

Frieder Rubik, Gerd Scholl

Eco-labelling practices in Europe

An overview of environmental product information schemes

Schriftenreihe des IÖW 162/02



i | ö | w

INSTITUT FÜR
ÖKOLOGISCHE WIRTSCHAFTSFORSCHUNG

Frieder Rubik and Gerd Scholl (Ed.)

Eco-labelling practices in Europe

An overview of environmental product information schemes

Schriftenreihe des IÖW 162/02
Berlin, März 2002, ISBN 3-932092-62-7

Project in cooperation with:

Institut für ökologische Wirtschaftsforschung (IÖW), Regionalbüro Baden-Württemberg
(Projektleitung): Frieder Rubik, Gerd Scholl
ITACA, Rom (Paolo Frankl)
Randa Group, Barcelona (Pere Fullana Palmer)
SIFO, Lysaker (Eivind Sto)

Funded by the European Commission, DG XII, Brussels

IÖW gGmbH Geschäftsstelle
Potsdamer Straße 105
D-10785 Berlin

phone +49.(0)30.884 59 40
fax: +49.(0)30.882 54 39
mailbox@ioew.de

IÖW-Regionalbüro
Baden-Württemberg
Bergstraße 7
D-69120 Heidelberg

phone +49.(0)6221.64 91 60
fax: +49.(0)6221.27 06 0
mailbox@heidelberg.ioew.de

Zusammenfassung

Der Bericht gibt einen Überblick zu „Produktbezogenen Umweltinformationsschemata“, die über die ökologischen Eigenschaften von Produkten und Dienstleistungen informieren sollen. Dabei werden diese Schemata in einem weiten Sinne interpretiert; sie umfassen verpflichtende Ansätze (z.B. Energiekennzeichen, Inhaltsdeklarationen) wie auch freiwillige Ansätze (z.B. Umweltzeichen). Ebenfalls eingeschlossen in diese Betrachtung sind „offizielle“ Umweltzeichen, die durch Dritte zertifiziert sind, wie auch umweltbezogene Anbietererklärungen durch Unternehmen, die nicht durch Dritte zertifiziert sind. Diese Betrachtung wird durch eine Bezugnahme auf die drei ISO-Umweltkennzeichnungstypen der Normenreihe 14020 abgerundet.

Der Bericht besteht aus Länderübersichten, die für jedes EU-Mitgliedsland und Norwegen den State-of the-art mit „Produktbezogenen Umweltinformationsschemata“ beschreiben, aus einem Bericht zur Anwendung dieser Schemata auf Ebene der EU sowie abschließend aus einem Überblick, der die wichtigsten Erkenntnisse zusammenfasst und Schlussfolgerungen ableitet.

Abstract

The report presents an overview of “Environmental Product Information Schemes” (EPIS) which provide ecological information on products and services. EPIS are interpreted in a wide range encompassing mandatory (e.g. energy label, product declarations) and voluntary approaches (e.g. eco-labels); also included are third-party labelling as well as green claims of companies which are self-certified. This range is closely linked to the ISO-typology of labelling elaborated in the standard 14020.

The report consists of country reports each describing the state-of-the-art with EPIS in all Member States of the European Union and Norway, further a report on EPIS at EU level and a summarising paper providing major findings and conclusions from the EU wide overview.

Authors

Sveva Barbera, born in 1967, is an architect, Doctor in Environmental Design, Assistant Professor of Environmental Requirements of Industrial Products at the Dep. ITACA-University of Rome “La Sapienza”. Her areas of research are design for environment and for usability, eco-labelling issues and ecodesign.

Paolo Frankl, born in 1964, is physicist, holds a PhD in Energy and Environmental Technologies and is Assistant Professor of Materials Technologies at the Dept. ITACA, University of Rome I “La Sapienza”. His main areas of research are Life Cycle Assessment (LCA) of energy systems and materials, the application of LCA in business and policy, eco-labelling issues and eco-efficiency.

Pere Fullana, born in 1964, has a Doctorate in chemical engineering, teaches environmental issues at the School of International Commerce (Pompeu Fabra University) and works as Technical Manager of Randa Group, S.A. His research covers application of LCA, ecoindicators, ecolabelling, ecodesign and risk assessment.

Eloi Montcada, born in 1971, is Agricultural Engineer and master in Enterprise Environmental Management. He works as senior consultant at Randa Group in the "Product Area" performing Life Cycle Assessment, ecolabelling and ecodesign projects.

Lucia Pietroni, born in 1966, is an architect, Doctor in Environmental Design, Assistant Professor of Environmental Requirements of Industrial Products at the Dep. ITACA-University of Rome "La Sapienza". Her areas of research are design for environment and for usability, eco-labelling issues and ecodesign.

Frieder Rubik, born in 1956, is economist and works as senior researcher at the IÖW. He leads the research department "Ecological product policy" of IÖW; his areas of research are product policy, eco-labelling issues, product innovation and the application of Life Cycle Assessment in business and policy.

Dirk Scheer, born in 1969, studied political science in Heidelberg and Seville. Since 2001 he works as researcher in the department "Ecological product policy" of IÖW; his areas of research are environmental labelling, service engineering, and institutional and participatory aspect of environmental governance.

Gerd Scholl, born in 1966, is economist and works as senior researcher and project co-ordinator at IÖW. His research areas are instruments of product-oriented environmental policy (Integrated Product Policy, IPP), eco and social labelling, life-cycle assessment (LCA) and eco-services in business-to-business and business-to-consumer.

Jordi Vall-Ilovera, born in 1977, is Industrial Technical Engineer specialised in Chemistry. He works as junior consultant in Randa Group, S.A. developing eco-labelling and green purchasing projects. He inspects for the Catalanian Ecolabel.

Eivind Stø, born in 1945, holds a graduate (mag. art.) degree in political science from University of Oslo in 1972. He is director of research at SIFO and has been working with consumer policy and consumer interests, consumer complaining, sustainable consumption and eco-labelling.

Pål Strandbakken, born in 1957, was awarded a graduate (mag. art.) degree in sociology by the University of Oslo in 1987. He is a research fellow at SIFO, where his main areas are sociology of consumption, environmental awareness, sustainable consumption, and the durability of durables.

Table of Contents:

Foreword	1
<i>Gerd Scholl / Frieder Rubik, IÖW, Germany</i>	
European Environmental Product Information Schemes (EPIS) and European Integrated Product Policy (IPP)	2
<i>Frieder Rubik, IÖW, Germany</i>	
Environmental Product Information Schemes (EPIS) in Austria	30
<i>Dirk Scheer, IÖW, Germany</i>	
Environmental Product Information Schemes (EPIS) in Belgium	48
<i>Pere Fullana / Eloi Montcada / Jordi Vall-Llovera, RANDA, Spain</i>	
Environmental Product Information Schemes (EPIS) in France	63
<i>Paolo Frankl / Sveva Barbera, ITACA, Italy</i>	
Environmental Product Information Schemes (EPIS) in Germany	84
<i>Gerd Scholl, IÖW, Germany</i>	
Environmental Product Information Schemes (EPIS) in Greece	109
<i>Paolo Frankl / Lucia Pietroni / Sveva Barbera, ITACA, Italy</i>	
Environmental Product Information Schemes (EPIS) in Ireland	126
<i>Paolo Frankl / Sveva Barbera, ITACA, Italy</i>	
Environmental Product Information Schemes (EPIS) in Italy	137
<i>Paolo Frankl / Lucia Pietroni, ITACA, Italy</i>	
Environmental Product Information Schemes (EPIS) in Luxembourg	175
<i>Pere Fullana / Eloi Montcada / Jordi Vall-Llovera, RANDA, Spain</i>	
Environmental Product Information Schemes (EPIS) in The Netherlands	184
<i>Dirk Scheer, IÖW, Germany</i>	
Environmental Product Information Schemes (EPIS) in the Nordic Countries: Denmark, Sweden and Finland	202
<i>Eivind Stø, SIFO, Norway</i>	
Environmental Product Information Schemes (EPIS) in Norway	226
<i>Pål Strandbakken, SIFO, Norway</i>	
Environmental Product Information Schemes (EPIS) in Portugal	244
<i>Pere Fullana / Eloi Montcada / Jordi Vall-Llovera, RANDA, Spain</i>	
Environmental Product Information Schemes (EPIS) in Spain	253
<i>Pere Fullana / Eloi Montcada / Jordi Vall-Llovera, RANDA, Spain</i>	
Environmental Product Information Schemes (EPIS) in the United Kingdom	280
<i>Paolo Frankl / Sveva Barbera, ITACA, Italy</i>	
Environmental Product Information Systems (EPIS) in the Member States of the European Union and in Norway - Findings and Conclusions -	302
<i>Frieder Rubik / Gerd Scholl, IÖW, Germany</i>	

Gerd Scholl / Frieder Rubik

Foreword

Environmental **P**roduct **I**nformation **S**chemes (EPIS) are systems that provide ecological information on products and services. They may address business clients or private consumers. They range from mandatory (e.g. product declarations) to voluntary approaches (e.g. national eco-labels) and cover third-party labelling as well as green claims of companies. EPIS play an important role in European environmental policy. They award and promote environmentally superior goods and services and offer information on their quality and performance with respect to consumer health, resource consumption, etc. EPIS fit well into a multi-stakeholder policy framework - as enhanced by Integrated Product Policy (IPP) - since elaboration of criteria and acceptance in the market requires involvement of a number of different parties, from government, over business, to consumer and environmental organisations.

Within the EU funded project "*Developing Effective and Efficient Product Information Schemes (DEEP). Assessing and expanding product information schemes between voluntary and mandatory approaches*"¹ a consortium of research institutions from four European countries (Institut für ökologische Wirtschaftsforschung (IÖW), Germany; University of Rome "La Sapienza", Dipartimento ITACA, Italy; Randa Group/Spain; National Institute for Consumer Research (SIFO), Norway) explores the benefits and shortcomings of different EPIS and aims to develop an integrated environmental labelling strategy. The specific objectives of the research project are

- to analyse the conditions under which environmental product information schemes are an efficient and effective tool to achieve sustainable development;
- to assess previous experiences with EPIS in different European countries and the relationship of these schemes with business strategies, Integrated Product Policy, and market conditions;
- to define strategies aimed at linking EPIS with other IPP measures;
- to explore how EPIS can be used for realising sustainable consumption patterns, creating green markets, fostering innovation and development of green product and services, and implementing multi-stakeholder initiatives,
- to elaborate an integrated environmental labelling strategy.

The research process is divided into two major steps: First, past experience with EPIS in Europe with a special focus on Germany, Norway, Italy, and Spain will be analysed by reviewing the state-of-the art in different countries and performing three case-studies in each country (washing machines, paper products, tourism). Second, operative and strategic proposals with respect to possible links of EPIS with other IPP tools will be elaborated mainly based on insights gained at workshops with relevant stakeholders.

This report contains the findings of the inventory stage of the project. It consists of several country reports each describing the state-of-the-art with EPIS, further a report on EPIS at EU level and a summarising paper providing major findings and conclusions from the EU wide inventory.

¹ The project is funded within the 5th European Framework Programme under the thematic programme "Energy, environment and sustainable development, EESD" (EVG1-CT-1999-00006). It started May 2000 and its delivery is expected in autumn 2002.

Frieder Rubik

**European Environmental Product Information Schemes (EPIS)
and European Integrated Product Policy (IPP)**

Table of Contents

1	INTRODUCTION	3
2	INTEGRATED PRODUCT POLICY (IPP) AND EPIS	3
2.1	IPP: Approach, State and Plans	3
2.2	IPP and EPIS: Cutting Lines	10
3	MANDATORY LABELS	12
3.1	Overview	12
3.2	Mandatory Labels in the Field of Chemicals	13
3.3	Mandatory Labels in the Field of Household Appliances (Energy Label)	14
3.4	Food Labelling	15
3.5	Other Areas	15
4	VOLUNTARY LABELS	15
4.1	ISO Type I Labels	16
4.1.1	European Eco-flower	16
4.1.2	Energy Star	22
4.1.3	Other Labels	22
4.2	ISO Type II Labels	22
4.3	ISO Type III Labels	23
5	CONCLUSIONS	23
6	LITERATURE	28

1 Introduction

This paper presents an overview of the European Union's activities with regard to environmental product information systems (EPIS). Focusing on the EU means that we examine those Union activities which are relevant for the Member States. The EU competences are dealt with within the Treaty of Amsterdam (Art. 249). Four different types of activities can be distinguished:

- **regulations:** these are binding in their entirety and directly applicable in all Member States;
- **directives:** these bind the Member States as to the results to be achieved; they have to be transposed into the national legal framework and thus leave a margin for manoeuvre as to the form and means of implementation;
- **decisions:** these are fully binding on those to whom they are addressed;
- **recommendations and opinions:** these are non-binding, declaratory instruments.

This paper does not include details of all legislative and political processes.

Our presentation of EPIS is orientated towards environmental issues, quantitative and qualitative labels and business-consumer-relationships. This means that we do not examine EPIS considering

- safety issues,
- social, economic, and/or technical issues,
- specific business-to-business aspects, or
- test reports, quality marks, conformity signs.

Chapter 2 "*Integrated Product Policy (IPP) and EPIS*" gives an overview of Integrated Product Policy (IPP), an area developed within the past three years. **Chapter 3** "*Mandatory Labels*" is orientated towards mandatory labels, i.e. the use of which is obligatory; the following **chapter 4** "*Voluntary Labels*" highlights voluntary EPIS, i.e. labels that are used on a voluntary basis. **Chapter 5** "*Conclusions*" presents our most important findings and conclusions.

2 Integrated Product Policy (IPP) and EPIS

This chapter provides an overview of activities and plans of the Commission as to Integrated Product Policy (IPP). First, we will introduce IPP and, second, we will have a look at EPIS' IPP activities.

2.1 IPP: Approach, State and Plans¹

Activities and measures of the EU in the field of product-oriented environmental policy have a rather long tradition². We distinguish between conceptual, product group overlapping and product group specific activities and measures.

¹ This section is based on Rubik (2001). For information on Member State activities in the field of IPP see Rubik (2001) and E&Y et al. (2000).

² Also see Rubik/Empacher (1994).

Examples of product group overlapping activities and measures are:

- Guidelines for environment-related taxes and charges (Communication COM [97] 9).
- The European Parliament's working document „Environment and European standards“ containing some conclusions with regard to a better consideration of public interests (e.g. environment) and the participation of NGOs; this document has been passed as a resolution (September 19,1996)³.
- European Standardisation (CEN): In 1995, the “ENAPS” working group was founded upon a decision of programme committee 7 (Environment) with the objective to apply the ISO Guide 64 into product standardisation using the examples of packaging, building products, paints and varnishes, heating systems and flame retardants; some years later (1999), an Environmental Help desk was set up at CEN.
- The EU Ministers of Finance have decided that Member States may apply for a reduced VAT rate in three of five different service sectors (repair of bikes, shoes, textiles, maintenance of flats, domestic nursing, cleaning, hair cuts)⁴. The main reason is the fight against illicit work; nevertheless, this reduction might stimulate environmentally interesting maintenance strategies.
- Recommendation of the Commission with regard to voluntary agreement (COM [96] 561 final). Over the last years, three voluntary agreements have been made, namely in the fields of washing machines, cars, and TVs.
- Communication of the Commission with regard to public procurement (COM [98] 143 final).
- The Regulation on an European eco-label scheme.

Beside these product group overlapping activities, the EU has agreed upon a series of different product group specific activities and measures that refer to specific aspects of specific product groups⁵.

Primarily, these activities and measures are *singular* events which are not derived from a general conceptual framework. The elaboration of such a framework has been started under the name „Integrated product policy“ (IPP).

The 5th Environmental Action Programme (EAP) of the EU, covering the period between 1992 and 2000, did not mention IPP explicitly; it included several implicit references such as: The EAP philosophy is based on a "(...) dual approach of high environmental standards combined with positive incentives to even better performance should be applied in a co-ordinated manner to the different points in the research-process-production-marketing-use-disposal chain where industry, and industrial products, may impact upon the Union's environmental resource base" (EAP 1992, p. 28). The EAP illustrated these general considerations with reference to some product-related instrumental proposals.

The Commission [COM (95)624] mentioned product policy the first time in a progress report on the implementation of the 5th EAP: "Unsustainable production and consumption patterns are the main cause of recent environmental problems. Additional measures are needed inter alia in the area of product policy" (COM (95) 624, chapter 1.1). It identified the following action: "to avoid distortions in competition, a coherent framework with guidelines needs to be developed at EU level for a policy on products at member State level,

³ "Resolution on the communication for the Commission to the Council and the European Parliament on the broader use of standardization in the Community policy" (A4-248/96).

⁴ Cp. taz of 13 September 1999.

⁵ See Rubik (2000, p. 19f.).

which goes beyond eco-labelling and includes the creation of a platform for the exchange of views and experience on life-cycle analysis" (COM (95) 624, chapter 1.1).

A renewed review of the 5th EAP concluded: "(...) develop a framework for an integrated, life-cycle oriented product policy, which will address, inter alia, the further development of life-cycle analysis, including the reduction of waste generated, and will take into account implications for the internal market, in order to promote the development of cleaner products (...)"⁶.

The most important impulse to a conceptual development of product policy has been given by a DG Environment project carried out by the British consultants of Ernst&Young (E&Y) and the University of Sussex. The study, which started in 1996, was meant to propose a first conceptual draft for a European IPP. The report was submitted in 1998 (E&Y et al. 1998) and provoked an intense discussion.

Some important elements of this report are:

- **Definition of IPP:** "Public policy which explicitly aims to modify and improve the environmental performance of product systems" (E&Y et al. 1998, p. 33). Important aspects are:
 - Focus on states as main actors,
 - Focus on products, exclusion of services,
 - Life-cycle orientation,
 - Focus on measures and instruments which explicitly influence the environmental performance of products.
- **Identification of „building blocks“** defined as „(...) a cluster of policies which share a common objective" (E&Y et al. 1998, p. 34):
 - *"Managing wastes"*: "These will include 'dissipative wastes' (material wastes generated in 'using up' a product) and 'non-dissipative wastes' (material streams which may be recovered and reused or recycled). Measures in this category will currently be classified as chemicals or waste policies";
 - *"Creating markets"*: "These will be measures which encourage the adoption of environmentally-friendly products and services onto the market, both in the private and public sectors";
 - *"Green product innovation"*: "These will include measures aimed at stimulating research and development of technologies and products; and measures to encourage the environmental management of products";
 - *"Allocating responsibility"*: "These will be measures which allocate legal and financial liability for the product-system environmental burdens. This would include potential burdens (related to the design of the product), and actual burdens (related to the actual use and discard of products)";
 - *"Transmitting environmental information"*: "These will be measures which encourage greater transparency about the environmental burdens and full environmental costs of product systems. These informational and price signals will serve to alter customer behaviour across the product system".
- **Recommendation of future activities:** The report identified some important roles of the Commission and listed a hierarchy of priorities:

⁶ Decision 98/2179 of the European Parliament and the Council of 24.9.1998 (OJ of October 10, 1998 – L 275).

- Definition of a common understanding and formulation of an IPP vision
- Diffusion of best practises
- Support of effective implementation
- List of specific measures for each of the five building blocks.

In December 1998, this report has been presented to the public and interested organisations at a workshop in Brussels; more than 180 persons from politics, associations, companies, NGOs, and research joined the workshop (European Commission-DG XI 1999). For the purpose of preparation as well as future positioning, some associations⁷ presented position papers and comments; the most important matters were:

- IPP should consider an integrative approach with regard to the three dimensions of sustainability (environmental, social and economic affairs) and to the life cycle of products.
- IPP should be considered as a new environmental approach which pursues the idea of deregulation and which does not take any new regulative measures.
- The relevant actors should share responsibility („Shared responsibility“); unilateral allocations of tasks addressed to the business side are refused.
- The central governmental task within an IPP consists in the creation of appropriate framework conditions for the other actors, especially business; parts of this task are the fixing of objectives, the formulation of principles, and the development of instruments.
- The IPP instruments should not impose new restrictions on business, but permit business sufficient possibilities to act/react and be flexible; policy should concentrate on self-commitment and voluntary agreements.

After having carried out this IPP-workshop, DG Environment concluded:

- "Increasing the focus on products and the life-cycle approach within EMAS and strengthen the link between EMAS and the EU Ecolabel
- Broadening the approach for product labelling
- Integrating environmental considerations into product standards through appropriate mechanisms
- Greening Public Procurement
- Further developing and disseminating Ecodesign
- Implementation through Environmental Agreements, which will be an emerging instrument option" (European Commission-DG XI 1999, p. 12).

The IPP topic was given an additional stimulus by the European Presidency of Germany during the first half of 1999. In autumn 1998, the German Ministry for the Environment (BMU) decided that IPP should become one topic of the German Environmental Council Presidency. It was settled that a so-called „Informal EU-Environmental Council“ should deal with IPP as a main issue. For preparing this Council, a series of meetings of the relevant departments of the 15 environmental ministries took place; in addition the Institut für ökologische Wirtschaftsforschung (IÖW) was commissioned to write a draft version of a background

⁷ AIM (1998), CIAA (1998), EU-COMMITTEE (1998 und 1999), UNICE (1998a, 1998b, and 2000).

document for the Environmental Council⁸. This background document was presented to the Council in a slightly modified version. At the Council, which took place in Weimar in May 1999, the German initiative was welcomed and supported by all Ministers. Thus, the IPP topic became part of the political agenda; some measures at EU level were proposed in the background document. Today, this document (BMU 1999b) forms the „Common ground“ within the EU.

Some important elements of the background paper are:

- Definition of IPP: Integrated Product Policy (IPP) is a public policy which aims at or is suitable for continuous improvement in the environmental performance of products and services within a life-cycle context.
- Clarification of a set of principles within IPP, such as market compatibility.
- Listing of a possible IPP toolkit consisting of six categories.
- Distinction between Integrated Product Policy (referring to the area of government and governmental institutions and the inclusion of the formulation of objectives and the framework setting by selecting and implementing instruments) and Integrated Product Management (referring to the area of actions and measures taken by the different stakeholders involved in the life-cycle of a product or service).
- Supplementation of the building blocks presented by E&Y et al. (1998) by two additional ones, namely sustainable consumption and management of dangerous substances in products
- Listing of concrete proposals, such as improvement of broad and appropriate access to environmental product information and consideration of specific needs of different customers.

The discussions at the Informal Council resulted in some Presidency conclusions of the German Minister for the Environment Jürgen Trittin: "The Ministers therefore welcomed the European Commission's intention of submitting by the end of this year a Communication / Green Paper containing proposals for the development of an integrated environmental product policy while taking into account the ideas and proposals made during their deliberations. The Ministers encouraged the Commission to ensure that the various groups, all stakeholders and the Member States remain closely involved when pursuing its proposals. It was suggested that a temporary forum for product-related environment policy be created or sector specific panels established. The Consultative Forum on Sustainable Development could also be involved.

The following European-level actions and measures were put forward as possible components of an integrated environmental product policy:

- (...)
- taking account of integrated product approaches when formulating a European Union environmental strategy to follow up the current evaluation of the 5th EU Environment Action Programme;
- ensuring greater consideration of aspects of product-related environmental policy in the implementation of the 5th EU Framework Research Programme;
- realisation of pilot initiatives in specific products groups;

⁸ The author of this paper was IÖW's project leader and main author of the background document.

- improving consumer information by means of product labelling, ecolabelling and enhanced access to product-related data" (BMU 1999a, p. II/III)⁹.

These conclusions, which might also influence the elaboration of a Green Paper of the Commission, have two characteristics:

- List of some principles and strategies, especially the co-operation of stakeholders, a multi-instrumental approach, market compatibility, sharing of tasks, and preference for economic and informative instruments as well as voluntary agreements;
- Identification of some concrete initiatives, such as the integration of IPP into the 6th forthcoming EAP and the forthcoming 5th research programme of the Commission, stimulating pilot projects or the application of public procurement to IPP.

Some weeks later, DG Environment organised two consultations with representatives of business and NGOs with regard to IPP.

In order to support further conceptual progress within DG Environment, several studies have been commissioned in autumn 1999. E&Y/SPRU were commissioned with an update of their previous report. They presented some arguments and recommendations for IPP: „The dynamic vision of IPP (...) implies that any effort, whether taken by the Commission or member states, should be focused on working with the market to encourage and promote innovation and dynamism amongst firms. (...) this effort should be directed towards achieving the goal of minimising the life cycle environmental burden of final consumption. In delivering this, consumers, industry and public policy makers all have a role to play" (E&Y et al. 2000, p. 27).

The following roles and tasks for the Commission have been proposed:

- "provide leadership and diffuse good practice;
- ensure that measures which focus on products are integrated, not only amongst themselves, but also with other environmental policy measures;
- safeguard the internal market;
- promote measurement and evaluation" (E&Y et al. 2000, p. 27).

At its meeting on 28 October 1999, the European Council "Internal Market, Industry and Telecommunication" decided - within the context of the realisation of the Cardiff-process for the integration of environmental policy in other policy fields - that a continued IPP development is considered to have priority in the future. The Commission mentioned the importance of IPP several times, for example in its documents for the Council of Helsinki (December 1999) [SEC (1999) 1941].

The co-operation between the two Directorates of General Environment (DG XI) and Industry (DG III) is an important strategic challenge¹⁰.

⁹ Translation by BMU.

¹⁰ See for example the work document "Sustainable Industrial Development" of the Commission (SEC [1999] 1729), which explicitly mentions IPP: "Finally, the promotion and implementation of an integrated product life-cycle approach will certainly contribute to increasing the synergy between industrial development and environmental protection, especially as far as measures and activities in the field of industrial policy are concerned. Finally, the promotion and implementation of an integrated product life-cycle approach will certainly contribute to increasing the synergy between industrial development and environmental protection, especially as far as measures and activities in the field of industrial policy are concerned" (p. 16).

In the meantime, the preparatory work for the Green Paper has progressed; it was published February 2001 (European Commission 2001). The Green Paper does not deliver any definition of IPP and does not refer to previously presented definitions of an IPP. However, some characteristic aspects of the terms Integrated Product Policy are given:

- Integration refers to
 - consideration of the whole life-cycle of a product from the cradle to the grave,
 - co-operation with stakeholders,
 - application of different instruments.
- The term product includes both material products and services.
- The policy is based on a governance philosophy of facilitation rather than direct intervention.

Objective of an IPP is to reduce the life cycle environmental impacts of products along the whole life-cycle. The Green Paper is based on the principle to use market forces as a means of environmental governance. According to the Commission this means: "The general idea is that policy should focus on setting the main objectives and providing the different stakeholders with the means and incentives to achieve these objectives. Depending on the context, the IPP approach may also be useful in finding business-oriented solutions of environmental problems in discussion and co-operation with stakeholders and/or the preparation of legislation" (European Commission 2001, p.5).

This interpretation of IPP is the dominating political philosophy of the whole Green Paper. Thus it allocates an important - if not leading - implementation role to the different stakeholders.

The implementation strategy of the Commission is concerned with strengthening the environmental orientation both of the supply and demand side. A series of proposals and possible actions are listed referring to both sides; four different areas of the IPP approach of the Commission are listed, each of them contains several proposals:

- *Price mechanism:* This topic refers to a correction of market failures by internalising external costs. The most prominent role plays the Value-Added-Tax (VAT) and its different tax rates. It is proposed to link lower VAT-rates to the European eco-label system, i.e. eco-labelled products should be allowed to be allocated to the lower VAT-rate. Other possible instruments are the producer responsibility, governmental fiscal aids and environmental liability.
- *Greener consumption:* First it is proposed to distinguish between private consumption and public/professional procurement. Private consumers should have easy access to understandable, relevant, credible information either by means of labelling on the product or another readily accessible source (e.g. internet or NGO's)¹¹. The public procurement should better be mobilised by clear guidance for public purchasers.
- *Business' leadership in greener production:* The Commission regards the improvement of information as a central mechanism to diffuse environmental thinking within business; the application of Life Cycle Assessment (LCA) should be promoted as a supporting tool. In addition to that, eco-design guidelines should be elaborated and the standardisation within CEN should focus towards environmental aspects. Also some pilot projects - called "product panels" - are intended to be initiated.

¹¹ See for more information chapter 2.2.

- *Other supportive instruments:* In addition to the first three areas, other instruments like environmental management (EMAS), R&D, and environmental accounting/reporting should be strengthened for an IPP.

However, there is a strange dichotomy within the Green Paper. The internalisation strategy is regarded as the main governance principle and the most effective instrument, other instruments are treated as supplements: "As economic interests are a main driver, the instruments probably most effective are those, like taxes and subsidies, that help to *'get the prices right'*, to internalise external costs (...). However, as long as this is not the case, supplementary action to better inform consumers on the environmental characteristics of products and to encourage producers to develop a better design of products is needed" (European Commission 2001, p. 9). Whereas first, a co-operative approach has been introduced first, this quotation introduces a new priority list of governance philosophies: the market regulatory approach and then - due to its (political) failure - the market regulation governance philosophy is substituted by a more self-regulatory approach which is based on voluntary information instruments supporting the supply and demand sides.

The Green Paper will be discussed at a meeting with interested organisations at March 8 and 9, 2001; its results should be reported to the Environmental Council in June 2001 (Gothenburg/Sweden).

Apart from the Green Paper, DG Environment plans to stimulate pilot projects on IPP on a voluntary basis in 2001. Within the 6th EAP, IPP will have a prominent role. The draft version of the 6th EAP¹² mentioned IPP several times, e.g.: "Within the framework of the proposed Integrated Product Policy (IPP) approach, the Commission will address ways to improve the environmental performance of products throughout their life cycle. The aim shall be to satisfy consumer demand with less resources and lower hazards and risks to the environment and prevent waste generation at source. This will comprise action on economic incentives for environmentally friendly products, enhancing 'green' demand through better consumer information, developing an objective basis for green public procurement, and action to encourage more environmentally friendly product design. This will involve discussion with stakeholders to improve product design on the basis of voluntary actions by companies and sectors and will, if appropriate, be supported by instruments such as standardisation and legislation" (EAP 2001, p. 17).

Further progress and pressure on the Commission can be expected by the Swedish European Presidency. The Swedish Environmental Minister declared several times that IPP will have a priority within their Environmental Presidency of the EU (first half of 2001). The issue of IPP has been dealt with an international workshop organised by DG Environment and the Swedish Presidency which took place March 8 and 9, 2001, at Brussels. Additional stakeholders and expert dialogues are planned for 2001. It is planned to publish a White Paper on IPP end of 2001.

2.2 IPP and EPIS: Cutting Lines

Environmental product information systems (EPIS) are one important element within IPP. The report of E&Y et al. (1998) introduced as one (of five) building blocks "Transmitting environmental information" (E&Y 1998, pp. 12 and 80ff.). They suggested a number of actions to be taken:

- *Development of a differentiated product information policy:* Encouragement of information generation and flow along the product chain.

¹² The draft version has been presented recently and has to be adopted by the European Council and the Parliament by a co-decision procedure within the following months of 2001.

- *Code of practise*: Review of national initiatives relating to environmental information on products which aim at developing a code of practise.
- *Eco-label*: Further progress of the EU eco-label as a part of environmental information policy directed at consumers; selection of product groups based on environmental policy priorities.
- *Retailers*: Retailers should be a target group of information dissemination and should be dealt with within the revised EMAS scheme.

DG Environment concluded from the December 1998-workshop that one special IPP focus is to broaden the product labelling approach. Although this aspect has not been elaborated any further, it becomes clear that information and communication as key words will become essential parts of the IPP progress. This means that the focus on EPIS will be deepened in the future.

Until January 2001, IPP-activities and eco-labelling have been treated within the same unit of the Commission, namely DG Environment E.4. Recently, a restructuring of DG Environment took place; nowadays, IPP-activities are treated within unit A.2 "Sustainable Resources" and eco-labelling activities are dealt within another unit, namely D.3 "Industry and implementation". The draft version of the 6th EAP mentioned labelling activities several times (EAP 2001, p. 18f.) and listed two specific actions, namely:

- "Assess progress and effectiveness of Community Eco-Label scheme.
- Measures, including the use of fiscal incentives where appropriate, to encourage the uptake of eco-labels that allow consumers to compare environmental performance (e.g. energy efficiency) between products of the same type " (EAP 2001, p. 19).

In addition to that, it is recommended to encourage a ranking-oriented labelling approach comparable to the energy label; however it is not mentioned for which product groups this approach is intended. The introduction of product information schemes for all types of products will also be encouraged by the Commission within its IPP-approach; once more, it does not become clear how this vague approach might be concretised and realised. Obviously, a clear labelling strategy encompassing the different application areas and the different ISO-types will not be pushed by the 6th EAP.

As already mentioned above, the Green Paper of the Commission (European Commission 2001) dedicated consumers an important role within the IPP-strategy. The area "Greener consumption" refers to the objective that consumers have easy access to information and assign labels according to the ISO-standards an important role. Several actions and proposals have been listed within the Green Paper, namely:

- Extension of the scope of the European eco-label "(...) to cover as many products as possible, targeting those product categories for which they are likely to be most effective" (European Commission 2001, p. 13);
- increase of public funding for eco-label schemes;
- use of eco-labels for other applications (e.g. public procurement, eco-funds, indicators);
- review of the European eco-labelling strategy;
- elaboration of Guidelines for making and assessing environmental self-declared claims by producers or distributors;
- strengthening support for European co-operation with regard to environmental product declaration according to the ISO-type III;

- support of exchange of best practices of information transfer and evaluation.

These proposals have been presented within the area of "Greener consumption". Interesting to notice is that within another area, namely "Business' leadership in greener production" the generation of product information is also mentioned. The Commission regards the generation and collection of information on the environmental impacts of products along their life cycle as an important approach. It is also envisaged to check whether "a possible instrument to increase the generation and availability of information is to oblige and/or encourage producers to supply key data along the product chain and to consumers" (European Commission 2001, p. 18).

These potential measures and activities of the Green Paper will be discussed during 2001 within several stakeholders and expert dialogues. The planned White Paper on IPP should also deal with this topic.

3 Mandatory Labels

Mandatory labelling prescriptions of the European Union exist in different fields. The application of these labels is compulsory, i.e. manufacturers, users, retailers, or other actors are obliged to comply with relevant prescriptions.

3.1 Overview

Table 3.1 provides a very general overview of different EU labelling activities.

Table 3.1: Compulsory environmental labelling of different product groups (Rubik/Empacher 1994, updated)

Product group	Council directives/regulations (excerpts)	Reference of label	Compulsory information
Qualitative labels:			
Household appliances	92/75/EEC	Consumption of energy and other resources	Regulation directives are to be enacted by the Member States
Household appliances	86/594/EEC	Noise emissions in dB	
Household appliances, electrical ovens	79/530/EEC	Consumption of energy	- Content of oven in litres - Preheat consumption to 200 ^o - Steady state consumption (one hour 200 ^o C) - Cleaning Cycle Consumption
Hazardous substances and preparations	83/478/EEC	Content of asbestos	"Attention! Contents asbestos!"
	85/467/EEC	Content of PCB/PCT	"Attention! Contents PCB/PCT!"
Di (2-ethylhexyl)-phtalate	90/420/EEC		
Existing chemical substances	79/831/EEC		Danger symbols
Cars	1999/94/EC	Environmental issues	- consumption of petrol - emission of CO ₂
Batteries and accumulators	91/157/EEC		- separate collection - if necessary reuse - content of heavy metals
Tobacco products	92/41/EEC	Risks for consumer's health	Several phrases according to Annex 1 of Directive 92/41/EEC
	89/41/EEC	Risks for consumer's health	- nicotine and tar content - "Smoking/tobacco endangers health"

Product group	Council directives/ regulations (excerpts)	Reference of label	Compulsory information
Lawn mowers	87/252/EEC	Admitted noise level of performance	- producer - type designation - noise level of performance
Paint, varnish, printing ink, adhesives, etc.	86/508/EEC	Content of lead	"Attention! Contains lead!"
Detergents	73/404/EEC		- name of product - responsible for distribution
Declaration of contents (quantitative labels):			
Hazardous preparations	88/379/EEC 89/178/EEC	- name of preparation - name of distributor - chemical designation of dangerous substances	
Hazardous substances	67/378/EEC several amend-ments	- name of substance - name of responsible - danger symbol - standard designation of risks - security advice - EEC number	
Paints, varnish, printing ink, adhesives, etc.	77/728/EEC 83/265/EEC	- designation of preparation - chemical name - producer/responsible - danger symbols - standards according to danger - security advice	
Batteries and accumulators	91/157/EEC	- risks of uncontrolled disposal of waste batteries and accumulators - way to remove built-in batteries and accumulators from equipment	
Chemical substances and preparations	91/155/EEC	- data documents for security	
Dangerous chemicals destined for exportation	2455/92/EEC	Declaration according to Directive 67/548/EEC or other directives on dangerous preparations valid in the exporting Member State	
Pesticides	91/414/EEC	- name of pesticide - name and address of holder of admission - admission number - name and quantity of every active agent - weight - number of preparation and name - information on first aid - instructions on possible dangers for human health - security instructions - type of effect (e.g. fungicide, herbicide) - purpose of use and use restrictions - use instructions and appropriate amount of utilisation - safe disposal of pesticide and packaging - expiry date - possible distribution restrictions	
Biocides	COM (93) 351 final	According to the provisions of Directive 88/379/EEC	

3.2 Mandatory Labels in the Field of Chemicals

Mandatory labels are especially relevant in the field of chemicals/chemical substances. Several directives have been published which have to be implemented by the Member States. These labels especially refer to users/consumers downstream who apply these products/substances. Therefore, the most important aspects of these labels are health and safety issues.

However, Directive 93/21/EEC introduced a danger symbol for "environmentally harmful" substances and new advices hinting at the dangers a substance may involve for the environment. Other label aspects which are environmentally relevant refer to waste, the prevention of heavy metal emission, carcinogenic substances etc.

3.3 Mandatory Labels in the Field of Household Appliances (Energy Label)¹³

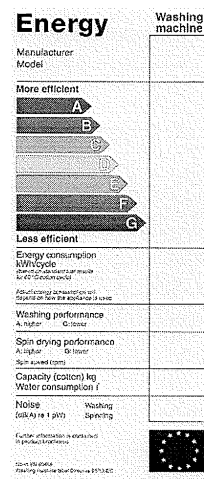
Household appliances must be labelled according to a (general) EU directive (92/75/EEC). This directive refers to refrigerators/freezers, washing machines, dryers, dishwashers, ovens, water heaters/hot-water storage appliances, lighting sources, and air-conditioning appliances. Producers are obliged to indicate the energy consumption, consumption of specific resources, and other information (see exemplary energy-label for dishwashers below). This directive is a general directive which has to be supplemented by specific directives for each product group under consideration.

The EU has applied this directive to the following specific product groups:

- refrigerators/freezers (94/2/EC),
- washing machines (95/12/EC),
- tumble dryers (95/13/EC),
- combined washing-dryers (96/60/EC),
- dishwashers (97/17/EC)
- lamps/light bulbs (98/11/EC).

Product groups under development are:

- boilers,
- air-conditioning appliances.



In addition, directive 92/75 will be amended by extending it to all major appliances and installed equipment. After this amendment, energy labelling will apply to the following product groups:

- building components, e.g. windows;
- installed systems, e.g. heating, cooling, hot water;
- brown goods, e.g. TV, VCR, hifi, power supplies.

The most important energy label criterion is the consumption of energy. This must be specified in numeric terms and according to a ranking which is subdivided into several groups (from "A" to "G").

It is also planned that the product group of office equipment should be labelled. However, this labelling should be based on a voluntary agreement with producers concerned and marked with the US energy star, for more information see chapter 4.1.2.

¹³ For extensive information see COM (2000) 247 final.

Energy labelling has been reviewed for some countries (cp. e.g. Waide 1999)¹⁴.

We received the information that 96% of all refrigerators/freezers meanwhile are ranked among the first three categories "A", "B", or "C"; DG Energy & Transport regards this fact as a success of the energy label¹⁵.

It is planned to review those product group criteria for which an energy label has been already prescribed within several years, namely dish washers, washing machines, and refrigerators/freezers.

3.4 Food Labelling¹⁶

The field of mandatory food labelling is complicated. At present, there are more than 40 different EU laws relating to food labelling. A framework Directive (79/112/EEC) containing basic rules has been amended last year (2000/13/EC).

Recently, the labelling of genetically modified food has been discussed; an agreement, however, has not yet been reached.

3.5 Other Areas

The consumption of petrol and the emission of CO₂ from cars is a new labelling area (Directive 1999/94/EC). The Directive refers to all new cars. The information has to be presented in numeric values and will not be ranked as in the case of the energy label for household appliances.

4 Voluntary Labels

Voluntary labels or EPIS are labels which are applied by companies on a voluntary basis. ISO has elaborated three different label types, namely:

- **ISO-Type I labels:** Voluntary, multiple criteria-based third party programme that awards a licence authorising the use of environmental labels on products. These indicate the overall environmental preferability of a product within a particular product category based on life cycle considerations. These labels provide qualitative environmental information. They are covered by ISO 14024 which was published in April 1999.
- **ISO-Type II labels:** Self-declared environmental claim made by manufacturers, importers, distributors, retailers, or anyone else likely to benefit from such a claim without independent third-party certification. They are covered by ISO 14021 which was published in 1999.
- **ISO-Type III labels:** Quantified environmental data for a product with pre-set categories of parameters based on the ISO 14040 series of standards, not excluding additional environmental information provided by a Type III environmental declaration programme. They are covered by the technical standard ISO TR 14025, which was published in March 2000.

¹⁴ An update is under progress.

¹⁵ The amendment of Directive 92/75/EEC intends also to tighten the criteria because the differentiation among the products offered on the market is decreasing due to technical progress.

¹⁶ See O' Rourke et al (2000).

We refer to these three label types due to their capacity to structure the labelling-landscape. In contrast to the situation in some Member States, we have not found any indications for ISO-Type I-like labels on the level of the EU.

4.1 ISO Type I Labels

4.1.1 European Eco-flower¹⁷

History and development process:

In 1988, the first initiatives to create eco-labels were taken; at that time focusing on waste problems. The Commission prepared a discussion paper which was submitted to the "Waste Management Committee" and included the proposition of a European environmental quality label. It was planned to be introduced by the realisation of the Internal Market and as a voluntary instrument supplementing regulatory environmental policy. In 1989, the Commission commissioned the Danish Technological Institute (DTI) to carry out a study on an eco-label scheme. At the same time, France and the United Kingdom also started to examine eco-labels. As a consequence, the European Council of Ministers for the Environment asked the Commission in September 1989 to present a proposal for an EU-wide eco-label. This, on the other hand, resulted in a modification of the objectives of the DTI study. In 1990, DTI presented its report (DTI 1990).

In the following months, a national expert group on environmental labelling was founded and met three times. Representatives of consumer and environmental organisations participated in these meetings. On 11 February 1991, the Commission presented its first proposal for an eco-label directive [COM (91) 37 fin.]. This proposal was rejected because of objections raised by various interest groups. The life-cycle approach did not contain any criteria for raw materials or the pre-production stage. The procedure for the award of the scheme would have involved the participation of six different committees and was considered to be far too complicated. Although it planned the establishment of a jury composed of representatives of the various interest groups, a decision on the award would have remained with the Commission and only governmental authorities would have been allowed to participate in the decision-making process. Moreover, the proposal provided that only the best ten percent of a product group would be awarded the label and that the national eco-label schemes, having lost their justification, may have to be abolished after a four year period. Above all, consumer and environmental groups demanded greater participation in the process and greater consistency in the adoption of environmental criteria.

In March 1992, together with the Directive on the eco-labelling scheme, the Commission published guidelines for the definition of product groups and criteria. German experience with the implementation of the Blue Angel scheme influenced these guidelines. The eco-label scheme adopted two different systems: the "Hurdle-System" (i.e. products have to fulfil certain conditions or may not pass certain limits) and a sort of "Scoring-System"; in other words, the compensation for bad characteristics with especially favourable ones. Moreover, it did not require the drawing up of an LCA, which remained a voluntary measure.

¹⁷ Parts of this chapter are based on Rubik (1995).

A plethora of regulations:

The regulation that was finally adopted concerning the eco-label award (92/880/EEC) included pre-production in life-cycle assessment, simplified the award scheme by abolishing the Jury, and left decision-making to competent bodies that should be independent and neutral. In addition, it provided that all products meeting the criteria would be awarded the label and ensured that national labels would coexist with the Union label. However, the influence of interest groups was reduced to a simple consultative role. The methodological progress of LCA resulted in the initiation of a so-called "Group de sages" which elaborated "Guidelines for the application of Life Cycle Assessment in the EU eco-label award scheme" (Groupe de sages 1997).



Regulation 92/880/EEC was revised for several years (between 1996 and 2000). After long discussions with stakeholders, between the Commission, the Council and the European Parliament, a revised Regulation was published in 2000 (1980/2000/EEC) and is now in force¹⁸.

Previously, a regulation concerning fees (Directive 93/326/EEC) was adopted, which fixed the rate for firms using the eco-label at 0.15 % of sale per year or a minimum of 500 ECU. In the meantime, a new modified fee model has been passed and published in November 2000 (Decision 2000/728/EC). This fee model introduced maximum thresholds and reductions. The application fee is between 300 and 1,300 € and the annual fee will be at 0.15% of the annual sale with a threshold of 25,000 €. Price reductions have been introduced, namely 25% for SMEs and 25% for companies from developing countries. Proactive EMAS or ISO-certified companies will be granted a reduction of the annual fee of 15%. Member states have got the right to reduce the annual fee by 25% for the first three new applicants in each Member State that are awarded the eco-label for a specific product group; the intention of this prescription is to stimulate first-movers.

A decision on a new standard contract was recently taken (2000/79/EC) arranging the conditions for using the eco-label.

The process of elaborating an eco-label:

The main objective of the EU eco-label is "to promote products which have the potential to reduce negative environmental impacts, as compared with the other products in the same product group, thus contributing to the efficient use of resources and a high level of environmental protection" [Art 1 (1) of Regulation 1980/2000].

Nowadays, the previous elaboration and awarding process is substituted by the new regulation. Some of the main new process elements are:

- establishment of the European Eco-labelling Board (EUEB)¹⁹,
- a new working plan for the Commission,
- extension of the scheme to retailers' brands,

¹⁸ A review of the modified scheme must be carried out by September 2005.

¹⁹ Recently, the Commission took a Decision (2000/730/EC) establishing the EUEB and its rules of procedure.

- extension of the product range to services,
- joint obligations for Member States and Commission to promote and market the scheme.

In principle, the Commission gives a mandate for the setting of product group criteria to the EUEB, which consists of the competent bodies of the 15 Member States and of the Consultative Forum²⁰. The EUEB selects a Lead Competent Body; this Lead Competent Body elaborates (or revises) criteria, organises working groups, carries out hearings, and submits draft label criteria to the EUEB. The latter examines the draft, returns it to the Lead Competent Body (if necessary), or submits it for approval to the Commission²¹. However, the whole procedure and the interpretation of the new Regulation has only been started recently, this means that not too many experiences are available and that there are some different possible future interpretations.

Experience with the application of the eco-label:

Requirements for the European eco-label have been elaborated for 15 product groups; 12 product groups are under development, some of them since several years (e.g. batteries). Table 4.1 presents an overview of the current state of requirement elaboration.

Table 4.1: State of criteria elaboration of the EU eco-label for different product groups (State: January 2001) (Source: European Commission - Environment 2001)

Product group	State
<u>Published product groups:</u>	
Tissue paper	L 019 of 24 January 1998
Dishwashers	L 216 of 4 August 1998
Soil improvers	L 219 of 7 August 1998
Bed mattresses	L 302 of 12 November 1998
Indoor paints and varnishes	L 5 of 9 January 1999
Footwear	L 57 of 5 March 1999
Textile products	L 57 of 5 March 1999
Personal Computers	L 70 of 17 of March 1999
Laundry Detergents	L 187 of 20 of July 1999
Detergents for dishwashers	L 167 of 2 of July 1999
Copy paper	L 210 of 10 August 1999
Light bulbs	L 216 of 14 August 1999
Portable computers	L 276 of 27 October 1999
Refrigerators	L 13 of 19 January 2000
Washing machines	L 16 of 21 January 2000
<u>Product groups under development:</u>	
All purpose cleaners and cleaners for sanitary facilities	Criteria under development
Hand dishwashing detergents	Criteria under development

²⁰ Members of the Consultative Forum are – amongst others – representatives of the European consumer organisations (COFACE), of the environmental organisations (EEB), of the trade unions (ETUC), of the industry (UNICE), of SMES and crafts (UEAPME) and of commerce (EUROCOMMERCE).

²¹ DG Environment involves during the interservice process within the Commission several other DGS, among them also DG SANCO.

Product group	State
Hard floor coverings	Criteria under development
Television sets	Criteria under development
Vacuum cleaners	Criteria under development
Tourist accommodation	Feasibility study completed
Furniture	Feasibility study under development
Tyres	Feasibility study completed
Rubbish bags	Study completed
Converted paper products	Study completed, work suspended
Batteries for consumer goods	Study completed, work suspended

For all products groups for which requirements exist the procedure has been carried out according to the previous first eco-label Regulation. Experiences with the modified Regulation 1980/2000 are still modest because this regulation became in force late 2000.

Most of the requirements are based on the hurdle-approach which prescribes that each criterion of the requirements has to be fulfilled. The scoring-approach has been applied to laundry detergents and is planned to be applied to hard surface cleaners.

Altogether, the market penetration of the eco-label is modest. Up to January 2001, 59 companies have been allowed to use the EU eco-label for more than 216 different products²²; ten months later more than 350 from 92 different companies applied the flower. An overview of companies and products gives Table 4.2.

Two different product groups dominate - paints/varnishes as home care products and clothing/textiles: 20 textile companies/manufacturers are allowed to use the EU eco-label and 19 producers/manufacturers of paints/varnishes; both product groups together amount up to 2/3 of all licensed companies. With regard to the amount of eco-labelled products, about 50% of all products authorised to use the EU eco-label are paints/varnishes. Reasons for the importance of the product group of paints and varnishes might be that the requirements of the EU-eco-label are stronger than those of the French eco-label, that the Nordic Swan has not elaborated any requirements for this product group and that mass media have pushed manufacturers and consumers to be aware of possible environmental burdens of this product group.

²² In some cases it was not possible to get complete numbers for the amount of awarded products due to tricky calculation difficulties. That means that the indicated numbers are the minimum size.

Table 4.2: Quantity of awarded products and manufacturers according to GEN-classification (state: January 2001) (Source: European Commission - Environment 2001; own analysis)

	Eco-label	Products	Remark	Firms	"GEN"-Code
Batteries		0		0	1100
Burners/Boilers		0		0	1200
Detergents for dishwashers		3		2	1301
Laundry detergents		0		0	1301
Cleaning		3		2	1300
Footwear		3	>+	2	1400
Textile products		52	>+	20	1400
Clothing/Textile		55	>+	22	1400
Construction/Building		0		0	1500
Soil improvers		19	>+	7	1603
Gardening/Agriculture		19	>+	7	1600
Refrigerators		1		1	1701
Washing machines		0		0	1703
Dishwashers		0		0	1704
Home Appliances		1		1	1700
Indoor paints and varnishes		105	>+	19	1800
Home Care Products		105	>+	19	1800
Light bulbs		0		0	1900
Lights		0		0	1900
Personal computers		1		1	2003
Portable computers		0		0	2003
Office Equipment		1		1	2000
Office Supplies (not paper specific)		0		0	2100
Package/Container (not paper specific)		0		0	2200
Copying paper		2		1	2300
Toilet paper, kitchen rolls and other tissue-paper products		29	>+	5	2302
Paper Products		31	>+	6	2300
Personal Care Products		0		0	2400
Services		0		0	2500
Solar-Energy		0		0	2600
Vehicles/Fuels		0		0	2700
Water-Saving		0		0	2800
Bed mattresses		1		1	n.d.
Furniture		1		1	n.d.
Tourism		0		0	n.d.
Energy		0		0	n.d.
Food		0		0	n.d.
Others		0		0	4000
Total (European Union)		216	>+	59	

Explanation:

>+ Reliable information on exact number of eco-labelled products is not available. The indicated number are the minimums.
n.d. Not defined

Some product groups do not include any labelled products at all, namely dishwashers, washing machines, refrigerators (with one exception), and light bulbs – all these are products of the "white product group"; besides these white goods, companies producing portable computers have not applied for the EU eco-label either.

Table 4.3: National distribution of applicants for EU-eco-label (State: January 2001) (Source: European Commission - Environment 2001; own analysis)

	Austria	B	DK	F	Fi	Germany	Greece	Irl	I	Lx	Nl	Norway	Pt	Spain	UK	Sweden	Total
Washing machines																	0
Dishwashers																	0
Refrigerators		1															1
Indoor paints / varnishes		2	1	2		2							2	4		6	19
Soil improvers		1		5							1						7
Tissue paper				1				1	2						1		5
Copying paper														1			1
Dishwashing detergents									2								2
Laundry detergents																	0
Lightbulbs																	0
Textile products			5	9					1					5			20
Footwear									1					1			2
Bed mattresses														1			1
Personal Computers																1	1
Portable Computers																	0
Total	0	2	8	17	2	0	2	1	6	0	1	0	2	12	1	7	59

The regional distribution of the companies shows Table 4.3. "Dominating" countries are France (17 companies) and Spain (12 companies); no applicants come especially from Germany and also from Austria. Companies from non-EU countries have not applied to use the eco-label, at least so far.

The Commission intended to harmonise the European eco-labelling "landscape" by integrating national eco-label schemes into the European scheme. However, this strategy failed and nowadays, a coexistence of regional, national and the European schemes is accepted (Art. 11).

Starting 1st January 2001, the Commission created a Help Desk which supports companies asking for information about the European Eco-label and for a registration according to the EMAS scheme. Responsible for the Help Desk is an external consultancy, namely Bradley Dunbar (Brussels).

The insufficient market penetration resulted in commissioning various studies:

- Belgium, The Netherlands, Luxembourg, Italy (IEFE/ICEM-CEEM 1998),
- France, Spain, and UK (Taylor et al. 1998),
- Germany, Austria (Lohs/Wulf-Schnabel 2000),
- Spain (study underway),
- Greece (study will be submitted in December 2000).

4.1.2 Energy Star

The Energy Star is a voluntary label which has been created in the United States in 1993. It is the result of a voluntary agreement.

The EU intends to conclude a mutual agreement with the United States referring to all office equipment products covering information and communication technology (ICT); the conclusion of this agreement is expected by the end of 2000. It is planned to accept the Energy Star for all products marketed in the EU on a voluntary basis. An EU Regulation shall regulate the specific details of the Energy Star application within the European Union [see COM (00) 018].



Following the conclusion of an agreement with the US and a successful adoption of an EU Regulation, the Energy Star shall be permitted to be applied for all ICT products fulfilling the prescriptions regarding technical specifications of the energy star.+

4.1.3 Other Labels

The most important ISO type-I-related label is that of organic agriculture products (Regulation 2092/91).

4.2 ISO Type II Labels

The arena of green claims, labels, and advertisement is expanding: "(...) the use of misleading claims is changing in nature, but the phenomenon as a whole is showing an increase in both numbers and sophistication – in all Member States. (...) the ability of the majority of member States to control such claims is poor" (Leubuscher et al. 1998, p. 50).

The EU has agreed on several Directives in the field of consumer protection. Especially Directive 84/450/EEC, which refers to misleading advertisement, is relevant with regard to green claims. This Directive has been amended by Directive 97/55/EEC in order to include provisions on comparative advertising; the problem of green claims, however, has been touched only modestly, at least so far.

In 1999, the EU published a consultation document of a possible EU approach regarding Green claims (DG SANCO 1999), which considers two objectives: a) prevention of misleading green claims, b) promotion of reliable green claims. The proposals of this document are based on a study (Leubuscher et al. 1998), which presented several policy options for an improvement, verification, and control of green claims. Proposed elements of an EU approach are:

- The amending of Directive 84/450/EEC, covering the (il)legality of misleading advertisements/claims, the introduction of sanctions and essential requirements applicable to green claims, a reversal of the burden of proof, and the compliance with CEN standards.
- The consideration of giving CEN a mandate to adopt a European standard of green claims.
- Development of guidelines for the assessment of green claims.
- Monitoring of green claims.

This consultation document was published in May 1999; the different stakeholders have been invited for comments. DG SANCO has examined them. As the announced guidelines for an assessment of green claims are being elaborated and will be published in early 2001 (either as a recommendation or linked with an amended Directive 84/450/EEC), the Directive on Misleading Advertisement will also be amended including – among other things – green claims. The monitoring of green claims is postponed due to a shift of internal DG SANCO priorities.

4.3 ISO Type III Labels

The Commission has not implemented any ISO-type III label. However, some of the above-mentioned labels have certain similarities with ISO-type III labels.

A voluntary Directive (90/496/EEC) has been published, which deals with nutritional information on food. It is planned to amend this Directive. However, the Commission and the Council have not yet agreed on a future strategy, especially on the question whether nutritional information should become mandatory or not.

5 Conclusions

In the previous chapters, we presented an overview of the European Union's EPIS landscape. EPIS are instruments considered within the toolbox of an Integrated Product Policy (IPP). The IPP-approach started some years ago; it is pushed forward both by Member States and the Commission which has published an IPP Green-Paper early this year.

Obviously, different labelling approaches (co-)exist. Labelling issues have a long tradition in the field of chemicals due to their health and safety risks. Starting in the late sixties, several Directives have been concluded which have continuously been amended. The EU's mandatory EPIS schemes mainly focus on durables. Voluntary EPIS refers to food and within the European eco-label a plethora of different product

groups. Social label issues are not dealt with by existing EPIS. Nevertheless, this issue is being discussed; DG "Employment and Social affairs" also considered this aspect by commissioning a report (Zadek et al. 1998).

A labelling focussing on "clearer" environmental issues started in the late eighties. The eco-flower and the energy label are its most prominent examples. Others can be found in the food sector. There is a close relationship between environmental and health issues. Table 5.1 presents an synoptic overview on the European EPIS-landscape.

The European eco-flower is a modest growing eco-label scheme. By the beginning of 2001, eco-label requirements have been elaborated for 15 different product groups; nearly 60 companies are allowed to apply the eco-label awarding more than 216 different products. However, the label is (nearly) not used within some product groups, especially durables (white goods and portable computers). "Dominating" countries are Spain and France.

Within the European eco-label, the role and influence of NGOs is modest, at least in comparison to national eco-label schemes. Consumer and environmental organisations are represented within the EUEB with two votes and they could influence the Lead Competent Body during the elaboration process of the criteria by activating the relevant national organisations.

Table 5.1: Synoptic overview of EPIS (own elaboration)

Label name	Product groups covered	Mandatory/voluntary	Prior target groups	Prior areas of concern				Official ISO-type	Information input	Information output
				Environment	Health	Safety	Other issues			
Energy label	White goods	M	Consumers	<ul style="list-style-type: none"> ▪ Energy consumption 	-	-	-	Medium	Modest	
Energy / CO ₂ -label	Cars	M	Consumers	<ul style="list-style-type: none"> ▪ Energy consumption ▪ Emission of CO₂ 	-	-	-	Medium	Medium	
EU eco-flower	Diverse	V	Consumers	<ul style="list-style-type: none"> ▪ Diverse 	-	-	-	High	Modest	
Energy star	Office equipment	V	Consumers, professional purchasers	<ul style="list-style-type: none"> ▪ Energy consumption 	-	-	-	Medium	Modest	
Organic agriculture	Food	V	Consumers	<ul style="list-style-type: none"> ▪ Soil protection 	▪ Health	-	-	High	Modest	

Explanation:

Information input = Describes the amount of information/indicators "processed" within a specific label.
Information output = Describes the amount of information delivered by a label addressed towards its users.

EPIS are especially applied in business-consumer-relationships. Specific environmental product information schemes which are addressed to business do not exist.

The EU eco-label has been at least modestly successful so far; it is expanding, however, slowly. The accepted coexistence of national, regional, and the European eco-label might influence the EU scheme, but different scenarios are possible: either a competitive one (competition between EU and national schemes, decreasing application of the "loosing" scheme) or a supporting/complementary one (exchange of information, co-operative marketing, eventually mutual recognition etc.).

The most prominent European EPIS are the EU-eco-label and the energy label. It seems that the duty to use the energy label prevents companies from applying for the EU eco-label: With one exception, at the moment, manufacturers of white goods and light bulbs do not apply for it. Interestingly, a co-existence of these labels for four product groups could be registered, namely refrigerators, washing machines, dishwashers and light bulbs. Comparing the requirements for these product groups (see Tables 5.2 to 5.5), we notice that about 50% of the eco-label criteria exist also for the different energy-labels.

This means that any intended future extension of the energy label to brown goods and to building components might bear the risk to compete with the EU eco-label.

Table 5.2: Comparison between requirements for **refrigerators** of the European eco-label and the Energy label

Eco-label criterion	EU -Ecolabel criteria	Energy label criteria
Energy efficiency	Required	Required
Ozone Depletion Potential of refrigeration fluids and foams	Required	Not required
Global Warming Potential of refrigeration fluids and foams	Required	Not required
Life time extension	Required	Not required
Recovery and recycling	Required	Not required
Instructions for use	Required	Required
Noise limits	Required	Required
Information for consumers	Required	Required

Table 5.3: Comparison between requirements for **light bulbs** of the European eco-label and the Energy label

Eco-label criterion	EU -Ecolabel criteria	Energy label criteria
Energy efficiency	Required	Required
Average life and maintenance	Required	Required
Standards for mercury	Required	Not required
Standards for packaging	Required	Not required
Product information	Required	Required

Table 5.4: Comparison between requirements for **washing machines** of the European eco-label and the Energy label

Eco-label criteria	EU -Ecolabel criteria	Energy label criteria
Energy efficiency	Required	Required
Water consumption	Required	Required
Centrifuge efficiency	Required	Required
Noise limits	Required	Required
Detergent leakage prevention	Required	Not required
Machine design	Required	Required
Instructions for use	Required	Required
Recovery and recycling	Required	Not required
Life time extension	Required	Not required
Washing efficiency	Required	Required
Information for consumers	Required	Required

Table 5.5: Comparison between requirements for **dishwashers** of the European eco-label and the Energy label

Eco-label criteria	EU -Ecolabel criteria	Energy label criteria
Energy efficiency	Required	Required
Water saving	Required	Required
Measures to prevent excessive use of detergents	Required	Not required
Machine design	Required	Required
Instructions for use	Required	Required
Recovery and recycling	Required	Not required
Washing efficiency	Required	Required
Drying efficiency	Required	Required
Noise emissions	Required	Required
Detergent leakage prevention	Required	Not required

The most obvious challenge is to embed the different EPIS schemes in an environmental labelling strategy covering the different approaches, target groups, and concepts. This proposal has also been made in a recent report (Allison/Carter 2000): "No-coordinating role currently occurs at the European or Member State level. Even within the Commission, different labels can be established for the same product, for example Eco-labels exist for Energy-labelled products, which often makes the former redundant for the average consumer" (Allison/Carter 2000, p. 73). This report identified five different future strategic options for an EU environmental labelling strategy, namely (Allison/Carter 2000, p. 64):

- Type II as an initial 'stepping stone' for producers on the way to the use of Types I and III.
- Type III as a 'stepping stone' to Types I and II.
- Type I as the ultimate label type, used alongside other policy tools, with other label types not given prominence in policy framework.
- Complementary roles for Type-I, II and III labels and also single issue labels on an equal basis (no 'ultimate' claim type); restriction of other types of labels.
- Needs based approach - all labels and other forms of product environmental information on equal footing, given prominence and support within policy framework where their use is most appropriate.

These options have to be discussed within the Commission and will also be analysed by the DEEP-project in its future work programme.

In addition to this, any EPIS strategy is confronted with the following challenges:

- The co-operation and/or inclusion of sustainability issues with environmental labels. So far, attempts to expand the environmental requirements of the EU eco-label towards sustainability-issues do not exist; there are only some proposals. A strategic approach to look for chances of a "Label for Sustainability" has to be assessed.
- The embedding of information as an IPP strategy. Information and EPIS are only one building block of the broader IPP-strategy. Its relationship have to be more stressed in detail.
- The application of EPIS within other instruments/measures of an IPP. Often mentioned instruments are public procurement and taxation, especially different VAT-rates. Such a "double" strategy seems to strengthen EPIS, however, several risks exist. We think that a linkage between VAT-rates and eco-labelling runs the risk that the practical elaboration process of requirements would be overburdened with a lot of technical and juridical questions which might be very difficult to arrange.

These aspects bear significant future relevance and should be dealt with carefully.

6 Literature

- AIM [Association des Industries de Marque] (1998): Integrated Product Policy – Preliminary comments by the Branded Goods Industry. Brussels
- Allison, Charles / Carter, Anthea (2000): Study on different types of Environmental Labelling (ISO Type II and III Labels): Proposal for an Environmental Labelling Strategy. London: Study on behalf of DG Environment
- BMU [Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit] (1999a): Schlußfolgerungen des Vorsitzes über die Ergebnisse des Informellen Treffes der EU-Umweltminister. In: Umwelt, No. 6, pp. III-IV
- BMU [Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit] (1999b): Hintergrunddokument zum Thema Produktbezogene Umweltpolitik. In: Umwelt, No. 6, pp. V-XVI
- CIAA [Confédération des industries agro-alimentaires de l'UE] (1998): CIAA views on Integrated Product Policy. Brussels
- DG SANCO (1999): Outline of a possible Community approach in the area of Green Claims – consultation document. Brussels (downloaded from the internet on 21 September 2000)
- DTI <Danish Technological Institute> (1990): Eco-Products. Proposal for an European Community Label. Taastrup (DK): Report of DTI to the European Commission
- EAP <Environmental Action Programme>, Commission of the European Union, (1992): Towards Sustainability - An Environmental Union Programme of Policy and Action in Relation to the Environment and Sustainable Development. Brussels: own publication
- EAP <Environmental Action Programme>, Commission of the European Union, (2001): Environment 2010: Our future, our choice. Brussels: own publication [draft as of January 2001]
- E & Y et al. [Ernst & Young / SPRU] (1998): Integrated Product Policy. London: Study on behalf of DG Environment
- E & Y et al. [Ernst & Young / SPRU] (2000): Developing the Foundation for Integrated Product Policy in the EU. London: Study on behalf of DG Environment
- EU-COMMITTEE (The EU-Committee of the American Chamber of Commerce in Belgium) (1998): EU Committee Position Paper on Integrated Product Policy – Preliminary views, Brussels
- EU-COMMITTEE (The EU-Committee of the American Chamber of Commerce in Belgium) (1999): Letter at EU-Commissar Margot Wallström as of December 10, 1999. Brussels
- European Commission – DG XI (1999): Workshop on Integrated Product Policy – 8 December 1998. Final report, Brussels
- European Commission (2001): Green Paper on Integrated Product Policy (COM [2001] 68 final), Brussels
- European Commission - DG Environment (2001): [internet <http://europa.eu.int/comm/environment/ecolabel/> as of 5th February, 2001]
- Group de sages (1997): Guidelines for the application of Life Cycle Assessment in the EU eco-label award scheme. Luxembourg: Office for Official Publications of the European Communities
- IEFE/ICEM-CEEM (1998): Promotion and the diffusion of the EU eco-label in Italy and the Benelux. Milan/Gent: Study on behalf of DG Environment

- Leibuscher, Susan et al. (1998): Study on verification and control of environmental claims. Brussels: Study on behalf of DG Health and Consumer Protection
- Lohse, Joachim / Wulf-Schnebel, J. (2000): Promoting and marketing the European eco-label in Germany and Austria. Hamburg: Study on behalf of DG Environment
- O'Rourke, Raymond et al. (2000): Food labelling. How much information can consumers digest? In: Consumer Voice, No. 2, p. 5
- Rubik, Frieder / Empacher, Claudia (1994): Inventory of product policy instruments: Case study European Union. Berlin: IÖW-Schriftenreihe 72/94 – EU
- Rubik, Frieder (1995): Product Policy and the Environment: The Example of Eco-Labels. Berlin: IÖW-Schriftenreihe 88/95 of the Institut für ökologische Wirtschaftsforschung
- Rubik, Frieder (2000): Innovationen durch die Umweltpolitik - Integrierte Produktpolitik (IPP) in Deutschland. Heidelberg/Berlin: report on behalf of the German Federal Environmental Agency
- Rubik, Frieder (2001): Integrierte Produktpolitik – Konzeptionen, Erfahrungen und Herausforderungen. Marburg: Metropolis [in preparation]
- Taylor et al. (1998): Development of a strategy for the promotion of the European eco-label award scheme. Study on behalf of DG Environment
- UNICE [Union des confédérations de l'industrie et des Employers d'Europe] (1998a): Integrated Product Policy – UNICE Opinion. Brussels
- UNICE [Union des confédérations de l'industrie et des Employers d'Europe] (1998b): Integrated Product Policy – UNICE Comments on the Five Building Blocks of Measures proposed by the Ernst & Young Study. Brussels
- UNICE [Union des confédérations de l'industrie et des Employers d'Europe] (2000): UNICE Contribution to the green paper on Integrated Product Policy. Brussels
- Waide, Paul (1999): Refrigerators: development in the European market. In: Bertoldi, Paolo et al. (Ed.): Energy Efficiency in Household Appliances. Berlin et al: Springer, pp. 231-247
- Zadek, Simon et al. (1998): Communicating ethical trade. Understanding how social labels work. London: Study on behalf of DG Employment and Social Affairs

Dirk Scheer

**Environmental Product Information Schemes (EPIS)
in Austria**

Table of Contents

1	INTRODUCTION	31
2	INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INFORMATION SCHEMES IN AUSTRIA	31
2.1	Environmental Policy and Product Policy	31
3	MANDATORY EPIS	33
4	VOLUNTARY EPIS	34
4.1	ISO Type I Labels	35
4.1.1	'Classical' ISO Type I Labels	36
4.1.2	ISO Type I like Labels	42
4.1.2.1	The Austrian BIO-Label	42
4.1.2.2	IBO-Label	43
4.2	ISO Type II	43
4.3	ISO Type III	44
5	OTHER EPIS	44
5.1	Social Labels	44
5.2	Other Labels	44
6	CONCLUSIONS	45
7	REFERENCES	46
8	APPENDIX I: SAMPLE OF AUSTRIAN PRODUCT LABELS	47

1 Introduction

This paper examines Environmental Product Information Schemes (EPIS) in Austria regarding both mandatory and voluntary labelling activities. Compulsory product information in particular has a long tradition in Austria, reflecting the legislator's point of view to minimize safety and health risks for the consumer while handling products. Though embedded in Austrian legislation for a long time many Acts were updated in consequence of Austria's EU-accession in 1995 in order to implement EU directives.

Product information on a voluntary basis is a relatively new policy approach which is meant to improve the environmental performance of products via flexibility and soundness without limiting or restricting the market forces.

Chapter 2 presents cornerstones of Austrian environmental policy and product policy with emphasis on general patterns i.e. institutional and programmatic related developments. The following **Chapter 3** examines Austrian compulsory product information and mandatory labelling schemes. **Chapter 4** illustrates voluntary EPIS on the general basis of the three types of environmental labelling elaborated by the International Organization for Standardization (ISO). A deeper analysis of independent third-party eco-labelling (ISO-type I) particularly the *Österreichisches Umweltzeichen* will be presented while first-party labelling (ISO-type II) and quantified product information using indices (ISO-type III) is shown in brief. Labels that do not fit into the ISO systematization will be highlighted in **Chapter 5**, for instance, social labels while **Chapter 6** concludes with the general findings and principal results.

2 Integrated Product Policy and Environmental Product Information Schemes in Austria

2.1 Environmental Policy and Product Policy

In Austria, environmental politics in government can be traced back to the early 1970s when Chancellor Kreisky set up the Ministry of Public Health and Environmental Protection, reflecting a technocratic policy approach typical in the period around the first oil crisis. Although, the Ministry remained for about a decade and half it was practically without power and was mostly an act of symbolic politics (Lauber 1997 p. 82). Though environmental issues were discussed controversial in Austrian politics and society during that period (e.g. radiation from nuclear plants, the *Waldsterben* (forest-die-back) or the conflict on a hydraulic dam at Hainburg), the Ministry could not lace any environmentally relevant legislation. Moreover, it was rebuffed when it requested to be involved in the preparation of environmental related legislation undertaken by other ministries.

After the period of stagnation in the 1970s a breakthrough followed in the mid-1980s in both environmental *politics* and *policy*. In 1984, under pressure from anti-Hainburg activists who had organised a petition demanding a referendum to secure constitutional environmental protection, the government responded with a constitutional law which declared comprehensive environmental protection as a basic goal of the state. Thus, for the first time the Austrian constitution explicitly referred to environmental protection. The Ministry of the Environment, Youth, and Family was set up and granted greater power than its predecessor and a Federal Environmental Agency was established in 1985, while on local / provincial level environmental

ombudsmen institutions were created. To facilitate the dialogue between the state, social partners and stakeholders the Austrian Society for Environment and Technology was set up. In the area of environmental policy the early 1990s brought up a new generation of legislation based on sound and flexible policies. While in the past Austrian environmental policy had relied particularly on command-and-control measures and subsidies in different sectors i.e. air, water, soil, noise and waste removal, the focus in the 1990s was more on sound, flexible and in part voluntary policy instruments. In 1993, the Environmental Information Act, the Environmental Impact Assessment and Citizen Participation Act were passed. In 1995, Austria adopted the EU regulation on voluntary environmental auditing of business firms (EMAS). The guiding principles of Austrian environmental policy were inspired by the Dutch example with its comprehensive policy framework in the National Environment Policy plan. In June 1992, the Austrian government in co-operation with representatives from various state levels, social partners, the scientific community and environmental organisations, launched its own National Environmental Plan (NEP)(BMUJF 1995). The prospect of EU membership and finally the accession in 1995 clearly influenced Austrian environmental legislation and general alignment of environmental policy.

In the area of environmental related *product policy* the idea of an integrative approach led to the concept of 'Integrated product policy' (IPP) (Rubik/Teichert 1997, Ernst & Young et al. 1998, Rubik 2000). The Austrian Environmental Plan did not explicitly mention product policy. The "political commitment to integrate environmental concerns into all political levels" includes "industrial policy, traffic and energy policy, agricultural policy, health policy, research and technology policy, as well as education policy" (BMUJF 1995 p. 12) without distinguishing product policy as a separate policy area. In its medium-term goals NEP aims to "promote innovative, environmentally sound production processes, while at the same time encouraging the development and marketing of 'green' technologies, products and services (ibid. p. 25). Similar to the Dutch case, the Austrian NEP identified market-based measures and consumers as key actors on its path to sustainable development. The change of consumer behaviour has been identified as one of the most important factors in implementing environmentally relevant measures (ibid. p. 77): "Not only must consumers be able to choose from a wide range of green products and services, they must also be provided with simple, concise information on the environmental repercussions of various products. Current and future labelling laws will have to clearly and comprehensively address environmental and health protection concerns" (ibid. p. 27). Thus, the Austrian government judges environmental product information schemes which can be seen as integral part of IPP as a fundamental policy approach towards sustainability without conceptualising IPP in detail¹.

In the following both mandatory and voluntary product labelling schemes in effect in Austria will be outlined. While compulsory product information relates primarily to safety and health aspects with its main emphasis on consumer protection, voluntary labelling may cover a greater scope of topics e.g. environmental, social, technical, geographical, economic etc. The labelling schemes analysed in this study will mainly refer to:

- environmental issues
- quantitative and qualitative labels and
- the business-to-consumer relationship.

Thus, labelling activities based solely on safety, technical, social and/or economic issues, specific business-to-business aspects, test reports, quality marks etc. will not be examined in detail.

¹ A current study aims to conceptualize the different measures so far in existence on all level of politics in an overall IPP framework (cf. www.17und4.at/ipp.htm) (12.12.2000).

3 Mandatory EPIS

Compulsory product information schemes refer mainly to safety and health aspects, and product use information. Hence, mandatory labelling is primarily embedded in legislation dealing with hazardous substances e.g. chemical bonds, plant protective agents or tobacco (cf. Table 1). Though most of the Austrian compulsory labelling schemes had been part of national law before Austria's EU accession they have been updated to comply with EU-directives.

Mandatory labelling prescriptions in the Chemical Act, for instance, oblige the producer or retailer to label the product with specific danger symbols and standardized risk and safety-information (R & S-sentences). New chemical substances which are introduced in the market have to be registered and admitted by official authorities.

Similarly, the Pesticides Act (Pflanzenschutzgesetz) and the Biocide Act (passed in 2000) stipulates that the label must show the name of the producer/manufacturer, appropriate danger symbols and first aid measures, and to name every substance according to 67/548 EEC (Annex I).

Table 1: Mandatory product information in Austria
(Source: Rubik (2000a) p. 9 and www.ris.bka.gv.at/bgbl/)

Product group	Act/decre	Reference of label	Compulsory information
Household appliances	BGBL 568/1994 Implements 92/75 EEC	Consumption of energy and other resources	- level of energy efficiency - capacity
Household appliances	BGBL 624/1996	Noise emission in dB	
Hazardous substances	BGBL 210/1993	Content of PCB/PCT/DBBT	- danger symbol - "contents environmental sound PCB"
Chemical substances	BGBL 53/1997	safety and health	- danger symbols - standardized danger information sentences (R & S sentences)
Plant protective agents	BGBL 60/1997	safety and health	- name "plant protective agent" - name of producer - substance according to 67/548 EEC - first aid measures - danger symbols
Biocide	BGBL 105/2000	safety and health	- substances according to Chemical Act 81/2000 - danger symbols
Textile	BGBL 890/1993	consumer information	- % of raw material
Tobacco	BGBL 431/1995	safety and health	- formal sentences with reference on health risk

Mandatory labelling with an emphasis on ecological aspects is difficult to find in Austria. A unique and genuine Austrian case of mandatory environmental labelling has been the decree of Tropical Timber Labelling (BGBL 539/1992) passed right before the Rio Earth Summit in 1992. Art. 2 stated that products completely or partly made out of tropical timber have to display a label of at least 10 cm size with the inscription either "made out of tropical timber" or "contains tropical timber". Due to boycotts of timber

exporting countries like Malaysia and Indonesia the Austrian government withdrew the decree half a year after its introduction. In 1995, concomitant with the EU-accession, Austria joined the International Tropical Timber Agreement.

Following the EU Directive 92/75 EEC, which stipulates that the manufacturers of large household appliances equip their products with the so-called European Energy Label, the Austrian government implemented the framework Directive in 1994. The specific product group related directives were implemented by the Austrian government successively:

- refrigerators/freezers (94/2 EEC): 1994
- washing machines (95/12 EEC): 1996
- tumble drier (95/13 EEC): 1996
- dishwashers (97/17 EEC): 1999
- lamps/light bulbs (98/11 EEC): 1999.

4 Voluntary EPIS

The increasing world-wide voluntary eco-labelling activities are also a topic of the International Organisation for Standardisation (ISO) which strives for systematisation of environment related product information. Its Technical Committee 207 developed three types of voluntary labels: Type I (ISO 14024) refers to criteria-based certification programmes, Type II (ISO 14021) describes self-declared environmental claims and Type III (ISO 14025) applies to quantified product information that is based upon independent verification using present indices. Thus, in its environmental labelling differentiation ISO does not cover instruments like obligatory labels, test reports or trade marks.

Austria shows a wide range of eco-labelling schemes covering both first- and third-party activities (for a sample cf. Table 2)².

² A brochure published by the Chamber of Labour presents an overview of the wide range of ecolabels available in Austria (cf. AK 1996).

Table 2: Labelling schemes in Austria

Label	Label awarded by	Product groups	Life cycle orientation ¹
IBO Zeichen	branch association	construction materials	full
Gütezeichen für Recycling-Baustoffe	branch association	construction materials	partial
Österreichisches BIO-Zeichen	government	food	full
Demeter	branch association	food	full
Ernte	branch association	food	full
Orbi	branch association	food	full
Dinatur	branch association	food	full
Ja! Natürlich	company	food	full
TransFair	NGO	food	partial
Natur pur	company	food	full
Erde & Saat	branch association	food	full
ARGE Gentechnik-frei	branch association	food (without genetic engineering)	partial
E-Commerce-Gütezeichen	government, NGOs	online-shopping	no (quality mark)
Naturpack	company	packaging	partial
Austrian Ecolabel	government	several	full
Green cotton	company	textile	full
ÖKO Tex Standard 100	branch association	textile	single issue
Silberne Diestel	branch association	tourism	partial
Grüner Baum	branch association	tourism	partial
Servus Tourismus	branch association	tourism	partial
Umweltsiegel Tirol	branch association	tourism	partial
Beim Bauern zu Gast	branch association	tourism	partial

¹ Awarding schemes based on full life-cycle-orientation consider in a screening phase the environmental impact in all life stages of products or services. For further specification in order to establish product group criteria the most important stages might be selected. Partial or single issue life-cycle-orientation is limited already in the screening phase to just selected or just one life stage.

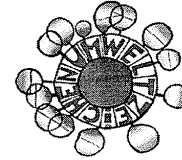
4.1 ISO Type I Labels

ISO-type I labels are defined in ISO 14024 norm published in April 1999 as a voluntary, multiple criteria-based third party programme that awards a licence permitting the use of environmental labels on products. These indicate the overall environmental preferability of a product within a particular product category based on life cycle considerations. These labels provide qualitative environmental information. However, the findings of so-called ISO type I labels in Austria resulted difficult to attribute to ISO 14024. Therefore we subdivide the norm in the following categories:

- *'Classical' ISO type I approaches:* third-party labels referring to the standard – explicitly/implicitly – in a comprehensive manner.
- *Other third-party, ISO type I like labelling:* third-party labels containing major elements of the ISO type I standard (e.g. third-party verification, multiple criteria based)

4.1.1 'Classical' ISO Type I Labels

The *Austrian Ecolabel* was created in 1991 on initiative of the Federal Ministry of Environment, Youth and Family (BMUJF)³. The Austrian artist Friedensreich Hundertwasser created the design of the label while the BMUJF subsequently registered the Ecolabel as a trademark. The Ecolabel is a voluntary, seal-of-approval, targeted to both consumers and manufacturers.



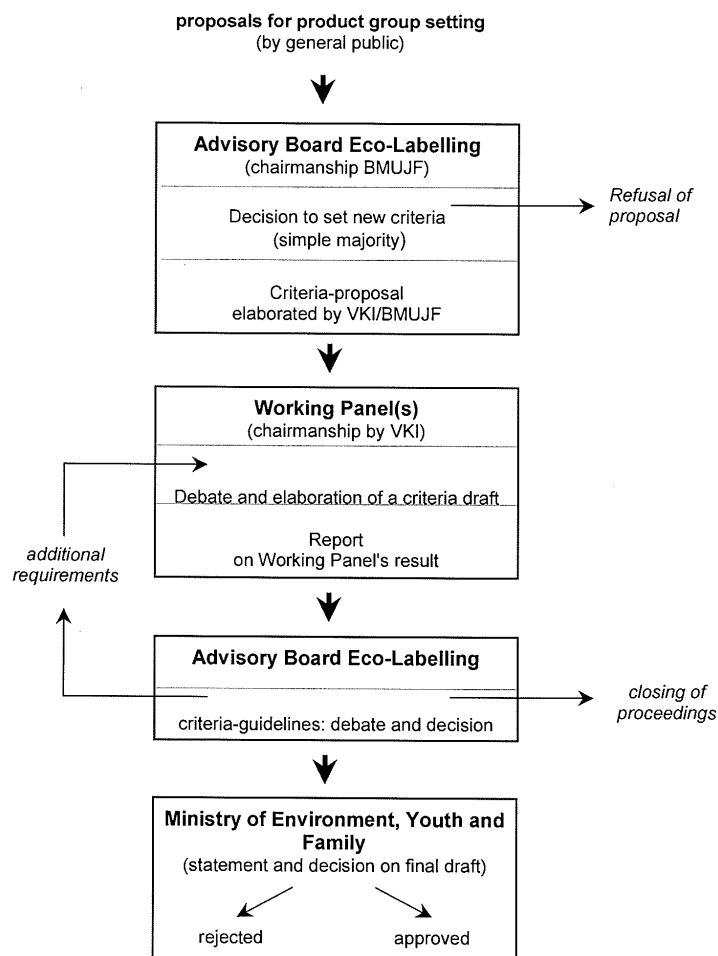
The objectives of introducing the Austrian Eco-label in the market were threefold (BMUJF 1999 p. 2):

- to supply the consumer with reliable information while purchasing. It is designed to draw consumers' attention to products that are more environmentally friendly as compared to the harmful potential of other products fulfilling the same function. The consumer should be able to identify environmentally sound products from the choice of products on offer.
- on the supply side, the Austrian government, supported by increasing consumer demand, intended to motivate producers and retailers to develop and offer more environmentally sound products without direct regulations, but with the dynamics of competitive market forces.
- moreover, third-party setting and controlling of criteria guidelines in the labelling procedure shall contribute to a higher degree of transparency in the assessment of products both in an ecological and functional perspective.

The administration and implementation of both the criteria setting and the ecolabel awarding procedure of the Austrian Ecolabel is conducted by the BMUJF, the *Verein für Konsumenteninformation* (VKI) (Association for Consumers Information) and the *Technische Büro HAUER Umweltwirtschaft* (Technical Office HAUER Environmental Economy). Compared to other 'national' labelling schemes it is striking that the national Consumers Association is directly involved in the process. In addition, two institutional bodies, the Advisory Board Ecolabel (*Beirat Umweltzeichen*) and the Working Panel were established to assist in the criteria setting and awarding process. Members of both the Advisory Board and the 'expert group' cover a widespread scope of societal interests and include representatives from e.g. the Ministry of Economic Affairs, the Federation of Austrian Industry, the Austrian Environmental Consultancy, the Austrian Federal Economic Chamber, the Chamber of Labour, Ecological Project Graz, the Austrians Standards Institute, the Austrian Association of Cities, environmental protection associations, and individual experts.

In the *Beirat Umweltzeichen* (Advisory Board Ecolabel), the BMUJF takes the chair. To start with the criteria setting, the Advisory Board defines product categories and services to be considered for the Ecolabel passed by majority decision (cf. Figure 1).

³ Recently the Austrian government renamed the Ministry of Environment in *Ministry for Agriculture and Forestry, Environment and Water management*. In this report we throughout keep the old name BMUJF except were official statements or publications were released under the new name.



BMUJFBundesministerium für Umwelt, Jugend und Familie
VKI.....Verein für Konsumenteninformation

Figure 1: Criteria setting in the Austrian Ecolabel scheme

Once new product groups have been selected the VKI elaborates in a first step via elementary inquiries the general scope for setting the guidelines. The proposal worked out by the VKI, thus, defines the background for elaborating the specific guidelines. The VKI refers its proposal then to the Working Panel. Every product category requires its own *Fachausschuss* (Working Panel) to ensure that experts with the necessary product related knowledge are included. The Working Panels are composed of representatives from a wide range of stakeholders e.g. economic, environmental and consumer organisations. The singular Working Panel has no predefined number of seats. The quantity of participants is determined on a case-to-case basis. The Working Panel, presided by the Association for Consumer Information (VKI), specifies and works out in technical detail the criteria. The body is responsible for discussing proposed criteria and coming to a unanimous decision in passing a draft set of environmental criteria for each product group. The Committee's final criteria proposal will subsequently be debated and approved or rejected by the *Beirat Umweltzeichen*. The body is

an official advisory board of the Minister and consists of 20 actors with two seats each where all principal interests are institutionalised. The criteria are then, when approved, authorized by the BMUJF and published in the official Federal Environment Agency gazette, the *Wiener Zeitung*. Usually, criteria guidelines are valid for three years unless there has been a major technological revision, so the criteria may be reviewed before the three year period is over. If no manufacturer has applied yet for an Ecolabel in an already set up product group, these criteria guidelines may be withdrawn or altered prior to the three years.

Once product group criteria are set and officially published, any natural person or legal entity resident in Austria, who produces or imports goods or offers services, may apply for the Austrian Ecolabel at the Association for Consumer Information (VKI). The condition of having Austrian residency only requires that the applicant's place of business is based in an EU Member State. Thus, the Austrian Ecolabel awards both products and services and may be applied by domestic and foreign manufacturers and retailers. If the producer is in compliance with the product requirements, a 'label utilisation contract' will be awarded by the BMUJF to the producer. Each product label may be used for two years, after which it is eligible for renewal. To use the Austrian Ecolabel, the applicant must pay an annual fee, which varies depending on the annual turnover of the product and ranges in five steps from ATS 2000 (EUR 145) to an upper limit of ATS 25000 (EUR 1817). Additionally, 25% of the annual turnover has to be paid as an application fee.

Besides defining a product group, the setting of the specific criteria guidelines is most important in third-party eco-labelling schemes. The judging principle of a product's/services' environmental impact may refer only to selected stages of a life-cycle (e.g. production, use) or may include all relevant stages of the commodities/services' life. The Austrian labelling scheme demands a comprehensive assessment of the environmental impact of a product. Its 'Life-Cycle-Thinking' (LCT) orientated approach considers the following aspects as most important (BMUJF 1999 p. 4):

- Raw material and energy consumption (concerning production and use)
- Toxicity of the ingredients
- Waste and emissions (concerning production and use)
- Marketing, packaging and transportation
- Disposal and recycling.

Thus, in the Austrian eco-labelling scheme the LCT-methodology is based on principal assessment guidelines although further specification is not required. The Austrian Ecolabel does not use in advance standardised LCA (life cycle assessment) sheets with detailed prescriptions nor is the product assessment based on the comprehensive ISO norm 14040. To assess the environmental impact of a singular product the LCA proceeding is carried out on a case-to-case basis, i.e. in the process of criteria elaboration only the most important life stages will be considered. In addition, to judge the quality and utility use value, product-specific guidelines and standards must comply with applicable health, safety and environmental requirements outlined in Austrian law, if the product is to qualify for a label.

By April 2001 the decisive bodies of the Austrian Ecolabel have published criteria guidelines for 40 (excluding UZ tourism) different product groups including consumable as well as durable commodities and services (cf. Table 3). A total of 109 firms put all together 444 products on offer (excluding UZ tourism). By far the highest number of awarded products is covered by UZ 29 (flower arrangements). Under the umbrella of the Austrian Flower Association 74 firms offer a total of 222 environmentally sound produced

arrangements in the market.⁴ One product group out of 40 therefore covers 49,4 % of all products awarded in the Austrian Eco-labelling scheme (excluding UZ tourism). Indoor equipment i.e. office chairs (UZ 34) and textile coverings (UZ 35) range next with 57 different chair- and 54 different textile covering products. But altogether just three firms applied for these two product groups. The high number of awarded products by just a small number of firms is due to the fact that these firms offer different types of principally the same product. The products may differ in design or size but they are quite similar to their components or way of production. Thus, the success of the Austrian Ecolabel (without UZ tourism) concerning the number of awarded products depends particularly on three product groups i.e. only 7,5% of all product groups cover 74,2 % of all products awarded the Austrian Ecolabel.

Table 3: Criteria guidelines, quantity of labelled products and firms (State: April 2001)

	Eco-label	Products	Remark	Firms	"GEN"-Code
Batteries		0		0	1100
wood-fired central heating boilers	UZ 37	3		1	1706
Burners/Boilers		3		1	1200
cleaning agents	UZ 30	0		0	1300
washing-up detergents	UZ 19	0		0	1301
dishwasher agents	UZ 20	0		0	1301
textile detergents	UZ 21	0		0	1301
Cleaning		0		0	1300
textile floor coverings	UZ 35	54		1	1400
Clothing/Textile		54		1	1400
thermal insulation materials with hydrophobic properties made of non-renewable resources	UZ 43	0		0	1501
thermal insulation materials made of renewable resources	UZ 44	0		0	1501
masonry units	UZ 39	1		1	1507
Construction/Building		1		1	1500
biodegradable saw-chain lubricants	UZ 14	3		3	1601
compostable flower arrangements and wreath	UZ 29	222		74	1603
peat free culture substrates and soil improvers	UZ 32	12		2	1603
Gardening/Agriculture		237		79	1600
household refrigerators and freezers	UZ 05	0		0	1701
household washing machines	UZ 08	0		0	1703
Home Appliance		0		0	1700
paints, varnishes and wood sealant lacquers	UZ 01	5		2	1800
water-soluble varnishes for wooden floors	UZ10		Combined with UZ 1		1800
wallpapers	UZ 17	4		3	1800
Home Care Products		9		5	1800
energy efficient light bulbs	UZ 47	0		0	1900
Lights		0		0	1900
photocopying machines	UZ 16	0		0	2000
resilient floor coverings	UZ 42	3		1	4000
office chairs	UZ 34	57		2	2004
filing systems for offices made of recycled paper	UZ 03	2		1	2005
Office Equipment/Furniture		62		4	2000
Office Supplies (not paper specific)		0		0	2100
reusable containers for beverages and liquid foodstuff	UZ 26	3		2	2200

⁴ The Austrian Ministry of Environment calculates 3 products each firm added up to total of 222 in UZ 29.

	Eco-label	Products	Remark	Firms	"GEN"-Code
Package/Container (not paper specific)		3		2	2200
total chlorine free bleached fine paper for inkjet- and highspeed laser printers	UZ 23	Combined with UZ 02			2300
low pollutant printing products	UZ 24	13		2	2301
publishing paper	UZ 36	10		3	2301
toilet-paper and tissue made of recycled paper	UZ 04	0		0	2302
tissue-paper, kitchen rolls	UZ 31	Combined with UZ 4			2302
printing and writing paper	UZ 02	3		2	2305
exercise-books made of recycled paper	UZ 09	Combined with UZ 18			2305
products made of recycled paper (incl. exercise books)	UZ 18	0		0	2305
Newspaper made out of recycled paper	UZ 22	Combined with UZ 36			2305
compostable paperbags for biogenic waste	UZ 25	4		1	2305
Paper Products		30		8	2300
Personal Care Products		0		0	2400
reprocessing of colour media	UZ 11	0		0	2500
go-for-the-environment tickets	UZ 27	0		0	2500
Services		0		0	2500
solar collectors	UZ 15	5		2	2600
Solar-Energy		5		2	2600
Vehicles/Fuels		0		0	2700
water-saving WC systems	UZ 12	0		0	2800
electronic based control-systems for sanitary installations	UZ 13	0		0	2800
water- and energy-saving sanitary installations	UZ 33	0		0	2800
Water-Saving		0		0	2800
wooden furniture	UZ 06	10		1	2004
Furniture		10		1	
Tourism	UZ TB	146		146	4000
Tourism		146		146	
solid bio-mass fuels (briquettes, pellets)	UZ 38	1		1	1707
Energy		1		1	
Food		0		0	
playthings for outdoor use	UZ 28	5		1	4000
fire extinguisher	UZ 40	0		0	4000
plastic canal tube	UZ 41	0		0	4000
wood and wooden materials	UZ 07	25		4	4000
Others		30	>+	5	4000
Total (Austria)		590	>+	255	

>+ Reliable information on exact number of eco-labelled products is not available. The indicated numbers are the minimum.

On the other hand it is striking that no supplier or retailer applied for product group awards such as reprocessing of ink media (UZ 11), detergents for manual use (UZ 19), dish washing agents (UZ 20), textile detergents (UZ 21), or cleaning agents (UZ 30). According to the BMUJF this is due to an informal boycott of supply-side actors in that industry. No recycled paper products (UZ 18) have been awarded due to a revision of the guidelines in 1997. In February 1997 two firms offered a total of seven awarded products made of recycled paper in the market (BMUJF 1997 Table 2.3), but after the publication of the revised criteria in August 1997 no firm has yet applied for the ecolabel. Furthermore, the elaboration and publication of new

product group criteria sometimes substitutes older ones, integrating them in a broader range of product group definition (e.g. UZ 09, UZ 10, UZ 22, UZ 23 and UZ 31).

Regarding the eco-labelling of services, the Austrian scheme offers criteria guidelines for public transport tickets (UZ 27), although until now there has been no demand by suppliers. Conditions require that a time ticket (day, week, month) is transferable to other persons and that in the time period of the ticket the number of rides are unrestricted, which may cause a bottleneck for public transportation suppliers.

The second product group concerning services in the Austrian scheme is the Ecolabel for tourism, reflecting the high significance of tourism in the region of the Alps. The Austrian Ministry of Environment (BMUJF) and the Ministry of Economic Affairs together with the VKI have created a nation-wide Ecolabel for touristic establishments, which is unique world-wide. The Austrian efforts in sustainable or 'green' tourism aim on the supply side at different target groups e.g. hotel sector, catering establishments, holiday apartments, private lodging, farm holidays, camp sites, alpine refuges etc. The guideline differentiates between two types of criteria. On one hand there are compulsory criteria which have to be fulfilled, and on the other hand there are optional criteria according to a rating system. The Austrian Ecolabel combines in its tourism criteria the hurdle and the scoring principle. To meet the requirements of the tourism Ecolabel the establishment has to fulfil the mandatory criteria and reach at least 60% of the optional ones. The criteria include environmental policies on procurement (food, washing, office, equipment), waste (e.g. waste management system), energy (insulation, energy-concept for the house), water (e.g. water efficient washing-machines and toilets), architecture and surroundings, transport, information available to guests and staff etc. So far the Austrian Ecolabel for tourism has been very successfully with 146 awarded establishments offering more than 10000 beds. Of these 45% belong to hotels and holiday villages, 40% to pensions and camping sites, and 15% to private rooms (BMLFUW 2000).

Guidelines for insulation materials made of mineral resources and criteria for 'green power' are under development and almost ready to publish. Another interesting task of the Austrian Ecolabel in the service sector is to work out criteria guidelines for schools. Work on this project has recently begun.

For the time being the performance of the Austrian Ecolabel is mediocre. Although during time a steadily increase of awarded products took place, the number of 449 labelled products is far too low to play a decisive role on changing demand patterns and purchase behaviour. On the **demand side** surveys state that the consumer shows a high degree of awareness concerning environmental issues and that he is willing to purchase environmental benign products (BMUJF 2000). On the other hand, the BMUJF stated that the level of awareness of the Austrian Ecolabel among consumers is at 33%. The Ministry concludes that consumers would create a considerable demand for environmentally sound products but due to a lack of adequate supply is not able to do so (ibid.).

In Austria, public consumer play a major role in the market. While in the EU institutionalised procurer spend on average 11% of gross domestic product (GDP) for purchasing goods, the Austrian public authorities are able to procure for about 15,9% of GDP, a quota considerably beyond the EU average (BMLFUW 2000). However, it is hard to tell the share of real 'green procurement' due to a lack of clear definition of environmentally sound products. Austrian 'green procurement' is based on formal, partly formal and informal guidelines:

- formal: Placing Act (Bundesvergabegesetz BGBl. 56/1997) and ÖNORM A2050
- partly formal: resolutions of Austrian Council of Ministers
- informal: Procurement Service Austria (BeschaffungService Austria)

The Placing Act was updated to implement Annex XVI of the EWR Treaty made by EC- and EFTA-states in 1992, and after Austria's EU accession to fulfil EU directives. ÖNORM A2050 revised in March 2000 is legally binding for public procurer. Environmental issues in both legal acts remained unclear. There are no specific prescriptions for 'green procurement'. Resolutions of the Austrian Council of Ministers elaborated general and specific guidelines to purchase environmental sound products, for instance, to buy goods awarded the Austrian Ecolabel. However, the Council's resolutions do not legally bind public authorities. To disseminate information on 'green procurement' the BMUJF established the *BeschaffungService Austria – Information Centre for Environmental friendly procurement* (BSA). The objectives of the BSA are to promote 'green procurement' by means of gathering data, conducting scientific studies, compiling data banks etc.

On the **supply side** the BMUJF reports that success or failure of the Austrian Ecolabel depends particularly on product sectors. In the field of cleaning products, for instance, there is a sustained informal boycott of the manufacturers since the very beginning of the Ecolabel. Moreover, resistance from the supply side tends to be very strong where multinational companies are involved. On the other hand, in the area of home construction materials distributed via Do-it-yourself-markets the Ecolabel begins to develop successfully e.g. varnishes and paint products or wood and wooden materials. This is due to a decision made in 1998 by the eco-labelling authorities to focus activities on that area in order to establish a favourable climate between the actors. The eco-labelling bodies did so because the end consumer was meant to attach high importance to an environmental friendly living arrangement, and therefore taking into account the longevity of home material products. The performance of the Austrian Ecolabel makes clear that retailers play a decisive role for success or failure of ISO-type I labelling schemes.

4.1.2 ISO Type I like Labels

4.1.2.1 The Austrian BIO-Label

In the food sector the Austrian Ministry of Agriculture initiated the **BIO Austria Kontrollzeichen** to award organically produced agricultural products and foodstuffs. The implementing body of the Austrian BIO-Label is the *Agrarmarkt Austria Marketing GmbH*, a subsidiary company of the *Agrarmarkt Austria*, latter founded in 1992 to prepare the Austrian agricultural sector both in marketing and production for Austria's entry in the EU domestic market.



The criteria of the BIO-Label hallmark are based on the regulation 2092/91 EEC and the Austrian Food Book III (chapter 8) (*Codex alimentarius Austriacus*). The Austrian legislation is sometimes more severe than the EU directive. The EU directive, for instance, allows the use of specific mineral fertilisers while the Austrian Food Book prohibits them. Concerning plant protecting agents the Austrian rule states explicitly the agents allowed while in the 2092/91 EEC there is no exact definition of plant protecting agents. More over, the Austrian Food Book gives a maximum value for the use of nitrate compared to an unlimited use of nitrate according to the EU rule. Besides the regulation for ecologically produced agricultural products the *Codex alimentarius Austriacus* stipulates that animals must be kept in their natural environment.

The BIO-Label hallmark is available as a red label i.e. minimum 70% of the product's ingredients have to be produced in Austria, while for the international market there is a black label on offer without regional restrictions. The awarding procedure and control meets independent third-party requirements such as unannounced control once a year. The number of companies producing agricultural products according to

the BIO-Label criteria increased rapidly. In 1991 an overall of 1970 companies cultivated ecological products while in 1995 the number rose to 18540 and in 1998 to 20140 companies (AMA 1999 p. 31).

4.1.2.2 IBO-Label

A product group specific ecolabel certifying environmentally benign products in the construction material sector is the **IBO-Label**. The *Österreichische Institut für Baubiologie* (IBO), an independent scientific society initiated the label and is responsible for the labelling procedure. Products awarded the IBO-label for the first time may use it for two years. Subsequently the period of the label's usage reduces to one year.



The criteria are set on a 'cradle-to-grave' approach taking the different life stages e.g. material extraction, production, distribution, use, recycling and disposal into account. The assessment of products relates to scientific knowledge granted by independent experts. Aspects to be considered in the product assessment are e.g. renewability, material and energy demand, emissions (air, water, soil, waste), transportation- and storage requirements etc. The IBO divides product groups into building materials for walls and plates, plaster, and insulation products. So far, 23 companies have been awarded the IBO label, with a total number of 33 products.

4.2 ISO Type II

In 1999, the Technical Committee 207 of the International Organisation of Standardisation published the ISO-type II norm covered by ISO 14021. ISO-type II refers to self-declared environmental claim made by manufacturers, importers, distributors, retailers, or anyone else likely to benefit from such a claim without independent third-party certification.

The scope of self-declared environmental claims is restricted by Austrian legislation to prevent unfair competition and misleading advertisement. Any kind of first-party environmental claim must comply with binding laws concerning fair product information (amending law 1999 of the Trade Mark Act). Environment related product information by economic actors often contains package claims such as 'x % of recycled materials' or 'x % biological degradable'.

Specific ISO-type II labels tend to occur often in the retail sector. Particularly, big retailing chains have created their own label. In the case of Austria, two nation-wide supermarket chains *Billa* and *Spar Austria* have initiated singular company seals covering exclusively the food sector. Billa's ecolabel named **Ja! Natürlich** refers to agricultural products. The criteria are drawn from 2092/91 EEC and *Codex alimentarius Austriacus* though sometimes threshold values are even stricter. Additionally, the label requires transparency of the flow of commodities. Spar Austria titled its seal **Natur pur** to certify milk products. The hallmark is essentially an additional label for products already awarded the *BIO-Austria Kontrollzeichen* or the *Ernte-Zeichen* (cf. Table 2). The Spar activity shows that the marketing effectiveness of third-party schemes as in the case of the Austrian BIO-label is so far limited. Big retailer chains prefer to add their own label to already awarded ones to increase marketing impact and incentive.

4.3 ISO Type III

ISO Type III labels refers to quantified environmental data for a product with pre-set categories of parameters based on the ISO 14040 series of standards i.e. with reference to the LCA methodology. The norm is covered by the technical standard ISO TR 14025 which was published in March 2000, and aims particularly at the business-to-business sector.

ISO-type III, so far the latest development in standardized eco-labelling is not very widespread around the world. Single pilot projects are run in Sweden, Canada and Korea. Currently, in Austria no similar projects are underway or planned in the near future. The BMUJF stated that activities relating to ISO-type III are solely an industry issue. Industry is welcome to play a major role in elaborating quantified environmental data sheets but the Austrian government has so far not set the task of ISO-type III labelling on its political agenda (BMUJF 2001). On the contrary, industry so far does not show any interest in ISO-type III activities.

5 Other EPIS

5.1 Social Labels

Social labelling activities focus on trade relationships between developed and developing countries in order to improve working conditions i.e. safety and health aspects, guarantee of minimum living standard by paying a 'fair' wage, prohibition of child labour etc. in third-world countries. Recently, social labelling has taken more and more environmental related criteria into account. One reason for the increasing importance of environmental criteria in social labelling might be due to the fact that the interaction between poverty and environmental pollution becomes more and more obvious (Hein 1992, Harborth 1993). Ecocide caused by conditions of poverty has been identified as a main reason for environmental problems in developing countries (Harborth 1993 p. 239).

Since the criteria guidelines of social labelling aim to establish a 'fair' and sustainable production of third-world produced goods, the certifying bodies tend to be international organisations. Hence, there is no specific Austrian social label. Social labels on products in the Austrian market therefore are similar to those known in other European countries e.g. Germany. The most relevant social label in Austria is *Trans Fair* with its emphasis on agricultural products like coffee, tea, cacao, honey and bananas.⁵

5.2 Other Labels

Due to the high importance of tourism in the Alps there is a huge quantity of regional tourism labels in Austria e.g.:

- *Q-Plus-Kleinwalsertal*: available in the region of Kleinwalsertal
- *Grüne Hand - Wir tun etwas für die Umwelt* (Green Hand - We do something for the environment): available in the region of Saalbach-Hinterklemm

⁵ For more information see Scholl 2000.

- Umweltsiegel Lungau (environment seal Lungau): available in the Region Lungau
- *Regionalmarke Nationalpark Hohe Tauern* (Regional mark National park Hohe Tauern): available in the region Hohe Tauern
- *Grüner Baum* (Green tree): available in the region of Bad Kleinkirchheim
- *Servus Tourismus*: available in the region of Kärnten
- *Tourismspreis Oberösterreich*: available in the region of Oberösterreich
- *Beim Bauern zu Gast* (a farmer's guest): no regional limitation
- *Dorfurlaub* (countryside holidays): no regional limitation

One of them will be analysed in more detail: The pioneer in the field of labelling touristic establishments is **Q-Plus-Kleinwalsertal (Silberdistel)** initiated 1988 by the tourist office in co-operation with the municipality of Mittelberg and *Raiffeisen-Bank*. The objectives for the label's introduction have been to improve both the quality of services and the overall quality of tourism supply. The criteria of the label aims at hotels, private pensions, trade and industry, mountain railways and chair lifts, public transport, agriculture, ski and snowboard schools, restaurants etc. As the label refers to the region of Kleinwalsertal both Austrian and German residents in the valley may apply for it. There are 27 general guidelines which every applicant has to fulfil. Additionally, specific obligatory guidelines are defined relevant to different target groups. Environment and quality aspects of criteria e.g. of water, waste, energy, arrival and departure etc. are set particularly in the target group related guidelines. Other criteria including e.g. offering a non-smoking room in hotels and pensions are optional ones. A scoring system is used to assess each applicant.

Control takes place once a year without announcement by an environmental consultant of the municipality and year round by guests and visitors. Thus, the control system of Q-Plus Kleinwalsertal alone does not meet strict independent third-party requirements. The label therefore includes aspects of ISO-type I and ISO-type II. The period of validity of the label is one year and subsequently requires reapplication. The first regional tourism label developed successfully. In 1999 158 companies have been awarded, 111 of them belong to category of accommodation i.e. hotels, pensions, private accommodation. The label led to verifiable savings in areas of energy, water and waste (Hamele 1997).

6 Conclusions

The overview of environmental product information schemes in Austria revealed some principal findings:

The elaboration of Austria's National Environmental Plan in 1992 brought up a systematic policy approach for environmental policy. However, IPP still lacks of such a comprehensive and integrated policy approach although an inventory study considering IPP related measures is launched.

In the area of mandatory labelling 'traditional' product information with reference to safety and health aspects still dominates. In consequence of Austria's EU accession national legal acts have been adapted to EU directives. Clearly environmental related labelling prescriptions had been initiated on EU level with the introduction of energy efficiency labels for household appliances. Austria implemented both the framework directive and the specific product group directives. A genuine national task of EPIS had been the decree of Tropical Timber Labelling but due to protests by developing countries has been withdrawn by the government.

In the area of voluntary EPIS the ISO-type I label *Österreichische Umweltzeichen* has been introduced in 1991. The scheme meets third-party requirements and judges products on a 'cradle-to-grave' basis (LCA-approach).

In the decision-making process of the Austrian Ecolabel it is striking that the *Verein für Konsumenteninformation* takes a leading role in the implementing procedure. However, all decisive stakeholders are involved and institutionalised in the Advisory Board.

The performance of the Ecolabel with 444 (without UZ tourism) awarded products has so far been mediocre although a steady increase is noticeable. The product groups covered by the scheme are comparable to other 'official' ISO-type I labels. An exception is the Ecolabel available for tourism establishments which developed successfully and awarded so far 146 establishments.

In order to evaluate the market conditions for the Austrian Ecolabel the BMUJF stated on the demand side a modest awareness of the scheme among consumers (33%) but also a widespread willingness of the consumer to purchase environmentally sound products. On the supply side the BMUJF identified retailers as crucial actors.

Especially in the food sector there is a wide-range of self-declared labels similar to ISO-type II with emphasis among retailers (supermarkets).

There are no ISO-type III activities in Austria so far. The BMUJF even does not plan to take a leading role in ISO-type III labelling in the near future. In the Ministry's opinion ISO-type III labelling is solely an industry issue.

There is no genuine Austrian social label because 'fair-trade' bodies tend to be international operating organisations.

7 References

- AMA [Agrarmarkt Austria Marketing GesmbH] (1999): Tätigkeitbericht 1999, Vienna.
- AK [Kammer für Arbeiter und Angestellte für Wien] (1996): Ökozeichen in Österreich: Was steht dahinter?, Vienna.
- BMLFUW [Bundesministerium für Land- und Forstwirtschaft, Umwelt- und Wasserwirtschaft] (2000): Molterer: 10 Jahre Umweltzeichen als "Öko-Erfolgsstory", Vienna (press release November 29, 2000).
- BMUJF [Bundesministerium für Umwelt, Jugend und Familie] (1995): National Environmental Plan; Vienna.
- BMUJF [Bundesministerium für Umwelt, Jugend und Familie] (1997): Einflüsse umweltbezogener Produktauszeichnungen auf die umweltgerechte Produktgestaltung, (*Schriftenreihe des BMUJF*, Vol. 8/97), Vienna.
- BMUJF [Bundesministerium für Umwelt, Jugend und Familie] (2000): Interview conducted on phone with Andreas Tschulik (head of department II/3 (industrial environment protection) [19.12.2000].
- BMUJF [Bundesministerium für Umwelt, Jugend und Familie] (2001): Das Österreichische Umweltzeichen, Vienna. (available as pdf-file from the BMUJF)
- Ernst & Young/SPRU (1998): Integrated Product Policy, London.
- Hamele, H. (1997): Das Buch der sieben Siegel: Umweltauszeichnungen im Tourismus, Berlin, (cf. www.greenglobe21.com/econett/report/rprt0022.htm [15.12.00]).
- Harborth, H.-J. (1993): Sustainable Development – Dauerhafte Entwicklung, in: Nohlen, D./Nuschler, F. (eds.): Handbuch der Dritten Welt: Grundprobleme, Theorien, Strategien, (Vol. 1), Bonn, p. 231-247.
- Hein, W (ed.) (1992): Umweltorientierte Entwicklungspolitik, Hamburg.
- IBO [Österreichisches Institut für Baubiologie] (2000): www.ibo.at/pruef.htm [15.12.00].
- Lauber, V. (1997): Austria: A Latecomer which became a Pioneer, in: Andersen, M. S./Lieferink, D. (eds.): European Environmental Policy: The Pioneers, Manchester/New York, p. 81-118.
- Rubik, F./Teichert, V. (1997): Ökologische Produktpolitik: Von der Beseitigung von Stoffen und Materialien zur Zurückgewinnung in Kreisläufen, Stuttgart.

Rubik, F. (2000): Innovationen durch die Umweltpolitik - Integrierte Produktpolitik (IPP) in Deutschland, Heidelberg.

Rubik, F. (2000a): Background Report on EU IPP and EPIS, Heidelberg (unpublished paper presented at the DEEP-Rome-Meeting).

Scholl, G. (2002): Environmental Product Information Schemes (EPIS) in Germany, Berlin, see this volume.

8 Appendix I: Sample of Austrian Product Labels

1. Voluntary labels



1.1 Demeter



1.2 Dinatur



1.3 Erde & Saat



1.4 Ernte



1.5 Orbi



1.6 Ja! Natürlich



1.7 Naturpack

1.8 Gütezeichen für
Recycling-Baustoff

1.9 E-Commerce-Gütezeichen



1.10 ARGE Gentechnik-frei

2. Mandatory labels



2.1 danger symbols (67/548 EEC - Annex I)

Pere Fullana / Eloi Montcada / Jordi Vall-Llovera

**Environmental Product Information Schemes (EPIS)
in Belgium**

Table of Contents

1	INTRODUCTION	49
2	SHORT DESCRIPTION OF IPP AND EPIS	49
3	MANDATORY SITUATION	50
4	VOLUNTARY LABELS	51
4.1	ISO Type I	52
4.1.1	Classical ISO Type I	52
4.1.1.1	European Labels	52
4.1.1.2	Other Labels	52
4.1.2	Other Third-party, ISO Type I	52
4.1.2.1	European Labels	52
4.1.2.2	National Labels	53
4.1.2.3	Regional Labels	54
4.1.2.4	Other Labels	54
4.2	ISO Type II	56
4.3	ISO Type III	56
5	OTHER LABELS	57
5.1	Social Labels	57
5.2	Other Interesting Labels	58
6	CONCLUSIONS	60
7	LITERATURE AND HOMEPAGES	61
7.1	Literature	61
7.2	Homepages	61

1 Introduction

The present paper presents the Belgian state-of-the-art of Environmental Product Information Systems, focused on both mandatory and voluntary eco-labelling schemes.

Responsibility for environmental and industrial legislation in Belgium is shared between national and regional governments but environmental priorities of the regional governments do not presently include a highlight on the environmental impact of products.

Before starting analysing the current situation, some important issues need to be underlined. First of all, Belgian competent body for EU-ecolabel was the last created in Europe, in October 1998 after some political problems. The second aspect is the no-existence of a national "classical" ISO type I ecolabel, as Blue Angel in Germany or Milikieur in the Netherlands.

Another important aspect is the significant importance of the consumer organisations, which include the "eco-consume" as one of their main aims.

Information for the study is based on primary and secondary data: phone interviews and mails with representatives of CRIOC-OIVO and the Belgian Competent Body and also specialized literature, European Commission Reports and Belgian legislation.

The following paper is divided in 6 chapters. The first one, after the introduction, briefly describes the general characteristics of both the evolution of Belgian environmental policy and Integrated Product Policy (IPP). **Chapter 3** introduces mandatory labels, including the interesting ecotax logo. **Chapter 4** gives an overview of existing Belgium activities about voluntary product labelling. They are divided according to their scope and ISO typology. International Organisation for Standardisation (ISO) strives for the systematisation of environmental related product information through its Technical Committee 207. It has launched three types of voluntary labels. **ISO Type I (ISO 14024)** is voluntary, multiple criteria based third-party programme setting up criteria and procedures for specific product groups; qualitative environmental information, as EU ecolabel. **ISO Type II (ISO 14021)** are self-declared environmental claims made by manufacturers themselves, as the labels created by several Belgian retailers. Finally **ISO Type III (ISO 14025)** are based on quantified environmental data for a product with pre-set categories of parameters; detailed quantitative environmental information. In this chapter all ISO-types of ecolabels are examined with a specific emphasis to ISO-type I labels introducing objectives, history and implementing procedures of third-party-ecolabelling. **Chapter 5** highlights other labels focused on food and social issues. Some general conclusions will be given in **chapter 6**.

2 Short Description of IPP and EPIS

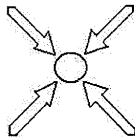
Belgian framework environmental competencies depend on the Ministry of Social Affairs, Public Health and Environment [Ernst and Young, 1998] but the three regional governments have developed own initiatives.

Since the 80's different environmental related laws have been approved, but the policy in the context of IPP is grouped in "The law relative to product standards for the promotion of the sustainable consumption and the promotion of the environment and health". (Moniteur Belgique, December 21st 1998).

The main objective of the law is to promote sustainable production and consumption using both of punitive and promoting policies. An important issue repeated along all the norm is to take all necessary measures, with reference to the product and its packaging, to protect the environment and the human health and to promote the sustainable consumption and production. Product Information Systems are mentioned as the best tools to inform consumers on environmental and health topics and it also considers Life Cycle Analysis as the tool to know the durability, dangers and potential risks of a product or group of products, throughout its life-cycle.

Currently the National Government is discussing the preliminary draft of the "National Plan for Sustainable Development". This Plan wants to be the Belgian framework for sustainable development and it is created as a tool to allow federal and regional governments to develop their own environmental legislation.

Referring to waste management, fiscal instruments are used by Belgian government to cover governmental services costs to protect the environment. Eco-taxes on products and packaging are applied to some product groups (mercury batteries, pesticides, disposable cameras and shavers,...). They can be reduced when some aspects of the product are improved, as the refunding of the packaging or even of the whole product (disposable cameras).



In addition to the goal of reducing waste, the ecotax also stimulates product innovation through the development of more recyclable products in order to be eligible for a complete or partial tax exemption.

Regional governments and even municipalities have developed their own waste management systems and voluntary agreements to promote product recycling and re-using close loops among manufacturing sites.

Besides the official initiative, Belgian consumer's organisations started to work hard on EPIS, because of the high number of them. They have created a common research and information centre, CRIOC-OIVO, which has started several information campaigns on ecolabels and related logos [<http://www.oivo-crioc.org/>].

Another interesting initiative is the thematic net "Eco-consommation", also carried out by the consumer and environmental organisations, to share their knowledge in ecological consumption. Ecoconsommation was created in 1991 by *Centre de Recherche et d'Information des Organisations de Consommateurs* (CRIOC), *Espace Environnement* and *Inter-Environnement Wallonie* (IEW), when they started a campaign to inform consumers towards eco-consume.

This initiative is financed by private and public funds and since 1996 the net is open to other associations and even particulars interested in environment and/or consume.

Two interesting initiatives to promote the knowledge of the eco-labels are its web page, <http://www.ecoconso.org/>, and a brochure with all eco-labels and pictograms which can be found in Belgium.

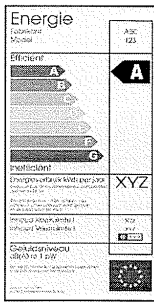
3 Mandatory Situation

In Belgium, general obligations for labelling and publicity are defined in the "Law for commerce practices" (Monitor Belge of 29/8/1991). The compulsory information which must be showed in the label is: name of the

product, company name, address and brand, price and quantity. Other regulations more specific have been developed since then and some of them give environmental information to the consumer, as the following.

Cosmetics and food products have to mention their ingredients in a list, from more to less amount, and food products have also to show the caducity date.

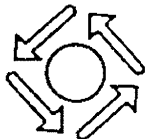
According to different EU Directives chemical and hazardous products have also be labelled with different compulsory sentences and symbols, to minimise their wealth and safety impact when being used.



In the same way, Belgium has implemented the Directives on energy efficiency of white goods. These are: Framework Directive 92/75/EEC for the EU energy label for white goods (Arrêté royal du 10 novembre 1996), refrigerators, freezers and their combinations (94/2/EEC) (Arrête ministériel du 20 novembre 1996) ; washing machines (95/12/EEC) (Arrête ministériel du 1er décembre 1998) ; household electric tumble driers (95/13/EEC) (Arrête ministériel du 1er décembre 1998) ; household combined washer-driers (96/60/EEC) (Arrête ministériel du 1er décembre 1998) ; household dishwashers (97/17/EEC) (Arrête ministériel du 1er décembre 1998); and household lamps (98/11/EEC) (Arrête ministériel du 1er décembre 1999).

Specifically in Belgium, there are two other types of mandatory labelling, both part of the ecotaxing system. Ecotax is an environmental tax developed in 1993 by the Arrêté Royal de 23 december 1993, which includes the following products: beverage packaging, one-single-use products, batteries, packaging of some industrial products, pesticides and some paper and cardboard products. These products have to be labelled with a pictogram represented by four arrows pointing to a circle. Until October 1999 a similar label was used with arrows pointing out of the circle, which meant that the product was totally or partially free from the tax. In fact, it is still quite usual to find products with this symbol.

Currently, and only for some ecotaxed product groups, the only way to be tax-free is the refunding of the packaging. It can be marked with different possible symbols and with the words "CONSIGNE-STATIEGELD".



4 Voluntary Labels

Belgium has not implemented any national scheme development like White Swan from Nordic Countries or German Blue Angel. Until now, Belgian Government has preferred to adapt the EU flower, although the number of granted products is quite low, yet.

Nevertheless, some Belgian supermarkets chains have created their own ecological labels for some of the products they sell. This performance could suppose the necessary initial impulse, which helps to make aware people of the importance that has the preservation of the environment.

Moreover, and apart of these ecolabels, there are other environmental developments regarding to other different types of products and services. Two of them are the *Enterprise Eco-dynamique* and the *Label Vert*, the first one designed to certified several kinds of enterprises and the second to be granted to tourist accommodations.

Other environmental information schemes have been found in Belgium. Textiles and agriculture products logos are the main kind of EPIS developed, and also there are few products granted with other national ecolabel. It is the case of German Blue Angel.

4.1 ISO Type I

4.1.1 Classical ISO Type I

4.1.1.1 European Labels

EU Ecolabel:



Although first Belgian legislation transposing the European Directive of the Eu Eco-label (880/92/EEC) was in December 1994 (Law of 14th June) creating the Certification Committee, the Competent Body did not start working until October 1998.

Currently there are only three Belgian products with the European ecolabel. The first one belongs to the group of paints and varnishes and was awarded by the French ecolabelling body (the company asked for the ecolabel in 1997, before the Belgian Competent Body was activated). So, the first product certified by the Belgian ecolabelling body was an organic soil improver awarded in November 2000. The remaining product certified also belongs to the product group of soil improvers.

4.1.1.2 Other Labels

Blue Angel:



In Belgium, it is also possible to find an ecolabel from a neighboured country. This label is the Blue Angel from Germany and, currently, there are 4 companies that have signed contracts with a total of 14 products awarded. The information about the products groups is not available.

4.1.2 Other Third-party, ISO Type I

4.1.2.1 European Labels

Blue Flag:



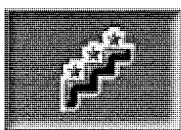
Blue Flag was born in Europe in 1987 as an initiative from the Foundation for Environmental Education in Europe (FEEE), with the collaboration of the European Commission. The aim of this program is to raise the citizen sensibility degree in order to protect the coastal and sea environment. This award is annual, so every year, it

must be renewed to preserve it. In Belgium the certification competent body is the *Bond Beter Leefmilieu*, which during 2000 granted 7 flags: 4 to certify beaches and 3 to marinas.

4.1.2.2 National Labels

Enterprise Eco-dynamique:

The label *Entreprise éco-dynamique* it is an initiative of the IBGE - *Institut Bruxellois pour la Gestion de l'Environnement* (Brussels region Department for the Environment and Energy) – launched in 1999 within the "Voluntary Companies Actions". It is developed in collaboration with various organizations in Brussels, public and private, including *l'Administration de l'Economie du Ministère de la Région de Bruxelles-Capitale*, *l'Agence Bruxelles-Propreté*, *Bruxelles Technopole*, *la Chambre de Commerce et d'Industrie de Bruxelles (CCIB)*, *le Port de Bruxelles*, *la Société de Développement Régional de Bruxelles (SDRB)* and *l'Union des Entreprises de Bruxelles (UEB)*.



The main objective is the continuous improvement of the environmental performance of the companies and the integration of environmental management principles. In fact "Enterprise éco-dynamique" is closer to an Environmental Management System than an ecolabel, but the information requested from Internet and consumers organisations includes this certification as "ecolabel".

Either, public or private organisations, with an operational site in Brussels can be awarded by the Enterprise Eco-dynamique scheme. The applying organisation must fulfil a minimum of voluntary criteria to obtain the first of the 3 levels of the ecolabel. These levels depend on the number of fulfilled criteria. There are not mandatory criteria.

Criteria are divided into 4 groups: eco-management practices in environmental field (management practices, technological choices and behaviour aimed at improving environmental performance in 8 fields: energy, air, water, waste, mobility, noise, soil, green and undeveloped areas); general eco-management practices: human, financial, communication and organisational resources allocated to the environment; the quality of the environmental analysis work required for the application file; and the quality of the environmental programme drawn up for the application file.

The first step to obtain the ecolabel is to sign the "Enterprise Eco-dynamique letter" in order to give an idea of the company environmental situation. At the same time the company has to fill in the "Descriptive sheet" about its environmental situation. Both documents have to be sent to the IBGE.

After the letter signature, and in 3 months period, the company has to fill in and returns the document called "Prospective Report" (model provided by the IBGE) back to IBGE. It comprehends a brief inventory of the plants and equipments, the aims of the company and the human, financial and operational resources

Before 2 years after the signature, the company will ask for the label with a candidates' file which will include an environmental analysis (giving a progress report on the major environmental incidences of the company), an environmental program and the state of the first achievements subjected to evaluation.

The attribution of the label amongst candidates will be given by a multi-actors Jury composed of the representatives of federations and public institutions, environmental and consumers organizations, and other groups of interest. The decision of the jury will be taken on the basis on the contents of the "Prospective report", on the candidates' file and on the results of a visit carried out by agents of the IBGE.

On February 2000 there were 70 applicants for the label, 15% of which comprise hotels and a conference centre and first awards of the ecolabel were given during 2000. The establishments with a stronger representation in applications are hotels, because of an environmental project in collaboration with the Department (IBGE) and the Brussels HoReCa Federation.

4.1.2.3 Regional Labels

Label Vert:



The Tourist Federation of the Belgian Luxembourg (FTLB), established in Belgian Luxembourg province is developing a project on tourism ecolabelling, called Label Vert since 2000. The project has been launched by several organizations in the province (public and private), such as *Ministère de la Région wallonne, direction générale de l'économie et de l'emploi*, and *F.U.L (fondation universitaire luxembourgeoise, guichets de l'énergie de la Région Wallonne)*. The pilot project is located in the river "Semois" valley, in the South of the Province and it is being carried out through six accommodation enterprises, that at the end of the pilot project will be certified.

All kind of accommodation enterprises can apply for this label: hotels, camping sites and lodgings. But, to obtain the ecolabel, companies have to fulfil the Regulation based on mandatory and voluntary criteria, which are divided in 6 themes: water, energy, waste, eco-consumption, green areas management, education and information.

The final decision on granting the Label is taken by the Tourist Federation of the Belgian Luxembourg, but it is essential that establishments fulfil all the mandatory criteria and 50% of optional ones in each of the six themes defined. The interested enterprises are followed-up and counselled and the inspections are made by an independent commission, specialized in environment.

4.1.2.4 Other Labels

FSC:



The Forest Stewardship Council is an international non-profit organisation founded in 1993 aimed to support environmental, social, and economical viable management of the world's forests. In Belgium, a National Committee adapted the original ten principles focused on tropical forest management to Belgian reality and currently there are three FSC certified forests with more than 4342 ha.

Öko-Tex Standard 100:



Centexbel is the independent Belgian textile institute associated to Öko tex and the responsible to award Belgian products with the label "Öko-tex Standard 100".

This label was introduced to identify textile products with a good environmental performance in terms of their content of harmful substances as heavy metals or formaldehyde. Products from potential label licensees are initially tested by Centexbel. Afterwards, a report is released to accept or not the application. If it is positive, the certificate is issued by Centelbex and, if the product does not comply with the criteria, the report has to indicate which point has to be improved.

Currently, in Belgium, there are 91 companies with certified products of ten product groups.

GuT Label:

On December 4th 1990, European carpet manufacturers joined in Aachen (Germany), to form GuT (*Gemeinschaft Umweltfreundlicher Teppichboden* – Community Environmentally Friendly Carpets). Their goal was to ensure environmental friendliness and consumer protection at every stage of the carpet's life-cycle.



The GuT label is a persuasive argument for the consumer. Every year, hundreds of carpet types are checked by GuT. Only those products that meet the GuT standards, obtain the GuT licence number. This licence number, which appears on the back of the carpet, indicates that it has been tested by a certified testing institute.

GuT's main objective is to optimise the manufacturing and recycling procedures to obtain the largest possible protection of humans and environment. This means:

- Economical use of selected raw materials
- Avoiding waste and turning waste into new raw material
- Reducing air effluents
- Using products that contribute to the well-being of the consumers
- Facilitating recycling

In co-operation with officially recognised test organizations across Europe, GuT continuously tests products against the highest standards. GuT also promotes environmentally friendly solutions for carpet installation as well as recycling projects. GuT disseminates objective information on these issues.

Belgium industry is the biggest carpet producers in Europe, but its market is one of the smallest. This means that Belgium carpets are mostly exported into other markets, especially Germany and UK ones. GuT members represent 70-75% of the European carpet producers, with more than 85% of the production volume. Currently in Belgium there are 15 GuT members. Until the moment there are 1749 awarded Belgian products from a total of 5448, which represents a high percentage.

In order to certificate the label the applicants have to deliver a complete application form together with a sample of a carpet to one of five GuT test-houses, in Germany, UK, Denmark, Austria or Belgium. Belgian one is CENTEXBEL, an independent textile institute.

If the carpet fulfils criteria the license can be granted to the manufacturer for one year. According to Edmund Vankann, every year, 10% of all certified products have to be monitored and the license is prolonged for another year if the control tests are passed.

FEBELTEX, a non-profit association representing Belgian industrial textile firm, co-ordinates GuT environmental tasks in Belgium.

4.2 ISO Type II

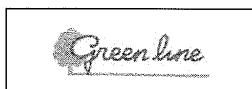
In Belgium the supermarket eco-logos or pictures mostly represent this type of ecolabelling. There are some supermarkets chains that have developed their own label to certify those products which are respectful with the environment [IEFE and ICEM-CEEM, 1998].

BIO:



The supermarket chain Delhaize has developed a biological food product range which can be ecolabelled with its own label called BIO. This label is guaranteed by Biogarantie a.s.b.l., Belgian Society to award biological and ecological food according to EC Regulation CEE n° 2078/92.

Greenline:



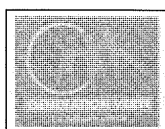
Greenline is granted to the products of Colruyt's supermarkets. The ecolabel stands for the commitment of Colruyt to inform their customers about products, services or activities that contribute in a positive way to the environment. For this purpose Colruyt created green prices labels. These make it easy for the customers to recognise the Greenline products in the Colruyt stores. They also mentioned why the product has received a green price label. To obtain the label, manufacturers have to inform Colruyt of the substantial improvements made on their product or the packaging with a positive effect on the environment.

GB-logo:



This pictogram, found in GB-supermarkets, is intended as a recognition instrument for the consumer who is looking not only for greener products but also for extra information about the environmental impact of products. It is placed the packaging of own brand products that were improved in some way. The manufacturing of the GB-own-brand-products is carried out by other companies, but GB gives the manufacturers strict production specifications. By doing so, GB has for its own products the guarantee that the improvements are really done. Nevertheless, the awarding of this label is again done rather arbitrarily and not done on a scientific basis.

Generation Verte:



The last Belgian supermarket ecolabel is the Generation Verte. This label, like GB-logo, is not certified by any external party. It emphasizes the environmental respectful products of the Cora's supermarket chain.

4.3 ISO Type III

No ISO type III labels have been found in Belgium

5 Other Labels

5.1 Social Labels

Belgium has two large organisations working on Fair Trade: Oxfam Wereldwinkels in Flemish-speaking Belgium and Magasins du Monde Oxfam in French-speaking Belgium. Both of them run almost 235 shops (175 and 60, respectively), mainly selling food and handicrafts, and several products are sold in several hundred supermarkets (belonging to eight chains) in Belgium.

Max Havelaar:

Max Havelaar is an independent organisation, which manages a label with the same name. This label of "equitable trade" can be granted to the coffees and bananas which fulfil criteria defined by the organisation.



The label offers a guarantee to the consumer: guarantee that food, produced in the developing countries, is grown under correct working conditions and that farmers received the right price for their harvest. More than 500.000 workers and farmer families are affected by this equitable trade. This label exists in 14 European countries as well as in Canada, the United States and Japan.

Max Havelaar Belgium, the national Fair Trade label organisation, is backed by a coalition of 28 member organisations. According to the Fair Trade in Europe 2001 report, with 14 licensees having signed up a contract with the organisation, Max Havelaar labelled coffee and bananas is now found in more than 1.000 supermarkets in Belgium.

Although Fair Trade labelled products only cover coffee and bananas, with 13 license contracts signed up on coffee and one on bananas, sales of labelled products account for €5m of the net retail value and 55% of these sales are made outside the traditional Fair Trade Circuit.

In October 1999 a survey showed that 36% of the population knew about Max Havelaar. The problem however seems to be the lack of visibility of the products, in that people do not know where to buy them or where to find them on the shelves.

This might explain why a very strong stated buying intention (77%), translates into comparatively low market shares of 1% for coffee and 0,6% for bananas.

Many municipalities and even Belgian parliament and Ministries have introduced Fair Trade coffee and tea. Fair Trade has found a place in the national government's new "National Plan for Sustainable Development".

5.2 Other Interesting Labels

Washright:

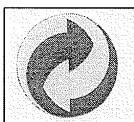
Another ecolabel found in Belgium shelves is the Washright, which logo is a hanged shirt with a green dot representing a washing machine. It does not give information on the product but it attracts consumer attention to a list of good practices to wash.



The *Association Internationale de la Savonnerie, de la Détergence et des Produits d'Entretien* (A.I.S.E.) is the official body that represents the soap, detergent and maintenance industry with European and other international organisations. Through its member associations, the A.I.S.E. now represents more than 1200 companies in Europe, covering approximately 90% of the market.

Green Dot:

Although Green dot is not an Ecolabel, it is one of the most famous logos which appears in product's packaging and until now it is the best-known of Belgium ¹. It indicates that producer or importer pays through a society (*FOST Plus* in Belgium) for funding a waste packaging management system, mostly belonging to public administrations. This symbol appears in almost all packaging, unless they are consigned.



In fact, according to the article 23 of *Décision de la Commission interregionale de l'Emballage concernant l'agrément de l'a.s.b.l. FOST Plus -23rd December 1998-* the Green Dot is not officially approved in Belgium. However, the management of this symbol by Fost Plus is exactly the same as in the other European countries where it is approved.

Food Labels:

The area used for organic agriculture is relatively small in Belgium. Its production represents 1,3 percent of the total agricultural area and organic farmers represent 0,86 percent of the total number of farmers. On the other hand, trading with in organic products is more and more important and is growing faster than organic agricultural production.

In Belgium there are two main organisations for organic farmers. In the Flemish region, Belbior (Belgische Organisatie voor Beroepstellers) and in the Walloon region, Unab (Union Nationale des Agrobiologistes Belges). Both of them are members of IFOAM and BioForum and are represented in the Ministry of Agriculture.

BioForum, the umbrella organisation for organic agriculture, includes representatives of farmers, processing firms, retailers and inspection bodies working with ecological food. It has replaced the former umbrella organisation Biogarantie, which is still responsible for the administration of the Biogarantie logo.

Since the Biogarantie logo replaced former logos (Velt, Belbior) in 1987, the only logos for organic agriculture that are left in Belgium are Biogarantie and Nature et Progres. In addition, some farmers and processing firms are also certified by Demeter, Bioland (both of Germany) or AB (*Agriculture Biologique*, France).

¹ Rouseau and Delaet (1998).

Biogarantie:

Biogarantie is a private and controlled ecolabel created in 1987 in Belgium. The label was launched as a collective mark, bearing on the ecological aspects of the product and to certify those companies which comply the biological requirements.



The use of the label is managed by the "asbl Biogarantie, but the verifications of the label are carried out by Ecocert Belgium, an inspection body that operates according to European Regulations 2090/91 for organic products. Biogarantie gathers organisations of consumers, organisations of certification and control and trade associations of farmers, transformers, distributors and stores. Biogarantie also includes the representatives of the sector of the biological production: organisations of professionals, ecologist associations, associations of consumers and organisations of control.

The mark can be awarded only if the company is controlled by a Belgian organisation of certification recognized as organization of control by the Ministry for Agriculture. The controls are carried out at least once per annum and they can be performed any time during the year. Control must comprise the requirements of control and the measurements of precaution envisaged in appendix III of the Regulation EEC n° 2092/91 and in the ministerial decree of 30th Of October 1998.

The following product groups can be ecolabelled: vegetables, agricultural products for humans and animal feed, products from animals (beef, sheep, pigs, hens and broilers) and some oil derivatives for non-feeding uses.

The label can be awarded only if the percentage of biological ingredients is higher than a certain percentage fixed for each category of products (e.g. 95% for food of vegetable origin), but it is possible to use the word "biogarantie" in the list of ingredients if the percentage of bio-ingredients is higher than 50%.

Nature et Progres:

The association *Nature & Progres* was originally an association of both consumers and farmers. Today



Nature & Progres is not officially recognised as a producer association because consumers can be members as well. In fact, it also defends farmers' interests. The label Nature & Progres is still used by a certain number of farmers (for direct marketing) and by many small organic shops.

It was founded in France in 1964, and today gathers farmers, transformers, garden amateurs and consumers from France, Belgium, Spain, Italy, Madagascar and Reunion. In Belgium, it exists since 1967 and currently there are more than 4.500 members, consumers, farmers, transformers and retailers active in the mobility of biological agriculture.

The Nature et Progres label was created to promote biological agriculture and gardening and bioconstruction. It promotes the respect of the natural cycles (link agriculture breeding, recycling of the organic matter, maintenance of the humus of the grounds) and supports a rich and diversified fauna and flora. It also proposes many services with the producers and the consumers to promote a bio-ecological respectful habitat of the health of the inhabitants and environment.

The European Association of Biological Agriculture Nature et Progres with gathering associations and the participation of consumers, according to the general ethics of association, selects criteria and standards to guarantee the quality of the products. These criteria are based on the subjects related to choice of materials

(taking into account their availability of the resources, environmental impacts of the products, recyclability, etc.), respect to the nature and traditional architecture, bioclimatic approach, management of waste and environmental information.

An independent institution approved by Nature et Progres is in charge of the controls to installations and a report is submitted to the committee of certification of Nature et Progres. This committee is composed by professionals, specialists and consumers and has the responsibility for the attribution of the mention. The Committee supervises the procedures of attribution and examines the conformity of the various cases to decide acceptance, withdrawal or refusal of attribution of the mention.

Agriculture Biologique:



The mention Agriculture Biologique guarantees that a product is the result of environmental concerned production, doesn't use chemicals from synthesis and respects animals well being. This label is certified by the association "Groupement Qualité Nord - Pas de Calais" (GQNPC) created in 1984 by the initiative of CRC-Consumption and consumers organisations. In December 1993, the association was approved as Certification Organism of agricultural labels by the public authorities (Ministerial decree of December 23, 1993, Official Journal of January 5, 1994). The association was founded on the basis of partnership between the consumers, the producers and the Regional Council.

To obtain this denomination, a product needs to be grown without using chemicals, applying working methods based on the recycling of natural organic matter and on the rotation of crops. It is also compulsory to use biological methods to fight plagues and to limit the use of additives, encouraging the use of natural ones.

6 Conclusions

- It does not exist nowadays a Belgian national ecolabel as the German Blue Angel. According to Administration representative's declarations, it is not expected to be created.
- There are only three Belgian products awarded with the European ecolabel, being the first one certified by the French Competent Body because of the Belgian one was created later (the last one in the EU).
- The non-existence of a national eco-label and the poor success of the European Flower show a quite desert landscape of clear and transparent environmental product information.
- Some Belgian products are ecolabelled with neighboured national schemes like the 14 ones with the German Blue Angel and others with international schemes as the FSC, Öko-Tex and GuT.
- Focusing on consumers, a study carried out in 1999 by Antwerp University [Daisy News, 1999] on the behaviour of the Belgian consumer in relation to green products, shows that around one third of them would be ready to take environmental criteria into account when shopping.
- Another survey, carried out by Rouseau and Delaet for CRIOC in 1998, inside hypermarkets, shows the high grade of confusion amongst the consumers. In fact, only half of the enquired people were able to recognise 4 of the 11 logos showed. For instant, the EU label was almost not recognised nor acknowledged: only 11,5% of enquired people gave the good meaning and 13% thought it means something related to ecotax. In the same way, logos referred to ecotax were only well-known by 2,7%. The best-known label was Green Dot, but it was often confused with the symbol of "recyclable" or

"recycled". The survey also shows that the best understood logos were those joined with a word or sentence.

- According to the environmental active consumer organisations, the wide range of eco-labels and logos produce confusion and misunderstanding among the consumers and it does not help to break the vicious circle – whereby the label's lack of viability deters producers from applying for the label, and, in turn, the absence of labelled products on the market prevents it from becoming known in the eyes of consumers
- Social labels are quite successful, compared with other countries, and are used as a purchasing tool for public administrations.
- Only food sector has independent and national spread tools to label the biological products.
- The developments in ISO type II labels are quite interesting. All of them, are launched by supermarkets and although they are not as transparent as desirable by consumer, it shows an environmental interest by retailers.
- There is not available information about ISO type III ecolabelling.
- Mandatory situation in Belgium is the same as the other European countries. Mostly information schemes are based on health and safety, especially in dangerous products, and energy labelling for white-goods.
- As a final conclusion, you can say that the inventory of product information schemes in Belgium is quite large in quantity, but quite poor in quality, in terms of independence and transparency.

7 Literature and Homepages

7.1 Literature

Durant, Isabelle [Vice- Prime Minister and Minister for the Mobility and Transport] and Deleuze, Olivier [Secretary of State to Energy and Sustainable Development] (1999). Plan Federal de Developpement Durable 2000-2004 ("Federal Plan of Sustainable Development 2000-2004").

EFTA – European Fair Trade Association (January, 2001). Fair Trade in Europe 2001.

Ernst and Young (March, 1998). Executive summary of the Final Report: European Commission DGXI: Integrated Product Policy.

IEFE and ICEM-CEEM (February, 1998). Project for the promotion and the diffusion of the EU-Ecolabel in Italy and the Benelux. Final report.

Law of 14 July 1991, of Commerce practices and consumer information and protection (MB of 29 August 1991).

Law of 21 December 1998, regarding to the product norms for the promotion of the sustainable consume and the promotion of the environment and health.

Observatoire Bruxellois de la Consommation Durable (OBCE) (April, 1999). Etiquetage écologique: pour une information plus honnête des consommateurs ("Ecological Labelling: for more honest information of the consumers").

Rousseau, C. / Delaet, D. (1998). L'etiquetage écologique, une aide à la décision d'achat, rapport d'enquête.

Taylor Nelson Sofres Consulting (December, 1998). Development of a strategy for the promotion of the European Ecolabel award scheme.

THE DAISY NEWS, published by the ecolabel unit of the European Commission (April, 1999).

7.2 Homepages

Agriculture Biologique: <http://www.gqnpc.com> – (visited: 06.10.2000)

Biogarantie: <http://www.bioforum.be> – (visited: 31.01.01)

Biogarantie: <http://www.ecocert.be> – (visited: 04.10.2000)

Blue Angel: <http://www.blauer-engel.de> – (visited: 12.09.2000)

Enterprise Éco-dynamique and Label Vert: <http://www.eco-tip.org/Eco-labels/ecolabels.htm> – (visited: 30.09.2000)

Enterprise Éco-dynamique: <http://www.ibgebim.be> – (visited : 29.09.2000)
EU Eco-label: <http://eurpopa.eu.int/index.htm> – (visited: 24.07.2000)
FSC: <http://www.fscoax.org> – (visited: 12.09.2000)
General information: <http://belgien.fgov.be/press/fr20000224.htm> – (visited on 19.01.01)
General Information: <http://www.ecoconso.org> – (visited: 20.10.2000)
GuT label: <http://www.gut-ev.de> – (visited: 31.01.01)
Label Vert: <http://www.ftlb.be> – (visited: 03.11.2000)
Max-Havelaar: <http://www.maxhavelaar.be> – (visited on 18.01.01)
Nature et Progres: <http://www.natpro.be> – (visited: 06.10.2000)
Washright: <http://www.washright.com> – (visited on 17.01.01)

Paolo Frankl / Sveva Barbera
supported by Virginia Belli

Environmental Product Information Schemes (EPIS)
in France

Table of Contents

1	INTRODUCTION	64
2	INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INFORMATION SCHEMES IN FRANCE	64
2.1	IPP and Related Policies	64
2.1.1	Definition of Strategic Actions for the Implementation of IPP in France	64
2.1.2	Role and Position of Different Involved Stakeholders	65
2.1.2.1	Interventions and Objectives of Public Authorities	65
2.1.2.2	Position of Industry, Retailers and Distributors, and Associations	66
2.1.3	Present French Position with Respect to the EC	66
2.2	EPIS	67
2.3	Other Environmental Product Policy Tools	67
3	MANDATORY LABELS	68
3.1	Energy Label	68
3.2	Packaging	69
4	VOLUNTARY LABELS	69
4.1	Classical ISO Type I Labels	69
4.1.1	European Eco-label	69
4.1.2	The NF Environnement Eco-label	71
4.1.2.1	Objectives and History of Third-Party-Ecolabelling in France	71
4.1.2.2	The Procedure of Labelling	72
4.1.2.3	Labelled Products with Respect to the EU-Flower Scheme	74
4.1.2.4	Current Status and Future Perspectives of the NF Environnement Eco-label	75
4.2	ISO Type I like Labels	76
4.3	Existing Studies and Surveys	77
4.4	ISO Type II Labels	78
4.5	ISO Type III Labels	80
5	OTHER LABELS	80
6	CONCLUSIONS	81
7	LITERATURE	82

1 Introduction

The report gives an overview of Integrated Product Policy (IPP) and Environmental Product Information Schemes (EPIS) in France. The study is a part of a larger research activity for all EU members. Its objective is to obtain an state of art of EPIS and to give some general conclusion.

Chapter 2 shortly describes EPIS and Product Policies currently existing in France. Chapter 3 analyses mandatory labels. Chapter 4 regards voluntary environmental labels (ISO type I,II,III). A large part of this chapter is dedicated to the French National Ecolabel NF Environnement (ISO type I). Chapter 5 describes social labels and Chapter 6 provides some general conclusions.

2 Integrated Product Policy and Environmental Product Information Schemes in France

An action plan for the implementation of the French Integrated Product Policy (IPP) has been published by the first months of 2001. In the following section, IPP and related product policies and instruments introduced in France during the 90's are shortly described.

2.1 IPP and Related Policies

2.1.1 Definition of Strategic Actions for the Implementation of IPP in France

The French Ministry for the Territory and the Environment (Ministère de l'Amenagement du Territoire et de l'Environnement - M.A.T.E.) has recently commissioned to Arthur Andersen a study on the definition and implementation of Integrated Product Policy (IPP) in France.

The objective is to initiate an integrated approach towards policies capable to increase both the supply and demand of more environmentally-sound products in this country. In particular, the study commissioned by MATE has investigated which responsibilities, roles and tools are expected to be the most appropriated in order to develop an IPP system, and has identified a set of strategic actions and tools needed for its implementation in France. These actions and tools are summarised in the following table.

Table 1: Strategic Actions and priority tools and operative actions for the implementation of IPP in France [Source: Andersen 2001]

Strategic Actions	Priority Tools and Actions
<p>Axis 1: Supporting and favouring the offer and supply of more environmentally sound products and services</p>	<ul style="list-style-type: none"> ▪ Supporting industry for the development and diffusion of eco-concept initiatives ▪ Supporting the development of voluntary initiatives by: ▪ Encouraging voluntary agreements ▪ Encouraging the development and certification of POEMS – Product Oriented Environmental Management Schemes) ▪ Recognising and recompensing voluntary labels ▪ Encouraging and supporting industry to develop “ecological profiles” (ISO-type III) of products. ▪ Sustaining the shift from the offer and supply of products to the offer and supply of services ▪ Identifying other systems for those subjects not committing themselves in any voluntary action ▪ Increasing the competitiveness of more environmentally sound products and services by internalising environmental external costs
<p>Axis 2: Encouraging and accelerating the raise of the demand for more environmentally sound products and services</p>	<ul style="list-style-type: none"> ▪ Favouring communication and sensitisation of consumers ▪ Accelerating the diffusion of good practices for Green Public and Private Procurement ▪ Allowing and formalising the integration of environmental aspects in Public Procurement ▪ Increasing the demand and competitiveness of more environmentally sound products and services by the internalisation of environmental external costs

2.1.2 Role and Position of Different Involved Stakeholders

2.1.2.1 Interventions and Objectives of Public Authorities

The identification of roles and responsibilities of the different involved public subjects and of their possible synergism is one of the key factors for the successful implementation of IPP.

The leading ministry for the introduction and diffusion of IPP in France is the Ministry for the Territory and Environment – MATE. In particular, within the direction for products and waste of MATE, the office for the environmental quality of products has following tasks and objectives:

- Management of the end-of-life of products
- Development of more environmentally sound products (eco-concept)
- Elaboration of methods for the assessment of environmental performances
- Elaboration of norms for the certification and labelling of products.

Other Ministries can intervene in the development of an IPP framework in France, in particular the Ministries for the Economy, Finance and Industry, through several general directions and/or some specific actions such as:

- Orientation of research programs of technical-professional centres of the industry sector
- Funding of research projects and studies
- Supporting technological innovation
- Participating in the elaboration of legislation and norms.

Moreover, also the National Agency for the Environment and Energy - ADEME (Agence De l'Environnement et de la Maitrise de l'Énergie) is carrying out a set of activities within the framework of environmental management of products, which are the same of an IPP approach.

2.1.2.2 Position of Industry, Retailers and Distributors, and Associations

On 23 October 2000, a working seminar on IPP has been organised involving the major stakeholders (industry, distributors, associations). From the debate their position with respect to the implementation of IPP in France has emerged. In particular, it emerged that according to the majority of involved stakeholders the objectives and building blocks of IPP, are not yet defined in sufficient detailed manner, even not at European level. Moreover, and more importantly, it emerged the little participation of French consumers and their associations in the environmental discussion in France, as opposed to what happens in Scandinavian Countries. This lack of "environmental culture" by French consumers has been identified as the most important brake against the implementation of IPP in France.

Therefore, French industry is in a "wait and see" position, waiting for further developments. In the meantime it has already expressed a certain criticism with respect to the proposed implementation of IPP, including:

- The imposition of tools and methods not appropriate for the French case by Scandinavian countries, which are more advanced in the application of IPP.
- The necessity of carrying out long and expensive studies.
- The development of a technocratic, constraining and compulsive policy, not connected with business reality
- The too extended use of National constraints, taxes and prohibitions, which all are tools in contrast with the proper dynamics of the evolution of products and services
- The introduction of specific National limits and constraints, which would distort the markets and decrease the competitiveness of French products with respect to foreign products.

2.1.3 Present French Position with Respect to the EC

The study identifies a set of necessary actions in order France to be a credible subject with respect to the European Commission within the discussion on IPP. The main needed actions are:

- Above all, increasing the discussion with all involved stakeholders
- Developing a clear and coherent IPP approach
- Carrying out and diffusing actual projects and experience in this field

- Ensuring that the French Policy can be integrated with the main orientations and measures that will be taken at European level (e.g. respect of the principle of subsidiarity, avoiding the introduction of market distortion elements, etc.)

These strategic actions have a twofold objective: on one hand they aim at supporting the offer and supply of more environmentally sound products and services; on the other they contribute to ameliorate the behaviour of consumers and to accelerate the demand for "green" products and services.

Within this framework of proposed strategies it emerges the will to favour voluntary systems (labels). Indeed, MATE concludes that the promotion of initiatives by private actors is needed and crucial for the success of IPP.

2.2 EPIS

France has a long tradition in eco-labelling. The National ecolabel NF Environnement dates 1992 and can be considered a "well-constructed" environmental product label. Moreover, France shows a fast acceleration in the EU-Flower labelling of products during the last two years. In particular, the leading role of distributors and retailers has been significantly increasing in these 2 years. A detailed description is given in § 4.1.

2.3 Other Environmental Product Policy Tools

Green Purchasing:

The ICLEI's (International Council for Local Environmental Initiatives) Green Purchasing Good Practice Guide 2000 addresses public purchasers and aims at assisting local and regional authorities in realising green procurement as part of their sustainable development process. One chapter of the guide presents innovative examples of green purchasing activities, and one of the practical experiences described there was developed by the French city Dunquerque. The municipality installed an environmental department and the city set about conducting a Local Agenda 21. The environmental department was responsible for initiating the introduction of greener products in its administration and the overall work on eco-products is carried out in co-operation with the French Ministry of the Environnement and ADEME French Agency for Energy and the Environment. The environmental department developed a six-step methodology for the introduction of greener products in administration. This methodology is applied to each target product which should be purchased green [GPP].

The France Government also has created an Inter-ministerial Commission which brings together all ministries and agencies involved in the reform of purchasing codes. Its objective is to integrate environmental concerns within the day-to-day activities of public management. [OECD 2000]

Environmental Management Systems:

Since 1995, ADEME has been disseminating the "Environment Enterprise Plan" (PEE), which was designed to assist in the introduction of environmental management systems (EMS) in companies. More than 2000 companies have already used the PEE. The agency is currently developing the plan to bring it into line with the ISO 14001 standard on EMS and eco-audit regulations. It is also adapting the plan to other sectors of the economy such as agricultural co-operatives. Additionally, ADEME is continuing to widen its partnerships with

professional organisations and consulting bodies to train trainers for small and medium-sized businesses and industries. Within the framework of this decision-making assistance, ADEME also finances preliminary environmental diagnoses for companies. In order to help environmentally-friendly products to emerge, ADEME supports the development of green products as well as a programme of partnerships with companies committed to environmentally-friendly product design. [PEE]

Design for Environment (DfE):

In France, the development of environment-friendly products and at the same time the implementation of eco-design is, amongst others, stimulated by means of the biennial award "Ecoproduit". This award is granted since 1987 and is organised by the ACFCI (Assemblée des Chambers Française de Commerce et d'Industrie). Because the French Ministry of Environment aims to widely diffuse DfE amongst industry, a strong relationship was established between the Ministry of Environment and the French Agency of Environment (ADEME). Since at the moment DfE is particularly a concern of some major companies in France, a project "Eco-conception" was recently started by ADEME which aims to introduce DfE in a lot of companies, of all sizes and kinds of industrial sectors. Also on a regional scale, initiatives are taken to introduce DfE in small and medium sized enterprises. [ESTO 2000].

Packaging:

Eco-Emballages: the central collection system for household packaging demanded by the Lalonde Decree (Packaging ordinance) was established on August 12, 1992 under the name Eco-Emballages. Its shareholders are product and packaging material manufacturers, importers and trading companies. The operative company is controlled by Ecopar S.A. as holding. The company is based on the principle of shared responsibility: it is up to the manufacturers, distributors and importers of packaging to solve the waste problem posed by used packaging in cooperation with Eco-Emballage. An operating licence was granted on January 1, 1993 and, following a three-year start-up period, was renewed as expected for a further six years in August 1996. Official licenses were also granted to the organisations Adelphé for glass bottles from the wine and spirits sector and Cyclamed for packaging used for pharmaceutical products.

3 Mandatory Labels

3.1 Energy Label

The mandatory energy label indicates the consumption of energy and of other essential resources (e.g. water, chemical products, etc.) of electric household appliances. The requested data must be indicated both on a label put on the appliance itself, and on a technical information sheet. The data to be indicated are specified in the different directives related to the different product groups. The producer is obliged to provide a detailed technical information.

Energy labelling of appliances according to the EU directive was first introduced in France in 1994: The general EU directive (92/75/CEE) on energy label has been applied through directive n° 566 July 1994 94/566, modified by directive n° 281 April 1998.

Energy labelled products in France are:

- Refrigerators, freezers and their combination,
- Washing machines, drying machines and combination,
- Dishwashers

3.2 Packaging

As mentioned, In France, a Packaging Ordinance - the second in Europe after the German one – was introduced with the Lalonde Decree No. 92-377 on 1 April 1992. This directive demanded that a specific company should be established to take over the recovery and recycling of household packaging. Moreover, it obliged the filling industry and importers to accept responsibility for their packaged products. The ordinance did not change the traditional responsibility of the local authorities for waste, but the latter are to be supported by the mentioned private company. The target formulated was that 75 percent of all household packaging must be recovered by the year 2002, independently of the packaging material and its route. French packaging legislation also consist of Transport Packaging Ordinance (Decree No.94-609) and a Decree (no.96-1008) on the disposal of household waste. They contain the quotas set by the European Packaging Directive.

The central collection system, demanded by the Decree, was established on 12 August 1992 under the name of Eco-Emballage. The most important task of Eco-Emballage is to offer the 36560 local authorities financial support and advice on the installation and development of a collection system for household packaging. In concrete terms, for instance this means that the additional costs incurred by a municipality for the recovery of packaging waste are reimbursed. On its turn, the work of Eco-Emballage is financed by the license fees paid for the Green Dot trade mark which is called "Point Eco-Emballage". The marking of all packaging participating in the Eco-Emballage system is mandatory. A good 91% of all French household packaging is now marked with the symbol, thus indicating that a financial contribution has been made to Eco-Emballage for this packaging. [GREEN DOT 2000]

4 Voluntary Labels

4.1 Classical ISO Type I Labels

4.1.1 European Eco-label

Labelled Products:

At present, 16 companies have labelled 25 products in France, belonging to 4 different product groups [AVARDS]. The large majority of labels have been awarded after the second half of 1998, and particularly in 1999 and 2000 [AWARDS]. As a matter of fact, France shows one of the most rapid acceleration in EU-Flower awards in the last two years, together with Italy and Spain.

In particular, the role of distributors and retailers has been significantly increasing:

"Several characteristics of the French retail sector are favourable to the development of the EU eco-label and will allow retailers to play the driving role:

- intention to increase the market share of their private labels;
- medium range positioning of their private labels (and not low range), i.e. an equivalent quality to national brands with a lower price, allowing a higher margin,
- creation of thematic ranges (green ranges such as Monoprix Vert, homogeneous range such as Auchan which will replace, as from 1999, its fifty or so private labels by a single brand, called Auchan with the bird from their logo as a distinctive sign),
- necessity to have a differentiating factor in order to increase the credibility of their private labels and the image of the retailer's name,
- being environmentally friendly is not perceived as a short-term fashion or as more expensive products anymore.

In that context, the EU eco-label is perceived by the main retailers interviewed (Auchan, Carrefour, Monoprix, ecc.) as a way to guarantee both a good quality and an environmentally friendly image for private label products, to bring further credibility and loyalty to private labels products and to improve the ethical and caring image of the retailers." [TNS 1998]

New Product Groups under Development:

At present, many new developments are going-on in the new EU ecolabel scheme. In particular, environmental criteria are being developed for 12 new product groups¹

Among the latter product groups, France has carried out a feasibility study for vacuum cleaners. The study, published by the EC on 17/12/2000 has been carried out by AFNOR (Association Francaise de Normalisation) with the aim to provide the Commission with an informed opinion concerning the potential for establishing an European Eco-label scheme on vacuum cleaners, including the potential barriers and the opportunities to develop this label [P.PROIA 07/12/2000].

Apart from the vacuum cleaner feasibility study, France has also taken the responsibility to develop environmental criteria for the product group "Hand Dishwashing Detergents". On 29 September 2000, a meeting was held and coordinated by AFNOR, during which main criteria for Hand Dishwashing Detergents were determined. The criteria refer to 4 main aspects[AFNOR 22/01/2000]

- Consumer information for an environmentally friendly use
- Performance requirement
- Packaging requirements
- Environmental requirements.

¹ Hard surface cleaners, sanitary cleaners, hand dishwashing detergents, hard floor coverings, television sets, vacuum cleaners, tourist accommodation, furniture, tyres, rubbish bags, converted products, batteries for consumer goods (the work for the latter two is suspended) [source: Rubik 2001, deliverable D6, Background Report on European IPP and EPIS]

4.1.2 The NF Environnement Eco-label

The NF Environnement label (Norme Francaise Environnement) is the national French ecolabel. It is a seal-of-approval program aimed at certifying products that have a reduced negative impact on the environment. Its two objectives were and are:

- To fulfil the need for reliable information on the ecological quality of products,
- To meet the desire of companies to valorise their efforts in environmental protection via labelled products.

The NF Environnement label is the exclusive property of AFNOR's group (Association Francaise de Normalisation), the standards institute of France.

Development of the label began in 1989, thus quite before the EU regulation on the ecolabel. However, because of initial opposition from industry, the program was not fully operational until 1992.

4.1.2.1 Objectives and History of Third-Party-Ecolabelling in France

On June 24, 1992, work on NF-Environnement Mark was suspended by the AFNOR pending a re-evaluation of its methodology. Originally, the NF -Environnement Mark planned to use a multi-criteria matrix similar to Blue Angel and the EU Eco-label. Products were assessed using a systematic life-cycle assessment (LCA), which looked at products from "cradle-to-grave" (i.e., amount and types of raw materials used, production, transportation, effects of consumption, and disposal), to evaluate their overall environmental impacts at each of these stages. However, because of the time-consuming nature and costs associated with LCA, AFNOR decided upon a modified life-cycle analysis approach, called the "New Simplified Procedure," to develop criteria and to evaluate products to receive the label (Boeglin, 1997). This new procedure uses a semi-qualitative life-cycle assessment for the product, and identifies the "key stages" in the product's life cycle that have the most significant environmental impacts. This new process is iterative based on both qualitative and quantitative data. The "New Simplified Procedure" was adopted to make the NF-Environnement Mark less expensive and more available to small and medium-sized businesses and industries.

NF-Environnement Mark plans to coordinate its efforts with other European programs, "both through the process of harmonization of standards and through its participation in European reciprocal recognition agreements" (General Rules, 1992). As a result of this coordination of efforts, the product criteria for paints and varnishes were approved on June 3, 1992, based on a study originally conducted for the EU Eco-label. Indeed, NF-Environnement label is considered a "euro-compatible" label designed to be integrated into the European ecolabel scheme.

NF-Environnement label is currently not a member of the Global Ecolabelling Network (GEN) for financial and logistical reasons. However, AFNOR is considering becoming a member soon to take advantage of the information exchanged through GEN membership. AFNOR participates regularly in meetings and exchanges with other ecolabelling programs on trade issues, standards development, and program implementation.

4.1.2.2 The Procedure of Labelling

Groups Involved:

The NF Environnement label is managed by AFNOR Certification. Four main groups are involved in the NF-Environnement label program: the Environmental Label Committee (Comité de la Marque), acting as consulting body, the French Ministry of the Environment, the ADEME (France Energy Management and Environment Agency), and AFNOR who managed the NF Environnement.

The Committee has 19 members who are an equal representation of all the partners concerned.

- professionals working in industry,
- professionals working in distribution,
- consumer associations,
- environmental protection associations,
- the public authorities (Ministries in charge of Industry, Environment and Consumer affairs).

Products Involved:

The NF-Environnement Mark can be awarded to consumer goods and intermediate products. It concerns both the product and the packaging. It may be awarded to products which satisfy the criteria featuring in the technical rules applicable to each group. For the time being, pharmaceuticals, foodstuffs, services and the car sector are excluded from the scope of the mark.

New Product Groups:

Theoretically, anyone can propose new product categories. In practice, however, industry representatives or environmental authorities such as ADEME, typically propose products that they feel may be suitable for the ecolabel. In any case, proposals from any source are collected by AFNOR CERTIFICATION which, after examination, submits them to the Committee. A single company developing a product presenting an ecological innovation may ask for establishment of draft criteria on the product group in question.

Draft and Adoption of Technical Rules:

The NF Environnement Mark testifies to the compliance of products with the criteria specified in the technical rules. A technical rule exists for each product category. Technical rules contain all specification details, i.e.:

- the scope (which specifies the product group in question),
- ecological criteria,
- fitness for use criteria,
- compliance and surveillance evaluation procedures,
- provisions regarding consumer information and product marking.

Several stakeholders are participating in the draft of technical rules. On advice from the Committee, Ademe organises a meeting of a limited working group which includes one representative of each interest group

(industry, retailers, environment and consumers NGO) and AFNOR CERTIFICATION. If they want, experts from the concerned professional sector may participate. Foreign companies are also invited to participate in the draft criteria development but must first express their interest in participating in the process. They may then be given the option of participating in the criteria development process and will at least be told what the draft criteria are and be invited to provide their comments. For example, several foreign garbage bag and vacuum cleaner manufacturers were involved in the criteria development for these categories.

After having received advice from professionals concerned by the product group in question, the draft technical rule is validated by the Committee.

AFNOR CERTIFICATION then submits the draft Technical Rule for the approval of the Executive Manager of AFNOR CERTIFICATION. Adopted criteria are then published in the official journal.

Environmental Criteria and Evaluation:

Once proposals for products categories are made and collected by AFNOR, environmental evaluations based on the "New Simplified Approach" are made by the Label Committee, who decides if the overall product group(s) in which the proposed product(s) belong, would be good candidates for the NF-Environnement Mark. Though a full LCA is not conducted, information from other programs' LCAs, where available, and information from producers are used in evaluating a product's suitability for the label. In addition, the program follows SETAC guidelines in its evaluations.

When developing product-specific criteria, products are assessed to determine their environmental impacts, based on multiple ecological factors, (e.g., the impact of the products' wastes on the environment - to air, water, and soil). Once identified, these impacts are quantified for setting threshold levels (e.g." limits on toxicity of chemicals, voc content, hazardous materials content, etc.). Products are also assessed on the following: energy use, raw material extraction and use, emissions during production, product uses, potential for recycling, disposal, product ingredients, type of wastes generated, environmental and health and safety hazards, and durability as well as real duration of use. Additionally, the NF-Environnement Mark conducts a generic environmental impact analysis when developing product criteria.

Label Award:

Once there is a technical rule for a product group, applicants should send their candidature to the Executive Manager of AFNOR CERTIFICATION for the right to use of the NF Environnement Mark for their products. On receipt of this application, an auditor is appointed by AFNOR CERTIFICATION to visit the production site and take samples of products to carry out inspections on the products presented. The applicant is awarded the NF Environnement Mark when the audit report and test reports establish compliance with technical rule criteria. Once the NF Environnement Mark has been obtained, periodic spot checks are carried out to check that the product and follow-up provisions implemented by the holder comply with criteria.

Criteria revision:

Product criteria are usually re-evaluated every three years, but may be evaluated sooner if there are new breakthroughs in technology relating to the product.

Financial Conditions:

Companies are subject to two types of fees:

1. NF Environnement Mark user rights admission fee comprising:
 - a fixed contribution to the cost of establishing the technical rule per product category between 7 500 (1143,37 €) and 15 000 Francs (2286,74 €) exclusive of tax, payable once only whatever the number of products presented in one category,
 - candidature administration fees of 7 750 Francs (1181,48 €) exclusive of tax per product range, then 3 917 Francs (597,14 €) exclusive of tax for the next instruction,
 - site visit fees of 7 040 Francs (1073,24 €) exclusive of tax (per day),
 - compliance test fees (if necessary) payable by the applicants.
2. an annual fee for the right to use the NF Environnement Mark fixed at 0,1% of the annual turnover made on the certified product with a ceiling of 50,000 francs (7,622.45 €) and a minimum between 6,500 (990.92 €) and 12,000 francs (1,829.39 €) (depending on each technical rule).

4.1.2.3 Labelled Products with Respect to the EU-Flower Scheme

The NF Environnement product groups are 10 and some of them look similar or are the same as the EU Ecolabel product groups. As shown in the table below, when product groups coincide, the NF Environment label seems to be preferred so far².

Table 4.1: Product groups and products in France (State: February 2001)

Product groups	Number of product labelled with NF Environnement	Number of products labelled in France with EU Ecolabel
- Paints and Varnishes (NF Env.)	12 producer	2 company
- Indoor paints and varnishes (EU Flower)	4 distributors 77 products	9 product
- coffee filters (NF Env.)	1 producer	1 producer
- tissue paper products (EU Flower)	2 distributors 8 products	1 distributor 5 producers (expired in 12/2000)
- vacuum cleaners (NF Env.)	None because of the recent setting of criteria	Criteria under development
- vacuum cleaners (EU Flower)		

² We do not have a simple explanation for this. The environmental criteria of NF Environnement are certainly not easier (they require to conduct a simplified LCA). Probably however, this is due to marketing reasons, i.e. consumer knowledge and trust, as in France NF environment is generally more diffused and known on the market than the EU-Flower.

4.1.2.4 Current Status and Future Perspectives of the NF Environnement Eco-label

Although possession of the NF-Environnement Mark is not an official requirement for procurement, some distributors of paints and varnishes, and/or retail stores, require that their suppliers provide at least one line of product that carries the NF-Environnement Mark. Additionally, certain municipalities and local authorities have specified that the garbage bags they purchase must bear the NF-Environnement Mark.

The NF-Environnement Mark has not yet developed product criteria for products imported from developing countries. The only foreign products that have been awarded the French ecolabel have been products manufactured by European companies. Because the NF-Environnement Mark is a relatively new program, it has not yet gained international recognition, and information about the program has not been available internationally - in fact it is still in the early stages of recognition domestically. At present, the label can be awarded for 11 product categories, namely:

- paints and varnishes
- dustbin bags
- glues for floor coatings
- mechanical washing aids
- vacuum cleaners
- garden compost containers
- school furniture
- desk furniture
- coffee filters
- carrier bags
- post bags.

There are three "zero categories" (never labelled Product Group): Vacuum Cleaners, School Furniture, Glues for Floor Covering. The Product Groups "Dustin bags" and "Desk Furniture" have had labelled products, but now there are expired.

There are 136 products that carry the NF-Environnement label. The majority of these in the Paints and Varnishes (77) because these were the first category established, and Garden Compost Containers (33). The number of eco-certified products in the paints and varnishes category is expected to drop once criteria for this category are revised.

For the time, pharmaceuticals, foodstuffs, services and the car sector are excluded from the scope of the mark.

Table 4.2: Product groups, manufacturers and products of the French eco-label
(Source: AFNOR, "Categories de Produits concernees par la Marque NF Environnement", updated in 15.02.2001)

PRODUCT GROUP	NUMBER OF MANUFACTURERS	NUMBER OF PRODUCTS
Mechanical washing aids	1	1
Glues for floor covering	0	0
Vacuum cleaners	0	0
Paints and varnishes	16	77
Enveloppes et pochettes postales	2	9
Coffee filters	3	8
School furniture	0	0
Desk furniture	0	0
Dustin bags	0	0
Carrier bags	7	8
Garden compost containers	6	33

4.2 ISO Type I like Labels

Forest Stewardship Council (FSC):



The Forest Stewardship Council (FSC) is an international body which accredits certification organisations in order to guarantee the authenticity of their claims. In all cases the process of certification will be initiated voluntarily by forest owners and managers who request the services of a certification organisation. The goal of FSC is to promote environmentally responsible, socially beneficial and economically viable management of the world's forests, by establishing a world-wide standard of recognised and respected Principles of Forest Stewardship.

At present the private plantation *Groupe Gascogne* has been certified for a total of 1,050 ha. (source: www.fscoax.org)

Market pressure is still not strong in France for certified products. There is no working group currently operating in France to promote certification of FSC.

PEFC- Pan-European Forest Certification Council:



The PEFC scheme, a European voluntary private sector initiative, will provide assurance to the customers of woodland owners that the products they buy come from forests that are independently certified by a third party and managed according to the Pan European Criteria, as defined by the resolutions of the Helsinki and Lisbon Ministerial Conferences of 1993 and 1998 on the Protection of Forests in Europe.

France has formally established in 8 March 2000 the "Association Française de certification forestière PEFC" abbreviated PEFC France. PEFC France is the French member of the Pan-European Forest Certification

Council (PEFCC), association under Luxembourg law. PEFC France wants to promote and implement the PEFC certification and its inherent principles, in particular:

- conformity with the Pan-European criteria
- the development of the certification process by appealing to accredited certification bodies in compliance with the directives EN 45011 et 45012.

Blue Flag, Beaches Marinas:



The Blue Flag was born in France in 1985 where the first French coastal municipalities were awarded the Blue Flag on the basis of criteria covering sewage treatment and bathing water quality. So far, 349 beaches and 81 tourist marinas have obtained the Blue Flag label in France.

At European level, in 2000, 1,873 beaches and 652 marinas were awarded the Blue Flag.

The Blue Flag label is awarded by the Foundation for Environmental Education in Europe (FEEE). 21 countries are participating in the Blue Flag Campaign: Belgium, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, **France**, Germany, Greece, Ireland, Italy, Latvia, the Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Turkey and the United Kingdom.

In the year 2000 new criteria for beaches have taken effect. Some of the present guideline criteria will become imperative. There will also in the new criteria be an increased focus on waste water treatment and Agenda 21 activities. A revision of the marina criteria will be carried out in 2000, and new revised marina criteria will take effect in 2003. (blueflag.org)

Oeko Text Standard 100:



The Oeko-Tex standard 100 was established in 1992. The Oeko-Tex standard 100 sets yardsticks. For yarns, fabrics and textile products of all kinds, limits have been laid down for noxious substances. Only manufacturers who comply with strict testing and inspection procedures and provide verifiable quality assurance are allowed to place the Oeko-Tex label on their products.

Since the introduction of the "Oeko-Tex Standard 100" more than 5900 "Oeko-Tex" certificates have been awarded. Approximately 1800 companies in the textile and clothing industry are now operating in accordance with the criteria specified in the international "Oeko-Tex Standard 100". The number of French companies who obtained the standard are 183. [OTS]

4.3 Existing Studies and Surveys

Two consumer surveys were carried out by the statistical research institute CREDOC (Centre de Recherche pour l'Etude et l'Observation des Conditions de vie – Department Conditions de vie et aspirations des Français) respectively in 1996 and in 1999. In the first one, carried out on behalf of AFNOR, it was found that more than 80% of the respondents do know at least one eco-label or green label. However, it is not clear which eco-label they referred to (EPA 1998). In fact, in the second survey commissioned by ADEME in 1999 a different method was used: the NF logo was shown to the interviewed people without any written indication and people were asked whether they knew the logo and its meaning. On such a precise question the number

of positive answers decreased by 30% with respect to 1996, thus corresponding to 56% of respondent people (CREDOC 2001). In any case, the same survey of 1999 reports that 2/3 of French consumers refer to the energy label when buying electrodomestic appliances (ADEME 2000).

4.4 ISO Type II Labels

As in other countries, also in France there is a plethora of ISO-type II product labels, suffering as well from the same problems encountered in other countries, i.e. lack of control, lack of credibility, sometimes confusing when not misleading information.

However, it is worth mentioning that a documentation handbook, FD X 310, published by AFNOR in 1998, regulates the communication of environmental quality of products with ISO-type II labels in France.

Packaging:

In particular, often the labels refer to rather generic potential characteristics but are interpreted by consumers as product-specific aspects pointing out actual environmental benefits. This for instance the case of labels identifying materials and recyclability, which actually do not guarantee at all that the material is actually recycled (which depends not just from the product, but rather from the existence of recovery systems, recycling lines, other industrial factors). Often, the consumer is misled since he generally misses the difference between "technically recyclable" and actually recycled.



The case of the Green Dot in France is a little bit more tricky, because the participation of a company to the central recovery system Eco-emballage is voluntary, but if the firm does participate in the system, then the application of the Green Dot ("Point Eco-emballage") is mandatory. The label actually indicates that the company has paid its fee to the central recovery company. The latter has specified recovery targets and an actual responsibility to actually guarantee either recycling or incineration (and where appropriate composting). The target of Eco-Emballage is to reach 75% recovery of all household packaging by 2002. In 1998, the recovery rate was 60%.

The M.E.R.E Logo:



The case of MERE (Matières, Energie, Recyclage, Emissions) logo is interesting for three reasons: first, it is a logo based on a (simplified) life cycle approach. Second, it also refers to continuous environmental improvement, which is a mixture of product-service approach worth to be further examined. Third, it uses a mixture of communication formats, i.e. a logo, an information handbook and an internet site.

The MERE logo is managed by the company Carte Vertes Internationales (CVI), a "virtual³" multi-partner company in the field of product environmental quality. It bases on the principles of the documentation handbook FD X 30-310 published by AFNOR on the basis of ISO 14021 norm. According to this approach, the environmental product information to be communicated to consumers goes along 4 axes, corresponding to the 4 leafs of the logo, i.e. [C.V.S.1998]:

- Raw materials,
- Energy
- Recycling
- Emissions (and waste)

Putting the logo "Continuous ecological improvement" on a product indicates that the manufacturer engages himself in a process of continuous improvement of the ecological quality of the product and a process of information to the consumers. In particular, this implies the realisation of an information handbook. Moreover, an internet site has been created by CVI to diffuse information of the ecological quality of products. The applicant pays a fee and can provide information on the site in two formats: either with 3 "free-style" pages or according to a preset model with the assistance of CVI (more expensive).

We think that this case is quite interesting. However, the logo was born just at the end of 2000, and so far there is no labelled product. Criteria and functional units are very vague and no judgement is possible so far.

Tourism Labels:

In France there are several labelling initiatives with respect to sustainable tourism. Beyond the already mentioned international label for marinas and beaches (Bleu Flag), other ecolabels are used for tourist accommodations (hotels, campings, youth hostels, etc.). It is worth observing that, similarly to other countries (e.g. Italy), these labels include some kind of scoring system (additional criteria beyond the mandatory ones for the label) and a strong relationship to the local territory.

Les Clefs Vertes:



This label was founded in France in 1999. Its target are campings, caravan and bungalows. As in other labels in other countries (e.g. Italy) this label include some mandatory requirements for the obtaining of the label plus additional scoring criteria. The label has 38 criteria, based on 4 main axes of environmental management:

- Environmental information and sensitisation of personnel and tourists
- Reduction at the source of emissions and waste
- Rational use of water and energy
- Operations linked to the quality of life and space

The criteria are subdivided in three different scoring categories: "imperative", "important at mid-term", "ideal".

³ Self-definition: the company is fully internet-based.

By 2000, 49 open-air sites for camping and caravanning in France have obtained the label.

Gites Panda:

The label Gites Panda has been developed by the tourism association Gites de France, WWF and the Regional Association of French Natural Parks. The target applicants are tourism organisations linked to Gites de France and recognised by WWF.

There are 4 main environmental criteria, which are all linked to the relation to the local territory.

4.5 ISO Type III Labels

There is no official information about any initiative with this specific respect. However, it should be noticed that France has a long-standing tradition in LCA and EPD are a "natural" instrument for the marketing use of LCA results. Therefore a future interest in this particular sector cannot be excluded.

5 Other Labels

Fair Trade Labelling Organisation International (FLO) is an international association including several brands: Max Havelaar, TransFair, Fair Trade Foundation, Trans Fair International. It includes 15 members from 15 countries. So far, labelled products are bananas, cacao, coffee, honey, sugar, and tea. The possibility to include new products is studied at present. In France, the brand representing FLO is Max Havelaar.

Max Havelaar:



The association Max Havelaar France was born in 1992 on the initiative of 3 already existing associations, i.e: ISF (Ingénieurs Sans Frontières), Peuples Solidaires et CICDA (Centre International de Coopération pour le Développement Agricole).

Between 1993-96, Max Havelaar was developed at regional level in Bretagne in some niche retailers. Thanks to the mobilisation of hundreds of volunteers, the initiative began to expand to other French regions. In the 1997 the international platform for fair trade FLO was created, also on the initiative of Max Havelaar France. In 1998 the publicity campaign "Exigez des produits éthiques" ("request ethic products") was launched and supported by 60 organisations, with the aim to introduce fair coffee in the large distribution chains. In 1999 the fair coffee was finally launched in the large distribution at national level. This was a turning point for the penetration of fair commerce among the large public and the beginning of a movement of conscious consumption at large scale in France.

Only high-quality coffees cultivated with craft-made methods can obtain the Max Havelaar label. 50% of them are biological coffees. By 2000, these products are available in 1700 selling points all over France in the main large French distribution chains, i.e. Monoprix/Prisunic, Auchan, Atac, Carrefour, Match, Leclerc. Max Havelaar coffees are further distributed by specialised retailers, such Biocoop, Naturalia, Artisans du Monde. They can also be bought by mail via 3 SUISSSES.

Today, Max Havelaar offers a set of 7 fair products, i.e. in chronological order: coffee, tea, cacao, sugar, honey, orange juice, and bananas.

Social Accountability 8000 (SA 8000):

Social Accountability International (SAI), founded in 1997 as the Council on Economic Priorities Accreditation Agency (CEPAA), is working to address the growing concern among consumers about labour conditions around the world. SAI developed a standard for workplace conditions and a system for independently verifying factories compliance. The standard, Social Accountability 8000 (SA8000), and its verification system draw from established business strategies for ensuring quality (such as those used by the international standards organisation for ISO 9000) and add several elements that international human rights experts have identified as essential to social auditing.

In France there are some facilities involved with SA 8000:

- Celtipharm
- Insudiet
- and the retailer Promodes.

6 Conclusions

France has taken initiative towards an integrated approach for product policy just very recently. The French Ministry for the Territory and the Environment (Ministère de l'Aménagement du Territoire et de l'Environnement - M.A.T.E.) has published in January 2001 a report investigating which responsibilities, roles and tools are expected to be the most appropriated in order to develop an IPP system in France. The study has also identified a set of strategic actions and tools needed for its implementation in France. However, the first reactions of the involved stakeholders emerging from the debate following the publication of the report are quite moderate. In particular, industry is in a "wait and see" position. It expressed some criticism with respect to the proposed system and identified the lack of "environmental culture" of French consumers (as opposed to what happens in other countries, e.g. in Scandinavia) as the main present barrier against the diffusion of IPP in France.

On the contrary, France has a longstanding tradition in ecolabelling. As a matter of fact, the national ecolabel NF Environnement was introduced in France by AFNOR (Association Francaise de Normalisation) already in 1989 and became fully operative in 1992. Today, more than 100 products in 11 product groups are labelled.

NF Environnement environmental criteria are based on a simplified LCA approach. Also because of this, the NF Environnement is considered an "euro compatible" label designed to be integrated into the EU Ecolabel scheme. The NF Environnement plans to further co-ordinate its efforts with other EU programs. However, in practice it is observed that in product groups where both NF Environnement and the EU-Flower exist, the National label significantly predominates. Apart from presuming that the knowledge of the National label is more diffused, we do not know clear explanation for this. Therefore, the question whether the both labels are mutually compatible or NF actually hinders the EU-Flower is open. The impression is that this also depends on the specific product group considered. Apart from the two main ISO-type I labels, in France there are a plethora of ISO-type II environmental labels.

In general, according to a survey carried out in 1999, French consumers have a high degree of knowledge of ecolabels, but a much lower level of trust. 63% of French consumers think that there is no guarantee that products actually meet the environmental performances that are claimed.

Anyway, a fast acceleration of the diffusion of the EU-Flower, among the fastest in Europe together with Spain and Italy, can be observed for the last years 1999-2000 (28 products). This is also linked to the increasing role of retailers and distributors in the last two years⁴.

As far as the latter are concerned it is worth highlighting that several main retailers perceive "...the EU eco-label as a way to guarantee both a good quality and an environmentally friendly image for private label products, to bring further credibility and loyalty to private labels products and to improve the ethical and caring image of the retailers." [TNS 1998]. Therefore, their role with respect to the diffusion of ecolabels is even going to increase in the future.

The leading role played by retailers has also led to an exponentially growing diffusion of social labels (Max Havelaar's fair trade products) in 1999-2000. This phenomenon should also be duly taken into account for developing future strategies (e.g. the question ecolabel vs. sustainability label)

Finally, no information about the possibility to introduce an EPD system like in Sweden and Italy could be found. However, France has a long-standing tradition and experience in LCA. Therefore, a future interest in a marketing use of LCA through ISO-type III labels and EPD cannot be excluded.

7 Literature

[ADEME (Agence de l'Environnement et de la Maitrise de l'Energie) 2000] Écoproduits & Écolabels, www.ademe.fr/entreprises/Management-env/approche-produit/Promotion/Documents/EcoFiche2.doc

[ANDERSEN 2001] *La Politique intégrée des produits*, Final report to the Ministère de l'Aménagement du Territoire et de l'Environnement (M.A.T.E.), by Arthur Andersen, Paris, January 2001.

[ANPA 2000] Agenzia Nazionale Per l'Ambiente, "Politiche Integrate di Prodotto: un'impostazione per lo scenario italiano", ANPA, Rome, January 2000

[CREDOC 2001] Centre de Recherche pour l'Étude et l'Observation des Conditions de vie – Department Conditions de vie et aspirations des Français, Georges Hatchuel Directeur général adjoint du CRÉDOC – personal communication, October 2001.

[OECD 2000] J.Cinq,Mars," A New Policy tool for the Environment: Green Public purchasing in the OECD", Pollution Prevention and Control Division Environment Directorate, OECD 2000

From Epa report, Environmental labelling Issues, Policies, and practices Worldwide, December 1998

Breglin, Nadia, AFNOR, personal communication with Abt Associates, May 1997

Organization for Economic Co-operation and Development, *Case Study on Eco-Labeling Schemes*. Paris. 30 December 1997.

Association Française de Normalisation (AFNOR), 1997, *Fact sheet: La Preuve par NF- Environnement*.

Association Française de Normalisation (AFNOR), February, 1997, *Information File on the NF. Environnement Mark*.

Association Française de Normalisation (AFNOR), April, 1997, *La Marque NF-Environnement*.

ADEME (French Energy Management and Environment Agency), *Background information and statistics from the CREDOC survey (1996)*.

Association Française de Normalisation (AFNOR), 1992, *General Rules Applicable to the NF- Environnement Label*.

Davis, G.A., *The Use of Life Cycle Analysis in Environmental Labeling*, US Environmental Protection Agency, Office of Pollution Prevention and Toxics, EPA1742-R-93-003, September, 1993:

Proia, Patricia, AFNOR. Personal Communication with Abt Associates (Gary Davis). 1997.

AFNOR. *Information File on: The NF-Environnement Mark*, February 1997.

Etienne, Roger, Ecobilan. Personal communication with Abt Associates (Gary Davis). 1997.

AFNOR. *Marque NF -Environnement "Aspirateurs Traineaux " Reglement Technique*. AFNOR 207, March, 1996.

⁴ However, no market data are available so far. Anyway, one might speculate that consumers might trust more in retailer's brand than in labels themselves.

From internet

- [AWARDS] //europa.eu.int/comm/environment/ecolabel/award.htm
- [AFNOR 22/01/2000] "Minutes of the meeting of 29th of September 2000 on the European Ecolabel on Hand Dishwashing detergents" (www.europa.eu.int/ecolabel)
- [C.V.S.1998] Cartes Vertes Internationales, Agence d'Information sur la Qualité Ecologique des Produits (www.cartesvetresintl.com)
- [DEE] "Les progrès de la consommation éthique", www.crc-conso.com/etic
- [ESTO 2000] A. Tukker, P. Eder, "Eco-Design: European State of the Art, part I, II" – technical report prepared for the EU Commission – JRC Institute Prospective Technological Studies Seville, October 2000 (www.jrc.es)
- [GPP] "ICLEI's European Eco-Procurement initiatives" (www.iclei.org)
- [GREEN DOT 2000] "The Green Dot in Europe", p.26-31, Duales System Deutschland AG, II Edition, Frankfurt 2000, www.gruener-punkt.de
- [MAX HAVELAAR] Max Havelaar, "Le label du commerce équitable" (www.maxhavelaarfrance.org)
- [OTS] Oeko Tex Standard 100, www.oeko-tex.com
- [PEE] www.ademe.fr/anglais/present/general/entreprise.htm
- [P.PROIA 07/12/2000] Patricia Proia, "Feasibility Study on an European Ecolabel Scheme for Vacuum Cleaners, Final Draft" – AFNOR Certification, 07/12/00 (www.europa.eu.int/ecolabel)
- [TNS 1998] Taylor Nelson Sofres Consulting, "Development of a Strategy for the Promotion of the European Eco-Label Award Scheme, December 1998, published on www.europa.eu.int/ecolabel in February 2001.

From AFNOR

- AFNOR, NF Environnement mark, information file, n° 11 luglio 2000
- AFNOR, Critere marque NF Environnement "sacs sortie de caisse", domaine d'application, 1999
- AFNOR, Critere marque NF Environnement "composteur individuels de jardin", domaine d'application, 1999
- AFNOR, Critere marque NF Environnement "peintures, vernis et produits connexes", domaine d'application, 1995
- AFNOR, Critere marque NF Environnement "auxiliares mecaniques de lavages", domaine d'application, 1996
- AFNOR e Ministère de L'environnement, Deux labels écologiques – la marque NF Environnement , L'écolabel européen, April 1996

Gerd Scholl
in co-operation with Jutta Horn

**Environmental Product Information Schemes (EPIS)
in Germany**

Table of Contents

1	INTRODUCTION	85
2	INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INFORMATION SCHEMES IN GERMANY	85
3	MANDATORY LABELLING	87
4	VOLUNTARY LABELLING IN GERMANY	88
4.1	ISO Type I Labelling - Third-party Certification Schemes	90
4.1.1	'Classical' ISO Type I Labels	90
4.1.1.1	The European Eco-label	90
4.1.1.2	The Blue Angel Scheme	91
4.1.2	ISO Type I like Labels	98
4.2	ISO Type II Labelling - Self-declarations	102
4.3	ISO Type III Labelling - Quantified Environmental Information	103
5	SOCIAL LABELLING IN GERMANY	104
6	CONCLUSIONS	106
7	LITERATURE	108

1 Introduction

The paper gives an overview of environmental product information schemes (EPIS) in Germany. It is part of a larger research activity in which EPIS is inventorised for all EU member states. This activity is conducted within the EU research project "Developing Effective and Efficient Product Information Schemes (DEEP) - Assessing and expanding product information schemes between voluntary and mandatory approaches".

The paper starts with a brief sketch of product-related environmental policy in Germany and the role of information-based approaches within this policy (chapter 2). Mandatory labelling will be depicted in chapter 3, while voluntary programs are at the core of chapter 4. This section addresses third-party eco-labelling in Germany, the role of self-declarations, and finally the relevance of quantified environmental information in the German market. Chapter 5 introduces social labelling approaches in Germany. A number of conclusions based on the brief synopsis of German EPIS is presented in chapter 6. The paper is completed by a list of references (chapter 7) and an appendix (chapter 8).

2 Integrated Product Policy and Environmental Product Information Schemes in Germany

Product-related environmental policy has quite a long tradition in Germany. First activities have been taken in the seventies, e. g. with the coming into force of the DDT Act in 1972 and the introduction of the first national eco-labelling program, the "Blue Angel", in 1978. Although a comprehensive concept of an Integrated Product Policy (IPP) does not yet exist in Germany, there has been substantial political progress during the last few years: A first stimulus was the German Presidency of the European Council in 1999 under which product-related environmental policy experienced a major leap forward. In the background document of the informal Meeting of EU Environment Ministers in Germany IPP has been defined as public policy which explicitly aims at or is implicitly suitable to influence the environmental performance of products and services (BMU 1999).

The concept of IPP differs from traditional environmental policy approaches in that it covers all products and services and their environmental effects, while taking a lifecycle perspective (raw material extraction, material processing, manufacturing, distribution, use and disposal) as the lead principle and avoiding shifts of environmental problems between different media. The environmental ministers of the EU agreed that IPP is a suitable means to achieve reduced consumption of environmental resources (eco-efficiency, factor 4 and 10) and to lessen the use of hazardous substances. For realising these objectives, however, a number of principles should be taken into account:

- cradle-to-grave and cross-media perspective,
- market compatibility,
- involvement of stakeholders and shared responsibility,
- subsidiarity, i.e. allocation of tasks to most appropriate policy levels within the EC,
- integration into related policy areas, such as transport, construction, agriculture, R&D policies.

The instruments applied in Germany in order to improve the environmental performance of products along their ecological life cycle cover a wide array of different approaches. Direct-regulatory instruments are still

very important, in particular for averting dangers arising from e.g. emissions of hazardous substances into environmental compartments (e.g. DDT-Act, Pesticides-Act, Washing and Cleansing Agents Act, PCP Ordinance, CFCs and Halons Prohibition Ordinance). The main focus of this category, however, has increasingly been extended towards more flexible and life cycle oriented measures such as take-back obligations and minimum quotas for returnables. Reclamation schemes, for instance, encompass compulsory duties or agreements of producers and retailers to take back and re-use or dispose of spent products and packaging. These obligations are free of charge for consumers and are legally backed up by the Waste Management Act ("Kreislaufwirtschafts- und Abfallgesetz") of October 1996, especially by the enhanced product responsibility laid down in Article 22. On the basis of Article 24 take-back obligations can be enacted through ordinances. This has happened with respect to used oil, solvents, packaging, batteries, and end-of-life vehicles. Responding to planned EC directives a draft ordinance for electronic appliances has been presented recently.

Application of economic instruments occurs on a smaller scale. Product charges and taxes are less common in Germany which is mainly due to a reluctant attitude of policy makers and opposition from industry. The ecological tax reform, however, introduced in 1998 slightly pushed the process, also on a product level (e.g. mineral oil taxes). A greening of public procurement as another economical approach has been more successful in Germany. Numerous edicts of state and local governments, for instance, dealing with "Environmental Protection in Public Procurement" require to consider products marked with the "Blue Angel" (OECD 1997a). Moreover, Article 36 of the Waste Management Act obliges public institutions and agencies to check the applicability of especially low-waste and recyclable products.

With regard to obligatory information tools, the legal approaches followed in Germany are not significantly different from those in other European countries (which is mainly due to the fact that most legal prescriptions are formulated on a European level). More details are provided in chapter 3.

In general, there is a tendency towards "soft" and voluntary instruments such as information, education, and consulting in Germany. One of the main pillars of this development is the Blue Angel which will be introduced later in the paper. Furthermore, the role of life cycle assessments (LCA) has been stressed in public policy and played a major role e.g. in promotional strategies for selected products (e.g. recycled paper) and in designing policy instruments for management of packaging waste. In addition, motivating measures, such as eco-prizes, awards, and design contests have emerged and also contributed to a broadening of policy.

Besides that, co-operative action between the government and industry in the form of self-commitments (e.g. for end of life vehicles, CO₂ emissions) has gained growing importance. Moreover, co-operation between industry and environmental organisations (e.g. BUND/Hertie, Greenpeace/Foron, WWF/AEG Hausgeräte), strategic partnerships among 'greener' companies (e.g. "Working Group of ecological food producers") and, last but not least, consumer oriented co-operations like 'food coops' or sharing initiatives (e.g. consumer goods sharing, car-sharing) played a role.

Normally, in order to tackle a specific environmental problem a mix of different instruments is being applied. This instrumental mix, however, has until now mainly been the result of a very pragmatic policy approach, rather than the outcome of systematic, differentiated and integrated policy design.

A weak point of German environmental policy in general, but also of product-related policy approaches is the lack of quantified and measurable targets. Besides specified product standards there is only a very small number of revisable objectives (e.g. return and re-use quotas for packaging).

In contrast, environmental and also partly social impacts of current consumption patterns are increasingly being paid attention to. Policy has recognised that greening of this important area is an indispensable track on the way to sustainability. This impression is underpinned by a huge number of research projects commissioned by federal ministries and also intense collaborative action done by all relevant societal parties. In 2000, a group of 18 different organisations from business, environmental NGOs, church representatives, handicraft etc. agreed upon a common memorandum ("Förderung des nachhaltigen Konsums - Prozess zur nationalen Verständigung in Deutschland") formulating seven general statements with regard to objectives, target groups, instruments and general framework conditions of a more sustainable consumption.

Environmental product information systems (EPIS) are an essential element in almost any of the policy approaches, let it be mandatory labelling or voluntary certification of products. We will summarise the status quo and major developments with respect to German EPIS in the following chapters.

3 Mandatory Labelling

Mandatory labelling prescriptions oblige suppliers of goods to inform about certain (ecological) features of their products. Examples for this kind of labelling are the Textile Labelling Act (Textilkennzeichnungsgesetz TKG) and the Chemicals Act:

The TKG stipulates that textile products may not be put on the German market unless wearing a label describing the kind and percentage of raw materials used (Rubik/Weskamp 1996, p.41). The label has to be affixed by the textile producer or clothing manufacturer and is controlled by factory inspectorates.

The Chemicals Act permits the regulation of chemical substances by means of specific ordinances. The act contains detailed requirements on registration, admission, and labelling of new chemical substances. The Hazardous Substances Ordinance prescribes, for example, the obligatory labelling of formaldehyde if its content exceeds 1,500 mg/kg.

Another example of the obligatory labelling of product compositions is the Essential Commodities Act. The European directive on mandatory labelling of shoes (94/11/EEC) was transposed into German law by the fourth amendment of this act in July 1995. It stipulates that the labelling of shoes that are being placed on the German market must describe the material used (leather, coated leather, natural and synthetic textiles, others) for the various shoe components.

Similarly, a mandatory declaration of content, like laid down in the Pesticides Act ("Pflanzenschutzgesetz") or the Act on Detergents and Cleansing Agents ("Wasch- und Reinigungsmittelgesetz") formulates information requirements with regard to e.g. the quantity and quality of harmful substances contained.

Finally, obligations to provide information may pertain to the use and disposal stage of a product. The Lawnmower Ordinance, for instance, prescribes mandatory information about the noise emissions of the product, and the Act on Detergents and Cleansing Agents demands directions for proper use and dosage of the detergent that have to be provided on the packaging.

The European energy label:

Household appliances must be labelled according to EU Directive (92/75/EEC). This directive refers to refrigerators/freezers, washing machines, dryers, dishwashers, ovens, water heaters/hot-water storage

appliances, lighting sources, and air-conditioning appliances. Producers are obliged to indicate the energy consumption, consumption of specific resources, and other information on a label fixed to the appliance. In Germany, the framework directive has been transposed into national legislation by the "Energieverbrauchskennzeichnungsverordnung - EnVKV" (energy labelling ordinance). This ordinance stipulates obligatory labelling of household appliances (refrigerators and freezers, washing machines, dryers, dish washers) from 1998 on. Depending on the product group the label includes information on

- the energy efficiency (according to a scale from A to G),
- the capacity,
- noise emissions, and
- the washing/drying performance.

4 Voluntary Labelling in Germany

Since the introduction of the Blue Angel scheme in 1978 ecolabels played a prominent role in the instrumental set of 'green' suppliers in Germany. They are regarded a means to easily attract the consumers' attention in a market in which product differentiation has to be more and more sophisticated. It is estimated that in the mid nineties about 1,000 different product labels could be encountered in Germany. Although this figure might be too high, it is obvious that ecolabels are en vogue and, paradoxically, German consumers get more and more confused about the eco-advantages conveyed by a label. The following table provides an overview of several voluntary labels existing in Germany (Scholl 1999). It tells which products and what kind of criteria are addressed by the label. Furthermore, it categorises, as far as possible, the seals according to the ISO typology.

The synopsis shows that

- there is a very large number of voluntary labels in Germany, in particular in the areas of clothing, home textiles (carpets) and food products; this might be due to the fact that consumer awareness is relatively more developed in these areas and benefits can be internalised more easily (e.g. health protection);
- there is a heterogeneity of labels addressing such different areas as consumer electronics and donation organisations; apparently, labels are in general assumed to be an effective consumer information tool;
- ISO type I like labelling schemes dominate, although one has to bear in mind that there are substantial institutional differences, e.g. from government involvement (Blue Angel) to labelling of branch associations (e.g. PEFC, "Arbeitsgemeinschaft umweltverträgliches Bauen").

Table 1: Overview of voluntary labels in Germany (Scholl 1999)

Name	Product group(s)	Environmental criteria	Social criteria	ISO I	ISO II	ISO III
„Blauer Engel“	several	x		x		
„Euroblume“	several	x		x		
Neckermann „Umwelt-Prädikat“	several	x			x	
„Stiftung Warentest“	several	(x)		x		
TÜV „Umweltsiegel“	several	x	(x)	x		
WWF Panda	several	x		(x)		
„ÖkoControl“	furniture, textiles	(x)		(x)		
„Markenzeichen Naturtextil“	textiles	x	(x)	x		
Ecoproof	textiles	x	x	x		
Green Cotton	textiles	x			x	
„Öko fair tragen“	textiles	x	x		x	
Öko-Tex Standard 100	textiles	(x)		x		
„SG-schadstoffgeprüft“	leather goods/ clothes	(x)		x		
Care & Fair	carpets		x		x	
„ETG-Teppich-Siegel“	carpets	(x)		(x)		
greenline	carpets	x			x	
GuT	carpets	x		(x)		
Rugmark	carpets		x	x		
Flower Label Program	flowers	x	x	x		
„Naturkind“	food	x			x	
„Öko-Prüfzeichen“	food	x		(x)		
„Öko-Punkt-Sachsen“	food	x		x		
TransFair	food	(x)	x	x		
„Blaue Flagge“	beaches, marinas	x		x		
„Blaue Schwalbe“	tourism	x	x	x		
„Wir führen einen umweltorientierten Betrieb“	tourism	x		x		
FSC – Forest Stewardship Council	wood	x	x	x		
PEFC – Pan-European Forest Certification	wood	x	(x)	(x)		
„Arbeitsgemeinschaft umweltverträgliches Bauen“	building material	x		(x)		
„Empfohlen vom IBR“	building material	(x)		x		
„Gemeinschaft Energielabel Deutschland“	office & consumer electronics	x		x		
„Grüner Strom Label“	electricity	x	x	x		
„Kaninchen unter schützender Hand“	cosmetics		animal protection	x		
DZI „Spenden-Siegel“	donation organisations		x	x		
spiel gut	toys	(x)		x		

x indication is valid

(x) indication is valid with certain limitations

4.1 ISO Type I Labelling - Third-party Certification Schemes

Type I environmental labelling according to ISO 14024 comprises claims which are based on criteria set by a third party and which are multi-issue based on life cycle impacts; they indicate overall environmental preferability of a product within a product category; examples are national eco-labelling schemes such as the Nordic Swan, the German Blue Angel, or the European Eco-label.

It is not always clear, whether labelling schemes actually refer to the ISO standard. Therefore, we distinguish in our analysis two major categories within third-party labelling:

- *'Classical' ISO type I approaches*: third-party labels referring to the standard – explicitly/implicitly – in a comprehensive manner.
- *Other third-party, ISO type I like labelling*: third-party labels containing major elements of the ISO type I standard (e.g. third-party verification, multiple criteria based)

In the following we present empirical evidence from Germany with respect to these two categories.

4.1.1 'Classical' ISO Type I Labels

4.1.1.1 The European Eco-label

As far as ISO type I labelling is concerned the main European approach is the **European flower**. The label aims at stimulating the supply and demand of products with a reduced environmental impact. With respect to supply, the EU Eco-label has a clear objective of encouraging industry to market greener and certified products. On the demand side, the scheme gives consumers the means to make informed environmental choices when purchasing.¹ The award of the label to products is administered by national 'Competent Bodies'. In Germany, this is the Federal Environmental Agency (Umweltbundesamt, UBA) which is also responsible for the "Blue Angel" (see below).



To date, there is only one label holder for the Euroflower in Germany (a textile producer)². A study which explored the reasons for this lack of acceptance at German suppliers (Hagemann/Weißner 1999) revealed, amongst others, that

- there is very limited knowledge about the Euroflower,
- there is a perceived lack of awareness among consumers about the label,
- the criteria are sometimes considered too low, and
- the application fees are regarded too high.

Initiatives to actively promote the European flower in Germany have not been taken yet.

¹ <http://europa.eu.int/comm/environment/ecolabel/scheme.htm>, 130201.

² Cosilana Naturwäsche GmbH, a producer of children's underwear and nightwear.

4.1.1.2 The Blue Angel Scheme

The most well-known and wide-spread ISO type I label in Germany is the Blue Angel which is available for different kinds of consumer and professional goods and services.

History and Objectives:

The German "Blue Angel" is the first official national eco-labelling scheme world wide. According to Neveling (2000), this has been the result of a struggle of many years during which governmental and private interests, on the one side, and environmental and industry concerns, on the other side, had to be balanced. After having been mentioned in the first government environmental programme already back in 1971, it took more than seven years until the Blue Angel actually came into being. First attempts to establish a programme mainly organised by private industry-related institutions (such as the RAL, see below) failed, since business associations feared that voluntary standard-setting could tighten up environmental legislation in the long term. Presuming acceptance of the label at least among industrial eco-pioneers the government started a new initiative by setting up a jury consisting of representatives from environmental organisations, trade unions, the church, and the government. Industry and consumer organisations did not participate at that time.



The jury met for the first time in 1978 and passed criteria for low-noise lawnmowers, returnable bottles for milk and juice, renewed tyres, hygiene paper from recycled material, and CFC-free sprays. Criteria development and award of the label was solely the task of the jury in co-operation with the relevant government body (federal environmental agency). This changed when RAL, a self-administered organisation of German industry in charge of developing and managing quality assurance and labelling programmes, re-entered the scheme in 1979 and took over the task to manage the award of the ecolabel, to conclude contracts etc. Due to the competence and management resources of RAL and owing to the fact that a number of individual companies was very interested in the seal³, the Blue Angel gradually penetrated the market. As a consequence, consumer organisations and industry associations joined the jury in the mid eighties and, hence, made it a pluralistic forum.

The label is a voluntary instrument of environmental policy and it can be awarded to products and services "which

- compared with other products fulfilling the same function and
- considered in their entirety, taking into account all aspects of environmental protection (including the use of raw materials),
- are characterised by a particularly high degree of environmental soundness
- without thereby significantly reducing their fitness for use and impairing their safety"⁴.

Hence, the program is based on the principle of comparative assertions, i.e. a product is awarded the label due to its relative environmental superiority within the same product category, rather than referring to its

³ Neveling (2000, p.74 f.) gives the example of recycled paper products: While all German suppliers first boycotted the label due to its ambitious criteria, a supplier from Canada successfully applied for it and used it in the market showing that even national boycotts could not stop the development of the programme.

⁴ See <http://www.blauer-engel.de/Englisch/index.htm> (101100).

absolute ecological soundness. It takes a life cycle and cross environmental media perspective and ensures proper performance of the labelled product in terms of fitness for use and safety. Minimum standards ('hurdles') are set up for each product group included in the scheme referring to their key ecological issues. The entire range of criteria has to be met, if an applicant wishes to use the label. Hence, balancing one criterion with another ('scoring system') is not possible.

The logo represents the environmental sign of the United Nations ("Blue Angel"). The key criterion of the specific product is mentioned in the wording of the logo saying "Eco label because ... (e.g. low pollutant, low noise)". This was the result of a modification of the hallmark in 1987 which until that year used the wording "Environmentally friendly because ...".

The main objectives of the Blue Angel program are

- guiding the consumer in purchasing quality products with fewer adverse environmental impacts,
- encouraging manufacturers to "develop and supply environmentally sound products", and
- using the ecolabel as a "market-oriented instrument of environmental policy".⁵

In principle, the Blue Angel addresses the top end of the market in terms of environmental performance. Only if a limited share, usually less than one third of the market, is able to meet the requirements, an incentive remains to improve the majority of products available. Deviation from this unofficial guideline occurs e.g. in case of recycling paper or paints where, depending on the definition of the product group, the share of eligible products may exceed one third.

Procedure and Methodology of the Blue Angel:

Three institutions are involved in the process of criteria development and administration of the label. The **Environmental Label Jury** ("Jury Umweltzeichen") is an independent pluralistic panel consisting of representatives from the scientific, business and environmental communities, consumer organisations, handicraft, trade union, industry, media, trade and German states.

It has 14 members and is in charge of selecting new product-categories on the basis of a statement of the Federal Environmental Agency, deciding upon the criteria of the products-categories based on the results of expert hearings, and deciding upon the further development and improvement of criteria. The Jury meets twice a year.

The **Federal Environmental Agency** (Umweltbundesamt, UBA) which is a government authority represents the scientific body within the labelling scheme. Its tasks are above all collecting and commenting proposals on new product groups and preparing a preliminary draft of the criteria.

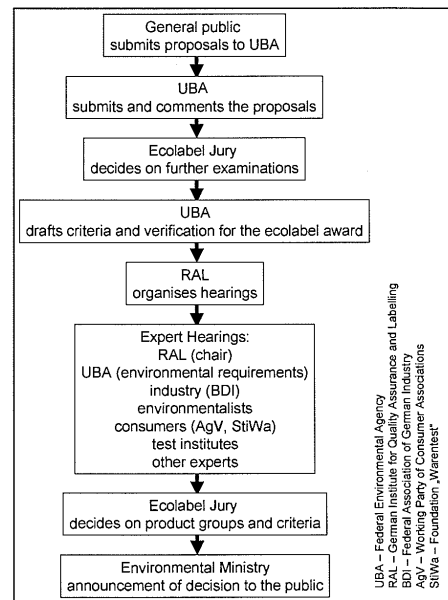


Figure 1: Process of criteria development
(Source: <http://www.blauer-engel.de>)

⁵ Umweltbundesamt (1990) quoted by EPA (1998).

Certification body is the **German Institute for Quality Assurance and Labelling** (RAL Deutsches Institut für Gütesicherung und Kennzeichnung e.V.) which is a private organisation. The RAL administers the labelling scheme and concludes the contracts with the applicants.

The flow chart (Figure 1) reveals the procedure of developing new criteria and illustrates the tasks of the different organisations. It is important to notice that a) everybody who likes can submit proposals for new product groups to the Federal Environmental Agency (each year an average of 150 product categories is proposed of which 90% come from suppliers of environmentally sound goods)⁶, and b) the decision on the labelling guidelines is taken by the Environmental Label Jury so that a variety of social parties can directly influence the result of the process. This is different from e.g. the procedure followed in the European Ecolabel where stakeholders only take a consulting role. In fact, the Jury of the Blue Angel quite often makes use of her right to veto and refuses the recommendation of the expert hearing.

Testing orders are passed by the jury for 5 to 15 product groups a year. Normally it takes between six months and one year to draft the basic criteria. When guidelines have passed the Environmental Label Jury they are normally valid for three years. If there are major technology or innovative breakthroughs in the product category, criteria may be re-assessed prior to the end of the three-year period. In practice, this has substantial consequences on the internal procedures of the scheme: The criteria of copiers, for instance, are valid until December 31, 2002. RAL is obliged to terminate contracts nine months before. In order to have revised guidelines available in March 2002, they have to be passed during the December meeting of the Jury. Criteria development is conducted first half of 2001 then, while the expert hearing would be scheduled for autumn.

Producers that wish to apply to the Blue Angel have to submit application documents to RAL which examines the certificates and the fulfilment of the criteria. Afterwards the Federal Environmental Agency and the Federal State in which the manufacturer is located comment the documents. If application is accepted RAL concludes the contract on ecolabel utilisation with the producer. This procedure on average takes three months time. Duration of contracts is usually four years. If criteria are revised during this period manufacturers have to re-apply.

The Blue Angel is a self-financing system. Applicants have to pay a single handling charge of 150 € to RAL. Moreover, RAL receives an annual subscription whose height depends on the probable annual turnover of the labelled product according to the categories in Table 2.

In addition, users of the Blue Angel have to contribute to an advertising fund of the labelling program which accounts for 20% of the entire annual fee. Taylor-Nelson-Sofres Consulting (1998) reports that the advertising budget is usually spent for general promotion activities, rather than for product-specific campaigns. These general activities comprise a Blue Angel internet site, a number of booklets and brochures informing e.g. about criteria and label holders and gimmicks and presents such as phone cards, pencils, bags etc. Neither the Federal Environmental Agency nor the RAL advertise in newspapers or on TV, while companies sometimes do.

Table 2: Application fee for the Blue Angel
(Source: <http://www.blauer-engel.de>)

Annual turnover (Mio. DM)	Annual fee (DM)	Category
< 0,5	350,-	1
0,5 - 2	700,-	2
2 - 5	1.400,-	3
5 - 10	2.750,-	4
10	3.980,-	5

⁶ See EPA (1998, B-48) and Rubik, Teichert (1997, 318).

The **holistic approach** is at the core of the Blue Angel program. It refers on the one hand to the consideration of the different stages of the ecological life cycle, i.e. from production, over utilisation to final disposal. On the other hand, it addresses various environmental impacts such as use of hazardous substances, emissions into air, water, soil, noise emissions, production of waste, and saving of resources.⁷ Though full blown **life cycle assessments** (LCA) are normally not conducted within each criteria development of the Blue Angel scheme, the tool is of great importance for the selection of product categories, the development of guidelines, and the meeting of environmental priorities (Neitzel 1997). An example is the labelling strategy of packages for fresh milk: It was not before a comprehensive LCA revealed that polyethylene bags are not inferior, under certain conditions even superior to returnable glass bottles, that the Blue Angel scheme enlarged its focus towards these kind of bags. Moreover, the LCA told that with respect to returnables transport distances have to be considered in the criteria development, too. Another example refers to TV sets, where an LCA-study showed the outstanding weight of energy impacts in the use phase. This led to the consideration of this parameter and related technical features such as stand-by-mode in the labelling procedure.

Furthermore, LCA enables eco-labelling practitioners to incorporate process- or production-related guidelines in their programs. To date, however, very few examples of a successful implementation of standards exist which pertain to the production stage (Neitzel 1998). Main reason is the fact that fulfilment of these standards is difficult to prove unless they can be checked by checking the end product itself. This is the case, for instance, with the Blue Angel for hot-filter paper (prohibition of chlorinated bleaching agents) and for newsprint paper (at least 80% recycled paper, prohibition of chlorinated bleaching agents). In addition, the reasoning for putting less emphasis on earlier stages of the life cycle within the Blue Angel system is that Germany's environmental protection laws and regulations are believed to sufficiently address the reduction and avoidance of environmental damage during production stages.⁸

In brief, LCA is regarded as a means for a more 'scientific' environmental labelling in Germany. It does not, however, substitute for panel discussions on most appropriate guidelines for a certain product group (Oeser 1998, Neitzel 1997).

Actual Status and Perspectives of the Blue Angel:

Starting with three product categories in 1978 the Blue Angel program today covers 85 different consumer goods (e.g. batteries, recycled paper, change-top tooth brushes), professional products (e.g. construction machines, busses with diesel drive) and also few selected services (e.g. public transport/eco-tickets, car-washing plants, car-sharing).⁹ From 1988 (48 product categories) to 2000 (85 product categories) the number of product groups within the program almost doubled. On average, 4 to 5 new products are introduced each year.

As Figure 2 shows more than 3,800 products wear the Blue Angel in 1999. Each year a number of contracts are cancelled due to further development of criteria for specific product groups or because of a complete withdrawal of the category. In 1994 there was an unusually high number of criteria updates leading to expiry of about 40% of all contracts.

⁷ See Rubik, Teichert (1997, 316).

⁸ EPA (1998, B-49).

⁹ A table in the Appendix provides an overview of all product categories.

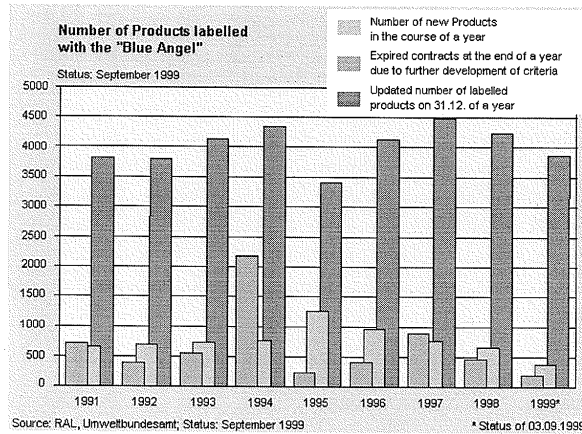


Figure 2: Number of labelled products (Source: <http://www.blauer-engel.de>)

Almost 16% of all labelled products are from foreign manufacturers. These companies account for approximately 15% of all contractors and mainly come from France (16%)¹⁰, Austria (14%), Italy (12%), The Netherlands (12% each), and Switzerland (9%).

The labelling criteria of the Blue Angel address a variety of ecological aspects, such as minimisation of health risks (e.g. varnishes low on hazardous substances, products for indoor pest control and prevention, low noise construction machines), reduction of waste (e.g. wallpaper from recycling material, returnable bottles, building material primarily made of waste glass), and saving of resources (e.g. flushing cisterns, recapped tires, energy saving refrigerators).

The scope of the program has been widened during the last years especially towards electronic appliances, e.g. copiers in 1991, desk top computers in 1994, TV sets in 1998, and washing machines and dish washers in 1999. In these cases, the award of the hallmark is based on a complex set of criteria such as durability, recycling-friendly construction, resource consumption, availability of spares etc.

Table 3: Top ten product group
(source: own calculation based on <http://www.blauer-engel.de>)

Product groups	No. of labelled products	No. of manufacturers
1. Varnishes	1,003	57
2. Recycled board	387	49
3. Recycled paper	319	85
4. Copiers	249	8
5. Sanitary paper products	179	13
6. Construction machines	166	32
7. Products of wood and/or wooden materials (indoor use)	123	51
8. Computer	119	12
9. Atomising oil burners	99	22
10. Chain lubricant for power saws	85	8
Sum	2,729	337
Total (of all Blue Angel categories)	3,866	801

¹⁰ The country shares are calculated as the ratio between number of contracting manufacturers from the country under consideration and the total number of foreign contracting manufacturers.

The top ten product categories (from a total of 77 categories in 1999) are responsible for roughly 70% of all labelled products. Table 3 above shows that 26% of all labelled products are varnishes, followed by paper products (10% board, 8% paper)¹¹ and copiers (6%). With copiers and construction machines there are two groups within the top ten which are exclusively for commercial use. This indicates that besides final consumers also professionals are an important target group of the scheme.

In contrast to the most attractive product groups there is a number of categories in which applicants are completely lacking. During the last three years this was about one fifth of all product categories. While this figure has been rather low during the late eighties, it has almost continuously increased from 1995 on (see Figure 3). 'Zero categories' preponderantly refer to electronic products and appliances (e.g. dishwasher, tumble-driers, washing machines, television sets, portable computers) and to sanitary and hygiene need (e.g. detergents, flow restrictors).

Oeser (1998) reports that besides chemical industry that is not interested in the Blue Angel for washing detergents and apparently household equipment manufacturers which are not willing to apply for the eco-mark either¹², there is no actual interest of automobile industry although criteria have been passed for busses and smaller trucks, e.g. with gas driving systems.

As mentioned before, the Environmental Label Jury frequently assigns the task of testing new eligible product groups to the Federal Environmental Agency. The majority of test orders underway pertains to electrical appliances and products (e.g. vacuum cleaner, coffee machines, halogen-free electric cables and wires) and products for do-it-yourselfers and the handicraft (e.g. wall paints, glue for floor, silicone sealing compounds). Moreover, industrial products such as flame retardants and easy deinkable dyes for printing containing less harmful substances are being examined at present.

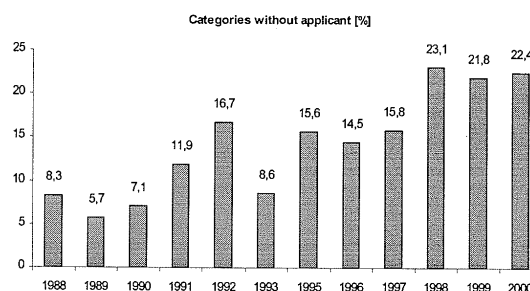


Figure 3: Development of 'zero-categories'
(Source: own calculation)

Services are being paid more attention to: The award criteria for wet cleaning for textiles have been developed and have to pass the Environmental Label Jury. A feasibility study on energy contracting and upgrading of personal computers and notebooks is currently underway. Examinations of green electricity, however, are likely to be postponed.

Environmentally relevant product groups such as textile products and cleansing agents are not covered yet. Nor are products addressing the fair trade aspect: Test orders for products made from jute and rattan have been commissioned by the Jury. Until now, however, no detailed examination has begun and future prospects are rather pessimistic.

¹¹ If amalgamated with sanitary paper products (5%) the paper group covers almost as much products as the varnishes group.

¹² The UBA has recently commissioned a study aiming at increasing the acceptance of the Blue Angel vis-a-vis manufacturers of white goods. This study is performed by IÖW.

Market Perception and Effects of the Blue Angel:

There are only few empirical studies which shed light upon the actual impacts of the Blue Angel scheme with respect to environmental protection, consumer information, supplier benefits etc. Rubik (1994) explored the effects of the hallmark at the example of wallpaper and hair spray. He found that main **company** motives for using the label are competitive advantages, its value for product marketing, and its contribution to environmental protection. Normally, eco-labelling would be part of a 'green' corporate culture. Companies not using the label fear an increase of costs, mainly due to changing production patterns and product designs, and also negative side-effects to non-labelled models of their product range. Both users and non-users, however, concede that the Blue Angel had some impact on product innovation and optimisation (in particular in case of wallpaper).

In late 1997 another survey was conducted among companies using the Blue Angel (UBA 1998). This survey revealed that in general companies give the label good marks. In particular, they acknowledge its value in consumer information and in incorporating environmental protection as an additional factor in market competition. It turned out that companies by and large accept the quality of the award criteria, the expenditures for the application of the ecolabel, the processing of the applications, and also the user fees. That the Blue Angel is part of their marketing tool kit is underpinned by the most important motive for using the label, namely improving a product's market chances (followed by "fulfil customer expectations" and "help protect the environment").

With respect to the benefits of applying the eco-mark the poll unveiled that they are mainly immaterial and indirect in nature. According to the consulted companies the Blue Angel did not bring about remarkable changes in sales (if at all, then for 'first users' only), neither it improved the possibilities to realise higher price margins in the market. Though the feedback of customers to the use of the label was generally judged quite good, it did not enable companies to acquire new clients more easily. The effects on the market position are assessed rather sceptically, even though more than 25% of the companies have observed improvements. The latter was especially true for smaller companies.

The impact on product development is ambivalent. Although two thirds of the sample said that the statement "The ecolabel has led to a distinct improvement in the ecological quality of the products" is "partly", "mostly", or "completely" true, criticism has been voiced as to the potential of the label to guide innovation processes: Due to the limited adaptability of the award criteria (lengthiness of the process to develop and update guidelines) there is a risk of bringing competition in ecological innovation to a stillstand.

Possible ways to further improve the labelling program refer to - at least from point of view of the consulted label holders - a cutting down of bureaucracy and application costs by means of simplifying the award criteria of the label and, moreover, extension of public relation efforts addressing private and commercial consumers and elucidating the ambitions, procedures, and thus the credibility of the program.

From point of view of consumers, the Blue Angel is well known in Germany. Spiller (1999) found in a survey among 215 people that knowledge of the label accounts for 91%. The institution(s) behind the label, however, are known by only 27% of the interviewees.

Similarly, the role of the Blue Angel as an indicator for an environmentally sound product is rather high and has increased during the last two years (see Table 4). It has, however, lost its unique signalling power, since terms like "eco" and "environmentally-friendly" have continuously gained importance over the last couple of years (obviously accompanied by a plethora of new ecolabels created by individual companies, industrial associations, environmental organisations, testing institutes etc.) .

Table 4: Indicators for environmentally sound products from point of view of German consumers
(Source: BMU/UBA 2000)

Question: <i>What indicates that a product is environmentally sound?</i>						
Answers in % (multiple answers possible)	1992	1993	1994	1996	1998	2000
... the term "bio"	10	10	11	21	25	33
... the term "eco"	12	10	13	22	27	36
... the term "environmentally friendly"	26	18	23	39	47	36
... the "Blue Angel" logo	61	61	59	48	45	55

In this context it is interesting to recognise that a strongly pronounced willingness to pay more for 'greener' products can actually be found only in a very small segment of German consumers. Asked whether one is willing to pay more for an environmentally friendly product only 12% of German consumers answer that they are "particularly willing". 59% "tend to be willing", 24% "do not tend to be willing" and 5% are "not willing at all" (BMU/UBA 2000, 36 f.). The willingness to pay rises with increasing income.

An important driving force for market penetration of Blue Angel products has been **public procurement**. Many procurement guidelines in local states and municipalities suggest buying Blue Angel products, or at least consider the criteria developed for product categories when making procurement decisions (EPA 1998). Other research underpinned the important role of the Blue Angel criteria for the procurement of Federal ministries and subordinated agencies (Umwelt 1997). Suppliers of office equipment have confirmed this importance (Neitzel n.y.). A guide for green procurement published by the Federal Environmental Agency (UBA 1999) frequently mentions the label and the specific guidelines in its recommendations for public and private professional purchasers.

An OECD study published in 1997 provided some information on the **market impacts** of the Blue Angel (OECD 1997b). Besides the growing overall number of product categories and licensees Blue Angel paints are mentioned for which market share was 60% in the Do-It-Yourself-sector and 20% in the handicraft sector in 1995. 14 years earlier the market share of this kind of paints accounted only for 1%. For recycled paper products an increase of the market share of eco-labelled products was observed as well: For sanitary paper products it rose from 32% in 1986 to 64% in 1993 and for administrative paper products percentage went from 13 to 24 in the same period. Oeser (1998), furthermore, observed that the Blue Angel has contributed to achieve an increasing market share of returnable bottles for milk and juice.

In addition, the OECD report reveals that market impact can be due to side-effects arising independently from the actual award of the label. In case of soil improvers and soil adjuvants made from compost, for instance, Blue Angel products had a small market share, but might have had a positive impact akin to informal standard-setting in the market. Similarly, the extensive discussion of the ecolabel of rapidly biodegradable hydraulic fluids in symposiums and workshops might have exerted some influence on production methods in the sector. Moreover, the labelling initiative in case of sound-proofed glass collection bins for noise-sensitive areas probably affected the sound features of this product category more generally, although the hallmark is not very visible in the market.

4.1.2 ISO Type I like Labels

There is a plethora of ISO type I like labels in Germany besides the Blue Angel. In the following we will introduce few of them to show the variety of product categories and labelling approaches embodied in the concepts.

Stiftung Warentest:

The label of the "Stiftung Warentest" (Foundation Warentest) is not an ecolabel in the true sense, but rather a kind of certification about the outcome of a comparative product test carried out by the Foundation. It can be granted for various products and services, e.g. household appliances, food, textiles, and toys.



When the label came into being in 1964 the criteria did not even contain ecological aspects. The environmental effect of the products was not considered until the mid 80s and is still only one aspect among many others, such as safety, functionality, technical quality, utility value and price-performance-ratio. Although the criteria often go beyond the standards set by law, they cover only single ecological aspects (e.g. packaging or energy consumption).

The products are assessed on a scale from "very good" (++) to "very bad" (--). The tests which provide the information for this judgement are conducted by independent institutes. Whether the label is used correctly within the marketing strategies of the companies, is controlled by the Foundation Warentest itself.

The validity of the label is temporally unlimited, but it is restricted to Germany. About 90 product tests are carried out each year. The magazine that publishes the results of the tests ("test") sells more than 800,000 copies each month.

TÜV Umweltsiegel:

This label has been created in 1995. It is awarded by TÜV Ecoplan Umwelt GmbH, which is a well-reputed private test and consulting institute. It is awarded to products which are made from natural or other environmentally sound materials and which prove not to harm the environment along their entire life cycle.



The criteria of the underlying eco-standard "UT 21" encompass items such as fitness for use and safety, use of renewable resources and secondary materials if possible, small power consumption during use, and prohibition of child labour. These general guidelines are specified for selected product categories. Contracts with applicants are valid for three years. To date, 42 products from 11 manufacturers have been granted this label.

Markenzeichen Naturtextil (Trade Mark Natural Textile):

The label "Naturtextil" (natural textile) can be awarded to textile products ensuring high environmental performance in each stage of the product life cycle. It is administered by the International Natural Textile Association (IVN) which is rooted in the former "Arbeitskreis Naturtextil", an association representing different parties from the ecologically oriented textile sector. The trade mark is available for every interested company.



The guidelines are very strict. For example, only natural fibres are accepted as raw materials. The fibres have to meet a pesticide limit of 0.1 mg/kg, although they can be grown conventionally. During processing of the fibres the use of formaldehyde, glyoxal, heavy metals, phenoles or other hazardous chemical substances is not permitted. Moreover, the materials have to remain unbleached. Optic brighteners, biocides, and antimicrobials must not be used either. With respect to the colouring allergy producing, toxic, heavy metal

containing, and azo-dyes are forbidden. The final product has to meet limits for soluble heavy metals, pesticides, and its pH value. Social criteria, such as fair wages and no child labour, are considered as well.

The award is differentiated into two quality levels: "Best" represents highest available standards, "better" is granted if e.g. one criterion is not met. Compliance is proven by independent institutes. Each labelled product has a control number providing access to a full declaration sheet.

ÖkoTex Standard 100:

This label is awarded by the "Internationale Gemeinschaft für Forschung und Prüfung auf dem Gebiet der Textilökologie" via its member institutes. The association consists of 12 textile institutes of 12 European countries. The appointed German institute is the "Forschungsinstitut Hohenstein". The "Öko-Tex" label has been introduced to mark textile products which have a good environmental performance in terms of their content of hazardous substances.



The products have to meet the limits which are set e.g. for formaldehyde, heavy metals, pesticides and pentachlorophenol. Biocides, flame retardents, and carcinogenic or allergy-producing dyes must not be used. In addition, an odour-test is carried out. The criteria refer only to the final product. The rest of the life-cycle and especially production and processing of the fibres are not considered. Moreover, the label can be awarded to products which consist of synthetic materials.

Products from potential label licensees are initially tested by expert institutes. Additionally, spot-tests are carried out on the manufacturers premises. The test institute is obliged to produce a final report within three weeks. The certificate can then be issued. In case the product does not comply with the criteria, the report will indicate in what fashion the product needs to be improved, if it is to become eligible for a later test for obtaining the "Öko-Tex Standard 100" label.

Applicants have to pay an application fee between 440 and 680 € and, furthermore, they have to bear the costs for testing of their products (between 260 and 2600 €). The label was established in Germany in 1994 and is valid world-wide, but only for one year. So far 600-700 companies have taken the opportunity to have their products labelled (about 3,000).

Öko-Prüfzeichen (Eco Seal of Approval):

The scope of the Öko-Prüfzeichen (ÖPZ) is limited to food from ecological farming. It is a joint venture of the "Arbeitsgemeinschaft Ökologischer Landbau (AGÖL)", which is an association of nine German ecological cultivation associations, and "Centrale Marketinggesellschaft der Deutschen Agrarwirtschaft (CMA)", which mainly represents conventional farmers. Companies that are not member of any AGÖL association can also apply for the label.



The general principles prescribe that the plants are grown in accordance with the standards of the EC regulation on ecological cultivation (91/2092/EEC). This prohibits, for example, the use of chemical/synthetic plant-protection agents. Additionally, no gene-manipulated seeds and growing crops are allowed, crop rotation has to be balanced and diversified, and mainly organic fertilisers from the own farm should be employed. With respect to animal keeping it requires that animals be kept in a way suitable for them and in accordance with ecological conditions. The use of synthetic-organic feed additives (e.g. antibiotics), and imported feeds is generally excluded. Regulations for further processing are also formulated.

The label is available since end of 1999 and it is used until now by 70 companies from production, processing, and retail trade. The number of applicants is quite small. Conventional retailers perceive it as too costly, specialised bio-shops argue that an additional label would not be necessary. Caused by current debates in Germany (February 2001) about new environment and health related minimum standards in food and especially meat production the minister for agriculture and consumer protection has announced to introduce a new national food label. This will even worsen the perspectives of the ÖPZ.

Forest Stewardship Council (FSC):

The World Wild Fund For Nature (WWF) promotes the labelling initiative of the Forest Stewardship Council (FSC). The eco-seal granted by the FSC indicates that the timber stems from sustainably managed forestry. The criteria have emerged from a co-operative effort between representatives of the wood industry, environmental associations and certification bodies. Timber from rain forests is accepted only, if the biodiversity remains unchanged and the forest can regenerate. Timber coming from plantations can be labelled only, if no rain forests have been eroded recently for the plantation. Certified forestry companies have to comply with domestic law and respect the rights of indigenous peoples. The controls are not carried out by FSC itself. The FSC only appoints and controls the certifying institutes.



Although the focus of the FSC seal is on tropical forests, the requirements are valid for any other forest as well. Because of different social structures and environmental conditions, however, special criteria are set for each country. A German working group of the FSC has adopted the guidelines to the conditions of German forestry in 1999. To date, more than 16 mill. ha are managed according to the FSC standards world-wide. In Germany, the corresponding area is 45 ha. A buyers community, the so called "Gruppe 98" (group 98), supports the proliferation of the label and has committed itself to purchase FSC products whenever possible. Members of this group are big mail order businesses such as Otto and property markets such as Bau-Fritz and Obi.

Gemeinschaft Energielabel Deutschland (GED):

The GED Energy label is a labelling system for consumer electronics, mainly office equipment and entertainment goods, which have a particularly small stand-by power consumption. The registration office of the program is supported by a number of energy saving programs of German Federal states, public institutions, and environmental NGOs. The program is part of a European initiative of the Group for Efficient Appliances (GEA) covering countries such as Denmark, Finland, Sweden, The Netherlands, France, and Switzerland.



The objective of the system is to label 20-30% of the most energy efficient appliances in the market. The best products are published every three months on a publicly available list. Manufacturers have to apply at the registration office. The eco-label is available since 1998. At present 620 products from 50 manufacturers have been awarded the label.

Blaue Flagge (Blue Flag):

The Blue Flag label is the logo of a campaign started by the Foundation for Environmental Education in Europe (FEEE) which is a non-profit, non-governmental organisation consisting of Member organisations representing 25 European countries. In Germany, the label is administered by the Deutsche



Gesellschaft für Umwelterziehung e.V. (DGU) and supported by the Federal Environmental Agency and the Ministry for the Environment.

The objectives of the ecolabel are, amongst others, to ensure and advertise clean and safe beaches and marinas for the public, to educate local authorities, private tourism operations and the public, and to bring about co-operation between the sectors of tourism, environment and education. The award criteria refer to water quality, environmental management, safety, services and facilities, and environmental education and information. Some of them are imperative while others are guidelines. The award is granted for one season at a time.

In Europe, more than 1,800 beaches and more than 600 marinas were awarded the Blue Flag in 1999. 26 beaches and 163 marinas were located in Germany.

Grüner Strom Label (Green Electricity label):

The Green Electricity label seeks to be a European seal of approval for electricity generated in an environmentally sound fashion. The label is granted to electricity which either stems exclusively from renewables ("Gold") or from a mix of renewables and combined heating power ("Silver"). The ecolabel is managed by Grüner Strom Label e.V. which is a private not-for-profit organisation. Members of the society are several German environmental NGOs (e.g. BUND, Die Verbraucher Initiative, NABU, DNR, Eurosolar).



According to the guidelines electricity suppliers are not allowed to operate nuclear power plants and have to generate electricity by at least 1% from solar energy. For the "Gold" label electricity must not come from water plants above 10 MW, neither from waste incineration. In order to successfully apply for the "Silver" label the CHP share must not exceed 50% and CHP plants have to perform an average annual efficiency of at least 75%.

This ecolabel has been introduced in 1999. Until now it has been awarded to a small number of electricity suppliers in Germany.

4.2 ISO Type II Labelling - Self-declarations

Type II self-declared environmental claims according to ISO 14021 refer to self-declarations of economic operators (e.g. manufacturers, importers, distributors, retailers) without independent third-party certification. The standard prohibits amongst others vague or non-specific claims; environmental management plans must not be used in ways which suggest qualities of the product itself; verifiable evaluation systems must be in place before a claim is made (Leubuscher et al. 1998).

It is not known officially in which cases economic actors follow the prescriptions of this voluntary standards in Germany. Any kind of advertising, however, has to comply with the prescriptions set up in the law against unfair competition ("Gesetz zum Schutz vor unlauterem Wettbewerb").¹³

¹³ Germany has not formally transposed EU Directive on Misleading Advertising. Legal practice, however, increasingly takes it into account. (Leubuscher et al. 1998, 5)

There are labelling examples in Germany which are quite close to the systems envisaged by the standard. Besides on-pack claims such as "x % of recycled materials" or "biologically degradable substances", one can observe a number of initiatives taken by companies (e.g. producer brands such as "Hipp" for baby food from organic cultivation or "Auro" for environmentally sound paints), especially traders, to convey the environmental qualities of their products via labels, logos, etc.

The big German mail order business companies, for instance, have each created their own labelling approach. Neckermann uses three different labels: The "Umwelt-Prädikat" indicates products offering several eco-advantages as compared to another product of the same category, the "Umwelt Button" highlights one specific feature of a good, e.g. formaldehyde free textiles, and "Wonderful World" is the logo for a clothing collection based, amongst others, on natural fibres. Correspondingly, the Otto Versand uses the "Umweltbaum" for e.g. energy- and water-saving appliances, and a label called "Future Collection" representing their eco-textile range.

"Umweltbewußt Einkaufen" (Environmentally Conscious Purchase) is a company seal of Karstadt, a big German department store. It is granted to 'greener' products of its own range, e.g. washing detergents, footwear, electric devices, and stationary. Eligible products are, for instance, those wearing a Blue Angel, products having a lower solvent content (e.g. paints), being made from recycled paper (e.g. wallpaper) and products with reduced energy consumption (e.g. washing machines, refrigerators) and low noise emissions (e.g. vacuum cleaners).

In the food retailing sector, almost each big chain has created its own green brand for food products. Examples are "Naturkind" of Tengelmann, "Füllhorn" of Rewe, or "Terra Pura" of Metro. Although these marks are much more brand logos than labels, the consumer might not be able to distinguish them from third-party certifications.

4.3 ISO Type III Labelling - Quantified Environmental Information

Type III environmental declaration according to ISO 14025 addresses quantified environmental data of a product under pre-set categories of parameters (e.g. CO₂ emissions or waste generation) set by a qualified third-party with reference to the LCA methodology; unlike the mandatory European energy label allowing for a comparison between products with regard to the same reference unit and fixed scales (A-, B-, C-, D-category), ISO type III labels do not incorporate weighting with other products; an example of this category is the environmental product declaration for the Volvo S80 passenger car providing information on environmental aspects of manufacture, use and recycling.

Environmental declarations according to ISO type III are not very widespread. Pilots are run in Sweden, Canada, and Korea. Due to the amount and quality of information conveyed they are best suited to purchases by business or public bodies and may have a potential role in replacing (or structuring) supplier questionnaires (ERM 2000).

A report commissioned by the Federal Environmental Agency concludes, that the German debate over ISO type III labelling is characterised by scepticism and reservations (Grahel et al. 2000). In particular, the study analysed three sectors (textiles, construction materials, electronic appliances) and identified a general dilemma: On the one hand companies actually wish to have comparable and credible product information, but on the other hand they have no specific idea which methodology for data collection and which format for

presentation would be suitable. These diffuse ideas normally go along with a very limited willingness to invest in elaboration of a quantified, formalised product information scheme within the company.

5 Social Labelling in Germany

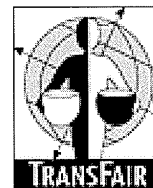
Social labelling has emerged in the context of fair trade initiatives. The standards of a more socially responsible international trade, in particular between developed and developing countries, refer to 'adequate' prices ensuring minimum living standards for the producers and enabling more democratic and employee-friendly work conditions, or to the prohibition of child labour etc. In the meantime, environmental criteria are increasingly being paid attention to.

In Germany, four social labelling programs have obtained at least some minor market relevance:

- the "TransFair" label,
- the "Rugmark" label,
- the "Care & Fair" label, and
- the "Flower label program".

TransFair¹⁴:

TransFair e.V. was founded as an umbrella organisation for all marking activities promoting the ideals of fair trade with developing countries. The main focus of the label is on the social situation of the people working in agriculture of the developing countries. Ecological criteria are an additional 'can-option' and are rewarded by a specific surcharge. In 1999, however, already 29% of entire turnover with TransFair labelled products was from eco-farming. TransFair does not trade the goods by itself, but rather grants licenses for the use of the TransFair logo and controls compliance to the TransFair rules.



The label is awarded for an unlimited period of time. At the moment it is valid in Germany, Italy, Luxembourg, Austria, Japan and Canada. The application fee for the TransFair coffee label, for instance, accounts for about 0.12 ECU per kg of raw coffee. A consumer survey revealed that about 30% of consumers in Germany know the TransFair label.

400 producers are organised under TransFair and registered in 19 different countries. There are 100 licensees, mostly SMEs such as importers, roasters, wholesale traders, and retail chains. The product range comprises coffee (since 1993), tea (1994), cacao, sugar, and honey (1996), bananas (1998), and orange juice (1999). The entire turnover

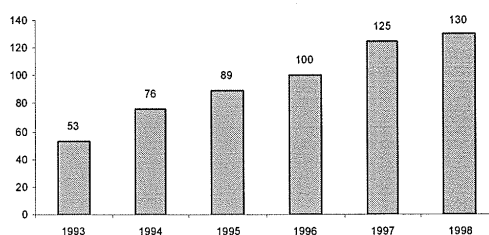


Figure 4: Turnover of TransFair labelled products in Germany in mill. DM (Source: Misereor et al. 2000)

¹⁴ Sources: Verein zur Förderung von Gerechtigkeit im Welthandel (1999), UNCTAD (1999), Scholl (1999), <http://www.Transfair.org/tfair/kurz.htm> (071100).

of TransFair products continuously increased until 1998 which was mainly due to the introduction of new product categories. From 1998 to 1999, however, turnover fell from 130 mill. DM to 110 mill. DM, i.e. by roughly 15%. Main reason was the very strong price competition in retail trade. At present, Transfair coffee has a market share of approximately 1%, labelled tea covers 2.5% and honey 1.5%. With chocolate/cacao and bananas market shares are infinitesimal.

Rugmark¹⁵:

Rugmark International e.V. is a private society supporting carpet manufacture without child labour. It was founded in 1995 by Indian NGOs, German and international social aid institutions, and the Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH. The main objectives of Rugmark are to reduce child labour and to establish minimum social standards in the carpet manufacturing sector in India, Nepal, and Pakistan. Since the focus is on social criteria, ecological aspects are not considered. The criteria prescribe, for example, that children under 14 years must not be employed in carpet production. Exceptions can be made for family enterprises, but only for their own children, if school attendance can be secured. Moreover, the label prescribes that the minimum wages of the respective country are paid.



Besides, the criteria oblige the exporter to pay 1% of the export value and the importer to pay 1% of the import value into a fund which is controlled by UNICEF. The money is used to finance developing projects.

Although the criteria do not go beyond the standards set by law, they imply an improvement of the every day situation, because very often regulation is not enforced. Compliance with the criteria is proved through on-site investigations. The awarded manufacturers and exporters have to agree that their enterprises are checked by Rugmark inspectors without preceding announcement. The employment of children is controlled by the NGOs. Although the validity of the label is principally unlimited, it can be withdrawn in case of a violation of the criteria.

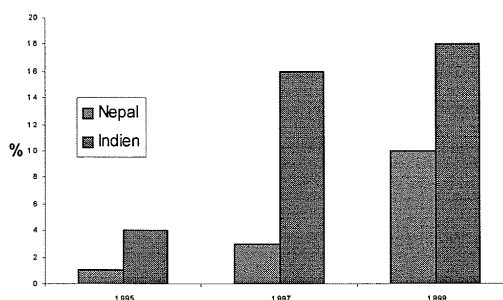


Figure 5: Market shares of Rugmark carpets from India and Nepal in Germany
(Source: TransFair e.V./Rugmark 1999)

In Europe, turnover with Rugmark-certified carpets accounted for 118 mill. DM, which was 4 mill. less than one year before. Compared to the critical development within the entire oriental carpet sector, however, this 3.7% decrease appears to be a relative improvement of the market position. This is illustrated by the figure showing that market shares of labelled carpets in Germany could be continuously extended during the last couple of years.

¹⁵ Sources: Verein zur Förderung von Gerechtigkeit im Welthandel (1999), UNCTAD (1999), Scholl (1999), TransFair e.V./Rugmark (1999).

Care & Fair¹⁶:

The Care & Fair logo is a trade mark of carpet importers paying a voluntary charity fee for development projects. The private society pursues the objective of reducing illegal child labour and improving economic conditions in carpet manufacturing industry. It was founded in 1995 and meanwhile has more than 650 members.



One percent of the import value of the carpets go to a fund feeding development projects on health and education in the producing countries. Carpet suppliers/manufactures have to commit themselves, amongst others, that child labour does not occur, employees are paid minimum wages, receive basic medical provision, and enjoy regular working schedules. Control of suppliers with respect to child labour and social conditions of work, however, does not take place. Care & Fair argues that by doing so additional money can be 'gained' for the projects. Approximately 3.5 mill. DM could be provided within the program for 25 schools and 14 hospitals since 1995.

Flower Label Program¹⁷:

This label stands for cutting flowers from socially and environmentally sound production. It was introduced - after eight years of negotiations - in 1999 by a co-operation between German human rights organisations, trade unions, and the association of flower importers. Labelled flowers fulfil the following criteria: living wages, freedom of association, prohibition of child labour, health care, responsible use of natural resources, integrated plant protection, and prohibition of highly poisonous pesticides. Compliance is controlled by independent experts.



Until now companies from Ecuador, Kenya, Simbabwe, and Tansania are associated with the program. Producers in Israel, Sambia, Sri Lanca, and Uganda have expressed their interest to participate.

In Germany, 637 shops sell Flower Label certified products. Compared to the total figure of outlets in Germany (17,000 flower retailers and 4,000 gardeners) the segment is still a market niche.

6 Conclusions

The brief overview of German approaches in EPIS revealed a number of relevant issues and open questions:

- The Blue Angel is by far the most important ISO type I label in Germany. It is well known and broadly accepted. This is mainly due to the involvement of a wide range of different societal actors in the process of product selection and criteria development. The label apparently works well as a supplementary marketing tool, especially for SMEs, but does not provide direct substantial material benefits e.g. in terms of new customers or increasing sales. Criticism is voiced as to a potential lack of flexibility of the program in terms of adoption of criteria to technological progress.

¹⁶ Sources: Care&Fair (2000), Verein zur Förderung von Gerechtigkeit im Welthandel (1999), Scholl (1999), TransFair e.V./Rugmark (1999).

¹⁷ Sources: <http://www.bgi.blumen-worldwide.com/flowerlabel.html> (101100), <http://www.fian.de/frames.htm> (101100), Verein zur Förderung von Gerechtigkeit im Welthandel (1999), Scholl (1999).

- The relatively large number of 'zero categories', i.e. Blue Angel product group without label holders, reveals that either no marketing benefit is perceived by potential applicants (maybe since other green marketing tools are more important or green marketing is not important at all), the criteria setting is too weak or too strong, or that other labels are more relevant with the category under consideration (as one can assume with white goods where the European Energy label is obligatory). The Blue Angel institutions so far respond to that observation by further enlarging the range of Blue Angel products, but also by analysing the reasons for non-acceptance and deriving promotional strategies from that analysis (in particular in combination with an Integrated Product policy approach).
- Besides direct market impacts in terms of increasing market shares of Blue Angel certified products (as with varnishes and recycled paper products), indirect effects such as generating discussions over environmental qualities of products and thereby creating environmental awareness within an industry should not be underestimated.
- Experience tells, that the Blue Angel is rather efficient if addressing professional buyers. Hence, the role of ecolabels within public and private procurement is a very important one, also for the future.
- The importance of 'buyers communities' committing themselves to purchase certified products is underpinned by the FSC example. This hints to an interesting question: How should one promote the sale of greener products? By providing information on their environmental superiority directly to consumers? Or by finding and activating levers in the distribution stage? Or by a combination of both approaches?
- Another issue with German EPIS is the plethora of labels, in particular in the areas of clothing, home textiles (carpets) and food products. Consumer awareness and the link to health protection can presumably be regarded as main drivers.
- Moreover, there is a wide variety of labels addressing such different areas as consumer electronics and donation organisations. Apparently, labels are in general assumed to be an effective consumer information tool.
- In addition, it appeared that issues such as energy (in terms of energy consumption and also generation of electricity) and tourism are of increasing relevance within ISO type I labelling in Germany.
- The eco-seal of approval for ecological food (ÖPZ), which has been introduced quite recently and is aimed at building an umbrella label for different ecolabels of different eco-farming associations, is a way to support ease of consumer decision-making. But this example also shows that building good reputation, which is a core issue with any label, takes time and intense promotional activities.
- It is not known whether other forms of voluntary labelling stick to the prescriptions provided in the ISO type II standard. The inventory showed, however, that there are many green claims in the German market and that especially companies from the retailing sector have their own labelling approaches including self-created labels and logos.
- With regard to ISO type III scepticism still dominates German discussion. Initiatives such as pilot projects have not been taken yet.
- Interesting concepts of mandatory environmental labelling refer to user instructions and information with respect e.g. noise emissions. The 'tradition' of obligatory information tools, however, pertains to product compositions and declarations of contents.

- Social labels sometimes try to combine aspects of social responsibility with environmental and health protection. To date these labels cover a small market niche in Germany which is, at least in case of TransFair's certified food products, due to very strong price competition in the German food retailing sector.

7 Literature

- BMU [Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit] (1999): Hintergrunddokument zum Thema Produktbezogene Umweltpolitik, in: Umwelt, No. 6, pp. V-XVI
- BMU [Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit] UBA, Umweltbundesamt (Ed.) (2000): Umweltbewusstsein in Deutschland 2000 – Ergebnisse einer repräsentativen Bevölkerungsumfrage. Berlin
- Care & Fair (Ed.) (2000): Care & Fair macht Schulen – 5 Jahre Care & Fair – Teppichhandel gegen Kinderarbeit e.V.. Hamburg
- EPA [Environmental Protection Agency] (1998): Environmental Labeling. Issues, Policies, and Practices Worldwide, Washington
- ERM [Environmental Resources Management] (2000): Study on different types of Environmental labelling (ISO Type II and III Labels). Executive summary, Oxford
- Grahl, B./Rubik, F./Steinfeldt, M./Schmincke, E. (2000): Formalisierte und standardisierte Umweltinformationen für Produkte und Dienstleistungen. Tübingen
- Hagemann, Helmut/Weißner, Benno (1999): The European Eco-label in Germany. Development of recommendations for action to increase acceptance. Studie des IÖW im Auftrag des Umweltbundesamtes. Wuppertal.
- Leubuscher, Susan et al. (1998): Study on verification and control of environmental claims. Brussels
- Misereor/Brot für die Welt/Friedrich-Ebert-Stiftung (Hg.) (2000): Entwicklungspolitische Wirkungen des fairen Handels. Beiträge zur Diskussion, Aachen
- Neitzel, Harald (1997): LCA and Ecolabelling. Application of Life cycle assessment in Environmental Labelling. German Experiences, in: International Journal of LCA, 2 (4), pp. 241-249.
- Neitzel, Harald (1998): Applying non product-related criteria in eco-labelling, in: gate 2/98, pp. 14-20
- Neveling, Stefanie (2000): Produktinnovation durch Umweltzeichen. Eine vergleichende Untersuchung des deutschen und europäischen Umweltzeichens, Baden-Baden
- OECD (Ed.) (1997a): Issues Paper on „Greener Public Purchasing“, Green Goods IV, 24th - 26th February 1997 in Biel/Bienne, Switzerland. Paris
- OECD (Ed.) (1997b): Eco-Labeling: Actual effects of selected programmes. Paris
- Oeser, Kurt (1998): 20 years of experiences of the german environmental labelling scheme "Blue Angel". -In: OECD (Ed.): Conclusions and papers presented at the international conference: Green goods V "Eco-Labeling for a sustainable future". Berlin, 1999.
- Rubik, Frieder (1994): Product Policy and the Environment: The Example of Eco-labels, Schriftenreihe des IÖW 88/95, Berlin
- Rubik, Frieder (2000): Innovationen durch die Umweltpolitik - Integrierte Produktpolitik (IPP) in Deutschland, in co-operation with Hoffman, Esther; Simshäuser, Ulla, Heidelberg
- Rubik, F./Teichert, V. (1997): Ökologische Produktpolitik. Von der Beseitigung von Stoffen und Materialien zur Rückgewinnung in Kreisläufen. Stuttgart
- Rubik, Frieder/Weskamp, Cornelia (1996): Verbraucherschutz durch Produktkennzeichnung. Schriftenreihe des Instituts für ökologische Wirtschaftsforschung, Berlin
- Scholl, Gerd (1999): Label für nachhaltige Produkte, published by Bundesverband für Umweltberatung (Ed.), Bremen
- Spiller, Achim (1999): Umweltbezogenes Wissen der Verbraucher: Ergebnisse einer empirischen Studie und Schlussfolgerungen für das Marketing, Duisburg
- Taylor-Nelson-Sofres Consulting (Ed.) (1998): Development of strategy for the promotion of the european eco-label award scheme.
- TransFair e.V./ Rugmark (Ed.) (2000): Jahresbericht 1999, TransFair & Rugmark. Köln
- UBA [Umweltbundesamt] (1999): Handbuch umweltfreundliche Beschaffung, München.
- UBA [Umweltbundesamt] (Ed.) (1998): Erfolgskontrolle Umweltzeichen/ Assessing the Success of the German Eco-label. Berlin
- UBA [Umweltbundesamt] (1990): Information Sheet on the Environmental Label: Current Facts and Figures, Berlin
- Umwelt (1997): Umweltfreundliche öffentliche Beschaffung, Ergebnisse einer Umfrage, in: Umwelt, No. 7-8
- UNCTAD (1999): Profiting from Green Consumerism in Germany, prepared by Scholl, Gerd; ertel, Matthias, New York and Geneva
- Verein zur Förderung von Gerechtigkeit im Welthandel (Ed.) (1999): Im Zeichen der Nachhaltigkeit – Verknüpfung von Öko- & Fair Trade Initiativen. Wuppertal

Paolo Frankl / Lucia Pietroni / Sveva Barbera

**Environmental Product Information Schemes (EPIS)
in Greece**

Table of Contents

1	INTRODUCTION	110
2	INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INFORMATION SCHEMES IN GREECE	110
2.1	Environmental Policy Framework in Greece	110
2.2	Government Policies Affecting Consumption and Production	111
2.2.1	Overview	111
2.2.2	Energy and Housing	113
2.2.3	Design For Environment and Life Cycle Assessment	117
2.2.4	Waste Management	118
3	MANDATORY LABELS	118
3.1	Household Appliances (Energy Label)	118
3.2	Toxic Chemicals	119
4	VOLUNTARY LABELS	119
4.1	Classical ISO Type I Labels	119
4.1.1	EU-Flower	119
4.1.1.1	Present Status	119
4.1.1.2	New Product Groups - Tourism	120
4.2	ISO Type I like Labels	121
4.3	ISO Type II Labels	123
4.4	ISO Type III Labels	123
5	OTHER LABELS	124
5.1	Social Labels	124
5.2	Other Interesting Labels	124
6	CONCLUSIONS	124
7	LITERATURE	125

1 Introduction

This paper examines environmental policy in Greece in general and environmental product policy and ecolabelling activities in particular. Greece is a country in which product-oriented environmental policies and tools are still under development. Very little information is available on them. In fact, many difficulties were encountered to collect data and documents on ecolabelling initiatives and schemes in Greece.

Chapter 2 describes environmental policy and in particular Greek policies oriented to sustainable production and consumption. In chapter mandatory labels are described. Chapter 4 gives an overview of existing Greek activities of voluntary product labelling, in particular regarding the EU label, but also the application of ISO type-I like labels and ISO type-II labels.

2 Integrated Product Policy and Environmental Product Information Schemes in Greece

According to Amalia Katsoy, the Greek representative of EU Competent Body, IPP is a very important policy for Greece; however, so far we have not identified in Greece any action Plan or Implementation Model of Integrated Product Policies (IPP). Moreover, a study published in 1998 by Ernest & Young and SPRU (Science Policy Research Unit) indicated that there was no activity related to Environmental Product Policy in Greece (EPP) [EYS 1998]. On the other hand however, some information, derived from various sources, indicates that in Greece some Environmental Policies with significant implications on products and services have been adopted since the '90s.

2.1 Environmental Policy Framework in Greece

The Ministry for the Environment, Physical Planning and Public Works is the main body responsible for the development and implementation of environmental policy in Greece at the central-national level. The present Organisation for the operation of the Ministry for the Environment, Physical Planning and Public Works was set up in 1998 by Presidential Decree.

The Environmental Programme of Greece for the period 1994-2000 aimed at addressing the major environmental problems of Greece as well as at creating the infrastructures for the efficient management of the Greek environment in the 21st century. The Programme is based on a set of principles, i.e:

- sustainability principle as it aims at improving or protecting the environmental conditions in Greece, while at the same time preserving the development efforts in the industrial, tourist and agricultural sectors;
- polluters-pays principle as it recognises the responsibility of the major pollutants who are called to take rectification measures;
- precautionary principle as it attempts to prevent, rather than to rectify an environmental problem, with technical interventions at the source rather than at the end of pipe line;
- principle of joint responsibility as it recognises the common obligations of the central, regional and local authorities as far as the environment is concerned.

The principles of the framework programme are translated into practice through the Operational Environmental Programme, which is supported by both national and community funding.

So far, the largest part of the Operational Environmental Programme refers to Energy policies, in particular to the integration of renewable energy technologies and to the efficient use of energy in buildings. In particular with respect to the latter, a National Action Plan exists, which has significant implications on products and services, as it aims at changing existing production and consumption patterns through the promotion of building construction techniques and services aimed at energy conservation and at the integration of renewable energy technologies ("Energy 2001" Programme, see § 2.2.2).

Another significant part of the Operational Programme refers to environmental information. As far as this is concerned, it is worth mentioning that part of the Operational Environmental Programme aims at developing the National Environmental Information Network, the Greek contribution to the EIONET of the European Environmental Agency (EEA).

2.2 Government Policies Affecting Consumption and Production

2.2.1 Overview

The responsible Government bodies dealing with aspects of sustainable consumption and production patterns are:

- Ministries of: Development; Environment, Physical Planning and Public Works;
- Center for Renewable Energy Sources (CRES), an organisation under the auspices of the Ministry of Development that plays an important role in implementing Government programs in energy efficiency and renewable energy sources, as well as in collecting and processing data relating to energy efficiency;
- Local Authorities: Regional and local energy agencies. The main goal of these agencies is to implement and co-ordinate energy programmes, particularly renewable, and energy conservation programmes, and both to provide and to collect energy related information.

While we were not able to identify any explicit *integrated* product-policy approach so far in Greece, there is no doubt, however, that several Greek environmental policy goals and tools have significant implications for consumption and production patterns and do actually involve several stakeholders.

The two following tables describe main goals, means and measures of Greek Government policies regarding sustainable production and consumption, as identified by the Ministry for the Environment, Physical Planning and Public Works. Goals, means and measures are related to the main involved stakeholders. Both stakeholders with primary responsibility for the policy measures and stakeholders, for which the impact is expected to be especially significant, are indicated.

As shown in Table 1, producers are mainly involved with respect to the goals of material and energy efficiency, while households and civil society are mainly involved with respect to housing and transports.

Table 1: Goals and Stakeholders (source: Website of the Ministry for the Environment, Physical Planning and Public Works, www.minenv.gr)

GOALS	STAKEHOLDERS				
	Producers	Local authorities	Central Government	Households	Civil society
MATERIAL EFFICIENCY	X		X		
ENERGY EFFICIENCY	X	X	X		
Transport			X		X
Housing			X	X	X
Other			X		
WASTE					
Reduce			X		
Reuse			X		
Recycle			X		

Table 2 indicates in more detail the level of different stakeholders with respect to three main policy tool groups, i.e. i) improving understanding and analysis, ii) applying tools for modifying behavior, iii) monitoring, evaluating and reviewing performance.

Table 2: Means, Measures and Stakeholders (source: Website of the Ministry for the Environment, Physical Planning and Public Works, www.minenv.gr)

MEANS AND MEASURES	STAKEHOLDERS				
	Producers	Local Authorities	Central Government	Households	Civil society
IMPROVING UNDERSTANDING AND ANALYSIS					
Information and education		R	R	I	R
Research			R		
Evaluation environmental claims	R		R		
Form partnership		R	R		R
APPLYING TOOLS FOR MODIFYING BEHAVIOUR					
Community based strategies			R	I	I
Social incentives/disincentives (e.g., ecolabelling)	I		R		
Regulatory instruments	I		R		I
Economic incentives/disincentives	I		R	I	I
Voluntary Agreements of producer responsibility for aspects of product life cycle	R		R		R
Provision of enabling facilities and infrastructure (e.g., transportation alternatives, recycling)		R	R		I
Procurement policy	I		R	I	I
MONITORING, EVALUATING AND REVIEWING PERFORMANCE					
Action campaign	R		R		I
Other					

R = stakeholders with primary responsibility for any of the policy measures

I = stakeholders for with the impact is expected to be especially significant

2.2.2 Energy and Housing

A National Energy Strategy guides all recent national legislation for sustainable planning, housing policy, building regulations etc. promoting sustainability, first in consumption patterns which also could have a secondary effect on the production pattern. The main topics taken into consideration are sustainable energy (Renewable Energy Sources - RES, Energy Efficiency), water, waste, and clean technologies for sustainable buildings.

Programmes and actions within the National Energy Policy framework which also have significant implications for consumption and production patterns include [UNCSD 2000]:

- Development of Energy Auditing and Certification Schemes
- Further regulations for Energy 2001 Programme aiming at energy conservation through energy certification of buildings and houses in cooperation with the Ministry of Environment, Physical Planning and Public Works
- Support of the network of domestic Regional Energy Centers in promoting applications and increasing awareness of the local societies in the use of sustainable energy sources by taking energy saving measures in every day's life
- Harmonize with EU Directives and implementation of labelling corresponding to domestic appliances energy efficiency
- Widening of the natural gas supply network in combination with the use of LPG or natural gas in SMEs of the industrial or commercial sector
- Participation in the main EU Energy Programmes and Initiatives (ALTENER, THERMIE, SAVE, SYNERGY, TACIS, PHARE), Research and Development Programmes, The Energy Charter and others with less energy-oriented content (MEDA, ECOS-OUVERTURE), which contribute to further strengthening of sustainable energy policies with simultaneous sensitizing of the domestic, industrial, commercial or professional consumer.
- Development of the necessary legal and regulatory framework in cooperation with other Ministries or Agencies having jurisdiction thereto (e.g. Center for Renewable Energy Sources (CRES), Public Power Corporation (PPC)). Included therein is the promotion of suitable organizational and financing schemes (Third Party Financing) leading to enhanced energy conservation or investments primarily in renewable energy sources even in the household sector which is considered as an effective means in directing consumer's behavior towards sustainable energy uses.
- Restructuring, privatization and deregulation of energy markets (e.g. electricity, gas) is a major tool in the direction of supporting consumer's behavior standards, assisted by economic and financial incentives or practices.

The Energy policy programmes in Greece have also some implications for labelling, in particular with respect to housing and electricity, as described more in detail in the next sub-paragraphs.

The "Energy 2001" Programme:

Within the framework of the National Energy Policy, the National Action Plan for Energy Conservation in the Built Environment, called "Energy 2001", carried out by the Ministry for the Environment, Physical Planning and Public Works, intends to change the existing production and consumption patterns, through the promotion of building construction techniques and services aiming at energy conservation and integration of renewable energy technologies.

The Action Plan is to be applied through a specific legislation, concerning an incentive policy for energy saving measures in the existing building (heating, cooling, lighting) as well as policies, policy instruments, measures and new standards concerning new buildings. Several pilot programmes have been started, with respect to bio-climatic houses and buildings, and photovoltaic systems. Especially the use of sustainable materials is promoted, through the Inter Ministerial Decision 21475/4707 (Gov. Gazette 880 B-19-08-98).

Moreover, an Inter-Ministerial Decision has been approved recently, in implementation of the European Directive SAVE (93/76/EC), to provide measures and terms of energy efficiency in buildings. The new legislation contributes to change production and consumption patterns in the fields of energy, water, and materials. The progressive implementation of the Energy 2001 is expected to contribute to the reduction of energy and water demands up to fifty percent and to promote the use of Renewable Energy Sources.

Energy Efficiency Code and Energy Labelling of Buildings:

More in particular, a new Energy Efficiency Code for all new buildings, encompassing energy consumption limits, energy identification, certification and energy labelling of buildings is to be introduced in 2001. This code also provides new sustainable criteria for improving indoor air quality (use of sustainable materials). This legislation is expected to contribute to changing demand for the quality of buildings and materials, which is also a determining factor in changing the production of construction materials.

An energy identity card for buildings will be instituted to ensure transparency in real estate purchase and use of sustainable materials [source: UNCSD 2000].

Tradable Green Certificates:

As in other EU countries, the market of electricity will be gradually liberalised in Greece. A law passed in December 1999, which identifies the process and the milestones towards full liberalisation of the electricity market. Within this framework, similarly to other EU countries, a Tradable Green Certificate system is to be established. The system is currently under development [CRES 2001], but no official detailed information is publicly available so far.

Sustainable Forestry:

Sustainable Forestry is an important part of Greek environmental policy, and Greece is quite advanced in the process of forest management and certification.

Greece has regulated the sustainable management of forests through legislation, and since 1937, forest management is being conducted through management studies and plans. These efforts are being complemented with the creation of two Laboratories (through the implementation of the 3rd Community Structural Fund) for the certification of the sustainable origin of forest products and their quality. The laboratories (with a budget of 2 billion GDR) will be set up in Athens and Thessaloniki and the certification as well as the labelling will be of a voluntary basis. These laboratories will cover apart from the domestic needs (whole of Greece), the needs of other Balkan countries as well, that do not have such infrastructure. [UNCSD 2001].

The first regulation of 1992 and the more recent one of 1999 provides for the reforestation of land and for:

- The enhancement of forestry resources.
- The contribution to a better regional organization in line with environmental concerns.

- The promotion of the contribution of forest resources to the abatement of the greenhouse effect and to the CO₂ sequestration.

A strategy plan for forestry was established in 1986 and a development programme in 1989. Greece favours the implementation of the forest principles adopted by the United Nations Conference on Environment and Development (UNCED) as well as the provisions of Agenda 21. A forest inventory terminated in 1992 covers forest distribution and characteristics, volume and quality of the growing stock, and the increment and natural mortality of the forest. The concept of sustainable forestry is well developed in forest management since the beginning of scientific development of forestry [UNCSD 2001].

At the same time however, Greece is fighting against deforestation. Forest fires are the most serious cause of deforestation, destroying on average 300 km² of forest annually even though intensive efforts manage to substantially reduce their effects. Encroaching urbanization is a rather moderate cause of deforestation, while the effects from logging and the need for fuel-wood have had a light impact. Land ownership patterns, grazing rights on public lands, and land speculation are the main obstacles to effective reforestation. Until recently, around 20,000 Ha in Greece has been reforested. The regional forest services have been reforesting non-vegetated forest areas that, during the last decade, have risen up to 35,000 Ha. Moreover, there are 47 local forest nurseries, with a total surface area of 350 Ha, where 20,000,000 trees of various species are annually being produced [UNCSD 2001]. As mentioned, Greek policy for sustainable forestry has also significant implications for labelling and certification activities, in particular with specific respect to the PEFC label (see. § 4.2.).

Sustainable Tourism:

Tourism is very significant for the Greek economy. In 1997, tourism accounted for 7% of Greek GDP, and tourism activities have increased significantly in the decade 1987-1997 (international tourist arrivals and hotel capacity increased by 31.5% in that period) [UNCDS 1998]. Of course, the tourism development has an important impact on environmental and social aspects and is causing increasing pressure on the environmental resources of Greece.

Therefore, Greek policy-makers have been increasingly concerned about the impacts of tourism and have been very active in defining a tourist policy during last years. The main goal of the latter is precisely to preserve Greek national resources and to achieve a sustainable tourist development [UNCSD 1998].

As far as EPIS on Tourism are concerned, Greece has been very actively collaborating since 1994 for the development of an European ecolabel on Tourism. Very recently, it has asked, together with Italy, to become the leading country for this product group or at least some product sub-group [Fieschi, 2001]¹. More in general, Greek policy-makers have been developing a policy for sustainable tourism, which is focused rather on the concept of "eco-tourism", that is mainly the preservation of natural (and historical) resources of Greece, rather than on the tourist accommodation itself.

As a matter of fact, Eco tourism and nature based tourism are an integral part of national and regional tourist policy mainly through public investment in infrastructures, incentive policy, promotional campaigns, participation of NGOs and the voluntary sector in various specific projects at the national, regional and local level. In all mountain areas, measures have been taken for the conservation, regeneration, and expansion of

¹ More details on EPIS on tourism in Greece are reported in § 4.1.1.2.

forests. Measures have also been taken to induce the local population, especially the young, to remain in mountain areas by promoting alternative livelihood opportunities through the promotion and development of eco-tourism, mountain tourism, and agro-tourism [UNCSD 1998].

Based on the principle that cultural heritage and the natural environment are the basic elements of natural wealth upon which tourism is actually based, specific planning policies regarding the carrying capacity of tourist areas are being developed. Through a ministerial Decision of 1987, specific areas of Greece are declared as Areas of Controlled Tourism Development, and parts of them are declared as "Saturated Tourist Areas"[UNCSD 1998].

More recently, The Development Incentives Law 2601/98 enhances the modernization of operating tourist units, the conversion of traditional listed buildings into hotels, as well as investments in environment protection projects and in the use of renewable energy sources [UNCSD 1998].

In Greece the responsibilities for sustainable tourism at the national level are divided among the Ministry of Development, Greek National Tourism Organization (GNTO) and the Ministry for the Environment, Physical Planning and Public Works. The regional services of GNTO and the Regions tourism administrations are responsible at the local level. A Draft Decree will pass this competency over to the Regions and the Prefectures accordingly [UNCSD 1998].

In particular, GNTO is responsible for monitoring tourist activities, and has launched several projects including [UNCSD 1998]:

- Elaboration of a national plan for tourist development including a research on the development of ecological tourism (see below for more details);
- Enhancement of alternative forms of tourism (mountain, ecological, cultural, rural tourism)
- Studies of environmental impacts of the construction of ports and other facilities
- Participation in various European initiatives (e.g. Blue Flag, see § 4.2)
- Public Information and environmental education
- Specific training for tourist personnel
- Enforcement of a strict legal framework for building tourist venues after elaboration of environmental impact studies
- Collaboration with NGO's,
- Etc.

In particular, it is worth mentioning the study "Ecotourism: Theoretical Background and Pilot Projects", commissioned in February 2000 by GNTO to WWF Greece. In view of the availability of E.U. funds for "alternative tourism" development in Greece, the GTO decided to ask for consultancy in order to gain a clear understanding of the meaning, the role and the way in which ecotourism should be promoted in Greece. The fact that the GNTO turned to an environmental NGO, WWF Greece, for this study is already a recognition of the importance of nature protection within the frame of ecotourism development in Greece.

The study is divided in two parts-volumes. The first part deals with the theoretical background of ecotourism and proposes a clear definition and key-concepts and tools for ecotourism development. It tries to build on the already gained experience of ecotourism internationally, but it also analyses the Greek context, the potential and the threats which exist. It puts forward propositions in order to maximise the benefits and

minimise the threats by presenting concrete examples from Greece and abroad. Critical tools for ecotourism, such as the carrying capacity, the visitors' impact management, the methodology of designing an ecotourism development plan etc. are analysed in this volume. The second part of the study focuses on two pilot studies, one on a wetland area and another on a mountain area.

Finally, the study concludes with a series of proposals, mainly proposals which can be promoted by the GTO. The overall aim is to communicate the meaning and role of ecotourism to all the parties involved and to set up the institutions which are needed for proper implementation of ecotourism projects. [WWF 2001]

SME's and Environmental Management Systems:

Environmental Management Systems (EMS) are just starting in Greece. For instance, there were just 57 ISO 14000 and 1 EMAS certifications at the end of 1999 [ISO IC 2001].

More in detail, Greek SMEs do not share the advantages of more developed countries in Europe, because of weak production and technical infrastructure, lack of founding mechanism, and poor financial incentives for SMEs. The manufacturing policy for SMEs is implemented primarily through the GSF (Community Support Framework, 1994-99). CSF is the main development programme for Greece and is co-financed by the Greek government and the structural Funds of the Community. The policy is implemented mainly through improvements in the infrastructure (e.g. transport, sewage) and production facilities, as well as through provision of investment incentives, different service to SMEs and different financial instruments. In general, however, IEP-Integrated Environmental Protection structures for SMEs are still not developed in Greece [IPTS 2000].

2.2.3 Design For Environment and Life Cycle Assessment

Greece does not seem particularly active in the development of policies and strategies supporting eco-design. However, it is worth mentioning two minor projects carried out by Greek actors and related eco-design, which might have implications for the future development of Design for Environment (DFE) and Life Cycle Assessment (LCA) activities in Greece. On their turn, this might have significant implications for the development of EPIS in Greece in the future.

The two projects are:

- A data-bank, developed by the Greek Cleaner Production Center, on ecological building materials and products. "The database contains information about products which claim to be "environmentally friendlier", but there is no independent verification of these claims. Also, the database includes a lot of imported products and it is not clear how many of these products are developed in Greece. " [IPTS 2000]
- A network on LCA (Hellenic life cycle network- Helcanet), promoted in 1998 by the Laboratory of Heat Transfer and Environmental Engineering at the "Aristotele University of Thessaloniki (AUT). There appear to be some LCA studies completed at and/or ongoing at AUT (e.g. on energy production, paper, brick production). However, the studies appear to be completed as academic studies without using the study results of industry. [IPTS 2000]

According to the report "Eco-Design: European State of the Art", in Greece there might exist several small and very small innovative enterprises involved in the production and development of "green products". However, the authors of the report were not able to identify any firm relevant (by its dimensions) for the Greek market presently involved in such activities [IPTS 2000].

2.2.4 Waste Management

Another important legislation which might have significant implications for product policy and EPIS in a more mid-long term is the one on waste management.

In Greece, National legislation has been harmonised in recent years with European Union (EU) regulations on waste management. Responsibility for waste management has been delegated to local authorities.

Legislation has been issued aimed at reducing air pollution from waste incineration plants. Threshold values have been established for heavy metals in sewage sludge used in agriculture. Programmes are being introduced for the reduction of weight and volume of packaging material. In accordance with EU Directive 91/156, the establishment of an integrated network of waste disposal is being planned. Activities have been initiated to promote waste prevention and recycling. Recycling programs are being implemented for paper, glass, and aluminium. Awareness campaigns are being conducted.

National legislation provides for the planning and management of toxic and dangerous waste, procedures for the transport of dangerous waste, special permits for the disposal and storage of dangerous waste, and measures for building facilities for toxic residues at ports. Activities producing dangerous waste and facilities for disposal of dangerous waste require an environmental impact assessment and special permit. Controls are in place. Planning on the management of hospital waste has been completed. Regulations on the collection and disposal of batteries and accumulators are being established. Two facilities are under construction for the controlled storage of solid toxic waste and mud. [UNCSD 2000]

As a matter of fact, there is already a connection with EPIS, since the EU Eco-Label Award Scheme has been introduced at the National level (also) with a view to minimising certain waste products [UNCSD 2000].

3 Mandatory Labels

3.1 Household Appliances (Energy Label)

As an EU Member state, Greece is obliged to implement the EU Directives concerning labelling of appliance energy efficiency (92/75/EEC and subsequent implementation directives). The legislation for refrigerators and freezers and for washing machines has already been adopted.

Moreover, the Center for Renewable Energy Sources (CRES)², supported through the EU/SAVE programme, recently launched an information campaign in order to make consumers and retailers aware of the usage of the new energy label.

The consumer awareness-raising campaign on energy labelling of domestic appliances and especially of refrigerators and freezers aims to:

² The Center for Renewable Energy Sources collects and analyses primary energy data as well as socio-economic and technical data pertaining to energy use. It has a complementary role as the national co-coordinating body for the EU Project on Energy Efficiency Indicators under the SAVE programme. This project aims to harmonize data collection, develop and implement a common method of analysis of energy efficiency on an international basis, and compare results among EU Member countries. The study identified lack of pertinent data as a considerable obstacle. As of early 1998, results from this programme cover the period 1980 to 1992. CRES intends to extend the results to the present. A programme of energy auditing is managed by CRES. The programme provides money and technical assistance for energy auditing in buildings, small and medium enterprises, and industry. As of November 1997, about 50 audits in buildings and 50 in industrial processes had been performed.

- make the Greek consumer aware of the use of the energy labelling for domestic appliances by explaining the meaning and significance of the energy labelling symbols and figures for refrigerators and freezers
- collect available data related to the energy efficiency of domestic appliances and especially refrigerators and freezers
- estimate the energy savings and economic profits achieved by the use of energy labelling and inform the public about the results

The manufacturing and retailing industries often participate either as sponsors or as speakers in conferences and seminars dealing with environmental issues. In most cases this is done with the co-operation of the Ministry of Development as well as that of the consumer organisations. Small and Medium-sized enterprises also participate with increasing interest. [UNCSD 2000]

3.2 Toxic Chemicals

Greece has promoted the application of all relevant European Union (EU) legislation on toxic chemical management through a special program of collaboration with the EU. This includes: Directives 67/548 and 92/32 on the classification, packaging and labelling of new chemical substances; Directive 93/67 on the assessment of the hazards of new chemical substances; Regulation 793/93 on the assessment of hazards of existing chemical substances; Directive 88/379 on the classification and labelling of preparations; Directive 76/769 on restrictions of the marketing and use of certain hazardous substances and preparations; Regulation 2455/92 on the export and import of certain hazardous products; and Directives 87/18 and 88/320 on the application of Good Laboratory Practice. Thus, Greek legislation has been harmonised with EU legislation. Control is carried out under the framework of National and EU programmes [UNCSD 2000].

4 Voluntary Labels

4.1 Classical ISO Type I Labels

4.1.1 EU-Flower

4.1.1.1 Present Status

Greece harmonised with the European Community Regulation 880/92 which introduced an Ecolabel Award Scheme, by the Joint Ministerial Resolution 86644/2482/1993. This Resolution established a Supreme Board for Awarding Ecological labels within the Ministry for the Environment, Physical Planning and Public Works. This Supreme Board, named ASAOS, established in 1993, provides information to the business community and consumers, organises international meetings and co-operates with activities of the European Commission for the development and promotion of the EU-Flower. Several major groups, industry organisations, unions, NGOs and consumer groups, participate in the Supreme Board for Awarding Ecological Labels.

Greece has been active in the development of the EU-flower criteria of several product groups, although with different levels of responsibility in different times.

In particular, ASAOS initially had the task for establishing criteria of the product group "Bed mattresses", in cooperation with France. Moreover, it carried out a pilot project concerning Tourist Services for the European Ecolabel, in cooperation with France too.

Today, Greece is the leading country for the revision of the criteria of Bed-mattresses. The task was undertaken with the support of the Material Science and Engineering Section of the Chemical Engineering Department of the National Technical University of Athens, as technical consultant of ASAOS. The revised criteria are expected for the end of 2001. The first meeting of the Ad-hoc Working Group for the revision was held in Brussels, on 20 March 2001. The main issues related to the revision of the criteria are the following: final disposal of mattresses and recyclability; flame retardant; quantity of materials.

For Greece the response to the ecolabel scheme for Bed mattresses is considered successful because at present there are 3 Greek companies with ecolabelled products: one of them applied the award of ecolabel for a range of 22 products, the second one for a range of 10 and the third for 2 products. It is believed that in Greece the interest for Bed mattresses ecolabels will increase in the future, because of the Olympic Games and the necessary for new hotels and residential. [AHWG 2001]

This "success story" on Bed mattresses (together with the one of paints and varnishes) represents an exponential acceleration of the diffusion of the EU-Flower in Greece. As a matter of fact, Greece shows a rapid acceleration in EU-Flower awards in the very last year. Until 2000, there were just two companies in Greece that had been awarded the EU ecolabel: Berling SA and Alexander Ieridis, both in the product group of "indoor paints and varnishes".

However, Amalia Katsoy, on behalf of ASAOS- the Greek Competent Body for EU Ecolabel, has announced that a series of manufacturers are or are going to be awarded in the next future with the EU-Flower. More precisely, the manufacturer are related to the following product groups:

- 3 for bed mattresses (for a total of 34 products)
- 3 more for paints and varnishes
- 1 Small-size dishwashers
- 1 textiles.

Finally, it is worth mentioning that DG Environment launched a marketing study on EU-Flower in Greece conducted by Synergia Public Relations LTD, Athens. The results of the study will be available in June 2001.

4.1.1.2 New Product Groups - Tourism

Greece has been very actively collaborating since 1994 for the development of an European ecolabel on Tourism. In March 1999 the Commission, together with Competent Bodies, relaunched the "Eco-labelling initiative in tourism" started by the Greek and the French Competent Body as early as 1994, when legislative restraints hindered a follow-up.

Despite such a stop at European level, the level of interest in an ecolabel for Tourism remained high in Greece. As a tangible example of this continuing interest, on 19 and 20 April 1999 the "European Hearing on Instruments favouring Sustainable Tourism and Green Purchasing" took place under the leadership of the Hellenic Ministry for the Environment, the Greek Competent Body ASAOS, European Partners for the Environment and other stakeholders. This Athens meeting formed an opportunity to get informed on latest trends and best practices in tourism, existing eco-labels and relaunched the initiative at European level.

Greece also participated in the discussion following the presentation of the feasibility study FEMATOUR, presented by the EC in last September, 2000 [FEMATOUR 2000]

Very recently, Greece has asked, together with Italy, to become the leading country for this product group or at least some product sub-group [Fieschi, 2001].

4.2 ISO Type I like Labels

Oeko-Tex:



As in other EU countries, Oeko-Tex Standard 100 is likely the most diffused ISO-type I-like label in Greece. So far, in Greece there are 51 firms with products certified Oeko-Tex.

Oeko-Tex Standard 100 was firstly established in 1992. It applies to finished textiles but also to intermediate products. The label focuses on Human Toxicity and the effects on human health. Ecolabeled textiles cannot contain more than a threshold of toxic materials, neither they can cause too high emissions during the use phase.

PEFC- Pan-European Forest Certification Council:



Greece has applied in order to become a permanent member of the PEFC-Pan-European Forest Certification Council, in which Greece has been participating until today as an observer. The aim of the PEFC is:

- institutionalisation of an internationally reliable structure for the certification of forest studies and initiatives taken by European Countries that would facilitate the mutual recognition of the forestry studies between countries;
- definition of basic requirements for the forest certification as well as for the standard agreements on the pan-european, national and regional levels.

The Pan European Forest Certification (PEFC) Council was officially launched in Paris on the 30th of June 1999, following months of intensive development work. The PEFC scheme, a voluntary private sector initiative, will provide assurance to the customers of woodland owners that the products they buy come from independently certified forests managed according to the Pan European Criteria as defined by the resolutions of the Helsinki and Lisbon Ministerial Conferences of 1993 and 1998 on the Protection of Forests in Europe. Timber products from these forests will be identifiable through the PEFC logo and customers buying these products will be making a positive choice for sustainable forest management.

So far, there are no forests certified PEFC in Greece. However, also given the focus of Greek environmental policy on sustainable forestry, this is likely to change in the near future.

Green Globe 21 Certification:



This is an interesting label for several reasons: Because it refers to a service and environmental management systems, because criteria are related to Agenda 21 and therefore the label can be applied to whole tourist areas, and because an interrelated

certification process developed for communities follows a multi-stakeholder approach, in line with the general approach of IPP.

The label is given at two different status level: Statement of intent (SOI - the applicant stating its environmental objectives) and certified (the objectives are reached).

So far, Green Globe 21 is the only independently verified world-wide certification scheme for Travel & Tourism. In Europe it is mostly diffused in the UK, but also Greece is member of Green Globe 21 and there is one certified Greek company (Sofitel Maadi). [Ecotip 2000]

Green Globe is formally supported by 27 industry and government organisations including the World Travel & Tourism Council, the International Hotel & Restaurant Association, the Pacific Asia Travel Association, the World Tourism Organisation and the United Nations Environment Programme.

The certification programme defines a global standard for environmental performance. It is based on a combination of Agenda 21 for Travel & Tourism issues and ISO type procedures. It is accompanied by application guides for different sectors of the industry such as hotels, airlines, tour operators, travel agents, airports, visitor attractions, cruise ships and car hire companies. These applications can be tailored for local conditions.

An interrelated Green Globe 21 Certification process has been developed for Communities. This consists of a 3-phase programme to create a co-ordinated culture of sustainable tourism involving all stakeholders. It incorporates an agreed environment management action plan, an implementation process and verification procedure.

Blue Flag, Beaches Marinas:



The Blue Flag label is awarded by the Foundation for Environmental Education in Europe (FEEE). 21 countries are participating in the Blue Flag Campaign: Belgium, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, **Greece**, Ireland, Italy, Latvia, the Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Turkey and the United Kingdom. In 2000, 1,873 beaches and 652 marinas were awarded the Blue Flag.

The award of the Blue Flag is currently based on 27 criteria for beaches and 16 criteria for the marinas covering the same four aspects of management:

- Water Quality
- Environmental Education and Information
- Environmental Management
- Safety and Services.

Some criteria are imperative whereas other are guideline criteria.

In particular, Blue Flag beach criteria include, beach cleanliness, dog control, access for disabled visitors, provision of life saving equipment, environmental management and bathing water quality based on the highest standards of the EC Bathing Water Directive EC/76/160. The 16 Blue Flag marina criteria are based

on the provision of environmental education and information, environmental management, clean water, safety and services. [BF 2000]

In Greece the National Operator for the project "Blue Flag for Europe" is the Hellenic Society for the Protection of Nature, founded in 1951. At present in Greece there are no beaches and no marinas awarded with the Blue Flag. [PI 2001]. However, the interest is increasing, as demonstrated by a recent project promoted by the Greek National Tourism Organisation (see also § 2.2.4)

European Eco-Schools:



Another label created by FEEE is Eco-schools. This label is potentially interesting for several reasons. First, it refers to a service, and therefore includes management criteria. Second, it has relevant social implications, since it focuses on education and involvement of social community. In this sense, it might well be rather considered a sustainability label.

The Eco-Schools Programme aims to raise students awareness of environmental and sustainable development issues through classroom study, and provides an integrated system for environmental management of schools based on an ISO14001/EMAS approach. As a process of facilitating sustainable development at a local level, pupils are encouraged to take an active role in practical steps to reduce the environmental impact of the school. Eco-Schools thus extends learning beyond the classroom and develops responsible attitudes and commitment both at home and in the wider community. The Eco-Schools Green Flag, awarded to schools with high achievement in their Programme, is a recognised and respected eco-label for environmental education and performance.

In Greece the National Operator for the European project "Eco-Schools" programme is the Hellenic Society for the Protection of Nature that was founded in 1951 by 50 members comprising Academicians, Professors of Biology, Forestry Experts, Public Functionaries and many other distinguished citizens having an interest in the protection of the natural environment. Its main aims are the Protection of Nature and the education of the public. The registered Eco-Schools in May 2000 was 130 and the awarded Eco-Schools in October 2000 was 30. [BF 2000]

4.3 ISO Type II Labels

Environmental claims are a common practice in Greece, and during the last five years there has been a growing and discernible trend in using them. These claims usually deal with detergent products, paper products and recycling products. The major regulatory measures against false environmental claims in advertising are provided by article 9 of Law 2251/94 for Consumer Protection and by article 3 of Law 2328/95 for the regime of private television and of the radio/TV market.

On the basis of self-regulatory measures against false environmental claims in advertising, there is a voluntary code of the Union of Greek advertisers.

4.4 ISO Type III Labels

No information available.

5 Other Labels

5.1 Social Labels

No information available

5.2 Other Interesting Labels

No significant information available

6 Conclusions

Despite a lot of contacts taken over several months, it has been very difficult to collect accurate, updated and reliable data on EPIS in Greece. Most of the publicly available information is usually in Greek.

While we were not able to identify any explicit *integrated* product-policy approach so far in Greece, there is no doubt, however, that several Greek environmental policy goals and tools have significant implications for consumption and production patterns and do actually involve several stakeholders. As far as this is concerned, it is worth mentioning that very recently the Ministry for the Environment, Physical Planning and Public Works published the results of a study which identifies the role of the various stakeholders in Greece (producers, local authorities, central government, households and civil society) in function of the policy goals, measures and tools. This might be considered a first step towards an IPP approach.

Within the set of environmental policies started so far, the initiatives taken by Greek legislators and policy-makers in three specific areas, i.e. energy and housing, sustainable forestry and sustainable tourism, have potentially significant implications for product policy and EPIS. More in detail:

- The "Energy 2001" programme foresees an energy efficiency code and the energy labelling of buildings and houses.
- Sustainable Forestry is an important part of Greek environmental policy, and Greece is quite advanced in the process of forest management and certification. Greece has recently become a permanent member of the PEFC, although so far no Greek forest has been certified.
- Tourism is very significant for the Greek economy. The concern and action against the environmental pressure arising from tourism is increasing. Greece is active on both the definition of a National sustainable tourism policy, based mainly on the concept of the preservation of natural and historical resources ("eco-tourism") at territorial level, and the development of the EU-flower on tourism. As far as the latter is concerned, Greece has been very active since 1994, running the first pilot case together with France. Very recently, it has asked, together with Italy, to become the leading country for this product group or at least for some product sub-group.

The only "classical" ISO-type I ecolabel existing in Greece is the EU-flower. A national label does not exist. So far, just a limited number of companies have been or are going to be awarded with the EU-flower in a short time. However, the number of companies has very significantly increased in the year 2000, passing

from just 2 labelled products and 2 companies until 1999 to the present 10 companies in 4 product groups (3 in bed mattresses with 34 products, 5 in paints and varnishes, 1 in dishwashers, and 1 in textiles).

As in other countries, important ISO-type I-like labels in Greece are Oeko-Tex (51 products labelled), the Green Globe 21 (1 Hotel company certified), the Blue Flag, European Eco-schools, and PEFC.

No sufficient information was available neither on other labels, nor ISO-type II labels and ISO-type III labels. As far as the latter are concerned, it is however worth mentioning that a Greek network on LCA (HELCANET) was recently founded.

7 Literature

- [AHWG 2001] A.H.W.G., Revision of ecological criteria for the award of the Community ecolabel to Bed mattresses, Brussels, 20 March 2001
- [ASAOS, 1995] *Pilot Project on Eco-label criteria development for touristic services. An introductory report to the ad hoc Working Group of the EU Member States. Expert Group on ecolabel criteria for touristic services*, unpublished
- [BF 2000] Blue Flag, "General Information", 04 December 2000 (www.blueflag.org/who/feee.htm)
- [CRES 2001] Center for Renewable Energy Sources, Personal communication, January 2001.
- [Ecotip 2000] "Eco-labels and Awards in Tourism in Europe", www.eco-tip.org
- [Ellada Kathari, n.1, summer 1999]
- [EYS 1998] Ernst & Young and SPRU, Integrated Product Policy, European Commission, DG XI, Brussels, Belgium, March 1998
- [FEMATOUR 2000], European Commission, DG Env, *Feasibility and market study for a European Eco-label for tourist accommodations*, Amsterdam, August 2000
- [Fieschi 2001] M. Fieschi, Head of the Unit for the Environmental Quality of Products at the Italian Agency for the Protection of the Environment – ANPA, personal communication, Rome, March 2001.
- [IPTS 2000] Institute for Prospective technological Studies, European Science and Technology Observatory (ESTO), "Eco-Design: European State of the Art – part I and II", ESTO October 2000
- [ISO IC 2001] The number of ISO14001/EMAS registration of the world, www.ecology.or.jp/isoworld/english/analy14k.htm
- [PI 2001] Personal Interview with the Hellenic Society for the Protection of Nature, on March 2001.
- [UNCSD 1997] V Session of the United Nations Commission on Sustainable Development, 1997, in www.un.org/esa/agenda21/natlinfo/countr/greece/eco.htm
- [UNCSD 1998] VII Session of the United Nations Commission on Sustainable Development, 1998, in www.un.org/esa/agenda21/natlinfo/countr/greece/eco.htm
- [UNCSD 2000] VIII, IX Sessions of United Nations Commission on Sustainable Development, May 2000 in www.un.org/esa/agenda21/natlinfo/countr/greece/eco.htm
- [WWF 2001] Eleni Svoronou - WWF Greece -, Abstract of "Ecotourism: Theoretical Background and Pilot Projects", January 2001.

Paolo Frankl / Sveva Barbera
supported by Virginia Belli

Environmental Product Information Schemes (EPIS)
in Ireland

Table of Contents

1	INTRODUCTION	127
2	INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INFORMATION SCHEMES IN IRELAND	127
2.1	Public Procurement	128
2.2	Environmental Management Systems	128
2.3	EU and National Ecolabel	129
2.4	Sustainable Forestry	129
3	MANDATORY LABELS	129
3.1	Household Appliances (Energy Label)	129
3.2	Packaging	130
4	VOLUNTARY LABELS	130
4.1	Classical ISO-type I Labels	130
4.2	ISO Type I like Labels	131
4.3	ISO II	133
4.4	ISO III	133
5	OTHER LABELS	134
5.1	Social Labels	134
5.2	Other interesting Labels	134
6	CONCLUSIONS	135
7	LITERATURE	136

1 Introduction

Among the EU Countries, the Republic of Ireland (EIRE) is characterised by a recent and accelerated economic development, which is causing an increasing pressure on the environment. In particular, during the 90's decade, in correspondence with the rapid economic growth, following trends have emerged, which have significant implications in environmental terms:

- In five years the individual consumption of goods and services has increased by one third
- The industrial production has doubled
- The total number of vehicles has increased by more than 50%
- The primary energy demand of the whole country has increased by more than one third
- The forestry, tourism and commercial activities have significantly increased
- The number of built houses, as well the number of properties, has doubled.

These changes cause significant problems of environmental protection. This is also reflected by the fact that the major part of Irish citizens considers environmental pollution as an impelling and urgent problem, to be solved in short time [EPA Ireland 2000].

However, due to favourable initial environmental conditions, both in demographic and climatic terms, and to the fact that economic growth was quite recent, the generic environmental quality of Ireland is relatively good compared to the one of almost all other EU countries [EPA Ireland 2000].

One might well speculate that this is one of the main reasons for the delay with which the Irish government and producers have been promoting, diffusing and supporting efficient environmental strategies and policies. The latter have been mostly developed by the Department of the Environment, starting in 1992-93 focusing on Vehicle Emission standards, Waste, Recycling Strategy, and Climate Change.

2 Integrated Product Policy and Environmental Product Information Schemes in Ireland

"As in most EU Member States the concept of IPP is new to Ireland. Recent waste management legislation has introduced the concept of producer responsibility requiring, for example, the take back of packaging materials. Voluntary measures, such as the EU eco-label scheme and environmental management systems (ISO 14001 and EMAS, the EU Eco-Audit and Management Scheme) are promoted at national level.

An important new initiative is the Enterprise Ireland Pilot Demonstration Grant Scheme whereby financial support will be given to a selected number of manufacturing companies to conduct research aimed at assessing the potential for development of Environmentally Superior Products from their existing or related product range. Co-funding of up to £25,000 will be available for individual projects and it is anticipated that 10 proposals will be funded in 1999. An environmentally superior product is one which can be shown to have reduced environmental impact in terms of its design, materials content and consumption, energy consumption, manufacture, packaging, use recyclability or disposal without compromising perceived product quality. The intention is to focus on products, rather than processes, with the aim of reducing their environmental impact". [Casserly, 2000].

2.1 Public Procurement

"The public rightly expects the public sector to demonstrate a commitment to good environmental performance. The greening of public procurement process has the potential to have a significant impact on the demand for environmentally friendly goods and services. Sustainable Development: A Strategy for Ireland, recognises the special obligation on the public sector to demonstrate good environmental performance as part of the service which it delivers. The Green Government Guide, published in 1996, sets out how the public sector can demonstrate good environmental management practice. The Guide has been circulated to all Government Departments and other public sector organisations and they have been asked to give a high priority to promoting good environmental practice and integrating it into all aspects of their operations. In addition, the Guide is seen as facilitating Departments to progress to a more formalised systems of environmental management, as well as exerting a positive influence on the production of environmentally friendly goods and services through the integration of environmental considerations in public procurement policy. The Department of the Environment and local Government and the Revenue Commissioners are already committed to achieving certification to ISO 14001" [Cassery 2000].

Anyway, it has to be observed that this process is being implemented in a broader context than only IPP: "...Such approaches are particularly relevant to local authorities in the implementation of Local Agenda 21 where they can lead by example in the "greening" of their own operations in pursuing green housekeeping measures and adopting environmental management systems. The Sustainable Development Strategy recommends the development of an eco-management and audit system for local government as the means to progressing this objective" [Cassery 2000].

As far as financial instruments are concerned, there is an increasing range of financial instruments to support sustainable production and consumption, e.g.:

- Fourteen Irish projects have been funded to date under the EPA's EU co-funded Cleaner Production Pilot Demonstration Programme.
- The EU Life Programme provides co-funding for innovative environmental demonstration projects undertaken by industry and local authorities. A new 5 year programme is expected launched at the end of 1999 and is likely to contain a specific thematic element with a product focus.
- The Enterprise Ireland scheme for Environmentally Superior Products [Cassery 2000].

2.2 Environmental Management Systems

"In Ireland, the National Accreditation Board (NAB) is both the EMAS "Competent Body" for the registration of sites and the environment policy Accreditation Body for verifiers. The NAB was established in 1985 to accredit calibration and testing laboratories. It is a division of Forfás - the National Policy and Advisory Board for Enterprise, Trade, Science, Technology and Innovation - and is the sole national body responsible for accreditation in accordance with the EN 45000 series of European standards and the relevant ISO standards and guides. NAB also supervises Environmental Verifiers from other EU Member States while carrying out EMAS audits in Ireland" [Cassery 2000].

There are four EMAS registered sites in Ireland and a number of others which are awaiting validation audit. In Ireland there are also approximately 40 companies registered to ISO 14001 or the earlier Irish and UK environmental management standards (IS 310 and BS 7750) [www.environ.ie].

2.3 EU and National Ecolabel

Ireland has followed quite the same process of UK, i.e. mostly promoting and supporting the EU-Flower and not to develop National or Regional schemes. As a matter of fact, there is no National Ecolabel in Ireland, nor there is any discussion on-going on the opportunity and possibility of developing one.

In general, Eco-labelling is a relatively recent concept in Ireland (see §4.1).

During the year 2000, a massive public information campaign called "The Environment, It's easy to make a Difference" was launched, to promote eco-labelling as part of the current national environmental awareness campaign. The aim of this campaign is to encourage individual action and shared responsibility towards the environment.

2.4 Sustainable Forestry

In Ireland the principle of sustainable forest management has been incorporated into the National Policy on Forestry "Growing for the Future". It is being implemented through the drafting of a National Forestry Standard incorporating a Code of Best Practice; new and revisited Environmental Guidelines; amended legislation; forest grants administration procedure and a wide range of specific environmental controls [ENFO 2000]. This process is likely to have significant implications also for product policy. In fact, a working group has been established in 1998 to develop the FSC Standard for Irish forests (and products). A second draft is now available for Public consultation (see § 4.1.2) [IFCI 2000].

3 Mandatory Labels

3.1 Household Appliances (Energy Label)

The mandatory energy label indicates the consumption of energy and of other essential resources (e.g. water, chemical products, etc.) of electric household appliances. The requested data must be indicated both on a label put on the appliance itself, and on a technical information sheet. The data to be indicated are specified in the different directives related to the different product groups. The producer is obliged to provide a detailed technical information. Energy labelling of appliances was first introduced in Ireland under EU legislation in 1995. The legislation currently applies to washers, dryers, combination washer-dryers, fridges, freezers, fridge-freezers, and dishwashers. By the end of 1999 lamps will be included in the products covered. By law all displayed products must carry the standard energy label.

Labeled products in Ireland are:

- Refrigerators, freezers and their combination
- Washing machines, drying machines and combination
- Dishwashers
- Lamps

The following table lists the National Regulation instruments adopted for implementation of the EEC directives for each product group.

Product Group	EU Regulation	Ireland Regulation (Statutory Instruments – S.I.)
Mandatory energy labelling of domestic appliances	Dir. 92/75/CEE	not found National Statutory Instruments
Refrigerators/freezers and combination	Dir. 94/2/CEE (modified by Dir. 96/57/CEE)	S.I. 482/97
Washing machines	Dir. 95/12/CEE (modified by Dir. 98/89/CEE)	S.I. 109/96 and S.I. 208/97
Tumble driers	Dir. 95/13/CEE	not found National Statutory Instruments
Combined washing-driers	Dir. 96/60/CEE	S.I. 319/97
Dishwashers	Dir. 97/17/CEE (modified by Dir. 99/9/CEE)	S.I. 210/98 and S.I. 171/99
Lamps	Dir. 97/11/CEE	S.I. 170/99

Adapted from [IRLGOV 2000, ENT-IRL 2000]

3.2 Packaging

In June 1997 a packaging ordinance (“Packaging Regulations”) was passed in Ireland with the objective of implementing the EC Packaging Directive (94/62/EC Dir. 1994). For Ireland, the EC Packaging Directive set a recovery target of 25 percent of all packaging waste by June 2001. The aim of the Irish Packaging Regulation is to exceed this target by two percent. The Regulation impose obligation on all companies which supply packer goods or packaging and/or to “major producers” i.e. which have a packaging output exceeding 25 t/year and annual turnover exceeding £ 1 million.

This regulation implies the introduction of the mandatory label on the recognition of the packaging material (again 94/62/EC Dir. 1994). As for other countries, there is no mandatory requirement about recyclability and actual recycling. As far as the latter is concerned, see § 4.2.1 on ISO-II labels.

4 Voluntary Labels

4.1 Classical ISO-type I Labels

With respect to the study carried out by David Meehan and David Cabot in January 1994 [IEEP 1994], we notice that since then the situation of voluntary environmental information instruments has not significantly evolved in Ireland. In general there is the tendency to support the EU Ecolabel with respect to other voluntary schemes. With this respect the position of Ireland seems very close to the one of United Kingdom, but with the fundamental difference of a very scarce – or even not existent – presence of environmental labelled product and/or services. Another difference with the current process going on in the UK is that in Ireland there is currently no discussion about the possibility and opportunity of creating a National eco-label.

Participation in the European Scheme is supposed to provide significant opportunities for Irish based industries to gain market advantage by achieving recognition under the scheme. Manufacturers or importers can make an application to the Competent Body – in the case of Ireland this is the National Standards

Authority of Ireland (NSAI). Under the recently revisited Regulation, retailers and distributors (in addition to manufacturers) can now apply for the eco-label for products put on the market under their own brand name.

So far, only one product has been labelled in Ireland in the Tissue Paper product group. Moreover, there was a second product in the group of Indoor Paints and Varnishes, which has expired:

Table 4.1: Product group, manufacturers and products ecolabelled by (foreign) ISO-Type I labels

PRODUCT GROUP	MANUFACTURER	PRODUCT - MODEL	DATE OF AWARD	EXPIRY DATE	INFO SOURCE
Indoor paints and varnishes	FSW COATING Ltd	Fletwood decorative gloss paint white		Expired	AFNOR
Tissue paper products	Tishu MFG Ltd.	Cromatic and Ultimatic Tissue	12/1999	12/2001 ¹	EU Ecolabel website

Despite such a low number of products awarded, according to Irish analysts future outlook is optimistic: "Eco-labelling is a relatively recent concept in the Irish context but, as criteria for an increasing number of product groups are agreed and as consumer become more aware of the scheme, we can expect to see more products on Irish shelves carrying the label" [Cassely 2000].

4.2 ISO Type I like Labels

Forest Stewardship Council (FSC):



The Forest Stewardship Council (FSC) is an international body which accredits certification organisations in order to guarantee the authenticity of their claims. In all cases the process of certification will be initiated voluntarily by forest owners and managers who request the services of a certification organisation. The goal of FSC is to promote environmentally responsible, socially beneficial and economically viable management of the world's forests, by establishing a world-wide standard of recognised and respected Principles of Forest Stewardship.

The FSC's Principles and Criteria (P&C) apply to all tropical, temperate and boreal forests. Many of these P&C apply also to plantations and partially replanted forests. More detailed standards for these and other vegetation types may be prepared at national and local levels. The P&C are to be incorporated into the evaluation systems and standards of all certification organisations seeking accreditation by FSC. While the P&C are mainly designed for forests managed for the production of wood products, they are also relevant, to varying degrees, to forests managed for non-timber products and other services. The P&C are a complete package to be considered as a whole, and their sequence does not represent an ordering of priority.

Ireland has adopted – and adapted - the FSC label. A working group aiming at establishing the FSC criteria for Irish forests under the name "Irish Forestry Certification Initiative" has been formed in November 1998. A second draft has been recently published in which the FSC Standard criteria for Irish forest are established.

¹ This label was extended from December 2000 to December 2001

However, no Irish forest has been certified so far [sources: IFCI 2000, FSC-UK 2000].

Blue Flag, Beaches Marinas:



In Ireland more than 70 beaches and 5 marinas have obtained the Blue Flag label. The latter is an European label owned and managed by an independent no-profit organisation called Foundation Education in Europe (FEEE).

The Blue Flag was born in France in 1985 where the first French coastal municipalities were awarded the Blue Flag on the basis of criteria covering sewage treatment and bathing water quality. 1987 was the "European Year of the Environment" and the European Commission was responsible for developing the European Community activities of that year. The Foundation for Environmental Education in Europe (FEEE) presented the concept of the Blue Flag to the Commission, and it was agreed to launch the European Blue Flag Campaign as one of several "European Year of the Environment" activities in the Community.

The French concept of the Blue Flag was developed on European level to include other areas of environmental management, such as waste management and coastal planning and protection. Besides beaches marinas also became eligible for the Blue Flag.

In 1987, 244 beaches and 208 marinas from 10 countries were awarded the Blue Flag. Since 1987 the Campaign has year by year increased in numbers of Blue Flags. The criteria have during these years been changed to more strict criteria. As an example, in 1992 the Campaign started using the restrictive guideline values in the EEC Bathing Water Directive as imperative criteria, and this was also the year where all Blue Flag criteria became the same in all participating countries. In 2000, 1,873 beaches and 652 marinas were awarded the Blue Flag. 21 countries are participating in the Blue Flag Campaign: Belgium, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, the Netherlands, Norway, Portugal, Slovenia, Spain, Sweden, Turkey and the United Kingdom.

The award of the Blue Flag is currently based on 27 criteria for beaches and 16 criteria for the marinas covering the same four aspects of management:

- Water Quality
- Environmental Education and Information
- Environmental Management
- Safety and Services.

Some criteria are imperative whereas other are guideline criteria.

This year (2000) new criteria for beaches have taken effect. Some of the present guideline criteria will become imperative. There will also in the new criteria be an increased focus on waste water treatment and Agenda 21 activities. A revision of the marina criteria will be carried out in 2000, and new revised marina criteria will take effect in 2003. [source: BLUE FLAG 2000]

European Eco-Schools:



The Eco-Schools Programme aims to raise students awareness of environmental and sustainable development issues through classroom study, and provides an integrated system for environmental management of schools based on an ISO14001/EMAS approach, with

water, waste and energy as priority areas in initial years. In some national programmes, schools have gone on to consider the issues of transport, noise, nature and biodiversity, agriculture, healthy living and school grounds. As a process of facilitating sustainable development at a local level, pupils are encouraged to take an active role in practical steps to reduce the environmental impact of the school. Eco-Schools thus extends learning beyond the classroom and develops responsible attitudes and commitment both at home and in the wider community. The Eco-Schools Green Flag, awarded to schools with high achievement in their Programme, is a recognised and respected eco-label for environmental education and performance.

The Programme incorporates seven elements which any school can adopt as a methodology. These elements have been designed to be the core of the Eco-Schools process, yet the structure is flexible enough to be adopted in any country, and at any level of schools' previous environmental achievement. Pupil involvement throughout the process is an integral and essential factor.

An Taisce, the National Trust for Ireland co-ordinate the Green-Schools programme in Ireland. Since September 1997 eighteen Local Authorities have entered a partnership with An Taisce in the Green Schools Programme. Each of these Local Authorities has pledged £1,000 per year for the next three years in support of this partnership project. The Green-Schools programme can thus be promoted in the catchment areas of these eighteen Authorities. An Taisce has circulated a Green-Schools information pack to approximately 400 schools. The information pack contains a copy of the Green-Schools Handbook, an Environmental Review booklet, a Registration Form, and a copy of the first theme book - Litter and Waste. To date over 100 schools with a student population totalling almost 16,000 have registered and new registrations are being received almost daily [source: www.eco-schools.org]

4.3 ISO II

Repak - Green Dot:

The likely most famous and diffused ISO-II label in Ireland is the Green Dot. Green Dot has been introduced by Repak – a not-profit private limited company established under a voluntary agreement between Industry, the Department of the Environment and Local Government – as of January 1, 2000. Repak was established as industry's response to the obligations placed on them under the National Packaging Waste Regulations 1997 and the EU directive on packaging waste (94/62/EC Dec 1994). Repak is an approved scheme under the Waste Management Regulations and is committed to achieving a collection and recycling level of 27% (2% more than the prescription of the EU directive) of packaging waste on behalf of its members. Repak offers membership on an annual basis to all companies involved in the packaging chain, but it also assumes responsibility for recovery of packaging waste from the domestic sector on behalf of its members.

More in particular, members of Repak are exempt from the obligations imposed on companies under the Packaging Waste Legislations. Moreover, members do not have to take back waste from their customers nor do they have to contribute towards any other collection or recycling scheme. To obtain these services, obligated companies pay a membership contribution to the Repak scheme. Brand holders / Importers will be charged a material-specific Green Dot membership fee. [source: GREEN DOT 2000]

4.4 ISO III

No information available.

5 Other Labels

5.1 Social Labels

Fair Trade Labelling Organisation International (FLO) is an international association including several brands: Max Haavelar, TransFair, Fair Trade Foundation, Trans Fair International. It includes 15 members from 15 countries. In Ireland, the only brand represented is the Fair Trade Foundation.



In Ireland, the only national organisation that concentrates on importing, wholesaling and retailing fair trade products is Tradeireann. Taking Northern Ireland into account as well, Trocaire and War on Want must be added. There are also four wholesale organisations that import fair trade products from alternative trading organisations in the United Kingdom: Galloway Wholefoods, Wholefood Wholesale and Munster Wholesales purchase from Traidcraft, whereas Lifeorce only imports Caf,direct.

The retail network furthermore includes the Oxfam Shops, a few Third World Shops (in Athlone, Galway, PortLaoise) and a number of supermarkets and health food shops - all in all some 60 points of sale. Another retail channel is the mail-order catalogue of Trocaire, mainly distributed in Northern Ireland.

There is an umbrella organisation which functions as a network for the distribution of fair trade products and the promotion of educational campaigns among all groups involved in development aid and development education: the Irish Fair Trade Network - IFTN.

The UK's labelling organisation (FairTrade Foundation) is also present in Ireland, where labelled products are distributed (i.e. Caf,direct). They are still investigating the possibility of having one agreed national labelling initiative.

Information on development issues is disseminated through leaflets in shops, displays, events, seminars, training sessions, development education centres, schools, community groups and general talk to the public. The IFTN budget for education is about 35,000 Euro. The market for fair trade: Few figures are available about the dimension of the market or estimates of wholesale or retail turnover. The general attitude among commercial importers or wholesalers shows a lack of positive response or interest in fair trade, except among the ones mentioned above. The lack of response may be contributed to a lack of knowledge and awareness about fair trade.

It is not possible to quantify the consumers' reaction because national market research was never conducted; only a local survey which indicates that the average consumer is cost-conscious, committed and increasingly interested in development and equity issues.

Generally speaking, the products are too expensive since most of them are imported via the U.K (source: www.transfair.ca/fairtrade/fair639.html)

5.2 Other interesting Labels

No significant information available

6 Conclusions

Due to a relatively recent economic growth, the general environmental quality in Ireland is still quite good and no environmental emergencies are perceived. This has certainly not favoured the adoption and implementation of innovative environmental policies. However, similarly than in other EU countries, in recent years the concept of IPP has been introduced in Ireland. Important related previous environmental policy instruments are:

- The Packaging Regulations, adopted in 1997, have introduced in Ireland the concept of "Extended responsibility of producers", which requires for example that they have to take care of the collection of packaging waste
- The Enterprise Ireland Pilot Demonstration Grant Scheme of 1999 gives financial support to a selected number of manufacturing companies to conduct research aimed at assessing the potential for development of Environmentally Superior Products from their existing or related product range. Co-funding of up to £25,000 will be available for individual projects and it is anticipated that 10 proposals will be funded in 1999.
- Also in the public sector, several Departments of the government felt the need to promote and incentive innovative environmental approaches. In 1996, the Green Government Guide was published, which sets out how the public sector can demonstrate good environmental management practice. The initiatives include:
 - The integration of environmental considerations in public procurement policy
 - The creation of an inter-department network
 - An audit, by each Department, of its activities, in order to assess its environmental performances
 - The redaction, by each Department of a Green Housekeeping Strategy with targets and indicators aimed at constantly improving environmental efficiency [www.environ.ie/enviro/1.html].

As far ISO-type I ecolabelling is concerned, similarly to the UK, Ireland decided in the past to support the EU-Flower and not to push for the development of a National ecolabel. During the year 2000, a massive public information campaign called "The Environment, It's easy to make a Difference" was launched, to promote eco-labelling as part of the current national environmental awareness campaign. The aim of this campaign is to encourage individual action and shared responsibility towards the environment.

However, Ireland does certainly not show encouraging data related to the adoption of the EU-Flower. So far, there is just one Irish labelled product in the group of tissue paper. A second product label (in the group of varnishes) expired two years ago. The situation seems to be in stand-by. Neither there is discussion about the opportunity of introducing a National ecolabel.

On the contrary, other ISO-type I schemes based on international experience are more spread out in Ireland, notably the FSC label in the wood sector and the Blue Flag in the tourism sector. An Irish Forestry Certification Initiative has been formed in November 1998², and 70 beaches and 5 marinas are labelled with the Blue Flag.

² However, no Irish forest has been certified.

In the last two decades the whole priority attention of both the public and the private sector has been focused on industry development and economic growth. Just recently, in presence of an economic growth which seems to have become stable, the general interest has expanded including environmental policies and tools. This reflects the current interest of private economic actors and of the government itself to consolidate National development through the promotion of products capable to compete on the European market.

The outlook of IPP and EPIS in Ireland is mixed. On one hand, as of the end of 2000, just one product has been labelled with the EU-Flower.

On the other hand however, some encouraging signs exist. In recent years several initiatives related to IPP have been launched including an information campaign on eco-labelling during the year 2000.

According to some analysts, given the positive experience and the agility with which Ireland has been able to transform its economic structures and to start a quick development and economic growth process, one might expect a correspondent quick adaptation of production standards by Irish industry and service sector, in order to respond to increasing environmental pressure and requirements, also with the help of efficient governmental support.

7 Literature

[Blue Flag 2000] www.blueflag.org

[Casserly 2000] Noel Casserly, "Environmental Integration and Sustainable Production and Consumption", and "EU Eco-label scheme", private communication, 2000

[ENFO 2000] ENFO, www.enfo.ie/leaflets/sd8.htm

[ENT-IRL 2000] Enterprise Ireland, Eurolaw Database, Mrs. Mary Glannon, ENT-IRL Information Center, private communication

[EPA Ireland 2000] Ireland's environment, www.epa.ie/soe/summary2d.html

[FSC-UK 2000] www.fsc-uk.demon.co.uk/

[GREEN DOT 2000]: "The Green Dot in Europe" p. 42-45, Duales System Deutschland AG, 2nd Edition, Frankfurt 2000, www.gruener-punkt.de.

[IFCI 2000] Irish Forestry Certification Initiative, <http://ireland.iol.ie/~woodlife/ifci.htm>

[IRLGOV 2000] Website on Irish State, www.irlgov.ie

[IEEP 1994] David Meehan BCL, David Cabot, "Inventory of product instruments: Case study Ireland", Research Report 1994

Internet sources:

www.environ.ie

www.enfo.ie

www.epa.ie

<http://ireland.iol.ie>

www.irish-energy.ie

www.ilo.org

www.fair-mark.org

www.fairtrade.net

www.blueflag.org

www.transfair.ca/fairtrade/fair639.html

www.fsc-info.irl@justforests.org

Paolo Frankl / Lucia Pietroni
with contribution of Eliana Cangel

Environmental Product Information Schemes (EPIS)
in Italy

Table of Contents

1	INTRODUCTION	138
2	INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INFORMATION SCHEMES IN ITALY	138
3	MANDATORY LABELS	141
3.1	Energy Label	141
3.2	Packaging Labels	142
3.3	The Forthcoming Green Electricity Certificate System	143
4	VOLUNTARY LABELS	143
4.1	Classical ISO Type I Labels	143
4.1.1	The European Ecolabel in Italy	143
4.1.1.1	Main National and European Norms for the Application of the Reg. CEE n. 880/92	143
4.1.1.2	The Italian Competent Body – Il Comitato Ecolabel-Ecoaudit	145
4.1.1.3	The Qualified Italian Test Laboratories	146
4.1.1.4	The Ecolabel Award Procedure	146
4.1.1.5	The Italian Products awarded with the EU-Flower	147
4.1.1.6	New Product Groups under Development	150
4.1.1.7	Existing Research Studies and Surveys	153
4.1.2	The National Ecolabel	155
4.2	ISO Type I like Labels	158
4.2.1	Ecolabels for Textiles	158
4.2.2	Ecolabels for Forestry-Wood-Furniture Chain	159
4.2.3	Ecolabels for Building Materials and the Construction Sector	160
4.2.4	Ecolabels for Tourist Accommodation	161
4.3	ISO Type II Labels	163
4.4	ISO Type III Labels - Environmental Product Declarations (EPD)	165
5	OTHER LABELS	169
5.1	Social Labels	169
5.2	Other Interesting Labels	170
6	CONCLUSIONS	170
7	LITERATURE	172

1 Introduction

The objective of this paper is to describe the state-of-the art of EPIS in Italy. The paper first outlines the methodological approach, the current state-of-the art and the outlook of IPP (Integrated Product Policy) in Italy. Second, it discusses mandatory labels, i.e. energy labels in the field of household appliances as well as packaging labels. The paper then addresses ISO-type I environmental labels, i.e. the EU-Flower in Italy and the current proposal for a National ecolabel. Moreover, a list of other ISO-type I, ISO-type II and other labels, as well as social labels, are shortly presented and discussed. Finally it tackles with the forthcoming Environmental Product Declaration (EPD) scheme (ISO-type III), which is expected to be operating in 2001.

2 Integrated Product Policy and Environmental Product Information Schemes in Italy

The European Commission is currently transforming and integrating its environmental product policies into a single methodological framework and approach, i.e. Integrated Product Policy (IPP), which addresses the whole product system and its environmental impacts. The main basic principles of IPP are twofold: i) taking into account the whole life cycle, and ii) the involvement and participation of all interested stakeholders involved in the (life cycle) management of the product system. The main motivation behind this approach is to avoid the transfer of environmental issues from a phase of the product life cycle to another. This approach makes IPP very different from former environmental product policies aiming at reducing or cancelling single environmental effects.

Some major IPP instruments are the environmental certification of products and industrial processes (Ecolabel, EMAS), methods for ecological design (DfE), environmental communication and marketing, Green Public Procurement strategies, and voluntary agreements between parties¹.

In Italy, the diffusion of new instruments of integrated policy has been very limited so far. However, very recently the situation has significantly improved. In particular, in the year 2000, the National Agency for the Protection of the Environment (ANPA - Agenzia Nazionale per la Protezione dell'Ambiente) has taken several initiatives supporting the introduction and diffusion of IPP in Italy, recognizing almost for the first time in this country the importance of incentivating sustainable consumption patterns, the definition and development of environmentally preferable products, green public procurement policies and, above all, labelling schemes of products and services.

The most significant initiatives taken by ANPA in support of IPP and EPIS are:

- The creation of a new Unit for the Environmental Quality of Products (Unità per la Qualità Ecologica dei Prodotti), with the main objective of fostering the development and diffusion of voluntary measures aiming at improving the environmental performance of products over their life cycle;
- The recent publication of an IPP report, defining a proposal for a National Action Plan [ANPA – IPP 2000];

¹ At European level, seven *building blocks* of IPP have been identified, on which also Italy has recently begun to work. They are: i) allocating responsibility; ii) transmitting environmental information, iii) managing waste; iv) management of dangerous substances in products, v) green product innovation, vi) creating markets, vii) sustainable consumption.

- The start of several projects at national level promoting the diffusion of the European Ecolabel system among Italian firms; in particular a project in collaboration with IEFE (Istituto di Economia delle Fonti di Energia) dell'Università Bocconi di Milano) in Northern Italy and another in Southern Italy in collaboration with the Luiss Management University of Rome, as well as two forthcoming communication and promotion projects held in collaboration with major environmental NGO's, i.e. Legambiente;
- The definition of the National guidelines for the redaction of Environmental Product Declarations and the realisation of the three first pilot cases at national level (see § 4.4);
- The realisation of an Italian on-line public LCA database, with specific reference to energy systems, transportation, waste and major materials (see § 4.4)
- The support to voluntary agreements between interested actors and sectors (e.g. industrial districts) interested in improving the environmental performance of the whole product system;
- Technical support to the development of a National ecolabel, initiative launched by the Ministry of the Environment, to be integrated and harmonised with other environmental policy tools (e.g. EMAS) at both National and European level (see § 4.1.2);
- The realisation, in collaboration with Associazione Impresa Politecnico di Milano (AIP), of a manual for Green Public Procurement in the Italian administration². The manual focuses on the whole life cycle of products and is intended as guideline as well as a training tool for public administrators (in particular purchasing officers), also aiming at integrating itself with other already existing environmental policies in the public administration.

In the following part of the section the proposal for a National Action Plan for the implementation of IPP in Italy is shortly described [ANPA-IPP, 2000].

The proposal is structured in two phases (see also Fig. 1):

- *Phase I - Preparatory phase*, describing the first phase of the plan aimed at performing general preparatory and co-ordination activities. It is aimed at creating the basis for the following Implementation Phase and it consists of the following steps:
 - Consensus building on and adoption of the concept of IPP;
 - Identification of strategic objectives.
- *Phase II - Implementation Phase*, presenting product oriented IPP implementation activities, which will identify critical areas and intervention plans for each product or group of products, and will include monitoring and evaluation. The aim is putting IPP into place and ensuring proper integration with existing policies. The Implementation Phase involves two parallel processes:

² First draft version; the final report is expected for June-July 2001. The draft contains an analysis of purchasing procedures of Italian public administration bodies, the determination of the criteria for environmental preferability, the description of the environmental issues with specific reference to 14 products (classified in sectors and sub-sectors) and the correspondent suggestions for purchasing procedures of products which have lower environmental impacts per same (or better) service unit. The final version of the manual is expected to include more than 100 products within the following sectors: furniture, lighting, office equipment, personal health security clothes, paper products, consumables for hygiene and detergents, services, and transportation. The manual includes several pilot case-studies with Italian local administrations, i.e. Provincia di Torino, Comune di Firenze, Comune di Ferrara, l'AGAC (municipal utility of Reggio Emilia), the offices of ANPA itself.

- *Management* relating to the actual operational steps necessary for IPP implementation for specific products or group of products: product selection; analysis; consultation; identification of best practices and complementary measures; implementation and monitoring; evaluation.
- *Communication* assuring the necessary information and awareness raising among the stakeholders involved as well as the wider public. This will be implemented within the proposed National Action Plan, by means of publication of papers and/or research reports; organisation of conferences, seminars and workshops; company initiatives promoted by the various stakeholders.

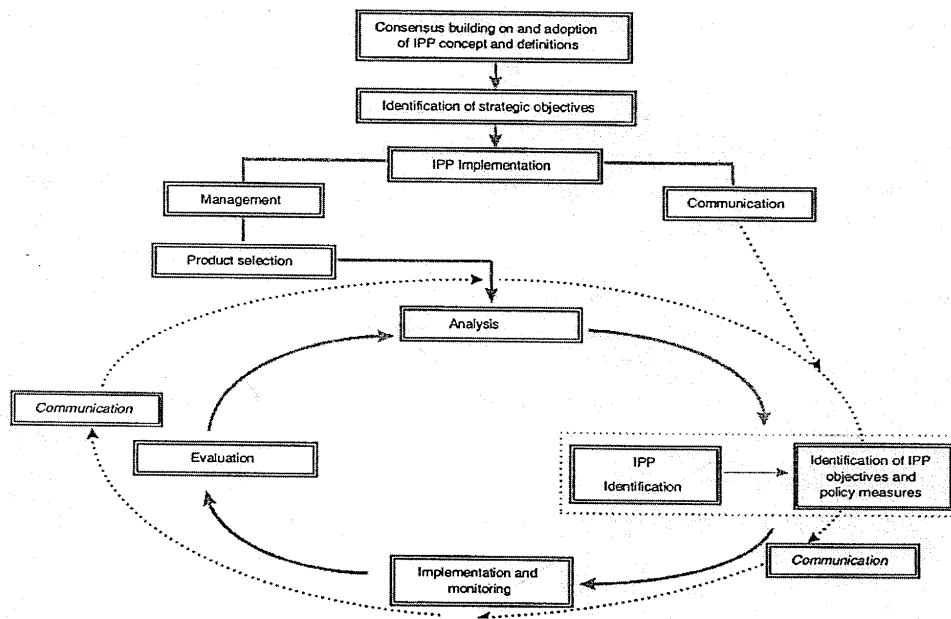


Figure 8: The National Action Plan

Figure 1: The National Action Plan [source: ANPA-IPP 2000]

Beyond the Action Plan, ANPA has also realised an implementation model aiming at developing a system of IPP's in the Italian context exploiting market forces and actors, and co-ordinating the instruments currently used.

As shown in Figure 2, this implementation model is sub-divided in 5 steps: analysis, consultation, identification/implementation, monitoring, and evaluation. At present, ANPA has started an application of this model on the Tourism sector, with a pilot case-study on the Comune di Jesolo, an important sea resort in Northern Italy [ANPA 2001].

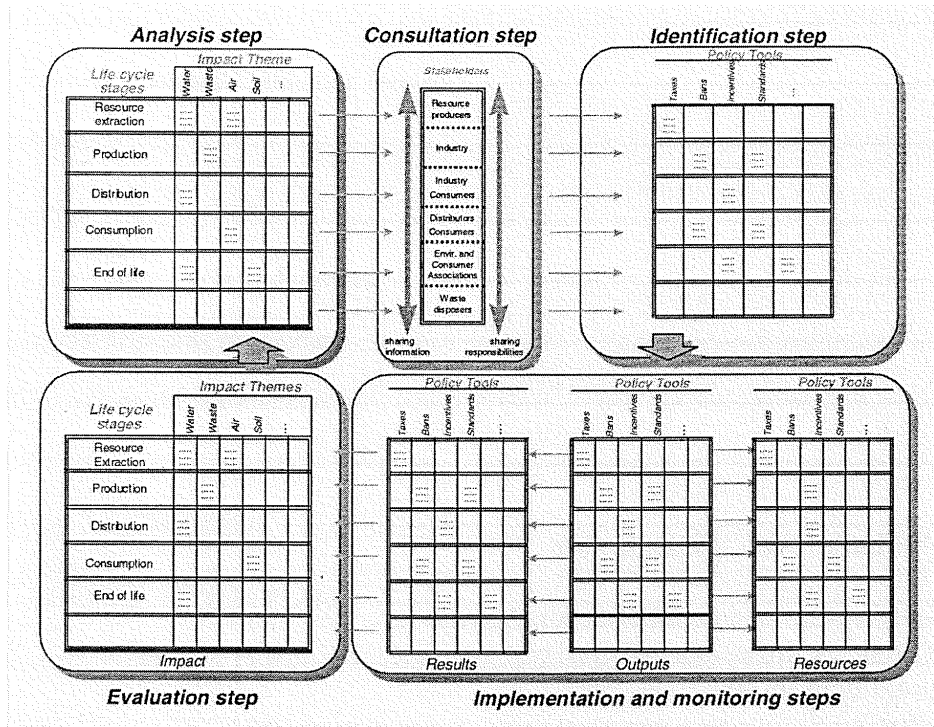


Figure 2: IPP Implementation Model (source: ANPA-IPP, 2000)

3 Mandatory Labels

With contributions of V. Belli and S. Baiani

The mandatory labelling system concerns several production sectors and materials, substances and product categories. Some of these labelling systems are related to specific European norms, correspondingly implemented through national laws. Beyond to environmental protection, they usually also refer to health and safety. among the latter, the most important labels refer to dangerous and toxic substances and product and/or CE labels referring to several types of electrical appliances.

As far as the DEEP research project is concerned, the main focus is concentrated on energy and packaging labels, as well as the forthcoming green certificates for electricity from renewable energy sources.

3.1 Energy Label

The mandatory energy label indicates the consumption of energy and of other essential resources (e.g. water, chemical products, etc.) of electric household appliances. The requested data must be indicated both on a label put on the appliance itself, and on a technical information sheet. The data to be indicated are specified in the different directives related to the different product groups. The producer is obliged to provide

a detailed technical information [ENEA 2000]. MICA, through its own laboratories or through ENEA, can verify these data.

Labelled product groups in Italy:

In Italy the general EU directive (92/75/CEE) on energy label has been applied through D.P.R. n. 107 98/3. Labelled product groups in Italy are only:

- Refrigerators, freezers and their combination
- Washing machines, drying machines and combination
- Dishwashers

Labelled product groups	European norms	Italian norms
Refrigerators/freezers and combination	Dir. 94/2/CEE	D.M. (MICA) 98/4/2
Washing machines	Dir. 95/12/CEE (modified by Dir. 98/89/CEE)	D.M. (MICA) 98/10/7
Tumble dryers	Dir. 95/13/CEE	D.M. (MICA) 98/10/7
Combined washing-dryers	Dir. 96/60/CEE	D.M. (MICA) 98/10/7
Dishwashers	Dir. 97/17/CEE (modified by Dir. 99/9/CEE)	D.M. (MICA) 99/11/10

The European norms are also related to other product groups (e.g. water heater and reservoirs, air conditioning systems, lamps, boilers).

3.2 Packaging Labels

The packaging material labelling system is aiming at facilitating the collection of packaging materials and their recovery and recycling. An appropriate label has to be put on the packaging, and has to remain visible also after the opening of the packaging itself.



Materials subject to this kind of labelling are plastics, paper and cardboard, metals, wood, textiles, glass and composite materials.

Comparison with EU-Flower:

There is some connections with the ecolabel when it comes to criteria related to the end-of-life and recycling. In particular the relation with packaging materials are particularly related to the following product groups/criteria:

- Tissue paper / 3. Reduction of solid waste
- Footwear / 6. Packaging of the final product
- Copy paper / 6. Waste management

The identification of materials is also important in other ecolabel product groups, i.e. PC, refrigerators, washing machines, and dishwashers, but this goes beyond packaging.

Green dot:

On the contrary of other main European countries, the Green Dot label is not applied on Italian products (however, plenty of foreign products carrying the Green dot label are circulating in Italy).

3.3 The Forthcoming Green Electricity Certificate System

In 2002, a tradable green electricity certificate system is going to be introduced in Italy. The system will be connected to a mandatory target, i.e. the electricity producers, auto-producers, or importers will have to produce at least 2% of their electricity from renewable sources. In order to do demonstrate this, they will have to show a certain amount of certificates to the competent authority. The scheme is still at an early preparation scheme, so not much more detailed information is available so far. The first certificates will be issued and traded starting from January, 2001, but the system will be fully operative just in 2002. However, this remains a very interesting case to follow, in particular for a comparative assessment of mandatory vs. voluntary policy instruments.

4 Voluntary Labels

4.1 Classical ISO Type I Labels

4.1.1 The European Ecolabel in Italy

The objective of this chapter is to describe the state-of the art of the EU-Flower diffusion in Italy, as well as to identify some major factors which influenced this process. Some considerations regarding the future outlook of the EU ecolabel are further discussed in chapter 6 – Conclusions.

4.1.1.1 Main National and European Norms for the Application of the Reg. CEE n. 880/92

European Norms:

The Regulation n. 880/92 establishing a European Scheme for the attribution of a environmental quality label of products was published in March, 1992. Furthermore, a series of "operative" decrees have been published in the period May-December 1993. The new Regulation n. 1980/2000 has entered in force just in September 2000, much later than the expected date for revision (five years after starting, i.e. 1997). For more details, see [Rubik 2001, IPP/EPIS paper D-6].

Italian Norms:

Italy is among the EU Countries which needed more time to enforce all National Regulations to activate the ecolabel scheme. The following list summarises the main decisions in chronological order:

- L. 294 of 9/8/1993 gives the Ministry of the Environment the task to identify the CB
- DL 496 of 4/12/1993 (modified in L. 61 of 21/1/1994) establishes ANPA and identifies its activities, including the technical support for the ecolabel scheme
- DM 413 of 2/8/1995 (further modified by the DM 236 of 12/6/1998) establishes the CB and gives support tasks to ANPA and MICA
- DM of 12/11/1996 activates the CB and appoints the members of it
- DPR 335 of 4/6/97 establishes the organisation of environmental control and the organisation of ANPA
- CM of MICA n. 162263 of 31/7/97 identifies administrative and technical procedures to be satisfied by laboratories and companies
- L. 344 of 8/10/97 establishes the institution of National ecolabel

The first Italian law regarding the application of the Ecolabel Regulation 880/92 dates August 1993. The law n.294/93 gives the Ministry of the Environment, in cooperation with the Ministries of Industry, of Public Health and of Treasury, the task to identify the Competent Body and allocates funds for this purpose.

However, the Ecolabelling scheme in Italy has become fully operative only at the end 1997, with a great delay with respect to other EU Member Countries. The enforcement has been done by means of a quite complicate series of laws and decrees published between August 1993 and 1997.

The only act explicitly required to enforce the EU regulation in the different Member Countries has been to nominate a Competent Body in each Nation. The latter is responsible for the award and management of the Ecolabel both on the National territory and with respect to the EU. Italy has accomplished to this obligation in August 1995 with the DM n.413 of 2 August 1995 (then modified in June 1998), which establishes the National Competent Body (*Il Comitato Ecolabel-Ecoaudit*, see next paragraph) and identifies its activities with respect to both Reg. 880/92 (Ecolabel) and Reg. 1836/93 (Ecoaudit or EMAS).

The same Ministerial Decree also gives ANPA (*Agenzia Nazionale per la Protezione dell'Ambiente* - The National Agency for the Protection of the Environment) and the Technical Office of MICA (*Ministero dell'Industria, del Commercio e dell'Artigianato* - Ministry of Industry, Commerce and Craftmanship) the task and responsibility of technical support to the Competent Body.

However, the CB had to wait for another Ministerial Decree in November 1996 to be actually activated. In addition, once being established, the CB was still lacking of technical support. In fact, while ANPA itself had been founded in early 1994, the Agency has become fully operative just in June 1997 (DPR n. 335 of 4/6/97). Moreover, a guideline of MICA on the administrative and technical procedures to which companies asking for the ecolabel have to be submitted, and on the requirements to be satisfied by the test laboratories verifying the ecological performance of products, only dates July 1998.

This complicated legislative process also explains why the Italian CB has been officially settled just in February 1997 and has actually become operative only at the end of 1997. It also might help to explain why the first ecolabel has been awarded in Italy only in July, 1998.

Finally, another important Italian regulation to be mentioned is the law L. 344 of 8/10/97 on the development and qualification of interventions and occupation in the environmental field, which establishes a National ecolabel award scheme (see § 4.1.2) and identifies its complementary purpose with respect to the EU-flower scheme.

4.1.1.2 The Italian Competent Body – Il Comitato Ecolabel-Ecoaudit

As already mentioned, the Italian CB – the Committee Ecolabel-Ecoaudit, has been established in 1995, activated in 1996, and has officially settled for the first time in February 1997. The Committee is subdivided in two operative autonomous sections (Ecolabel and EMAS). It is formed by 12 members, nominated respectively 4 by the Ministry of the Environment, 4 by the Ministry of Industry, 2 by the Ministry of Health, 2 by the Ministry of Treasury, plus the President and Vice-President nominated by the ministry of the Environment.

There are severe restrictions for the selection of the members, as they are not allowed to do any professional, collaboration or consultant activity, or have any direct or indirect interests in companies operating in the sectors of competence of the committee. This holds for the whole lasting period of the committee (3 years) plus one year³. The new CB has been settled in May, 2000.

As mentioned, the CB profits of the technical support of ANPA and of the Technical Office of MICA.

In particular, ANPA has the following specific tasks:

- Technical-administrative verification process of ecolabel applications
- Preparation of the format of the application forms
- Establishment and management of specific archives of applications and awards
- Identification and definition of new product groups to be submitted to the CB
- Information and communication about the ecolabel to the public and firms
- Studies and research for the implementation of Reg. 880/92 (and the new Reg. 1980/2000).

In 1999, the resources and staff devoted to this purposes have been significantly reinforced, and a new Unit for the Environmental Quality of Products has been founded in ANPA (The National Agency for the Protection of the Environment). This has resulted in an increased support to the CB and the launch of a new series of initiatives, e. g.:

- The preparation of a new information manual for firms, in correspondence with the new regulation 1980/2000, to be submitted to the CB for approval and diffusion.
- The launch of several local and regional communication and information campaign initiatives involving specific industry sectors and several environmental NGO's, i.e. Legambiente
- A reinforced technical support with respect to new product groups
- The ISO 9000 certification process of the internal award management activities within ANPA
- Other supporting measures also related to Environmental Product Declarations (see § 4.4) and the forthcoming National Ecolabel (see § 4.1.2.)

³ According to several observers, these restrictions, plus quite low salaries, have caused significant difficulties in finding available experts, causing further delays in the whole process.

On its turn, as already mentioned, the technical offices of MICA have the responsibility to control and monitor the compliance requirements of the test laboratories.

In addition, similarly to what happens at European level, the DM 413/1995 foresees the establishment of an advising Forum. The latter is composed by 3 representatives of Industry Associations, 2 representatives of Commerce Associations, 2 of craftsmanship, 3 of Environmental Associations, and 2 of Consumer Associations. The Forum is directed by the President of the section Ecolabel of the CB, profits of the support of ANPA and has advising tasks to the CB, in particular with respect to new product groups. So far, the Forum has still not been activated.

Finally, two last observations on the Italian CB. As France, Germany and the United Kingdom, Italy has the maximum number of votes (10 points) available for a Country when it comes to approve ecolabel criteria. This is the result of the weights of the countries in the European Councils. In the past, the Italian CB has taken the leadership of the activities defining the ecolabel criteria for refrigerators. Recently, Italy has taken the leadership for the definition of criteria for Hard Floor Coverings (see also § 4.1.1.6.) and for the revision of criteria for Soil Improvers, and, finally, has asked, together with Greece, for the leadership on Tourist Accommodation.

4.1.1.3 The Qualified Italian Test Laboratories

As already mentioned, the testing laboratories need to be qualified by the Technical Office of MICA. In order to do this, they apply to MICA and are submitted to verification procedures (see also Figure 3). In addition to the specific requirements related to particular product groups to be tested, the laboratories have to satisfy several general requirements, including the UNI CEI EN 45001 norm on impartiality, independence and integrity.

At present, there are 12 test laboratories in Italy, which cover almost all eligible product groups⁴. Quite obviously, their geographical location corresponds to large industrial areas or districts where several potential interested companies are also located. Among 12 laboratories, just one is located in Southern Italy.

4.1.1.4 The Ecolabel Award Procedure

The Ecolabel is awarded by the Comitato Ecolabel-Ecoaudit, as the Italian CB. The award procedure is defined by the DM 413/95 and is schematically shown in Figure 3.

The full procedure, from the application to the contract between the applicant and the CB, cannot last more than 4 months, given that the enclosed documentation is complete and that the EU has no objections.

The application follows a standard format, which contains a series of requested information, including of course the preliminary test reports and certification carried out by a qualified independent laboratory.

Once the producer, importer or retailer has transmitted the application according to the established format, the CB evaluates the correspondence of the product to the ecological criteria. If the evaluation is positive, the CB, through ANPA, sends all the documentation to the EU Commission, which has max. 30 days to eventually refuse the application. If this time deadline is overcome, the application is automatically accepted.

⁴ For instance, no laboratory is qualified to carry out tests on Personal Computers.

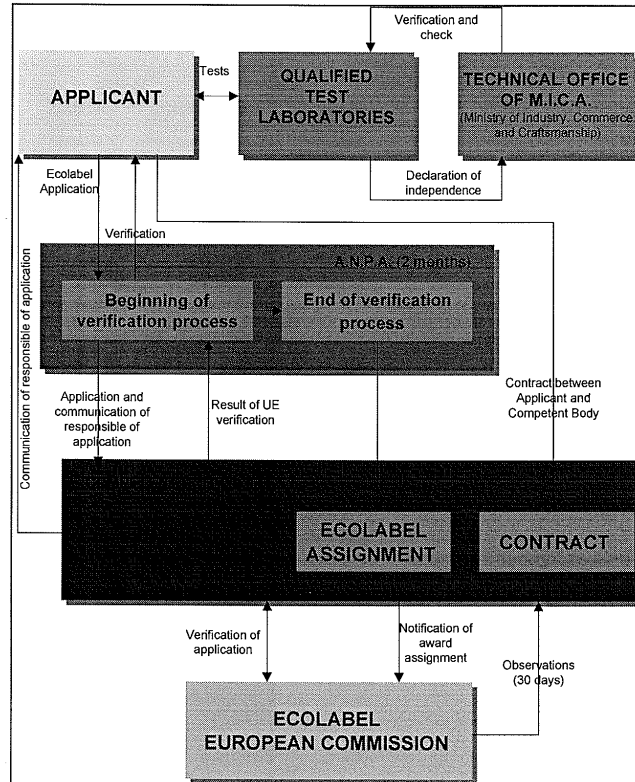


Figure 3: The Ecolabel Award Procedure in Italy as of 1997 according to the EC Regulation n. 880/92 (Source: ANPA 1998)

The CB then signs a contract with the applicant, in which all details and conditions for the use of the ecolabel are defined. The awarded label has the same max. time validity of the criteria according to which it has been assigned.

The new Regulation on the EU-Flower, n. 1980/2000, changes this procedure in some points and makes it less complex and faster.

4.1.1.5 The Italian Products awarded with the EU-Flower

Until 1999, there were very few labelled products in Italy and just from one specific product group, i.e. tissue paper. However, in the year 2000 the number of applications has significantly increased and the awards today cover five product groups, namely tissue paper, textiles, detergents for dishwashers, detergents for washing machines and footwear. The labelled products as of January 2001 are 61, namely:

- 39 shoes of one single company
- 13 tissue papers
- 2 textiles

- 6 dishwasher detergents
- 1 washing machine detergent

The first ecolabel award contract was signed by the CB with the firm Cartiera Lucchese for the product "carta igienica ECOLUCART" on 23 July, 1998. The second ecolabel was awarded almost two years after to a collection of bed linen, belonging to the product group "textiles". It is worth mentioning the ecolabel on tablets for dishwashers, which has been directly awarded to a retailer (ESSELUNGA), in April 2000. The most recent contracts were signed with a shoe manufacturer for 39 models of the shoe collection "EcoGreen" and with a manufacturer of washing machine detergents. By February 2001, other 12 products in the product group Indoor paints and varnishes are expected to obtain the label⁵.

Below, the most interesting cases are shortly described in chronological order.

The Tissue-paper EcoLucart of Cartiera Lucchese SpA:

EcoLucart is a high-quality white paper, made out of 100% recycled pulp fibres recovered from selected pre-consumer macerated waste. The production process contains several environmentally sound innovations. Moreover, the eco-compatibility of the product is completed by the packaging in Mater-Bi, a bioplastic material produced from maize starch, which is completely water-soluble and is to be used for composting at the end of its useful life.

The case of Cartiera Lucchese might be considered a "success-story", for several factors.

Cartiera Lucchese has been the first company in Italy to present white recycled paper at the beginning of the 90's, when the market image of recycled paper was almost entirely associated with low-quality and grey paper. It is worth noticing that Cartiera Lucchese directly entered a new market sector for the company (tissue-paper) with an ecological product, as a marketing differentiation strategy.

At the beginning, the company encountered significant difficulty in involving large distribution chains and retailers. However, deeply convinced of the eco-compatibility and innovative aspects and quality of the project, the firm continued its initiative. In 1997, the company commissioned a marketing survey about the interest of consumers in ecologically sound projects and its public recognition (see more details in § 4.1.1.7.). The survey gave positive results and strongly supported the decision of Cartiera Lucchese to apply for the ecolabel of its products based on EcoLucart.

The ecolabel was awarded in 1998, and can be considered a success-story, for several aspects:

- The interest of the public is increasingly growing, as shown by another survey carried out in 1999. The survey even reports that 6% of the interviewed sample of Italian consumers confuse the concept of the EU-flower with the product EcoLucart itself (see § 4.1.1.7)
- The turnover of ecological products of Cartiera Lucchese is constantly raising
- Today 13 products from EcoLucart, ranging from toilet paper, drying paper, to handkerchiefs, have obtained the ecolabel
- Cartiera Lucchese was the first to involve distributors and retailers in the diffusion process of the ecolabel in Italy. Today, the large distribution has "taken-off" and is now deeply involved in the process.

⁵ The products are of the firm Baldini Vernici SpA, which was one of the pilot case-studies of a former diffusion project of the Ecolabel (see more details in § 4.1.1.7).

Three large distribution chains have asked for the extension of the ecolabel contract and sell today the toilet paper and the drying paper made from EcoLucart under both logo of Cartiera Lucchese and of themselves.

- Today, it is estimated that around 10.000.000 of Italian consumer do know EcoLucart, and that 4.700.000 use it (see § 4.1.1.7 for more details).

The Bed-linen Collections of Madival S.p.A.:

Madival SpA is a textile SME specialised in the development, production and commerce of tissues for interior decoration and furniture, home laundry and other particular uses (e.g. interior of handbags, etc.). Madival is interesting for two reasons. First, several production phases of Madival are made in outsourcing. This has created some problems in the ecolabel award procedure and has caused a greater complexity of the whole organization and the test procedures⁶. Second, the testing laboratory has been the Centro Tessile Cotoniero e Abbigliamento SpA. The latter is worth mentioning because it is the same laboratory making the test for the Oeko-Tex Standard 100 label (see § 4.2) and because it has prepared a standard application form for the preliminary technical independent verification in the textile sector, which might be an important accompanying and support measure for a future diffusion of the ecolabel in Italy in this specific sector.

The Footwear Collection "EcoGreen" of Calzaturificio Fratelli Soldini:

Apparently, this is one of the most interesting cases in Italy, since it includes 39 products of shoes for men, women, sport and leisure, and professional. However, in fact, this is a very strange case, because despite of being more than 50% of the total labelled products in Italy, there is practically no information circulating in the market. In particular, there is no information / diffusion campaign, no information is available on the web-site of Soldini (the ecolabel is not even mentioned!), just vague information could be retrieved from both the company management⁷ and from ANPA during direct interviews.

The Detergent Tablets for Dishwashers of the Product Collection "Per chi ama la natura" distributed by ESSELUNGA:

The detergent tablets for dishwashers of the collection "ESSELUNGA per chi ama la natura" (Esselunga for those who love nature), are produced by General Detergents S.p.A. and distributed in the 106 selling points of ESSELUNGA. They are the first and only case so far in Italy of direct award of the ecolabel to a distributor. Moreover, they are the first detergent product for dishwashers to obtain the ecolabel in Italy and in Europe.

The role of distributors and retailers:

Maybe the most interesting process that can be observed in Italy is the increasing interest and role of retailers. As a matter of fact, 8 applications come from very large distribution chains (COOP, ESSELUNGA,

⁶ It might be argued, that some kind of simplification procedures and/or different forms of product information flows might be necessary in the future in the cases where there is a complicated supply chain. It also might be argued that Environmental Product Declarations might be of support in this cases, but so far this conclusion is very questionable.

⁷ Despite being a worldwide known company in the footwear sector, Soldini is still a typical family-run SME. One might argue that this is exactly a case in which a SME has the titles, the interest and the capacity to obtain an ecolabel but actually misses the resources to manage it and to do any form of environmental information and communication afterwards. This might be a general problem of Italian industry which is almost fully based on SME's in several main industry sectors. This also suggests that particular support should be devoted to these cases, maybe with an appropriate national scheme (see also § 4.1.2).

PAM⁸). As mentioned, one contract has been directly signed with a retailer, the other awarded ecolabels are an extension of the contracts with Cartiera Lucchese.

Distributors and retailers are playing a very important role in the promotion and diffusion of the knowledge of the label among consumers and stimulating at the same time producers to increasingly consider the environmental aspects of their products. Some large retailers have declared that they have the intention to dedicate entire sections of their supermarkets to labelled products only, similarly to what they already do for organic food products. The beginning of some form of competition among retailers about environmental matters might be observed as well.

In particular, ESSELUNGA has recently introduced a set of ecological products called "Per chi ama la natura". This set includes the detergents for dishwaters (ecolabel), tissue-paper products made from EcoLucart (ecolabel extension from Cartiera Lucchese), and other detergents (not labelled so far). This collection of products adds to the collections "Esselunga BIO" of food bio-products for children and "Esselunga NATURAMA" of meat, fish, fruits and vegetables with controlled production.

Similarly to Esselunga, COOP has recently launched a set of ecological products called "COOP ecologica", which adds up to the already existing line of bio-products. This line includes two ecolabeled products, namely the toilet paper and the drying paper from EcoLucart, for which COOP has obtained the extension of the ecolabel contract.

Finally, also PAM has launched a line of ecological products, called "I tesori dell'Arca ecologica" (The treasury of the ecological ark), which includes the ecolabeled toilet paper made from EcoLucart.

This recent attitude of distribution chains might be considered an important milestone in the diffusion process of ecolabels in Italy.

4.1.1.6 New Product Groups under Development

So far, the Italian CB has taken the leadership for the definition of ecological criteria of products which have been successfully assigned the ecolabel only in the case of refrigerators. In fact, Italy had begun to define the criteria for packaging and ceramic tiles as well. However, in both cases the procedure of criteria definition failed later at European level.

However, in the year 2000, Italy has become the responsible member Country for the criteria definition for the new product group *Hard Floor Coverings*. Moreover, it has participated in the AHWG feasibility study on the group of *Tourist Accommodation*, for which it might become the leading Country, if the current discussion at European Level lead to a positive result.

Hard Floor Coverings:

As mentioned earlier, already in 1992-93 Italy had been the leading member State for the ecological criteria definition for ceramic tiles, which belong to the larger product group of floor coverings. The Ministry for the Environment, ENEA⁹, and the Association "Assopiastrelle" of Sassuolo made the feasibility study for the

⁸ For example, COOP has 1100 selling points and is the largest distribution chain in Italy.

⁹ ENEA (Ente per le Nuove Tecnologie, l'Energia e l'Ambiente - Institution for New Technologies, Energy and Environment) is a Italian Public Research Institute.

ecolabel criteria, but the proposed criteria were never approved by the other Competent Bodies and the EU Commission¹⁰.

Much more recently, a pre-feasibility study on "Wall and Floor Coverings with a view to establishing EU Eco-labelling criteria" was carried out by the Center for Social and Economic Research on the Global Environment (CSERGE), UK, in March 2000 [CSERGE-2000].

The conclusion of this study has been that Wall and Floor Coverings include a very large numbers of products, that are too diverse for a single ecolabel. It is suggested that the wall and floor coverings group is classified further in wall coverings and floor coverings in accordance with their use destination. A second classification can be made within the floor coverings group in accordance with their finished surface, based on their technical properties and performances. On this basis floor coverings can be divided into five product groups that can potentially be considered for an ecolabel: resilient flooring (textiles, linoleum, PVC, rubber, carpets); processed hard flooring (ceramic tiles and terrazzo); natural hard flooring (natural stone, marble); processed timber flooring (panel products, laminate, mosaic); natural timber flooring (board and strip, block, parquet).

On the basis of this pre-feasibility study, and of discussion between Competent Bodies, Interest Groups and the European Commission, it was decided to split the product group of *Floor Coverings* in three sub-groups, i. e. :

- Hard Floor Coverings (including processed hard flooring, such as ceramic tiles and terrazzo, and natural hard flooring, such as marble and granite)
- Timber Floorings
- Resilient Floorings

and to begin to develop the criteria for the sub-group of HFC.

ANPA has been charged of the feasibility study and for the final definition of Eco-label criteria for the HFC group. The process started on September 2000 and the indicative Work Plan established by ANPA in January 2001 is the following: Two Ad Hoc Working Group (AHWG) Meetings will be organised to present respectively the second and the third draft of Eco-label criteria for HFC's. The meetings are expected to be held respectively in June and September 2001. The deadline for the Final Draft of Eco-label criteria for HFC is November 2001 [ANPA-HFC 2001], and if all consultations go right, the ecolabel criteria shall be approved by March-April 2002.

Tourist Accommodation:

This is one of the most challenging "product" groups, for several reasons. First, it is one of the first groups to be discussed after the approval of the new regulation; secondly and most importantly, it is the very first case of potential application of the European ecolabel to a service. As a matter of fact a crucial point of the current discussion at European level is exactly on the nature of the product/service group. The present proposal is about *Tourist Accommodation*, but several participants in the discussion, including ANPA itself, are of the opinion that the ecolabel should be given on the *service*. Very clearly, the discussion is at a very early stage and the future is still quite unclear.

¹⁰ Unofficial sources refer that this was mainly due to the opposition of Spain, but we have no official confirmation of this information.

So far, the state-of the art is more or less the following.

A feasibility study FEMATOUR¹¹, has been conducted by Dutch and Spanish consultants (Consultancy and Research for Environmental Management-CREM, NL, and CH2M-HILL, Spain). The study was completed in summer 2000 and presented in Brussels on September 23 [FEMATOUR 2000]. The main objective of the FEMATOUR study was to carry out a feasibility and market study, focusing on the development of a European Eco-label in the tourist sector, with the emphasis on the service product group "tourist accommodations" and its sub-groups.

This study has carried out a general overview and an initial assessment of the tourism market and the impact of tourist accommodations. The study concludes with the following main recommendations:

- Make optimal use of the experiences of existing ecolabels that have already dealt with of the potential obstacles for European Ecolabel for tourist accommodations
- Make optimal use of existing networks and structures in the tourist sector
- Start with one or two product groups, that score positively on the criteria identified
- Define the services provided by the selected product groups in close relation with appropriate stakeholders
- Choose a phased approach with regard to additional services
- Pay additional attention to a pragmatic approach to deal with regional and local differences in climate, carrying capacity, etc. In particular, provide enough flexibility in standards to deal with differences in businesses and regions, preferably using a combination of mandatory standard and optional standards
- Develop quantitative standards where appropriate and feasible
- Provide for clear link between the European label and existing environmental initiatives in the tourist sector, like ecolabels and EMS certification
- Link a European Ecolabel for tourist accommodations to the wider process of the sustainable tourism, like the promotion of environmental management in general and of EMAS and ISO 14001 in particular

Italy has actively participated in all activities of the AHWG on eco-labelling in tourism sector. Moreover, ANPA has presented the results of a National feasibility study on EU Ecolabel in tourism sector. This study [ANPA – TUR 2000] has included the following main items:

- Analysis of national tourist flows and characterisation of the tourism demand
- Identification of the choice criteria of tourists
- Survey on the national demand and on the environmental quality of the offered service
- Selection of a representative sample of national tourist interest
- Identification of the "Service Life Cycle" of the service offered by the tourism structures
- Survey on the national tourism structure, carried out in collaboration with Federalberghi
- Technical feasibility study on energy and water consumption figures with respect to the data of the European study

¹¹ FEMATOUR stands for FEasibility and MArket study for TOURist accommodations.

- Analysis of 12 already existing environmental labels on tourist accommodations in Europe, carried out in collaboration with ACTA-Associazione Cultura Turismo Ambiente:
 - Identification of considered environmental areas
 - Identification of the main environmental indicators used in function of the areas
 - Identification of eventual economic and commercial benefits
 - Definition of environmental impact indicators related to the life cycle phases of the tourism service
 - Definition of management criteria with respect to the main activities and to the life cycle phases of the tourism service
 - Identification of "best practices"
 - Identification of potential benefits to be obtained by the application of the ecolabel

It is worth noticing that the Italian and European studies come to quite different results. In particular, the Italian study shows much more positive results with respect to the feasibility of an environmental label. The main results of the two studies are summarised in the following table.

Very clearly, there are still major open issues at European level, first of all the definition of the "product" group, considering such a wide difference set of realities in Europe.

Table 1: Main Results of the Feasibility Studies on Tourist Accommodation

Italian Feasibility Study	European Feasibility Study
Good level of environmental awareness and interest of hotel-keepers	Scarce interest of hotel-keepers
High level of support of all stakeholders (public institutions, hotel-keepers, associations, etc.)	Conditioned support to very precise conditions: <ul style="list-style-type: none"> - Full voluntary actions - Consideration of existing local initiatives - Consideration of national differences - Monitoring and control by an independent body - Are ISO-type II labels to be preferred?
Good technical feasibility <ul style="list-style-type: none"> - Existence of qualitative and quantitative environmental indicators - Existence of improvement potential - Existence of economic and commercial opportunities 	Necessary pre-condition for the technical feasibility is a pragmatic approach

4.1.1.7 Existing Research Studies and Surveys

In this subchapter we summarise the main results of two existing studies, which might be helpful to describe and understand the situation of ecolabel in Italy, also in view of the second research phase.

Marketing surveys by Cartiera Lucchese

As already mentioned, Cartiera Lucchese has carried out two surveys, the first in 1997 before starting the ecolabel application, the second in 1999, one year after receiving the award. More than 1000 phone interviews were carried out, taking into account a representative sample of the Italian population between 14 and 79 years (corresponding to 46,8 million people) [source: Astra-Demoskopea 1999].

The main results of the survey are:

- A large majority of interviewed people declared their interest in environmental matters and recognised the importance of focusing the attention on sustainable products and consumption. According to the survey, 90% of people is ready to commit himself to the environment purchasing green products. The comparison of the results of the 1997 survey with the 1999 one shows that this interest and commitment is significantly increasing with time. However, there are some hints suggesting a still existing "gap between speaking and acting"¹².
- The large majority of the interviewed people did not know the ecolabel. Some even confused it with the product EcoLucart itself. As far as the latter is concerned, according to the interviewed sample, 10,000,000 of Italians do know and 4,700,000 do buy EcoLucart paper products.
- The very significant role of retailers: The majority of Italian consumers will more and more buy in distribution chains which take care for the environment and offering "green products". This trend is significantly increasing (+22% from 1997 to 1999).

It is worth highlighting once again, that the results of 1997 further pushed Cartiera Lucchese to continue the process to obtain the eco-labelling for its products. The firm considers the results of 1999 as a confirmation of its good choice.

The IEFE Research and Promotion Project in 1998:

In order to understand the problems which have slowed down the diffusion of the EU-ecolabel, a research project on Italy and Benelux was commissioned by the EC respectively to IEFE (Istituto di Economia delle Fonti d'Energia e dell'Ambiente) and to CEEM (Centre for Environmental Economics and Environmental Management of the University of Gent) [source: IEFE, 1999].

The study was the very first of this type in Italy, and identified the main barriers to the introduction of ecolabel in Italy (as of 1998):

- A lack of information about the EU-flower for both companies or retailers¹³.
- Some disagreement of producers with respect to the ecological criteria set by the EC
- The mistrust of industry associations
- The scarce promotion by large distribution chains¹⁴
- The specific difficulties of SME's (complexity of procedures, doubts on the commercial efficacy, high costs to obtain and maintain the award)¹⁵

The overall observation is that there is a substantial lack of communication and co-operation between the different involved actors (firms, consumers, retailers, public institutions).

¹² From the set of answers one might interpret a high level of environmental awareness of Italian consumers. Our comment is that the question is still open, whether the actual lack of initiatives is given by a very limited offer of green products and services by industry or that in reality Italians are rather "verbal environmentalists".

¹³ We might observe that this situation is changing quite rapidly, thanks to both the active commitment of ANPA and of the large distribution chains.

¹⁴ This has radically changed in the meantime.

¹⁵ It is worth mentioning that the new regulations establishes a set of economic incentives for SME's (and Developing Countries).

It is further generally argued that Italian large companies have shown quite low interest in ecolabel and prefer rather their own marketing strategies. On their turn, on one hand the ecolabel can represent a valid opportunity for SME's as a marketing instrument to differentiate themselves and get greater visibility on the market¹⁶. On the other hand however, SME's are tackling with a series of already mentioned difficulties because of lack of financial, human, time and information resources.

Almost in parallel with its research study, IEFE launched a promotion plan on behalf of the EC for the diffusion of the ecolabel among SME's. Five companies, characterised by a high level of process and product technological innovation, high quality market targets, and high level of interest in environmental innovation, were involved, i.e.:

- Cartiera Lucchese for the household paper sector
- Baldini for the paint sector
- Madival for textiles,
- Cartiera Favini for copy paper
- Deco Industrie for detergents.

Of the 5 companies involved, three companies (i.e: C. Lucchese and Madival, and in these weeks also Baldini) actually continued and obtained the ecolabel. In the case of Cartiere Favini¹⁷, we suppose that the failure was due to a change in the top-management, which diminished the centrality and influence of the former environmental manager (this was the main reason for the stop of the LCA activities in Cartiera Favini [Frankl & Rubik 1999]).

The main general outcome of this project was that Italian companies still need a lot of support to overcome difficulties, particularly related with the lack of resources in the case of SME's. This implies a common strategy involving all social, economic and institutional stakeholders. It was pointed out the crucial role of retailers and distributors, which can strongly influence consumption patterns, as well as Green Public Procurement policies. Moreover it was highlighted that a deeper involvement of environmental NGO's is strongly desirable. In particular the development of a network between all stakeholders is considered a crucial point for the further diffusion of the ecolabelling scheme in Italy.

4.1.2 The National Ecolabel

So far, there is no National ecolabel in Italy, however, there are some interesting very recent evolutions as far as this matter is concerned (November 2000).

Similarly to what has happened in most OECD Countries and in several Emerging Countries, the opportunity of establishing a National ecolabel has been identified in Italy as well. The National label was supposed from the very beginning to focus on and take into account the main objectives of the Italian environmental policy, that is the reduction of greenhouse gas emissions, of water consumption and pollution, and of waste production.

¹⁶ This has clearly been the case of Cartiera Lucchese when it decided to enter the market sector of tissue paper as a newcomer.

¹⁷ Cartiera Favini is actually a strange case, because in some way it is a "success-story without the ecolabel". We will certainly focus our attention on this case during the second research phase.

In fact, the law n.344 of 8/10/97 on the "Development and qualification of environmental interventions" established the institution of a National ecolabel award scheme. The expected scheme should be complementary to the European one. The task of establishing the National scheme was given to the Competent Body – "Comitato per l'Ecolabel e l'Ecoaudit", with the condition of not creating any additional burden on the Italian State budget.

A first hypothesis was drawn around two years ago, identifying the objective of the National label in supporting and promoting specific Italian industry sectors characterised by

- high quality products, well known world-wide
- high presence of SME's
- eventual concentration in limited geographical areas (industrial districts).

With this specific respect, the CB elaborated an (unofficial) working proposal, trying to connect the forthcoming Italian label, the EU-Flower and the EMAS schemes. A long discussion period with no major outcomes followed. In the same period, the components of the CB and major parts of the Unit at ANPA dealing with the environmental quality of products have changed. Very recently, another very interesting proposal was made, that is to co-ordinate and harmonise the forthcoming Italian ecolabel with the (forthcoming in the next future, see § 4.4) Environmental Product Declaration certification scheme (see also below for more detailed description).

The opportunity and usefulness to establish a National ecolabel is very clear, in particular in connection to those products which cannot be labelled at European level so far, which play an important role in the Italian economy and market, and until now have no other choice than to adopt an ISO-type II logo. This is also the case of products which have specific importance at Italian level, but do not reach a significant share of the European market (as explicitly requested in the EU regulation).

It is also worth citing the results of a survey carried out by ANPA and Unioncamere in 1995: 65% of respondent companies did agree with the hypothesis of establishing a national ecolabelling scheme. [ANPA, 1998]. Finally it is worth observing that the opportunity and necessity of the harmonisation of the EU-flower with other National labels is explicitly mentioned in the new regulation 1980/2000.

We agree with the conclusions of [R. Scialdoni 1999], who affirms that today there seems to be the opportunity to make an Italian and an European ecolabel coexist, in a positive, complementary and synergetic manner. The requirement for this is that the Italian label is clearly defined within the context of Italian environmental policy, with clear objectives, roles and instruments (and limits). The proposal to link the national ecolabel with an EPD certification scheme goes precisely in this direction.

In the last draft document on the state of diffusion of the ecolabel in Italy, presented by the CB (Comitato Ecolabel – Ecoaudit) on November 2000, the main characteristics of the forthcoming National ecolabel are described in a specific chapter. In particular, the draft specifies three main concepts:

- General principles of the National ecolabel
- Procedures, criteria and indicators
- Roles of different stakeholders.

Below we shortly describe the main points of the draft. To our opinion, so far the general principles and the roles of stakeholders are quite well identified and defined, while some confusion still exists as far as procedures, criteria and indicators are concerned.

The basic principles of the proposed scheme are substantially two, i.e. focus on the national context and integration of instruments. In particular:

- the National ecolabel is expected to be a tool more appropriate (compared to the EU-Flower) to the Italian production system and environmental context
- the National scheme is expected to reinforce and further integrate the framework of voluntary measures (e.g. Environmental Product Declarations, EMAS, voluntary agreements), in a view of IPP.

However, when it comes to the description of how to translate this in practice, i.e. to procedures, criteria and indicators, the situation is still quite vague and certainly subject to possible changes in the future. So far, on one hand it is clear from the proposed draft that the National scheme is going to heavily rely on Environmental Product Declarations (EPD – see § 4.4). This represents the main novelty and characterising factor of the proposed Italian scheme with respect to the EU ecolabel. On the other hand however, it is still not very clear how thresholds of environmental performance will be identified, and how the link with EMAS and voluntary agreements will be done in practice.

More in detail, the basic principle is that the company willing to obtain an Italian ecolabel will have first to make an EPD of its products, according to ISO/TR 14025¹⁸. An EPD is a voluntary declaration which quantifies the environmental impacts of a product or service over its whole life cycle. Results are presented in a way which allows the comparison between different products of the same product group, through the standardisation of several environmental parameters (see § 4.4 for a detailed description). However, EPD in itself is a "neutral" declaration, that is it does not say whether a product is environmentally good or bad. It is just a standardised way to give a "picture" of the environmental profile of the product.

Therefore it will be the task of the CB to identify the parameters of environmental excellence ("the environmental criteria") for the award of the National ecolabel. These parameters will be linked of course with the ones of EPD, but will also take into account the priority orientations of Italian environmental policy. Similarly to the EU-Flower scheme, these criteria will take into account the whole range of variability of environmental performance of the products present on the Italian market, to ensure that a significant share of products will be able in principle to obtain the ecolabel¹⁹.

Moreover, these criteria are to be connected with other IPP instruments. In particular, for specific product groups, the need of adopting EMAS for the entire supply-chain might be taken into account.

According to the proposed draft these characteristics are expected to create a flexible tool which will be able to foster the integration of different tools for environmental improvement (Ecolabel, EMAS, Voluntary agreements).

To our opinion however, while this is true in principle, in practical terms there are still a lot of open issues, related to the definition of precise procedures, in particular to the definition of thresholds, the methods to integrate EMAS and voluntary agreements to EPD, as well as their relative weight in the overall assessment for the award of the National label.

As far as stakeholders are concerned, the following main actors and roles are identified:

¹⁸ And to the Italian guidelines (see § 4.4), we presume. But this is not explicitly mentioned in the draft.

¹⁹ Of course, all this is a theoretical approach. The two first EPD's at Italian level are only expected to be certified in summer, 2001. Therefore, no practical application of the proposed environmental criteria scheme will be possible before that time.

- *Ministries of the Environment and Industry*: provide indications on objectives of Italian environmental and industrial policies, identify priorities for the ecolabel award with respect both to environmental criteria and the competitiveness of the Italian industry
- *The Comitato Ecolabel-Ecoaudit*: propose to the mentioned ministries application programs of the label; approve the guidelines for the specific product or service groups indicated in the program and defined by the Section Ecolabel with the support of ANPA and the collaboration of interested category associations; approve the environmental criteria for the evaluation of EPD's, as proposed by the Section Ecolabel
- *The Section Ecolabel of the Comitato*: to manage the whole scheme, in its quality of CB of the National ecolabel, to identify the award procedures as proposed by ANPA, to prepare the award guidelines, with the support of ANPA and the category associations, for the specific product groups, to propose the environmental criteria for the evaluation of EPD's, to award the label to enterprises.
- *ANPA*: guarantees the support to the CB for the technical-administrative management of the award scheme, for the definition of specific product group guidelines,
- *Stakeholders (category, industry, commerce, service, consumers and environmental associations)*: to provide opinions and proposals both as far as the identification of product groups and the definition of the environmental criteria for the ecolabel award are concerned
- *Firms*: within the respect of the existing guidelines, to carry out the EPD for a product or product group, to apply for the label award, to use the label for the publicity of labelled products.

4.2 ISO Type I like Labels

Below we have selected a list of examples which are either relevant for our case-study sectors or because they seemed particularly interesting.

4.2.1 Ecolabels for Textiles

FIDUCIA NEL TESSILE - Test Sostanze Nocive Secondo Öko-Tex Standard 100 (INTERNATIONAL):



Oeko-Tex Standard 100 was firstly established in 1992. It applies to finished textiles but also to intermediate products. The label focuses on Human Toxicity and the effects on human health. Eco-labelled textiles cannot contain more than a threshold of toxic materials, neither they can cause too high emissions during the use phase. From the beginning of the scheme, the International Association for Research and Test in the field of Textile Ecology (Oeko-Tex) has awarded around 5900 certificates around the world to 1800 companies. 93% are in Europe (37% in Germany, 16% in Italy (around 550 companies), 6,5% both in Austria and Switzerland). In recent years the number of applications increases with a number of 630 /year [AIRPET 2000]. Today, Oeko-Tex Standard 100 is the most applied textile ecolabel in Europe²⁰. The only textile Italian company with an EU ecolabel (Madival) already had Oeko-Tex.

²⁰ It is also worth mentioning the development, in 1995, of another standard, Oeko-Tex 1000, which also takes into account the environmental impacts of production processes. So far there have only been pilot projects in Switzerland and Austria.

Marchio Italiano Del "Tessile Biologico" Promosso da AIAB-Centrocot (NATIONAL):

AIAB (Associazione Italiana per l'Agricoltura Biologica) the Italian Association for Bio-agriculture, has launched in 1998 a new certification scheme for Italian textile products in collaboration with Centrocot [Foglia P., Cerini G. 1999].

The motivation behind this initiative is that the term "ecological" is still reductive. The AIAB standard applies to all textile products made by natural fibres. The standards is awarded according to the following principles:

- Raw materials must be certified natural fibres from bio-agriculture;
- Raw materials other than fibres must be harmless for the environment and human health
- Transformation techniques have to reduce to the maximum extent the impacts on the environment
- Chemical and/or hazardous products must be avoided in transformation processes
- Colourings must be of vegetable origin and cannot contain heavy metals or carcinogenic substances.

4.2.2 Ecolabels for Forestry-Wood-Furniture Chain***FSC - Forest Stewardship Council - Certificazione Forestale e Catena di Custodia (INTERNATIONAL):***

The logo FSC (Forest Stewardship Council) indicates that the raw material of a wood or paper product comes from a forest managed in sustainable manner. In Italy there are still few FSC certified products. On the contrary, the labelled products have a significant market share in Germany, the United Kingdom and the US. Recently, WWF has launched a campaign for the diffusion of the FSC logo.

The FSC initiative was born in 1993 and is a bottom-up action which tries to meet consumer demand and the offer of interested forest managers. The action was born also in reaction to governmental inertia.

Already today, 18 millions hectares of forest are certified. Moreover, FSC applies to the whole Wood Furniture Chain: for any product the origin has to be transparent. 6 qualified certification bodies are active worldwide [FSC 2000]. The procedure of qualification in Italy is on-going.

In fact, there are two certification schemes:

- the first one is about the good forest management
- the second, which applies to other actors in the wood furniture production chain is the "Chain of Custody"

In the world today 550 wood and paper industries sell over 10000 FSC labelled products.

The Italian wood sector is one of the largest in the world, with excellent quality products. Also the paper sector is very important. Therefore, this label is potentially very relevant to Italian industry, which imports raw materials from everywhere in the world, including from tropical rainforests.

It is worth mentioning a link with social aspects. Indeed the sustainable management criteria of FSC are:

- Compliance with law and of general FSC principles
- Responsibility, property and use rights

- Rights of indigenous people
- Relationships with local community and worker rights
- Benefits from forest
- Environmental impact assessment²¹
- Forest management plans
- Monitoring and assessment
- Conservation of high environmental value forests
- Management of plantations

La Magnifica Comunità della Valle di Fiemme

La Magnifica Comunità di Fiemme (MCF), is the first FSC certified forest in Italy (11000 hectares) [Pettenella D., Secco L., Zanuttini R. 1999].

RigatoRosa snc.: mobili italiani realizzati con legno certificato FSC

Rigato Rosa is a very small furniture laboratory and factory, the first case of FSC certified furniture in Italy (Chain Custody – 1998).

The firm has a significant environmental policy, including use of recycled wood, use of non toxic adhesive and paints, collaboration with African communities and use of FSC certified timber. 20 products are certified.

4.2.3 Ecolabels for Building Materials and the Construction Sector

Marchio ANAB-IBO-IBN di Qualità Bioecologica dell'edilizia (AUSTRIA-GERMANY-ITALY):



ANAB (I) – IBO – IBN is a no-profit association between an Italian, a German and an Austrian research institutes, which certify bio-ecological building materials since 1988 [ANAB-IBO-IBN 1998]. The impacts on health and environment are assessed along the whole life cycle of the product.

The significance of this label is particularly connected with the assessment of human health impacts, in particular related to:

- Toxic indoor emissions (gases, dust, fibres)
- Radioactive emissions
- Electromagnetic fields and static charges
- Impacts by contact with hazardous substances
- Thermal indoor quality
- Others

²¹ This particular topic is severely criticised by several observers.

4.2.4 Ecolabels for Tourist Accommodation

There is an impressive number of labels of this type in Italy in recent years. Here we just list them. We expect to discuss them all in more detail in the next research phase as a case-study sector. However, it is important to highlight the significant bottom-up push of involved actors in this particular sector, which is extremely relevant for the Italian economy.

It is worth noticing that all the following labels have several common aspects:

- The award procedure
- The environmental areas on which they focus on, e.g. waste, energy, water consumption, noise, food quality, etc.
- The presence of a public administration (either a municipality or a province) in the body awarding the label
- A scoring system (e.g. 1 star, 2 stars, etc.) also allowing monitoring of improvement with time on a yearly revision basis
- The simultaneous presence of minimum necessary requirements to obtain the label and specific facultative requirements to raise the score value

BLU GARDA (REGIONAL):



This ecolabel is awarded by an association of hoteliers of the Province of Verona - l'Unione Gardesana Albergatori Veronesi (UGAV) and the regional office of Legambiente in Verona²².

The requirements taken into account are 50 covering all the above mentioned environmental areas + the canceling of architectural barriers, the presence of green areas and parkings. To obtain the label at least 7 requirements have to be fulfilled. With more requirements obtained the applicant receives a higher score (max. 5 Swans). The first label was assigned in 1997. Today, more than 100 Hotels around the Lake of Garda have obtained the label.

CONTRASSEGNO ECOLOGICO TIROLO/ALTO ADIGE (REGIONAL):



The label was born in Tirol, Austria in 1992. Since 1994 it has been adopted also in Italy in the region of Alto Adige. In 2000 the criteria were revised and presently the body managing and awarding the labels is the regional council office for Tourism and the Environment. The rules are quite strict, since the applicant must fulfil 44 of the 50 requirements to obtain the label, which is valid for one year. At present, 80 tourism structures are labelled [Alto Adige Promozione Turismo 1996].

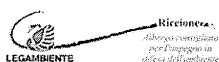
²² Verona is an important town of the Region Veneto in Northern Italy, very close to the important tourism area of the Lago di Garda.

JESOLO PER L'AMBIENTE (REGIONAL):

This is likely one of the most interesting cases in Italy.

The label was promoted by several public and private actors in 1993, namely: Associazione Jesolana Albergatori (AJA), Movimento Consumatori, Associazione Commercianti, Comune di Jesolo, APT di Jesolo, Assessorato Turismo della Provincia di Venezia, ENEA, Camera di Commercio, Industria, Agricoltura e Artigianato di Venezia. The first 43 labels were awarded in 1994. Today, the number of awarded hotels is around 100. The requirements to be fulfilled are 29; some are necessary threshold ones, other are facultative ones improving the score.

Since 1998, the ecolabel is part of a larger initiative called "Jesolo per l'Ambiente", which includes the environmental management of all tourist services (and not only the Hotels) and other aspects (e.g. transports and commerce). The Municipality of Jesolo was one of the first cases of ISO 14001 certification of a town in Italy. Finally, all these activities will be merged in the first pilot case-study of application of IPP in Italy starting from March, 2001 - see also § 2 and [ANPA 2001].

ALBERGHI RACCOMANDATI PER L'IMPEGNO IN DIFESA DELL'AMBIENTE (REGIONAL):

The project was born in 1997 from a common initiative of the local Hotel association, the Comune of Riccione, and the local Legambiente Emilia Romagna. In 1998 it actually started with the participation of 30 Hotels. The criteria are getting stricter every year. Also, each year the applicant hotel define their objectives to be fulfilled, which are to be approved and monitored by the above mentioned awarding bodies. At present, also 50 Hotels of the area Bellaria/Igea Marina are involved and the initiative is going to be extended and exported in Slovenia and Croatia.

VALIGIA BLU (REGIONAL):

The initiative was promoted by Promozione Alberghiera (a cooperative including 212 Hotels in Rimini) and by the consumer association ADOC (Associazione a tutela dei consumatori). This label was born in 1996 in Rimini, but with the objective to develop a model at national level. According to this goal, the promoters developed a National Forum "Valigia Blu" which acts as label managing body and which, in principle, is open to the participation of several stakeholders. In practice however, just little information is available so far, and the label seems to be in stand-by at present.

ALBERGO VERDE (REGIONAL):

The project "Albergo Verde" is promoted by CTS²³, Province of Torino, ANPA, and ACTA (Associazione Cultura Turismo Ambiente). The label is awarded to tourist accommodation structures in the Province of Torino fulfilling a series of environmental requirements referring to waste, water and energy. A characterising factor of this label worth highlighting is that it integrates environmental management criteria, and training and information initiatives. In particular, CTS has done a large information campaign addressing both hoteliers, their personnel and customers. Following an

²³ The CTS – Centro Turistico Studentesco is one of the largest Italian tour operators.

approach of continuous environmental improvement typical of an EMS, the label can also be awarded to structures which declare to be able to fulfill the environmental requirements in a near future.

The label is interesting but it is worth mentioning that the project has not been implemented so far.

MARCHIO DI QUALITÀ ECOLOGICA DELLE STRUTTURE TURISTICO-RICETTIVE (REGIONAL):



This initiative is promoted by the Province of Modena and the cooperative "La Lumaca". Again, an interesting aspect of this label is the integration of typical EMS factors. In fact, the label assesses that the applicant tourist accommodation structure is committed towards continuous environmental improvement of its activities according to a specific set of guidelines defined by the promoters and presented in a manual. At present around 10 structures have obtained the label.

MARCHIO AIAB (Associazione Italiana per l'Agricoltura Biologica) PER GLI AGRITURISMI BIO-ECOLOGICI (NATIONAL):



This scoring label is interesting because it focuses on a peculiar type of tourist accommodation, that is agro-tourism, which contains in itself both service and a production (of bio-food) activities. The label was born in 1998 and is awarded by the Italian Association for Bio-agriculture (AIAB) to agro-tourism firms which fulfil several requirements in the areas of: bio-production, information and training activities on nature and bio-production processes, environmental protection, natural resources, tourist accommodation structures and services, restoration, transports.

The fulfilment of the mandatory requirements gives a minimum score of 1 daisy. Any supplemental 20 fulfilled criteria give the right to additional daisies (max. 5). As of 2000, around 130 bio-firms have obtained the label, which is a clear sign of the large interest of these actors with respect to the label [AIAB 1999] and [Lacche F. 2000].

4.3 ISO Type II Labels

The green claims, self-declarations, and ecolabels in according with ISO-type II are numerous and various in Italy. We have selected the following examples related to content of recycled material, recyclability of products and/or specific environmental features.

It is worth mentioning that in some cases (e.g. CCA and BIOARKT) it is not easy to make a clear distinction whether the labels are ISO-type II or ISO-type I-like labels.

PANNELLO ECOLOGICO-Legno riciclato al 100%:



This logo identifies furniture made entirely with recycled wood, without cutting any tree. The logo exists at international level in 11 idioms. The logo is awarded by a consortium of firms, which has the same name. All panel producers give to their clients (furniture producers) a ISO 9000 certification plus the guarantee that the panel is made 100% by recycled wood and with ecologically sound production processes. 350 furniture firms participate, which is reflecting an interest which is recently increasing in a significant manner.

The project is accompanied by an impressive advertising campaign, claiming to "save the environment". However, no quantified information is available so far on important aspects of the life cycle.

DIGODREAM- Pavimentazione tessile riciclabile al 100%:



The logo identifies a completely recyclable textile floor covering.

MARCHIO ECOCERTO- il marchio dei prodotti e degli impianti per la costruzione di ambienti salubri:

ECOCERTO has been the first Italian logo focusing on indoor air quality.

Eligible products are raw construction materials, auxiliary materials, finishing materials, interior design products, but also technical installations, fittings, etc. The whole life cycle is considered.

CCA-Attestato di Conformità a Criteri di Compatibilità Ambientale:

In 1996 this label was created at the Politecnico di Milano. The scheme follows the principles of the EU regulation and considers therefore the whole life cycle of building materials, fittings and interior products. Main aspects focused on are the recyclability of employed materials, waste production, energy balance, absence of hazardous substances, low emissivity and low pollution of air and water in all life cycle phases.

The interesting peculiarity of this label is related to the assessment of indoor pollution risk and potential human health impacts of assemblers.

Marchio BIOARKT:



This label is awarded to architects and designers, either for the environmental quality of their projects, the management of the yard and/or the materials employed. The criteria on which the label is based are the same ones of bio-construction. The label is awarded by Studio BIOARKT, a private association involved in Bio-architecture in Italy. The label is interesting because it combines the environmental performances of products (ecological materials) with the one of services (the management of the building yard).

PELLICOLA COOP without PVC:

As already mentioned, COOP sells under its own label a set of biological and ecological products. This label, indicates that the packaging films used for food do not contain PVC. This guarantees a greater safety and lower environmental impact.

The interesting case here is that this ISO-type II label is a self-declaration (focusing on a single environmental aspect) and not a symbol. The interesting question is whether this is a more effective way to communicate to final consumers in some cases rather than a not always transparent (and thus confusing) symbol. Our feeling is clear: yes.

4.4 ISO Type III Labels - Environmental Product Declarations (EPD)



EPD's are a very young environmental product information instrument. There are several experiences on EPD at international level, both in Europe and the US. However, the only Country which has established a Competent Body for the certification of EPD's (The Swedish Environmental Management Council), and which has created a related logo is Sweden.

The Italian Situation:

Italy is envisaging to adopt an Environmental Product Declaration (EPD) System, quite similar to the one recently established in Sweden. At present, an experimental project is carried out by ANPA. Three pilot case-studies are currently carried out, which are expected to finish by summer 2001²⁴. The general guidelines on EPD are expected to be published by ANPA, as competent body for the EPD system, by summer 2001. The qualification of the verifiers is expected to be done by 2001. The objective of this subchapter is to shortly describe the proposed system, the state-of-the art and the outlook for its application in Italy.

Definitions:

According to ISO/TR 14025 there are the following definitions:

- *Type III environmental declaration*: quantified environmental data for a product with pre-set categories of parameters base on ISO 14040-series standards but not excluding additional environmental information provided within a Type III environmental declaration programme
- *Type III environmental declaration programme*: voluntary process by which an industrial sector or independent body develops a Type III environmental declaration, including setting minimum requirements, selecting categories and parameters, defining the involvement of third parties and the format for external communication

The Proposed EPD Scheme:

The state-of-the-art of the proposed EPD scheme as of March 2001 is schematically shown in Figure 4. More details about the single boxes are given further below.

The very first step is the preparation of general guidelines by ANPA. As mentioned, they are expected to be presented by summer, 2001. The guidelines are expected to contain general information about the EPD procedure and its objectives, the information which is mandatory to be contained in an EPD, general rules on how to carry out the LCA study, etc.

²⁴ The two companies participating are ABB Italy (electromechanical devices) and Novamont (bio-plastics). Paolo is participating to the second case-study for Ecobilancio Italia.

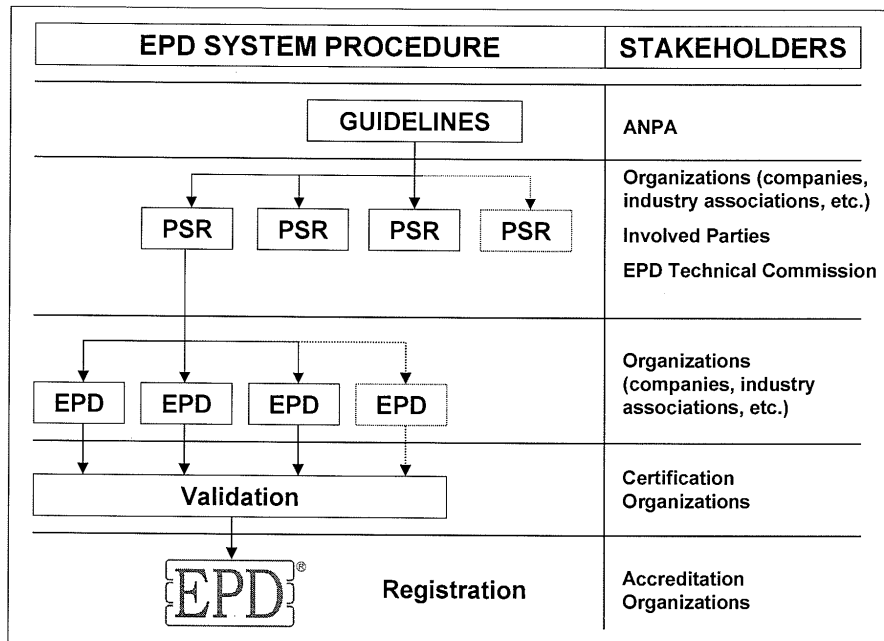


Figure 4: Environmental Product Declaration procedure and main stakeholders (source: ANPA-EPD, March 2001)

The Product Specific Requirements (PSR) is maybe the most crucial point of the whole procedure. The key point is that the criteria are proposed bottom-up, either by a single company, an organisation, or in co-operation between firms and organisations. The PSR must contain all details about the considered group of products, the assessment and communication tools (see more details below).

It follows an open consultation meeting in which all interested stakeholders are involved and the PSR reviewed by the interested parties. All participants to the meeting are invited to make their observations (both on-site and afterwards following a procedure set by ANPA). The first of such presentations in Italy has been done by ABB Italy in November, 2000²⁵.

ANPA then has the task to collect all the review observations, eventually to add changes to the proposed PSR, and finally to approve them. ANPA is currently doing this for the first Italian pilot case-study.

At this point, the company is ready to carry out or to complete the LCA study according to the ISO 1404x rules (including an external peer review).

²⁵ More of 40 people participated to the meeting, which has been very "calm". We think that this was the case because of the absolute novelty of the tool. We have been told that in Sweden there have been very strong discussions during several of these meetings [source: IVF, personal communication]. For instance, for the second case-study of thermoplastic granulate, we expect much hotter discussions.

The results of the LCA, as well as other information, are then presented in the EPD according to both the general guidelines and the Product Specific Requirements. If this has been strictly the case, the EPD is ready to be certified by a qualified verifier²⁶.

If the results of the certifier are positive, the product is awarded with the EPD logo by ANPA.

General EPD Guidelines:

Similarly to the Swedish guidelines, the Italian guidelines are expected to contain:

- General information about the EPD system and its objectives,
- Technical information about the role of companies, the rules to carry out the LCA study, the role of verifiers;
- The involvement of the stakeholders²⁷
- The format and Communication of the EPD
- The procedures for the establishment of the EPD scheme

Information Contained in an EPD:

According to the guidelines, three main information have to be contained in an EPD, i.e:

- Description of the company/organisation and of the product or service (with the possibility to include a content declaration)
- Environmental Performance Declaration
- Additional Information from the company/organisation and certification body (with the possibility to include a recycling declaration)

The Environmental Performance Declaration contains the results of the LCA study carried out according to ISO 1404x norms. The current Italian guideline draft foresees that results have to be given in separated form for the three macro-phases of the product/service life cycle²⁸, that is:

- from cradle to gate
- use and maintenance
- end-of-life.

In general, an EPD of an end-product shall contain information about all three macro-phases. Exceptions might be allowed, but they have to be justified within the PSR. On the contrary, the EPD of bulk materials shall contain detailed information only for the first macro-phase. However, additional information, e.g. on the end-of-life phase, can be added in the third part of the EPD. For instance this might be the case of a bulk material which has very good recycling or composting properties.

²⁶ For instance, this is not the case of the "famous" Volvo EPD, as it contains also a benchmarking comparison and it combines the information on the car with information on the Environmental Management System at Volvo.

²⁷ The very early involvement of all stakeholders is considered as a crucial point for a successful application of EPD.

²⁸ In the Swedish guidelines only two phases are foreseen, as the "use" phase goes until the end-of-life of products.

Indicators to be used for the LCA Results:

Quantitative information must be given *both* in terms of emission/consumption indicators and impact assessment indicators. The first category includes: energy consumption; natural resource consumption; air emissions; water emissions; waste production. As far as the impact indicators are concerned, a minimum mandatory set of indicators is foreseen (Global Warming Potential, Ozone Depletion Potential, Acidification Potential, Eutrophication Potential, Photochemical Smog), which have to be eventually integrated by an additional set of indicators identified in the PSR. The characterisation factors to be used to calculate the potential impacts are explicitly given by ANPA. Exceptions are allowed, but must be justified.

Quality of Data for an EPD and the I-LCA Data bank:

As for any LCA, the quality of data is of crucial importance for the reliability of the results. Of course, the ideal case would be to use primary data everywhere, but this is clearly not possible. The Swedish guidelines are very stringent on this matter, as they require that in total no more than 10% of the total impacts might come from secondary data. Quite obviously, this threshold is presently too severe for the Italian conditions, given the low level of diffusion of LCA and data-base in Italy.

Therefore, a more feasible, "dynamic" system of requirements increasing with time is to be introduced in Italy. In the present introductory phase, the basic requirement to companies is that (just) all data referring to processes occurring in production sites directly under control of the company making the EPD have to be primary data. However, in order to obtain the renewal of the validation of the EPD, after 3 years, the company has to ensure that no more than 10% of the total impacts over the product life cycle come from secondary data. Anyway, the phases of extraction of raw materials, production of fuels, production of grid electricity and transportation is excluded from this calculation.

In particular as far as the latter phases are concerned, it is very important to mention that ANPA just diffused on the internet the official version of the Italian public LCA data-bank (I-LCA), which contains the best secondary data on these life cycle sub-phases adapted to the Italian boundary conditions. The official presentation of the data-bank was done by the Minister of the Industry in February 2001.

Summarising, there is the following list of priority about the use of LCA data for EPD:

- Primary data have to be used as much as possible. The use is absolutely mandatory as far as the production phase is concerned
- Secondary data have to be representative for the scope and goal of the study. Their use instead of primary data has to be justified
- Reference source for secondary data is each data bank in according to ISO 1404x standards, including the I-LCA data bank, that is to be considered as a principal source.
- All calculations and/or indirect data have to be explained in transparent manner.

It is worth highlighting once more the importance of this tool which has been provided by ANPA together with the rules. Without the I-LCA data bank, the EPD requirements would be an insurmountable barrier for most companies, particularly for the SME's. It is also worth mentioning that in the view of ANPA, the I-LCA is not static. On the contrary, there will be a continuous updating procedure. All Italian LCA experts (companies, Universities, consultants, research institutes, others) are invited to participate in this process.

According to ANPA (and to our opinion), the I-LCA is a crucial step for the whole development and diffusion of IPP in our country.

5 Other Labels

5.1 Social Labels

Social Accountability 8000 International Standard:



SA 8000 was established by the Council on Economic Priorities Accreditation Agency (CEPAA) in 1997 and certifies the social responsibility of enterprises all over the world. The standard focuses on the respect of human rights, respect of workers rights, protection against the exploitation of children labour, guarantee of safety and healthiness at the working place [CEPAA 1999].

In order to be certified, the firm must realize a Social Management System (SMS) based on the main international human right principles. Italian certified companies so far are:

- Acroplastica, Italy, plastics
- Convergi Consultants Group, Italy, management consultancy
- Coop Italia, Italy, management services
- Coop Italia Consorzio Nazionale Non Alimentare, Italy, management services
- Honda Logistic, Italy, distribution of automobile equipment.

TRANSFAIR - Marchio di Garanzia dei Prodotti del Commercio Equo e Solidale:



The logo is a collective worldwide logo indicating that the product is produced and traded according to fundamental principles of equity and solidarity in the commerce (fair trade). The objective is to reduce disequilibria existing between the South and the North of the planet.

The basic principle is a price which allows the producer to satisfy his basic needs, plus an overprice for the funding of social projects, and payments in advance. The label has both a quality and ethics value. The label was created in 1992 in Stuttgart, Germany. Rapidly, national TransFair associations were created in several countries, including Italy. In 1997 FLO (Fairtrade Labelling Organisations International), was established, unifying 17 national labels.

The Italian organisation (TransFair Italia) was founded in 1994 by a long list of interested actors. The introduction of the label in Italy can be considered a success: in the last 2 years the volume of products traded under the logo has raised by 50%. In 1999 more than 350 tons of coffee produced by small producers in Developing Countries were sold in Italy (before the introduction of the label they were 185) [Centro Nuovo Modello di Sviluppo 1996] and [Gesualdi F. 1999].

Products sold under the logo are tea, honey, cacao, sugar, orange juice, bananas. Today these products are present in 3500 selling points. Several large distributions chains expose the trade, including COOP, CTM, Esselunga and GS. Currently also other unconventional forms of product distribution are explored, including supply contracts to hospitals, local administration, etc.

5.2 Other Interesting Labels

Marchio ecologico per il commercio di alimentari e generi misti (ecolabel for the commerce of food and mixed items):



This is an interesting label because it is awarded for services. In particular, it is given to small shops in the Region of Alto Adige, which are environmentally committed both with respect to the products and to the management of the shop service itself. The label was founded in 1993 and is a combined initiative by different sections of the local public administration.

The label has also a clear social objective, i.e. to support and give some kind of competitive advantage to small detail shops, which would otherwise risk to disappear from the market. At present 51 shops have been awarded. They are all located in small centres [Unione Commercio Turismo Servizi, Provincia Autonoma di Bolzano 1999].

6 Conclusions

Looking at the historical evolution and diffusion of IPP and EPIS in Italy, one can observe a very important change in attitude, approaches and instruments exactly at the turn of the millennium, i.e. in the year 2000.

As a matter of fact, while until 1999 very little action could be observed both on IPP and EPIS, starting from 2000 many important signs of change can be highlighted.

Observations from the past:

Very clearly, until 1999 all environmental policies and instruments in Italy were rather of the type "command & control" than oriented towards voluntary actions. This goes even beyond environmental product policy; for example this is confirmed by the very low diffusion of EMAS in that period. In the past, most of the main interventions were either end-of-pipe or focusing on a single stage of the life cycle (e.g. the legislation on waste of 1997) and always mandatory. In particular, following observations can be made for EPIS.

Until 1999, just 4 products of a single product group (tissue paper) had obtained the EU ecolabel. Despite the indications foreseen in the law, no National ecolabel had been developed. Several main motivations for this can be identified, i.e.:

- A very long and confused bureaucratic / normative process;
- A general lack of awareness in most interested actors;
- In general large companies have shown very little interest and have seemed to prefer other marketing strategies. On the other hand, SME's were potentially interested, but do need a lot of support to overcome difficulties, particularly related with the lack of human, financial and time resources.

As far as IPP is concerned, by the end of 1999 there had only been a shy beginning of debate but no real action towards an integrated approach in environmental product policy could be observed.

On the other hand, looking in more detail in the overall Italian situation, one can observe a multitude of rather bottom-up initiatives coming from both firms and local public administrations, demonstrating though an existing and increasing interest of several stakeholders in EPIS. It is worth noticing that most of these initiatives were at local/regional level and significantly linked to the territory and local conditions. This is

reflected in a significant number of initiatives in some specific Italian regions (e.g. Emilia-Romagna and Alto-Adige). Given this link with the territory, it is not a case that many of these initiatives are related to tourism.

Moreover, it can be observed that in some specific sectors, industry has followed the international trends (this is the case of the Oeko-Tex label in the textile industry, which is in fact the most diffused EPIS in Italy so far). Finally, an existing interest of consumers in green products can be interpreted by the survey carried out by Cartiera Lucchese (this was actually the main motivation for the firm to continue the process to obtain the ecolabel despite several other difficulties on the market²⁹).

Outlook and future trends:

In the year 2000, many changes have happened in Italy. First, the institutional support to environmental product policy has dramatically increased: new financial and human resources have been allocated with this respect and a new Unit devoted specifically to the environmental quality of products has been founded at ANPA. This unit has operated at 360° towards an integrated approach. The main outcomes of this process are:

- The recent publication of an IPP report, defining a proposal for a National Action Plan
- The start of several projects at national level promoting the diffusion of the European Ecolabel system among Italian firms; in collaboration with research institutes, universities and environmental NGO's,
- The development of an EPD scheme
- The realisation of an Italian on-line public LCA database,
- The support to voluntary agreements between interested actors and sectors (e.g. industrial districts)
- A first draft for the development of a National ecolabel to be integrated and harmonised with other environmental policy tools (e.g. EMAS) at both National and European level.
- The realisation, of a manual for Green Public Procurement in the Italian administration.

In several of these actions, ANPA has also collaborated with the new ecolabel CB, which was elected in April, 2000. In parallel, a very significant increase in the participation of other stakeholders can be observed. This includes single firms, industry associations, and distribution chains and retailers. In the 13 months from January 2000 and by end of January 2001, the number of awarded EU-ecolabels has raised up to 61, and 12 more are expected by end of February.

Maybe the most interesting process that can be observed in Italy is the increasing interest and role of retailers. As a matter of fact, 8 applications come from very large distribution chains (COOP, ESSELUNGA, PAM). Distributors and retailers are playing a very important role in the promotion and diffusion of the knowledge of the label among consumers and stimulating at the same time producers to increasingly consider the environmental aspects of their products. Some large retailers have declared that they have the intention to dedicate entire sections of their supermarkets to labelled products only, similarly to what they already do for organic food products. The beginning of some form of competition among retailers about environmental matters can be observed as well. It is worth noticing that this commitment of distributors and retailers is combined (has actually followed) a significantly increasing interest in social labels.

²⁹ A conclusion which can be drawn from the consumer survey carried out by Cartiera Lucchese is that the true limit so far has not been a lack of interest of final consumers, but the complete lack of appropriate offer of ecological products or services. Whether this is true or it is the reflection of the "Verbal Environmentalism" of Italians is still an open question.

Open issues:

- By far the largest part of Italian industry is made by SME's. On one hand, the latter are the most likely profiting from ecolabels (so far all firms which obtained the EU-Flower were SME's). On the other hand, however, most of these enterprises need specific support, both in terms of financial and human resources, information and training.
- Similarly, EPD appear very interesting as EPIS within the supply-chain in the business – to –business relation involving SME's. In particular, the bottom-up, multi-stakeholder approach is potentially extremely interesting to increase participation of all actors involved. However, carrying out an LCA, making an EPD, and eventually in the future applying for the Italian ecolabel, might be too complicated and costly for SME's³⁰? As a consequence, explicitly linking the National ecolabel to EPD might be another supplemental barrier for SME's instead of a push?
- For retailers and industry sector associations making a large use of ISO-type II labels there is clearly the need for guidelines for the harmonisation and regulation of the symbols used and the type of information provided.
- In Italy the link to the local territory dimension seems to be a success factor for the bottom-up diffusion of environmental and sustainable initiatives and policies. This is evident from the large extent of ISO-type I labels existing in the tourism sectors always involving a local public administration and multitude of local stakeholders³¹. Clearly the territorial dimension offers advantages in: existing relationship and trust between stakeholders, facilitated economic co-operation approaches and, same specific local environmental issues and priorities, implementation, action and monitoring at local and restricted area level is easier. Is this a model for success to be analysed in more detail. How can these spontaneous multi-stakeholder integration and participation phenomena fostered?
- Most existing regional tourism labels include environmental management criteria and mix the concepts of physical environmental parameters with continuous improvement management criteria. Is this experience providing an appropriate model to be followed for the integration of EPIS with EMAS in a IPP framework?
- IPP is not only integration of different environmental policy tools, but also the integration of socio-economic and industry policies. Once again, is this integration of policies and participation of all stakeholders easier and more feasible at local / regional level? How can local initiatives be fostered? How can these initiatives be a model for the extrapolation at National level? How to harmonise local and National policies and instruments?

7 Literature

- [AIAB 1999], *Disciplinare per gli Agriturismi Bio-ecologici*, Bologna, Maggio 1999.
- [Alto Adige Promozione Turismo 1996], *Il contrassegno ecologico Tirolo/Alto Adige. Concetto e requisiti 1997-1999*, Austria 1996.
- [ANAB-IBO-IBN 1998], *La valutazione e la certificazione dei prodotti per l'edilizia secondo i criteri dell'Architettura Bioecologica*, ANAB, Milano 1998.
- [ANPA 1998] (a cura di Scialdoni R., Jacaz G., Olivetti M., Tarisciotti F., Trinca M. L., Velardi M.), *L'etichetta Ecologica Europea: stato di attuazione del Regolamento U. E. 880/92. Problemi e prospettive*, ANPA, Novembre 1998.
- [ANPA-Green Products 1998], *Prodotti ecocompatibili nella Pubblica Amministrazione*, Roma 1998.

³⁰ Despite the large support from the public administration (EPD guidelines and I-LCA data-bank).

³¹ But other examples are emerging in industrial districts, e.g. furniture, textiles, ceramics, etc.

- [ANPA-GPP 2000] Green Public Procurement - Manuale delle Caratteristiche dei Prodotti Ambientalmente Preferibili da utilizzare nelle procedure di acquisto della Pubblica Amministrazione, Unità per la Qualità Ecologica dei Prodotti, in collaborazione con l'Associazione Impresa Politecnico (AIP) di Milano, Roma, 1ST Draft October 2000; www.sinanet.anpa.it/ and www.mirrorsinanet.anpa.it/EcolProd/GPP/GPP.asp
- [ANPA-IPP 2000], Integrated Product Policies (IPP): An Approach for the Italian Scenario, ANPA in collaboration with Consorzio Ambiente per il Futuro e Ernest & Young S.p.A., Roma 2000.
- [ANPA HFC 2001], Hard Floor Coverings EU Eco-label Award Scheme. Work Plan, Roma, 8 January 2001.
- [ANPA-TUR 2000], Studio nazionale per l'applicazione del marchio europeo di qualità ambientale nel settore del turismo, Unità per la Qualità Ecologica dei Prodotti, Roma, Settembre 2000.
- [ANPA 2001], Strategie e strumenti per lo sviluppo sostenibile nel turismo, Milano, 16 febbraio 2001.
- [ANPA EPD 2001], Linee guida per la dichiarazione ambientale di prodotto – EPD, Bozza per la “Consultazione aperta delle Parti Interessate”, Unità per la Qualità Ecologica dei Prodotti, Roma, marzo 2001.
- [AIRPET 2000] Associazione Internazionale per la Ricerca e Prova nel campo dell'Ecologia Tessile (Oeko-Tex), Öko-Tex standard 100 - Condizioni generali e particolari, Edizione 3 marzo 2000, Zurigo, Svizzera.
- [Astra-Demoskopea 1999], EcoLucart. Gli italiani e l'ambiente, Ricerca commissionata dalla Cartiera Lucchese, Luglio 1999.
- [Battistella G. 1995], Nuovi stili di vita, EMI, Bologna 1995.
- [Bianchi D. 1991], Ecolabels: i marchi di qualità ambientale e l'analisi del ciclo di vita, Ambiente Italia, Milano 1991.
- [Bianchi D. 1995], voce: Ecoetichettatura, in Gamba G., Martinetti G. (a cura di), Dizionario dell'Ambiente, ISEDI, Torino 1995.
- [Carmineo G., Iraldo F. 2000], Nuove prospettive delle politiche ambientali comunitarie: la Integrated Product Policy, in Economia delle Fonti di Energia e dell'Ambiente, n. 2, 2000, Franco Angeli, Milano.
- [Centro Nuovo Modello di Sviluppo 1996], Guida al consumo critico, EMI, Bologna 1996..
- [CEPAA 1999], Social Accountability 8000, International Standard, New York, October 1997
- [Chiapponi M. 1999], Nuovi prodotti: cresce la qualità ambientale, in Ambiente e Sviluppo, n. 5, Settembre-Ottobre 1999, pp. 6-10.
- [Comitato Ecolabel-Ecoaudit (Sezione Ecolabel-Italia) 1997], Informazioni per l'utente, ANPA, Luglio 1997.
- [Comitato Ecolabel Ecoaudit 2000] (Bianchi G., Rifici R.), Lo stato di avanzamento di EMAS ed Ecolabel in Italia e in Europa, Roma 6 novembre 2000.
- [CSERGE 2000], Feasibility Study of Wall and Floor Coverings with a View to Establishing EU Eco-labelling Criteria, Norwich, UK, 22 March 2000.
- [Delogu B., Dubini M., Giuiuzza P. 1996], Gestire l'ambiente. Ecogestione, audit ambientale e marchio ecologico europeo, Il Sole 24 Ore Pirola, Milano 1996.
- [DETR 2000] Department of the Environment, Transport and the Regions, Choosing Green – Toward More Sustainable Goods and Services, First Report of the Advisory Committee on Consumer Products and the Environment, 23 October 2000.
- [Dosi C., Moretto M. 1998], Is Ecolabelling a Reliable Environmental Policy Measure?, Fondazione ENI E. Mattei, July 1998.
- [ENEA 2000], Etichetta energetica di frigoriferi e congelatori, ENEA-Dipartimento Energia, Roma 2000.
- [EPA 1993], Status Report on the Use of Environmental Labels Worldwide, Office of Prevention, Pesticides and Toxic Substances, EPA 742-R-9-93-001, Washington, September 1993.
- [EPA 1998], Environmental Labeling Issues, Policies, and Practices Worldwide, Office of Prevention, Pesticides and Toxic Substances, EPA 742-R-98-009, Washington, December 1998.
- [FEMATOUR 2000], European Commission, DG Env, Feasibility and market study for a European Eco-label for tourist accommodations, Amsterdam, August 2000
- [Foglia P., Cerini G. 1999], Programma AIAB - Centrocot per la certificazione di articoli tessili biologici, AIAB - Associazione Italiana per l'Agricoltura Biologica (Bologna) e Centrocot - Centro Tessile Cottoniero e Abbigliamento, Busto Arsizio (Varese) 1999.
- [Frankl P. and F. Rubik 1999], LCA in Industry and Business – Adoption Patterns, Applications and Implications, Heidelberg, Germany: Springer 1999.
- [FSC (Forest Stewardship Council) 2000], Summary of Proceedings, II Annual Conference, Oaxa, Mexico, November 10-13, 2000.
- [Gesualdi F. 1999], Manuale per un consumo responsabile, Feltrinelli, Milano 1999.
- [Goggin P. A. 1994], An appraisal of ecolabelling from a design perspective, in Design Studies, vol. 15, n. 4, October 1994, pp. 459-477.
- [IEFE 1999], Politiche Ambientali di prodotto: opportunità per le imprese e garanzie per i consumatori, Atti del Convegno, IEFE, Milano 15 Febbraio 1999.
- [Klaus Novy Institut 2000 a], Questionnaire for Actors and Experts in the Furniture Market in the EU Member States, 28 October 2000.
- [Klaus Novy Institut 2000 b], The Feasibility of an EU Eco-label for Furniture. A first factfinding paper, Köln, September 2000.
- [Lacche F. 2000], Guida agli agriturismi bioecologici, Tecniche Nuove, Milano 2000.

- [Luciani R., Andriola L., Masoni P. 2000], Ecolabel ed Ecodesign: obiettivi impossibili per le PMI, in Ambiente e Sviluppo, n. 6, novembre-dicembre 2000, pp.6-12.
- [Movimento Consumatori, TeAM 1995] (a cura di), Come promuovere un Turismo compatibile, progetto in collaborazione con il network ECOTRANS International, COM/I edizioni, Livorno 1995.
- [Pettenella D., Secco L., Zanuttini R. 1999], La certificazione della gestione aziendale e dei prodotti nel sistema foresta-legno, Regione Veneto, Direzione Foreste ed Economia Montana, Venezia 1999.
- [Rubik 2001] Rubik F., Background Report on European Integrated Product Policy and Environmental Product Information Schemes, DEEP Deliverable D-6 IPP/EPIS final report.
- [Scialdoni R., Carli G., Graziani E., Olivetti M. 1999], Ecolabel, che fatica, in Ambiente e Sviluppo, n. 5, Settembre-Ottobre 1999, pp. 11-19.
- [Udo de Haes H. 1997], Slow Progress in Ecolabelling: technical or institutional impediments?, in Journal of Industrial Ecology, n. 1, winter 1997, pp. 4-6.
- [UNEP/IE 1997], Ecodesign: a promising approach to sustainable production and consumption, UNEP/IE Publications, Paris 1997.
- [UNEP/IE 1998], Ecolabels in the Tourism Industry, Paris Cedex 1998.
- [Unione Commercio Turismo Servizi, Provincia Autonoma di Bolzano 1999], Marchio ecologico per alimentari e generi misti, Bolzano 1999.

Pere Fullana / Eloi Montcada / Jordi Vall-Llovera

**Environmental Product Information Schemes (EPIS)
in Luxembourg**

Table of Contents

1	INTRODUCTION	176
2	SHORT DESCRIPTION OF INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INFORMATION SCHEMES	176
3	MANDATORY LABELS	177
4	VOLUNTARY LABELS	177
4.1	ISO Type I	177
4.1.1	Classical ISO Type I	177
4.1.2	Other Third-party, ISO Type I like Labelling	177
4.2	ISO Type II	180
4.3	ISO Type III	180
5	OTHER LABELS	180
5.1	Social Labels	180
5.2	Other Interesting Labels	181
6	CONCLUSIONS	182
7	LITERATURE AND HOMEPAGES	183
7.1	Literature	183
7.2	Homepages	183

1 Introduction

The present report examines Environmental Product Information Schemes (EPIS) in Luxembourg, regarding both of mandatory and voluntary labeling activities. Luxembourg is the smallest country in the European Union and strongly dependent from imports. Currently it does not exist a national ecolabelling scheme and the Government do not foresee to establish it in a short term, so Ecolabelling initiatives in Luxembourg are very short and only two sectorial national labels have found

Following paper is divided in 6 chapters, starting with the cornerstones of Luxembourg in environmental and product policy.

After the introduction, Chapter 3 examines mandatory product information schemes in Luxembourg, which follow the EU legislation. Next Chapter 4 illustrates voluntary EPIS and it is divided according to the origin of them. The chapter focused on two national labels found, for tourism and waste management. No companies from Luxembourg has EU-labeled products.

Chapter 5 includes the description of other labels, social and food, specially national ones (TransFair-Minka for former and Demeter and Bio-Label for latter). The report finishes with the conclusions in chapter 6.

2 Short description of Integrated Product Policy and Environmental Product Information Schemes

Luxembourg does not have developed a specific environmental policy related to product. In part this reflects the fact that Luxembourg is highly dependent upon imports and that it has a few productive industry. Product related policies are spread over several ministries (e.g. Small and Medium Sized Enterprises, Economy, Energy and Environment). Its co-ordination is one of the aims of the Plan for Sustainable Development, developed by the Ministry of Environment and approved by the Counsel of the Government in 30th April, 1999. This Plan exposes the main fields and actions that Government wants to carry out to protect the environment. Main topics are the interaction between environment and economy, nature and natural resources protection, water management methods and atmospheric pollution.

Environmental policy of Luxembourg is mainly focused on waste management resulting from product consumption. In the short term, it does not appear likely that Luxembourg will develop national product policy, but will react to EU policy developments.

This waste management policies are based on the creation of different norms which includes a take-back obligations on producers, importers and distributors of products and on future financial actions (eco-taxes).

The Government together with industry and a public research institute also established a centre for the promotion of clean technology. Amongst its aims are transmitting environmental information about EU Eco-label, BATs and green product innovation to companies.

The Law of 10th June 1999, on classified companies and activities, confirms the interest showed towards environmental protection within the economic policy. The main aim of it is the human pollution prevention and reduction on natural environments and introduces into the companies the mentality developed in the Plan of Sustainable Development with different regulations and sanctions.

3 Mandatory Labels

Mandatory labelling schemes in Luxembourg followed those launched by EU legislation on chemical and dangerous products and substances, food, electrical appliances, textiles and footwear.

No problems have appeared in the transposition of EU Directives to national legislation.

4 Voluntary Labels

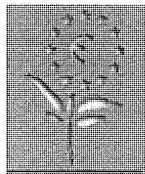
4.1 ISO Type I

At the moment Luxembourg has not national official scheme, like German Blue Angel, to certify environmental respectful products and Government has no intention to develop one because they support EU scheme. Apart of it, only two other voluntary eco-labels have been found: one for tourist resources (*EcoLabel für Luxemburger Tourismusbetriebe*) and other for waste management (*Label Priméiert*). However, both of them don't belong to classical ISO type I label.

Furthermore, there are two more symbols for organic products and one with a fair trade sense.

4.1.1 Classical ISO Type I

EU Eco-label:



In spite of the short number of national producers, so possible applicants, Luxembourg Government have spent 700.000 Belgium francs for the EU eco-labelling operational, administrative and promotional cost, trying to attract producers and big retailers. Luxembourg Competent Body for the EU eco-label is the Ministry of the Environment, but since now any product has not been awarded.

In general, producers and retailers are not interested in EU-ecolabel. According to a survey performed in 1998 by IEFE and ICEM, in the framework of a project to promotion EU eco-label in Belgium, Netherlands, Italy and Luxembourg, only 5 companies from 223 showed interest in the scheme, and none of them wanted to be involved in the project.

4.1.2 Other Third-party, ISO Type I like Labelling

EcoLabel:



At the end of 1996, the persons in charge of Luxembourg tourism sector, with the support of the Ministry of Tourism, met to discuss an ecological project of label. Thereafter, the Ministry for Tourism charged the Foundation Oeko-Fonds with working out a concept for the Grand Duchy of Luxembourg.

The project *EcoLabel für Luxemburger Tourismusbetriebe*, started with an investigation phase and continued with a competition *Ëmwelt & Tourisme*, was launched in 1997 in Luxembourg by Foundation Oeko-Fonds and three Luxembourg Ministries (Tourism, Environment and Energy) financed it.

The competition had a great success: 34 establishments received prizes for their efforts in the field of the environment.

The eco-label for tourist accommodations goal is to distinguish, with the EcoLabel, hotels, camping sites and holiday lodgings that pay particular attention to the environment. The aims of the eco-label are the reevaluation of the quality tourism in Luxembourg, the decrease of the expenses in the establishments and the intensification of the regional economy and the improvement of the environmental situation in and around the accommodation.

The guide-lines of the project are determined by the project committee (advisory group) composed by representatives from the following institutions: Tourism Ministry, ONT, Ministry for the Environment and Energy, National Tourism Office, Chamber of Commerce in Luxembourg, Hotel and Restaurant Association Horesca, Camping Associations Camprilux and APC, Rural Tourism Association "APTR", hotel-school *Lycée Technique des Hoteliers Alexis Heck*, other professional training centres like the *Centre National de Formation Professionnelle Continue Ettelbrück*.

The procedure of labelling starts with a process of inspection, but it is highly advised to take part in a consulting and training program before it. The establishment interested in the awarded of the eco-label has to make a drawn application and has to fulfil certain minimum criteria concerning its ecological management. In this perspective a catalogue of criteria was designed taking as a starting point foreign examples. The catalogue comprises 100 environmental criteria, distributed on five fields: water, energy, waste, purchases and information. Here are some examples:

- W2: Showers and wash-hand basins equipped with devices of saving in water
- E2: Presence of a plan of management of energy
- A3: No individual portions for breakfast
- B1: Majority use of recycled paper
- I4: Information to the hosts on the "green tourism"

In each field the criteria are divided into "compulsory" and "voluntary" ones and are updated each two years regarding the latest knowledge in environmental matters.

The inspection of accommodations is assured by an independent commission, which evaluates the measurements taken within the establishments. This commission of inspection has to take into account the particularly innovating measures or those, which do not appear in the catalogue of criteria.

For some criteria, it is obligatory to fill forms. It is, for example, the case of criteria related on energy, water, waste or the products of cleaning used. These forms must be presented, at the latest, at the time of the inspection. At the same time, it must be presented: the form with the source data on the establishment and possible invoices of ecological products acquired in the past.

The inspection visit to the establishment will be done after the establishment makes an auto-diagnostic. This diagnostic has to set the weak points of the establishment, which will have to be improved with the criteria.

Before the inspection, the organism in charge of certifying the eco-label will communicate a date to make the definitive inspection. A special inspection commission will do the definitive inspection and it will verify if the

establishment fulfils the ecological criteria. The commission is composed by four persons: an environmental consultant, an energy consultant, an independent inspector approved in environment and a member of Foundation Oeko-Fonds, who is in charge of co-ordinating and organising the inspection.

Before the last visit, the commission will make an inspection report and it will be sent to the Committee of Decision. This report contains if the establishment will be granted with the eco-label or not. For being certified with the eco-label it is necessary to fulfil all the mandatory requirements and a minimum of 50% of optional criteria in every of the five fields.

If the establishment fulfils the required criteria, the label is granted to him in form of a certificate and it will be valid during two years. After this time, the establishment will be invited to be registered for a new inspection or to give up the label.

Extraordinary inspections can be undertaken if the delivering institution received complaints of thirds, and if the criteria are not respected, the label will be withdrawn after a notice. In this case the user of the label will have to return immediately the label to the delivering institution.

A certified establishment can carry out its publicity using the label. It is authorised to employ it for example in its advertising leaflets or on the envelopes.

The application of the ecolabel is absolutely voluntary and free, and the establishments which can apply for it are:

1. Hotels, lodgings and holiday apartments.
2. Establishments of rural tourism (rooms of hosts, lodgings, etc.).
3. Camping sites.

Those establishments for groups and restaurants without rooms are excluded of the ecolabel certification process.

Label for tourism accommodations is working quite well. Nowadays there are 21 enterprises in the Scheme: 6 camping sites, 2 gites (High standard rural accommodations), 7 hotels and 6 other tourism resorts. 21 enterprises is a relatively high number because the total number of accommodation in Luxemburg is only about 700.

Since the launching of the project, over 60 accommodations got help "in situ" from counsellors of the Oeko-Fonds Foundation and an energy consultancy firm. Most of these accommodations are now "on the way" to an ecological management. Until now, 30 enterprises made an energy-check of their accommodation. Further, about 80 interested candidates receive regularly a information-letter called "EcoLabel-Info-Tipp", with practical tips on ecological products etc. This counselling-programme is financially covered by subsidies from the Ministry of Environment and the Ministry of Energy for the energy-check.

Last but not least, training for hotel- and camp-site - managers, ecological management consulting and energy audits were conducted. At the moment, 11 owners of camp-sites and hotels participate at a workshop which prepares them to the 2001 - inspection. In mid-2001 it will be possible for Oeko-Fonds to generate more information about the "exact" ecological benefits: the owners who want to continue with the label, data from resources consumption, the results of 2001 inspections,...

Label Priméiert:

The second label found in Luxembourg is a quality mark awarded by the SuperDrecksKëscht (Administrator collaborator company for waste management) and it is recognised by the Environmental Administration and the *Chambre des Métiers*. Only craftsmanship and transport companies with a global ecological waste management, can be granted with the label.

The most important actions to carry out by applicants are:

- Motivation of all workers
- Waste prevention actions
- Creation of a visible and accessible waste collecting point
- Secure waste storage
- Segregated waste management
- Environmental-friendly Company Policy

The fulfilment of criteria is controlled every year. Companies labelled for more than five years will receive a diploma and the control checks will be every two years.

4.2 ISO Type II

No available information for this type of ecolabelling has been found, but common symbols and sentences as recycled or recyclable or Möbius loop, appear on products packaging.

4.3 ISO Type III

In Luxembourg, there is not any product with an ISO type III ecolabel.

5 Other Labels

5.1 Social Labels

Luxembourg, at the heart of Europe is surrounded by three countries with extensive Fair Trade networks (Netherlands, Belgium and Germany).

Currently two main labels can be found in Luxembourg: Fair Trade-Minka and Max Havelaar for products imported from Netherlands and Belgium.

Today Fair Trade products can be purchased in the world shops, the three main supermarket chains (with more than 70 outlets) and in over 80 health and wholefood shops throughout the country.

TransFair-Minka:



In 1992 TransFair-Minka Luxembourg labelling organisation was created by different organisations working with Third World solidarity and environment. It was the Luxembourg branch of the world-wide spread TransFair label. This was created as an umbrella association to promote fair trade in developing countries. Currently the product range covered includes coffee, chocolate, tea, sugar/sweets, bananas, cacao, honey and orange juice.

Luxembourg has three national Fair Trade licenses for coffee, however the most significant quantities are distributed by Belgian, Germany and Dutch licenses.

TransFair Minka coffee achieved in 1999, a market share of 3% of national market and TransFair bananas 4% , with a net retail value of around €560.000.

A survey of public awareness of Fair Trade in spring 1998 showed that 20% of the population had an active awareness of Trans Fair, and a further 10% had a passive one.

5.2 Other Interesting Labels

Green Dot:



The Green Dot is the most spread label in Luxembourg. It is managed by, non-profit company, called Valorlux, which has the aim to fulfil the EU Directive 94/62/CE. The main objectives of this regulation in Luxembourg are to promote, co-ordinate and finance the selective waste management.

Food labels:

At the beginning of 1988 both the following organic associations were founded: "Verain fir biologesch-dynamesch Landwirtschaft" (demeter) and "Verenegung fir Biologesche Landbau Letzebuerg" (bio-Label).

At this time [Aenderkerk, 2000] the total membership of both associations included 10 farms with about 300 hectares of land. This figure remained relatively constant for a few years until the total number of farms reached 30 (1002 hectares) in 1999.

Table 1: Organic farms and agriculturally utilised area under organic management in Luxembourg 1999 (Source: Verenegung fir biologesche Landbau Letzebuerg (bio-LABEL))

	1999
Number of organic farms	30
Per cent of all farms	1.1
Land under organic management (ha)	1,002
Per cent of agriculturally utilised area	0.8

The tasks of the associations remained the same as before: PR-work, representing the interests of the organic farmers, the provision and up-dating of standards, certification, inspection of the farms (additionally to the EU-standards), administration of the associations' labels.

Until the implementation of Council Regulation (EEC) 2092/91, only the standards of the associations were valid.

In some important ways their standards are stricter than those of the EU (for example, complete conversion of the farm, restrictions on brought-in feedstuffs). Therefore the organic symbols (bio-LABEL, Demeter) continue to play an important role.

Demeter label has to be renewed each year.

Demeter



Bio-label



6 Conclusions

In the previous chapters Luxembourg environmental policy and the compulsory and voluntary labelling systems have been studied.

In the voluntary ecolabelling field, Luxembourg has not develop any national eco-label, and only two sectorial labels have found. The interest of the other possible applicants, producers and retailers, is quite low, in spite of the funding spent by the Government promoting the EU eco-label. On the other hand, food and social labels have a significant success, thus in both of the cases the market share is higher than 1%.

Other findings of the report are:

- Luxembourg is a small country and highly depends on exports. Thus the number of possible ecolabelled products and services is very low.
- Mandatory labels found are the ones promoted by the EU Directives.
- In Tourism sector, one of the most important in the country, different stakeholders joined to create an own and successful ecolabel. Until now 21 enterprises have been awarded.
- More than 300 enterprises have applied for the other ecolabel, "Quality label".
- There are no Luxembourg companies with foreign ecolabels as Blue Angel or Milieukeur.
- Social labelled coffee achieved in 1999, a market share of 3%, and bananas 4%, with a net retail value of around € 560,000.

7 Literature and Homepages

7.1 Literature

- Aendekerck, Raymond (2000). Organic Farming in Luxembourg as part of: Steffi Graf / Helga Willer (Eds.): Organic Europe.
- IEFE and ICEM-CEEM (February, 1998). Project for the promotion and the diffusion of the EU Eco-label in Italy and the Benelux. Final Report.
- Ernst and Young (March, 1998). Executive summary of the Final Report: European Commission DGXI. Integrated Product Policy.

7.2 Homepages

- Bio-label information: <http://www.luxnatur.lu/luxnatur/awards.htm> – (visited: 30.01.01)
- EcoLabel für Luxemburger Tourismusbetriebe: <http://www.eco-tip.org/Eco-labels/ecolabels.htm> – (visited: 30.09.2000).
- EcoLabel für Luxemburger Tourismusbetriebe: <http://www.emweltzenter.lu/emweltzenter/oekofonds/ecolabel> – (visited: 30.09.2000).
- Food labels: http://www.organic-europe.net/country_reports/luxemburg/default.asp – (visited: 23.02.01)
- General information: <http://europa.eu.int/index.htm> – (visited: 24.07.2000).
- General information: <http://www.mev.etat.lu> - (visited: 30.08.2000).
- Priméiert Label <http://www.superdreckskescht.lu> - (visited: 10.11.2000)

Dirk Scheer
with support of Frieder Rubik

**Environmental Product Information Schemes (EPIS)
in The Netherlands**

Table of Contents

1	INTRODUCTION	185
2	INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INFORMATION SCHEMES IN THE NETHERLANDS	185
3	MANDATORY LABELS	187
4	VOLUNTARY LABELS	188
4.1	ISO Type I Labels	189
4.1.1	'Classical' ISO Type I Labels	189
4.1.1.1	The Dutch Eco-label Milieukeur	189
4.1.1.2	European Eco-label	197
4.1.2	ISO Type I Like Labels	197
4.1.2.1	The EKO-seal	197
4.1.2.2	Other labels	198
4.2	ISO Type II Labels	199
4.3	ISO Type III Labels	199
5	OTHER LABELS	199
5.1	Social Labels	199
5.2	Other Labels	199
6	CONCLUSIONS	200
7	LITERATURE	201
8	APPENDIX	202

1 Introduction

This paper examines eco-labelling activities in The Netherlands with particularly emphasis on independent third-party product information schemes. Thus, this report analyses more in detail the Dutch Milieukeur, a so-called 'official' ecolabel sponsored by the government and implemented by Stichting Milieukeur, a foundation where various societal representatives participate. Product labelling in general is a broad and complex subject reflecting a large variety of leading objectives, implementing procedures and country specific attributes. While the 'traditional', compulsory product label aimed primarily at safety and health aspects, voluntary labelling schemes are considered to be a sound policy instrument exerting purchase incentives in the market, and supply the consumer with reliable information. Latter emerged as a result of intensive environmental debate during the 1970s to respond the increasing 'greening' of producers, retailers and consumers.

The scientific methodology of the study is based on a review of primary and secondary literature, and first hand information collected by means of qualitative 'face-to-face'-interviews with representatives of Stichting Milieukeur, the Ministry of Housing, Spatial Planning and Environment (VROM) and the Confederation of Netherlands Industry and Employers (VNO-NCW).

After introducing the study, **chapter 2** first describes shortly the general characteristics of both the development of Dutch environmental policy and Product Policy. In **chapter 3**, we introduce mandatory labels. **Chapter 4** gives an overview of existing Dutch activities of voluntary product labelling. The increasing world-wide voluntary eco-labelling activities are also a topic of the International Organisation for Standardisation (ISO) which strives for systematisation of environmental related product information. Its Technical Committee 207 worked out three types of voluntary labels: Type I (ISO 14024) refers to criteria-based certification programmes, Type II (ISO 14021) describes self-declared environmental claims and Type III (ISO 14025) applies to quantified product information that is based upon independent verification using present indices. Consequently, chapter 4 examines all three different ISO-types, specific emphasis is dedicated to ISO-type I labels introducing objectives, history and implementing procedures of third-party-eco-labelling. **Chapter 5** highlights other labels. Some general conclusions will be given in **chapter 6** while the **appendix** shows the certification outlines of the Milieukeur scheme as well as the 'LCA-matrix'.

2 Integrated Product Policy and Environmental Product Information Schemes in The Netherlands

In The Netherlands **environmental policy** as an independent policy area has evolved steadily since the early 1970s. In the beginning the main focus was on different sectors i.e. air, water, soil, noise and waste removal without applying a comprehensive policy approach. The outcomes of this 'end-of-pipe'-strategy were dissatisfying (Oosterhuis / van Scheppingen 1994 p. 4). The need for a more systematic approach regarding both scheduling and implementation of environmental policy intentions became obvious. In 1982, the first Integrated Environmental Plan (IEP) (Indicatief Meerjaren Programma) introduced a shift to environmental precautionary measurements, i.e. rather preventing than reducing emissions. In 1989, the Dutch government published the first National Environment Policy Plan (NEPP₁) (Nationaal Milieubeleidsplan). The NEPP₁ focused on sustainable development, a notion elaborated in the Brundtland Report (1987). The objective of sustainable development is to ensure "a development that meets the needs

of the present without compromising the ability of future generations to meet their own needs" (Brundtland Report 1987 p. 43). To achieve this goal NEPP₁ introduced a systematic and integrated mid-term strategy for environment policy. With NEPP₃ published in 1998 the Dutch government deepened the integrated environmental policy approach. Integrated product policy (IPP) as a source-orientated instrument is part of this policy approach.

For the first time the Dutch government mentioned **product policy** as a distinguished environmental policy field in IEP (1987). In the National Environment Policy Plan Plus (NEPP+) (1990), a tightened up version of the first National Environmental Policy Plan, the importance of product policy stressed the need for "a sound product policy" (VROM 1990 p. 7) where an attempt is made to manage processes as an integrated whole. The Dutch Ministry of Environment's idea of product policy is "to bring a situation whereby all the market actors – producer, traders and consumers – are involved in an ongoing effort to reduce the impact which products have upon the environment" (VROM 1994 p. 8). The disclosure of good, reliable information regarding product-related environmental impact via self-regulation was stated as an important strategy for attaining this primary objective (ibid. p. 5). In this context eco-labelling schemes (e.g. Dutch Milieukeur, quantitative product information by producers) played a major role in promoting the efficiency and effectiveness of integrated product policy. That is that the demand side of the market i.e. consumers were judged as crucial actors in the area of product policy. The VROM intended to influence purchasing patterns of the consumer through encouraging environmental benign product information. In implementing this strategy, the government originally tried to identify good 'green' products versus bad products (Rowledge et al. p. 267). Subsequently an intensive debate between the different actors took place.

However, Dutch industry contested the government's strategic demand side approach arguing that the lack of a frame of reference within which consumers can compare various life-cycle impacts would result in a confusing market place (de Groot 1998 p. 1). The Dutch government gradually changed its position. In 1995, the Minister of VROM, Margaretha de Boer, stated that "the policy designed to encourage companies to reduce the environmental burden of their products will now be targeted more directly at companies themselves rather than via customers and extensive environmental product information" (VROM 1995 p. 11). The reasons for Dutch environmental policy shift did not address the concern that environment related product information cannot serve as an effective product policy instrument. They rather stressed methodological difficulties in providing and assessing reliable product information:

- "The problem of setting up such a labelling system had been underestimated. The question of what information to provide, on what aspects and in what units has proved a difficult issue.
- Consumer responses to product information, and the way in which they weigh up different items of information, are too unpredictable for companies to use them as a guide. If information is provided on two aspects of a product, and it scores better than another similar product on one, but worse on the other, then the choice depends on the consumer's personal preference" (VROM 1995 p. 3).

Hence the government encouraged product improvement primarily via supply side measurements i.e. promotion of environmentally-orientated product development and Ecodesign, promotion of product-orientated environmental management systems (e.g. ISO 14001, EMAS) and further development of methods regarding practicability of comprehensive 'lifecycle assessment' ('LCA-studies'). The Dutch government's ability to adjust environmental and product policy reflects its willingness to be truly flexible in the implementation of policies and programmes (Rowledge et al. p. 267). That is to say the government

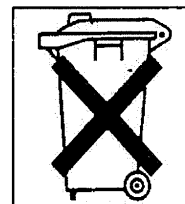
strives for a clear definition of environmental policy objectives, but as well lets the different stakeholders and target groups decide how to achieve them.

Although Dutch policy has undertaken a shift from demand to supply side, environmental product information still plays a role in The Netherlands which are presented in the following chapters.

3 Mandatory Labels

In The Netherlands as in other countries, compulsory labelling pertains mainly to *chemical substances* in order to ensure safety and healthiness of consumers using eligible products (Oosterhuis / van Scheppingen 1994 p. 73). The Dutch Chemical Substances Act states in art. 34 (1) that the importer or the one who makes the substance/preparation or product available is responsible for the appropriate packaging and labelling, if they belong to specific categories e.g. explosive, oxidising, flammable, toxic, corrosive etc. Subject to Art. 36 (1) the packaging of substances, preparation and products containing dangerous substances have to be labelled with the following information: chemical name of the substance, name and address of the manufacturer or importer of the substance, category as described in art. 34 (1), a reference to associated dangers of the substance (so-called risk i.e. R-sentences) and recommendation of safety measures (S-sentences). Moreover specific labelling and information requirements implementing the relevant EC directives apply to batteries containing mercury, cadmium or lead (EC directive 91/157) and pesticides which include the admission number of the pesticides and the name and address of the supplier.

With regard to consumer chemical waste the Dutch government introduced the **KCA-logo** (klein chemisch afval) obligation from the beginning of 1 July 1994 (based on art. 10 (4) of the Environmental Protection Act) for specific product groups e.g. batteries (except batteries to which EC directive 91/157 applies), fluorescent lights, thermometers containing mercury, oil filters, nail polish and removers, glues and cements, chemicals for photography, paint and paint products etc.



The intention of this label is to indicate to the consumer that it is of great environmental importance to keep these products separate from other household waste. The decree is considered as compatible with the general EC rules i.e. that there is no discrimination between national and imported goods (Oosterhuis / van Scheppingen 1994 p. 75). Recently the KCA-label has been renamed in **KGA-Label** (klein gevaarlijk afval) including now a wider scope of products considered.

Besides these mandatory labelling schemes for several product categories there are also regulations regarding specific product groups in The Netherlands. For instance the decree on performance requirements of central heating boilers which obliges the producer to attach the **CE-mark** on boilers of the approved type (implements EC directive 92/42). Regulations based on the Noise Nuisance Act state that demolition hammers, power generation units, lawn mowers etc. have to be equipped with a **label indicating their noise production**. For the so-called 'white goods' i.e. household appliances such as freezers and refrigerators, washing machines, dishwashers etc. the Dutch government implemented the EC Framework Directive 92/75 which regulates an **unitary energy label** for big household appliances demonstrating via different energy consumption categories the efficiency of the machine. Since October 1996 the label is obligatory for washing machines, dryers, refrigerators and freezers. The task aims for transparency and comparability between product groups.

Compulsory **declaration of contents** is mainly limited to specific product groups and is often accompanied by obligatory **advice for use and disposal** of the product. Detergents and cleaning agents, for instance, have to indicate on their packaging the active substances as well as the amount of detergent to be used taking into account the hardness of water. Similar decrees obliging the producer to publish the **active substance and safety recommendations** exist for dangerous substances, pesticides and smoke detectors containing radio-active substances.

4 Voluntary Labels

The Netherlands show a large variety of different voluntary labelling schemes (cf. a sample in Table 4.1). The scope is from 'traditional' quality marks emphasising particular technical aspects to single issue and product group orientated ecolabels, and labels which take the whole life cycle into account. To systematise product labels they can be distinguished by their sponsoring and participating actors (UNCTAD 1999 p. 12). Labelling schemes that are financed by governments and in which public authorities participate can be described as 'official labels'. Environmental and other non-governmental organisations also began establishing their own labelling schemes to guarantee a high level of independency and credibility. Moreover, umbrella organisations like industry association etc. or individual firms initiated product label marks by themselves.

Table 4.1: Labelling Schemes in The Netherlands

Label (year of introduction)	Product group	Environmental related criteria	Environmental criteria specification
Gaskeur (1992)	central gas systems	partly	single issue (low consumption)
Keurcompost (1992)	GFT-compost	yes	multi issue (pollutants)
KOMO (1988)	construction products	no	quality mark
Proefkoneen (1991)	cosmetics	partly	single issue (no animal experiments)
KEMA-Keur (-)	electronic appliances	no	quality mark
MPS (1993)	flowers	yes	multi issue (environmental, social)
Demeter (-)	food	yes	multi issue (biodynamic production)
EKO (1985)	food	yes	multi issue (organic production)
V-keurmerk (-)	food (vegetarian)	no	no meat products
CPE-keurmerk (1990)	food (eggs, poultry)	no	quality mark
Grasei (-)	food (eggs)	partly	single issue (no antibiotics)
PVE / IKB (1996)	food (pork)	no	quality mark
De Groene Weg (1981)	food	yes	multi issue (organic production)
Max Havelaar (1988)	food (tropical)	partly	multi issue social / environmental
GIVEG-(HR) (-)	gas appliances	partly	single issue (low consumption)
Kringloop symbol (1970)	several	yes	single issue (recyclebility)
Milieukeur (1992)	several	yes	multi issue (pragmatic LCA approach)
Goedgekeurd Keurmerkinstuut (1926)	technical appliances	no	quality mark
EKO-seal (1995)	textile	yes	multi eco and social issue (e.g. no child labour)
FSC (1994)	timber	yes	multi issue (sustainable forestry)
ECOHOUD (1997)	timber	yes	multi issue (sustainable forestry)
KIWA (-)	water supply products	partly	quality mark (water saving)

The increasing world-wide voluntary eco-labelling activities are also a topic of the International Organisation for Standardisation (ISO) which strives for systematisation of environment related product information. Its Technical Committee 207 developed three types of voluntary labels: Type I (ISO 14024) refers to criteria-based certification programmes, Type II (ISO 14021) describes self-declared environmental claims and Type III (ISO 14025) applies to quantified product information that is based upon independent verification using present indices. Thus, in its environmental labelling differentiation ISO does not cover instruments like obligatory labels, test reports or trade marks.

4.1 ISO Type I Labels

ISO-type I labels are defined in ISO 14024 norm published in April 1999 as a voluntary, multiple criteria-based third party programme that awards a licence permitting the use of environmental labels on products. These indicate the overall environmental preferability of a product within a particular product category based on life cycle considerations. These labels provide qualitative environmental information. However, the findings of so-called ISO type I labels in The Netherlands resulted difficult to attribute to ISO 14024. Therefore we subdivide the norm in the following categories:

- *'Classical' ISO type I approaches:* third-party labels referring to the standard – explicitly/implicitly – in a comprehensive manner.
- *Other third-party, ISO type I like labelling:* third-party labels containing major elements of the ISO type I standard (e.g. third-party verification, multiple criteria based)

4.1.1 'Classical' ISO Type I Labels

4.1.1.1 The Dutch Eco-label Milieukeur

In The Netherlands, the *Milieukeur* is the overall and general 'official' label according to ISO Type I. Responsible for organising the national ecolabel is Stichting Milieukeur, an independent foundation created in 1992 by the Ministry of Housing, Spatial Planning and Environment (VROM), and the Ministry of Economic Affairs. In the Panel of Experts, the decisive body of the foundation all relevant stakeholders are present i.e. representatives from industry, consumer associations, environmental associations, retailers and government. Prior to the establishing of the Dutch Ecolabel, the government had published the Environmental Advertising Code to prevent misleading environmental advertising claims.



Stichting Milieukeur as the owner of the seal-of-approval, is responsible for determining the product groups and the guidelines, and supervises the use of the label. Besides the national ecolabel implementation, Stichting Milieukeur although executes the EU-eco-label inside The Netherlands.

Objectives and History of Third-Party-Eco-labelling in The Netherlands:

The motivation for the government to establish the Milieukeur hallmark in The Netherlands was to provide the consumer with reliable information about the environmental impact of products in order to stimulate the

purchase of less environmentally harmful products. The government pursued the following objectives:

- to assist consumers to be more environment-conscious when purchasing products by means of simple and reliable product information, namely the Milieukeur hallmark,
- to combat the proliferation of first-party environmental information or labels,
- to act as a stimulus for producer innovation,
- to create a shift in the products on offer in the shops to a more environmentally friendly direction by stimulating demand (VROM 1998 1).

The Stichting Milieukeur is divided into four organs, the Panel of Experts (College van Deskundigen), the Supervisory Council (Raad van Toezicht), the Board (Bestuur) and the College for Appeals (College van Beroep) which co-operatively manage the eco-labelling procedure. Unlike other national ecolabel organisations it is the Panel of Experts, and not the Board, that is the most important body consisting of representatives of the government, manufacturers, consumer groups, environmental groups and retailers (cf. Figure 4).

The Panel gathers a wide-spread knowledge from its various members. Technical knowledge to implement the criteria is given from outside by the Committee of Experts, a body where researchers and engineers particularly from the producer's side participate. Through detailed and thorough discussions the Panel of Experts then determines award criteria. The Board finally decides about the Panel's draft with yes or no, but in reality endorses the Panel's proposal. Thus, the higher importance of the Panel of Experts against the Board is obvious. The College of Appeals hears complaints about the Stichting Milieukeur's decisions.

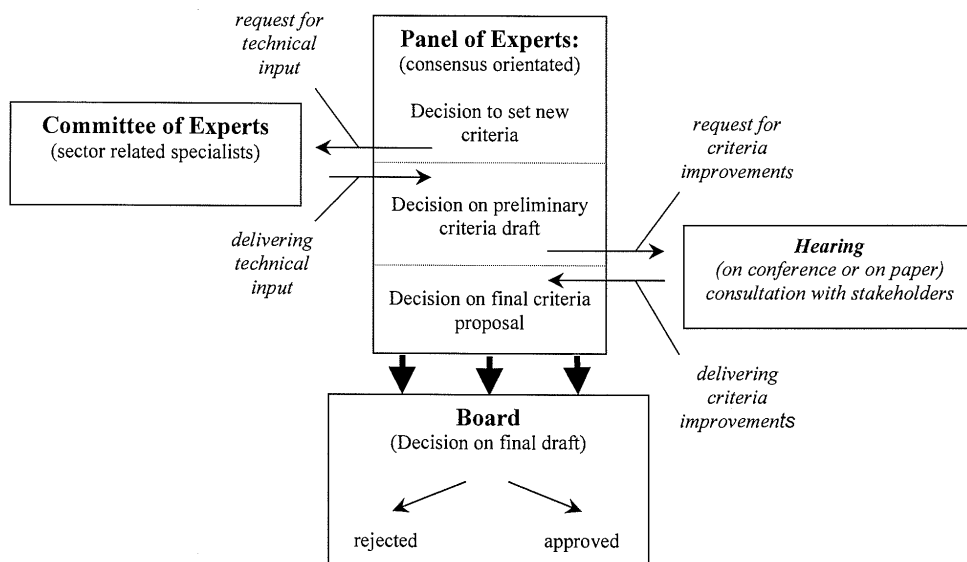


Figure 4: Criteria-setting process in the Dutch Milieukeur scheme

The finance of the foundation was subsidised a 100 percent in the very beginning of 1992 by both the Ministry of VROM, and the Ministry of Economic Affairs. In each following year a decrease of governmental support was intended, so that Milieukeur should be fully self-financing in 1997. However, as financial expectations failed, Stichting Milieukeur is, and will be in the near future almost 100 percent financed by the government due to high costs of labelling proceedings and advertising.

The Procedure of Labelling:

The procedure of third-party labelling involves two principle measures:

- defining a product group
- setting environmental criteria for specific products.

Anyone can submit a request to Stichting Milieukeur for a creation of a new product category. But a new product group will only be defined, "if sufficient environmental gain may be realised within that product group" (Stichting Milieukeur [no year] p. 8) – and if the market asks for it. Even though specific guidelines for product group definition don't exist and the Board decides each request on a case to case basis, other aspects influence their choice: consumer perception, market penetration, price, quality and functional aspects (Øllgaard et al. 1998 p. 16). Any consumer products both for the home and business market are eligible. In 1995 Stichting Milieukeur began developing product groups in the food sector. Only pharmaceutical products are excluded from the eco-labelling scheme because legally binding regulations on product information for this product group already exist.

The sets of requirements for specific product groups are fundamental in third-party labelling schemes. The product criteria are the principle and verifiable threshold for products receiving or not receiving a label. The general guidelines of requirement setting have to consider on one hand the environmental impact of products. The reliability of eco-labelling on the purchasing side depends to a great extent on the analysis of a product's environmental attributes. On the other hand manufacturers and retailers have to be able to implement the criteria under economic cost / benefit restrictions. Stichting Milieukeur follows two principles for establishing ecolabel requirements (Giezeman / Verhees 1993 p. 3)

- The sets of requirements for the environmental label have to be based on an analysis of all aspects during all stages of a product's life. Only that way the consumer will get what he had been promised and the label will be an effective and efficient instrument.
- The standard always has to be sufficiently high, so that only a limited number of products should be able to receive the ecolabel. This is the only way to give sufficient content to the innovative effect of environmental labelling.

These principles determine the Dutch methodology for criteria setting. A program's evaluation method is one of its most important features, reflecting the scientific basis, data sources and assessment on which label award decisions are carried out. Moreover, the methodology applied for setting product group criteria plays a fundamental role in explaining differences between the several European national eco-labelling schemes. As a tool for assessing the environmental impact of products the LCA has been developed. LCA is a 'cradle-to-grave'-approach, which considers all steps in a product's life cycle – extraction, production, use and disposal – regarding its environmental impact. The Dutch eco-labelling body strives to examine as far as possible the damage caused to the environment at each stage of the product's life e.g. in the raw material

phase, the production phase, transportation, and packaging. Stichting Milieukeur has applied a self-developed 'LCA-matrix', which covers a large variety of environmental related basic aspects (raw material, energy consumption, emissions, nuisance, waste, recyclability, repairability and technical life of a product) (see the LCA-matrix in appendix I). But nowadays, the LCA-matrix has been substituted by a software tool based on a Life-Cycle-Thinking approach.

In the first step the most relevant environmental effects of a certain product will be identified. The inventory makes clear at which stages of a product's life the environmental impact is obvious. That means that a complete detailed analysis of the product is not intended, because it is too cost intensive. The conclusions by external scientists of step one rather demonstrate on which basic aspects to focus attention for deeper study. In the following second step the product group related requirements and measuring methods of the selected environmental aspects are formulated taking considering as well the functional needs of a product. In step two of the analysis Stichting Milieukeur emphasises that environmental requirements both aim at the largest possible reduction of environmental damage and have to be within reach of the producers. Moreover, one product or brand for sale has to be able to meet the requirements or has to be able to be awarded the environmental label within the foreseeable future, although the functional quality has to be sufficient ('pragmatic approach'). The process of developing criteria usually takes on average one year. After fixing the requirements by the Panel of Experts and being approved by the Board they are then published and may be requested from the foundation by anyone.

Third-party eco-labelling is meant to be a dynamic instrument to influence both the demand and the supply side to take environmental impacts in their market behaviour into account. The applied product requirements which are the objective and verifiable basis of the awarding scheme therefore have to be adapted to new scientific and technical knowledge. That is that the criteria in practise are tightened continuously. On the other hand product-group guidelines have to be fixed for a period, so that manufacturers and retailers are able to adjust. Stichting Milieukeur's criteria are usually valid for a period of three years, before a revision takes place. A change of criteria before the planned revision is possible for both product groups where no label has already been awarded, and no awarded product groups.

Once product groups are defined and requirements are set the eco-labelling process continues with the application procedure. The applicant is responsible to supply information about the meeting of the requirements for a certain product (e.g. test reports, documents, declaration from the applicant or supplier etc.). If further test are necessary, Stichting Milieukeur only recognises accredited laboratories to independently certify the criteria fulfilment. On the other hand, if a product has already been awarded in other eco-labelling schemes and the criteria are similar, the application may be handled easier (Øilgaard et al. 1998 p. 35).

Current Status and Future Perspectives of the Dutch eco-label:

The efficiency and effectiveness of third-party eco-labelling is most important for assessing eco-labelling schemes as useful environmental policy tools. Efficiency of eco-labelling refers primarily to cost-benefit analysis of economic calculations, while effectiveness of eco-labelling covers the ecological dimension. A successful eco-labelling scheme as a voluntary information instrument has therefore to be efficient on both the supply and the demand side. On the supply side the comprehensive and pragmatic LCA approach of the Dutch Milieukeur regarding the criteria setting has been stressed.

Stichting Milieukeur has elaborated and published criteria guidelines for 43 different product groups (PGs) in the non-food sector, although 10 of these have later been inactivated (cf. Table 4.2). The foundation

inactivates unsuccessful product groups, that is product groups where no producer has been interested in applying for an ecolabel. For the time being (January 2001) there are finally 33 PGs officially published where the Milieukeur hallmark is available.

Table 4.2: Quantity of product groups (PGs) in the Milieukeur and Blue Angel scheme
[Source: Calculated from RAL (2000), Stichting Milieukeur (2000a), letter of Stichting Milieukeur January 30, 2001]

	Milieukeur		Blue Angel
	non-food	food	non-food
No. of PGs ever elaborated	43	17	107 ¹
No. of PGs inactivated / cancelled	10	2	21
No. of PGs under development	6	3	no statement
No. of PGs where ecolabel is available	33	15	86
No. of PGs awarded ecolabel	24	14	68
Percentage of awarded PGs on total PGs where ecolabel is available	72.7%	83.3%	79.1%

¹ The German scheme subdivides sometimes a product group into two e.g. RAL-UZ 84a (Kläranlagenverträgliche Sanitärzusätze) and 84b (Kläranlagenverträgliche Spülwasserzusätze) which are in the table counted as two PGs.

For all of the product groups in the non-food sector, the criteria are based on the hurdle-principle, that means that each criterion of the requirements has to be fulfilled. In contrast to this, the product groups of the food sector are based on both principles, the hurdle and the scoring-approaches.

Currently, 38 PGs have been labelled and at least 164 individual products¹ have been awarded the Dutch Milieukeur. In Table 4.3, we present a list of awarded products and firms allowed to use the Dutch ecolabel; Table 4.3 is categorised according to the classification coded introduced by the Global Environmental Network (GEN) intending to compare ecolabels on an international basis.

About 1/3 of the awarded companies are companies from the food sector. 2/3 of the companies derive from the non-food sector. "Dominating" non-food sectors are paper products (20 firms), services (with 27 recreation parks), cat litter (14 companies) and producers of flowers and plants (14 companies). Obviously, some product groups for which eco-labels are available are seldom or not at all used.

In some cases, the Milieukeur awarded products have increased the market share of the products at stake. De Haes reports that cat litter, produced from waste organic material, increased its market share from 2% to 8% while carrying the Dutch ecolabel (de Haes 1997 p. 5). Moreover, cat litter is one of the most demanded product groups where producer apply for. For the time being 14 different companies advertise with the Milieukeur on their cat litter products. Other successful product groups where organisations have been awarded the Dutch Milieukeur are concrete paving bricks, concrete tiles, writing paper, residential recreation parks, flowers and plants, and the product grouparable products.

¹ In some cases it was not possible to get complete numbers for the amount of awarded products due to tricky calculation difficulties. That means that the indicated numbers are the minimum size.

Table 4.3: Quantity of awarded products and manufacturers according to GEN-structure (state: January 2001)

	Products	Remark	Firms	"GEN"-Code
Batteries	0		0	1100
Burners/Boilers	0		0	1200
Toilet chemicals	5		1	
Cleaning	5		1	1300
Footwear	>3	>+	2	1400
Clothing/Textile	>3	>+	2	1400
Concrete Building bricks and blocks	n.a.		6	1503
Linoleum	4		1	
Concrete paving bricks	n.a.		6	1503
Subfloors	0		0	1507
Construction/Building	>4	+	13	1500
Fertilizers (for garden and indoor use)	8		1	1603
Growing media	0		0	1603
Gardening/Agriculture	8		1	1600
Home Appliance	0		0	1700
Home Care Products	0		0	1800
Lights	0		0	1900
Office Equipment/Furniture	0		0	2000
Toner cartridges	0		0	2002
Office Supplies (not paper specific)	0		0	2100
Package/Container (not paper specific)	0		0	2200
Copying papers	6		3	2300
Writing paper	16		9	2300
Offset paper	0		0	2300
Toilet paper	2		1	2302
Adhesive labels	6		2	2304
Organizers	2		1	2304
Ring binders	2		2	2304
Writing materials	3		1	2304
Envelopes	0		0	2304
Hand dryers (paper)	2		1	2305
Paper Products	39		20	2300
Personal Care Products	0		0	2400
Recreation parks	n.a.		27	2500
Shoe repairers	0		0	2500
Services	>0	>+	27	2500
Solar-Energy	0		0	2600
Car care products	3		3	2705
Care products for carwash installations	n.a.			2705
Carwash installations	>40		1	2705
Vehicles/Fuels	>43		4	2700
Water-Saving	0		0	2800
Furniture	>6		5	2004
Furniture	6		5	n.d.
Non-food products:				
Bottom organic household waste bin	1		1	2900
Cat litter	18		14	2900
Chain forms	0		0	2900

	Products	Remark	Firms	"GEN"-Code
Cleaning and product recycling of industrial gloves	0		0	2900
Fire extinguishers	5		2	2900
Flowers and plants	n.a.		14	2900
Fire extinguishers	n.a.		3	2900
Playground equipment	n.a.		1	2900
Food products:				
Apples and pears	n.a.		2	2900
Apple juice	n.a.		2	2900
Arable products and arable farming	>20	>+	14	2900
Bread	2		2	2900
Flax	n.a.		1	2900
Flour	>11	>+	3	2900
Fruit vegetables	0		0	2900
Onions	n.a.		1	2900
Potatoes	n.a.		7	2900
Pork	n.a.		1	2900
Rye	n.a.		1	2900
Strawberries	n.a.		2	2900
Sugar beets	n.a.		1	2900
Wheat/barley	n.a.		7	2900
Winter carrots	n.a.		1	2900
Others:				2900
▪ Non-food product groups	>24		35	
▪ Food product groups	>33		45	
Total:	>160		152	
▪ Non-food product groups	>127		106	
▪ Food product groups	>33		45	

n.a. not available

>+ Reliable information on exact number of eco-labelled products is not available. The indicated number are the minimums.

To assess the efficiency of the Dutch labelling scheme the coverage of labelled PGs at the rate of the total PGs can be analysed. 69.7% of the PGs where an ecolabel currently is available have been awarded. Compared to the 79.1% of the German Blue Angel scheme which is generally judged a success-story (UBA 1998) the Dutch quota is still quite successful. But with regard to the amount of individual labelled products the German scheme, with its over 4,100 items carrying the Blue Angel, goes remarkably far beyond the Milieukeur scheme.

Even more striking is the fast and successful development in the food sector. Stichting Milieukeur launched the criteria setting for food related product groups in 1995. Since then 16 PGs have been elaborated while already 14 of them carry the Dutch seal-of-approval. The Dutch consumer can find the Milieukeur on agricultural and horticultural products like apples, bread, flax, flour, pork, potatoes, winter carrots etc. In the food sector the Milieukeur is aiming for 'integrated' farming methods taking into account, for instance, the limited use of chemical crop protection agents and artificial fertilizers including guidelines for cadmium and phosphate fertilisers, the use of energy and waste management. Thus, the Milieukeur lies in between organic farming which can be awarded with the SKAL-owned EKO-seal, and conventional farming. While the organic farming strives for a 'natural' form of production and forbids the use of artificial fertilisers and synthetic pesticides, the 'integrated' farming methods of Milieukeur allow a limited amount of artificial fertilisers. The ISO Type I labelling of food products undertaken by Stichting Milieukeur to provide the consumer with reliable information particularly in a sector where environmental information and labels extremely proliferate may be seen as a forerunner by other 'official' labelling schemes.

Besides the evaluation of the quantity of published and labelled product groups the performance of an eco-labelling scheme should also be analysed on the consumer side. After all, it is in the consumer's decision whether to purchase or not environmentally benign products. The level of awareness of the ecolabel among consumers, therefore, can be seen as an indicator to reveal the efficiency of the hallmark. Data published by Milieukeur itself state that in 1999 the proportion of consumers who spontaneously knew the name of the Dutch ecolabel increased from 13% to 22% and the rate of people knowing the name after being helped by the interviewers rose from 52% to 57% (Milieukeur 2000 p. 6), though nothing is said about the time period in which the increase of the ecolabel awareness took place. The foundation attributes the increase of the level of awareness among consumers primarily to their national advertising campaign carried out on TV. Compared to Germany, a study conducted by The Federal Ministry for the Environment states that 80% of the West Germans and 56% of the East Germans knew of the ecolabel Blue Angel very well (Bundesumweltministerium 1996 p. 26). Moreover, a survey revealed that 51% of the West and 30% of the East Germans claimed that they pay attention to the Blue Angel when shopping (UBA 1998 p. 18). Unfortunately no data are available concerning whether Dutch consumers, when making purchasing decisions, take the Milieukeur into account.

In recent years, for instance in Germany, public procurement politics became more and more important to encourage 'green consumerism' and foster the purchase of environment friendly products. In 1999, the overall German public demand for 'greener products' was estimated at approximately 13% of GDP (UNCTAD 1999 p. 29). With regard to the Blue Angel scheme, the German Federal Environmental Agency advises public procurers to prefer Blue Angel awarded products against non labelled ones when purchasing (UBA 1993 p. 48). In The Netherlands, NEPP+ (1990) proposed 'green' public procurement politics as a potential demand side approach to strengthen integrated product policy. Nevertheless, the Dutch public authorities are not advised on an official basis to select 'greener' products when purchasing although it has to be stressed that EU legislation limits the monitoring of national 'green procurement' legislation. Public procurement in The Netherlands so far does not play a major role in product policy. As an explanation one might look at the relatively small amount of individual labelled products that considerably restrict the purchasing choice in the market.

The market penetration of the Dutch ecolabel has so far been mediocre. The Ministry of VROM stated in 1998 that "the high expectations regarding the success of the eco-label were not met. There was no flood of applications for the label. The visibility in the shops of products bearing the eco-label is mediocre. The Eco-label Foundation initiated a great many certification programmes, but producers have not been very eager to apply for the label" (VROM 1998 p. 2).

However, what is the current status and future perspective of the Dutch ISO Type I hallmark? Are there specific difficulties or developments for Milieukeur?

In 1996, an interim evaluation took place to assess the performance of the ecolabel. The outcomes led to measurements to improve the Milieukeur in the market. Regarding the Foundation's internal procedure Stichting Milieukeur undertook a critical examination of the stringency of the product requirements and the number of requirements as well as a shift in accent from the development of new certification programmes to the promotion of the ecolabel among producers and consumers (ibid.). Representatives from the Ministry of VROM and Stichting Milieukeur confirmed the tendency to lower the level of the criteria guidelines to reach a better market-acceptance by the manufacturers, so the requirements will be easier to meet in the near future. Besides the environmentally related aspects, the focus of new criteria-setting is now to make sure that the requirements are within reach for suppliers. On the other hand the compliance of requirements

must not be too easy. The criteria for concrete paving bricks, for instance, are judged as too easily met, and will be tightened up in the near future. Moreover, it is intended to combine specific products which relate somehow to each other into one product group in order to prevent elaborating and publishing an innumerable quantity of product specific ones. While in the past, for instance, there existed a specific product groups for chairs (MK.9) running out in 1999, it was replaced by a certification schedule for furniture (MK.33) now including seats such as chairs (office, dining-room, garden, and canteen chairs), tables and desks, cupboards and shelves, beds, bedsteads and cots (excluding mattress), and worktops (e.g. kitchen sink units).

4.1.1.2 European Eco-label

External developments refer to the interaction between Dutch Milieukeur and other 'official' ecolabels mainly the EU-flower. There are tensions between the European and the Dutch eco-labels because the level of EU-criteria sometimes is judged as too low compared to the Dutch standard. Stichting Milieukeur regards the level of EU-guidelines for footwear, for example, as far too low to be compatible with the Dutch ones. With regard to the product group of paints the fixed emission standards set by the EU probably will not meet the requirements of the new Dutch Law for Work Circumstances. In the case of tissue papers, for instance, the EU-criteria allow substances which are for Stichting Milieukeur and Dutch consumer associations not acceptable. The initial goal when implementing the European Ecolabel was to harmonise the various national eco-labelling activities, and in the long run combine them under the umbrella of the EU-flower. This seems to be, at least for the moment, far from reach. Any future interaction, particularly between Milieukeur and the EU-flower, will be held merely on a product group related case-to-case basis.

At the moment, only one Dutch company is allowed to use the European eco-label, namely the company "Conviro milieu-produkten bv" for its soil improver². In general, there does not exist much enthusiasm about the EU eco-label in The Netherlands.

Recently, a research project on behalf of DG Environment examined the possibilities to support the European eco-label in The Netherlands focussing on electric appliances and green-design. Although the project is still underway, some interim results are available (Brezet et al. 2000) proposing a three-fold option box: a) creating public interest in the EU-eco-label by a communicative approach ("pull-strategy"), b) introducing some voluntary incentives, e.g. financial incentives ("push-strategy"), and c) developing some regulatory prescriptions.

4.1.2 ISO Type I Like Labels

4.1.2.1 The EKO-seal

Similar to Milieukeur is the **EKO-seal** of the non governmental organisation SKAL which covers product groups like food, textiles, essential oils and soap. SKAL bases its criteria guidelines on organic production as outlined in EEC Regulation 2092/91. This means that the EKO-seal can be used on all organic animal and plant products which are produced in accordance with the EU Regulation. Awaiting the completion of the EU Regulation SKAL standards are still in place for processed animal products (e.g. milk, cheese etc.) and animal feeding stuff.



² It was told to us that this Dutch producer applies the EU eco-label for the French market.

The SKAL labelling procedure meets third party standards and its independency and credibility is acknowledged by the Dutch Accreditation Council (Raad voor Accreditatie). The EKO seal of approval guarantees the consumer a natural and environmentally benign product according to methods of organic production. So far, in the primary production 1100 companies are certified with another 250 in conversion. In the processing agricultural industry 850 companies advertise with the EKO-label. All in all 6800 products are labelled.

4.1.2.2 Other labels

The oldest label in the food sector is **Demeter** – named after the Greek goddess of the world's fertility – that has been a trademark for products of certified biodynamic production since 1927, inspired by the way of thinking of Rudolf Steiner. Demeter is an internationally operating organic association. A particularly Dutch food-label dealing with organic production is **De Groene Weg**, while the **V-keurmerk**, **Grasei** or **PVE /IKB Scharrelvarkensvlees**, for instance, rather emphasise in their criteria setting health and safety aspects (e.g. no antibiotics, size of chicken cages).



V-keurmerk



Graskeurmerk



PVE/IKB Scharrelvarkensvlees

With regard to the high importance of producing and exporting agricultural products there is also a special ecolabel for flowers, the **MPS hallmark** by The Netherlands "Milieu Project Sierteelt" (Floriculture Environmental Project). Its objectives are to reduce the environmental impacts of flower/plant cultivation and the improvement of the image of the sector. The awarding of an ecolabel is based on a scoring system. Participating growers are given a rating of A (best), B and C for crop protection, use of fertilisers, energy, and waste handling, so that the scheme covers production, grading, packhouse and cold storage.



The MPS label has so far been a success, thus in 1998 more than 6000 growers (more than 60% of the total) in The Netherlands participate in the project (CBI et al. 1998 p. 72).

In The Netherlands, many 'traditional' product label exist for technical appliances. On the one hand, labels like the **Goedgekeurd Keurmerkinstituut** that awards services and products (except in the food sector) or the **KEMA-Keur** labelling electronic appliances are primarily a quality mark without any environmental impact assessment. On the other hand, some quality mark labels like **Gaskeur** (central gas systems), **GIVEG-(HR)** (gas appliances) or **KIWA** (water supply products) include in their criteria environmental aspects (mostly energy saving).

4.2 ISO Type II Labels

In 1999, the Technical Committee 207 of the International Organisation of Standardisation published the ISO-type II norm covered by ISO 14021. ISO-type II refers to self-declared environmental claim made by manufacturers, importers, distributors, retailers, or anyone else likely to benefit from such a claim without independent third-party certification.

As in other countries ISO type II label are very wide-spread throughout different product groups. These labels have to respect the Marketing Control Act. Most of these ISO II labels are single issue orientated and imitate eco-friendly motives and design.

4.3 ISO Type III Labels

The labels analysed so far, i.e. labels more or less relating to ISO Type I and Type II, addressed particularly to the end consumer. In the business-to-business sector efforts are made to develop and voluntary use environmental labelling based on sets of common numerical indices. Such ecolabels are known as ISO Type III environmental declaration programs which must draw on quantitative data sheets from lifecycle analyses to allow a direct comparison of the performance of products and services. The developments of Type III labelling show a great variation in different countries. While in countries like Sweden Type III labelling is on its way of being embedded in legislation and some products are already certified, Germany and Japan began assessing the requirements for this type of ecolabels. In the German case the electronics and electrical equipment, textiles, and construction materials sectors were analysed (Grahl et al. 1999). In The Netherlands, representatives of both the Ministry of VROM and the industry association (VNO-NCW) reported that only in the construction material sector, environmental self-declaration exists – which is called *Milieu Relevante Product Informatie* (Environmental relevant product information) (MRPI); at the moment about 100 companies have been licensees to use the MRPI (see Wijnen 2000). But neither the government nor the industry is aiming for selected measures to encourage Type III labels so far.

5 Other Labels

5.1 Social Labels

The Netherlands is one of the pioneer countries having introduced the *Max Havelaar* label. The Max Havelaar brand is well known, 90% of the Dutch population knows the name. In 1993, Max Havelaar coffee was introduced, honey in 1995, bananas in 1996, tea in 1998 and orange juice in 2000. In 14 other European countries and in three outside Europe the Max Havelaar trademark has found a following. Nowadays, the market share of Max Havelaar-coffee is of about 3%.



5.2 Other Labels

No information available.

6 Conclusions

In the preceding chapters, environmental product information schemes in The Netherlands have been analysed.

The Dutch government has formulated its own national Integrated Product Policy-strategy. Interesting to notice that this strategy changed from originally a preference for demand-side measures favouring information as a key tool to a dominance of supply-side measures. Preferred and practised measures are initiatives like the product-oriented environmental management programme (POEM) and Eco-Design programmes. They all support business in its activities. Therefore, the orientation on the demand-side is of minor importance and also the preference for eco-labelling activities is not enthusiastic.

The inventory of product information indicated that mandatory labelling even in The Netherlands refers mainly to health and safety aspects. The Dutch government obviously does not apply national binding regulations to encourage production and sale of environmentally more benign products. Except when implementing EU-directives like the CE-mark or the EU-energy label, the Dutch government obliges producers and retailers to use product information.

As in other countries also in The Netherlands emerged a multitude of different environmental related product labels. In order to profit from 'green' consumerism different stakeholders like the government, non-governmental organisations, international organisations or industrial associations initiated their own scheme. Particularly in the food sector eco-labelling activities are widespread. In the business-to-business sector, the ISO Type III labelling is not of importance in The Netherlands with except in the building sector.

The more comprehensive study of the Dutch ISO Type I label, the Milieukeur hallmark, researched the institutional decision-making process, the procedure of defining product groups and setting of criteria, and the performance of the label in the market. The findings have shown that institutionally unlike in other labelling schemes the Panel of Experts is the most decisive body elaborating product group definition and criteria setting while the Board in practice almost every time endorses the Panel's proposal. The requirements for the different product groups in the non-food-sector are based on the hurdle-principle whereas in the food-sector both the hurdle and the scoring-approaches are applied.

The product groups elaborated by the foundation cover quiet common consumer goods like bicycle-tyres, car care products, envelopes, footwear and writing materials. Moreover, there are, at least compared to other 'official' labelling schemes, unusual PGs like cat litter, flower and plants, and since 1995 the opening of the scheme for the food sector.

However, an evaluation of the scheme's performance by the Dutch government showed that the high expectations were not met. Milieukeur with its approximately 300 individual labelled products does not have a decisive impact in the market, even if the share of PGs awarded an ecolabel on the total PGs published is quiet successful.

There are different possible reasons for the - at least current - failure of the eco-label: The most prominent reason is the missing active support of the government for the Milieukeur. IPP is oriented on supply-side measures and allocates a clear minor importance to the demand-side. Also Dutch companies are hesitating due to the small size of the Dutch market and to their international global/international or European orientation.

In addition to that, business pushed government in the nineties to change their IPP-strategy and has still today a clear preference for supply-side measures. Public procurement as an important demand group is rather decentralised; "green procurement"-activities started late, in 1999. In the meantime about 100 public authorities have signed voluntary agreements for a "green procurement".

To improve its market acceptance Stichting Milieukeur intends to lower the level of criteria, to combine functional similar product units in just one product group and tries to interact and harmonise with other national and international ecolabels as far as the reliability of its product information and the encouraging of production and retail of environmentally friendly products is guaranteed.

Also the greening of public procurement and clear links with the eco-label would support the diffusion of the eco-label and eco-labelled product on the market.

7 Literature

- Brezet, H. et al. (2000): Report on distributor oriented marketing of the EU Eco-label for electric appliances, Delft.
- Brundtland Report (1987): Our Common Future, Oxford.
- Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (ed.) (1996): Umweltbewußtsein in Deutschland 1996, Ergebnisse einer repräsentativen Umfrage, Berlin.
- CBI/DIPO/NORAD/OSEC/PROTRADE/SIDA (1998): Eco Trade Manuel: Environmental challenges for exporting to the European Union.
- Giezeman, H.G.M./Verhees, G. (1993): Ecolabelling: Practical Use of Cradle-to-Grave, Stichting Milieukeur, The Hague.
- Grahl, B./Rubik, F./Steinfeld, M./Schminke, E. (1999): Formalisierte und standardisierte Umweltinformationen für Produkte und Dienstleistungen, Heidekamp et al. (unveröffentlichte Studie im Auftrag des Umweltbundesamt).
- Groot, F. DE (1998): The Dutch Approach: IPP in the context of environmental management systems (unpublished paper).
- Haes, U. DE (1997): Slow Progress in Ecolabelling: Technical or Institutional Impediments? in: Journal of Industrial Ecology, p. 4-6.
- Øllgaard, H./Nielsen, C. (1998): National Ecolabels – Phase 2 – Workshop follow up, DTI Environment.
- OOSTERHUIS, F./SCHEPPINGEN, I. VAN (1994): Inventory of product policy instruments: Case Study The Netherlands, Berlin: IÖW-Schriftenreihe 72-NL/94.
- RAL [Deutsches Institut für Gütesicherung und Kennzeichnung e. V.] (2000): Umweltzeichen: Produkthanforderungen, Zeichenanwender und Produkte, Sankt Augustin (Ausgabe März 2000).
- Rowledge, L. R./Barton, R. S./Brady, K. S. (1999): Mapping the journey: Case Studies in Strategy and Action towards Sustainable Development, Sheffield.
- Rubik, F. (1995): Product Policy and the Environment: The Example of Eco-Labels, Schriftenreihe des Instituts für ökologische Wirtschaftsforschung (IÖW) No. 88/95, Berlin, Heidelberg 1995.
- Stichting Milieukeur (no year): Added Value for Products and the Environments, The Hague.
- Stichting Milieukeur (2000): Jaarverslag 1999, The Hague.
- Stichting Milieukeur (2000a): <http://www.milieukeur.nl/producenten/> (visited: 26.09.2000)
- UNCTAD (1999): Profiting from Green Consumerism in Germany, Geneva.
- UBA [Umweltbundesamt] (ed.) (1993): Umweltfreundliche Beschaffung: Handbuch zur Berücksichtigung des Umweltschutzes in der öffentlichen Verwaltung und im Einkauf, 3rd Edition, Wiesbaden, Berlin.
- UBA [Umweltbundesamt] (ed.) (1998): Erfolgskontrolle Umweltzeichen/Assessing the Success of the German Eco-label, Texte des Umweltbundesamtes 61/98, Berlin 1998.
- VROM [Dutch Ministry of Housing, Spatial Planning and Environment] et al. (1990): National Environmental Policy Plan Plus (NEPP+), The Hague.
- VROM [Dutch Ministry of Housing, Spatial Planning and Environment] (1994): Policy Document on Products and the Environment, The Hague.
- VROM [Dutch Ministry of Housing, Spatial Planning and Environment] (1995): Product and the Environment. The implementation of the product-oriented policy. Letter from the Minister of Housing, Spatial Planning and the Environment, The Hague.
- VROM [Dutch Ministry of Housing, Spatial Planning and Environment] (1998): The Dutch Ecolabel, The Hague (unpublished paper presented on the Green Goods Conference, October 1998 in Berlin)
- Wijnen, Henk (2000): From Experiment to Routine: State and Next Phase of Integrated Product Policy in The Netherlands. In: Ökologisches Wirtschaften, No. 6, p. 18-20

Eivind Stø

**Environmental Product Information Systems (EPIS)
in the Nordic Countries Denmark, Sweden and Finland**

Table of Contents

1	INTRODUCTION	204
2	IPP AND EPIS IN THE NORDIC COUNTRIES	204
3	MANDATORY LABELS IN THE NORDIC COUNTRIES	205
4	VOLUNTARY ENVIRONMENTAL LABELS	206
4.1	ISO Type I	207
4.1.1	The EU Flower	207
4.1.2	The White Swan	208
4.1.2.1	History of the White Swan	208
4.1.2.2	Development of Criteria	209
4.1.2.3	Current Status of the White Swan	211
4.2	ISO Type I like Schemes	214
4.2.1	The Falcon – Good Consumer Choice	214
4.3	ISO Type II	215
4.4	ISO Type III	215
5	OTHER LABELS	216
5.1	Social Labels	216
5.2	Other Interesting Labels	217
5.2.1	Recycling Labels	217
5.2.2	Organic Food Labels	218
6	CONCLUSIONS	219
6.1	Sweden	219
6.2	Denmark	220
6.3	Finland	221
6.4	Further Conclusions	222
6	LITERATURE	224
7	APPENDIX: LIST OF CRITERIA DOCUMENTS OF THE SWAN	224

1 Introduction

This article gives an overview over the environmental product information schemes in the Nordic members of the European Union: Denmark, Sweden and Finland. The main focus is put on the introduction and development of The Nordic White Swan, and this is the reason why we have chosen to present the three countries in the same article. However, the information and discussion in this deliverable, D10, is also relevant to the discussion in D 5, the EPIS in Norway. All the Nordic countries are a part of the Nordic eco label schemes and both the consumer policy and the environmental policy in the Nordic countries share many of the same values, goals and means. But there are also differences between the countries, and these will be discussed in each chapter, but also separately in chapter 6.

After the introduction we will in chapter 2 relate the EPIS in the Nordic countries to the more general product oriented environmental policy (IPP). The main focus in this report is put on voluntary environmental labels, ISO type I, II and III, presented in chapter 4. But we will also give a brief overview of the mandatory labels (chapter 3) and social and other interesting labels (chapter 5).

2 IPP and EPIS in the Nordic Countries

During the last years the environmental and consumer political authorities in the Nordic countries: Denmark, Finland, Iceland, Norway and Sweden have taken serious measures to develop an IPP-strategi in both the consumer and environmental policy in the five countries. Two major conferences have taken place (1998 and 2000) with participation from relevant stakeholders, and a draft document "IPP in the Nordic Countries" is now discussed by stakeholders.

In this draft document the Nordic IPP ad hoc group introduces the following measures (se also Dyekjaer, and Boye, 2000):

- Nordic co-ordination of IPP in juridical, technical and economic education on university level
- Further development of environmental product information schemes towards consumers and business, including ISO type I and ISO type III
- Changes in taxes and VAT-systems, towards green taxes
- Extended product liability , including the environmental impact of products
- Extended use of environmental impact in the international standardisation process, CEN/CENELEC
- Green procurement of consumables in public and private businesses
- Increased production and consumption of organic food
- The potential of information technology in IPP

When the IPP ad-hoc group discusses these measures, they emphasis both the need for Nordic co-ordination of this process, and the need for European and international solutions. The IPP-strategy has recently been discussed in governmental documents addressed to Nordic Parliaments.:

- In *Sweden* the IPP-strategy was presented Riksdagen in May 2000.
- In *Denmark*, a product oriented environmental program was discussed in 1998, and will be revised during 2000, proposing a program of 120 million DKK pr. year.

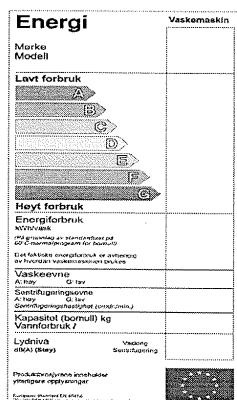
- In *Norway* the IPP-strategy was introduced in Stortingsmelding No 8(1999-2000) on Norwegian environmental policy and No 40 (1998-1999) on Consumer Policy. Both is discussed in the Storting last year.
- In *Finland* IPP has been integrated in the Ministries decision on sustainable development based upon Life Cycle Analysis, extended product liability and open information.

It is worth noting that the first Nordic conference had the title "Product Oriented Environmental Strategy (Produkt orientert miljø strategi – POMS). In the Nordic setting today, they are using POMS as synonym with IPP. But I see it, there has been significant development from a focus on products alone, to an integration of green goals and measures into an IPP that also includes the use of products and lifestyles of consumers.

3 Mandatory labels in the Nordic countries

Two kinds of mandatory labels are used in the Nordic countries: *energy labels and toxic labels*. The energy label is based upon EU directives (Directive 94/2/EC), implemented in the national laws. Denmark was one of the first European countries to make this implementation (January 1995). It is a mixture of symbols on the one hand and exact information about energy consumption, capacity, noise and use of water (if applicable) on the other. The symbols in the energy labels evaluate the performance of the product, according to European standards, in a scale from A to G, where A is more efficient and G less efficient.

Figure 1: EU- Energy label



In Denmark, Sweden and Finland this mandatory labels are found on :

- Washing machines
- Tumble dryers
- Combination washing-dryers
- Refrigerators
- Freezers
- Dish washers
- Lamps/light bulbs

Two relevant comments can be made to this energy label scheme. First of all, studies in the Nordic countries have shown that the mandatory energy label too often is not easy found on the actual products. It is either well hidden or not placed on the product at all. Secondly: to what degree can we trust this information? The producers themselves are responsible for the information given in the label. Consumer tests have shown that this self evaluation of the overall product performance in too many cases are wrong. In most cases the producers give a much more positive evaluation of their own product than the independent test institutions do. They may classify the product to A or B standard, but the results of the tests only conclude that it satisfies the C or D level. These results is also confirmed in recent European studies (Winward, Schiellerup and Boardman 1998) The consumer trust in labels in the Nordic countries are traditional very high, but these test results may affect the trust in energy labels.

The **toxic and health labels** are also based upon EU-directives, and implemented in the national product control acts. The Product Register requires information on all products that are classified in accordance with the Chemical Labelling Regulations if the quantity placed on the market each year is 100 kg or more. A declaration is also required for any product that is labelled because it may represent a fire or explosion hazard or be dangerous for the environment. The main existing labels in the Nordic countries are:

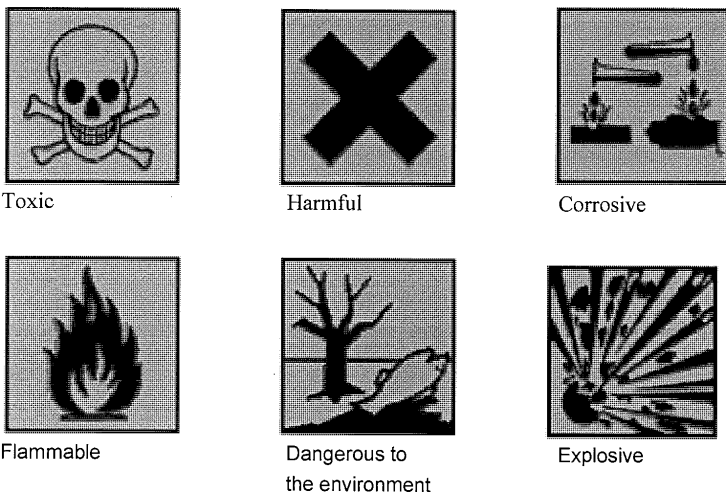


Figure 2: Toxic and health labels

In addition to these main symbols it is also possible to distinguish between toxic and very toxic and between flammable, highly flammable and extremely flammable. These information is given by special letter symbols or by special version of the pictures above.

4 Voluntary Environmental Labels

In this part we will distinguish between ISO-type I, II and III, and the main emphasis will be put on ISO type I. What are the significant differences between these three types?

- Type I describes criteria based evaluation and certification ,
- Type II is self declared environmental claims and
- Type III refers to quantitative scientific product information.

The main cornerstone of the EPIS in the Nordic countries is third party labels of ISO type I. But you will also find elements of ISO type II and III, and mandatory labels in the Nordic market. As far as ISO type I is concerned, it is fruitful to distinguish between the classical type I labels on the one hand and the labelling schemes that look more or less like type I, on the other. The EU flower and the Nordic White Swan belong to the classical type, while the Falcon (Bra Miljöval) belong to the type I like category .

4.1 ISO Type I

According to Wanhua Yang (1998), the third party, multicriteria program is the main stream of eco-labelling, both in Europe and world wide. The OECD report "Eco-labelling: actual effects of selected programmes" (OECD 1997) shows that the various eco-labels have mix experiences as far as market impact, trade effects and environmental effectiveness are concerned.

The three most important voluntary environmental labels in the Nordic countries are the White Swan the European Flower and the Falcon. The initiative to the White Swan was taken by the Nordic Council of Ministers, and they are still co-ordinating the process of the White Swan. However, the administration of the Swan is taken care of nationally, in slightly different ways in the involved countries. We will return to these differences later. The same national institutions are also the competent bodies for the EU Flower. The Falcon, "Good environmental choice", is run by the Swedish Environmental NGO, the Swedish Society for Nature Conservation (SSNC), and will be discussed more in detail in 4.2 ISO type I like labelling.

4.1.1 The EU Flower



The EU Eco-label scheme was established in 1992 by the European Commission, and is laid down in Council Regulation (EEC) No. 880/92.

The administration of the EU-flower in the Nordic countries is taken care of by the same competent body as the White Swan:

- Sweden: SIS Ecolabelling AB, as a part of the Standardisation organisation
- Finland: The Finnish Standards Association SFS is an independent, non-profit making organisation .
- Denmark: Eco-label secretariat within the dk-Teknik, a certified technological service institute
- Iceland: Icelandic Environmental and Food Agency
- Norway: Ecolabelling Norway, an official and independent institution

The EU flower plays no significant part in the EPIS in the Nordic countries, even though Denmark has been a part of the European eco-label system since the start in 1992. In all countries paint and varnish is the most common product group.

However, to a certain degree, you will find the EU-flower on more products in Denmark than in the other Nordic countries. In Denmark seven textile producers have marked some of their products with the EU-flower. In addition one producer within each of the product groups *refrigerators and freezers*, *textile detergents and dishwashing detergents* also are certified for the EU-flower. In Sweden there has also been refrigerators (DK) and washing machines (UK) on the market, but these have been withdrawn when the criteria was strengthened. Today computers are the only other product with the EU-flower in the Swedish consumer market.

4.1.2 The White Swan



The green label with the White Swan is based on the emblem of the Nordic Council. It was established by the Nordic Council of Ministers in 1989. Sweden, Norway, Finland and Iceland joined the White Swan in 1989-1991. Denmark in 1997.

The program is administered in Norway, Sweden, Denmark, Finland and Iceland by national boards organised under the Nordic Eco-labelling Board. The Board is organised under the Nordic Committee of Senior Officials for Consumer Affairs and also reports to the Nordic Committee of Senior Officials for Environmental Affairs.

In a Nordic setting The White Swan is the dominating third party label. Since 1989 the importance of the White Swan has increased significantly. More than 50 criteria has been developed, and number of licences is close to 800, with approximately 2500 products carrying the label. The White Swan is also well known and trusted by consumers, with some exceptions to be mentioned below.

4.1.2.1 History of the White Swan

The initiative to the White Swan was taken by the Nordic Council of Ministers, November 6.1989, inspired by the Brundtland Commission and the Blue Angel in Germany. Norway and Sweden joined the White Swan from the very start, Finland in 1990 and Island 1991. By then Denmark was the only member of the European Union, and they decided to give priority to the EU-Flower. However, Denmark joined the White Swan in 1997. The development of the Nordic Swan has taken place in four phases (Nordisk Miljømerkningsnemnd 2000):

The Starting Phase 1990-1991:

- In this phase they made crucial decisions on
- The formal procedure of establishing the White Swan
- Regulation of the Nordic co-operation between the national bodies
- Choice of criteria and products.

It is worth noting that the White Swan was inspired by the Blue Angel, but in the criteria discussion they expended the evaluation from the product to the production process, introducing LCA analysis. From the beginning, the choice of products was done in a dialog with both producers and consumers organisations.

The Development of Criteria 1992-1996:

In the first phase very few criteria was developed, in fact only four by the end of 1991. During the five years 42 new criteria was established. In addition, in the choice of products, more emphasis was put on the visibility of the White Swan. This decision lead to the first work with ordinary consumer goods.

Joint Nordic Planning 1996-1997

To a large degree the development of criteria had so far been nationally based. In this phase more emphasis was put on the co-operating between the national bodies, and the result was a joint plan for development of criteria and choice of products. In this plan the expansion from goods to service was introduced. In 1996 a joint Nordic Market Strategy was developed.

Joint Nordic Strategy since 1997

When Denmark joined the White Swan in 1997 it was possible to develop a joined Nordic strategy, and this was adopted in 1999. In this strategy document you will not only find development of criteria, choice of products, licensing and marketing of the White Swan, but also discussion about environmental philosophy, organisation and ethical rules.

In this last phase the White Swan has expended in many direction: number of licences, number of products, market shares, knowledge among consumers and the expansion of independent eco-labelling bodies.

Alain Nadal (1996) has identified two phases in the eco-labelling process: *the negotiation phase* and *the market phase*. His study shows that the strategies undertaken by industrial firms both during the negotiation and the market phases varies from one product group to another. In some cases the entire industry co-operates with the eco-labelling institutions, while in other cases there are confrontation between the industry and the eco-labelling bodies

4.1.2.2 Development of Criteria

Nordic environmental labelling is common to Denmark, Finland, Iceland, Norway and Sweden. The work in the various countries is co-ordinated through the Nordic co-ordination body which decides on a common set of rules for Nordic environmental labelling. The co-ordinating body determines matters such as the product groups and the criteria that shall apply to environmental labelling. The eco-labelling process starts with choice of product groups. This strategic choice is based upon :

- A qualitative and quantitative evaluation of the environmental impact of the product group
- the potential of environmental improvement within the product group
- the need of consumer information within this product group
- the industry's interests in eco labels in the actual group
- the cost of criteria development
- market analysis in the Nordic consumer market

There is no general rules of the priority of environmental problems to be addressed in the development of criteria. These problem is discussed within each product group. The process starts with choice of relevant environmental parameters and choice of scientific level. In this process two phases are worth noting. First of all the dialog with the scientific community in expert groups. Secondly the hearing process, where the draft criteria is discussed with relevant stakeholders in industry, retail business, environmental organisation and consumer organisations.

The concrete development of criteria is based upon many of the same considerations as in the choice of product groups. The main consideration is the environmental impact of the product group, the potential of environmental improving, and the market potential. In this process LCA evaluations are used to identify where the environmental impact of this particular product group is largest.

The decisions taken in the co-ordinating body must be unanimous. Draft criteria are drawn up by inter-Nordic expert groups consisting of initiated persons from state authorities, environmental organisations, trade, industry, etc. The proposals are circulated for comments before being finalised by the Nordic co-operating body. When the criteria document has been authorised, companies may apply for licences for products within the group. The secretariats of the various countries handle the licence applications and issue licences.

It is worth noting that LCA analysis constitute an important part of the criteria development in the White Swan from the very start. It is not only the product in itself that is labelled, but the production process and the environmental impact through the whole life of the product. This is (probably) a significant difference from the Blue Angel. The criteria of the White Swan are developed more along the same lines as the EU-Flower.

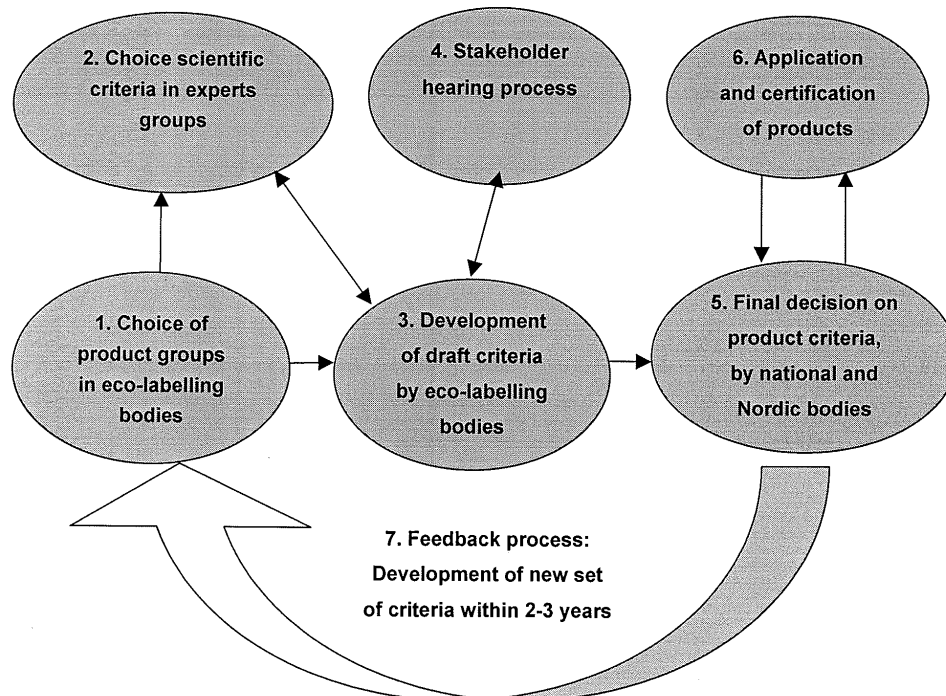


Figure 3: The Nordic Eco-labelling process

It has been important to choose product groups where the consumer choice in the market matters to the environment, and where the symbolic effects have been strong. However, within the Nordic White Swan institution they have not been willing to develop criteria within product groups that overall are believed to have large negative effect on the environment, even though there are significant differences between the products. Cars is one typical example of such a product. Cars can not become eco-friendly, and label on the best cars, - as far as energy is concerned - will therefore destroy the trust of the eco-label among stakeholders.

We will also emphasise the importance of the market and market conditions in the criteria development of the White Swan. The success is not only related to the development of criteria for new product groups and number of licensed products, but also the number of actual products in the shop and market shares of the eco-labelled products.

4.1.2.3 Current Status of the White Swan

By April 2001 the Nordic White Swan had adopted 55 criteria, and 1015 products were licensed. One licence can be used to produce several products, and this is special the case for paper products and household chemicals. The total number of products is more than 3000, and close to 800 firms are involved in the White Swan. Table 1 gives the current status of the White Swan by April 2001. A lot of different groups carry today the White Swan: Batteries, Office equipment, Paper products, household chemicals, personal care products, car care products, shampoos and – to a certain degree: textiles, home appliances and services.

The main products are:

- household chemicals with 209 licences and 415 products
- paper products with 133 licences and close to 2000 products
- printed matter with 494 licences
- office equipment with 29 licences and more than 300 products

In table 1 we will emphasise the large number of printing-works – 494 - in the Nordic countries taking part in the White Swan. The majority of these firms are Swedish (290) and Danish (138), while only 25 are Norwegian companies. Secondly, 59 paper production firms have applied for 89 licences, and within these licences more than 1500 different products are available. It is also interesting to note that 27 hotels have labelled their services with the White Swan, 23 in Sweden and 4 in Norway, and the hotel services is a growing sector in the Nordic eco-labelling scheme. At last we will draw the attention White Swan licence number 1000: the car washing facilities at the Swedish Statoil Detalist in Umeå.

It is also worth noting that 16 of the 55 criteria groups have no licenced product by April 2001. The **Zero-product** groups are:

- | | |
|--------------------------|-----------------------|
| ▪ Wall coverings | ▪ Light sources |
| ▪ Windows | ▪ Diapers, washable |
| ▪ Small heat pumps | ▪ Lubricating oils |
| ▪ Composters | ▪ Marine engines |
| ▪ Correcting agents | ▪ Passenger car tyres |
| ▪ Refrigerators | ▪ Packaging paper |
| ▪ Dishwashing machines | ▪ List of chemicals |
| ▪ Audio-visual equipment | |

It is also worth noting that no criteria is developed for painting. Since 1996 only 7 new criteria has been adopted. Resources have been used to develop new criteria for "old" product groups. Today new criteria are discussed within the product groups: Detergent for textiles, Hand Dishwashing detergents, writing instruments and Female sanitary products. However two new criteria is also discussed for burning of solid biofuel in local combustion appliances and laundry businesses.

Table 1: The Nordic White Swan (Status April 5, 2001, 55 criteria, with 16 zero groups)

Product name	Product Groups	Firms	Licences	(Products)
Batteries	2 Batteries, Primary	8	11	116
	Batteries, Rechargeable	4	5 16	35
Burners/boilers	1 Oilburners	1	1	3
	Oilburners/boilers combinations	4	4 5	13
Cleaning	6 All Purpose cleaners	17	51	125
	Automatic Dishwashing detergents	18	25	30
	Detergent for sanitary facilities	16	32	67
	Detergent for textiles	16	66	130
	Floor care products	10	17	30
	Hand Dishwashing detergents	13	18 209	33
Clothing, Textiles	1 Textiles	1	1 1	3
Constructing/building	5 Building boards and panels	9	9	44
	Floor Coverings	5	6	42
	Adhesives	5	7	26
	Wooden furniture and fitments	6	6	53
	Closed toilet system	3	4 32	6
Gardening/agriculture	3 Compost bins	9	9	13
	Lawnmowers	2	5	21
	Wooden outdoor furniture	1	1 15	2
Home appliances	1 Washing machines	2	3 3	9
Home care products	?			
Lights	0		0	
Office equipment	5 Copy Machines	4	8	30
	Faxes and printers	1	1	8
	Personal computer	2	2	17
	Toner cartridges	15	15	250-300
	Writing instruments	3	3 29	8
Office supplies	?			
Package/container	0		0	
Paper Products	6 Coffee filters	5	5	47
	Grease proof paper	1	1	4
	Kitchen and toilet paper	16	30	250-300
	Paper envelopes	7	8	40
	Printed matter	494	494	>494
	Printing paper	59	89 627	>1500
Personal care products	3 Shampoo and soap	8	11	68
	Female sanitary products	1	1	6
	Disposable diapers	1	6 18	34
Services	3 Car wash facilities	1	1	1
	Hand towel systems	3	3	6
	Hotels	27	27 31	27
Solar energy	0			
Vehicles/Fuel/ car products	1 Car care products	12	24 24	81
Water saving	0			
Other products	2 Industrial cleaning agents	4	5	15
	Agent for spreading on icy roads	1	1	4
Total	39 product groups	(815) ¹	1015	>3000 ²

The expansion of the White Swan has been in number of licensed products and in market shares. The Nordic Council of Ministers has carried out an evaluation of the ten first years with eco labels. According to this study, the market shares varies a lot from one product group to another, and from one country to another.

¹ Some of the firms produce product within several product groups, and the correct number will be significantly below 800.

² The number depends upon how a product is defined, within the paper industry and the chemical industry the differences between some of the products are very small.

Table 2: White Swan market shares for different countries³ and products (The Nordic Evaluation of the White Swan Part A, Annex 8, Stockholm 2000)

	10%	10-40%	40-70%	<70%
Batteries		D,I,N	F,S	
Freezers	D,N,I,F	S		
Detergent for the house		D,F,I	N,S	
Detergent for textiles	D,I,	F	N	S
Printing paper			I	D,F,N,S
Printed matter	I,N,	F	D	S

This table shows that the market shares for eco-labelled products is largest in Sweden, for all product groups. The figures for Denmark tells us that they joined the White Swan as late as 1997, this is the main reason behind the low market shares for many product groups. However, Denmark is the country with the largest increase in eco labelled products during the last two years, and the potential for eco-labelled products are reasonable high. This has to do with the fact that Danish consumers are among the most environmental conscious consumers in the Nordic countries. Studies have shown that Danish consumers are more concerned about the environment than consumers in the other countries (Nordic Council of Ministers 1999: p 25).

Various studies has shown that consumer knowledge about the White Swan increased dramatically during the 90ties. Today more than 80% of consumers in Sweden, Norway and Finland recognise the White Swan as the Nordic eco-label. The figures varies from one study to another, dependent on the design of the research. Denmark and Iceland have a significant lower knowledge than the other countries. The knowledge increases with education and income, and decreases with age in all countries

In Denmark and Sweden consumers also to a large degree recognise the label for organic food, but this is not the case for Norway. The EU-flower is not recognised in the Nordic countries, not even in Denmark.

The consumer trust in the White Swan is reasonable high in Norway, Sweden and Finland. However, in Finland the White Swan has "competition" from the Blue Swan, a national country of origin label. Data from Finland indicates that this Blue Swan confuse consumers in the market. In Denmark the trust in the organic label – the red Ø – is higher than the White Swan (Nordic Council of Ministers 1999: p 55), but the situation in Denmark is changing rapidly.

³ S=Sweden, D=Denmark, I=Iceland, F=Finland, N=Norway

4.2 ISO Type I like Schemes

4.2.1 The Falcon – Good Consumer Choice



The good environmental choice (bra miljöval), with the Falcon label, is run by the the Swedish Society for Nature Conservation. It started the work as early as 1988, and the Falcon was launched in 1992

The Falcon – *good environmental choice* – was launched in 1992, but the Swedish Society for Nature Conservation (SSNC) started the work with development of eco labels as early as 1987. They started with laundry detergent and continued with batteries. It is worth noting that the newest product groups are electricity supplies and transport. This indicates a significant shift in the development of criteria from goods to services.

Today SSNC is involved in thirteen product groups:

- Laundry detergents
- Stain removers and bleaches
- Cleaners
- Toilet cleaners
- Dishwasher detergents
- Washing-up detergents
- Soap and shampoos
- Paper
- Nappies and similar products
- Textiles
- Electricity supplies
- Passengers transport
- Goods transport

There is no zero groups, this means that you will find the Falcon in the market for all the 13 product groups in Sweden, and for some of them also in other Nordic countries as well. The largest product groups are (April 2001):

- | | |
|---|-----|
| ▪ Chemical products for the house and personal care | 809 |
| ▪ Paper | 27 |
| ▪ Sanitary products and diapers | 14 |

▪ Textiles	14
▪ Electricity	69
▪ Transport:	22
▪ Shops	37

The product groups is very similar to the groups of the White Swan. The biggest difference between the two schemes lies in the way eco-labelling decisions are reached. In the Falcon case the Swedish Society for Nature Conservation *alone* decides how the criteria are drawn up and which goods should be eco-labelled. Within the White Swan scheme, decisions are made by the Nordic eco-labelling committee, which gives each country a voting right and also includes representatives of the industry and other relevant stakeholders. There has been a competition between the Falcon and the White Swan in the Swedish and also in the Nordic consumer market. However, today there are more signs that the to label support each other.

4.3 ISO Type II

ISO-type II includes self-declaration labels, made by the manufactures themselves, such as recycling labels. You will find type II labels in the Nordic market, but they play only a minor part in the communication between producers and consumers. The reasons for this is the White Swan and Nordic Marketing Control Acts. The Nordic consumer policy is developed along the same lines in all countries, and the Marketing Control Acts plays an important part in this policy. It is very difficult to claim that products are eco-friendly, you have to prove it. And the best way to prove it is by third party eco labels! However, on some product you will find a kind of "environmental fact" labels. They are not claiming to be more eco-friendly than other products, but there are reasons to believe that this is the message they communicate to consumers. At least consumers get confused. These "environmental fact" labels have element of ISO-type III.

4.4 ISO Type III

ISO-type III refers to environmental performance labels, with contains detailed information about the product. The process to develop EPD – Environmental Product Declarations – has started in the Nordic countries, and Sweden has taken the lead. The EPD is developed within the ISO TR 14025. An international network is established with representation from Canada, Japan, Korea, Germany, Switzerland, Denmark, Norway and Sweden. It aims at providing and displaying *quantitative environmental information* from manufacturer or supplier, based on *LCAs* and controlled by an *independent body*. There are reasons to believe that this mainly will be used as a business to business communication. The industry need this information. On the other hand, for some large consumer goods this could also be relevant information to consumers.

Type III schemes, mainly for business to business communication, are about to be introduced in the Nordic countries where both Sweden and Denmark have been active (Hansen et.al. 2000). By EPD's, raw materials and semi-finished products and parts are considered, This means that more extensive projects and whole corporations will be able to deliver vastly improved environmental audits. EPDs are available for products like office chairs, 25 litre plastic cans, 1 square meter of natural gas, a ton of cement, a length of concrete sewage pipe etc. We believe that business demand for such information is increasing, even though environmental aspects still are clearly subordinate to price for professional buyers. If business in the future aims at labelling larger entities than isolated products and services, like tourist resorts, hotel chains, pre-fabricated

dwellings etc., such EPDs or ISO Type III labels will be helpful, or even necessary for supplying sound environmental information to the public.

Through the "NIMBUS" project, Norway, Sweden and Denmark are seeking to co-ordinate layout and organisation of EDPs in the Nordic countries. According to Frankl and Pietroni (2001) the guideline of the EPD systems contain:

- General information about the EPD system and its objectives,
- Technical information about the role of companies, the rules to carry out the LCA study, the role of verifiers;
- The involvement of the stakeholders
- The format and Communication of the EPD
- The procedures for the establishment of the EPD scheme

And according to the guidelines, three main information have to be contained in an EPD, i.e:

- Description of the company/organisation and of the product or service
- Environmental Performance Declaration
- Additional Information from the company/organisation and certification body (with the possibility to include a recycling declaration)

5 Other Labels

In the Nordic consumer market you will find a number of other labels, some of them give information about social and political aspects of the product, other deals with organic food, and at last several labels give information about the possibility to recycle the package of the products.

5.1 Social Labels

Fair trade labels exists to help producers of tea, coffee, cocoa, and bananas in the south to receive a fair share of their trade. The argument behind fair trade labels is that the main cause for underdevelopment can be found in the existing world trade practices. For survival and development most Third World countries depend on exports of raw materials. While the prices of these raw materials on the world market are systematically decreasing, the prices of the goods these countries import from the industrialised countries are increasing. The principle victims of these price falls are the producers, and especially hundreds of thousands of small producers. They lack the capital to survive economically and for whom the consequences are even worse since they lack direct access to the market, but depend on intermediaries to sell their products. Conscious of this unfair and unequal situation, more than 15 national Fair Trade labelling initiatives has developed. They are looking for ways to contribute to the solution of these problems.

Fair trade labels are found in all the four large Nordic countries. In Denmark, Finland and Norway the fair trade label is linked the Max Havelaar institution, using the elephant as symbol. In Sweden the fair trade organisation is called the Association for Rättvisemärkt, and they have developed their own label.



Max Havelaar label in Norway, Denmark and Finland:



Fair trade label in Sweden

The fair trade organisation *in Sweden* was founded 1996 and is a part of the international organisation FLO, Fair Trade Labelling Organisations International. Today you can buy Rättvisemärkt coffee, cocoa, tea and bananas in Sweden through the three retail chains HEMKÖP, ICA and KF.

FLO Finnish office, *the Finnish Fair Trade Association* (Reilun kaupan edistämisyhdistys ry.) was founded in March 1998 by six NGOs and grassroots organisations. Later on, the association has got more members including some trade union organisations. Two of the big roasters and the most important supermarket chains in Finland have brought the Fairtrade produce into mainstream retail. Ten different fair trade certified coffee brands, seven tea brands and bananas are available in the Finnish market at the moment.

Denmark was the first Nordic country to join the Max Havelaar institution, and the Elephant is reasonable known by Danish consumers. In Denmark you will fair trade labels on coffee, the, chocolate, bananas and sugar. As in the other Nordic countries, coffee is the products with highest market shares. The fair trade scheme is developed in dialog with a large number of NGOs, and they have given their political, social and economic support for the fair trade labels and fair trade products.

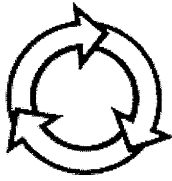
5.2 Other Interesting Labels

5.2.1 Recycling Labels

In the Nordic consumer market it is also possible to identify a number recycling labels. The most common is Der Grüne Punkt.



Originally this was a German label, informing consumers that it is possible to recycle the package in Germany. But today many other countries have joined the recycling scheme, among them both Denmark, Sweden and Finland. However, there is no guaranty that is it possible to recycle the product, -or part of it – even though it is labelled with the green dot, or other recycling labels



These labels inform consumers that it is possible to recycle the package or part of the product, but the relevance for Nordic consumers is not strong. They are developed by the package industry, and the industry have no responsibility to organise the recycling process. It is also possible to find two other recycling labels with slightly more relevance for consumers: the plastic label and the aluminium. In the Nordic countries there are some possibilities to recycle both aluminium and plastic. The number within the plastic label inform us about what kind of plastic we are dealing with.



5.2.2 Organic Food Labels

A number of national organic labels is found in the Nordic countries. They are most frequently used in the home countries, but within the Nordic market there is significant export/import of organic food.



Swedish official label



Norwegian organic label



Danish official label



Finish official label

All the Nordic countries has set political goals to promote organic production and consumption, first of all by increasing the percentage of organically cultivated land. In Sweden the goals for 2000 was 10% of the land. In reality they only managed to reach half this level last year.

The most successful products have been milk and dairy products, while all the Nordic countries has struggled in the production of organic meat. Fruit, vegetables and cereals have been successful in some countries, and more problematic in others (Michelsen et al. 1999).

In the food market, the organic labels is the natural links between producers and consumers. It is therefore a problem that the organic labels, especially in Norway and Finland, is not recognised by consumers.

The production and consumption of organic food is much higher in Denmark, and to a certain degree Sweden, than in Finland and Norway. In Denmark the market shares for milk was 14% in 1997, compared with 3% in Sweden, 1% in Norway and less than one % in Finland. For vegetables the figures were 6-10% in Denmark 3-4% in Sweden and less than 1% in Finland and Norway. In all countries the beef production did not reach 1%. The situation has changed since 1997, especially the market shares of eggs has increased significantly, but the differences among the four countries are more or less the same. There are even reasons to believe that it has increased, due to the strong commitment to organic consumption among the retailers in Denmark and Sweden.

6 Conclusions

So far we have described the similarities between Denmark, Finland and Sweden, and the main picture is very much the same as far as eco-labels are concerned. There are, however, significant differences between the countries. In many ways Sweden has taken the lead in the development of eco-labels, the potential in Denmark is very high and Finland is lagging behind.

There are not any important differences as far as mandatory labels are concerned, all the countries have to implement the EU-directives into their national laws. The energy label and the toxic labels are all implemented in the product control acts in Sweden, Denmark and Finland.

The Nordic marketing control acts are very similar, and it is not possible to trace differences in the use of ISO type II labels between the countries. We will concentrate the discussion on four more or less important differences:

- The way the ISO type I is organised in the three countries
- The status of the type I labels
- The general attitudes towards environmental questions

6.1 Sweden

ISO Type I:

The initiative to establish and develop the Nordic White Swan was taken by the Nordic Council of Ministers, and they have set up a joint Nordic competent body to be responsible for the White Swan. (Nordisk Miljømerkingsnemnd) However, the national administrative model is not the same in the five countries. In Sweden the well established national standardisation institution was given the responsibility to develop criteria and certify the products of the White Swan. Later this body was also given the same responsibility as far as the EU-flower is concerned. The environmental labelling work in Sweden is led by the SIS Ecolabelling Board. The Board are appointed by the Government. The Board consists of individuals and representatives from the National Swedish Board for Consumer Policies, Environmental Federation of Sweden, Swedish Retail Federation and the Ministry of Environment.

The Swedish government is still supporting the White Swan financially, although it has been a political goal from the very start that the Nordic eco-label should be self-financed. However, the contribution from the government has declined and is today less than 30%. More than 80% of the consumers in Sweden recognise the White Swan, and the label is highly trusted among consumers (Nordic Countries of Ministers 1999)

In addition to the White Swan, the national environmental NGO in Sweden has established their own type I label, *the Falcon : good environmental choice*. The Falcon is found in all the Nordic countries, but is well recognised only by Swedish consumers. Is there a competition between the Falcon and the White Swan in the Nordic consumer market? There are of course elements of competition in Sweden, but it is more recognised today that the two labels support each other, both towards industry and in the communication with consumers. The Falcon is well trusted among Swedish consumers, but the trust in the White Swan is even higher.

The EU-flower plays no significant part in Sweden, it is found mainly on paint and varnish. It is not recognised by consumers and it is difficult to measure the trust in EU-flower (Nordic Council of Ministers 1999)

The overall attitudes towards environmental questions is still high in Sweden, and this is also reflected in the relation between consumption and the environment. Only Danish consumers are more concerned about the environment than the Swedish

It is also worth noting that retail systems in Sweden are very monopolised. The two largest retail chains, the consumer co-operatives (Konsum) and the ICA chain have more than 80% of the consumer market. Both chains have – more or less – committed themselves to a sustainable development, and in this commitment eco-labels play a significant part. The Swedish retailers are one of the driving forces for eco labels in Sweden. Even Procter & Gamble has been forced to apply for the White Swan for their washing detergents, in order to get into or maintain their market shares in Sweden

ISO Type III:

Sweden has developed the ISO-type III labels further than the other Nordic countries, and has even taken the lead internationally. The type III labels contain exact product information, and is probably more suitable for business to business communication. However, for consumers with special needs and wants this information in the type III label could be relevant and very important. For others there are of course the danger that the information could be misunderstood.

6.2 Denmark

In Denmark the environmental authorities have placed the administration of the eco-labels in the Eco-labelling board, as a part of dk TEKNIK, an independent institution with experiences from the EU-flower certification process. Dk TEKNIK is responsible for both the EU-flower and White Swan in the country. Denmark joined the White Swan as late as 1997, eight years after it was established. The eco-labelling board consists of representatives from consumer organisations, environmental organisations and governmental authorities.

The Danish government is supporting the eco-labelling body with 75% of their expenses. Since the volume of the White Swan is increasing in Denmark, there are reasons to believe that this contribution will be reduced the next years. This has been the case in the other Nordic countries because the licensed products to a larger degree is financing the eco label schemes.

When we study the development and performance of eco-labels, Denmark, in many ways, is the most interesting Nordic case. On the one hand Danish consumers are the most environmental conscious consumers in the Nordic countries. Number of Nordic studies have shown this. In 1999 a representative Nordic survey asked consumers about the importance of price, quality and the environment in purchasing behaviour. Nearly 30% in Denmark was most concerned about the environmental aspects, compared with 11% in Sweden and 8% in Finland.

Other observations tell the same story. The production and consumption of organic food is very high, and in this process the organic food labels have given their contribution. The social labels are also stronger in Denmark than in the other Nordic countries, the Max Havelaar products is well known in the Danish consumer market. The concept of the political consumer – or political and ethical consumption – is relevant in the Danish consumer market.

The potential for eco-labels are obvious. On the other hand, the eco-labels have only lately played any significant part in the consumer policy or the environmental policy in Denmark. The labels are less known in Denmark than in the other countries, and less trusted. There are fewer eco-labelled products in Denmark than in Sweden, Finland and Norway. This contradiction needs an explanation, but it is not difficult to explain the current status for the White Swan in Denmark.

When the White Swan was established in 1989, Denmark was the only Nordic EU-member. Denmark decided not to join the White Swan, but to wait for the European eco-label, the EU-flower. The result of this strategic decision has been less activity in the field of eco-label development in Denmark than in the other Nordic countries. The White Swan has been a greater success in development of criteria and in market orientation of the eco label than the EU-flower. But after Denmark joined the Nordic eco-label scheme we have witnessed a very rapid development in Denmark, in both phases of the eco-labelling process. A large numbers of criteria have been developed, many products have been certified and the consumers' awareness in the market have been increasing. Within few years the situation in Denmark will be the same as the other Nordic countries, and there are reasons to believe that Denmark can take the lead in the development of eco labels in the Nordic countries. They have large potentials.

Denmark takes part in the international development of ISO type III labels where Sweden have taken the lead.

6.3 Finland

The Finnish Standards Association SFS is responsible for both the White Swan and the EU-flower in Finland. An Environmental Labelling Board has been established to decide the criteria for issuing the Swan Label. The members of the board represent consumer and environmental authorities, trade and industry, and organisations on consumer and environmental protection.

Compared with Denmark and Sweden the Finnish consumers are less concerned about the environment. While the Danish and Swedish consumer represent a driving force towards sustainable consumption, this is not to the same degree the case in Finland. However, the market shares of paper products (<70%) are reasonable high in Finland, and the same is the case for batteries (40-70%). On the other hand the market shares of laundry textiles is less than 40%.

The knowledge of the Nordic eco-label is significant lower in Finland than in Sweden and Norway (Nordic Council of Ministers 1999), even though Finland has been a part of the White Swan since 1991. One of the

reasons for this is the country of origin label in Finland, placed on food products. This food label is also a white swan, but with the blue Finish flag instead of the green background of the Nordic eco-label. The two labels are very similar, and it easy to understand that Finish consumers get confused.



The Finish country of origin label



The Nordic White Swan

6.4 Further Conclusions

The Nordic countries has tried to develop and implement an Integrated Product Policy both in the environmental and consumer policy. In this IPP Environmental Product Information Schemes plays an important part. The third party eco-labels – ISO type I – is the dominating schemes, with the White Swan as the main eco-label. But we will also find other third part labels in the Nordic market. The Falcon, from the Swedish environmental NGO, is important not only in Sweden. In addition the organic food label is well known and respected in the market, at least in Denmark and Sweden.

To some degree the Nordic Swan has been a consumer political success (Stø, Throne-Holst and Vittersø 2001). The reasons behind this success in the co-operation between the environmental authorities, the eco-labelling bodies, the consumers and their organisations, the environmental, organisation, the industry and – to some degree the retailers:

- Large number of relevant criteria is adopted in the 90ties, and 776 products are licensed
- The markets shares for some of the products – paper and detergents – are high
- The consumer knowledge and trust in the White Swan are reasonable high

On the other hand, there are important challenges to the future of the White Swan:

- Development of new criteria, especially for integrated service products
- The market shares for new strategic products
- The link to European and international labels and
- Consumer trust in eco-labels.

It is worth noting that the success stories to a large degree are linked the co-operation of the industry. The detergent industry decided to co-operate early in the 90-ties, and has been the flag-ship of the White Swan. After agreement with the paper industry, the same has happened with paper products.

However, studies has also shown that there are some uncertainty among consumers about the legal and administrative status of the White Swan. We call it a *third-party institution*, but is this recognised by consumers? Some of them refer to the White Swan as a governmental body, others to the label as a marketing performance from the industry, while others again link the swan to the environmental organisations. The trust varies among these groups. In a Nordic setting the government has high legitimacy, and the trust is highest among consumers who believe that the swan is a governmental institution. And significant lowest among those who think that the industry itself is behind the label. The correct answer is

complicated. It is an official label, but not a governmental. The consumer organisations, environmental organisations, the retailers and the industry are all involved in the eco-label process, but it is not their label. One of the challenges for the future is to communicate this message to the Nordic consumers.

Other interesting challenges are 1) the development of new criteria, 2) market shares for new strategic products, 3) the link to European and international labels and 4) the relation between eco labels and social labels.

The development of new criteria in the White Swan represents a strategic problem, the process has slowed down the last five years. One strategic decision is to concentrate on services. There are many reasons behind such a development. First of all that the importance of services in modern societies is growing, and this has to be reflected in the objectives of the environmental policy. One could argue that a development in the consumption from goods to services in itself represents a significant step in the correct direction, as far as the environment is concerned. On the other hand this obviously depends upon the character of the services, and eco-labelling schemes can offer significant contribution to both producers and consumers of public and private services. It is complicated to develop and adopt environmental criteria for services because they are usually composed of a number of elements and involve a dialog between producers and consumers. However, this can be solved by not labelling the single elements in the services (towels in hotels), but the *integrated hotel system*.

Another strategic decision is the way the eco-label scheme will treat the "black" products. This is product groups that have a large negative environmental impact, like cars, but where there are significant differences among models and labels. So far, the eco-labelling bodies in the Nordic countries have decided not to develop criteria within these kind of products, because it might have a negative effect on the consumer trust of the White Swan. It has taken years to build this trust in the market, and many environmental friendly consumers are still sceptic to the label, because they think it is too easy for the industry to get the White Swan. Cars with eco-labels could destroy the trust among strategic consumer groups.

As table 1 shows us, the market shares for detergents and paper are high in the Nordic countries. But there are serious challenges for the other product groups in all the countries. It is important to identify bottlenecks in the process from industry to consumers. Criteria are adopted, number of products are licensed, but the market shares are low? Is the main bottleneck on the producer side, to improve the products? How is the marketing of the products, are they easy to find in the shops? Or is the main challenge found in consumer values and attitudes towards eco labelled products within this product group?

Another challenge in the future is the relation between national, regional and global labels. Some OECD countries outside Europe are taking great responsibility for a sustainable development, and one of the tools are national eco-labels. It is possible that Europe – and the EU-Flower – is too geographically confined? It is possible to develop co-operation between the Nordic White Swan and eco-labelling schemes outside Europe?

At last we will focus on the future of social labels, and the relation between eco labels on the one hand and social, political and ethical labels on the other. During the last years social labels have been a part of the label jungle in the Nordic countries, and there are reasons to believe that this process will continue. Consumers get confused because of the large number of official and unofficial labels in the market of consumer goods and services. But will an integrating of all labels destroy both the eco labels and the social labels?

6 Literature

- Dyckjaer, Sidsel and Boye, Mette (2000): *Chemicals under the spotlight. From awareness to action*, published by The Danish Ecological Council and others, Copenhagen
- Michelsen, Johannes, Ulrich Hamm, Els Wynen and Eva Roth (1999). The European Market for Organic Products: Growths and Development. *Organic Farming in Europe: Economics and Policy Volume 7*. Universität Hohenheim
- Nadal, Alain (1998): *Conditions of development of a product ecolabel*. Carnegie Mellon University Pittsburgh, PA, USA
- Nordic Council of Ministers: The Nordic Evaluation of the White Swan Part A, carried out by the Swedish Environmental Protection Agency, Annex 8, Stockholm 2000
- Nordisk Miljømerkningsnemnd: *Evaluering av Nordisk Miljømerking. Del C. Beskrivelse av det nordiske miljømerkingssystemet fra et miljøsynspunkt*. 16. mai 2000 (transl: *Nordic Ecolabelling Body: Evaluation of Nordic Ecolabelling. Part C. Description of the Nordic Ecolabelling Scheme from an Environmental Perspective*)
- Nordisk Ministerråd: *Nordiska konsumenter om Svanen -livsstil, kännedom, attityd och fötroende*, TemaNord Miljö/Konsument 1999, København/ transl: *Nordic consumers on the Swan -lifestyle, knowledge, attitude and trust*.
- OECD (1997): *Eco-labelling: Actual Effects of selected programmes*. Paris: OECD/GD(97)105
- Stø, Eivind, Harald Throne-Holst, and Gunnar Vittersø 2001 *The role of consumers in environmental successes*., Lysaker, SIFO
- Vittersø, Gunnar, Strandbakken, Pål & Stø, Eivind (1998): *Grønt husholdningsbudsjett. Veiledning til et mindre miljøbelastende forbruk* ("Green Household Budget. An information tool for sustainable consumption"). With an English Summary. SIFO Report no. 7-1998, Lysaker
- Winward, John, Pernille Schiellerup and Brenda Boardman (1998). *Cool Labels. The first three years of the European Energy Labels*. University of Oxford.
- Yang, Wanhua (1998): *Eco-labelling: its role in promoting sustainable production and consumption*. Prepared for the International symposium for Sustainable Consumption and Production, Oslo November 1998.
- Yang, Wanhua (1998): *Ecolabelling: Its role in promoting sustainable production and consumption*, paper for International Symposium on Policy Instruments for Sustainable Consumption and Production: The Search for Effective Steering, November 5-7 1998, Oslo

7 Appendix: List of Criteria Documents of the Swan

Paper products:

- Printing paper
- Printed matter
- Paper envelopes
- Grease proof paper
- Tissue paper
- Coffee filters

Household Chemicals:

- Textile detergents
- All purpose cleaners
- Detergents for sanitary facilities
- Shampoo & Soap
- Hand dishwashing detergents
- Dishwasher detergents
- Floor care products

House & Garden:

- Building board: chip-, fibre- and gypsum board
- Flooring materials
- Wallcoverings
- Windows
- Oilburners Oilburner/boiler combinations
- Small heat pumps
- Composters
- Lawnmowers
- Closed toilet systems

Office Machinery and Supplies:

- Copying machines
- Personal computers
- Faxes and printers
- Toner cartridges
- Correction agents
- Writing instruments

Household Machinery:

- Refrigerators, freezers
- Washing machines
- Dishwashing machines
- Audiovisual Equipment

Miscellaneous:

- Hotels
- Adhesives
- Light sources
- Batteries, primary
- Batteries, rechargeable
- Car care products
- Diapers, disposable
- Diapers, washable
- Female sanitary products
- Ice Combatting Agents
- Lubricating oils
- Marine engines
- System for towels in dispensers
- Textiles
- Wooden furniture and fitments
- Industrial cleaning and degreasing agents

Pål Strandbakken

**Environmental Product Information Schemes (EPIS)
in Norway**

Table of Contents

1	INTRODUCTION	227
2	SHORT SUMMARY ON INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INFORMATION SCHEMES	227
3	MANDATORY LABELS	228
3.1	Mandatory Labels in the Field of Chemicals	228
3.2	Mandatory Labels in the Field of Household Appliances	229
4	VOLUNTARY ENVIRONMENTAL LABELS	230
4.1	ISO Type I	230
4.1.1	The EU Flower	231
4.1.2	The White Swan	231
4.1.2.1	The Performance of the White Swan	231
4.1.2.2	Development of Product Criteria	233
4.1.3	Falken/Bra miljööval	236
4.1.4	The Ø-label	236
4.1.5	The FSC-label	237
4.2	ISO Type II Labelling in Norway	238
4.3	ISO Type III Labelling (EPD) in Norway	238
5	OTHER LABELS	239
5.1	Social Labels	239
5.2	Other Interesting Labels	239
6	CONCLUSIONS	240
7	LITERATURE AND OTHER SOURCES	242
7.1	Literature	242
7.2	Documents	243
7.3	Homepages	243

1 Introduction

The paper presents an overview of the situation for different ecolabels in the Norwegian market at the beginning of the new century. The study of environmental product information systems (EPIS) has a focus on the most successful ISO-type I label, but the ambition is to review and to comment on the relevant labels.

Chapter 2 gives a brief introduction to some aspects of Integrated Product Policy (IPP) and EPIS; chapter 3 covers mandatory labels, while chapter 4 deals with voluntary labels (ISO type I, II and III).

Chapter 5 comments on social labels and other interesting labels, while conclusions are offered in chapter 6.

2 Short summary on Integrated Product Policy and Environmental Product Information Schemes

The development of efficient environmental product-information schemes (EPIS) is perhaps the most important condition for making Integrated Product Policy (IPP) work. The overall aim of IPP is to integrate environmental aspects and considerations into products and processes as early as possible in the development phase, but also to take product safety, product use and waste disposal problems into consideration. IPP covers a wider range of tools and activities than EPIS, but EPIS is an indispensable part of it.

Among the major elements of IPP in the European Union today, we find (Dyckjaer & Boye 2000, p.34):

- public access to information
- extended producer's responsibility
- restructured standardisation procedure
- development of Best Available Technology (BPA)
- green public procurement
- eco-labelling
- green taxes
- "closed loop" systems of production, consumption and disposal

To what degree Norwegian authorities actually translate these IPP ideas into practice is hard to decide, but at least they have some activity in most of these fields.

In this respect, IPP might be regarded as a new, more integrated *view* of activities and measures that have been in evidence in environmental policy for quite a while. Initially, the concept in the Nordic Countries was called "Product Oriented Environmental Strategy" (Nordic abbreviation: "POMS"), but today IPP is the common acronym. IPP might actually be a wider concept than POMS, taking into account a more lifestyle-oriented approach, but this extension of concepts is probably not very important in this context.

Among such IPP-activities in Norway, we find governmental support for environmental product-information schemes; initially for Type I labels, but increasingly also for Type III labelling. There also seems to be some business interest in standardising Type II labels. Some other initiatives and measures that might go under an IPP heading are listed in Report to the Storting No. 8 (1999-2000); *The Government's Environmental Policy and the State of the Environment*. IPP is said to be integrated in this document and in another Report on

consumer policy (Report no. 40, 1998-1999). This integration is, however, not easily noticed by reader, unless we chose to regard IPP as a more general taxonomy or checklist.

The effectiveness of EPIS is likely to vary with the public awareness of and concern with the environment. Here, Norway seems to lag behind Sweden and far behind Denmark. A Nordic representative survey, made for the evaluation of the Swan label (TemaNord 1999:592, p. 35) might illustrate: The question was how important environmental aspects were, compared to price and quality, to the consumer "when they are shopping on an ordinary day". Almost 30% of the Danish consumers hold the environment to be most important, compared to more than 10% for Sweden. For Finland, Norway and Iceland, the percentage is below 10.

It is not easy to decide whether environmental commitment is increasing or decreasing in the Norwegian population. "*Whereas Norwegians have become more environmentally committed in some areas, they have become less so in others*" (Nyberg 1999, p. 22). We have a general feeling, however, that there is less focus on environmental issues in the year 2000 than there was in the early nineties.

Further, the connection between consumers' eco-awareness and the effectiveness of EPIS is not necessarily one dimensional. Reduced media focus on environmental issues *might* also reflect that the issues have become normalised, that they become part of daily routines for business and consumers, more or less in line with theories of ecological modernization (Weale 1992, Hajer 1995 and Spaargaren 1997).

3 Mandatory Labels

A number of mandatory labels are environmentally relevant. The application of these labels is compulsory. From an environmental perspective the most interesting products groups for mandatory labelling seem to be chemicals/chemical substances and household appliances.

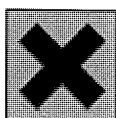
3.1 Mandatory Labels in the Field of Chemicals

Regulations relating to the classification, labelling etc. of dangerous chemicals have been laid down pursuant to the Product Control Act, the Working Environment Act, the Act relating to explosive goods and the Act relating to flammable goods and pressurised liquids and gases.

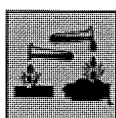
The Product Register requires information on all products that are classified in accordance with the Chemical Labelling Regulations if the quantity placed on the market is 100 kg or more. A declaration is also required for any product that is labelled if it may represent a fire or explosion hazard or if it might be dangerous for the environment.



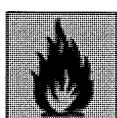
Toxic



Harmful



Corrosive



Flammable



Dangerous for the environment

A study of consumers' need for information about hazardous ingredients in products was undertaken by SIFO in 1997, for three product groups; cleansers (all sorts of household cleansers), paint/varnish and batteries. For questions of confidence and trust, findings followed the usual Norwegian pattern:

- Confidence was inevitably based on the source of the information being a neutral, independent agency with no vested interest in the product (---) Confidence was greater in public schemes than in manufacturers (Tufté & Lavik 1997, p. 16).
- As regards the factors that affect consumers' discussions about what to buy, the focus groups and sample survey alike concluded that the most important criterion was either quality or efficiency. As far as the cleansers were concerned, this meant that the product had to be effective, while it referred to strength and durability as far as paint and varnish were concerned. The predominant opinion was that environment- and health-friendliness must not be at the expense of quality (Tufté & Lavik 1997, p. 16-17).

The consumers explicitly – in the focus groups – stated that they were not interested in more information in the form of more text. They would rather see quite simple symbols, hazard labels etc.

3.2 Mandatory Labels in the Field of Household Appliances

According to general EU directives that also apply to Norway, household appliances must be labelled by producers to indicate their energy consumption (as well as some other environmental aspects). The EU directive on energy labels applies to these product groups:

- refrigerators/freezers
- washing machines
- dishwashers
- combined washing-dryers
- tumble dryers
- lamps/light bulbs

For boilers and air-condition appliances the label system is about to be developed. Next in line is building components, installed systems and brown goods (directive 92/75 will be amended, Rubik D-6). The focus of the energy label obviously is the consumption of energy. The quantified energy consumption of the appliance is stated by the producers and the product is then given a ranking from "A" to "G", with "A" being the first category. The scheme is controlled by national authorities.

The reviewers visit retailers (200 visits every year) in order to control the presence of energy labels on products. In addition SIFO, on behalf of the government, has performed product tests on washing machines (four or five each year), while NEMKO (Norwegian Electrical Materials Control) has tested refrigerators and lightning equipment.

Product tests seem to reveal that producers' energy labelling is rather inaccurate and that the inaccuracies systematically is to the advantage of the producers and /or importers. Products are regularly placed in higher categories than they deserve.

4 Voluntary Environmental Labels

Voluntary labels are labels applied to products on a voluntary basis. The existing eco-labelling schemes are classified into these three broad categories:

- **Type I eco-labelling** refers to eco-labelling certified by a third party based on several preset criteria. Usually, the third party identifies products that have less environmental harms, sets criteria for these products, and awards the label to manufacturers who meet these criteria.
- **Type II labelling** is based on self-declaration by manufacturers, such as "biodegradable" or "recyclable" labels.
- **Type III labelling** refers to environmental performance labels, or "certified eco-profiles". This kind of labelling contains detailed information by using indices, and is far more informative providing actual quantified environmental performance (Yang 1998, p. 2).

The first two types will be concerned with business-to-consumer communication, while Type III labels is mainly a business-to-business tool.

4.1 ISO Type I

Given the Nordic character of the White Swan, as well as the high level of cultural, economic and political integration in the Nordic region, it is a bit difficult to separate the case of Norway completely from the cases in D-10; the other Nordic countries. There are, however, differences in consumer knowledge, environmental awareness, consumption patterns etc. that separate the cases.

By far, the most developed and most important Type I eco-labelling scheme in Norway is the (Nordic) *White Swan*. The Swan is the symbol of The Nordic Council, and the White Swan is the official Nordic Type I voluntary third-party eco-label. It was the world's first multinational labelling scheme.

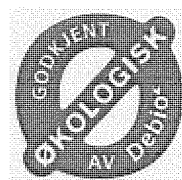
Beside it, we find the Debio-label for ecologically produced food (the "Ø", for økologisk) and the *Falcken/Bra miljöväl* ("Falcon/Good Environmental Choice") granted by a Swedish environmental NGO.



White Swan



Falcken



Organic food

Other Type I labels (and labels resembling Type I) are insignificant. Neither the *Blue Angel* nor the *EU Flower* means anything in the Norwegian market at the moment. For forest products, it remains to be seen whether the *FSC-label* ("Forest Stewardship Council") will succeed. At the present time it seems more likely that Norwegian producers and importers will try to develop some other scheme. There are also initiatives for developing a label for fish and fish products.

The WWF *Panda* is present, but its status as an eco-label is rather dubious. WWF reviews the applicant product by their own criteria as a regular third part body, but it is possible to buy the right to be the sole user of the logo for a whole product group. The relationship between the actual WWF environmental review of the product, and the granting of the label to corporations that support the World Wildlife Fund seem unclear. It should probably rather be regarded as a hybrid between type I and type II.

4.1.1 The EU Flower



As mentioned above, it is unclear whether the European label actually means anything in the Norwegian market. The White Swan Foundation is representing the Flower in Norway as an executive body, but to our knowledge the number of labelled products is very limited. According to White Swan Foundation representatives (telephone inquiry February 01) the only product group present in the Norwegian market is paint and varnishes. It is a fair guess that consumer knowledge of the EU Flower at present is rather negligible.

4.1.2 The White Swan

The White Swan is the official Nordic eco-label, established in 1989 by the Nordic Council of Ministers, as a *harmonised, voluntary* and *positive* environmental labelling of products. Finland, Iceland, Norway and Sweden joined the scheme, while Denmark, at that time the only Nordic member of the European Union, participated as an observer. As a Union member, Denmark wanted to concentrate on the development of the EU Flower. In 1997 however, Denmark also joined the Nordic scheme.

The program is administered in Norway, Sweden, Denmark, Finland and Iceland by national boards under the Nordic Eco-labelling Board. The board is organised under the Nordic Committee of Senior Officials for Consumer Affairs and also reports to the Nordic Committee of Senior Officials for Environmental Affairs (<http://www.ecolabel.no/english/about.html>, 210900).

The label is administered in each country by national bodies. In Norway the White Swan is administered by an independent foundation. The White Swan's stated aim is to work for the environment by making consumer choice easier and by being an incitement for producers to develop environmentally better products. In the market it communicates environmental considerations directly to the end user.

The White Swan product criteria are established by joint Nordic expert groups that follow the products' lifespan (from cradle to cradle), trying to develop efficient and temporary environmental criteria, without forgetting functional and qualitative demands on the products.

4.1.2.1 The Performance of the White Swan

A systematic review of success criteria for eco-labels is presented elsewhere. Here we briefly go through *consumer knowledge* of the label, *consumer trust* in the label, the number of *product criteria* and the number of *licences*. Further, we take a brief look at the market situation for labelled products, and finally we account for an attempt at evaluating *the ecological performance* of the labelling scheme.

Consumer Knowledge:

Norwegian consumers have been asked about their awareness of the correct official Norwegian – or Nordic – eco-label several times during the 1990ties (Strandbakken 1995, Ramm 1997). Thus, we are able to follow the development of consumer knowledge of the label, from its introduction and to the present.

We have given the respondents a multiple choice between four or five alternatives: Panda, Smiling sun, Pine tree and the White Swan, and the alternatives were rotated from one respondent to another. The results from five such questionnaires are presented in table 1 (from Stø 1998).

Table 1: Knowledge of the official Nordic eco-label 1992 - 1997 (in %)

	1992	1993	1994	1995	1997
Panda	24	16	5	4	4
Smiling sun	5	4	3	1	1
Pine tree	31	14	6	2	3
White Swan	12	30	66	78	80
Other		5			
Don't know	28	31	20	15	12
%	100	100	100	100	100
N	1025	1322	1016	1010	1022

The fundamental change took place between 1992 and 1994. The correct answer increased from 12% to 66%. In 1992 only 12% gave the right answer to this multiple choice, leaving the White Swan at third place, behind both Pine Tree and Panda. In the two last studies approximately 4/5 of the respondents gave the correct answer. These results are supported by studies in Finland and Sweden. Today more than 80% of the Swedish and Finnish consumers are able to identify the White Swan (Nordic Council of Ministers 1996).

In the short term the introduction of the eco-label in Norway had little effect on the consumer knowledge of the White Swan. The transmitted information was not linked to well known products and not used in the marketing of products, so the initial increase in consumer knowledge (1992-1993) was the result of public debate alone. But when the large detergent industry decided to take part in the eco-label schemes, the picture changed dramatically. The industry started to use the eco-label very actively in their television commercials. From 1993, consumer knowledge rose sharply, and it continued to rise through 94 and 95.

A first obstacle for the label to function as a tool for more sustainable consumption was overcome. We believe consumer knowledge of, or familiarity with, the eco-label to be a necessary, but not sufficient condition for the labelling scheme to be successful as an information tool.

Consumer Trust:

Even with the documented high level of consumer knowledge of the Swan, there are some rather surprising elements in more recent survey material and focus group studies.

Although, in 1995, as many as 78% of the public could identify the Swan as the officially approved eco-label, only 18% of them actually guessed that the government was behind the scheme. 32% believed that the environmental organisations were behind the label, while 23% believed it was the producers (Tufte and Lavik 1997). Who the respondents believe to be behind the label influences their trust in the scheme.

Among consumers who believe that the producers are behind the scheme, only 46% trust (expresses "high trust") that a Swan-labelled product is less environmentally harmful. Comparable figures for those who believe environmental organisations are behind is 63% (and 58% of those who *do not* know has high trust in the label!). Among those who – correctly – assume that the government is behind the scheme 72% express "high trust" that the label indicates a less harmful product (ibid.).

The high level of trust in governmental eco-label administration might be typical for Norwegian consumers. The confusion about the institutional status of the White Swan might partly be explained by producers/importers and environmental organisations participation in the foundation and in the expert groups. In addition, it is perhaps not obvious that an independent foundation is representing an official label.

Nevertheless, it seems crucial to inform the public on the character and institutional status of the scheme if we want to achieve increased consumer trust in the Swan and if we want consumers to regard and to use the label as giving relevant and trustworthy information in the market.

SIFO material so far seem to indicate that in Norway, individuals' environmental consciousness is not very present in their buying behaviour (Methi 2000). "Eco-friendly behaviour" has so far mainly been focussing on waste management in the households (we also have material that demonstrates that this is an international phenomenon; Nyberg & Stø 2000). At the point of purchase, questions of price, quality and brand loyalty seem to be the central ones to the consumer.

To make purchasing behaviour more environmentally relevant to consumers is one of the most important challenges to the White Swan foundation, as well as to the environmental authorities if a greening of private consumption is to be achieved.

4.1.2.2 Development of Product Criteria

The White Swan product criteria take into account environmental impacts of the product from raw materials extraction through production, distribution, consumption ("use") and as waste. Labelled products have to be among the environmentally best third of the products in the market.

Criteria are set strictly, but realistically. They are set to stimulate a better production. Criteria are specified precisely and measurably, so that there may be no doubt as to whether the product qualifies for the label or not (<http://www.ecolabel.no/english/about.html> 210900).

The requirements will specify the maximum environmental impact which is considered acceptable for a product group. The environmental properties of similar products on the market will be compared and assessed, and factors such as consumption of natural resources and energy, emissions into air, water and soil as well as generation of waste and noise is considered during the whole life cycle (ibid.). The criteria are normally valid for three years.

By January 2000, there were criteria documents in 52 different product groups. The development of new product criteria seems to have slowed down since the mid-nineties, with only 7 new criteria since 1996.

We might at present witness a process where the foundation is "running out" of new products to label. There is some controversy concerning the "black" products; fear that labelling the least environmentally harmful models of certain eco-unfriendly products (like combustion engine vehicles) might confuse the public. Should the least harmful fossil energy using car be labelled, or should the label be reserved for electrically powered vehicles? Or should we even go into the question of what kinds of power stations the electricity for the vehicles come from? In addition we might question the environmental aspects of private vehicles altogether, no matter how they are powered, because of the car culture's consumption of space etc.

The question of labelling or not labelling motor vehicles (or other black products) is an important one. If we find some sort of a common international consensus about *transportation*, *food* and *domestic energy use* being the environmentally most important areas of private consumption (see Vittersø, Strandbakken & Stø 1998), a label that more or less excludes all three might rightly be accused of having at best rather superficial effects on the environment (see 2.4. for eco-labelling of domestic electricity).

There are also debates over labelling of services and bigger packages of services (like tourism and travel) and how specific elements of such packages should be evaluated. By the middle of December 2000, the Nordic Eco-labelling Board will decide whether it should go for Swan labelling of environmentally concerned mutual funds.

Finally, there is a question of internationalisation. How should the White Swan co-operate with labelling schemes from other countries in such a way that labels become interchangeable (i.e. so that products awarded the Catalonian label can use the White Swan if the producers want to sell in the Norwegian or other Nordic markets)? The Swan foundation is the executive body of the EU Flower in Norway, but this question of internationalisation really goes beyond this technical co-operation and concerns trade relations on a global scale.

And, beyond questions of the legal status of EPIS from other regions, questions of transportation will have to be considered. Organic dairy products from New Zealand might carry a heavy ecological burden when sold in European supermarkets.

Licences:

Licences are awarded to products that satisfy the relevant criteria. A product that has been given the label in one Nordic country carries the label in the other countries automatically. We do not go into the details about application, application fees and annual fees here. By January 2000, 777 licences were awarded. Each license might cover more products from one producer. There were approximately 2500 products carrying the Swan label.

White Swans in the Market:

So far, the Swan label has been most successful in the fields of paper products and detergents; both non-durable products. In most retail chains the paper products and detergent counters are dominated by Swan-labelled products.

For consumer durables, however, the label seems less successful. It might be that for products that are more of a household *investment*, the environmental performance is ranked quite low compared to questions of price and quality. The main problem perhaps is to persuade consumers into actually using the label as an information tool for purchase, whether they are buying durables, non-durables or services.

In addition to the questions of eco-label success in communicating with consumers and guiding their purchasing decisions, the labelling bodies also will have to measure their success in encouraging the design, production, marketing and use of products that have less environmental impacts, and promote the rational use of energy and resources (Yang 1998, p. 2).

It is not easy to evaluate the degree of success for the White Swan scheme in communicating with and persuading business. We do neither know why some producers chose to join the scheme, nor why others refrain. In the case of laundry detergents, when the dominating Norwegian producer use the Swan on more or less all its products it is not obvious that the short term target is market shares. The corporation might just as well be engaged in some form of corporate advertising directed more at the authorities, retailers and possible competitors, than at end users.

Perhaps rather surprising, detergents are not very "exportable" products, due to national and regional differences in washing culture (temperature, time, water use, different machinery) and in water quality. In order to cement an already dominant market position, the use of the label might make it even harder for future competitors to enter. The label policy of only labelling the best third of the products in the market looks rather strange in a near monopoly situation where the dominant actor has all its brands labelled.

Further, there have been rumours that certain Scandinavian retail chains have made plans for allowing *only labelled products* onto their counters (most likely limited to the product groups where there exist eco-labelled alternatives). If that is so, the "consumer choice" aspect of eco-labels will change profoundly. Instead of selecting products at purchase, it could become more of a question of choosing retailer.

White Swans in the Environment:

If consumers and producers are the targets of the ecolabel's first goals, the *ultimate* goal obviously is the protection of the environment. To isolate and to evaluate the ecological effects of a labelling scheme is of course next to impossible. Nevertheless, an attempt was made in the general evaluation of the Nordic scheme ("Evaluering av Nordisk Miljømerking. Del C. Beskrivelse av det nordiske miljømerkingssystemet fra et miljøsynspunkt", May 2000).

In order to consider direct environmental effects, the group tried to quantify effects for three product groups: fine paper/print paper, detergents and printed matter.

Nordic Eco-labelling defines environmental effects as changing environmental strain, reasoning that increased environmental stress, in the shape of increased emissions or increased resource use sooner or later will lead to environmental degradation. To quantify environmental effects thus implies a quantification of the reduced environmental stress that labelling has contributed to ("Evaluering....", p. 2, my translation).

This is not necessarily very clear, but it probably means that quantifiable reduction of environmental impact for labelled products compared with some sort of industrial average, *combined* with market shares, will supply measurable environmental effects of White Swan labelling.

For fine paper/print paper, emissions of COD, AOX and S from labelled products that were accepted in the first version of criteria for fine paper (set in 1991), were significantly lower than average emissions calculated for 1990. A further reduction for COD and S was achieved when criteria were revised in 1994 and 1996. The total demands on eco-labelled paper have become much stronger from the first version of the criteria and to the present day. To comply with the present demands, emissions have to be reduced with between 30 and 50%, compared to the first criteria set for fine paper (ibid.)

When criteria were set in 1991, the number of products that were able to meet the criteria were low. The market share for Swan labelled paper today is exceeding 70% in all the Nordic countries except Iceland (ibid.)

This seems to indicate that if the volume of produced and consumed fine paper is held constant between 1991 and the year 2000, yearly emissions from production of fine paper for three specific substances have been reduced by 35% as a direct effect of the labelling scheme in ten years (that is, if general product- and process development and some other factors are held out).

For a heavy degradable substance used in detergents like LAS, reduction in Sweden has been exceeding 95%, while the average reduction in Europe is only 15%.

To assess direct environmental effects of the White Swan, or for any other EPIS for that matter, is probably impossible if we aim at some degree of accuracy, mainly because we lack a "control group". We will never know how the situation in a national community would have developed without the scheme. Nevertheless, it is important to try to indicate what kind of difference the label might make, in order to not lose contact with the label's ultimate aim. In the last resort, public support for the scheme will depend on whether it is possible to demonstrate that the label is likely to make a difference to the environment.

4.1.3 Falken/Bra miljöval

The Swedish Society for Nature Conservation (SSNS) has for many years been working with questions of consumption and life style impact on the environment. In 1992, the Society and Swedish retailers introduced the label *Falken/Bra miljöval*. They had, in 1999, developed criteria for 13 different categories of products and services (SOU 1999:7, p. 58). The product groups are quite similar to the ones covered by the White Swan (paper, soft paper, textiles, detergents, washing up liquid etc.), but SSNS also labels electricity and some transport services. To have eco-labelled domestic energy seems interesting, because it meets the challenge of certifying products and services in one the ecologically most important areas of private consumption. At the moment, labelled electricity is only delivered in Sweden, but on a future Nordic level it might be an important green good.

The label is Swedish. Some labelled products - like soft paper and hair shampoo - will be found in Norwegian retail chains, but we do not know anything about market shares or about Norwegian consumer knowledge of or trust in the Falken/Bra miljöval-label.

4.1.4 The Ø-label

The Ø-label is the Norwegian consumers' guarantee for organic farm products; mainly food. The control and certification body for organic agricultural production is called *Debio*. Debio also certifies the combination of the Ø-label and the *Demeter*-label (for biodynamical products).

The Ministry of Agriculture has established the Debio standards for plant production and livestock as a supplement to the *Regulation on Production and Labelling of Organic Agricultural Production*. The term "organic" (Norwegian "økologisk") is thereby legally protected, and in order to market or label agricultural products as organic, they must be inspected and certified by Debio (http://www.debio.no/diverse/deb_eng.htm, 161000).

There is, however, at the present time a very limited amount of organic food in the Norwegian market and a very limited volume of production as well. In 1997 1.8 million litres of organic milk was sold, making up something between 1 and 2% of the total milk consumption. Comparable figures for beef, mutton, pork and poultry would be like 0.1%, 0.5%, 0.6% and 0.3% (Torjusen and Vittersø 1998). Production and consumption is increasing, though.

For whatever reason – lack of food scares might be one – the demand for organic food products seems to be smaller than in Sweden and Denmark. It is also probably smaller than in the rest of Europe. Consumers' confidence in conventional Norwegian food production might be quite high, and – as for White Swan products – it seems difficult to activate the environmental consciousness of Norwegian consumers at the point of purchase.

On the question of consumer knowledge, Nyberg (1999) shows that only 14% of Norwegian consumers were able to pick out the Ø as the official Norwegian label for organic food in a multiple choice questionnaire (p. 74). In autumn 2000, Debio has launched a massive campaign for increasing consumers' familiarity with the Ø-label, in the form of newspaper and television advertising. It is a fair guess that this will lead to an increase in consumer knowledge. But it is not obvious that it will also facilitate an increased consumer demand for organic food products. At present, consumer interest in organic and (biodynamical) food products is very limited.

Unilever and the World Wildlife Fund want to co-operate on a labelling scheme for fish that is not the product of overexploitation. The concept has been criticised for favouring resource demanding high sea production, instead of more environmentally friendly coast-production. For fish and fish products, as for forest products (4.1.4.), the question of what label and what labelling body – if any - that eventually will succeed is still undecided in Norway.

Debio has recently decided that they are ready to certify ecological aquaculture, along the definition given in IFOAM Basic Standards (The International Federation of Organic Agriculture Movements). So far, this seems to be on the level of intentions, but it means that Debio is ready to move from certifying organic farm products and into off farm food production. From a consumer's point of view, it is probably an advantage to have limited number of EPIS to relate to.

4.1.5 The FSC-label

The FSC-label (Forest Stewardship Council), is an attempt at ensuring that wood products come from forests that are sustainably managed. It is probably most relevant for the furniture industry. At the moment we do not have any indications of the labels' market shares in Norway, neither do we know anything about consumer knowledge and trust. There is some business interest in a labelling scheme for sustainable forest products, but Norwegian producers and importers have so far neither decided to go for the FSC label, nor really tried to develop an alternative.

That the FSC does not run a Norwegian homepage might be an indication of the labelling scheme's lack of success in the country so far.

In an attempt at making things happen, government has suggested that Debio (4.1.3.) could be appointed to take over as certifying body for forest products as well, in addition to organic farm products and sustainable produced fish and fish products.

4.2 ISO Type II Labelling in Norway

Type II labels will – in Norway and in the other Nordic countries - have to consider the Marketing Control Act, that puts heavy restrictions on the use of expressions like "eco-friendly". Such self-declared private labels are often stylised drawings of trees or flowers, imitating the "official" look of real (Type I) eco-labels. As indicated, producers and importers might be interested in some kind of standardisation here.

A label for *environmental information*, using a stylised landscape and a green arrow ("Miljø-informasjon se baksiden"), tells the consumer that somewhere on the packaging there is printed environmentally relevant information. This label will look like an ISO Type I eco-label, but it will not guarantee anything about the products' environmental status. If the quality of the information is good (accurate, reliable and quantitative LCA-data), however, this way of doing things makes the label resemble the ISO Type III label (4.3.).

The World Wildlife Fund *Panda* also is a kind of hybrid label. It means that the producer supports WWF financially, but it also might mean that the WWF has put environmental demands on products/production. This "type I-aspect" is, however, contradicted by the policy of sometimes allowing producers to be sole users of the label for a certain product group.

he "typical" ISO Type II-labels will be the ones that make claims about recyclability, biodegradability etc. A SIFO-study of environmental claims in marketing (Enger 1998) found that for 166 brands in 16 product groups 63% had some sort of environmental claim on the packaging. 19% of these products carried some kind of eco-label. More than half of the labels (56%) were what she preferred to call quasi-seals (or quasi-labels); the rest were regarded as reliable. As mentioned, ISO Type II label claims are often about waste reduction (recyclability, recycled content, degradability etc.). The market should probably profit from some kind of third party regulation or business agreements about what kinds of claims that are acceptable (like: is a product really *recyclable* if there is no system for actually gathering and recycling at a reasonable distance from the consumer?).

4.3 ISO Type III Labelling (EPD) in Norway

Type III schemes, or EPD (Environmental Product Declarations), mainly for business to business communication, are about to be introduced in Norway (spring 2000), modelled on Swedish and Danish experiences (Hansen et.al. 2000). Employers' organisations, environmental authorities and research institutes collaborate in developing a system based on ISO Guidelines and Standards (ISO TR14025 and 14040-43). It aims at providing and displaying *quantitative environmental information* from manufacturer or supplier, based on LCAs and controlled by an *independent body*. Since consumer oriented ISO Type I eco-labels do not supply enough information for industrial or professional buyers, there has been a demand for a more comprehensive scheme. Environmental declarations of this kind (Type III) is not really supposed to communicate directly with consumers, due to the technical and quantitative nature of this information.

By EPD's, raw materials and semi-finished products and parts are considered, and not only consumer products. This means that more extensive projects and whole corporations will be able to deliver vastly improved environmental audits. In Norway, EPDs are available for products like office chairs, 25 litre plastic cans, 1 square meter of natural gas, a ton of cement, a length of concrete sewage pipe etc. We believe that business demand for such information is increasing, even though environmental aspects still are clearly subordinate to price for professional buyers. If business in the future aims at labelling larger entities than isolated

products and services, like tourist resorts, hotel chains, pre-fabricated dwellings etc., such EPDs or ISO Type III labels will be helpful, or even necessary for supplying sound environmental information to the public.

Through the "NIMBUS" project, Norway, Sweden and Denmark are seeking to co-ordinate layout and organisation of EDPs in the Nordic countries. In a period of increased international trade, some sort of standardised information system covering larger areas or regions is probably a good idea.

5 Other Labels

5.1 Social Labels

Social labels are neither very important nor very common in Norway; *Max Havelaar* was introduced in 1997 and at the moment two labelled coffee brands are on sale. One of them also carries the Ø-label for organic production (see 4.1.3.).

Max Havelaar has struggled to launch the Elephant label in the Norwegian consumer market. They started with coffee, as the rest of Europe, and found the Norwegian market hard to penetrate, for two reasons. One was that behind the Norwegian retail chains (four chains taking approx. 95% of the total retail market) we find large coffee-importers. Another was a failed attempt in the early eighties of introducing "fair" coffee from Tanzania; a failure mainly due to very poor product quality. In January 2001, however, Max Havelaar signed a deal with one of the retail chains ("Norgesgruppen"), with the intention of gradually introducing products like tea, cocoa, honey, sugar and orange juice. Max Havelaar Norway is a member of the international Fair Trade Labelling Organisation, overlooking producers' level of income, stability of income, employees' income and working relationship etc.

Recently the situation has changes, and year 2000 represent a breakthrough for Elephant in the Norwegian consumer market. The sales of fair trade coffee increased from 56 tons in 1999 to 125 tons last year. In principle it is today possible to buy Max Havelaar coffee in 70% of the Norwegian groceries.

There has been some debate over the possible introduction of a label that guarantees that no child labour has been involved in manufacturing. Denmark is experimenting with a more elaborate social labelling – the "red dot" – that is granted to manufacturers and importers that reports to be clean on a limited number of social criteria (self-declared or third-party?). If successful, this scheme is likely to be imitated in Norway. This is because it might solve the potential problem of having one label for every good cause, which is probably not very desirable.

A country of origin label – *Godt Norsk* (Good Norwegian) – has also been introduced, and is by some consumers more or less perceived as an eco-label. It is not an eco-label, even if it might look like one. It is rather a combined country of origin-label and a "high quality"-label, demanding the continuing improvement and consumer orientation of producers.

5.2 Other Interesting Labels

The Green Dot (Der Grüne Punkt) is the label for the Duales System Deutschland AG, a privately operated public limited company that on a non-profit basis is responsible for how German industry and trade deals with the German Packaging Ordinance of 1991.

From 1996 the company created a European organisation; the *Packaging Recovery Organisation Europe*; PRO Europe, aiming at awarding "the Green Dot mark to national collection and recovery systems on the basis of uniform rules and regulations and, moreover, to establish it as a European trade mark" (<http://www.gruener-punkt.de/en/index.php3?choice1=home>). Norway is one of the countries where the label is introduced.

The Green Dot might be instrumental in developing the closed-cycle economy. We do not yet, however, know anything about the Green Dot impact on the Norwegian market. Neither do we know anything about consumer knowledge or familiarity with the label.

6 Conclusions

The key actor in the Norwegian market at the moment is the White Swan. It is a well known and commonly trusted EPIS that seem to work well for a number of product groups like print paper and soft paper, laundry detergents and printed matter.

Beside it, the Ø-label is struggling for recognition and market shares, perhaps making some progress in the field of dairy products.

For a number of other consumer oriented labels the situation presently is unclear.

Interesting and rather promising developments are made for ISO Type III labels; potentially changing the large business-to-business field, for a social label like Max Havelaar – perhaps approaching a market success for fair trade products - and for the Green Dot in the field of waste management. But we obviously do not know anything about the future development of these schemes.

Among the mandatory label, the environmentally most interesting is the energy label; it is comprehensive, quantitative and cross national. We do not, however, so far know anything about consumers' actual use of this as an eco-label. At present it is probably mainly a bureaucratic-political project.

For the White Swan, the most important *barrier* at the moment probably is the exhaustion of interesting and "easy" product groups. A labelling scheme that only includes "low hanging fruits", and thus rather small parts of the overall market for consumer products, might be criticised for being superficial and for having at best a rather symbolic impact on the environment. In the long run it can become a problem to issue more and more licences for products like paper and detergents if the main debates on eco-aspects of consumption are concerned with cars, food and domestic energy. On the other hand: Eco-labelled combustion engine vehicles are not unproblematic either.

So the main challenge for the White Swan – as the leading labelling scheme in Norway – at present probably is to *proceed* after the initial success and to come to terms with other types of products, product combinations, services and product-service combination.

Another barrier might be the question of whether the label actually means a difference in the market. In Norway we risk ending up with a situation where labelled goods hold near monopolies for some product groups (like soft paper and detergents), and being quite marginal for other groups (like PCs, furniture and floor coatings). In neither situation the label will function ideally.

For the Ø-label the main barrier probably still is the low level of consumer interest in organic food, combined with much public confusion about health aspects and questions of taste and quality.

For other ISO Type I labels (The EU Flower, Falken/Bra Miljöval and the FSC), questions of barriers and of potential will become interesting in the moment they reach a certain volume (number of licensed products, market shares, public recognition). Then they will also have to deal with questions of co-operation and/or competition with other labelling schemes.

For the voluntary labels in general, the main *drivers* probably are the general consumer interest in and concern for environmental issues. Quick rises in demand for labelled (food) products might come about as results of food scares like BSC, but a more significant turn to eco-labelled consumer products is likely to be the outcome of a more general ecological modernisation of consumption. In such a turn, governmental and municipal authorities are likely to be among the driving forces.

We believe that from a consumer's point of view, the optimal situation is a market with a limited number of Type I labels, where 3 or 4 instantly recognisable labels supply the limited amount of information that the environmentally conscious consumer needs at the point of purchase.

For Type II labels and environmentally relevant social labels the main barriers probably are linked to battles for recognition and to questions of information overload for consumers. Labelling schemes dealing with waste management are probably the most environmentally important ones, and among them the Green Dot seems most interesting, operating on a European level and being linked to a vision of a closed-cycle economy. Here the main barrier might be lack of consumer familiarity with the seal and the concept, and perhaps also questions of compatibility and co-operation with municipal waste systems.

The ISO Type III labelling initiatives are still rather new and untested, so the identification of barriers will necessarily be hypothetical. A fair guess is that initially environmental status will be given low priority by industry buyers, compared to price and (perceived) quality. This might however change if general demand on business from society changes, and if certain dominant sectors of business start to consider ecological performance as a comparative advantage. Such a development is in line with theories of ecological modernisation (Weale 1992, Hajer 1995, Spargaaren 1997).

Among the mandatory labels, the most interesting seem to be the energy label. So far it seems as if producers' performance ratings of their own products is inaccurate and biased to producers' advantage (products are said to be more energy-efficient than they are). In addition, consumer interest in the scheme so far has not been overwhelming. It is possible that differences in energy consumption between products are too small to engage consumers, or that products' level of energy use is not considered to be very important compared to questions of price, quality or design.

For mandatory labels like the EU energy labelling the initiative and therefore the first drive came from European authorities. The success or failure of the label in the market will probably depend on whether consumers hold the differences between products to be economically and/or ecologically large enough to be interesting. The general level of trust in the labelling scheme is also important. If the information on the label is conceived to be trustworthy and reliable by consumers and the difference between products' energy efficiency is significant (especially economically), the label might be successful. From now on the potential driver is in the market.

For the voluntary and consumer oriented environmentally relevant labels we believe that the most important trends are

- labelling of services and
- labelling of larger entities and complex products (where both products and services might be included).

Transport services, tourism and hotels are areas where we have seen some labelling activity recently. We believe that we will see some ISO Type I label expansion into the service sector in the near future. Larger entities, like tourist resorts or housing complexes, are also interesting, but they will probably demand new and different types of criteria. New and different types of criteria will probably also be necessary for "complex" products; products like furniture where a number of subcontractors from distant (that is: far from Europe) parts of the world are involved (Russian timber, Indian cotton, Argentinean leather etc.).

In order to develop criteria for such business areas, we will probably have to design systems for mutual international recognition between labels, probably even inter-changability. We could let products carrying a Japanese eco-label use the White Swan in the Nordic countries and vice versa. This could make the labelling of services, larger entities and complex products easier and cheaper. Attempts at internationalisation have already started in the White Swan Foundation.

Another trend that we believe will have an increasing importance is ISO Type III labelling. We believe that business will use environmental concern to demonstrate social responsibility and actively use their closed loop production and their buying policies in large scale corporate advertising. This development should be encouraged by state authorities and NGOs, even when society remains suspicious of corporations' motives (market segmentation is always a temptation).

7 Literature and Other Sources

7.1 Literature

- Dyekjaer, S and Boye, Mette (2000): *Chemicals under the spotlight. From awareness to action*, published by The Danish Ecocidse and logical Council and others, Copenhagen
- Enger, Anniken (1998): *Miljøargumentasjon i markedsføring. En innholdsanalyse av tre reklamekanaler* ("Environmental Claims in Marketing"). With an English Summary. SIFO report no. 1-1998, Lysaker, Norway
- Hajer, Maarten A. (1995): *The Politics of Environmental Discourse. Ecological Modernization and the Policy Process*, Oxford
- Nyberg, Anders (1999): *Miljømonitor. Stabilitet og endring i forbrukernes miljøengasjement* ("Environmental Monitoring. Stability and Changes in Consumers' Environmental Commitment"). With an English Summary. SIFO Report no. 6-1999, Lysaker
- Nyberg, Anders and Eivind Stø (2001) *Is the future yours? An international survey on Youth, consumption and the environment*. Paris: UNEP and UNESCO 2001
- Ramm, Jorun Skoglund (1997): *Forbrukernes miljøinnsats. Kildesortering, innkjøps- og energiadferd* ("Consumers' environment-motivated attitudes and actions"). With an English summary. SIFO Report no. 2-1997, Lysaker, Norway
- Spargaaren, Gert (1997): *The Ecological Modernization of Production and Consumption. Essays in Environmental Sociology*, Wageningen
- Strandbakken, Pål (1995): *Bærekraftig forbruk. En teoretisk drøfting og empirisk tilnærming til diskusjonen om et bærekraftig forbruk* ("Sustainable Consumption. Theoretical and empirical approaches to the debate on sustainable consumption"). With an English summary. SIFO Report no. 1-1995, Lysaker, Norway
- Torjusen, Hanne and Vittersø, Gunnar (1998): *Bærekraftig matforbruk. Begrepsdrøftinger, menyeksempel og kostnadsberegninger* ("Sustainable Food Consumption"). With an English summary. SIFO Report no. 11-1998, Lysaker, Norway

- Tufte, Per Arne and Lavik, Randi (1997): *Helse- og miljøinformasjon. Forbrukernes behov for informasjon om skadelige stoffer i produkter* (Health- and environmental information. The consumer's need for information about hazardous ingredients in products"). With an English summary. SIFO Report no. 4-1997, Lysaker, Norway
- Vittersø, Gunnar, Strandbakken, Pål & Stø, Eivind (1998): *Grønt husholdningsbudsjett. Veiledning til et mindre miljøbelastende forbruk* ("Green Household Budget. An information tool for sustainable consumption"). With an English Summary. SIFO Report no. 7-1998, Lysaker
- Weale, Albert (1992): *The new politics of pollution*, Manchester and New York
- Yang, Wanhua (1998): *Eco-labelling: Its role in promoting sustainable production and consumption*, paper for International Symposium on Policy Instruments for Sustainable Consumption and Production: The Search for Effective Steering, November 5-7 1998, Oslo

7.2 Documents

- Nordisk Miljømerkningsnemnd: *Evaluering av Nordisk Miljømerking. Del C. Beskrivelse av det nordiske miljømerkingssystemet fra et miljøsynspunkt*. 16. mai 2000 /transl: *Nordic Eco-labelling Body: Evaluation of Nordic Eco-labelling. Part C. Description of the Nordic Eco-labelling Scheme from an Environmental Perspective*
- Det Kongelige Miljøverndepartementet: Stortingsmelding nr. 8 (1999-2000); *Regjeringens miljøvernpolitikk og rikets tilstand* ("The Ministry of Environmental Affairs: Report to the Storting no. 8 (1999-2000); The Government's Environmental Policy and the State of the Environment")
- Nordisk Ministerråd: *Nordiska konsumenter om Svanen -livsstil, kännedom, attityd och fötroende*, TemaNord Miljö/Konsument 1999, København/ transl: *Nordic consumers on the Swan -lifestyle, knowledge, attitude and trust*
- Statens offentliga utredningar 1999:7 Finansdepartementet: *Märk väl!*, Betänkande av Utredningen gällande konsumentinformation om dagligvaror, Stockholm 1999 /transl: *Report to the Swedish Ministry of Finance: Label well!*

7.3 Homepages

- The White Swan: <http://www.ecolabel.no/english/about.html> 210900
- The Ø-label (Debio): http://www.debio.no/diverse/deb_eng.htm 161000
- The Green Dot: <http://www.gruener-punkt.de/en/index.php3?choice1=home> 200202

Pere Fullana / Eloi Montcada / Jordi Vall-Llovera

**Environmental Product Information Schemes (EPIS)
in Portugal**

Table of Contents

1	INTRODUCTION	245
2	SHORT DESCRIPTION OF INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INFORMATION SCHEMES	245
3	MANDATORY SITUATION	246
4	VOLUNTARY LABELS	246
4.1	ISO Type I	247
4.1.1	Classical ISO Type I	247
4.1.1.1	European Labels	247
4.1.1.2	National Labels	247
4.1.1.3	Other Labels	248
4.1.2	Other Third-party, ISO Type I like Labelling	248
4.1.2.1	European Labels	248
4.1.2.2	Other Labels	249
4.2	ISO Type II	250
4.3	ISO Type III	250
5	OTHER EPIS	250
5.1	Social Labels	250
5.2	Other Interesting Labels	250
6	CONCLUSIONS	251
7	LITERATURE AND HOMEPAGES	252
7.1	Literature	252
7.2	Homepages	252

1 Introduction

The present report examines Environmental Product Information Schemes (EPIS) in Portugal regarding both mandatory and voluntary labelling activities, as well as the main environmental policy lines.

According to Mr. Ministry of Environment: "Everyday Portugal is more concerned about the environment problems. There are already several people, companies and other organisations developing efforts to improve the environmental quality envisaging an economic sustainable development". However environmental policies and initiatives in Portugal are not very developed, being the country in the cue wagon of EU in environmental issues. Currently it does not exist a national eco-labelling scheme and Portuguese Government do not foresee to establish it in a short term. Meanwhile mandatory labelling schemes only follow EU legislation.

The methodology of this study is based on a review of secondary sources literature, specially from internet, and first hand information collected by means of emails and phone calls to public administrations (General Directorate of Industry and Environment) and enterprise associations.

The following document is divided in 6 chapters starting with the cornerstones of Portuguese environmental policy and product policy, including the description of competencies, quite spread amongst several departments of the Portuguese Administration.

Chapter 3 examines compulsory product information in Portugal, which mainly follows the EU legislation. Chapter 4 illustrates voluntary EPIS, classified according to their origin. No Portuguese ecolabels have been found, and only European and foreign national labels could be analyzed.

Chapter 5 includes the description of other type of labels, as fair trade and food labels; however, no social national labels have been found. This report finishes with a set of general conclusions.

2 Short Description of Integrated Product Policy and Environmental Product Information Schemes

Environmental policy in Portugal is nationally administered by the Ministry of the Environment and Natural Resources (*Ministério do Ambiente e Recursos Naturais*) created in 1990.

The General Directorate of the Environment (DGA) seems to be the main department of the Ministry of Environment and ensures the co-ordination and planning of environmental activities in different economic sectors. It guarantees the co-ordination and follow-up of the European Union policies and initiatives in the different areas according to its competencies and it is the focal point of the European Environment Agency, in Portugal. In spite of that, some competencies, especially those related with industrial processes and products, still belong to the Ministry of Economic Affairs. For instance, the Portuguese EU ecolabelling competent body is the General Directorate of Industry belonging to this Ministry and the responsibility for Integrated Product Policy is also integrated in this General Directorate.

According to the Ministry of Environment in Portugal, the fulfilment of environmental legislation is a minimum requirement, which must be consolidated in a sustainable development process, and it must be defined as the base of a responsible performance, representing an essential pillar to the survival of the companies.

The Ministry of the Environment signed several "Contracts of Environmental Adaptation" with some industrial sectors for companies to comply with the environmental legislation. This contract establishes specific measures to decrease the environmental impacts of the companies' activities, reducing the pollution limits and wastes, during a certain period of time.

These contracts constitute one of the main environmental policy instruments of the Ministério do Ambiente to make companies and their products comply with minimum conditions of environmental quality. The Department is also encouraging companies to engage EMAS and EU ecolabel Schemes organising seminars and face-to-face interviews, but the results are very limited (1 EMAS verified company and 2 products with EU label¹).

One of the most interesting legislations related to information and environment is the Law 65/93, of 26 August, modified by the Laws 8/95 and 94/99, which regulates anyone's access to documents owned by the Administration or public companies. The access to administrative documents is assured by Public Administration following the principles of advertising, transparency, equality, justice and impartiality.

3 Mandatory Situation

Mandatory EPIS found in Portugal come from the EU legislation on dangerous products and substances, and on electrical appliances. Concerning the labelling of household appliances, Portuguese legislation has transposed the next EU Directives (see next table):

EU DIRECTIVES :	PORTUGUESE LEGISLATION :
Dir 92/75/CEE	D.L. 41/94, 11 February
Dir 94/2/CE	Port. 1139/94, 22 December
Dir 95/12/CE	Port. 116/96, 13 April
Dir 95/13/CE	Port. 117/96, 15 April
Dir 96/60/CE	Port. 1095/97, 3 November
Dir 97/17/CE	D.L. 309/99, 10 August
Dir 98/11/CE	D.L. 18/2000, 29 February

4 Voluntary Labels

It is worth noting that in Portugal, there is not any national ecolabelling scheme nor any Environmental Product Information Scheme (EPIS), except on food, Agrobio.

Some Portuguese companies have been certified by foreign ecolabels as AENOR-Medio Ambiente (from Spain) and Öko-Tex, an International label for textiles. Moreover, an interesting European label, not found in other countries, is quite present in Portugal: Eco-Schools Green Flag, which would be an ecolabel for services.

¹ According to the web site of the General Directorate of Environment

Table 1: Synopsis of ecolabels found in Portugal

Name	Product group(s)	Environmental criteria	ISO type I	ISO type II	ISO type III	Other
EU Ecolabel	Several	X	X			
AENOR-Medio Ambiente	Several	X	X			
Eco-Schools Green Flag	Schools	(X)	X			
Blue Flag	Beaches, marinas	X	X			
Öko-Tex Standard 100	Textiles	(X)	X			
Joaninha (Agrobio)	Products from ecological agriculture	(X)				X

4.1 ISO Type I

4.1.1 Classical ISO Type I

4.1.1.1 European Labels

The Competent Body in Portugal is the Comissão de Selecção (Selection Committee), according to a legislative initiative launched by both of Ministry of Industry and Energy and Ministry of Environment (28/08/1993). The Committee is formed by representatives of the General Environmental Directorate (Direcção Geral do Ambiente), General Directorate of Industry (Direcção Geral da Indústria), General Health Directorate (Direcção Geral de Saúde) and the Consumer Institute (Instituto do Consumidor), and it is lead by the former. In this Committee each institution have to check the fulfilment of the legislation under its responsibility. In fact DGA is responsible to verify if the product fulfil the environmental European legislation and the National Environmental Policy. DGI is the official Competent Body, and it is the official responsible to award a product.



At the moment, there are only two Portuguese enterprises have licensed products with EU label. Both of them belong to paints and varnishes products group: *Tintas Robbialac* with two products and 6 references and *Tintas Dyrup* with 1 product and 9 references.

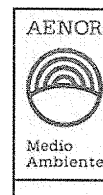
4.1.1.2 National Labels

There is not any national classical ISO type I ecolabel developed in Portugal.

4.1.1.3 Other Labels

AENOR-Medio Ambiente:

AENOR-Medio Ambiente is a Spanish ecological label (see chapter 4.1.1.2 of the EPIS in Spanish report) and currently there is 1 Portuguese product from the product group of paints and varnishes that has received the mark award. The company Ricolor-Dyrup, S.A., manufactures this product, called Ricológic, and it is commercialised in Spain.



4.1.2 Other Third-party, ISO Type I like Labelling

4.1.2.1 European Labels

Eco-Schools Green Flag (Eco-escolas):

The Eco-Schools Green Flag (Eco-Escolas in Portuguese) is an European initiative of FEEE (Foundation for Environmental Education in Europe) to raise students awareness of environmental and sustainable development issues through classroom study, and provides an integrated system for environmental management of schools based on an ISO 14001/EMAS approach. As a process of facilitating sustainable development at a local level, pupils are encouraged to take an active role in practical steps to reduce the environmental impact of the school.



The Eco-Schools Green Flag is awarded to schools with high achievement in their Programme and is a recognised and respected ecolabel for environmental education and performance.

The Eco-Schools programme involves seven steps that any school can adopt. Based on the elements of an environmental management programme, the process involves a wide range of stakeholders but the most important role is played by the students. It must be stressed that, although Eco-Schools may be awarded with a Green Flag after a set period, the process is an on going one and schools must continue to work towards their objectives and re-apply for the award in the future.

To identify the environmental problems and to find their solutions the school must perform an audit and, with the results, elaborate and apply an Action Plan in order to re-evaluate those results periodically.

When the school consider that it complies the objectives of the Program, it will present its candidature to the National Commission of the Eco-Escolas Program, which analyses the application and delivers the Eco-Schools Green Flag.

The National Commission is composed by representatives of the Basic Education Department (*Departamento de Educação Básica* (DEB)), Institute for Educational Innovation (*Instituto de Inovação Educacional* (IIE)), Institute for Environmental Promotion (*Instituto da Promoção Ambiental* (IPAMB)), Wastes Institute (*Instituto dos Resíduos* (INR)), Water Institute (*Instituto da Água* (INAG)), Environmental Regional Directorate of Açores (*Direcção Regional de Ambiente dos Açores* (DRA Açores)), Energy Conservation Centre (*Centro para a Conservação da Energia* (CCE)), HLC, Engenharia e Projectos S.A., BP Portuguesa S.A. and Pararede.

The implementation of the Program Eco-Escolas is helped by the Ministry of the Environment, by the Environmental Promotion Institute and by the Ministry of Education. The Program also receives the economical help from two private companies, *HLC, Engenharia e Projectos S.A.* and *BP Portuguesa S.A.*

The Eco-Escolas Program started in Portugal in 1996/97 with the participation of 125 schools and 30 were granted with the Eco-Schools Green Flag. In the following year, 1997/98, there were 124 schools participating and 71 of them were awarded the ecolabel. In 1998/99 the number of awarded schools was 77 out of 119, and in 1999/2000 there were 123 schools interested in the program. In all Europe there are 4000 certified schools, so Portugal represents currently more than 5% of them, a high percentage compared with ecolabelled enterprises.

Blue Flag:

The Blue Flag Campaign, started in 1987 as an European campaign, and it is owned and run by an independent non-profit organisation, the Foundation for Environmental Education in Europe (FEEE). It is a symbol of high environmental standards as well as good sanitary and safety beach/marina conditions. Its campaign includes environmental education and information for the public, decision makers and tourism operators.

All Blue Flags are only awarded for one season at a time. By renewing the award, each season, the Campaign ensures that the beaches and marinas are continuously complying with the criteria. If some of the mandatory criteria are not fulfilled during the season or the conditions change, the Blue Flag will be withdrawn.



In Portugal the national organisation being in charge of certification is FEEE Portugal – *Associação Bandeira Azul da Europa* (ABAE). During the year 2000, 139 beaches and 5 marinas were certified.

4.1.2.2 Other Labels

Öko-tex Standard 100:

Öko-tex Standard 100 is a label awarded by the "Internationale Gemeinschaft für Forschung und Prüfung auf dem Gebiet der Textilökologie" via its national member institutes. Portuguese institute associated is CITEVE (Centro Tecnológico das Industrias Textil). This label guarantees the non-presence of hazardous substances during the production process. To obtain it, final products have to be under the established limits for several harmful substances as heavy metals, pesticides or formaldehyde.



Textiles have to be tested in the official institutes and after it a report with the results is produced.

Till now it has drawn up 883 product certifications, but currently only 269 companies are certified (the reason why this two numbers are different is that certifications are only valid during 1 year).

FSC:

FSC (Forest Stewardship Council) is promoted by the World Wild Fund for Nature (WWF). The ecolabel grants that the timber is produced in a sustainable managed forestry. There is not any certified forest in Portugal yet, but the Liga para Protecção de



Natureza is one of the members of WWF. It can be the first step to future FSC product certifications in this country.

4.2 ISO Type II

No ISO type II information is available.

4.3 ISO Type III

No ISO type III information is available.

5 Other EPIS

5.1 Social Labels

Fair Trade in Portugal has been promoted by CIDAC (Centro de Informação e Documentação Amílcar Cabral) in Lisbon since 1998. According to the Fair Trade in Europe 2001 report, currently there are only three shops working with Fair Trade and no social labels have been found.

5.2 Other Interesting Labels

Green Dot:

Portuguese Green Dot is managed by Sociedade Ponto Verde and the symbol is, undoubtedly, the best known "environmental" logo in Portugal. This, private and non-lucrative entity was constituted on December 1996 with the aim to promote the packaging waste management on a national level, according to 94/62/CE.



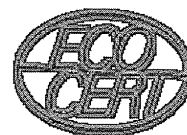
AGROBIO/Joaninha:

Since its foundation, in 1985, the main aim of the AGROBIO Association is the defence and the development of Biological Agriculture in Portugal. AGROBIO is an organisation composed by approximately 2600 partners, agriculturists and consumers and it has a great reputation amongst official bodies and citizens. The symbol of the Joaninha (ladybird) is used by the Association to certify products from the ecological agriculture point of view. Criteria are created by the organisation but are based on the typical ecological agriculture ones (non use of pesticides nor chemical substances).



AGROBIO is a member of IFOAM (International Federation of Movements of Biological Agriculture) since 1985.

Until 1995 AGROBIO was responsible both for technical support and for certification, but the Council Regulation (EEC) No. 2092/91 required an independent body to carry out inspections, and thus Ecocert founded Socert-Portugal upon the Movement of the Biological Agriculture. This organisation was created by a group of agronomists and was recognized in 1995 by the Ministry of the Agriculture as a control and certification organism for biological products. In 1996 SOCERT-PORTUGAL was accepted as a member of IFOAM and elaborated a procedure for the control and certification stages, including the Commission of Certification, which is composed of members and specialists from different organisations and companies.



Although the Portuguese section told the authors that this ecolabel is also established in other countries as France, Germany, Italy, Belgium and Luxembourg, it has not been found, as ecolabel, in the two latter.

Recently, another inspection body called SATIVA was established in Lisbon.



6 Conclusions

Although some policy makers and information from governmental departments comment that Portugal is more and more concentrated with the environment, facts are telling that environmental policy instruments are not being developed. In addition to that, extended policy instruments from the EU, international organisations or foreign countries are also seldom used by Portuguese companies.

Some key findings are:

- Portugal is continuously improving environmental conditions, but concerning environmental management and ecolabelling, it is yet under the European average.
- Only four products are licensed by public third-party bodies (three with the EU-label and one by AENOR).
- In textile sector, highly depending on exports, more than 269 companies are certified with Okö-tex label.
- Enterprises do not need ecolabel to increase their market and only this situation, in the case of textile ones, have acted as a driver to apply for them.
- Consumer ecolabelling knowledge and trust should be increased in order to pull companies to produce green products.
- Help from the Administration is needed to convince both, consumers and enterprises, towards greener products and services.
- Eco-Escolas Programme has to be a quality tool which deals environmental topics with young people, increasing their knowledge and their awareness.
- In a recent event held in Santander different initiatives from Portuguese tourism sector with the aim of the creation of some kind certification for Tourism resorts were commented, but actually, one of the most important productive sectors in Portugal has not any kind of ecolabel.

7 Literature and Homepages

7.1 Literature

Despacho Conjunto dos então Ministérios da Indústria e Ambiente e Recursos Naturais de 93.08.28.

Firmino, Ana (2000). Organic Farming in Portugal as part of: Steffi Graf / Helga Willer (Eds.): Organic Europe ; Stiftung Ökologie & Landbau (SÖL).

Gibson, John (October 1999). Legal Regulations appropriateness to integrated coastal zone management. Final report. Study on behalf of Macallister Elliot and Partners ltd.

Law 65/93, of 26 August, modified by Laws 8/95 and 94/99, which regulates anyone's access to documents owned by the Administration or public companies.

7.2 Homepages

Agrobio: www.agrobio.pt (visited: 10.11.2000).

Blue Flag: www.blueflag.org (visited: 18.01.01)

Companies certified by AENOR: www.aenor.es/certifica.htm (visited: 18.08.2000).

Ecocert: www.socert.pt (visited: 10.11.2000).

Eco-Escolas: www.abae.pt/ecoescolas.htm (visited: 03.11.2000).

Eco-Escolas: www.eco-schools.org (visited: 03.11.2000).

Eco-Escolas: www.feee.org (visited: 03.11.2000).

General information: www.dga.min-amb.pt (visited: 02.11.2000).

General information: www.europa.eu.int (visited: 24.07.2000).

General information: www.ipamb.pt (visited: 26.10.2000).

General information: www.min-amb.pt (visited: 06.11.2000).

Pere Fullana / Eloi Montcada / Jordi Vall-Llovera

**Environmental Product Information Schemes (EPIS)
in Spain**

Table of Contents

1	INTRODUCTION	254
2	SHORT DESCRIPTIONS OF INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INFORMATION SCHEMES	254
3	MANDATORY SITUATION	255
4	VOLUNTARY EPIS	257
4.1	ISO Type I	257
4.1.1	Classical ISO Type I	257
4.1.1.1	European Labels	257
4.1.1.2	National Labels	257
4.1.1.3	Regional Labels	262
4.1.2	Other Third-party, ISO Type I like Labelling	267
4.1.2.1	European Labels	267
4.1.2.2	National Labels	268
4.1.2.3	Regional Labels	270
4.1.2.4	Other Labels	273
4.2	ISO Type II	273
4.3	ISO Type III	274
5	OTHER EPIS	274
5.1	Social Labels	274
5.2	Other Interesting Labels	275
6	CONCLUSIONS	276
7	LITERATURE AND HOMEPAGES	279
7.1	Literature	279
7.2	Homepages	279

1 Introduction

The present report presents the current situation in Spain regarding Environmental Product Information Schemes, focused on independent third party ecolabels.

Two main Spanish ecolabels are AENOR-Medio Ambiente (AENOR environment) and the *Distintiu de Garantia de Qualitat Ambiental* (Emblem of Guarantee of Environmental Quality), thereafter "*El Distintiu*". Both of them are certified by the two EU Ecolabel Competent Bodies in Spain, AENOR and the Ministry of Environment of Catalonia. But, although people's awareness towards sustainability and environment protection is quite high, it is not translated into real actions, for instance into green purchasing.

The present study is based on a review of literature and web pages and on different face-to-face meetings with representatives of some of the eco-labels analysed (AENOR and Catalan Ministry of Environment) and with other related stakeholders: Spanish Ministry of Environment, the Confederation of Catalan Enterprises (Foment del Treball Nacional).

After introducing the study, **Chapter 2** first describes shortly the general characteristics of both the evolution of Spanish environmental policy and Integrated Product Policy (IPP), which are very limited. **Chapter 3** introduces mandatory labels, almost all of them transposed from EU Directives. **Chapter 4** gives an overview of existing Spanish activities of product voluntary labelling. They are divided according to their scope and ISO typology. International Organisation for Standardisation (ISO) strives for the systematisation of environmental related product information by means of its Technical Committee 207. They launched three types of voluntary labels. **ISO Type I (ISO 14024)** is voluntary, multiple criteria based, has a third-party programme setting up criteria and procedures for specific product groups, and offers qualitative environmental information. **ISO Type II (ISO 14021)** ecolabels are self-declared environmental claims made by manufacturers themselves. **ISO Type III (ISO 14025)** gives quantified environmental data for a product with pre-set categories of parameters: it provides detailed quantitative environmental information. In this chapter all ISO-types ecolabels are examined with a specific emphasis to ISO-type I labels introducing objectives, history and implementing procedures of third-party-ecolabelling. **Chapter 5** highlights other labels focused on food and social issues. Some general conclusions will be given in **chapter 6**.

2 Short Descriptions of Integrated Product Policy and Environmental Product Information Schemes

According to Spanish Constitution (article 149.1.13), central government is responsible for developing basic environmental legislation and the different autonomous government can develop and implement it in each region. But, in fact, the situation is very different amongst the communities. Moreover, some of them have implemented or applied EU Directives or Regulations directly.

An example of the complex legislative Spanish situation is the EU Directive on Integrated Pollution Prevention and Control (IPPC). This Directive has been only implemented to national legislation in Catalonia, and is not currently valid in the rest of the country, creating difficulties in companies established in more than one region. European Commission has denounced Spain¹, among other countries, to EC Court of Justice for not implementing the Directive in time: the end of period to adapt the IPPC Directive was 30th October 1999

¹ Published at Intec Urbe digital n° 539 (22.01.01).

and Spanish Authorities do not see possible their adoption until the end of 2001. In February 2001 a preliminary draft was launched.

Regarding Integrated Product Policy (IPP), Spain do not still develop this kind of policy, but in words of Juan Carlos Mampaso (General Deputy Director of Technological Programs of the Ministry of Industry and Energy) [Mampaso, 1999] Spanish policies impelled during the last years are referred to the development of a shared responsibility of all stakeholders (administrations, industry and consumers) in order to protect the environment. According to Ana Fresno Ruiz (Jefe de Área de Riesgos Ambientales), the new Spanish responsible for IPP, from the Ministry of Environment, in this moments the Ministry is working in this issue and searching the possibilities to include IPP in different legislation, but till now, nobody in the Government has worked with the concept.

Concerning Spanish legislation, there are different laws related to Environmental Product Information Schemes to underline. Maybe the most important one is the Law 38/1995 to guarantee free access and diffusion of environmental information which states the right of citizens to access to Administration and related companies environmental information.

Two other interesting regulations are on product and packaging waste management. On the one hand there is the Royal Decree 833/1988 establishing the legislation for the toxic and dangerous waste management. In its requirements a clear and transparent labelling for containers and packaging is demanded and it establishes different mandatory symbols and sentences.

On the other hand one finds the Law 11/1997, adopting the Directive 94/62, created to prevent and reduce the environmental impact from packaging, throughout its life-cycle, but especially in their end-of-use phase. In order to fulfil these actions different measures destined to the prevention of waste production are settled down. They are mainly focused on packaging re-use, waste recycling and the other forms of waste packaging valorisation.

Recently, Spanish Government has carried out another action to promote environmental initiatives amongst companies. It developed the Royal Decree 283/2001, of 16th March, about the "Deductions for Investments destined to the environment protection in the Corporate Tax". This Decree determines that the installations destined to the protection of the environment, including new acquisitions of industrial or commercial vehicles, can be deducted up to a 10% from the mentioned tax.

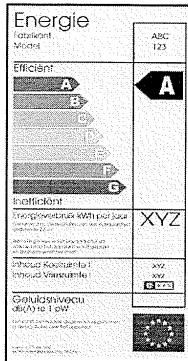
Basic improvement of the new installation must fulfil at least one of the following conditions: to avoid or reduce atmospheric contamination, to avoid or reduce waste water, and to favour the reduction, recuperation or correct treatment of the industrial wastes. On the other hand, transports only have to decreased their atmospheric contamination in order to obtain the deduction.

3 Mandatory Situation

Most of the legislation for mandatory labels belongs to chemical substances and preparations classified as dangerous and electrical appliances.

Former are mainly regulated by the Royal Decree 363/1995 which is focused, amongst other issues, in the packaging requirements and label for this kind of substances. All these products must be labelled with a

symbol according to their dangerous class and a sentence with the main risks. This decree, as all other, for mandatory labels for chemicals, are the national implementations of the related EU Directives²



Another mandatory label in Spain is the EU energy label for white goods. The framework of Spanish legislation regarding to the energy labelling is the Royal Decree 124/1994 (which is the transposition of the EC Directive 92/75/CE). This Directive has different implementations for the different energy requirements on energy labelling of several kind of household electric appliances. In the next paragraph it is shown the Spanish legislation for the different EU Directives:

Directive 96/60/CEE – R.D.701/1998 (energy labelling of household combined washer-dryers), EC Directive 97/17/CEE – R.D.864/1998 (energy labelling of household electric dishwashers), EC Directive 98/11/CEE – R.D. 284/1999 (energy labelling of household lamps).

There are no studies on the knowledge by the consumers and the enforcement by companies, but an own market study assumed that, since approximately one year, all companies are fulfilling with the legislation. Even one of them, Fagor, is using this ecolabel as marketing strategy for its A class washing machine.

Textiles and footwear labels have also to include some mandatory information, due to EC Directives transposed to national legislation, R.D 928/1987 for textiles and R.D 1718/95 for footwear.

A mandatory label found, in Spain, for all EU countries is the label for bovine meat³. Since September 2000, all the bovine meat of the European Union has to be identified. These identifications, which can be individual labels or posters, show all data to know the properties of the meat and who is the responsible of it. By this mandatory labelling scheme, the European Union wants to give the consumers more security and better guarantees.



In the identification label or poster it is possible to find a numeric code, related with the number granted to calfs in the farm of birth, and the mandatory register of the breeder. These two informations are the key to follow all the stages of the meat: from the farm, to the butcher's. This procedure facilitates a better control and knowledge on data about the animal and its meat.

² See chapter on EPIS in Europe in this volume.

³ *Came Identificada y Etiquetada* (Identified and Labelled Meat). Informative brochure about Bovine Meat Labelling. Campaign financed by the European Community.

4 Voluntary EPIS

4.1 ISO Type I

4.1.1 Classical ISO Type I

4.1.1.1 European Labels

In 1994, by means of the Royal Decree 598/94 of 8th April, the standards to apply the Regulation CEE n°. 880/92 on EU ecolabel were established in Spain. The initial Competent Body created in Spain was the Ministry of Environment but after some troubles, the different autonomous government were allowed to apply for it. AENOR was designated as subsidiary competent organism for those regions which did not request to develop their competencies. The unique autonomy which created, developed and implemented a Competent Body was Catalonia.



The creation process for the certification organism of the EU Eco-label in Catalonia finished with the development of the Decree 255/1992, of 13th October, in 1992. Nowadays, other different autonomies have developed legislation to create Competent Bodies for their Communities: Madrid, Cantabria, Murcia and Valencia, but only the former is working on it and in the next months the first certificate will be delivered.

Currently, and according to the EU web site (March, 2001) there are 12 Spanish awarded companies, 8 of them in Catalonia. Most of them are in the group of textiles (5) and indoor paints and varnishes (4) and there is one company in Bed mattresses, copying paper and footwear.

It represents a high percentage, compared with the rest of EU countries, both in terms of number of applicants and in terms of range of product groups covered. For the group of bed mattress the Spanish product is the unique awarded products, and in footwear an copy paper one of the two awarded products are Spanish. On 2000, Spain was the second country in the EU, after France, in number of firms awarded with the ecolabel.

4.1.1.2 National Labels

AENOR, Spanish Standardisation Body, is a private, independent, and non-profit organisation. It is also accredited as certifies of ISO 9000 and 14000 systems and EMAS.

In 1994 it launched the type I ecolabel called AENOR-Medio Ambiente in order to facilitate the process of creation of new product groups and the ecological criteria selection due to the pressure made by some producers and managers associations from some specific sectors to establish new products categories. The main characteristics of the AENOR-Medio Ambiente label are:



- Voluntary: the obtaining of the label is voluntary.
- Credibility: the label brings all the stakeholders interested into the procedure of setting criteria, and the certification system ensures their execution and control.
- Selectivity: with the execution of the environmental criteria, only the products under certain limits of impact to the environment are selected.

- Life cycle assessment (LCA): the environmental criteria are based on the LCA of the product, including production, distribution, use and elimination.
- Transparency: all the requirements for the product groups and the verification assay methods are collected in the UNE normative (Spanish standards).
- Control and verification: AENOR periodically verifies if the environmental requirements are kept.

AENOR is also the subsidiary competent body for the certification of the EU-label. The main difference between AENOR-Medio Ambiente and EU label is the product groups defined. Only one of them, paints and varnishes, is repeated but ecological criteria defined are quite different, because the EU-label is only for indoor paints, while the AENOR-Medio Ambiente is for indoor and outdoor ones.

The main objective of AENOR-Medio Ambiente is to promote the design, production, marketing and use of products which reduce the stress to the environment along their whole life cycle, providing accurate, verifiable and relevant information to the consumer.

Initially the ecolabel was focused on products (excepting food, drinks and pharmaceutical), but two last launched categories belongs to service sector: out of use cars centres and paper recovery centres.

Product groups have been selected according to their representatives in the market and to ecological issues, and taking into account:

- The interest showed by manufacturers to AENOR regarding the development of ecological criteria.
- The opportunities to significantly reduce the negative impact of the products.
- The need to give answers to those industrial sectors that have not an EU ecolabel for the type of products they produce, yet.

Some product groups, as end of life cars recovering & scrapping centres, were created before a national law was going to be published, in order to prepare the centres for it.

It is worth noting that none of the new product groups created has been requested for a consumers nor environmental association, and only a few business or industrial ones.

The scope of ecological criteria shall include products with the same function, which may be considered to be substitutable one for another and able to be compared according to the same criteria.

After deciding in which priorities areas begin to work, AENOR carry out a feasibility study in order to determine the benefits of undertaking this job. In this study there is a phase of information collection in which data are collected on:

- The size and structure of the market.
- Interest shown by industrialists of the sector concerned.
- Amount of national manufacturers of these products.

It is the results of this consultation stage which determines whether or not work is started on new product groups.

Once it has been decided to open a new project, AENOR look for life cycle studies already available or, if they do not exist, contracts an external consultant to carry out one. The conclusions of this study will point

out the main environmental impacts that have to be intended to reduce through the settlement of the ecological criteria. The parameters identify by the life cycle study are those on which must be made a special point in order to set the limits expressed in the ecological criteria.

A new working group is newly formed for each new product group. The task of this group is to discuss proposals regarding criteria and to elaborate an unanimous decision.

The working group has an equal representation of all the partners concerned. The composition is as follows:

- Professional working in industry,
- Professional working in distribution,
- Consumer associations,
- Manufacturers associations,
- Environmental protection associations,
- The public authorities (Ministries in charge of Industry, Environment and consumer affairs).

The development of the ecological criteria is based on life cycle assessment and on a hurdle principle. Taking in consideration the Life cycle assessment and through periodical meetings in which all the interested parties have to get an agreement about the parameters to be limit. Once the group have get this consensus this project is sent to the secretary of the Technical Standardisation Committee to be confirm and approved.

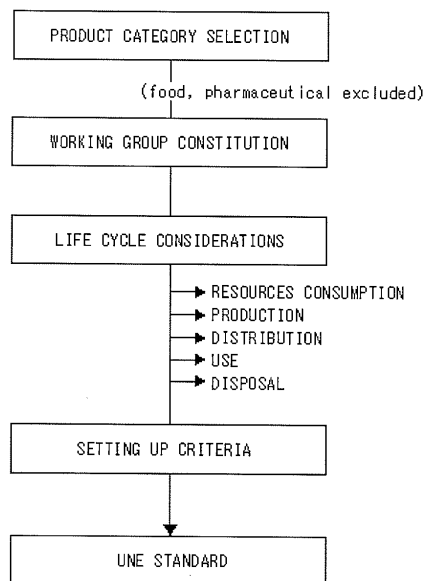
This process includes a 45-day public review period, in which everybody can send comments to these documents. After the reviewing of the public's comments, the criteria must be revised and set the final criteria.

The criteria are published in a UNE standard, the Spanish norms for the Standardisation.

This document comprises different parts:

- Scope (product group definition),
- Ecological criteria,
- Fitness for use criteria,
- Provision regarding consumer information and product marking.s

Once the ecological criteria have been approved by the Technical Standardisation Committee, any manufacturer can apply for the MARCA AENOR MEDIO AMBIENTE.



Currently the product categories with ecological criteria developed for AENOR-Medio Ambiente mark, their standards and the number of products labelled are:

Product group	Eco-label	Products	Firms	"GEN"-Code
Batteries		0	0	1100
Burners/Boilers		0	0	1200
Cleaning		0	0	1300
Clothing/Textile		0	0	1400
Construction/Building		0	0	1500
Gardening/Agriculture		0	0	1600
Home Appliance		0	0	1700
Paints and varnishes	UNE 48300:1994	20	8	1800
Home Care Products		20	8	1800
Lights		0	0	1900
Photocopiers	UNE 71901:1997	0		2000
Fax	UNE 71902	0		2001
Printers	UNE 71903	0		2001
Office Equipment		0	0	2000
Organizers	UNE 1180:1998	132	1	4000
Offices Supplies (not paper specific)		132	1	2100
Package/Container (not paper specific)		0	0	2200
Paper labels	UNE 1181	0		2305
Paper envelops	UNE 156000:1998	175	3	2304
Paper products		175	3	2300

Product group	Eco-label	Products	Firms	*GEN*-Code
Personal Care Products		0	0	2400
Paper recovering and warehousing centres	UNE 134001:1998	35	23	2500
Services		35	23	2500
Solar cells	UNE 206001:1997	0		2600
Solar-Energy		0		2600
End of life cars recovering & scrapping centres	UNE 26470:1998	4	4	2700
Vehicles/Fules		4	4	2700
Water-Saving		0	0	2800
Furniture		0	0	
Tourism		0	0	
Energy		0	0	
Food		0	0	
Dustin bags	UNE 53971:1996	5	2	4000
Shopping bags	UNE 53970:1996	23	7	4000
Others		28	9	4000
Total (AENOR - Spain)		394	48	

Criteria under development:

- Wooden doors
- Insulating materials

The approved criteria have not got a defined revision period, although they will be adapt to the Spanish environmental legislation as soon as it changes.

Different kind of actions can be punished by AENOR, and can include temporary or total suspensions by the illegal use of the label. Recently, cases of temporary suspensions to some companies have occurred.

According to AENOR representatives, the success of this label has been based on the particular success of some product group, as the case of the shopping bags. Manufacturers of this type of products have asked for certifications due to the pressure made by their costumers, most of them great surfaces, where the use of shopping bags is quite high.

Certification procedure for the AENOR-Medio Ambiente:

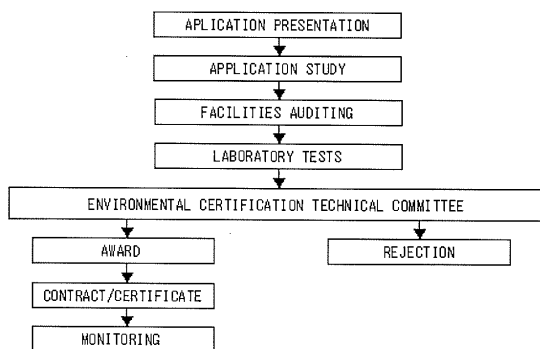
Once ecological criteria have been elaborated and published as Standard in UNE, the awarding procedure of the label can stars.

Manufacturers interested in obtaining the label send an application form plus a descriptive information of the product (catalogues, brochures, etc.) to the AENOR offices. This documentation is studied, evaluated and accordingly is required further information if necessary.

A group of auditors of AENOR visit factory sites to check ecological criteria fulfilment. During the process, they collect some samples of products and send them to accredited laboratories. These must be accredited by ENAC (Accreditation National Entity) or by the Ministry of Industry. These Independent laboratories are in charge of testing products on the line of the ecological criteria. Sometimes this step is the main bottleneck of

the process because of the high price of the test. In addition to the analyses the applicant also must pay the fees for application and certification procedure and an annual quota equivalent to 0.10% of the sales.

After the first visit and the laboratory tests AENOR auditors make a report, and with all other documentation is sent to the Technical Committee of Environmental Certification, made up of representatives of the Public Administration, associations of manufacturers and consumers, ecologists, laboratories of test and inspection entities. This Committee is the responsible to accept the application. The granted ecological labels will have a period of validity of 3 years and the product will be put under internal periodic annual controls to verify that the ecological criteria are fulfilled.

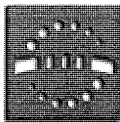


There are five zero product groups, four of them corresponding to electronic/technical equipment, with a high concentrated market and multinational manufacturers.

The 394 products belong to 21 companies, so with a high ratio products per company whereas the ratio is lower in services, 39 eco-label services which belong to 27 firms. In the case of paper envelopes only one company has 130 different labelled products and in the category of organisers another has 73.

4.1.1.3 Regional Labels

The DGQA is an ecological labelling system created through Decree 316/1994, introduced by the Autonomous Government of Catalonia on 4th November of that year. Initially, *El Distintiu* was used to guarantee the environmental quality of products, but through Decree 296/1998 of 17th November, the use of *El Distintiu* was extended to include services thus making this official system of environmental certification more complete.



The main reasons for the creation of *El Distintiu* were the lack of products categories and the difficulty to create new ones in the beginning of the EU-label scheme and the promotion of recycled products

It was also a strategic option by the Catalan Government. On one hand, in first 90's, it was not clear if there was only one Competent Body for EU label in Spain or if Autonomies were allow to apply for it On the other hand, a plethora of national ecolabels were created in Europe (AENOR in Spain, AFNOR in France, Milikieur in Netherlands,...). So the Catalan Ministry of Environment created an own ecolabel to support Catalan manufacturers in front of foreigners.

On one hand, *El Distintiu* provides consumers and users greater and more reliable information on the environmental quality of certain products and services to guide them in their use of purchasing decisions.

And, on the other hand, *El Distintiu* promotes the design, production, commercialisation, use and consumption of those products and services that favour the minimisation of waste recovery and reuse of by-products, the ecological improvement of their materials and substances, and also those which imply a saving of resources, especially energy and water.

Producers who can apply for the *Distintiu* are manufacturers of products with industrial plants in Catalonia, distributors with an own brand products marketed in Catalonia and those holders of services provided within Catalonia. The *Distintiu* can award products made or distributed in Catalonia and services set up in it, with the following exemptions: substances or preparations classified as dangerous by the European Community, products made using processes that may cause appreciable damage to persons or the environment, food, drink and pharmaceutical products, and those establishments related with human and animal health.

The competent body in charge to certify *El Distintiu* is the General Directorate of Environmental Quality, depending on the Catalan Ministry of Environment. Other two bodies involved are the Technical Board, attached to the General Directorate of Environmental Quality and made up by technicians from the Department, and the Environmental Quality Council formed by the different stake-holders involved in the scheme: users and consumers organisations, ecological associations, Catalonia Institute of Consumption, General Laboratory of Experiments and Investigations, Council of the Protection of Nature and Department of Health and Social Security

Selection of product groups and definition of criteria:

The initiative to define the categories and products corresponds without any distinction to the manufacturers or distributors of the products, the holders of services, the Environmental Quality Council and the General Directorate of Environmental Quality of the Department of the Environment. The proposal is delivered to the Environmental Quality Council, which by means of a working group of experts assesses it and writes an evaluation report. The Council guarantees a neutral and independent behaviour, thanks to its composition.

In the case of services, in 1998 a panel of experts prioritised a service list for the selection of the new groups. The selection is now basically followed by the "*El Distintiu*" Competent Body in order to launch the new service categories.

The General Director of the General Directorate of Environmental Quality adopts, after reviewing the information, the new product groups or service category and the criteria defined by the Environmental Quality Council. Thereafter, these must be published in the Official Journal of the Autonomous Government of Catalonia (DOGC).

The product groups defined for the Emblem of Guarantee of Environmental Quality, are different from EU-label ones, because, in words of Mr. Salvador Samitier, member of the Ministry of Environment and Catalan representative to EU ecolabel flower Board, it has no sense to define the same criteria for equal products for two different eco-labels. The *Distintiu* representatives do not want to launch new product groups which can be labelled by EU scheme because they believe in the complementarity of both of them. There is only one exception to this sentence: the category of paper. This product group is awarded by *El Distintiu* and by the EU-label, but both of them have defined the ecological criteria according to environmental needs of each territory. For instance *El Distintiu* is focused in water saving because it is one of the main problems in Catalonia whereas the EU-label is focused in a wide range of aspects.

Up to now, the categories of products approved and published in the Official Journal of the Autonomous Government of Catalonia (DOGC) are the following:

Groups of products approved and published. (March, 2001):

- Rubbish bags:
 - recycled plastic
 - compostable material
 - recycled paper
- Recycled cardboard and paperboard products
 - recycled cardboard products
 - recycled paper products for cardboard manufacturing.
- Recycled plastic products
- Paper and cardboard products
 - household and sanitary paper newsprint
 - printing and writing paper
 - photocopying paper
 - cardboard office products
- Products and systems that favour the saving of water:
 - taps and shower elements
 - flow restricters
 - closets
 - devices that save water in the closet
 - other systems that favour the saving of water
- Cork products and processed cork products:
 - products for wine bottles
 - products for thermal, acoustic and vibratory insulation
 - products for decorative flooring
 - other products for industrial, craft and artistic applications
- Camp Sites
- Traffic acoustic screens
- Regenerated base oils and the products which incorporate them:
 - regenerated base oil
 - base oil: minimum of 50% regenerated
- Products made of compostable material
- Leather products:
 - finished leather
 - manufactured leather
- Tourist accommodation
- Youth accommodation
- Boiler and water heater
- Car repairing centres
- Rural tourist accommodation

Categories being studied:

- Construction
- Photographic laboratories
- Dry cleaners
- Service station
- Wood products.

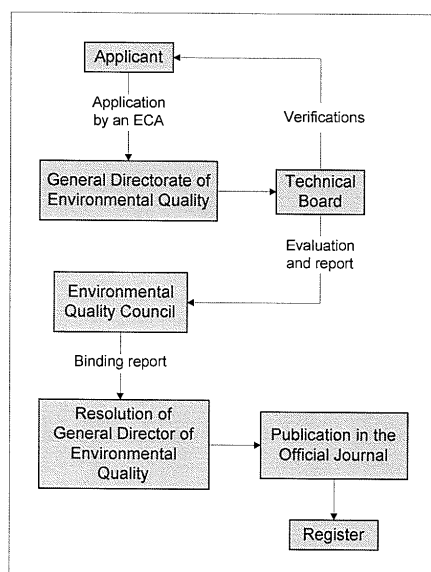
Criteria are based in the hurdle principle for categories of products and mixtures of hurdles and scoring for services and all of them are valid for a 3 years period. At the end of this time, they are revised to adapt them to the new scientific and technical progress. The period of validity of the award is also of 3 years, but it depends on the criteria, because of if criteria are revised and modified, the awarded enterprises will have to adopt the new criteria to keep the label. Competent Body can carry out surprise inspections to certified companies, but at present it is not an often practice.

Currently the acceptance of *El Distintiu*, strongly depends on the information campaigns towards manufacturers, almost individually. The budget available is too low to start big information actions towards consumers and the responsables prefer to wait for more labelled products or services.

Certification procedure for the Emblem of Guarantee of Environmental Quality:

Any Catalan manufacturer, retailer or vendor can apply for the label for a particular product into the defined categories. The application must include product samples, a technical description and the corresponding certificates. The documentation has to be presented to the General Directorate of Environmental Quality. In order to make easier the application process and to filter the candidates, the Ministry have designed some companies as Entitats Col·laboradores de l'Administració (ECA), Administration Collaboration Entities. They support the General Directorate in the first phase of the application procedure, carrying out a first verification of the product or service. Their report is used by the Environmental Quality Council to take the final decision. This application is evaluated by the Technical Board, which is a group composed by experts technicians from the Department of Environment. For this evaluation, the Technical Board will take all necessary steps and verifications for complying with the ecological criteria defined for the category the product or service belongs to.

Next step is the evaluation by the Environmental Quality which can declare the evaluation of the Technical Board as valid and releases the corresponding resolution proposal. The definitive awarding of *El Distintiu* will be done by a Resolution, the chairman of the Directorate of Environmental Quality within 15 days, to be counted from the date of approval from the Environmental Quality Council. Finally, the conferment is published in the DOGC and gives the manufacturer, vendor or holder the right to use the label of *El Distintiu* on the products which has been conferred upon.



El Distintiu is valid for three years, however, a revision must be carried out in case of during this time the product group environmental criteria are modified.

Statistics (March 2001):

Product group	Eco-label	Products	Firms	"GEN" Code
Batteries		0	0	1100
Boiler and water heater	DOGC 3226, 15/09/00	0		1200
Burners/Boilers		0	0	1200
Cleaning		0	0	1300
Leather products	DOGC 3150, 30/5/00	0		1400
Clothing/Textile		0	0	1400
Traffic acoustic screens	DOGC 2690, 28/7/98	2	2	1503
Construction/Bulidung		2	2	1500
Gardening/Agriculture		0	0	1600
Home Appliance		0	0	1700
Home Care Products		0	0	1800
Lights		0	0	1900
Office Equipment/Furniture		0	0	2000
Office Supplies (not paper specific)		0	0	2100
Package/Container (not paper specific)		0	0	2200
Paper and cardboard products	DOGC 2833, 23/2/99	36	3	2300
Recycled cardboard and paperboard products	DOGC 2988, 5/10/99	24	3	2305
Paper Products		60	6	2300
Personal Care Products		0	0	2400

Product group	Eco-label	Products	Firms	"GEN"-Code
Car repairing centres	DOGC 3073, 8/02/00	9	5	(?)
Services		9	5	2500
Solar-Energy		0	0	2600
Regenerated oils and products which incorporate them	DOGC 2606, 25/3/98	8	1	2900
Vehicles/Fuels		8	1	2700
Products and systems favouring savings ogwater	DOGC 3321, 6/2/01	665	6	2800
Water-Saving		665	6	2800
Furniture		0	0	
Rural tourist accommodation	DOGC 3346, 13/03/01	0		2900
Tourist accommodation	DOGC 3154, 5/6/00	1	1	2900
Camp sites	DOGC 2784, 11/12/98	6	6	2500
Youth accommodation	DOGC 3160, 14/6/00	3	3	2900
Tourism		10	10	
Energy		0	0	
Food		0	0	
Rubbish bags	DOGC 2721, 9/9/98	10	6	2900
Products made of compostable material	DOGC 2832, 22/2/99	5	1	2900
Recycled plastic products	DOGC 2722, 10/9/98	49	4	2900
Cork products and processed cork products	DOGC 2625, 3/4/98	1	1	2900
Others		65	12	4000
Total (Emblem - Catalonia)		819	42	

The category of car repairing centres has not been yet included in the GEN codes, but currently it has already certified 9 centres.

There are only two categories of products without awards: Boiler and water heater and Rural tourist accommodation, but according to the responsables of the Scheme some applications are running in this moment.

The 819 awarded products and services are made or proceed by 42 enterprises. It is worth noting that 665 products belong to the same category, "Products and systems that favour the savings water", but to only 6 firms. In this case most of the references are different type of taps with small differences amongst them.

4.1.2 Other Third-party, ISO Type I like Labelling

4.1.2.1 European Labels



Blue Flag:

Spain is the European country with more coastal zone and one of the main tourist places, so it is very important for this country to have the good environmental management of these sites. In fact, Spain is the European country with more beaches

and marinas Blue Flag awarded. The organism in charge of grant the fulfilment of the criteria and certify the label is the Asociación de Educación Ambiental y del Consumidor - A.D.E.A.C (Environmental Education and Consumer Association). During 2000, this organisation certified 364 beaches and 81 marinas, most of them in Catalonia and Valence coasts.

PEFC (Pan European Forest Certification):

PEFC certification was launched in Paris on June 1999. This scheme, a voluntary private sector initiative, will allow recognised products that come from independently certified forests managed according to the Pan European Criteria. Timber products from these forests will be identifiable through the PEFC logo and customers buying these products will be making a positive choice for sustainable forest management.



The purpose of the PEFC scheme is to establish an internationally credible framework for forest certification schemes and initiatives in European countries, in the first instance, which will facilitate mutual recognition of such schemes. The PEFC Technical Document and Statutes define the basic requirements of forest certification standards and schemes and the set up of institutional arrangements at Pan-European and national and sub-national levels. Timber from certified forests that meet the PEFC criteria can have access to a PEFC logo through a certified chain of custody.

The scheme has the support of many European forest industry, trade and owner organisations, which have become extraordinary members such as: FEBO (The European Timber Trade/ Retailers Association), CEPI (Confederation of European Paper Industries), CEI Bois (European Confederation of Woodworking Industries), ELO (European Landowners Organisation), CEPF (Confederation of European Forest Owners), UEF (Union of European Foresters) and FECOF (Fédération Européenne des Communes Forestières)

Environmental, retailing and social interests have also been invited to participate at national and European level.

Spain joined the PEFC initiative in June 1998 and the Spanish Forest Certification association (PEFC-Spain) was launched in May 1999 with the aim of promoting and implementing the sustainable management of Spain's forests.

PEFC-Spain is a private, non-profit-making organisation open to any association – forest producers, industrial concerns, traders, consumers or charities – nationally or on a more local scale, who may be interested in sustainable forest management. At present, membership includes the main national associations representing both forest owners and forest-based timber, paper and board industries.

Today Spain's PEFC Association is finishing the draft of the Spanish certification system, which will be submitted in the coming months to the PEFC Council for assessment. At the same time, a series of pilot trials are in preparation to test the new system in order to perfect it for future use.

4.1.2.2 National Labels

Biosphere Hotels – Quality for Life:

Biosphere Hotels project launched about in late 1996 as an environmental protection plan for the tourist accommodations on the island of Lanzarote. The initiative was proposed by businessmen working in the field

of tourism who were members of ASOLAN (The Hotel and Apartment Entrepreneurs' Association of the Island of Lanzarote).

Biosphere Hotels Certification Label is supported by the Responsible Tourism System (RTS) and by Spanish "Man and Biosphere" Committee of UNESCO, to lead hotels and restaurants establishments linked to the Biosphere Reserve program to use environmentally respectful management techniques.



The competent body in charge of the certifications is the Institute of Responsible Tourism (IRT), an independent, non-profit and national entity made up of representatives of the UNESCO Spanish Man and Biosphere Committee and other national and international organisations related with the Tourism and the Environment.

The system was created to give guidance to hotels and provide them with incentives to improve the quality of their installations voluntarily. Moreover, the name of the system is Responsible Tourism System, because it not only involves a reduction in environmental impact and efficiency in lending services, but it also encompasses other fundamental aspects of responsible hotel management.

The slogan QUALITY FOR LIFE, expresses the two goals that the eco-label is aiming to achieve:

1. the conservation and improvement of habitats for life on Earth,
2. and the satisfaction of travellers' expectations and an improvement in the quality of life within the local community that welcomes them..

The scope of activity of the Biosphere Hotels ecolabel is designed for generally include any area, region or territory that, implicitly or explicitly, complies with the requirements established at the "Earth Summit," the United Nations Conference on Environment and Development, held in Rio de Janeiro in 1992, to promote sustainable forms of development. In these areas, the goal is to foster and display a balanced relationship between man and the environment, and the three basic functions that are complementary and mutually strengthening that Biosphere Reserves must perform are:

- Conservation: They must contribute to the conservation of landscapes, ecosystems, species and genetic diversity.
- Development: They must promote economic and human development in a rational, lasting way, from both an ecological and a socio-cultural perspective.
- Logistics: The sites must serve as a base for research, observation, education and the exchange of information on problems involving conservation, as well as local, national and global development.

The hotel and restaurant establishments that apply for the Biosphere Hotels label have to comply with the environmental requirements, based on hurdle principles, that take the environment into account in terms of energy and water savings, the use of clean forms of energy, waste management, minimal air pollution, promotion of ecological principles and conservation of natural surroundings. The requirements that comprise the RTS standards and the criteria upon which they are based can be grouped into five categories:

1. Resource Conservation: The goal is to minimise the consumption of resources, especially those that are finite, through the use of conservation systems and other efficient ways of using resources.
2. Environmental Efficiency: This category basically includes a set of criteria that ensure a minimal impact to the environment.

3. Sustainable Development: These criteria will be applied to ensure compliance with the principles and objectives established at the many forums on sustainable tourism.
4. Environmental Quality: This set of criteria includes several physical factors within the environment, both inside and outside the establishment and in its activities, as well as the products and services it offers.
5. Quality Tourism: These standards are related to the truthfulness of the establishment's advertising, its efforts towards customer satisfaction and other criteria involving customer services.

The **procedure of applications** is divided in 3 points. The first point is called Biosphere Hotels Audit, and it is an internal review, helped by IRT's guide, in order to plan the implementation of the Responsible Tourism System. After the implementation of the needed measures, there is an internal auto-evaluation audit, to look up whether the establishment fulfils the necessary standard requirements before applying for the conformity evaluation to obtain the Biosphere Hotels Label. Finally, members from IRT perform the external audit. If it results positive, the establishment will receive the label and it must keep on complying the established requirements. If the audit result is negative, the ITR will advise the establishment in order to solve deviations from standard, and will subsequently confer the label.

Annual following-up inspections are carried out by IRT.

Since 1996 until now, 15 establishments have been certified with the Biosphere Hotels label, but all of them are placed in the island of Lanzarote.

IPE Ecolabel:

The *Instituto Papelero Español* (Spanish Paper Institute), was created in 1963 as a non-profit Industrial Research Association. Actually, it acts as the technical branch of ASPAPEL (Paper Producers Bussiness Association) but with juridical independence.



Criteria of its label, created by an expertise board following the scoring principle, are based on consumption of non-renewable materials and energy, air emissions, and waste water quality.

The procedure of labelling starts with a request to IPE. To evaluate the established criteria, the company have to deliver analysis and tests from accredited laboratories. IPE Technical Committee will take its decision according to the results of this test, comparing them with their limit results.

From its creation until now, the ecolabel has been granted to 8 products from 2 companies.

4.1.2.3 Regional Labels

Doñana 21 Ecolabel:



The territory of Doñana, which include the towns of Almonte, Aznalcázar, Bollullos del Condado, Bonares, Hinojos, Lucena del Puerto, Moguer, Palos, Pilas, Puebla del Río, Rociana, Sanlúcar de Barrameda, Villafranco y Villamanrique, and is declared Humanity Heritage and Biosphere Reserve, is one of the most environmental sensible place of Europe. This territory has natural privileged conditions, because there are some of the animal and vegetable species more protected in the Iberian Peninsula and Europe, and exists a unique ecosystem in the world.

The Junta de Andalucía (Autonomous government of the region) created, on March of 1997 "Doñana 21 Foundation", a private, non-profit entity, to execute the Sustainable Development Scheme of Doñana. The objective of the plan is to improve the relation between the conservation and the development in the space of Doñana because the nature and the economic activity are strongly joined. This plan tries to make compatible the progress and the welfare of the District of Doñana, and at the same time, to preserve its natural heritage. To obtain this coexistence, Doñana 21 Foundation created in 1999 the ecolabel Doñana 21.

Doñana 21 Foundation has assumed the commitment to create and promote the development of the ecolabel, to give enterprises a tool which facilitate the continuous improvement of their results and favour the development of the zone. Enterprises will reach this sustainable development if they comply and evolve with all the requirements of the ecolabel.

The requirements of Doñana 21 ecolabel are collected in the Regulation of the label. Among them, there are two international standards about quality and environment: UNE-EN-ISO 9001/2/3 and UNE-EN-ISO 14001 standards, respectively. Both of them are compulsory criteria to be certified with the label.

Other requirements are related to the continuous improvement of the products, processes and services quality and of the environmental aspects and impacts produced during the development of the activities. Enterprises, also have to deliver to consumers environmental information about their activities and process (Environmental Declaration).

The fulfilment of the requirements is accredited through a process of auditories and evaluations undertaken by Doñana 21 Foundation and a legal independent and certified Auditory Entity. Currently this Entity is AENOR, which, annually, will audit and evaluate awarded enterprises.

This Environmental and Quality Label has a period of validity of three years and it can be prorogued if the enterprise continue complying the requirements. Doñana 21 Foundation created the Guarantees Committee for the Label to prove that the requirements are complied appropriately during the period of validity. The committee is in charge to transact claims done during the development of the Regulation application and to propose Board the revisions and modifications.

Since 1999, more than 40 enterprises have been started the process and it is foreseen that the first three companies will be awarded during 2001. Enterprises can belong to next different sectors: agro-alimentary industry, hotel, services providers, manufacturers of craft products and rural tourism industries. Subsidies from Andalucía public administrations are available till the 50% of the funds expends in certification process.

The label was recognised in Brussels by General Director of Environment and FEDER Fund of the European Commission, as a quality and environmental behaviour guarantee mark to those enterprises which develop their activities in Doñana. The Program developed was selected as one of the best European experiences in sustainable development. Furthermore, the Sustainable Development Scheme of Doñana was also recognised because of the improvement of the economical conditions in this area with the appropriate respect to the environment and using its natural resources.

Enterprises opinion about Doñana 21 label is quite positive, although the majority ensures that the certification process supposes a lot of additional work, money and time.

Distintiu Ecoturístic of Alcudia Municipality:

In 1992, the City Hall of Alcudia declared the municipality as an Eco-tourist Municipality because of its necessity to respect and protect the environment and considering that tourism is one of the most important activities of the area. Among other environmental activities, on March 1994, was born the project of an ecolabel, called Distintiu Ecoturístic, that certifies those hotel and complementary offer establishments that are respectful with the environment.

The main objective of this label is to stimulate the tourist industry protecting and respecting the environment, through the award of a credible environmental quality label.

The City Hall of Alcudia, with the project of the Distintiu Ecoturístic label, wants to promote the environmental education and provide all the necessary and available information to managers, employees and customers.

The accreditation of the Distintiu Ecoturístic label depends on the fulfilment of the environmental requirements. To set up the environmental requirements, members of the City Hall consulted initiatives and other experiences about ecolabelling carried out in other countries. The ecological group GOB (Balearic Ornithology Group), an environmental NGO, was a reference point in assessment and they helped to draw up the Regulation and the Recommendations of the ecolabel. Another organisation which gave its collaboration to the City Hall members was the Hotel Managerial Association of Alcudia. This body had an important role in the broadcast campaign, organising courses, seminars and other informative activities.

The label is based on 3 documents, in which the main one of them is the Regulation. It contains 13 requirements, some mandatory and some voluntarily and they are based in a mixture of hurdle (for compulsory) and scoring (for voluntary) principles.

Mandatory requirements are related with environmental education, waste management, use of recycling materials and ecological products and energy and water savings. Voluntarily ones, include the adaptation of the establishments to the environmental characteristics of the zone.

Technicians from the Eco-tourist Commission of Alcudia's City Hall study all presented applications and after a visit to the installations, they draw up the technical reports approving or rejecting the application.

The label has a one year period of validity and can be renewed at the end of this period. Technicians from Eco-tourist Commission will be able to do some controls during the year to check and guarantee the fulfilment of the Regulation. If there is any anomaly with the requirements the ecolabel can be removed.

Since 1994, managers who apply for the ecolabel have done great efforts to incorporate environmental measures to their establishments trying to achieve eco-label criteria. Even those establishments which have not been awarded on the first time, have achieved good environmental levels. From 1994 the number of certified hotels has increased slowly but constantly, and in 2000 there were 14 hotels and 3 restaurants with the Distintiu Ecoturístic. Every year around 30% of applications are rejected because of one of the non-achievement of a compulsory requirement.

Since the first award of the ecolabel, the more positive consequences detected in Alcudia are the decrease of the waste water that arrives at the water treatment plant on summer, the considerable increase of paper, cardboard and glass quantities collected in the selective collection containers and the increase of solar panels installations to heat water.

4.1.2.4 Other Labels

FSC (Forest Stewardship Council):

In Spain, from 1996, the ecological group WWF/Adena is supporting and working in the promotion of the world-wide system of certification FSC. This ecolabel has the aim to certify those products that come from well-managed forests, respecting the environment. The requirements are focused on tropical forests, but can be adapted to other forests, setting special criteria according to national social and environmental conditions. During 1999, WWF/Adena co-ordinated the constitution of the Spanish Working Group to elaborate the Spanish standardisation for the FSC certification.



Currently it is difficult to find certified products in Spain, however there are 2 products awarded with the FSC seal. Moreover, other WWF-Grupo 2000 members (enterprise association that promotes the forestry certification FSC, co-ordinated by WWF/Adena) are in the way to obtain it.

A survey, carried out by the Spanish Ministry of Environment, with the collaboration of the Consumers and Users Organisation (OCU) and WWF/Adena, shows that 8 of 10 asked persons would willing to pay more for a FSC-product. From the results of the survey, also it is noticed that consumer is conscious of the woods situation, supports the sustainable management initiatives and participates on it (or is well-disposed to do it), wants real guarantees of the requirements fulfilment and is well-disposed to buy certified products.

Blue Angel:



Blue Angel is the ecolabel more successful in Europe. The Certification Body is the German Institute for Quality Assurance and Labelling (RAL Deutsches Institut für Gütesicherung und Kennzeichnung e.V.). Nowadays there are, more than 4000 certified products, 18 of them from Spain producers, which mostly export their products to Germany.

Öko-Tex standard 100:

The Technological Institute, AITEX, is a private non-profit association formed by textile enterprises associated to Öko tex and thus the responsible to award Spanish products with the label launched by it "Öko-tex Standard 100". This label was introduced by the international organisation "Öko tex", to mark textile products with a good environmental performance in terms of their content of harmful substances as heavy metals, formaldehyde, pesticides,.... Currently in Spain there are 210 companies awarded by this ecolabel.



4.2 ISO Type II

There are several examples of typical ISO type II claims, specially in the paper sector.

Sentences as "Made from recycled material", "Elemental chlorine free or Total chlorine Free", "Sustainable forestry management".... often appears in paper packaging. It is also quite usually to find the Möbius Loop joined to these sentences in the packaging.



Products from other groups with different claims could fit into this ISO type as some sentences found in detergents group.

Advertising is regulated by the General Publicity Law (34/1988) for the most of the products, and by the Royal Decree 1852/93 for food. This Decree, with the different legislation developed afterwards, establish the different criteria for using the words "Ecological", "Biological", "Eco-" and "Bio-" in food sector.

Unfortunately, in different products still are some vague sentences as "Environmental friendly", "Do not damage the environment",....., without any other reference nor certification, creating misunderstanding amongst the consumers.

After consulting the main Spanish retailers, none of them have launched a self-declaration ecolabel for its own labelled products.

4.3 ISO Type III

At the moment, there is no products with an ISO type III label in Spain.

SEAT published the Life Cycle Inventory of the SEAT Ibiza, which is the most similar paper to an ISO type III label published in Spain.

In all Environmental reports of the certified ISO 14001 or/and EMAS companies, appears different production environmental parameters and indicators (CO2 emissions, energy used, waste produce,...), but none of them include a LCA study nor it is certified as a label.

5 Other EPIS

5.1 Social Labels

Social labels are not wide spread in Spain and it does not exist a national Fair Trade labelling Scheme. According to Fair Trade in Europe in 2001, Spanish Fair Trade market is dominated by three big importing organisations: Intermón-Oxfam, Alternativa 3 and Ideas. These three organisations achieve more than 70% of their turnover through world shops and Fair Trade groups. All of them have their own world shops and trust in their name to ensure the real origin of the products sold.

A national forum of the most important Fair Trade players was established in 1996. It is called Coordinadora de Organizaciones de Comercio Justo (Coordination of Fair Trade Organisations) and is formed by 27 Fair Trade organisations, including importers, wholesalers, retailers, as well as important development NGOs like SETEM. The main objective is to better coordinate the work of the different players and to raise the profile of Fair Trade in Spain. One of the first decisions of the Coordinadora was to initiate discussions on a Fair Trade



labelling scheme in Spain. Currently all shops belonging to the Coordinadora shows the same logo, "JUSTO AQUÍ (Right here)", in the entrance signal, but not in the products.

Food products have continued to increase their market share and the once dominant handicraft sector now accounts for only 54% of sales. Further expansion of the food sector is expected when the national Fair Trade label is launched.

5.2 Other Interesting Labels

Green Dot:

The most spread labelling in Spain, is the "Green Dot" created by Spanish package producers in 1997 to fulfil the EU Directive on packaging refusal and it is managed by Ecoembes. It is a voluntary labelling scheme but most of the Spanish companies adhered to this system to guarantee a selective waste management of their packaging. In fact, only pharmaceutical industry adhered to PRODESFARMA and glass producers adhered to ECOVIDRIO, do not belong to this Packaging Management Integrated System.



Ecological Agriculture:

Spanish organic agriculture has shown a slow but steady growth in the course of its development since its starting in 70's. In the last years - mainly since the introduction of state legislation on organic agriculture – a speeding-up in the development was observed.

The number of organic farms has increased twelve-fold between 1994 and 1999, and the number of processing companies more than trebled. At present (1999) there are 11.773 producers (0,9 % of all farms) and 515 processing companies. In the same period the organically farmed surface rose from 17.208,9 hectares to 352.164 hectares (1,4 % of the agricultural land).

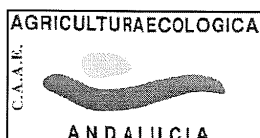
In Spain, EU-regulation 2092/91 on organic products is applied by Royal Decree No. 1852/1993, covering organic agricultural production and the labelling of agricultural products and foods. The decree legally protects expressions like "ecológico" (ecological), "biológico" (biological) and "orgánico" (organic) as well as the abbreviations "eco" and "bio". Food labelled with these terms must have been produced according to the rules of this decree.

The autonomies are in charge of implementing the decree, and each one has a competent authority, which certifies the ecological food products. Labels with references to Ecological Food are awarded by these Committees and include a sentence with the control code, together with it. The problem is that every region developed its own label, and some of them are quite different, creating confusing amongst consumers.

Recently a new EU regulation (CE 331/2000) created an EU label for ecological or biological agriculture. This label only can appear together with the official labels of each EU country.



Catalan logo



Andalucia logo



EU logo

Vida Sana:

In addition to the logos of the competent-authorities some of the private trademarks - in existence for many years - are used because consumers trust them.



One example is the trademark of the Vida Sana organisation, which is the most widely recognised Spanish organic trademark. Associació Vida Sana (Healthy Life Association) created in 1980 its own label for ecological food. It is the oldest ecological label for food in Spain and it was guaranteed by the Ministry of Agriculture before the official legislation appeared. Currently only official certified products can, if it is asked, be labelled with Vida Sana logo. This Association has also developed two more eco-labels in food sector and another for non-food products and other materials.

Producto no manipulado genéticamente (Genetically non-modified product): as the name shows, this label was created by the Vida Sana, and supported by NGO groups against genetic modified products, to mark food products genetically non-modified.

Producto natural (Natural product): Label for transformed food elaborated without any artificial substance, according to Código Alimentario Español.

Producto recomendado (Recommended Product): This distinctive is conceded to non-food products and materials, which contribute to life quality improvement and to environmental protection. There are no established criteria and companies which want to certify their products have to convince the "Technical Board" from the Association, delivering as much as information they can (ingredient list, other certifications,...).



6 Conclusions

- A recent survey carried out by *Fundación Entorno* about the state-of-art and perspectives of green purchasing habits in Spain, shows that, generally, consumers are well-disposed towards the improvement of the environment through their habits. Out of 10 actions considered by Spanish consumer to improve the environment, the green purchasing is in 5th place, after the water and energy resources saving and the

waste recycling and minimisation. According to the survey, the worst rated environmental products are batteries, cleaning products, transports and plastics. For consumers, the main source of product information is found in packaging (71%), followed by publicity (16%). But retailers consider more important green publicity, the product and its packaging image, than the information of the label. The drivers for buying green products are primarily the prestige and quality of the product (33%) and the image of the customer (29%) rather than the reduction of the environmental impact (26%). Usually it is thought that consumers do not buy green products because of its higher price, but according to their opinion, the main reasons are because of they do not think about green purchasing (47%) and the lack of the products in their usual shop (20%). Only 12% of customers think the reason is the price. Ecolabels are, in general, poorly identified, and a qualitative analysis showed that the identification of a label does not mean that the consequences of it can be explained. Regarding to their knowledge, 60% recognise the recycling/recycled product, 35% the Green Dot, 20% the EU label and only 10% the AENOR-Medio Ambiente. No data from the *El Distintiu* and other regional labels were available.

- Regarding to EU ecolabel, Spain is, together with France, the country where the label is currently making the most rapid progress, both in terms of number of applicants and in terms of range of product groups covered. So, there is a real potential right now for building on these recent breakthroughs, notably involving more actively the participation of different key actors, in order to break the vicious circle (label's lack of visibility deters producers from applying for the label, and, in turn, the absence of labelled products on the market prevents it from becoming known in the eyes of consumers).
- A similar situation is occurring with the AENOR and the *El Distintiu* label, the other two relevant third party labels. The higher number of labelled products than in the EU ones, 394 for the former and 819 for the latter, is, in words of their responsible, due to a very strong campaign towards producers with meetings, and in the particular case of *El Distintiu* thanks to the lower fees and public grants for testing. In spite of it, they do not still reach to consumers eyes as it is showed by the survey carried out by *Fundación Entorno*.
- Both of the ecolabels are based in LCA principles but since the *El Distintiu* does not always perform a LCA study according to ISO 1404x and rely on panel experts opinion, AENOR always performs one to develop the criteria.
- These two labels have include criteria for services, with a relative success.
- The 819 products awarded with the *Distintiu de Garantia de Qualitat Ambiental* are not a qualitative number, because 665 of them belong to the same products group, products and systems that favour the saving of water, belonging to only 6 companies.
- Three ecolabels on tourism sector have been found: Biosphere hotel, Doñana 21 and Alcudia, and all of them have achieved a high level of acceptance in neighbour hotels. However Biosphere hotels was launched to certify hotels all around the world only hotels in Lanzarote, where it was created, have been awarded. Besides these three ecolabels, *El Distintiu* has also developed 4 categories for tourist facilities, but only 2 of them have been requested and certified by some resorts.
- Self-declaration made by producers are not very developed and mentions to recyclability of the packaging or product are the most usual. Unfair and ambiguous sentences have been found what produce confusion amongst consumers. Only one label ISO type II, launched by a producers association have been found (IPE label), and it is not very successful.
- ISO type III is completely unknown in Spain and no initiatives are being developed in this direction.
- Mandatory labels are quite similar to other EU-countries, thus they are transposed from EU Directives

- Social labels are not present in the Spanish market and very few and individual initiatives have been carried out. Brands from the ONG or organisations which distribute the products are now the only way to know the origin of the products.
- Ecological food market increases every year and the main label is the one launched by regional public administrations.
- Social and food labels are starting in Spain and they are still unknown amongst population. They are in the beginning of the process, but food problems (mad cows, porcine pest, ...) can increase the production and distribution of the ecological food products.
- In spite of the number of the certified products, it is still very difficult to find the products in shops. The main problem argued by the different stake-holders is the same: the vicious circle: no labels -> people do not know them -> people do not buy products -> no product applications -> no labels
- According to the *Fundación Entorno* survey, population feels interested in buying green products, so if a critical number of them can be in the shelves, the domino effect can be important, as has happened in some product groups.

Drivers and Trends:

Drivers to convince companies are very different depending on the products group and, ecolabel.

Costumers are one of them, in products as textiles (basically German costumers for Okö-tex), paper and shopping bags in which retailers pressed to producers to obtain AENOR-Medio Ambiente.

One common issue in almost all of the companies with ecolabeled products is the insistence of the Competent Body. Until now, to get new ecolabeled products, Competent Bodies have to visit companies and encourage them to obtain the award, and hope in the domino effect, only produced in a few product groups: products and systems that favour the savings water for *El Distintiu* and paints and varnishes for AENOR. This effect can be also the issue to understand the successful of the local or regional tourist labels.

Another important driver in Catalonia are the public grants for testing and the lower fees offered by the Catalan Government to obtain *El Distintiu*.

Green purchasing is another driver just starting in Spain. The Spanish Ministry of Environment gives between 10 and 15% of punctuation in public tenders for environmental improvements. The Government of Catalonia developed a Political Order, related to Public Green Purchasing, which force public subsidised buildings to incorporate products and systems that favour the saving of water [RD 202/98].

One important fact is to note that none of the products groups and their criteria has been suggested neither by enterprises or associations of them nor consumers and NGOs, in spite of it is foreseen in the bases of the ecolabels. It is not a good symbol for the future, thus only Competent Bodies initiative is pulling the eco-labelling initiative.

Last January, a project for Promotion and Diffusion of EU Eco-Label in Spain started with the goal to increase the knowledge of this eco-label amongst consumers, producers and retailers. Latter are considered by the Commission as a key step for the eco-label. This project confirms the trend observed in this paper: during the recent years the number of ecolabeled products and product groups is increasing slowly but constantly, and there are no reasons to think it will be different in the next years. This fact, together with the increasing of environmental sensibility, presents a good future panorama in the country.

According to last certifications of *El Distintiu*, it seems that services sector is more interested in the implementation of this tools than product ones, in spite of EMAS is a strong "competitor" of the ecolabel for services.

7 Literature and Homepages

7.1 Literature

- [RD 202/98] Royal Decree 202/98, of 30th July, which establishes measures for the promotion of the saving of water in certain buildings.
- AENOR (nº 129, May 1999 and nº 133, October 1999). UNE (Monthly bulletin).
- City Hall of Alcudia (March, 1998). Normativa para la concesión del Distintivo Ecoturístico para establecimientos hoteleros. ("Standard for the concession of the Distintivo Ecoturístico to hotel establishments").
- City Hall of Alcudia (November,1998). Declaración de Alcudia: Municipio Ecoturístico. Objetivos y actuaciones ("Declaration of Alcudia: Ecotourist Town. Objectives and actions").
- Expansión Newspaper, pages 18-19 (13th October, 1998). Empresa y Medio Ambiente ("Enterprise and Environment"). News related with the AENOR-Medio Ambiente label.
- Expansión Newspaper, pages 18-19(13th April, 1999). Empresa y Medio Ambiente ("Enterprise and Environment"). Article related with the Biosphere Hotels labels.
- Fundación DOÑANA 21 (1999). Etiqueta Doñana 21. Reglamento de uso y gestión ("Label Doñana 21. Use and management regulation").
- Law 11/1997, of 24 April, of Packages and Wastes of Packages.
- Law 34/1988, of 11 November, Of General Publicity.
- Law 38/1995, of 12 December, on the right of access to the information in the matter of environment (BOE núm. 297, of 13 December 1995).
- Law 38/1995, of 21 April, of Wastes.
- Mampaso, J.C. (October, 1999). Nuevas Políticas ambientales, Política Integrada de Producto (IPP). Conference
- Royal Decree 363/1995, of 10 March, by which is approved the Regulation on notification of new substances and classification, packaging, and labeled of dangerous substances.
- Royal Decree 833/1998, of 20 July, by which is approved the Regulation for the execution of Law 20/1986, Basic of Toxic and Dangerous Wastes (modified by Royal Decree 952/1997, of 20 June).

7.2 Homepages

- AENOR-Medio Ambiente: <http://www.aenor.es/certifica.htm> (visited: 18.08.2000).
- Biosphere Hotels, Distintivo Ecoturístico and the Distintiu de Garantia de Qualitat Ambiental: <http://www.eco-tip.org/Ecolabels/ecolabels.htm> (visited: 30.09.2000).
- Biosphere Hotels: <http://www.biohotel.com> (visited: 02.10.2000).
- Blue Angel: <http://www.blauer-engel.de> - (visited: 12.09.2000).
- Distintiu de Garantia de Qualitat Ambiental: http://www.gencat.es/mediamb/cqa_i.htm (visited: 18.08.2000).
- Distintivo Ecoturístico: <http://www.alcudia.net> - (visited: 30.09.2000)
- Doñana 21: <http://www.donana.es/pral> (visited: 23.08.2000).
- Environmental Spanish Legislation: <http://www.ecoiuris.com> (visited: 03.11.2000).
- Fundación Entorno, Empresa y Medio Ambiente: <http://www.fundacion-entorno.org> - (visited: 22.01.01)
- General information: <http://europa.eu.int/index.htm> (visited: 24.07.2000).
- General information: <http://www.gen.gr.jp> (visited: 22.08.2000).
- General information: <http://www.mma.es/> (visited: 25.08.2000).

Paolo Frankl / Sveva Barbera
with support of Virginia Belli

Environmental Product Information Schemes (EPIS)
in the United Kingdom

Table of Contents

1	INTRODUCTION	281
2	INTEGRATED PRODUCT POLICY AND ENVIRONMENTAL PRODUCT INFORMATION SCHEMES IN THE UK	281
2.1	The on-going Work: Towards an Integrated Approach	281
2.2	Main Recommendations by the ACCPE	282
2.2.1	Self-declared Claims	282
2.2.2	Ecolabelling Schemes	282
2.2.3	New Directions on Product Information	282
2.2.4	Procurement and Purchasing Policy	283
3	MANDATORY LABELS	283
3.1	Energy Label	284
3.2	Car Label	284
4	VOLUNTARY LABELS	285
4.1	Classical ISO Type I Labels	285
4.1.1	European Eco-label	285
4.1.1.1	The Introduction of the EU-Flower in the UK	285
4.1.1.2	Original Expectations of other Stakeholders	286
4.1.1.3	UK Products awarded with the EU Ecolabel	287
4.1.1.4	New Product Groups under Development	288
4.1.2	The UK National Eco-label	288
4.2	ISO Type I like Labels	290
4.3	ISO Type II Labels	294
4.3.1	Importance of ISO Type II Labels in the UK	294
4.3.2	The Need for Regulation	295
4.3.2.1	Product Declarations: The "Green Claims Code"	295
4.3.2.2	Product Declarations: The Bottom Line	295
4.3.3	Interesting Examples	296
4.4	ISO Type III Labels	297
5	OTHER LABELS	297
5.1	High Level Awards	297
5.2	Social Labels	298
6	CONCLUSIONS	299
7	REFERENCES	301

1 Introduction

The objective of this paper is to describe the history of integrated product policy and product information schemes in the UK, its present status and future perspectives. The UK are an interesting case, because on one hand there was a strong initial support to the EU-Flower and no perceived need for the creation of a national label. On the other hand however, in the meanwhile the discussion about the opportunity, desirability and feasibility of creating a national label have been raised quite strongly in the two last years. The present tendency towards developing a "package" of integrated product information tools rather than a single labelling system is described and discussed.

Chapter 2 shortly describes the current Integrated Product Policies in UK; chapter 3 introduces mandatory labels; Chapter 4 describes in detail voluntary environmental labels (ISO type I,II,III); chapter 5 focuses on social labels and in chapter 6, some general conclusions are given.

2 Integrated Product Policy and Environmental Product Information Schemes in the UK

2.1 The on-going Work: Towards an Integrated Approach

In 1999 an Advisory Committee on Consumer Products and the Environment (ACCPE) has been established under the Department of the Environment, Transport and the Regions. Some time ago (23 October 2000), the First Report of the Advisory Committee has been published [ACCPE 2000]. It very clearly has an integrated approach focusing on product information, from all different perspectives. Indeed, the report focuses on following aspects:

- Self-declared claims
 - Promoting good practice
 - Regulatory Action
 - Other ways of tackling bad practice
- Environmental labelling and other rating schemes
 - Ecolabelling award schemes
 - Eco-rating and eco-profiling
 - High-level awards
- New national initiatives on product information
- General recommendations
- A "Family" of graded labels for cars, homes and domestic equipment
 - Car labelling
 - Home energy rating
- A high powered product information service, harnessing the internet

The work of the Committee is intended to last three years in total. A next working phase will focus on

Procurement and Purchasing Policy.

2.2 Main Recommendations by the ACCPE

2.2.1 Self-declared Claims

The first conclusion is on self-declared claims (ISO-type II). The UK encourage many more firms to provide information about their products. In fact, Self-declared Claims are by far the most dominant type of information currently in the UK market and are likely to remain so for the foreseeable future. The fact that so many claims exist, means that companies have a potentially very important contribution to make. Their importance fully acknowledged. The quality of the declarations has significantly increased after the introduction of the Green Claims Code (1998) and ISO 14021. However, the UK government must further tackle with the issue of poor-quality claims on two broad fronts:

- By promoting advice about good practice
- By reinforcing monitoring and taking firmer regulatory action against claims not meeting an acceptable standard (set of minimum standard)

The government should look at ways of influencing business to “bend” marketing towards sustainable development issues. If done effectively, this would unlock resources far in excess of what government itself can conceivably spend on direct communication.

2.2.2 Ecolabelling Schemes

The EU-ecolabel has so far achieved only a limited presence in the UK market, but it still can play a positive role. In particular, the recent improvements within the new regulations are definitely welcome. Public procurement procedures should be used in combination with this scheme.

At the national level, however, it is clearly concluded that a “national scheme” (e.g. in the style of Blauer Engel) represents a rather old-fashioned view of the market, fast being overtaken by developments in information technology. Therefore, the clear recommendation to the UK government is **not** to launch such a scheme, but rather to enforce more radical and effective measures, described below:

2.2.3 New Directions on Product Information

First of all, any measure should be capable of achieving real sustainable development gains. It should be tied in as closely as possible with priorities and key indicators in the UK sustainable development strategy. Finally, it should be developed in combination with other measures. A package of mutually reinforcing measures is much more likely to achieve real results than an information scheme on its own.

In particular, the two proposed measures to the government are:

- A coherent family of standardised rating and labelling for cars, homes and domestic equipment
- A powerful new product information service, based on the Internet.

The standardised rating is considered as one of the most efficient and effective instruments because they are easily recognisable, easily understandable and can be applied on all range of products in a sector, good

and bad ones, thus providing a broader information to consumers. It should be firstly applied to cars, homes energy rating and domestic equipment, because these three aspects cause as much as the 90% of CO₂ emissions in the domestic sector of UK. The format should be similar to the one of the EU energy label. Environmental focus should be on CO₂ emissions and energy efficiency.

The second major recommendation to government is to set up a high-powered product information service, based on the internet. The service should contain the results of the development of product databases across many more sectors where there is scope for real market transformation and offer comprehensive advice meeting a whole range of consumer and purchasing needs.

2.2.4 Procurement and Purchasing Policy

There are many positive purchasing policies the Government could adopt, in addition to its recent initiatives on timber and paper. Early action in one important field could actively contribute to the UK programme for reduced emissions of CO₂. DETR recommend that the Government should formally adopt a purchasing policy where:

- for product types which are covered by the EU energy labelling regime, buyers will normally specify performance in the 'A' category;
- for those types where additionally there are energy, ecological and fitness-for-use criteria established under the EU ecolabelling scheme, buyers will give preference to those products which can demonstrate that they meet those performance criteria;
- for types of products and technologies where the Government has recognized high energy efficiency performance under its new tax framework for Enhanced Capital Allowances (ECAs), buyers will normally select goods and equipment which meet the published criteria;
- for product types which are not covered by these other regimes, but where the Energy Saving Trust has established energy efficiency criteria under its Product Endorsement scheme, buyers will normally specify performance that meets those criteria.

This approach should be promoted across the rest of the public sector – and gradually widened to a much bigger range of goods and services where there is scope to contribute to other objectives in the Government's sustainable development strategy. [ACCPE 2000]

Moreover, DETR and Treasury (the central economic and finance department) have agreed and issued a joint note on Environmental Issues in Purchasing which addresses how environmental issues can be taken into account consistent with public procurement policy and the regulatory framework.

DETR's Sustainable Development Unit (SDU) and the Purchasing Policy and Advice Division (PPAD) have issued guidance to help buyers "buy green", including a Green Guide for Buyers. [DETR 2000]

3 Mandatory Labels

The main examples of mandatory environmental labels in the market at present are the standard labels required by EC Directives to appear on new items of domestic equipment, notably fridges, freezers and washing machines (with other items like light-bulbs to follow). As well as establishing a greater presence in the electrical goods market, this approach is likely to appear in a comparable form in the car market, as

details of a new EU regime are currently being agreed for showing fuel consumption by new motor vehicles. This approach is essentially a form of graded label, focusing mainly on a single important environmental factor (though there is scope for secondary messages to be included as well) and demonstrating the difference in performance between different products on offer in the market. It lends itself particularly well to working in combination with other measures, such as minimum standards to underpin progress at the bottom end of the market and sectoral agreements to achieve overall improvement across the product market.

At national level UK intend to step up pressure to improve compliance with the existing labelling regimes and the accuracy of declarations. At EU level UK propose following up principles agreed during the UK Presidency by working for a clear forward programme to cover more product areas where there is significant resource consumption in use - extending for example into sectors like office equipment, motors and heaters.

3.1 Energy Label

The mandatory energy label indicates the consumption of energy and of other essential resources (e.g. water, chemical products, etc.) of electric household appliances. The requested data must be indicated both on a label put on the appliance itself, and on a technical information sheet. The data to be indicated are specified in the different directives related to the different product groups. The producer is obliged to provide a detailed technical information.

Energy labels in the UK have been used on domestic appliances since January 1995, initially with refrigeration equipment, afterwards they have been extended to other electric household appliances.

In UK the general EU directive (92/75/CEE) on energy label has been applied through law n° 297 of the 13.10.1992. Labeled products in UK are [IEA 2000]:

- refrigerators, freezers and their combination,
- washing machines, drying machines and combination,
- dishwashers,
- lamps.

3.2 Car Label

In December 1999, the European Parliament and the Council approved the European Commission Directive 1999/94/EC relating to the availability of consumer information on cars. The purpose of this Directive is to ensure that information relating to the fuel economy and CO₂ emissions of new passenger cars offered for sale or lease in the Community is made available to consumers in order to enable consumers to make an informed choice. For more details ref. to [Rubik 2000] and http://europa.eu.int/eur-lex/en/lif/dat/1999/en_399L0094.html. This directive requires fuel consumption and CO₂ emissions per km to be explicitly written on a label attached to the car, plus a guide with respect to fuel economy to be available at any point of sale free of charge.

The EU Directive on car labelling was adopted in the UK in January 2001, among the first states in the European Union with Austria and Denmark. So far no more details about the details of the adoption of the regulation, and in particular of the format of the product information scheme to be adopted, are available.

As far as this is concerned, it is worth reporting a comment published on this issue by DETR in December 2000: "Whilst it is not necessary for the UK Government to introduce a comparative scheme in order to

comply with the minimum requirements of the Directive 99/94/EC in January 2001, it is to be hoped that the opportunity would be taken soon afterwards to introduce a comparative scheme, in order to contribute to the debate with other Member States on their experience with their comparative schemes, prior to the review of all EU schemes in three year's time" [DETR 2000c].

4 Voluntary Labels

4.1 Classical ISO Type I Labels

4.1.1 European Eco-label

4.1.1.1 The Introduction of the EU-Flower in the UK

With the development of green consumerism across Europe in the late 1980s came a proliferation of 'freelance' environmental labels that at best were confusing for consumers and at worst misleading. The outcome was calls for the introduction of official ecolabelling schemes, that would identify less damaging products and thereby help consumers to make a better informed choice.

At the time, other EU member states either already had their own schemes (Germany's Blue Angel Scheme, and Scandinavia's Nordic Swan) or were considering setting them up (France, Netherlands), and a scheme for consumers in the UK was seen as a natural development. The UK government began preparatory work on ecolabelling in 1988, and consulted widely in August 1989. In May 1990 it set up the National Advisory Group on Ecolabelling (NAGEL) to advise the Secretaries of State for the Environment and Trade and Industry on the format a scheme might take.

The Government's original objectives for the scheme, as given to NAGEL, included: providing consumers with accurate information on the environmental acceptability of products so that they could exercise an effective and informed choice; encouraging business to produce products which were environmentally less harmful, both as a contribution to protecting the environment and to promote the competitive position of British industry; to ensure arrangements were consistent with the development of the Single European Market.

At the time the European Commission was also considering whether a third party ecolabelling scheme would help to promote environmentally sensitive purchasing. Initial proposals were outlined in the EC 5th Environmental Action Programme, and in early 1990 the Commission began to bring forward detailed ideas for an ecolabelling scheme.

It turned out that the EU Scheme's objectives met the spirit of the UK government's original objectives, i.e.: to promote the design, production, marketing and use of products which have a reduced environmental impact during their entire life cycle; and to provide consumers with better information on the environmental impact of products, without compromising product or workers' safety or significantly affecting the properties which make a product fit for use.

The EU scheme also had the potential to meet the UK's third objective on the Single Market. By providing a single set of environmental criteria for products to meet, the EU scheme would allow manufacturers to produce goods to one specification which could then carry an ecolabel in every member state. Without the

Community scheme, products would have to be adapted to meet different national and regional schemes before they could be sold across the Community.

NAGEL's advice to the UK government, published in 1991, was that a single European based ecolabelling scheme, with a single label, based on standards that were consistent across the Community, would be in the interests of UK manufacturers and consumers alike. The Advisory group was loath to recommend a national scheme unless the proposed Community scheme did not come to fruition.

NAGEL considered that a proliferation of national schemes, with manufacturers forced to place different labels on the same product depending on where it was sold, and consumers faced with four or five different green symbols, all meaning something different, would be inconsistent with the aims of the Single Market and likely to significantly put back the cause of green consumerism .

This advice was accepted, and the UK supported the development of a Community wide ecolabelling scheme. Following adoption of Council Regulation EEC880/92 in March 1992, the United Kingdom Ecolabelling Board (UKEB)¹ was set up. Its purpose was to act as the competent body to administer the EU ecolabel scheme in the UK . [DETR 2000a]

4.1.1.2 Original Expectations of other Stakeholders

Manufacturers:

"Within the UK, opinions of manufacturers and their representative bodies were divided between those who objected to the principal of official award schemes, those who believed ecolabelling could improve product sales and/or product image, as well assist companies to improve all round environmental performance, and the vast majority whose interest in official environmental labelling was marginal or non-existent. Opposition came from a number of companies who saw labelling schemes as barriers to trade, a brake on innovation, and of little or no benefit to the environment. Support came from companies already at the forefront of environmental technology who saw labelling of their products as a further underlining of their market leader status" [DETR 2000a].

Retailers:

"Retailers and their representative bodies were keen to provide customers with what market research said they wanted - i.e. more choice of goods and reliable independent environmental information. Many retailers were initially supportive of the concept of official labelling and some were involved in pressing government to introduce a scheme. But under the EU arrangements, retailers were originally excluded from applying for labels for their own branded products, which dampened enthusiasm for the scheme" [DETR 2000a].

Consumers:

"Market research carried out in the mid 1980s showed a significant increase in the proportion of the population who saw the environment as an important issue which the government should be dealing with. When asked, consumers said they were keen to play a part in environmental protection through 'green' shopping (although this has not been borne out in practice), but they were confused by the number of

¹ Since April 1999, the Secretary of State for the Environment, Transport and the Regions took over from UKEB as the Competent Body running the scheme in the UK [Cox 2001]

environmental claims that appeared on products.

They wanted a system which provided independent and authoritative guidance on choosing products which were less harmful to the environment, but were still fit for purpose. Groups such as the Consumers' Association were active in encouraging government to develop an ecolabel scheme" [DETR 2000a].

Environmentalists:

"There was never one policy line on ecolabelling that all green groups signed up to. Those with a 'deep green' perspective tended to boycott labelling schemes, on the basis that they reinforced consumer confidence in consumption. Others refused to participate in schemes unless ethical issues such as animal welfare were covered. Groups such as Friends of the Earth were keen to support the introduction of official labelling schemes that would prevent consumers being misled into buying 'frothy green' goods - i.e. those labelled with spurious claims of environmental superiority". [DETR 2000]

4.1.1.3 UK Products awarded with the EU Ecolabel

A UK company, Hoover, was the first firm in Europe to obtain an EU ecolabel, already in 1993. However, today one cannot conclude that the EU-Flower had a great diffusion in the last 7 years. Several ecolabels have expired. Currently in the UK, only 2 companies have eco-labelled products (8 in total), respectively on the following product groups: Indoor paints and varnishes (1 company, 4 labelled products, all renewed²), and tissue paper (1 company, 4 products, all under renewal) [Cox 2001]

Several other labels have expired. Indeed Akzo Nobel, Hoover and Kalon all left the scheme before the Secretary of State for the Environment, Transport and the Regions took over from UKEB in April 1999 as the Competent Body running the scheme in the UK [Cox 2001].

The EU-Flower eco-labelled products in the UK are summarised in the following table. Other labelled products by other European CB circulating on the UK market are also listed.

Table 4.1: EU Eco-label Awards in the United Kingdom (State: Updated 12 January 2001)
(Source: Charles Cox, personal communication)

PRODUCT GROUP	MANUFACTURER OR IMPORTER	PRODUCT / MODEL	DATE OF ORIGINAL AWARD	CURRENTLY EXPIRES AT END	COMPETENT BODY ISSUING AWARD	STATUS
Tissue paper	Fort James UK Ltd <i>[previously shown as Fort Sterling]</i>	Co-op 280 sheet toilet tissue Co-op 70 sheet recycled kitchen towel	10 / 1998	12 / 2000	UK	Under renewal
Tissue paper	Fort James UK Ltd	Waitrose recycled toilet tissue	10 / 1998	12 / 2000	UK	Under renewal
Tissue paper	Fort James UK Ltd	Safeway Ecologic toilet tissue	10 / 1998	12 / 2000	UK	Under renewal

² These renewals are actually in the contract phase with the CB. Therefore, as of 7 March 2001, they still do not appear on the list of licensed products on the Commission website - <http://europa.eu.int/comm/environment/ecolabel/index.htm> [Cox 2001]

PRODUCT GROUP	MANUFACTURER OR IMPORTER	PRODUCT / MODEL	DATE OF ORIGINAL AWARD	CURRENTLY EXPIRES AT END	COMPETENT BODY ISSUING AWARD	STATUS
Paints & varnishes	ICI Paints	ICI Dulux Water-Based Gloss (includes: Dulux Retail Water-Based Gloss): - Pure Brilliant White; - Medium Base and Tinted Colours; - Extra Deep Base and Tinted Colours).	07 / 1996	12 / 2001	UK	Renewed
Paints & varnishes	ICI Paints	ICI Dulux Trade Ecolyd High Solids Gloss	01 / 1997	12 / 2001	UK	Renewed

Product availability:

The **Co-op**, **Waitrose** and **Safeway** kitchen paper and toilet tissue products are available from their stores (Enquiries about Fort James to Bill Robson, 01142 855805.).

The **Dulux** products are available from do-it-yourself retailers. Enquiries to John Wright at ICI Paints, 01753 877662.

Other ecolabelled products available in the UK:

These ecolabelled products licensed by other Competent Bodies are available in the UK:

Valti Joker paint, made by Tikkurila Paints - licence issued by the Finnish Competent Body: please ring Valti Specialist Coatings, 0131 334 4999, for stockists.

Orgabiose soil improver – licence issued by the French Competent Body: please ring Anglo-Eastern Commercial Ltd, 01366 387978, for stockists.

New Product Groups under Development

The European Commission is planning to increase the number of product groups for which ecolabels can be awarded. Within this process, UK have taken the responsibility for two new product groups (Television and tyres). In particular, following work has been carried out:

- A feasibility study on an ecolabel for TV's, published in December 1999. The report discusses a number of environmental issues for TV's and the types of criteria that could be introduced. [AEAT 1999]. According to the European website on eco-label as of end of February 2001, criteria are under development. However, no further details are available. [EU-Ecolabel]
- A feasibility study on an ecolabel for tyres. The report provides the Commission with an informed opinion concerning the potential for establishing a tyre ecolabel, including the identification of potential barriers, and, as far as possible, makes recommendations concerning the areas of tyre design, use and disposal which might be appropriate for establishing ecolabel criteria. [AEAT 2000]. No more details about the status of the criteria is currently available [EU-Ecolabel].

4.1.2 The UK National Eco-label

So far, there is no national labelling scheme in UK. However, discussions on the opportunity and desirability of a National label are on-going. Recently (1998), the discussion about the opportunity and desirability of establishing a national ecolabel was raised again in the UK.

Preliminary views from stakeholder are set out below. All commented that if a national scheme was introduced it should be seen as one element of a wider integrated strategy on providing environmental information for consumers. All raised concerns about costs, and whether Government would be willing to provide sufficient resources to publicise the scheme adequately.

The Discussion within the Competent Body:

There was strong support for a national scheme amongst the majority of UKEB Board members. This reflected their commitment to ecolabelling as a concept and dissatisfaction with elements of the EU scheme.

Among the issues that will need to be addressed in any debate on the format of a national scheme are :

- the method for deriving criteria, and whether this will be based on 'cradle to grave' life cycle analysis.
- the basis on which criteria are agreed. The decision mechanism could take a variety of formats but would need to ensure that criteria were established more quickly than at present.
- who can propose product categories for labelling, how categories are chosen and by whom, and arrangements for ensuring that categories reflect the government's priorities for the environment.
- the percentage of the market to be eligible for a label.
- costs to industry. Particular consideration needs to be given to encouraging small and medium sized firms to apply.
- the format of the label, whether this will be a single symbol or a graded one, and whether it will be supplemented with written information.
- monitoring of compliance. This may become a more significant issue if the scheme is designed to encourage the participation of small and medium sized firms.
- minimising risks of creating barriers to international trade.
- the interface with the EC scheme (which will continue to exist for the time being)
- interface with the Government's wider strategy for giving environmental information to consumers and improving the environmental performance of industry.
- timing of the scheme's launch, and arrangements for reaching 'critical mass' as quickly as possible.

The Reaction of Stakeholders:

Industry reaction was mixed. There was concern about the single market implications, but recognition that this had probably been undermined by other national schemes. Some Trade Associations were in favour, providing the scheme was constituted so that the majority of their members could qualify. Other Associations said they would want to see more detailed proposals before commenting. Some felt that the absence of a national scheme could prove a disadvantage to UK businesses in the longer term, particularly where procurers (government and private sector) were specifying that products should be ecolabelled. Others felt the concept of ecolabelling was fundamentally flawed and there was little point on government spending yet more resources on an initiative that was unlikely to produce environmental benefits.

Retailers generally gave the idea a cautious welcome, although one maintained there were more effective ways to spend the resources.

Consumer groups and environmentalists said they would support a new national initiative providing they

were persuaded that it was constituted in such a way as to deliver real benefits for consumers and the environment. For some this meant the scheme should focus initially on what they saw as high profile high polluting products such as cars, fridges, dishwashers etc.

In general, the response to the Government's consultation paper (1998/99) showed no consensus on the merits of the various labelling options discussed [ACCPE 2000].

4.2 ISO Type I like Labels

UK Woodland Assurance Scheme (UKWAS):

The UK Woodland Assurance Scheme (UKWAS) is a voluntary scheme for the independent assessment of forest management in the UK. The Scheme has been developed by a partnership of forestry and environmental organisations in response to the growing consumer demand for timber products from sustainably managed forests. [UKWAS 2000].

In June 1999 producers and users of British forest products have formally launched the forest management audit scheme which they hope will lead to a massive increase in the certification of sustainably produced timber. The UK Woodland Assurance Scheme (UKWAS) is backed by stakeholders from all sides - including public and private sector forest owners, a group of major retailers and the environmental group World Wide Fund for Nature.

The state-owned Forestry Commission claimed the scheme was the first time anywhere in the world that such a broad consensus had been reached on forestry performance standards and that it could act as a model for other countries to follow. The Commission was to certify its 800,000-hectare forest estate within a year. [ENS1999]

Following almost 2 years of formal discussions and a lot of careful analysis, both the new FSC UK Standard and the UK Woodland Assurance Scheme (UKWAS) Standard were submitted to the FSC secretariat in Mexico for comparison. The FSC UK Standard received formal FSC endorsement and now succeeds the existing FSC GB Standard. The UKWAS Standard, meanwhile, was compared with the FSC Standard and the two were found to be fully equivalent. This development means that the UKWAS standard can be used to deliver FSC certificates provided that the audit is carried out by a FSC accredited certification body. This is a brand new development for the FSC scheme and FSC UK is glad to have introduced a world first.

The FSC UK Standard and a cross reference document, which compares both Standards section by section, are both available from the FSC UK office. [UKWAS 2000].

PEFC- Pan-European Forest Certification Council:



PEFC UK became a full member of the PEFC Certification on the 26 January 2001. Information of PEFC certified forests are not available. The PEFC scheme, a voluntary private sector initiative, will provide assurance to the customers of woodland owners that the products they buy come from independently certified forests managed according to the Pan European Criteria as defined by the resolutions of the Helsinki and Lisbon Ministerial Conferences of 1993 and 1998 on the Protection of Forests in Europe. Timber products from these forests will be identifiable through the PEFC logo and customers buying these products will be making a positive choice for sustainable forest management.

It contributes to the promotion of the economically viable, environmentally sound and socially beneficial management of forests, ensuring customers and interested general public that forests are being managed according 6 criteria. [www.pefc.org/]

Forest Stewardship Council (FSC):



The Forest Stewardship Council (FSC) is an international body which accredits certification organisations in order to guarantee the authenticity of their claims. The goal of FSC is to promote environmentally responsible, socially beneficial and economically viable management of the world's forests, by establishing a world-wide standard of recognised and respected Principles of Forest Stewardship.

The process of producing FSC Standards for forest management in the United Kingdom was completed in 1999. [FSC 1999 A]

At February 6th-8th 2000 Board meeting the FSC Board announced the key elements of a new revised policy for FSC labelled products containing percentages of certified materials. In the UK, the FSC label has gained a significant relevance in the last years [FSC 2000]:

- The total of FSC endorsed woodland in the UK has risen to a massive 991,032 ha. The UK now has the fifth largest area of certified forest in the world.
- The total of companies in the UK who indicates that their wood comes from a well-managed forest: 34
- The total of manufacturers in UK for garden furniture who indicates that their wood products comes from a well-managed forest are 8; the total of agents and wholesalers for garden furniture who indicates that their wood products comes from a well-managed forest are 10 and the retailers are 6.
- Kitchen Products retailers in UK: 13
- Stationary and Paper Products in UK: 11
- Household Items and Furniture in UK: 26
- Timber and Board Materials in UK: 20
- Barbecue and Garden in UK: 22
- DIY Products in UK: 19

European Eco-Schools:



Another label created by FEEE is Eco-schools. This label is potentially interesting for several reasons. First, it refers to a service, and therefore includes management criteria. Second, it has relevant social implications, since it focuses on education and involvement of social community. In this sense, it might well be rather considered a sustainability label.

The Eco-Schools Programme aims to raise students awareness of environmental and sustainable development issues through classroom study, and provides an integrated system for environmental management of schools based on an ISO14001/EMAS approach. As a process of facilitating sustainable development at a local level, pupils are encouraged to take an active role in practical steps to reduce the environmental impact of the school. Eco-Schools thus extends learning beyond the classroom and develops responsible attitudes and commitment both at home and in the wider community. The Eco-Schools Green Flag, awarded to schools with high achievement in their Programme, is a recognised and respected eco-

label for environmental education and performance.

The Eco-Schools programme has been up and running in the UK since 1994. When the summer term drew to an end in July 1995, UK had 138 registered schools, As of 2000 there are over 1400 schools registered. Moreover, two collaborating UK environmental charitable organisations (Going for Green and Tidy Britain Group) are developing a variant of the Eco-Schools Programme for tertiary education. *Eco-Campus* is currently being trialed at the University of Central Lancashire (UK) and will be piloted in selected European countries. [BF 2000]

Green Globe 21 Certification:

This is an interesting label for several reasons, because it refers to a service and environmental management systems, and because criteria are related to Agenda 21 and therefore the label can be applied to whole touristic areas.

Green Globe 21 is a worldwide management and certification programme dedicated to helping the Travel & Tourism industry around the world develop in sustainable. It builds on the longest standing global travel industry environmental awareness and education programme, originally developed by the World Travel & Tourism Council and established as an independent concern in 1999. Green Globe is formally supported by 27 industry and government organisations including the World Travel & Tourism Council, the International Hotel & Restaurant Association, the Pacific Asia Travel Association, the World Tourism Organization and the United Nations Environment Programme.

The certification programme defines a global standard for environmental performance. It is based on a combination of Agenda 21 for Travel & Tourism issues and ISO type procedures. It is accompanied by application guides for different sectors of the industry such as hotels, airlines, tour operators, travel agents, airports, visitor attractions, cruise ships and car hire companies. These applications can be tailored for local conditions.

An interrelated Green Globe 21 Certification process has been developed for Communities. This consists of a 3-phase programme to create a co-ordinated culture of sustainable tourism involving all stakeholders. It incorporates an agreed environment management action plan, an implementation process and verification procedure.

The label is given at two different status level: Statement of intent (SOI - the applicant stating its environmental objectives) and certified (the objectives are reached).

So far, Green Globe 21 is The only independently verified *worldwide* certification scheme for Travel & Tourism. In Europe it is mostly diffused in the UK³: by end of January 2001, 6 Hotels/companies are certified, and 21 Hotels/companies are labeled at SOI level.

European Blue Flag:



The Blue Flag label is awarded by the Foundation for Environmental Education in Europe (FEEE). 21 countries are participating in the Blue Flag Campaign: Belgium, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, the Netherlands, Norway, Portugal, Slovenia, Spain, Sweden,

³ The only other European company participating is in Greece.

Turkey and the **United Kingdom**. In 2000, 1,873 beaches and 652 marinas were awarded the Blue Flag.

The award of the Blue Flag is currently based on 27 criteria for beaches and 16 criteria for the marinas covering the same four aspects of management:

- water quality,
- environmental education and information,
- environmental management,
- safety and services.

Some criteria are imperative whereas other are guideline criteria.

In particular, Blue Flag beach criteria include, beach cleanliness, dog control, access for disabled visitors, provision of life saving equipment, environmental management and bathing water quality based on the highest standards of the EC Bathing Water Directive EC/76/160. The 16 Blue Flag marina criteria are based on the provision of environmental education and information, environmental management, clean water, safety and services. [BF 2000]

The year 2000 new criteria for beaches have taken effect. Some of the present guideline criteria will become imperative. There will also in the new criteria be an increased focus on waste water treatment and Agenda 21 activities. A revision of the marina criteria was carried out in 2000, and new revised marina criteria will take effect in 2003.

Fifty-seven beaches and 29 marinas in the UK fly the prestigious European Blue Flag this year 2000. This is a record for the UK, with 16 more than last year which makes the UK ninth in the European league of clean beaches. Last year, 26 UK marinas were awarded flags, with 29 making the grade this time.

Tidy Britain Group, an independent national charity working for the improvement of local environments, coordinates the Blue Flag in the UK on behalf of FEEE.

Green Tourism Business Scheme:



This is an interesting example of regional tourism label, similar to the many ones emerging in Italy in the most recent years (see deliverable D4 § 4.1.3). It is worth remembering the main characteristics common to these labels, i.e:

- A similar award procedure
- The environmental areas on which they focus on, e.g. waste, energy, water consumption, noise, food quality, etc.
- The presence of a local public administration and/or association (either a municipality, province or tourism association) in the body awarding the label
- A scoring system (e.g. 1 star, 2 stars, etc.) also allowing monitoring of improvement with time on a yearly revision basis
- The simultaneous presence of minimum necessary requirements to obtain the label and specific facultative requirements to raise the score value.

In the case of Green Tourism Business Scheme, the criteria are developed and the label is awarded by Shetland Environmental Agency Ltd. (SEA Ltd); main auditors for the scheme are the Scottish Tourist Board

and Highlands and Islands Enterprise

Three levels of the label are available: Bronze, Silver, and Gold.

Environmental criteria are focused on nearly 100 measures, divided into 10 sections and + bonus criteria :

- 10 sections: compulsory (have a number of staff with environmental responsibilities), waste (reduction, recycling), energy (lighting, hot water and draughtproofing), water, transport/cycling/walking, green products, monitoring, communication of environmental practices to guests (joint ventures, Community, World Wide Web), wildlife and landscape,
- Bonus includes examples of innovation or particularly good practice not covered by other sections (examples: use of electric vehicle to transport laundry, plastic curtain in doorway of walk-in fridge, establishment of nature reserve in grounds)

At local level, the label is well diffused and there is considerable interest from Hotel Groups – All Scottish British Trust Hotels have joined at Bronze level, Scottish Youth Hostels Association has joined as a group and they plan to have 58 Gold members by 2001. [Ecotip 2000]

David Bellamy Conservation Award:

Again, this label is interesting because it refers to the local context (community, local craftsmen) going beyond pure environmental criteria.

This label applies in the United Kingdom since 1996. Target groups: holiday parks, caravan and camping sites, park home estates in the United Kingdom.

- Criteria: landscaping, recycling, waste management, water, energy, lighting, cultivation of flora and fauna, creation of habitats for wildlife, links to the local community, use of local materials and craftsmen, transport
- Creation of habitats for wildlife
- Links to the local community, use of local materials and craftsmen.
- Assessment is carried out independently by David Bellamy and The Conservation Foundation.
- Applications are judged from three separate sources: a detailed form completed by the park owner detailing conservation/environmental initiatives; questionnaires completed by holidaymakers on the park returned directly to David Bellamy; an independent survey of the park by a local conservation or wildlife group organised by The Conservation Foundation.

4.3 ISO Type II Labels

4.3.1 Importance of ISO Type II Labels in the UK

There are a lot of ISO-type II labels in the UK. In general, The UK Government would like to encourage individual companies and whole business sectors to develop their own initiatives for good product stewardship. UK is keen to ensure that such initiatives are transparent and credible to the public, supported wherever possible by independent review and verification. There are two basic forms of standardisation which UK is particularly encouraging business to consider. The first is in enabling consumers, at the point of purchase, to compare the performance of different products on a key environmental factor. The second

approach concerns information to consumers on the better use and disposal of products.

4.3.2 The Need for Regulation

4.3.2.1 Product Declarations: The “Green Claims Code”

Declarations which individual businesses make about the environmental performance of their product are likely to remain for some time the most visible kind of information in the market.

The UK Government would like to see this kind of information provided to a proper standard and wherever possible to be backed up by independent assessment and verification. The UK Green Claims Code (published in February 1998) set out some basic principles for businesses making environmental claims about products. It was issued with the explicit support of the CBI and the British Retail Consortium, as well as the national trading standards body, LACOTS.

The Government wants to encourage UK businesses to make full use of the recent ISO 14021 standard, for reasons of competitiveness and good trading practice, as well the positive effects in terms of a better-informed market for good products.

UK Government also want to encourage businesses to explore with certification bodies how the new standard might be used to add credibility to the information supplied to the market, for example by helping to make independent verification of environmental claims a cornerstone of good business practice.

4.3.2.2 Product Declarations: The Bottom Line

UK is confident that competitive, forward-looking businesses will see the commercial benefits of actively using the new ISO 14021 standard.

Meanwhile the Green Claims Code provides some good basic guidance - and also sets a bottom line for what is not acceptable. UK have asked the National Consumer Council to carry out a further survey of product claims, early next year, to update the work they have been doing since 1995/96. This should reveal the extent of improvement in the market - and highlight cases of particular concern.

One of the roles proposed for the Government's new Advisory Panel is to consider general reports about "green claims", and any individual cases and complaints referred to them, and to advise Government Departments, the Office of Fair Trading and local trading standards departments of their views on what constitutes either good or bad practice. It may also be that international standards authorities will themselves issue interpretative guidance, which could be used to help enforce national legislation.

UK want to make it easier for the existing legislation on trades descriptions and the control of misleading advertisements to be used to deal with any remaining abuses. In the longer term, as part of an overall improvement of the consumer protection legislation, UK is aiming for a stronger framework for dealing with misleading claims, including those about the environmental performance of goods and services. [GCC 2000]

4.3.3 Interesting Examples

Car Labelling:

This is an interesting example of anticipation / relationship between voluntary labels and a mandatory label.

In UK car labelling on fuel consumption and environmental emissions exist from 1983, but little is known about the influence they have had on consumer purchasers.

More recently, most motor manufacturers in the UK agreed in 1999 to the display of a label on new cars giving information about fuel efficiency, CO₂ emissions, the regulated emission standard and noise level.

This eco-profiling scheme which provides factual information in a standardised format, anticipates the basic requirements of the EU Directive on car labelling adopted by the UK in January 2001. The ACCPE Committee, while welcomes this voluntary initiative, do not consider it goes far enough in providing the comparable information which consumers need to make an informed judgement about the relative environmental performance of new cars. Car labels based on comparable ratings are being developed in other countries (for example in Denmark and Austria) and research currently being undertaken for DETR and the Society of Motor Manufacturers and Traders should help to indicate the most suitable type of rating approach for the UK. Whatever rating methodology is selected, the Committee believe there is great advantage in using a format and design similar to that of the EU Energy Label, i.e. a rating label. [ACCPE 2000] (see also § 3.2).

Buildings:

Home Energy Rating Scheme

This is a recent and interesting example of rating labels, because it is connected with energy labels on one side and with building construction on the other.

Home energy rating has been developed by DETR using the Standard Assessment Procedure (SAP), the official methodology for the energy rating domestic buildings. SAP ratings give householders a measure of the overall efficiency of their homes and are currently expressed on a scale of 1 (poor) to 100 (excellent). SAP ratings will soon have to be shown for all newly built homes. They are also being used as the basis of the energy efficiency report in the "seller's information pack", which is being piloted in Bristol as part of the Government's proposals for making the home buying and selling process more efficient. [ACCPE 2000]

BRE Environmental Assessment Method



UK's leading construction and fire research centre BREEM (BRE Environmental Assessment Method) is BRE's environmental labelling scheme for buildings, applicable to offices, superstores and housing. It rates a building against a series of environmental impacts and provide visible certifiable evidence of the performance of the building. The label focuses on materials, components and energy consumption of the whole building structure. It follows a (simplified) life-cycle approach based on a devoted software (BREEM). [EL]

Single-parameter Recycling Labels:*UKCRA The United Kingdom Cartridge Recyclers Association*

The stated aim of the Association is to provide printer users with proven high quality products, through its members, that are cost effective environmentally friendly alternatives to imported toner cartridges

Those remanufacturers who recognise that need form the UK Cartridge Recyclers Association, with the expressed aim of providing the printer user with proven high quality products that are a cost effective, environmentally friendly alternative to imported cartridges. [EL UK]

NAPM The National Association of Paper Merchants

The National Association of Paper Merchants (NAPM) logo. The NAPM allows the use of this design if the product comply with it's own (not government) standerdsof re-cycled paper. A minimum content of 75% genuine waste paper must be included in the finished product. [EL UK]

4.4 ISO Type III Labels

We have no information of existing projects or discussions about introducing an ISO-type III labelling scheme in the UK. The perception is that there is general scepticism, because of too much complexity of the method (because of the LCA)⁴.

5 Other Labels**5.1 High Level Awards**

In the UK a peculiar trend can be observed, i.e. the development of high level awards. As a matter of fact, DETR, in collaboration with the new Environmental Awards Forum recently founded by the Royal Society of Arts (RSA), is exploring whether there is scope for giving more prominence, within an existing award scheme or schemes, to outstanding achievement in the consumer product field. In fact this is expected to be a new award category designed to reward particularly innovative products. A possible immediate outcome of this process is to achieve a stronger consumer product focus to the new Queen's Award for Sustainable Development.

Queen's Award For Sustainable Development:

The Queen's Awards are the UK's top awards for business performance and are awarded in three categories. International trade, innovation and sustainable development. Achievements in either category may be assessed in any of the following fields: The invention, design, production

⁴ Opinion of a UK representative at the Internal Symposium on Environmental labeling and Consumer Information, October 26-27, 2000 – following WTO CTE meeting, Montreux Switzerland.

(in respect of goods), performance (in respect of services, including advice), marketing, distribution, after-sale support of goods or services, and/or The management of resources (including natural, manufactured and human resources) and relationships (with people and organisations) [Queensawards].

5.2 Social Labels

Fairtrade Mark :

The UK associate member to Fairtrade Labelling Organisation (FLO) is Fairtrade Foundation. At international level, the precise terms of fair trade will vary depending on circumstances, but the following are key characteristics of the basic criteria of fair trade:

- A clear set of criteria defining the fair trade terms is available to consumers and producers
- An organisation (auditor, body of Trustees), independent of business interests, oversees the implementation of the fair trade principles
- The suppliers are selected on the basis of being poor and relatively disadvantaged by the way the commercial market operates.
- There are monitoring systems to ensure that the fair trade principles and criteria are met and that individual producers are benefiting from the trading terms applied.
- Producers are consulted and are able to contribute to the development of the monitoring systems.

Trading terms are mutually agreed and always give greater support to the producer than they could expect from the commercial market.

Similarly to other FLO associate members, the Fairtrade Foundation exists to ensure a better deal for marginalised and disadvantaged third world producers. Set up by CAFOD, Christian Aid, New Consumer, Oxfam, Traidcraft and the World Development Movement, the Foundation awards a consumer label, the **UK's Fairtrade Mark**, to products which meet internationally recognised standards of fair trade.

Traidcraft, Oxfam and the Fairtrade Foundation work together to ensure disadvantaged third world producers really do benefit from fairer trade. Traidcraft and Oxfam have over twenty years of experience of working with communities in the third world to develop and market fairly traded products.

In recent years, fair trade organisations around the world have agreed international standards for fair trade for certain major commodities such as coffee, tea, cocoa and bananas. The **Fairtrade Mark** is the UK's only independent guarantee that products meet these standards.

So far, product groups who can obtain the Fairtrade mark are [FF 1999]:

- bananas,
- chocolate and cocoa,
- coffee,
- honey,
- snacks and biscuits,
- sugar,

- tea.

Moreover, Traidcraft and Oxfam aim to meet these standards and actively promote fair trade practices in product categories where no international standards have yet been agreed.

6 Conclusions

The history of ecolabelling and environmental product information schemes in the UK is very interesting, because it shows the whole evolution from the early expectations about the EU-Flower scheme to the present need to develop an integrated approach for product information.

The UK has been one of the earlier and most active supporters of the introduction of the EU-Flower. In fact, the clear advice of the National Advisory Group on Ecolabelling (NAGEL) to the UK government, published in 1991, was that a single European based ecolabelling scheme, with a single label, based on standards that were consistent across the Community, would be in the interests of UK manufacturers and consumers alike. The Advisory group was loath to recommend a national scheme unless the proposed Community scheme did not come to fruition. This advice was based on the twofold consideration that

- the proliferation of 'freelance' environmental labels and declaration was at best confusing for consumers and at worst misleading
- also the proliferation of national schemes, third-party verified but all carrying different symbols meaning something different, was confusing to customers.

Indeed, UK was one of the first EU Countries to adopt and apply the EU-Flower, already in 1993.

However, so far the EU-flower has little recognition in the UK market. Only 8 products of 2 companies have the label today (many previous labels have expired). There is a perceived general dissatisfaction with the top-down approach of the EU-label.

At the same time, the importance of ISO-type II declarations is acknowledged, although the need for regulating them is clearly recognised. As far as this is concerned, in 1998 a Green Claim Code has been introduced and later updated in 2000. The code is coherent with ISO 14021. Moreover, a proposal for the establishment of minimum acceptable conditions is currently under discussion.

Moreover, in recent years (1998), the discussion about the opportunity and feasibility of a national label has been renovated (see § 6.3). This is a further process in direction of an integrated approach within IPP. It is worth noticing that the approach towards IPP in the UK is very recent. The Advisory Committee on Consumer Products and the Environment (ACPPE) has been only established in 1999. Its first report dates October, 2000.

The policy approaches of social issues are yet less well-defined than in the environmental field, but they are increasingly important for business and consumers.

There is a clearly certain degree of dissatisfaction in the UK with all kind of present product environmental labels. On one hand, despite an initial great support, there is quite dissatisfaction with the rather *top-down*, little flexible, quite bureaucratic and not always transparent approach of the EU-Flower. In fact, we do not know the detailed motivations why companies like Hoover, Akzo Nobel and Kalon left the scheme and the number of EU-Flower labelled products has decreased from down to 8. On the other hand, the proliferation of more flexible bottom-up ISO-II claims reflects the interest of consumers in environmental product

information. However, although bottom-up business initiatives (i.e. ISO-type II declarations) are welcome, the need for good practices and for some kind of regulatory action is clearly acknowledged.

This has led to the need for a renovated discussion about the development of new tools and methods for environmental product information, including the establishment of a new National ecolabel (see below).

The recent discussion about the establishment of a national label in the UK has in fact touched all major open issues of EPIS in this country. The preliminary feasibility work done by ACPPE leads to the following threefold main recommendations:

1. A renovated support to the EU-Flower
2. The need for strict regulation of ISO-type II claims
3. The development of a "package" of different EPIS tools within an integrated approach.

The first recommendation is that EU-flower is still an opportunity for UK companies and recent changes in regulation are welcome. The motivation for this is the fact that UK products have to compete on the European market, and that just focusing on the national market would be a mistake. Public procurement procedures should be used in combination with this scheme.

The second recommendation is to better regulate ISO-type II declarations and to integrate them in a harmonised product policy framework.

Table 6.1: EPIS "Package"-tools proposed by the Advisory Committee on Consumer Products and the Environment to UK government

INSTRUMENT	OBJECTIVE	FACTORS FOR SUCCESS / OBSERVATIONS
ISO-type II declarations	Increasing the basis of companies wanting to communicate the environmental performance of their	Green Claim code Set of a minimum acceptable standard
Family of graded labels (eco-rating in the format style of the Energy label) on: - Cars - Homes - Domestic equipment	Reaching a very high number of consumers	Voluntary or mandatory? Quick and cheap measure, easy understandable Applies to all products in a sector, good and bad ones
High-powered internet "product information service" Development of product databases across many more sectors	Market transformation	Should be accessible to all: consumers and business Should offer comprehensive advice meeting a whole range of consumer and purchasing needs
High level awards	Promoting outstanding innovation	

In parallel, the development of a national label is welcome. However, a UK label following the same approach of "old-style" national schemes should *not* be established. Rather, a package of product information schemes should be created, developed and/or supported, including (see table below):

- Regulated ISO-type II declarations (no mention is made with respect to ISO-type III declarations)
- A family of graded mandatory eco-rating labels on cars, homes and domestic equipment

- A high-powered internet product information system⁵
- High level awards

This EPIS package should be introduced at the same time and in co-operation with other measures i.e. Procurement and Purchasing and Information Policy.

7 References

- [ACCPE 2000] Department of the Environment, Transport and the Regions (DETR), Advisory Committee on Consumer Products and the Environment (ACCPE): First Report, 23 October 2000, (www.environment.detr.gov.uk/consumerprod/accpe/report01/02.htm) specific for United Kingdom - <http://www.iea.org/pubs/studies/files/danish/dan2/61-dan2.htm>
- [AEAT 1999] AEA Technology, "The Feasibility of an Ecolabel for TV's", December 1999 (www.europa.eu.int/ecolabel)
- [AEAT 2000] AEA Technology, "The Feasibility of an Ecolabel for Tyres", a report produced for the Department of the Environment, Transport and the Regions (DETR), March 2000 (www.europa.eu.int/ecolabel)
- [BF 2000] Blue Flag, "General Information", 04 December 2000 (www.blueflag.org/who/feee.htm)
- [Cox 2001] C. Cox, DETR "EU Eco-label Awards in the UK", updated 12 January 2001, personal communication
- [DETR 2000] Department of the Environment, Transport and the Regions (DETR), "Greening Government Operations", Feb. 2000
- [DETR 1998] Department of the Environment, Transport and the Regions (DETR), "Consumer Products and Environment", 30 October 1998
- [DETR 2000a] Department of the Environment, Transport and the Regions (DETR) "The EU-labelling scheme", 3 April 2000 (www.environment.detr.gov.uk)
- [DETR 2000b] Department of the Environment, Transport and the Regions (DETR) "Choosing cleaner cars: The role of labels and guides", 28 December 2000 (www.environment.detr.gov.uk) and www.detr.gov.uk/roads/vehicle/environment/cleanercars/labels/03.htm
- [DETR 2000c] Department of the Environment, Transport and the Regions (DETR) "Choosing cleaner cars: The role of labels and guides", 28 December 2000 (www.environment.detr.gov.uk) and www.detr.gov.uk/roads/vehicle/environment/cleanercars/labels/10.htm
- [EC 2000] European Commission (EC), "Awards", updated:30 Gennuary 2001 and integrated with interview to Charls Cox and Bob Ryder (UK Competent Body) for last upgeading (7 marzo 2001)
- [Ecotip 2000] "Eco-labels and Awards in Tourism in Europe", www.eco-tip.org
- [EL] Environmental Labelling (www.recycle.mcmail.com/label.htm)
- [EL UK] Eco-Labelling in the UK (www.mna.hkr.se/~ene00p10/ecolabel.htm)
- [ENS 1999] Environmental News Service //ens.lycos.com/ens/jun99/1999L-06-07-01.html
- [EU-Ecolabel] European Ecolabel official website: www.europa.eu.int/ecolabel
- [FF 1999] Fairtrade Foundation, "Why Fairtrade labelling?" (www.fairtrade.org.uk/whyff.htm)
- [FSC 1999 A] UK National Standards, "Cross Reference between the FSC UK Standard (endorsed by FSC October 1999) and the UKWAS Standard", November 1999
- [FSC 1999 B] Forest Stewardship Criteria, "Principles and Criteria For Forest Stewardship" (www.fsc-uk.demon.co.uk/PrinciplesCriteria.html)
- [FSC 2000] Forest Stewardship Council, "Forest Details and Products Available in the UK"
- [GCC 2000] Green Claim Code, June 1998, updated June 2000 (www.environment.detr.gov.uk)
- [IEA 2000] International Energy Agency, "ENERGY EFFICIENCY INITIATIVE VOLUME 2, Country Profiles & Case Studies", 2000 review (<http://www.iea.org/pubs/studies/files/danish/dan2/03-dan2.htm>)
- [Queensawards] www.queensawards.org.uk
- [Rubik 2000] F. Rubik: "Background report on EU IPP and EPIS", deliverable D6 of DEEP report, 20 November 2000.
- [UKWAS 2000].UK Woodland Scheme, "Introduction to the UK Woodland Assurance Scheme", (www.forestry.gov.uk/ukwas/index.html)

⁵ Harnessing "information age" technology – to provide consumers and professionals purchasers with a powerful new product information service, based on the Internet, and supported by accessible, printbased material available.

Frieder Rubik / Gerd Scholl

**Environmental Product Information Systems (EPIS)
in the Member States of the European Union and in Norway
- Findings and Conclusions -**

Table of Contents

1	INTRODUCTION	303
2	INTEGRATED PRODUCT POLICY (IPP) IN EUROPE	303
2.1	IPP at the Level of the European Union	303
2.2	IPP in the Member States and Norway	304
2.3	IPP and Environmental Product Information Schemes	306
2.4	Some Conclusions	307
3	MANDATORY LABELLING IN EUROPE	308
4	VOLUNTARY LABELLING IN EUROPE	309
4.1	EPIS as Eco-labelling with Third-party-procedures	309
4.1.1	ISO Type I Approaches	309
4.1.2	Characterisation of ISO Type I Labels	314
4.1.2.1	Institutionalisation Phase	314
4.1.2.2	Selection Phase	316
4.1.2.3	Elaboration Phase	317
4.1.2.4	Market Phase	318
4.1.3	Success Factors During the Elaboration Phase	320
4.1.3.1	Number of Product Groups	320
4.1.3.2	Number of Licensed Products in the Market	323
4.1.4	Success Factors during the Market Phase	324
4.1.4.1	Market Shares of Eco-labelled Goods and Services	324
4.1.4.2	Consumer Knowledge of Eco-labels	325
4.1.4.3	Consumer Trust in Eco-labels	327
4.1.4.4	Producers' Acceptance of Eco-labels	328
4.2	EPIS as Self-declaration	328
4.3	EPIS as Quantified Environmental Information	330
5	OTHER LABELS	331
5.1	Social Labels	331
5.2	Other Labels	332
6	GENERAL CONCLUSIONS	333
7	LITERATURE	337

1 Introduction

This report has been prepared within the DEEP-project, financially supported by DG Research of the European Union. This project investigates environmental product information schemes (EPIS). The scope of the project and the instruments considered is broad and not restricted to a specific category. It encompasses environmental product information presented as labels, symbols, data sheets and includes both mandatory and voluntary schemes. However, product information schemes referring to health, safety, and technical aspects are not within the scope of this report.

The report is based on separate country reports prepared for Austria, Belgium, France Germany, Ireland, Italy, Luxembourg, Norway, Portugal, Spain, The Netherlands, UK and the Nordic countries (encompassing Denmark, Finland and Sweden). In addition, a report examining the situation at EU level has been prepared.

Chapter 2 "Integrated Product Policy (IPP) in Europe" starts with an overview of the recently developed area of Integrated Product Policy (IPP). The following **Chapter 3** "Mandatory Labelling in Europe" is dedicated to labels which have to be applied by legal prescription. **Chapter 4** "Voluntary Labelling in Europe" examines the landscape of voluntary label schemes applied in Europe. **Chapter 5** "Other Labels" is referring to either social labels or all other labels with environmental relationships. The final **Chapter 6** "General Conclusions" presents our conclusions based on analysis of country reports and the European situation.

2 Integrated Product Policy (IPP) in Europe¹

Integrated Product Policy (IPP) has been developed as an area of environmental policy in recent years. Several countries began product-oriented environmental policy in the seventies, but a more systematic approach has been taken within the last 5-10 years. In this chapter, we describe first the European level (chapter 2.1) followed by the level of Member States and Norway (chapter 2.2) and a consideration of IPP and environmental product information schemes (chapter 2.3). We close with some preliminary conclusions (chapter 2.4).

2.1 IPP at the Level of the European Union

Activities and measures of the EU in the field of product-oriented environmental policy have a rather long tradition². Primarily, these activities and measures are *singular* events, which are not derived from a general conceptual framework. The Commission mentioned product policy for the first time in a progress report on the implementation of the 5th EAP (COM (95)624). The next impulse to a conceptual development of product policy was given by a DG Environment project carried out by the British consultants Ernst&Young (E&Y) and the University of Sussex. The study, which started in 1996, was meant to propose a first conceptual draft for a European IPP. The report was submitted in 1998 (E&Y et al. 1998) and provoked intense discussion. It elaborated a framework and introduced the term „Integrated product policy“. E&Y presented a definition of IPP, namely: "Public policy which explicitly aims to modify and improve the environmental performance of product systems" (E&Y et al. 1998, p. 33).

¹ For a more exhaustive description and analysis see Oosterhuis et al. (1994 and 1996), E&Y (1998 and 2000), Rubik (2000b and 2002).

² Also see Rubik/Empacher (1994).

IPP was given additional stimulus by the European Presidency of Germany during the first half of 1999. At the European Council, which took place in Weimar in May 1999, the German initiative was welcomed and supported by all Ministers. Thus, IPP became part of the political agenda. Some measures at EU level were proposed in the background document prepared for the Informal Council. Today, this BMU document [BMU 1999] forms the "Common ground" within the EU. It contains a slightly revised definition of IPP: "Integrated Product Policy (IPP) is a public policy which aims at or is suitable for continuous improvement in the environmental performance of products and services within a life-cycle context" (BMU 1999, p. 3).

In the meantime, the Commission published a Green Paper on IPP in February 2001 (COM [2001] 68) (European Commission 2001). This Green Paper is intended to stimulate discussion by presenting some proposals in the area of IPP. It does not deliver any definition of IPP and does not refer to previously presented definitions of an IPP. However, some main characteristics of IPP are given:

- Integration refers to consideration of the whole life-cycle of a product from the cradle to the grave, co-operation with stakeholders and application of different instruments;
- the term product includes both material products and services;
- policy is based on a governance philosophy of facilitation rather than direct intervention.

The implementation strategy of the Commission is concerned with strengthening the environmental orientation of both supply and demand. A series of proposals and possible actions are listed referring to both sides. Four different areas of the IPP approach of the Commission are listed; each containing several proposals, for example:

- *Price mechanism:* This topic refers to a correction of market failures by internalising external costs. The most prominent role is played by Value-Added-Tax (VAT) and its different tax rates. It is proposed to link lower VAT-rates to the European eco-label system, i.e. eco-labelled products should be allowed to be allocated to the lower VAT-rate. Other possible instruments are producer responsibility, governmental fiscal aids and environmental liability.
- *Greener consumption:* First it is proposed to distinguish between private consumption and public/professional procurement. Private consumers should have easy access to understandable, relevant, credible information either by means of labelling on the product or another readily accessible source (e.g. Internet or NGO's). The public procurement should be better mobilised by clear guidance for public purchasers.
- *Business' leadership in greener production:* The Commission regards the improvement of information as a central mechanism to diffuse environmental thinking within business. The application of Life Cycle Assessment should be promoted as a supporting tool. In addition to that, eco-design guidelines should be elaborated and the standardisation within CEN should incorporate environmental aspects. Also some pilot projects - called "product panels" - are intended.

The Green Paper is to be discussed at several stakeholder meetings during 2001 with results to be reported to the European Environmental Council in June 2001. A White Paper on IPP is scheduled for spring 2002.

2.2 IPP in the Member States and Norway

We have concluded after analysing the development process of product policy in general and also in the Member States of the European Union that typical implementation and adoption patterns exist. We believe that four fundamental development stages of IPP can be distinguished (cp. also Rubik 2002):

1. *Introduction of product related measures and activities with an implicit reference to environmental issues:* This stage represents an early phase of product-oriented policy development. A number of measures addressing products may be introduced in different policy areas, not explicitly dealing with environmental issues, but with potential green impacts. Examples are economic instruments such as subsidies or product taxes. In this stage, Integrated Product Policy has not yet been recognised as a singular policy area.
2. *Introduction of product related measures and activities with an explicit reference to environmental issues:* This stage reflects a more 'conscious' environmental policy in which a more explicit product focus gradually emerges. Singular measures are established, but a common framework dedicated to a possible toolkit, principles, objectives etc. is not yet developed.
3. *Development of a general concept of an IPP:* This implies the further development of a policy approach based on singular action towards a systematic framework comprising objectives, principles, possible toolkit, single activities and measures. This represents a quantum leap, since integration along the ecological product life cycle and across different environmental media and policy areas is pursued systematically.
4. *Implementation and adoption of a concept with regard to specific product groups:* Setting up a policy framework is a necessary, rather than sufficient condition for a successful IPP. One cannot speak of a far reaching development unless actually implementing the policy with regard to product specific instruments and cross-sectoral initiatives.

These four stages describe a temporal development dynamics. They do not analyse the scope and the actual impact of IPP-measures and activities within each of the four stages. Looking at present development stages of IPP within the 15 Member States and Norway, it is obvious that the level of IPP-development according to the four-stages-model is quite diverse:

- *Laggards (stage 1):* Ireland, Luxembourg, Portugal, Spain.
- *Runners (stage 2):* Belgium, Finland, Norway.
- *Ambitious runners (between stages 2 and 3):* Germany³, Austria⁴, France⁵ and Italy⁶ have taken initiatives to elaborate own IPP-documents, but they have not agreed/published them yet. We allocate them to the second stage with a clear tendency to move towards the third stage.
- *Leaders (stage 3):* The Netherlands, Denmark, Sweden, Finland and the United Kingdom have elaborated own policy documents in the area of IPP and could be allocated to the third stage. However, none of them have yet formulated any product-group related implementation and plan for adoption. Therefore, we cannot allocate any of the examined countries to the fourth stage.

We have not yet identified any country which belongs to the fourth IPP-development phase.

³ The IÖW has prepared a conceptual document on behalf of the German Ministry for the Environment (Rubik 2000a) which supports the process of formulation of an policy document during 2001.

⁴ The Ministry for the Environment has commissioned a study on IPP which will be published during spring 2001 (see also Büchele 2000).

⁵ The Ministry for the Environment has commissioned a study on IPP which has been published January 2001 (Arthur Anderson 2001).

⁶ The Italian Environmental Agency ANPA has published an IPP-report (ANPA 2000) which is to support the Italian policy process.

2.3 IPP and Environmental Product Information Schemes

The possible toolbox of IPP is large. IPP could apply a plethora of different instruments. Among them, mandatory and voluntary information instruments play an important role.

The European IPP-process put emphasis on informative instruments⁷. Within the consumption chapter of the Green Paper it has called upon easy access of consumers to information and further standardisation of labelling activities according to the ISO series. Several actions and proposals have been listed, such as:

- Extension of the scope of the European eco-label "(...) to cover as many products as possible, targeting those product categories for which they are likely to be most effective" (European Commission 2001, p. 13);
- increase public funding for eco-label schemes;
- use of eco-labels for other applications (e.g. public procurement, eco-funds, indicators);
- review of the European eco-labelling strategy;
- elaboration of guidelines for making and assessing environmental self-declared claims by producers or distributors;
- strengthening support for European co-operation with regard to environmental product declaration according to the ISO type III;
- support exchange of best practices of information transfer and evaluation.

Within the area "Business leadership in greener production" generation of product information is also mentioned. The Commission regards generation and collection of information on the environmental impact of products along their life cycle as an important approach. It also advocates checking whether "a possible instrument to increase the generation and availability of information is to oblige and/or encourage producers to supply key data along the product chain and to consumers" (European Commission 2001, p. 18).

IPP activities within Member States and Norway have their own specific orientation for their national IPP-measures. Whereas The Netherlands concentrate on supporting the supply side, Denmark and Sweden focus on both supply and demand. The UK focuses on the demand side. Consequently, national measures, activities and priorities are diverse. For instance, the role of information instruments is modest in The Netherlands; whereas Denmark, Sweden and the UK regard them as an important IPP-tool.

The country reports revealed that mandatory and voluntary information instruments are applied in each country, but with a different intensity. Sometimes, informative instruments are used as stand-alone instruments, that means as instruments which are practised, but which are not linked to or integrated into a broader approach to reach a specific (environmental) target.

We identified several examples of such an integrated approach, i.e. examples of linkages between environmental product information instruments and other instruments of the IPP-toolkit:

⁷ For more information with regard to the actual applied EC-instruments see chapters 3 and 4.

- *Belgium*: two mandatory labels are connected to the ecotax system referring to beverage packaging, single-use products, batteries, packaging of some industrial products, pesticides and some paper and cardboard products. These products have to be labelled with a pictogram. Currently, and only for some ecotaxed product groups, the only way to be tax-free, is the refunding of the packaging.
- *Italy*: The planned national eco-label is expected to be integrated within the IPP-framework and especially voluntary measures (e.g. EMAS, voluntary agreements and ISO type III labelling). However a clear relationship of eco-labels with other instruments has still to be elaborated.
- *Spain*: The Catalan government supported its regional eco-label by public grants to producers, and some public authorities have introduced green purchasing practices.
- *The Netherlands, Germany*⁸: These countries connected subsidies and grants for private consumers buying energy efficient household appliances ranked to the A-category of the energy label.
- *United Kingdom*: In 1999 an Advisory Committee on Consumer Products and the Environment (ACCPE) was established. At the end of 2000, ACCPE published a report (ACCPE 2000) which follows an integrated approach, focusing on product information. It proposed that any measure in this area should be capable of achieving real sustainable development gains and should be tied in as closely as possible with priorities and key indicators in the UK sustainable development strategy. It should be developed in combination with other measures. Two proposed product-information measures are:
 - A coherent family of standardised rating and labelling for cars, homes and domestic equipment;
 - a powerful new product information service, based on the Internet.

2.4 Some Conclusions

The policy area of IPP has come up very recently on the political agenda. Some national and European activities have been started. Whereas some countries are leading the whole debate, there exists a need to clarify concepts and to look for some common measures. The presented Green Paper of the European Commission and the intended White Paper offer opportunities and challenges to agree upon further progress and to support laggards.

EPIS constitutes an important part of the IPP toolkit. Some Member States stress their importance in national policy papers, e.g. the United Kingdom. Also the European Green Paper proposes several initiatives in the area of EPIS with a specific focus on information by eco-labelling.

We think that two different EPIS-approaches exist: The application of EPIS-instruments as a stand-alone instrument versus an integrative approach.

The *stand-alone approach* is focussed on specific instruments and their application for information on products and services. Linkages among different EPIS-instruments are not realised. We think that such approaches are applied in most of the Member States.

Integrative approaches, i.e. approaches which link different EPIS instruments or incorporate them in a broader IPP-context oriented towards environmental objectives are – still - seldom the case. The most interesting exception might be the UK. The ACCPE (2000) elaborated some strategic proposals for an integrated EPIS-approach focusing on product information from all different perspectives. The British Environmental

⁸ This was not a Federal initiative, but an initiative of some regions and cities.

Ministry (DETR) seems also to follow a similar approach by its demand-side oriented IPP-efforts (DETR 1998). The efforts of other countries to combine some EPIS-tools with other instruments are more singular events and do not seem to pursue a systematic approach.

The review of the European eco-labelling strategy announced seems to offer an interesting opportunity to pick up national and international eco-labelling experiences and to re-orient the labelling-approach towards a more integrative approach.

3 Mandatory Labelling in Europe

Mandatory labelling in the Member States of the EU and in Norway is primarily based on EU-prescriptions. Typical application areas are:

- *chemicals and chemical substances* according to a series of different EU-prescriptions,
- *household appliances* according to EU Directive 92/75/EEC (and the following implementations with regard to specific product groups),
- *cars* according to the recently agreed Directive 1999/94/EC.

Considering the focus of our research, the energy label of household appliances is the most relevant application area of mandatory environmental product information systems. So far, the energy label has been applied to dishwashers, light bulbs, refrigerators/freezers, tumble dryers, washing machines and combined dryers/washing machines. It is planned to extend it to boilers and air-conditioning appliances. It is intended to amend directive 92/75 by extending it to all major appliances and installed equipment. After such amendment, energy labelling will apply to building components (e.g. windows), installed systems (e.g. heating, cooling, hot water) and brown goods (e.g. TV, VCR, hifi, power supplies). The most important energy label criterion is the consumption of energy; it must be specified in numeric terms and according to a ranking which is subdivided into several groups (from "A" to "G"). In addition to this, some product group specific performance aspects have to be indicated, e.g. noise, cleaning performance, drying performance, water consumption in the case of washing machines.

Only a very limited amount of national mandatory initiatives have been found, namely:

- *Belgium*: Mandatory labelling of packaging.
- *France*: Mandatory labelling of packaging.
- *Italy*: Italy plans to introduce a tradable green electricity certificate system in 2002 which is connected to a mandatory target to produce at least 2% of the electricity production of each producer from renewables. In this context, a mandatory certification of electricity might be introduced.
- *The Netherlands*: Mandatory labelling of product waste of specific product groups (e.g. batteries, fluorescent lights, thermometers containing mercury, oil filters, nail polish and removers, glues and cements, chemicals for photography, paint and paint products).

In summary, mandatory labelling within the Member States of the EU and Norway seems to be quite harmonised. Most of the prescriptions are due to European legislation. National mandatory labels refer in most cases to waste management aspects. Beside the "traditional" labelling of chemical substances the energy label is the most far reaching approach at the moment. It addresses white goods and is to be applied to additional product groups, such as brown goods and buildings. First experiences and evaluations (Waide

1999, Winward 1998) show promising results with respect to the acceptance of the label by consumers and its influence on markets.

4 Voluntary Labelling in Europe

Voluntary environmental labels can be structured according to the three different ISO labels types which have been agreed in recent years, namely:

- **ISO Type I labels:** "Voluntary, multiple criteria-based third party programme that awards a licence authorising the use of environmental labels on products. These indicate the overall environmental preferability of a product within a particular product category based on life cycle considerations. These labels provide qualitative environmental information" (ISO 14024, p. 1). They are covered by ISO 14024 published in April 1999.
- **ISO Type II labels:** "Self-declared environmental claim made by manufacturers, importers, distributors, retailers, or anyone else likely to benefit from such a claim without independent third-party certification" (ISO 14021, p. 3). They are covered by ISO 14021 published in 1999.
- **ISO Type III labels:** "Quantified environmental data for a product with pre-set categories of parameters based on the ISO 14040 series of standards, not excluding additional environmental information provided by a Type III environmental declaration programme" (ISO/TR 14025, p. 3). They are covered by the Technical Report ISO TR 14025 published in March 2000.

These three label types do not encompass the whole labelling landscape. Also other interesting issues, especially social affairs, are of some importance. We report on such labels within chapter 4.2.

Currently, it is not clear which of the actual label programmes or environmental claims refer *explicitly* to these three types and behave according to ISO 14024, ISO 14021 and ISO/TR 14021 and which of the label programmes refer only *implicitly* to this standard. This was a clear outcome of the different country reports.

4.1 EPIS as Eco-labelling with Third-party-procedures

4.1.1 ISO Type I Approaches

The ISO type I label could be regarded as the "classical" approach to inform consumers on the environmental qualities of products. The relevant ISO standard 14024 delivers some basic requirements for an ISO type I label, namely:

- voluntary,
- multiple criteria based,
- third party programme (a third party is a person or body that is recognised as being independent of the parties involved, as concerns the issue in question).

ISO mentioned in its standard 14024 several principles of an ISO type I label, important ones are voluntary nature of the programme, application of ISO 14040⁹, consideration of life cycle and environmental criteria,

⁹ This series deals with Life Cycle Assessment (LCA).

selectivity of requirements within a product category¹⁰, formal open participation among interested parties, verification and transparency of eco-labelling programme.

Analysing actual proliferation of the information schemes it is necessary to introduce new categories, since very often it is not quite clear whether a programme explicitly refers to ISO 14024. We propose the following classification:

- *“Classical” ISO type I approaches*: Third-party labels referring - explicitly/implicitly - to the standard and/or meeting most of the requirements stipulated there.
- *“Other third-party, ISO type I like labelling”*: Third-party labels containing not most, but major elements of the ISO type I standard (e.g. third-party verification, multi criteria based).

ISO type I or ISO type I like labels have been found in all countries examined. Altogether, one can distinguish among two different approaches:

- (1) *The “multi-product group programmes”* covering several product groups and application areas: Within the EU, several such label programmes have been elaborated.
- (2) *“Single-product group programmes”* referring to one specific product group or application area: The country reports reported that different single-product group programmes exist within the EU and Norway.

As mentioned above, it is still not clear whether these label programmes refer explicitly or implicitly to the ISO-standard 14024, i.e. whether they are “real” ISO type I labels. Based on country reports, we conclude that “classical” ISO type I labels have been established in nine of the 15 Member States of the EU and on the level of the EU itself. They have been introduced and are administered very often by government authorities or bodies which have been commissioned by the government to manage the programme. In this respect, such labels can be regarded as “national” labels, although one should be aware of the fact that from a juridical, contractual point of view the schemes are often private.

Beyond that, a number of other third-party, ISO type I like labels, either referring to a single criterion and/or a single product group, have emerged. They are not ISO type I in true sense, but they might fulfil the major criterion: the label is granted by an independent third-party.

Table 4.1 and Table 4.2 provide an overview of ISO type I approaches encompassing both the ‘classical’ ISO type I labels and ISO type I like labels. The criteria reported in this table refer to the following aspects:

- *Region covered*: region in which the label should be applied (nonetheless, suppliers from outside this region might be allowed to apply for the label as well).
- *Name*: name of the label programme.
- *Start*: year of the realisation of the scheme, i.e. the passing of the first product requirements (and not necessarily the appearance of labelled products in the market).
- *Body in charge of criteria setting*: gremium which is responsible for the definition of general guidelines and criteria; it might be different to the organisation which actually awards the label, i.e. concludes the contracts with the applicants.

¹⁰ This should allow clear distinctions with regard to technical/environmental performance of the products which are available on the market.

- *Open participation:* refers to one aspect of the standards which requires that interested parties are allowed to take part in major decision processes. This often coincides with a pluralistic composition of the gremium in charge of criteria setting.
- *Number of product groups:* this number describes the actual amount of elaborated requirements of eco-label criteria for several product groups.
- *Number of awarded companies:* the number of companies allowed to use the eco-label.
- *Number of awarded products:* the number of products allowed to wear the eco-label.

Nearly all of the different multi-product group programmes are open to participation by all interested stakeholders. The only exception is the Swedish "Bra Miljöval" scheme which is operated by an environmental organisation. Some, but not all of the single-product-group programmes are open for public participation. Such schemes can most often be found in the areas of tourism, textiles and organic food.

Table 4.1: Overview of multi-product-group programmes (ISO type I) applied within the EU and Norway (own elaboration)¹¹

Region covered	Name	Start	Body in charge of criteria setting	Open participation	Number of product groups	Number of awarded companies	Number of awarded products
European Union	European Flower	1992	European Eco-Labeling Board (EUEB)	Yes	16	59	> 216
Austria	Eco Label	1991	Ministry of the Environment/ Association for Consumer Information	Yes	41 / 42 ¹²	109 / 255	444 / 590
France	NF Environmentment	1992	AFNOR Certification (French Standardisation Organisation)	Yes	11	35	136
Germany	Blue Angel	1978	Jury Umweltzeichen	Yes	86	798	3,994
Nordic countries	White Swan	1989	Competent Bodies in participating countries with different organisational details	Yes	55	815	3,700
Spain	AENOR Medio Ambiente	1994	AENOR	Yes	12	48	394
Catalonia (Spain)	Distintiu de Garantia de Qualitat Ambiental	1994	General Directorate of Environmental Quality	Yes	16	42	819
Sweden	Bra Miljöval	1992	Swedish Society for Nature Conservation	Yes	14	532 / 289 ¹³	1,025
The Netherlands	Milieukeur	1992	Stichting Milieukeur	Yes	33 / 48 ¹⁴	108 / 153	> 132 / > 33

Explanation:

n.f. = not fixed n.a. = not available n.r. = not relevant

¹¹ State: February 2001 (except of "Bra Miljöval" - state as of October 2001).

¹² First number refers to product groups excluding tourism and the second to all including tourism.

¹³ First number refers to the number of companies summed up of the different product groups including double countings; the second one refers to the absolute number of all companies excluded double countings.

¹⁴ First number refers to product groups excluding food and the second including food.

Table 4.2: Overview of single-product-group programmes (ISO type I like) applied within the EU and Norway (own elaboration)¹⁵

Covered region	Name	Start	Body in charge of criteria setting	Open participation	Number of product groups	Number of awarded companies	Number of awarded products
International	FSC (Forrest Stewardship Council)	n.a.	World Wild Fund for Nature (WWF)	Yes	One (forestry)	n.a.	n.a.
International	Energy star	1993	Environmental Protection Agency	n.a.	Several (office equipment)	n.a.	n.a.
Europe	Eco Schools Flag	n.a.	Foundation for Environmental Education in Europe	No	One (environmental education)	> 4,000	Same
Europe	Blue Flag	1987	Foundation for Environmental Education in Europe	No	One (tourism)	n.a.	~ 1,900 sites
Europe	Öko-tex Standard 100	n.a.		No	One (textiles)	n.a.	n.a.
Europe	GUT (Gemeinschaft Umweltfreundlicher Teppichboden)	1990		n.a.	One (carpets)	n.a.	5,448
Austria	IBO-Label	1988	Österreichisches Institut für Bau- biologie	Yes	One (construction)	25	34
Belgium	Label vert	2000	Tourist Federation of the Belgian Luxembourg	Yes	One (tourism)	6	6
Italy	Tessile Biologico	1998	Associazione Italiana per l'Agricoltura Biologica	n.a.	n.a.	n.a.	n.a.
Luxembourg	EcoLabel für Luxemburger Tourismusbetriebe	1997	Foundation Oeko-Fonds	No	One (tourism)	21	n.a.
Luxembourg	Label-Priméret	n.a.	SuperDrechskescht	n.a.	One (waste management)	n.a.	
Spain	Doñana 21	1999	Doñana 21 Foundation	No	Five (agroalimentary industry, hotels services providers, handcrafts and rural industries)	0	n.r.
Spain	Distintu Ecoturístico	1994	Alicudia Municipality	No	One (tourist facilities)	17	n.r.
The Netherlands	EKO-seal	1995	SKAL	Yes	Several (organic agriculture)	1,350	6,800

Explanation:

n.f. = not fixed n.a. = not available n.r. = not relevant

15. State: February 2001.

4.1.2 Characterisation of ISO Type I Labels

In the following, we concentrate on the 'classical', national, multi-product-group approaches like the White Swan or the Blue Angel. We discuss their main characteristics along four main implementation phases, namely:

- the institutionalisation phase, i.e. emergence and organisational shaping of the scheme,
- the selection phase, i.e. definition of eligible product groups,
- the elaboration phase, i.e. setting up and agreeing upon product requirements and
- the market phase; i.e. application patterns and success of the labelled products in the market.

Table 4.3 provides an overview of important institutional aspects referring to these different phases.

4.1.2.1 Institutionalisation Phase

While the Blue Angel was introduced in the late seventies, the majority of national third-party labelling schemes have emerged during the late eighties and nineties. Although similar in major organisational elements, they show some institutional differences.

The existing *ISO-standard 14024* has - at least not explicitly - been adopted by the different label programmes, but this has not been confirmed officially.

Institutionalisation patterns differ with respect to the **role of government and other stakeholders**. While the Swedish Bra Miljöval has been set up by an independent environmental NGO, and the German Blue Angel scheme is traditionally based on a multi-stakeholder approach, the Catalan "El Distintiu" is more closely related to regional government (a pluralistic body elaborates the criteria and a public authority decides upon their acceptance). In this context, one main issue is the question whether non-governmental players, such as environmental organisations and consumer associations, have the power of veto or only a consulting role. In the case of the Blue Angel these groups actually decide, together with other stakeholders, upon the quality of criteria. In the EU labelling scheme, for instance, the final decision is taken by the Commission so that societal actors have less influence on the outcome of procedures.

Normally, ISO type I programmes have established **different institutional elements for criteria setting and administration of award**. The main motive seems to be increasing the efficiency of decision making processes. The country reports showed that the awarding institutions are either independent bodies created especially for the administration of the eco-label scheme (e.g. The Netherlands), standardisation institutions (France, Spain), "traditional" organisations dealing with (technical) labelling issues (e.g. Germany), or public bodies (Catalan, EU-label). The administration normally encompasses the conclusion of contracts with applicants which incorporates the assessment of certificates and documents. The committee in charge of criteria setting is usually a pluralistic multi-stakeholder panel. It tackles two main tasks: the selection of eligible product categories and the decision on award criteria.

Table 4.3: Overview of institutional aspects of classical ISO-Type I schemes (own elaboration)

Name of the programme	Country	Criteria principle	Awarding organisation	Formal final decisioner	Support by	LCA	Verification	Excluded product groups	Specialities
European Eco Label	EU	<ul style="list-style-type: none"> Hurdle Scoring (sometimes) 	<ul style="list-style-type: none"> National Competent Bodies Commission 	Commission	<ul style="list-style-type: none"> European Eco-Labeling Board Lead Competent Body 	LCT	Yes	<ul style="list-style-type: none"> Food Pharmaceuticals Beverages 	<ul style="list-style-type: none"> Incentive-oriented fee structure with advantages for frontrunners
NF Environnement	France	n.a.	<ul style="list-style-type: none"> AFNOR Certification (French Standardisation Organisation) 	AFNOR Certification	<ul style="list-style-type: none"> Environmental Label Committee ADEME French Ministry for the Environment 	LCT	Yes	<ul style="list-style-type: none"> Food Pharmaceuticals Services Cats 	
Blue Angel	Germany	<ul style="list-style-type: none"> Hurdle 	RAL	<ul style="list-style-type: none"> Jury Umweltzeichen Independent Pluralistic 	<ul style="list-style-type: none"> UBA Working Panels 	LCT	Yes	Food	<ul style="list-style-type: none"> Services as new area
White Swan	DK, FI, NO, SW	<ul style="list-style-type: none"> Hurdle 	<ul style="list-style-type: none"> Competent Bodies in participating countries 	<ul style="list-style-type: none"> Nordic Coordination Body 	<ul style="list-style-type: none"> Inter-Nordic expert groups 	LCT LCA	Yes	Food	<ul style="list-style-type: none"> Services as new area
Bra Miljöval	Sweden	<ul style="list-style-type: none"> Hurdle 	<ul style="list-style-type: none"> Swedish Society for Nature Conservation 	<ul style="list-style-type: none"> Swedish Society for Nature Conservation 	n.a.	n.a.	n.a.	Food	<ul style="list-style-type: none"> Detergents for clothes and house care Electricity Transport
Milieukeur	The Netherlands	<ul style="list-style-type: none"> Hurdle (all product groups) Scoring (only food) 	<ul style="list-style-type: none"> Stichting milieukeur 	Board	<ul style="list-style-type: none"> Panel of experts: Independent Pluralistic 	LCT LOA	Yes	Pharmaceuticals	<ul style="list-style-type: none"> Enlargement of product groups (furniture) Food included
AENOR Medio Ambiente	Spain	<ul style="list-style-type: none"> Hurdle 	<ul style="list-style-type: none"> AENOR (Spanish Standardisation Body) 	<ul style="list-style-type: none"> Technical Standard Committee 	Working Group	LCT	Yes	<ul style="list-style-type: none"> Food/beverages Pharmaceuticals 	<ul style="list-style-type: none"> Services as new area
Distritiu de Garantia de Qualitat Ambiental	Catalonia	<ul style="list-style-type: none"> Hurdle for products Hurdle/Scoring for services 	<ul style="list-style-type: none"> General Directorate of Environmental Quality 	<ul style="list-style-type: none"> General Directorate of Environmental Quality Dependent on Ministry of Environment Not pluralistic 	<ul style="list-style-type: none"> Pluralistic Environmental Quality Council 	LCA LCT	Yes	<ul style="list-style-type: none"> Food/beverages Dangerous substances Pharmaceutical Health Centres 	<ul style="list-style-type: none"> Services as new area Subsidies
AENOR Medio Ambiente	Spain	<ul style="list-style-type: none"> Hurdle 	<ul style="list-style-type: none"> AENOR (Spanish Standardisation Body) 	<ul style="list-style-type: none"> Technical Standard Committee 		LCT	Yes	<ul style="list-style-type: none"> Food/beverages Pharmaceuticals 	<ul style="list-style-type: none"> Services as new area
Distritiu de Garantia de Qualitat Ambiental	Catalonia	<ul style="list-style-type: none"> Hurdle 	<ul style="list-style-type: none"> General Directorate of Environmental Quality 	<ul style="list-style-type: none"> General Directorate of Environmental Quality Dependent on Ministry of Environment Not pluralistic 	<ul style="list-style-type: none"> Pluralistic Environmental Quality Council 	n.a.	Yes	n.a.	
Umweltzeichen	Austria	<ul style="list-style-type: none"> Hurdle (all product groups) Scoring (only tourism) 	<ul style="list-style-type: none"> Association for Consumer Information (VKI) 	<ul style="list-style-type: none"> Ministry of Environment 	<ul style="list-style-type: none"> Advisory Board Working Panels 	LCT	Yes	None	<ul style="list-style-type: none"> Tourism as product group
n.f.	Italy	n.f.	<ul style="list-style-type: none"> Comitato per l'Ecolabel e l'Ecoaudit 	n.f.	<ul style="list-style-type: none"> ANPA n.f. 	n.f.	n.f.	n.f.	n.f.

Explanation: n.f. = not fixed, n.a. = not available, n.r. = not relevant

4.1.2.2 Selection Phase

During the selection phase, the responsible panel decides upon product categories for which test procedures should be started. In addition, during this stage the decision is made as to which product categories will be included or excluded.

In principle, all ISO type I schemes invite the general public to submit **proposals** for new eco-label product groups. In practise, however, most proposals come from industry and producers of eco-friendly goods respectively.

Most label schemes **exclude** food and some exclude pharmaceuticals from possible product groups. The French NF Environment also excludes services, for instance. Other schemes follow a kind of "black list", i.e. a list of products which are unofficially excluded from the scheme, like for example private vehicles. Only the Dutch milieukeur **includes** food and has elaborated several requirements for different food products. Interesting new approaches are the increasing inclusion of services as a new area and the elaboration of eco-labelling criteria for transport and electricity in the case of the Swedish "Bra Miljöval".

We also got the impression that the selection of product groups started with some green **symbolic product groups** indicating an appropriate environmental consciousness and behaviour. At its start, the Blue Angel selected returnable bottles, recycled hygienic paper and CFC-free sprays as some of the product groups to be labelled first. It is reported that in Sweden product groups which are more easily tackled within the programme (i.e. the "low hanging fruits") have all been labelled and that nowadays there is a lack of interesting and also challenging product groups which are environmentally important.

A **prioritisation** of product groups, i.e. a reflection of the most important product groups both from an environmental point of view and from the point of view of consumer and/or producer interest, is the exception and not the rule: Recently, the Commission elaborated a draft working programme for the EU-eco-label scheme. In Catalonia in 1998, a panel of experts established a prioritising list for the selection of the new groups. This selection is now basically followed by the "*El Distintiu*" Competent Body in order to launch new service categories. In general, one can observe that the selection of product groups is often not very systematic; but rather follows a more pragmatic or symbolic approach. This is somewhat surprising, since there is huge knowledge on environmentally most relevant areas such as housing, mobility, and food (cp. e.g. Lorek/Spangenberg 1999).

The scope of the **definition of the product groups** seems to be characterised by two different tendencies: On the one hand, there is a trend to expand the scope of a category. This is practised, for instance, in the Dutch eco-label scheme: The certification schedule for furniture lists all materials allowed for several furniture products; each material has to fulfil specific environmental requirements. Thus, the Mileukeur criteria for furniture are solely based on material component requirements, and not on a division for further sub-groups. In contrast to this procedure, during the Italian work for an EU-eco label for hard floor coverings this product group has been split into three sub-groups and criteria have been developed for each of them.

With respect to the **demand-side**, country reports disclosed that private households are the main target of national eco-labelling programmes. Most product categories are consumer goods. The only main exceptions are paper products and office equipment, such as computers, copiers, printers, or office chairs, which can be bought by company purchasers and public procurers as well. Maybe due to the fact that it is the oldest and, in terms of product categories, the largest programme, the German Blue Angel includes a number of other non-consumer-oriented goods: construction machines, bus controlled devices for system engineering in

buildings, returnable transport packaging, municipal vehicles etc. The Dutch Milieukeur takes a similar direction including categories such as hand dryers and cleaning/product recycling of industrial gloves. The Spanish AENOR Medio ambiente launched in 1998 the service category "Paper recovering and warehousing centres" basically addressing municipalities and waste management companies.

4.1.2.3 Elaboration Phase

The stage of elaborating award guidelines for selected product groups is the most lavish during the pre-market phases.

Normally, criteria development is supported by boards, committees, panels, expert groups representing different economic and social interests (e.g. trade, industry, consumer and environmental organisations). For almost all ISO type I schemes such a **pluralistic and third-party** kind of labelling is apparently state-of-the-art. An example like the Swedish "Bra Miljöval", which is an eco-label managed by an environmental NGO (Swedish Society for nature Conservation), shows, however, that trust and good reputation can be created by less pluralistic and single-actor-procedures as well.

The ISO standard for third-party-labelling also prescribes that guidelines have to consider the entire **life-cycle of a product**. It does not stipulate, however, that full blown LCAs (**Life Cycle Assessments**) have to be conducted during criteria development. The country reports shed little light on this methodological issue. It becomes clear that Life-Cycle-Thinking (LCT) is normal business for the 'classical' programmes. To which extent the LCA methodology according to ISO 14040 is being followed, however, varies from country to country: Most often and due to limited budgets of the competent bodies, existing LCA results along with producer information are exploited for criteria development. If secondary data are not available or obsolete, studies are conducted by external consultants analysing the life-cycle impacts of the product under consideration. In the Dutch scheme, for instance, a formalised LCA matrix juxtaposing life-cycle stages and environmental parameters was used until 2000. This matrix provided the principle structure for analysis (a similar scheme is used by the Euroflower); and was recently combined with a software tool based on a LCT-approach.

The German example reveals that LCA has a major role to play within third-party-labelling, although such assessment is not conducted regularly. LCA can strongly influence

- the selection of product categories (e.g. an LCA showed that polyethylene bags for milk are not inferior to returnable glass bottles and have eventually been considered within the Blue Angel),
- the development of guidelines (e.g. LCA results revealed that superiority of returnable packaging largely depends on transport),
- the meeting of environmental priorities (e.g. reducing electricity consumption of TV sets due to the need to reduce CO₂ emissions).

Beside these different (potential) roles of LCA, the reports provide only few examples where criteria actually address several and, in particular, upstream life-cycle-stages: e.g. prohibition of chlorine bleaching agents in hot-filter paper or newsprint paper (Blue Angel), criteria referring to COD of leather tanning and VOC emissions during assembly of footwear components (Euroflower).

The varying role of LCA application within the different national and EU schemes might be one reason for the different criteria among countries.

Two main principles for criteria setting exist: the **hurdle and the scoring principle**. A hurdle system is characterised by a number of minimum standards which all have to be met at the same time. In contrast, a scoring system allows for some weighting among different environmental criteria. In the different labelling schemes, the hurdle principle dominates; the scoring principle has been applied - at least so far - only in some cases, e.g. at the European eco-label for detergents, for food products in the Dutch system or for tourism within the Austrian scheme. The prevalence of the hurdle system implies some dilemma. The core element of the scoring principle is the possibility to compensate the failures of some eco-labelling requirements with the excellent passing of some other eco-labelling criteria. Such a scoring scheme could consider national specialities (e.g. with regard to environmental objectives and/or to consumer interests) more appropriately; it could also encourage product innovations by more ambitious environmental requirements.

The applications for an eco-label are **verified** in all considered "classical" eco-label schemes. The concrete models of verification seem to be different, however. In some countries, the awarding institution is also the institution verifying the information received, whereas in other schemes, other third parties carry out verification¹⁶.

Technical progress continuously alters the environmental features of products. That means that there is a systematic temporal gap between criteria-setting and market developments. All schemes analysed attempt to tackle this dilemma by a periodic **dynamisation of the criteria**. The guidelines are frequently updated, on average every three years, taking into account scientific and technological progress. This built-in updating mechanism is normally used in a flexible manner, i.e. in case of technological quantum leaps revision might be conducted before the end of the three-year-period. The reports, however, could not shed light on the question, whether this flexibility actually worked and is sufficient to cope with technological progress in certain areas (e.g. consumer electronics, computers).

There is a lack of **mutual international recognition and co-operation**. At the moment, there exists European co-existence of different ISO type I schemes. Catalan and Swedish consumers are confronted with three different eco-labels applied in these markets/regions (Catalan, Spanish and EU label; Nordic Swan, Falcon and EU-label). Co-operation among label schemes is seldom practised. Exceptions to this are Austria; where the EU-label requirements for a specific product group are one-to-one adopted by the Austrian eco-label scheme and the Dutch situation where - in the case of similar product groups - the national "Milieukeur" is replaced by the Euroflower in order to avoid double labelling.

In addition, it has been reported that eco-labelling criteria have an **indirect effect** in terms of setting informal green standards for products. This might be an important consequence, even if the labels are not actually used by suppliers.

4.1.2.4 Market Phase

The market phase is the most crucial one for every third-party scheme. It comprises the acceptance of criteria by potential applicants and, furthermore, the impact labelled products have on the market in terms of their relative market share. We illuminate this point later within the following chapters. Therefore, we report here only some general findings.

¹⁶ However, we do not know the real and concrete control practices.

The increase of zero categories¹⁷ depicts a more general dilemma of current ISO type I programmes; namely the question of whether to **widen or deepen the schemes**. Some programmes have elaborated a plethora of different requirements, e.g. the German Blue Angel scheme has elaborated so far, requirements for 86 product groups and the White Swan for 46. But, very few of them dominate the schemes in terms of certified products (see chapter 4.1.3.2). Hence, competent bodies have to take a strategic choice whether to enlarge the number of eligible product groups (“widening”) or to settle a limited number of product categories and actively support their acceptance in the market (“deepening”).

With respect to **supporting factors** the country reports revealed that it is often certain agents of change which stimulate market penetration of eco-labels. **Retailers**, for instance, play a crucial role as experiences in Sweden and Italy have shown. Furthermore, experience so far indicates that **public procurement** might be an important leverage as well: The share of public purchasing at the GNP is between 11 and 18% in the EU and, hence, could open and enlarge markets for certified products (subject to some legal restrictions by EC-prescriptions). In addition, **governments** can encourage application of an eco-label by combining it with other efforts. The Catalan government, for instance, has given incentive to producers to apply for the Catalan eco-label by providing financial grants. Similarly, the possibility of financial incentives for first-movers (e.g. reduced application fee) has been introduced within the revision of EC regulation of the Euroflower.

Especially the EU eco-label has had limited success. Some interpretations have been found within the country reports Important **barriers** to the success of the EU eco-label are:

- lack of information about the EU-flower at companies and retailers.
- some disagreement between producers with respect to the ecological criteria set by the EC,
- mistrust of industrial associations,
- opposition of large companies,
- scarce promotion by large distribution chains,
- perceived lack of awareness among consumers,
- specific difficulties of SME's (complexity of procedures, doubts on the commercial efficacy, high costs to obtain and maintain the award)¹⁸,
- high application fees,
- different national cultures in the EU; opposing sometimes the EU-wide harmonised organisation model of an EU-eco-label,
- conflicting interests between EU and national eco-labels.

More general **barriers** for third-party eco-labelling appear to be:

- the small size of a market¹⁹,
- insufficient political support (e.g. other IPP-priorities in The Netherlands)
- insufficient knowledge of consumers about the awarding institutions,
- competition among different EPIS instruments²⁰,
- lack of environmental consciousness and “green” buying behaviour of consumers.

¹⁷ With “Zero categories” we mean product groups for which eco-labelling requirements have been elaborated, but label holders do not exist.

¹⁸ It is worth mentioning that the new regulations establish a set of economic incentives especially for SME's (and developing countries).

¹⁹ An example is The Netherlands; with a small population with only a minor demand-side importance in an European context.

²⁰ An example are white goods; within which the mandatory energy label and voluntary eco-labels “compete” with each other.

4.1.3 Success Factors During the Elaboration Phase

Several elaboration-phase related success criteria have been proposed in the literature²¹. However, it is very hard to apply these criteria to the empirical data generated by the country reports. In the following, we concentrate on two criteria, namely:

- number of product groups in the scheme,
- number of licensed products on the market.

Analysing and comparing the different schemes, we could use a classification elaborated by the Global Eco-labelling Network (GEN)²². We modified this classification by adding some new product categories (furniture, tourism, energy and food) and by correcting the allocation of some product groups²³.

Table 4.4 provides an overview of the "classical" ISO type I schemes. Horizontally, 23 product categories are listed. The columns list the number of elaborated eco-labelling requirements for specific product category (column "Product groups"), the number of companies allowed to use the eco-label (column "Firms") and the number of eco-labelled products (column "Products").

4.1.3.1 Number of Product Groups

The number of product groups considered varies from programme to programme. It is apparently larger, the older the scheme.

- German Blue Angel scheme: 86 groups.
- Austrian, Nordic and Dutch scheme: between 40 and 55 groups.
- European, French, Spanish, Catalan and Swedish Falcon: about 10-15 categories.

An analysis of the focus areas of the schemes in terms of number of product groups within one category reveals the following. Important categories, for which the number of product groups accounts for at least 10% of all considered product groups, are:

- cleaning in Austria, Nordic countries, the Swedish Falcon and The Netherlands;
- construction/building in Germany and Nordic countries;
- home appliances in the EU-scheme and Germany;
- office equipment in Austria and Spain;

²¹ See for example, EPA (1994), Nordic Council of Ministers (2001), OECD (1997) and Rubik (1995).

²² See http://www.gen.gr.jp/product_a.html (May 15, 2001).

²³ An example are textmarkers which have been allocated by GEN to "Paper products" (category 2000); we moved them to the category "Office supplies" (category 2100).

Table 4.4: Overview of the scope of "classical" ISO type I schemes (own elaboration) ²⁴

	Gen-Code	Austria		European Union		France		Germany		Nordic Countries						
		Product groups	Firms	Product groups	Firms	Product groups	Firms	Product groups	Firms	Product groups	Firms	Product groups	Firms			
Batteries	1100	0	n.d.	0	n.d.	0	n.d.	0	n.d.	3	10	2	12	151		
Burners/Boilers	1200	1	1	3	0	n.d.	0	n.d.	4	49	170	2	5	16		
Cleaning	1300	4	0	0	2	3	1	1	3	25	49	6	84	400		
Clothing/textile	1400	1	1	54	2	22	55	0	n.d.	0	n.d.	1	1	3		
Construction/ Building	1500	3	1	1	0	n.d.	n.d.	1	0	11	84	460	5	19	112	
Gardening/ Agriculture	1600	3	79	237	1	7	19	1	6	33	6	58	197	3	11	34
Home Appliance	1700	2	0	0	3	1	1	1	0	0	10	60	162	4	2	9
Home Care Products	1800	2	5	9	1	19	105	1	16	77	1	57	1,003	1	10	30
Lights	1900	1	0	0	1	0	0	0	n.d.	n.d.	1	2	9	1	0	0
Office equipment	2000	4	4	62	2	1	1	0	n.d.	n	7	30	402	4	22	303
Office Supplies (not paper specific)	2100	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	2	11	20	2	3	8	
Package/Container (not paper specific)	2200	1	2	3	0	n.d.	n.d.	1	2	9	3	40	60	0	n.d.	n.d.
Paper Products	2300	6	8	30	3	6	31	1	3	8	5	164	913	7	582	2,335
Personal Care Products	2400	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	4	3	11	4	10	106
Services	2500	2	0	0	0	n.d.	n.d.	0	n.d.	n.d.	3	16	22	3	31	34
Solar-Energy	2600	1	2	5	0	n.d.	n.d.	0	n.d.	n.d.	2	28	84	0	n.d.	n.d.
Vehicles/Fuels	2700	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	8	33	95	5	13	85
Water-Saving	2800	3	0	0	0	n.d.	n.d.	0	n.d.	n	4	13	60	1	3	6
Furniture	n.d.	1	1	10	1	1	1	2	0	0	1	51	123	2	7	55
Tourism	n.d.	1	146	146	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	0	0	0
Energy	n.d.	1	0	0	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	1	0	0
Food	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.
Others	4000	4	5	30	0	0	0	2	7	8	8	71	144	0	0	0
Total		41	255	590	16	59	216	11	35	136	86	798	3,994	54	815	3,687

n.d. = requirements have not been defined (yet)

²⁴ It should be noted that for a lot of product groups, the exact amount of labelled products is not known to the awarding organisation.

	Gen-Code	Spain (AENOR)			Spain (Distintu)			Sweden (Falcon)			The Netherlands		
		Product groups	Firms	Pro-ducts	Product groups	Firms	Pro-ducts	Product groups	Firms	Pro-ducts	Product groups	Firms	Pro-ducts
Batteries	1100	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.
Burners/Boilers	1200	0	n.d.	n.d.	1	0	0	0	n.d.	n.d.	0	n.d.	n.d.
Cleaning	1300	0	n.d.	n.d.	0	n.d.	n.d.	6	306	647	1	1	5
Clothing/Textile	1400	0	n.d.	n.d.	1	0	0	1	11	14	1	2	3
Construction/Building	1500	0	n.d.	n.d.	1	2	2	0	n.d.	n.d.	4	13	4
Gardening/ Agriculture	1600	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	2	1	8
Home Appliance	1700	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.
Home Care Products	1800	1	8	20	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.
Lights	1900	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.
Office equipment	2000	3	0	0	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.
Office Supplies (not paper specific)	2100	1	1	132	0	n.d.	n.d.	0	n.d.	n.d.	1	0	0
Package/Container (not paper specific)	2200	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.
Paper Products	2300	2	3	175	2	6	60	1	10	27	10	20	39
Personal Care Products	2400	0	n.d.	n.d.	0	n.d.	n.d.	2	61	190	0	n.d.	n.d.
Services	2500	1	23	35	1	5	9	2	14	17	2	27	0
Solar-Energy	2600	1	0	0	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.
Vehicles/Fuels	2700	1	4	4	1	1	8	0	n.d.	n.d.	3	4	43
Water-Saving	2800	0	n.d.	n.d.	1	6	665	0	n.d.	n.d.	0	n.d.	n.d.
Furniture	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	1	5	6
Tourism	n.d.	0	n.d.	n.d.	4	10	10	0	n.d.	n.d.	0	n.d.	n.d.
Energy	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	1	74	74	0	n.d.	n.d.
Food	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	0	n.d.	n.d.	15	45	33
Others	4000	2	9	28	4	12	65	1	56	56	8	35	24
Total		12	48	394	16	42	819	14	532	1,025	48	153	165

n.d. = requirements have not been defined (yet)

- vehicles/fuels in Germany and the Nordic countries;
- services in the Swedish Falcon;
- furniture in France;
- tourism in Catalonia;
- food in The Netherlands.

One has to be aware of the fact, however, that this simple indicator for focus areas within the labelling schemes does not tell one anything about the visibility of the seal in the market. Therefore, it is necessary to analyse the categories with a very high and very low number of applying firms/ certified products. The share of "zero-categories" is substantial in almost all schemes and varies from country to country:

- in Germany, around one fifth of all product categories²⁵
- in the Dutch scheme, 24% of non-food product groups and 7% of food product groups
- in the Austrian scheme 49%,
- in the national Spanish scheme about 42%,
- in the French scheme about 45%,
- in the Catalan scheme 19%,
- in the European scheme 31%,
- in the scheme of the Nordic countries 29% and
- in the Swedish Falcon scheme zero.

4.1.3.2 Number of Licensed Products in the Market

Most of the different label schemes considered were settled in the early nineties; the prominent exception is the German Blue Angel which began in 1978.

Obviously, the German Blue Angel and the Nordic systems are the schemes applied most often all over Europe. As of the end of 2000, about 800 companies use them for nearly 4,000 different products. The Catalan scheme is applied for about 800 different products, the Austrian scheme for about 600 products/sites²⁶. The Spanish (about 400 products), the European (about 200), the Dutch (about 160) and the French (about 140) schemes are used less often.

What product groups are mainly responsible for the visibility of the labels under consideration? An indicator might be to select those groups for which the share of eco-labelled products is more than 5% of all eco-labelled products. This would imply the following results:

- *Austria*: Four product groups are responsible for 81% of all eco-labelled products/sites, namely compostable flower arrangements (38%), tourism (24%), office chairs (10%) and textile coverings (9%).
- *European Union*: Four product groups are responsible for 95% of all eco-labelled products, namely paints (49%), textile products (24%), sanitary paper (13%) and soil improvers (9%).

²⁵ The number of "Zero-categories" was rather low during the late eighties; it has continuously increased since 1995.

²⁶ The Austrian label scheme has elaborated requirements for tourist sites.

- *France*: Two product groups for 81%, namely paints (57%) and compost containers (24%).
- *Germany*: Seven product groups are responsible for 62% of all eco-labelled products, namely paints/varnishes (25%), recycled board (10%), recycled paper (8%), copiers (6%), wallpapers (5%), construction machines (4%) and sanitary paper (4%).
- *Nordic countries*: Four product groups for 67%, namely printing paper (41%), printed paper (13%), sanitary paper (7%) and toner cartridges (7%).
- *Spain (AENOR)*: Five product groups for 98%, namely paper envelopes (44%), organisers (34%), paper recovering and warehousing centres (9%), shopping bags (6%) and paints (5%).
- *Spain (Catalonia)*: Three product groups for 92%, namely products/systems for water saving (81%), recycled plastic products (6%), paper and cardboard products (4%).
- *Sweden (Falcon)*: Seven products groups (i.e. the half of all) for 89%, namely all purposes cleaners (19%), laundry detergents (17%), soap/shampoos (17%), dishwasher detergents (11%), toilet cleaners (7%), electricity supplies (7%) and shops (5%).
- *The Netherlands*: Four product groups for about 64% of all eco-labelled products²⁷, namely car wash installations (24%), arable products and farming (12%), cat litter (11%), writing paper (10%) and flour (7%).

The figures reveal that the schemes in operation are in most cases "dependent" on only a small number of categories. Most important product areas are, for instance, paper products, textile products, durable office equipment and some products addressing national/regional characteristics (e.g. products for water-saving, tourism, flower arrangements, bags, organisers, food, cat litter, and recycled plastic products).

4.1.4 Success Factors during the Market Phase

The success of eco-labels with regard to the market-phase could be judged by several criteria which have been proposed by other authors²⁸. Due to our empirical data we can report on few of them, namely:

- (1) market shares of eco-labelled goods and services,
- (2) consumer knowledge of eco-labels,
- (3) consumer trust in eco-labels,
- (4) producers' acceptance of eco-labels.

4.1.4.1 Market Shares of Eco-labelled Goods and Services

The market shares of eco-labelled products of all sold products within the same group are an important success-indicator. The country reports delivered some information with respect to market penetration:

- *Germany*: As reported by an OECD study (1997) the market share of eco-labelled paints increased from 1% (1981) to 60 % in the Do-It-Yourself-sector and 20 % in the handicraft sector in 1995. For sanitary paper products, the market share rose from 32 % in 1986 to 64 % in 1993 and for administrative paper products the percentage went from 13 to 24 in the same period. Oeser (1998), furthermore, observed

²⁷ However, it has to be considered that for a lot of product groups, the exact amount of labelled products is not known to the awarding organisation.

²⁸ See footnote 21.

that the Blue Angel has contributed to an increasing market share of returnable bottles for milk and juice. In addition, the study revealed that market impact can be due to side-effects arising independently from the actual award of the label. Such informal standard-setting obviously has had some influence in case of soil improvers and soil adjuvants made from compost, rapidly biodegradable hydraulic fluids, any sound-proofed glass collection bins.

- *Nordic countries:* An assessment of the White Swan (ÅF-IPK 2000) indicated some estimates of markets shares of eco-labelled products²⁹:
 - For printing paper, it was estimated that the share is about 70% in all Nordic countries (except of Iceland);
 - in the case of printed matter, the shares of eco-labelled products are largest in Sweden (about 70%), 40-70% in Denmark, and 10% for Norway and Finland;
 - the market shares of eco-labelled laundry detergents are the largest in Sweden (70%), 40-70% in Norway, 10-40% in Finland and less than 10% in Denmark and Iceland;
 - for all-purpose cleaners, the shares are up to 40% in Sweden and Norway and between 10 and 40% in the other Nordic countries.

The main reason for the low Danish market shares for many labelled product groups is that Denmark joined the White Swan as late as 1997. However, Denmark is the country with the largest increase in eco-labelled products during the last two years.

- *The Netherlands:* In some cases, eco-labelling has increased market share of certified products. De Haes (1997 p.5) reports that eco-labelled cat litter increased its market share from 2% to 8%. Other successful product groups reported are concrete paving bricks, concrete tiles, writing paper residential recreation parks, flowers and plants, and arable products. More recently, the Environmental Ministry has judged the success of the Milieukeur to be very modest: "The Eco-label Foundation initiated a great many certification programmes, but producers have not been very eager to apply for the label" (VROM 1998 p.2).

The examples show that there is no systematic assessment of market impacts available yet. Evidence is mainly anecdotal in nature, and methodological problems have not been discussed in detail so far (e.g. the question whether an increase of market share of labelled products can be attributed to the hallmark or is due to other factors, such as change in consumer awareness, media and/or NGO campaigns etc.). Beside direct effects on the markets, it appears that indirect effects on not-eco-labelled products are also important.

4.1.4.2 Consumer Knowledge of Eco-labels

Some country reports referred to the knowledge (and also the importance) of eco-labels among private consumers³⁰:

- *Belgium:* A survey (Rouseau/Delaet 1998) examined consumer behaviour inside hypermarkets. The study shows a high degree of confusion amongst consumers: Only half of people questioned were able to recognise 4 of the 11 logos displayed. The EU label was almost never recognised or acknowledged: only 11.5% of people gave the correct meaning, 13% thought it meant something related to the Belgian ecotax. In the same way, logos referable to ecotax were only well-known by 2.7%. The best-known label was the Green Dot, but it was often confused by the symbol for "recyclable" or "recycled". The survey also showed that the best understood logos were those joined with a word or sentence.

²⁹ It has been mentioned that these shares are rough estimates (Nordic Council of Ministers 2001, p. 45).

³⁰ We do not know any analysis of this criterion among public and business purchasers.

- *France*: Two consumer surveys were carried out by the statistical research institute CREDOC (Centre de Recherche pour l'Etude et l'Observation des Conditions de vie – Department Conditions de vie et aspirations des Français) respectively in 1996 and in 1999. In the first one, carried out on behalf of AFNOR, it was found that more than 80% of the respondents do know at least one eco-label or green label. However, it is not clear which eco-label they referred to (EPA 1998). In fact, in the second survey commissioned by ADEME in 1999 a different method was used: the NF logo was shown to the interviewed people without any written indication and people were asked whether they knew the logo and its meaning. On such a precise question the number of positive answers decreased by 30% with respect to 1996, thus corresponding to 56% of respondent people (CREDOC 2001). In any case, the same survey of 1999 reports that 2/3 of French consumers refer to the energy label when buying electrodomestic appliances (ADEME 2000).
- *Germany*: Spiller (1999) found in a survey among 215 people that knowledge of the label accounts for 91%. The institution(s) behind the label, however, were known by only 27% of the interviewees.
- *Nordic countries*: Various studies³¹ have shown that consumer knowledge about the White Swan increased dramatically during the nineties. Nowadays, more than 80% of consumers in Sweden, Norway and Finland recognise the White Swan as the Nordic eco-label. The figures vary from one study to another; dependent on the design of the research. Denmark and Iceland have a significantly lower knowledge than other countries. Knowledge increases with education and income, and decreases with respondent age in these countries. In Denmark and Sweden, consumers also to a large degree recognise the label for organic food, but this is not the case for Norway. The EU-flower is not recognised in Nordic countries; not even in Denmark.
- *Norway*: Norwegian consumers have been asked about their awareness of the Nordic Swan several times during the nineties³². Whereas only 12% of consumers were aware of the Swan in the year 1992, the percentage increased considerably up to 66% in 1994³³. Recent surveys (Nyberg 1999, p 70) show that approximately 4/5 of respondents recognise it.
- *Spain*: A recent survey (Fundación Entorno 1999) indicates that 60% of Spanish consumers know a recycling/recycled product, 35% the Green Dot, 20% the EU label and only 10% the Spanish AENOR-Medio Ambiente-eco-label. Data covering the Catalan "Distintiu" and other regional labels was not available.
- *The Netherlands*: Stichting Milieukeur (2000a, p. 6) states that in 1999 the proportion of consumers who spontaneously knew the name of the Dutch eco-label accounted for 22% and the rate of people knowing the name after being supported by the interviewers was about 57%. The foundation attributes the increase of the level of awareness among consumers primarily to the national advertising campaign carried out on TV.

In general, the European eco-label is not well known. The Belgian and Spanish results are very modest. Better known are recycling symbols, especially the Green Dot.

The available empirical data reveals that ISO type I labels are well known; especially in countries where a lot of products are eco-labelled, such as in Germany and the Nordic countries. It is striking, however, that knowledge of the labels is sometimes not deeply rooted in consumers' minds. This underpins the Dutch

³¹ See for example Nordic Council of Ministers (1999).

³² See Strandbakken (1995), Ramm (1997) and Stø (1998).

³³ Only the Pine Tree-symbol and the Panda-logo was better known.

example where half of the respondents recognised the label correctly only after being helped by the interviewers. Moreover, some of the surveys reported appear to be rather imprecise with respect to the kind of labels they asked for and, hence, do not allow for substantial conclusions.

4.1.4.3 Consumer Trust in Eco-labels

Some country reports provided information on consumers' trust in eco-labels:

- *France:* As reported by ADEME (2000), a survey carried out by CREDOC in 1999 has shown that the credibility of green products has significantly decreased in the last two years: 63% of French consumers think that there is no guarantee that products actually meet the environmental performances that are claimed. On the other hand, however, consumers seem to be well aware and informed about environmental aspects of products. More than two thirds of French people refer to the energy label when purchasing electric appliances.
- *Germany:* Within consumer surveys on behalf of the Federal Environmental Agency (UBA), persons interviewed were queried several times for indicators for an environmental sound product. According to the survey, the Blue Angel has lost its unique signalling position, since terms like "eco" and "environmentally-friendly" have continuously gained importance over the last years (obviously accompanied by a plethora of new eco-labels created by individual companies, industrial associations, environmental organisations, testing institutes etc.): But nevertheless, about half of respondents consider the Blue Angel as the appropriate indicator.
- *Nordic countries:* Consumer trust in the White Swan is reasonable high in Norway, Sweden and Finland. However, in Finland the White Swan has "competition" from the Blue Swan; a national country of origin label. Data for Finland indicates that this Blue Swan confuses consumers in the market. In Denmark the trust in the organic label – the red Ø – is higher than the White Swan (Nordic Council of Ministers 1999, p. 55), but the situation in Denmark is changing rapidly.
- *Norway:* Tufte/Lavik (1997) reported on a survey among consumers about the Swan in the year 1995. 78% of the consumers identified the Swan as the officially approved eco-label, but only 18% of them guessed that – correctly – the government was behind the scheme. 32% believed that environmental organisations were behind the label, and 23% that it was the producers.

Who the respondents think to be behind the label influences their trust in the scheme: Among consumers who thought that producers are responsible for the scheme, only 46% expressed "high trust" that a Swan-labelled product is less environmentally harmful. Comparable figures for those who believe environmental organisations are responsible and for those who assume that the government is responsible are 63% and 72%.

This scattered information suggests that there is often a general mistrust with regard to the credibility of environmental claims via labels, that trust is more difficult to generate for "younger" programmes, and that trust in one label correlates with the relevance of other labels and also with the types of actor behind the scheme.

4.1.4.4 Producers' Acceptance of Eco-labels³⁴

The acceptance of eco-labels among suppliers has seldom been analysed. Empirical data is scarce. An indicator such as the number of zero-categories within the programmes (see Table 4.4) suggests that all schemes face substantial reservations of industry in certain product categories.

With regard to companies' attitudes towards type I labels, Rubik (1995) found for the example of the German Blue Angel for wallpaper and hair spray that main company motives for using the label are competitive advantages, its value for product marketing, and its contribution to environmental protection. Normally, eco-labelling would be part of a 'green' corporate culture. Companies not using the label fear an increase of costs, mainly due to changing production patterns and product designs, and also negative side-effects to non-labelled models of their product range. Both users and non-users, however, concede that the Blue Angel had some impact on product innovation and optimisation (in particular in the case of wallpaper).

Another German survey revealed that in general, companies judge the Blue Angel good (UBA 1998). In particular, they acknowledge its value in consumer information and in incorporating environmental protection as an additional factor in market competition. It turned out that companies by and large accept the quality of the award criteria, the expenditures for the application of the eco-label, the processing of the applications, and also the user fees. The poll, furthermore, unveiled that benefits of the label are mainly immaterial and indirect in nature: The Blue Angel did not bring about remarkable changes in sales (if at all, then for 'first users' only), neither did it improve the possibilities to realise higher price margins in the market. Though the feedback of customers to the use of the label was generally judged quite good, it did not enable companies to acquire new clients more easily. The effects on market position have been assessed rather sceptically; even though more than 25 % of companies have observed improvements. The latter was especially true for SMEs.

Especially in the case of mass products, market success of eco-labelled products is also largely dependent on retailers' acceptance. This has been demonstrated in the Nordic countries. The Swedish retail chain ICA and the Nordic consumer co-operatives decided to offer their consumers eco-benign products. Within the product category of laundry detergents both ICA and KF (Consumer co-op) have decided to sell only eco-labelled products in Sweden.

4.2 EPIS as Self-declaration

This ISO type could be regarded as the business marketing approach to inform consumers on the environmental qualities of their products by self-declaration ("Do-it-yourself"-labelling). ISO standard 14021 formulates some basic characteristics of an ISO type II label, namely:

- voluntary,
- self-declaration,
- without independent third-party registration.

ISO 14021 listed several requirements to self-declared environmental claims. Important are accuracy, verification possibilities and consideration of relevant environmental aspects.

³⁴ See also the criterion "Market shares" (chapter 4.1.4.1).

The standard has been published recently. As in the case of the ISO type I standard, it is once more difficult to find green claims which explicitly refer to the respective standard. There is, nonetheless, a long tradition of environmental claims and many of them might be regarded as potential ISO type II labels.

The arena of green claims, labels, and advertisement is expanding at the moment: "(...) the use of misleading claims is changing in nature, but the phenomenon as a whole is showing an increase in both numbers and sophistication – in all Member States. (...) the ability of the majority of Member States to control such claims is poor" (Leubuscher et al. 1998, p. 50). In response to this trend and the increasing confusion among consumers the EC has agreed on several Directives in the field of consumer protection. Especially Directive 84/450/EEC, which refers to misleading advertisement, is relevant with regard to green claims. This Directive has been amended by Directive 97/55/EEC in order to include provisions on comparative advertising; the problem of green claims, however, has been touched only modestly, at least so far. In 1999, the EC published a consultation document of a possible EC approach regarding Green claims (DG SANCO 1999), which considers two objectives: a) prevention of misleading green claims, b) promotion of reliable green claims. The consultation process is planned to finish during 2001.

The area of claims, advertisement, marketing etc. is regulated by legislation which is not restricted to environmental aspects but to the whole area of consumer information (e.g. health, safety, quality, technical features). Within the Member States of the European Union and Norway, Leubuscher (1998, p. 29) identified several different national regulation regimes:

- Self regulation by the market, especially the producers, and
- regulation based on a legal framework.

The country reports revealed the following situations:

- In *Austria*, especially retailers use some environmental labels, e.g. "Ja natürlich" or "Natur pur". Environmental claims are restricted by national legislation to prevent unfair competition and misleading advertisement.
- In *Belgium*, some labels created by supermarkets have been found; they refer e.g. to food products.
- In *France*, most of these labels refer to the areas of waste management and packaging.
- The Marketing Control Acts applied in *Denmark, Finland, Norway and Sweden* influence the application of self-declaration labels because it is demanded that each claim has to be proved. Some producers reacted and use nowadays "Environmental fact" labels which possess elements of ISO type III labels.
- In *Norway*, environmental claims in marketing have been examined by Enger (1998) who found that of 166 brands in 16 product groups, 19% of these products applied some kind of eco-label, and 56% of the labels were quasi-seals (or quasi-labels).
- In *Spain*, several examples for green claims exist, most of them in the area of paper products
- In the *UK*, a "Green Claims Code" has been agreed in 1998 and updated in 2000; its intention is to give guidance on environmental claims to producers. Several labels exist, e.g. in the areas of tourism, paper and buildings.
- In *Germany*, there are labelling examples which are quite close to the systems envisaged by the standard. Besides on-pack claims one can observe a number of initiatives taken by companies (e.g. producer brands such as "Hipp" for baby food from organic cultivation or "Auro" for environmentally sound paints), especially traders, to convey the environmental qualities of their products via labels, logos, etc. Similarly to Austria green claims are regulated by national legislation to prevent unfair competition.

The application of green claims differs considerably among the Member States of the EU and Norway. It is influenced by regulatory regimes which are either voluntary or mandatory. At least so far, the influence of European prescriptions is very modest, but a future update of the EC-Directive on misleading claims might stimulate a more harmonised treatment of environmental claims. The plethora of applications might ask for some transitional guidelines with regard to the application of the ISO 14021 standard which has the potential to harmonise it within Europe.

4.3 EPIS as Quantified Environmental Information

This ISO type could be regarded primarily as a business to business oriented approach. The ISO Technical Report ISO/TR 14025 formulates basic characteristics of an ISO type III label, namely:

- voluntary,
- quantified environmental information,
- based on ISO 14040 series.

The ISO/TR mentions explicitly that this area is still under development; therefore, several aspects are preliminary solutions and have to be reviewed within three years after the publication of ISO/TR 14025, i.e. before March 2003. Several considerations referring to an ISO type III label have been listed, important ones are voluntary nature of the programme, based on procedures and results from a life cycle study in accordance with ISO 14040 series of standards (LCA), critical review according to ISO 14040, open consultation with interested parties and presentation of relevant environmental information in a standardised way.

Sweden began in the nineties with an own ISO type III related labelling programme. It is called "Environmental Product Declaration" (EPD). This programme is administrated by the Swedish Environmental Management Council³⁵ supported by a technical committee. As of the beginning of March 2001, EPD's are available for 19 different products; eight of which are refrigerators produced by the Swedish company Electrolux, three electricity power plants by Vattenfall and Sydkraft (including nuclear power stations).

In addition to Sweden, also *Denmark* and *Norway* intend to introduce EPD's based on the Swedish experiences. Recently, a project called "NIMBUS" has been initiated. Its objective is to co-ordinate layout and organisation of EPD's on the different Nordic countries.

Recently, *Italy* launched its own national ISO type III initiative. The plans are similar to the Swedish/Nordic EPD-system. Two pilot projects³⁶ run until mid of 2001. General guidelines on EPD are expected to be published in May 2001.

In all the other countries considered, ISO type III approaches hardly exist. Scepticism appears to dominate and prevents any ongoing initiatives. Some

Recently, it was reported that the Council of European Producers of Materials for Construction³⁸ plans an European wide initiative to co-ordinate environmental information on construction products.

As a consequence, we think that - in contrast to the ISO type landscape - it is still possible to influence the future developments with respect to quantified environmental information schemes because there are not yet fixed routines and behaviours. There is a need for an intensive European dialogue between the systems in order to avoid incompatible national systems and to increase harmonisation.

5 Other Labels

Besides ISO(-like) EPIS other labels exist addressing technical, health, safety, social, economic or other aspects. Clearly, it is not possible to consider them all. Hence, we only discuss social labels (chapter 5.1) and other labels incorporating environmental issues (chapter 5.2).

5.1 Social Labels

Social labelling has emerged in the early nineties. It aims at supporting producers in developing countries e.g. by paying fair wages, guaranteeing basic labour rights (such as free trade unions), and prohibiting child labour. In many European countries, e.g. United Kingdom, The Netherlands, or Germany, social labelling is rooted in third-world-movements which have engaged in development policy for more than 20 years.

Today, national social labelling initiatives have joined an umbrella organisation called "Fair Trade Labelling Organization - FLO" that has been founded in 1997. Members of this organisation are labelling programmes from 17 countries (USA, Canada, France, Austria, United Kingdom, The Netherlands, Belgium, Germany, Italy, Finland, Norway, Denmark, Ireland, Japan, Sweden, Luxembourg, Switzerland).

The country reports revealed that social labelling is in a different state of development within the EU. Trans-national labels such as "Max Havelaar" and "TransFair", which are usually set up by a number of NGOs from different areas and mainly found on food products (e.g. coffee, tea, bananas, honey, cacao), have been rather successful; in particular, in countries like The Netherlands and Germany. Here the labels are fairly well known and have realised reasonable market penetration of between 1 to 3%. In countries like France or Norway "Max Havelaar"-certified products have really entered the market only very recently, that is during the last two years. In particular, in France the leading role of large distribution chains in the recent development is very clear. By 2000, labelled products are sold in 1,700 selling points. In Italy as well, in the last 2 years the volume of products traded under the logo has increased by 50%, and labelled products are now sold by several large distribution chains, with a total of 3,500 selling points all over Italy. Spain and Portugal have not yet succeeded in establishing their own national social labelling schemes. In contrast, Sweden has introduced its own national scheme ("Rättvisemärkt") which is separated from TransFair and Max Havelaar (although being member of FLO).

The experience so far tells that visibility in the market for fair traded products is largely dependent on whether or not they are listed by large retail chains. Furthermore, supply to large food processors, e.g. canteens, has accelerated turnover of some of the initiatives. In general, it appears, however, that - at least in countries like Germany - fair trade has consolidated on a rather low level.

³⁸ Together with the European Network of Building Research Institutes and SETAC.

Two further trends have been revealed by the country reports: The expansion of social labelling activities to products different from food, e.g. carpets ("Rugmark") and flowers (e.g. the German "Flower Label Programme"). And the growing incorporation of ecological criteria into social labels, in particular in the food sector. In Germany, for example, almost 30% of TransFair turnover was from eco-farming.

The Italian report mentions another interesting example of social aspects in production. The "Social Accountability 8000 International Standard" (SA 8000), which is not a label in true sense, addresses socially responsible companies all over the world. Certification according to the standard requires fulfilment of criteria such as respect of workers rights, protection against exploitation of child labour, safety and health protection etc. In Italy, five companies have been certified according to SA 8000. The logo can be used for promotion purposes, but not in direct connection with the product³⁹.

5.2 Other Labels

In the different Member States and Norway, several other environmental-related labels exist. Most of them refer to agriculture/food-aspects, to tourism, to textiles and to forestry.

The EU has developed a logo for organic agriculture (Regulation 331/2000/EC) which is applied in all Member States. But also national labels exist, e.g. the "EKO-seal" in The Netherlands or the "ø-label" (økologisk) in Norway. Beside these more "official" labels, associations for an organic agriculture created own labels (e.g. "Demeter", "Bioland").

The area of tourism is characterised by a enormous dynamic of labelling. A lot of regional, national or also international labels exist. The international association "Blue Flag" created an own label scheme which is applied in a series of countries, see for more details Table 4.2. Examples of regional labels are the "Silberdistel" label applied in the Kleinwalsertal (Austria) which was the pioneer for Ecolabels in tourism introduced in 1989, the "Umweltsiegel Lungau" applied in Austria or the "Gites Panda" applied in France. For hotels and restaurants, campsites and youth hostels, farm holidays and alpine huts by now approximately 20 regional and national environmental certificates and awards exist for countries in central and southern Europe (Hamele 2001, p. 2). A new approach to achieve further success of tourism eco-labels has been pursued in Germany. In 2000, a dozen leading national tourism associations set up a common umbrella label for environmentally friendly tourism. It is to be applied to all tourism services by way of a unified logo and with an appropriate catalogue of criteria for each type of service (ibid. p. 2). In the meantime, the label called "Viabono" has been officially introduced.

In case of textiles, the success of eco-labelling strategies seems to be, at least to some degree, due to the fact that EPIS can combine environmental protection and human health aspects and, thereby, provide more directly, benefits to the consumer. The most prominent example is the "ÖkoTex Standard 100". It was introduced in 1992 by two testing institutes in Germany and Austria. Meanwhile it is operated by 13 institutes world wide and has been granted to 5,900 products from 1,800 firms. The criteria mainly refer to human ecology (limit values for hazardous substances in the final product). Compared to this scheme, the European Flower or other national ISO type I programmes (e.g. Dutch "Milieukeur", French "NF Environnement") take a

³⁹ "Holders of a certificate SA 8000 are entitled to use the illustrated certification marks on letterheads, brochures and other promotional material. The mark must not be used on a manufactured product, packaging, trade samples or any other statements of product conformity. The certification mark shall not be used, under any circumstances, on or closely associated with products in such a way as to imply that the product itself is certified" (see Det Norske Veritas 2001)

more life cycle perspective. Their relatively ambitious scope might be one reason for their small market penetration - at least compared to the ÖkoTex Standard 100.

In parallel to these approaches, there have been individual firms successfully marketing their own eco-brand using a label-like logo ("Green Cotton" of the Danish Novotex) or internationally operating organisations such as the International Natural Textile Association which have set up a trade mark for textile products fulfilling strict requirements (e.g. strict pesticide limits for fibres, renunciation of bleaching, prohibition of child labour). These approaches are, however, mostly confined to market niches.

In the case of forestry, one has to distinguish between labelling of forest management (and subsequent processing of timber) and labelling of timber products. The most far reaching approach as to forest management is the certification scheme set up by the Forest Stewardship Council (FSC) (see Table 4.2). This voluntary label, promoted by representatives from the timber industry, environmental associations, and certification bodies, first addressed management rules for rain forest, but later was extended to any kind of national forestry (there are FSC national groups all over Europe transforming the general requirements to the domestic situation). The failed Austrian attempt to apply mandatory labelling to timber from unsustainable tropical rain forests indicates that, amongst other things, world trade rules play an important role in this context. In addition, German FSC experience tells us that acquisition by important market players (e.g. mail order business, property markets) is crucial for successful market penetration of certified products.

Moreover, there are national labels focussing on environmentally relevant characteristics of timber products: The German Blue Angel, for instance, can be obtained for low-formaldehyde timber products and, in Italy, there is a consortium of firms marketing furniture made entirely from recycled wood under the "Pannello Ecologico" label.

Beside these areas, the "Green Dot" is of some importance within the countries considered. It is applied, for example, in Belgium, Denmark, Germany, Ireland, Luxembourg, Norway, Portugal, Spain, Sweden. Although it is not a real eco-label, it is well known among Europe and a lot of consumers link it with environmental issues.

Another issue which is of some interest are labels for regional products. They are used to stimulate regional identities and to market products which are produced in the same region as they are consumed.

6 General Conclusions

In the following we present some general conclusions and provide an outlook with regard to emerging questions and research topics, which are to be further analysed, as far as possible, in subsequent stages of the DEEP-project.

Table 6.1 presents an overview of the findings of the first inventory stage of our research. :

- **IPP development stage:** Integrated Product Policy (IPP) has appeared within the last five years on the political agenda. We introduced a four phase development process. Obviously, IPP has been implemented in countries considered to a differing degree. There are leaders (The Netherlands, Denmark, Sweden, Finland and the UK) and laggards (Greece, Ireland, Luxembourg, Portugal, Spain) and the other countries in between these poles. Some countries seem to be ambitious runners (Germany, Italy, Austria and France).

- **Mandatory labelling:** Most mandatory labels implemented are based on prescriptions of the European Union. Only in some Member States and on a very small scale, have national mandatory labels been realised.
- **“Classical” ISO type I labels:** In all countries considered, there are national competent bodies for the European eco-label. Our analysis showed, however, that applicants mainly come from France and Spain. National or regional schemes exist in ten other countries.
- **Other third-party, ISO type I like labelling:** Eco-labels with third-party-participation are present in many of the countries analysed. They are sometimes a kind of national “spin-off” from European or international initiatives (such as the German GED label for low-energy office-equipment, the FSC label, the Blue Flag) and sometimes the outcome of a domestic approach, e.g. in the area of consumer advice (e.g. the German “Öko-Prüfzeichen ÖPZ” for food products).
- **ISO type II labels:** ISO type II labels are practised in some countries (e.g. Italy, Ireland and The Netherlands). However EPIS as a self-declaration is applied in all countries. This might be a hint that this labelling-approach is closer to the national/regional culture and context.
- **ISO type III labels:** European and/or international ISO type III-approaches do not exist. National approaches have been implemented or commenced in Italy, Sweden, Denmark and Norway.
- **Social labels:** Due to the nature of social labelling (e.g. requirements on fair trade, prohibition of child labour in developing countries) it is per se an international issue (see the carpet label “Rugmark”). Hence, labels such as “Max Havelaar” and “TransFair” can be found in many (European) countries and have pursued international co-operation among the different schemes. Even national approaches, such as “Rättvisemärkt” in Sweden, have joined the international Fair Trade Labelling Organisation FLO. If social labelling initiatives are at their very beginning, they might prefer to create strategic alliances on a national level first (e.g. the German “Flower Label Programme”).
- **EPIS-supporting instruments:** EPIS instruments are seldom supported by other instruments of the IPP-toolbox. Exceptions are Belgium, Germany, Spain and - under discussion - the UK.

Altogether, it becomes clear that the application of environmental product information schemes (EPIS) within the countries considered differs considerably.

Table 6.1: Characterisation of EPIS-landscape in the Member States of the European Union and Norway (own elaboration)

Aspect	A	B	D	DK	F	FIN	GR	I	IR	LUX	NOR	NL	P	SP	SW	UK
IPP-development stage:	2	2	2/3	3	2/3	2	1	2/3	1/2	1/2	2	3	1/2	1/2	3	3
Mandatory labels:																
▪ EU initiative	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
▪ National initiative	0	0	0	-	0	-	-	+	-	-	-	0	-	-	-	-
“Classic” ISO type I label:																
▪ EU initiative	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
▪ National initiative	+	-	+	+	+	+	+	+	-	-	+	+	-	+	+	-
Other ISO type I like labels:																
▪ EU initiative	-	+	-	-	+	n.a.	+	+	+	-	+	n.a.	+	+	-	+
▪ National initiative	+	+	0	-	-	n.a.	-	+	-	+	-	n.a.	-	+	+	0
ISO type II labels:																
▪ EU initiative	-	-	n.a.	-	-	n.a.	-	+	+	n.a.	-	+	-	-	-	-g
▪ National initiative	+	+	+	+	+	n.a.	+	+	n.a.	0	+	+	-	+	+	+
ISO type III labels:																
▪ EU initiative	-	-	-	-	-	n.a.	n.a.	-	n.a.	-	-	-	-	0	-	-
▪ National initiative	-	-	0	+	-	n.a.	n.a.	+	n.a.	-	+	0	-	-	+	-
Social labels:																
▪ EU initiative	+	+	+	+	+	n.a.	n.a.	+	+	+	+	+	+	-	+	+
▪ National initiative	-	-	+	-	-	n.a.	n.a.	-	-	-	-	-	-	+	+	-
EPIS-supporting instruments:	-	+	0	-	-	-	-	-	-	-	-	-	-	0	-	-

Explanations:

- 1 = Environmental policy with implicit environmental product focus
- 2 = Environmental policy with explicit environmental product focus
- 3 = General IPP-concept
- 4 = Product-group specific IPP-concept
- 0 = exist
- = does not exist
- o = no information available
- n.a. = not relevant
- (a) Planned
- (b) This refers to the transnational label "White Swan" joined by Denmark, Finland, Iceland, Norway and Sweden.
- (c) Common activity shared by Denmark, Norway and Sweden.
- (d) Under discussion based on a report prepared by ACCPE (2000)

How can EPIS create incentives for 'green' innovation?

With respect to the capability of information instruments to create incentives for greener product design, the first stage of our research revealed a number of interesting issues and questions: How can labelling programmes tackle quantum leaps in technology beyond the use of built-in updating mechanisms (i.e. revision of criteria every three years)? Keeping in mind that the hurdle principle still prevails, how can one exploit the potential advantages of a scoring system (e.g. achieving major innovations with regard to one parameter at the expense of fulfilling other)? How can one achieve a better match between eligible product categories and environmental priority areas, such as housing, mobility, or clothing - without compromising the credibility of schemes by selecting "black list" products? In this context, how can complex (service) products more easily be considered in the programmes?

How can EPIS contribute to a 'greening' of markets?

The stimulation of innovation is one target of EPIS-tools, but another important objective of labels is to influence consumer behaviour in such a way that market shares of eco-labelled products grow. Challenges with respect to greening of markets can be summarised as follows: Should ecological product information schemes address only the very best in one product category and, thereby, drive market transformation from the niche? Or should they try to achieve incremental improvements focussing on the average product? How can different market players, such as commercial buyers (retailers, public authorities, business) and private households be most effectively addressed by target group specific communication strategies? What communication media and instruments are suitable (e.g. consumer reports, internet presentations, manuals, etc.) and how can they be intertwined? Trade and retailers are gatekeepers in market transformation. In what ways can they be mobilised and what kind of capacity building is needed with respect to these players?

How to design EPIS to achieve maximum results?

At the instrumental level, there is a challenge to link EPIS with the IPP-toolbox. To the time of this report, coherent and integrated EPIS approaches do not exist - with the exception of an ongoing discussion in the UK. EPIS - so far - is mainly applied as a stand-alone tool. Questions raised by the country reports are: How can EPIS and IPP be further intertwined, whether it be directly by means of e.g. public grants for certified products or indirectly by incorporating information tools in a broader instrumental setting? e.g. Design for Environment, take-back obligations, eco-taxation etc.? Under which conditions is mandatory/voluntary labelling most effective? How can acceptance and visibility of the ISO series be improved? How can mutual recognition and international co-operation be further developed in order to meet the need of globalised producers to face as few standards as possible in their markets? Pursuing further harmonisation, also in order to reduce consumers' confusion, how can one ensure that potential positive impacts of competition among labelling schemes (e.g. more ambitious standards, "fight" for consumer attention) are not lost? Pre-supposing customer trust as the, or at least one of the, most important success factors of any EPIS, what is the most suitable institutional setting - government mandated schemes, NGO programmes, initiatives of industry associations, etc. - providing trust and credibility (bearing in mind varying political cultures within Europe)?

More generally, we observed that there is a lack of suitable data for assessing the effectiveness of EPIS, either in terms of stimulating green innovation or accelerating market transformation. There, success criteria should be further developed and operationalised.

7 Literature

- ACCPE [Advisory Committee on Consumer Products and the Environment] (2000): Choosing Green – Towards more sustainable goods and services. London: DETR
- ADEME [Agence de l'Environnement et de la Maitrise de l'Energie] (2000): Écoproduits & Écolabels, www.ademe.fr/entreprises/Management-env/approche-produit/Promotion/Documents/EcoFiche2.doc
- ÅF-IPK (2000): Utvärdering av Svanmärkningen, del B - synergieffekter. Stockholm:
- ANPA [Agenzia Nazionale per la Protezione dell' Ambiente] (2000): Integrated Product Policies (IPP): an approach for the Italian scenario. Rom: own publication
- Arthur Andersen (2001): La Politique Intégrée des Produits. Paris: publication of the French Ministry for the Environment
- BMU [Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit] (1999): Background Paper on Product Related Environmental Policy. Bonn/Berlin: manuscript
- Büchle, Martin (2000): EU Integrated Product Policy (IPP) process and Austrian product-related environmental policies – selected examples. In: Pretterhofer, Ursula (Ed.): Strategies of a Sustainable Product Policy, Graz, 1-5
- CREDOC (2001): Centre de Recherche pour l'Étude et l'Observation des Conditions de vie – Département Conditions de vie et aspirations des Français, Georges Hatchuel Directeur général adjoint du CREDOC – personal communication, October 2001.
- De Haes, Udo (1997): Slow Progress in Ecolabelling: Technical or Institutional Impediments? In: Journal of Industrial Ecology, p. 4-6
- Det Norske Veritas (2001)– Use Of Certification Marks under the Accreditation by Social Accountability International (SAI), private communication.
- DETR (1998): Consumer Products and the Environment. A Consultation Paper. London: DETR
- DG SANCO (1999): Outline of a possible Community approach in the area of Green Claims – consultation document. Brussels (downloaded from the internet on 21 September 2000)
- E& Y et al. [Ernst & Young / SPRU] (1998): Integrated Product Policy, London
- E& Y et al. [Ernst & Young / SPRU] (2000): Developing the Foundation for Integrated Product Policy in the EU, London
- Enger, Anniken (1998): Miljøargumentasjon i markedsføring. En innholdsanalyse av tre reklamekanaler ("Environmental Claims in Marketing"). Lysaker/Norway: SIFO report no. 1-1998
- EPA (1994): Determinants of Effectiveness for Environmental Certification and Labeling Programs. Washington DC: Environmental Protection Agency
- EPA (1998): Environmental Labelling Issues, Policies, and Practices worldwide. Washington: own publication
- European Commission (2001): Green Paper on Integrated Product Policy (COM [2001] 68 final), Brussels
- Fundación Entorno (1999): Present Situation and Perspective of the Habits of Environmental Consumption in Spain
- Grahl, Birgit / Rubik, Frieder / Steinfeldt, Michael / Schmincke, Eva (2000): Formalisierte und standardisierte Umweltinformationen für Produkte und Dienstleistungen. Tübingen: report on behalf of the Federal Environmental Agency
- Hamele, H. (2001): Ecolabels for accommodation in Europe – a must for more co-operation and promotion (handout disseminated on the 11. Reisepavillon – fair for sustainable tourism, Heidelberg 19. – 21. January 2001)
- Leubuscher, Susan et al. (1998): Study on verification and control of environmental claims. Brussels: Study on behalf of DG Health and Consumer Protection
- Lorek, Sylvia / Spangenberg, Joachim (1999): Prioritäten, Tendenzen und Indikatoren umweltrelevanter Konsumverhaltens. Wuppertal: Teilprojekt 3 des Demonstrationsvorhabens zur Fundierung und Evaluierung nachhaltiger Konsummuster und Verhaltensstile
- Nordic Council of Ministers (1999): Nordiska konsumenter on Svanen, livsstil, kännedom, attitud och förtroende (Nordic consumers and the Swan). Copenhagen: TemaNord 1999:592: Miljø/Konsument
- Nordic Council of Ministers (2000): Utvärdering av Svanmärkningen, del B - synergieffekter. Stockholm
- Nordic Council of Ministers (2001): Evaluation of the Environmental Effects of the Swan Eco-label – Final Analysis. Copenhagen: TemaNord 2001:516
- Nyberg, Anders (1999) Environmental Monitoring, stability and changes in consumer's environmental commitment (English Summary). Oslo: SIFO report No. 6
- OECD (1997): Eco-labelling: Actual effects of selected programmes. Paris: OECD/GD (97)105
- Oeser, Kurt (1998): 20 years of experiences of the german environmental labelling scheme "Blue Angel". -In: OECD (Ed.): Conclusions and papers presented at the international conference: Green goods V "Eco-Labeling for a sustainable future". Paris: OECD
- Oosterhuis, Frans / Petschow, Ulrich / Rubik, Frieder / Scheppingen, Yvette van / Scholl, Gerd (1994): Inventory of product policy instruments: Method, overview and conclusions. Berlin:
- Oosterhuis, Frans H. / Rubik, Frieder / Scholl, Gerd (1996): Product Policy in Europe. New Environmental Perspectives. Dordrecht et al./NL: Kluwer
- Ramm, Jorun Skoglund (1997): *Forbrukernes miljøinnsats. Kildesortering, innkjøps- og energiadferd* ("Consumers' environment-motivated attitudes and actions"). Lysaker% Norway: SIFO Report no. 2-1997
- Rouseau, C. / Delaet, D. (1998). L'etiquetage écologique, une aide à la décision d'achat, rapport d'enquête.

- Rubik, Frieder (1995): Product Policy and the Environment: The Example of Eco-Labels. Berlin: Schriftenreihe des Instituts für ökologische Wirtschaftsforschung (IÖW) No. 88/95
- Rubik, Frieder (2000a): Innovationen durch die Umweltpolitik – Integrierte Produktpolitik (IPP) in Deutschland. Heidelberg/Berlin: report on behalf of the German Federal Environmental Ministry
- Rubik, Frieder (2000b): Integrierte Produktpolitik in Europa - Initiativen und Herausforderungen. In: Ökologisches Wirtschaften, No. 6, 10-12
- Rubik, Frieder (2002): Integrierte Produktpolitik – Konzeptionen, Erfahrungen und Herausforderungen. Marburg: Metropolis [under preparation]
- Rubik, Frieder / Empacher, Claudia (1994): Inventory of product policy instruments: Case study European Community. Berlin:
- Stø, Eivind (1998): Eco-labels in the Nordic countries, an environmental and consumer political success? Paper presented at the ESA-conference "Will Europe Work", Vrije Universiteit, Amsterdam, Wednesday 18 – Saturday 21, August, 1999
- Spiller, Achim (1999): Umweltbezogenes Wissen der Verbraucher: Ergebnisse einer empirischen Studie und Schlussfolgerungen für das Marketing. Duisburg
- Stichting Milieukeur (2000): <http://www.milieukeur.nl/producenten/> (visited: 26.09.2000)
- Stichting Milieukeur (2000a): Jaarverslag 1999. The Hague
- Strandbakken, Pål (1995): *Bærekraftig forbruk. En teoretisk drøfting og empirisk tilnærming til diskusjonen om et bærekraftig forbruk* ("Sustainable Consumption. Theoretical and empirical approaches to the debate on sustainable consumption"). Lysaker/Norway: SIFO Report no. 1-1995
- Tufte, Per Arne / Lavik, Randi (1997): *Helse- og miljøinformasjon. Forbrukernes behov for informasjon om skadelige stoffer i produkter* (Health- and environmental information. The consumer's need for information about hazardous ingredients in products"). Lysaker/Norway: SIFO Report no. 4-1997
- UBA [Umweltbundesamt] (Ed.) (1998): Erfolgskontrolle Umweltzeichen. Berlin: UBA-Texte 61/98
- VROM [Dutch Ministry of Housing, Spatial Planning and Environment] (1998): The Dutch Ecolabel. The Hague (unpublished paper presented on the Green Goods Conference, October 1998 in Berlin)
- VROM [Dutch Ministry of Housing, Spatial Planning and Environment] (1994): Policy Document on Products and the Environment. The Hague: own publication
- Waide, Paul (1999): Refrigerators: development in the European market, in: Bertoldi, Paolo et al. (Ed.) (1999): Energy Efficiency in Household Appliances, Berlin et al., p. 231-247
- Winward, John et al. (1998): Cool labels. The first three years of the European Energy Label. Oxford/UK

Publikationen des Instituts für ökologische Wirtschaftsforschung

Das IÖW veröffentlicht die Ergebnisse seiner Forschungstätigkeit in einer Schriftenreihe, in Diskussionspapieren sowie in Broschüren und Büchern. Des Weiteren ist das IÖW Mitherausgeber der Fachzeitschrift „Ökologisches Wirtschaften“, die allvierteljährlich im oekom-Verlag erscheint, und veröffentlicht den IÖW-Newsletter, der regelmäßig per Email über Neuigkeiten aus dem Institut informiert.

Schriftenreihe/Diskussionspapiere



Seit 1985, als das IÖW mit seiner ersten Schriftenreihe „Auswege aus dem industriellen Wachstumsdilemma“ suchte, veröffentlicht das Institut im Eigenverlag seine Forschungstätigkeit in Schriftenreihen. Sie sind direkt beim IÖW zu bestellen und auch online als PDF-Dateien verfügbar. Neben den Schriftenreihen veröffentlicht das IÖW seine Forschungsergebnisse in Diskussionspapieren – 1990 wurde im ersten Papier „Die volkswirtschaftliche Theorie der Firma“ diskutiert. Auch die Diskussionspapiere können direkt über das IÖW bezogen werden. Informationen unter www.ioew.de/schriftenreihe_diskussionspapiere.

Fachzeitschrift „Ökologisches Wirtschaften“



Ausgabe 2/2010

Das IÖW gibt gemeinsam mit der Vereinigung für ökologische Wirtschaftsforschung (VÖW) das Journal „Ökologisches Wirtschaften“ heraus, das in vier Ausgaben pro Jahr im oekom-Verlag erscheint. Das interdisziplinäre Magazin stellt neue Forschungsansätze in Beziehung zu praktischen Erfahrungen aus Politik und Wirtschaft. Im Spannungsfeld von Ökonomie, Ökologie und Gesellschaft stellt die Zeitschrift neue Ideen für ein zukunftsfähiges, nachhaltiges Wirtschaften vor. Zusätzlich bietet „Ökologisches Wirtschaften online“ als Open Access Portal Zugang zu allen Fachartikeln seit der Gründung der Zeitschrift 1986. In diesem reichen Wissensfundus können Sie über 1.000 Artikeln durchsuchen und herunterladen. Die Ausgaben der letzten zwei Jahre stehen exklusiv für Abonnent/innen zur Verfügung. Abonnement unter: www.oekom.de.

IÖW-Newsletter

Der IÖW-Newsletter informiert rund vier Mal im Jahr über Neuigkeiten aus dem Institut. Stets über Projektergebnisse und Veröffentlichungen informiert sowie die aktuellen Termine im Blick – Abonnement des Newsletters unter www.ioew.de/service/newsletter.

Weitere Informationen erhalten Sie unter www.ioew.de oder Sie kontaktieren die

IÖW-Geschäftsstelle Berlin
Potsdamer Straße 105
10785 Berlin
Telefon: +49 30-884 594-0
Fax: +49 30-882 54 39
Email: [vertrieb\(at\)ioew.de](mailto:vertrieb(at)ioew.de)



| i | ö | w

INSTITUT FÜR
ÖKOLOGISCHE WIRTSCHAFTSFORSCHUNG

GESCHÄFTSTELLE BERLIN

MAIN OFFICE

Potsdamer Straße 105

10785 Berlin

Telefon: + 49 – 30 – 884 594-0

Fax: + 49 – 30 – 882 54 39

BÜRO HEIDELBERG

HEIDELBERG OFFICE

Bergstraße 7

69120 Heidelberg

Telefon: + 49 – 6221 – 649 16-0

Fax: + 49 – 6221 – 270 60

mailbox@ioew.de

www.ioew.de