

Introduction to Deep Transitions Thinking & Transformative Innovation Policy

IÖW Online Conference: Turning Point 2020: Will it be different this time?

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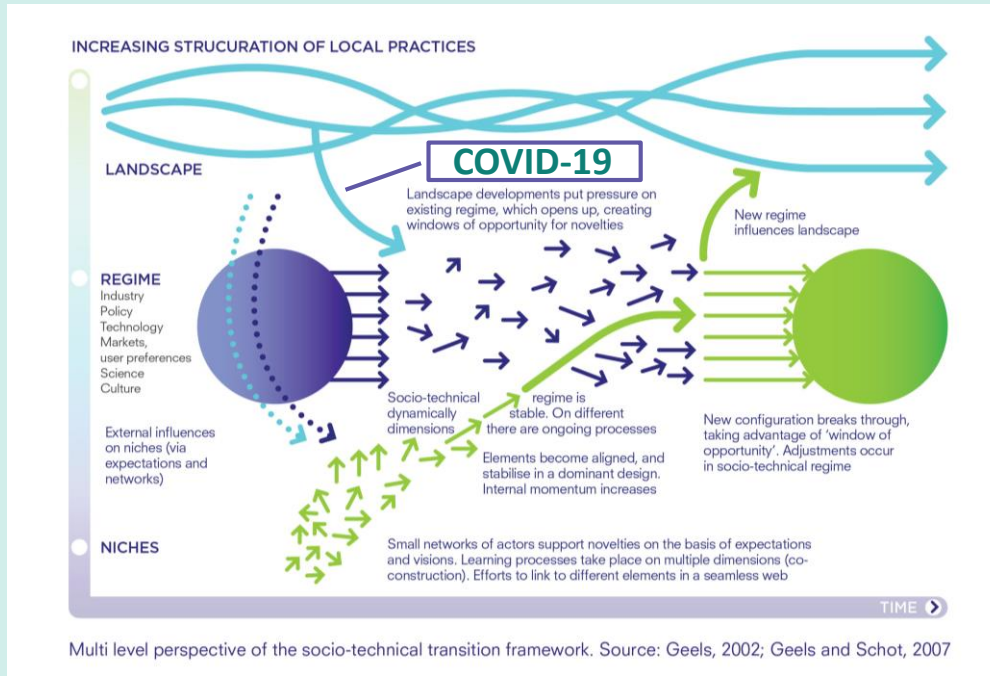
Origins: The Deep Transitions Idea

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- Sense of living at a (huge) **turning point in history**, this sense is based on indicators for **moving beyond planetary boundaries** (climate change, biodiversity loss, and resource use) and **below the social floor** (rising inequality within Global North and Global South) as well as a growing felt **need for fundamental change**

→ Can we ground this sense of living at a watershed moment in a theory? Deep Transitions is an attempt drawing on sustainability transitions studies & innovation economics (long wave theory)

How does a sustainability transition happen?



What is Socio-technical System Change?

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- An aligned set of system dimension changes: of science & technology, industrial strategy & structure, markets & user preferences, policy & governance and culture (symbols, perceptions)
- Actors operating the socio-technical systems are guided by rule-sets = regime = dominant practice expressed in system dimension
- System changes have many direct and indirect impact on trends in resources use, climate change, consumption and lifestyles, inequality, employment, quality of jobs, wider governance structures (socio-technical landscape)

Definition of Deep Transitions

“A series of interconnected and sustained fundamental transformations of socio-technical systems in similar directions (portfolio)”

→ It is called Deep because it is change of multiple systems (phenotype/resources) and of underlying meta-regimes (genotype/institutional layer)

Definition of Meta-regimes

...a best practice model made up of a set of all pervasive technological and organizational principles driving change in multiple socio-technical systems by actors using it for modernizing and rejuvenating the economy and society. When generally adopted, these principles become the common-sense basis for organizing any activity and for structuring any institution.

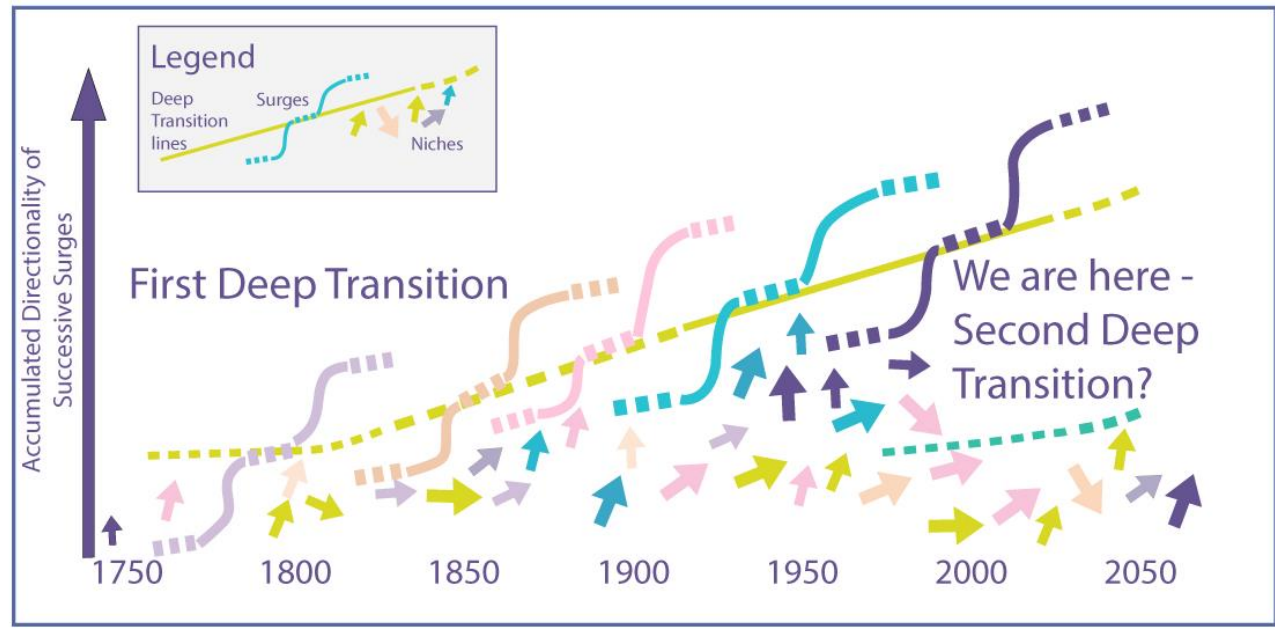
Adapted from Perez, 2002: 17



- Use of fossil fuels / Renewables
- Labour productivity / Resource efficiency
- Mass production / Specialized production
- Mass consumption / Sharing economy
- Linear production / Circular economy
 - Centralization / Decentralization
- Use of global value chains / Local production
- Competition / Collaboration – commons

Long-term continuity in Deep Transition Dynamics

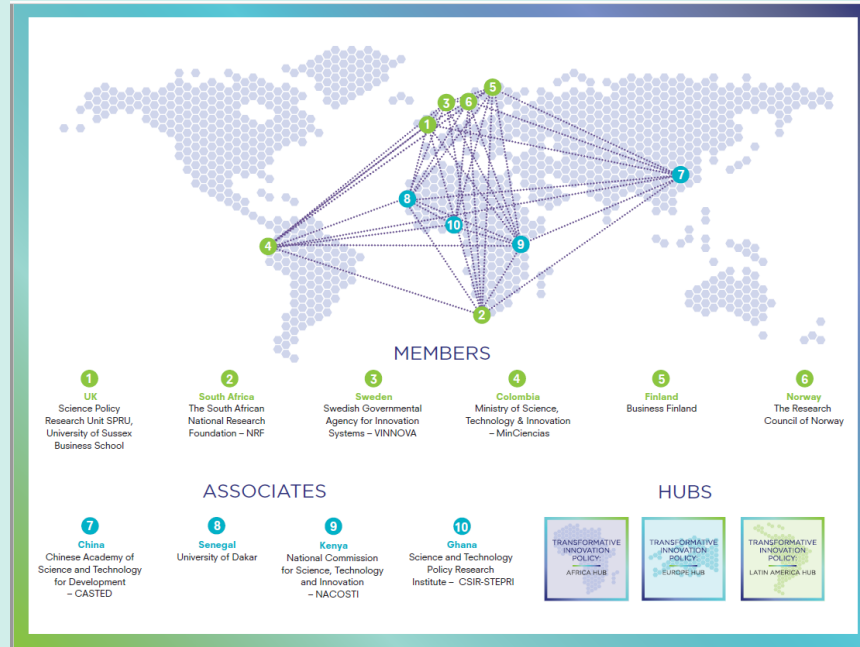
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Source: Schot, J., & Kanger, L. (2018)

Transformative Innovation Policy Consortium (TIPC)

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www.tipconsortium.net/members-and-associates



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What does TIPC want to accomplish?

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- 1 Redirect narrative for Science, Technology & Innovation Policy, away from a focus on economic growth towards a focus on SDGs & transformation
- 2 Build a set of demonstrators/experiments – how to approach, implement & evaluate transformative innovation policy (using a TIPC methodology)
- 3 Generate a network of people and organizations working from transformative perspectives across the Globe



- Redirect narrative in Sweden: Testing the TIPC Methodology for Vinnova's Mission Oriented program (collaborating with Business Finland & Research Council Norway)
- South-Africa: Developing a portfolio of experiments to engage with TIPC Methodology, working with Department of Science & Innovation and National Research Foundation
- Climate-KIC (EU program): Working with three experiments: sustainable mobility, nature-based solutions and sustainable land planning
- Colombia: Developing a portfolio of experiments through Latin-American Hub working with MinCiencias

Key concepts of the TIPC Methodology

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- Experimental Policy Engagements. Modulating ongoing transformations.
- Transformative Outcomes (TOs) – 12 processes of change – to build niches, expand & mainstream them & opening up regimes for change
- Method: Co-creation of a Theory of Change and a Monitoring & Formative Evaluation Framework using Transformative Outcomes

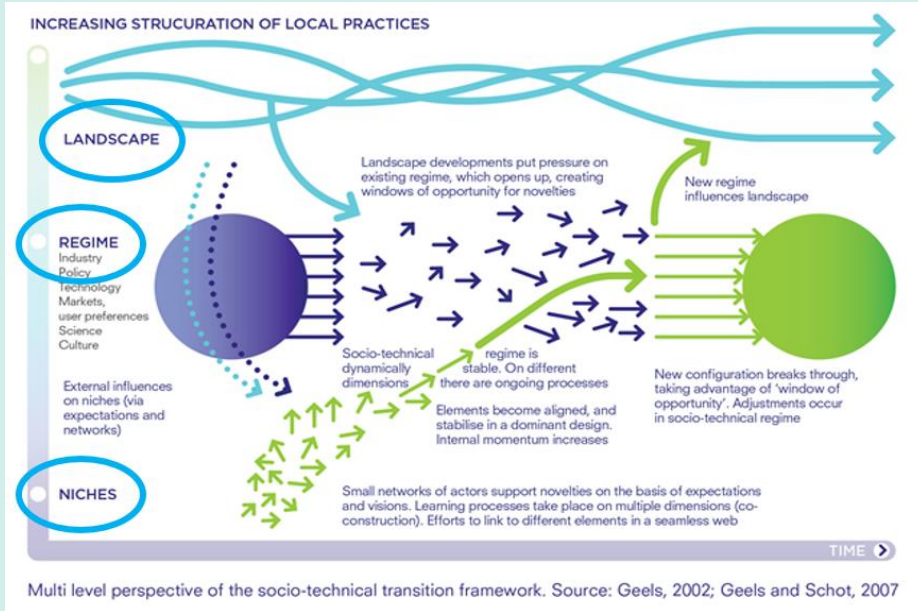
Transformative Outcomes: The framework

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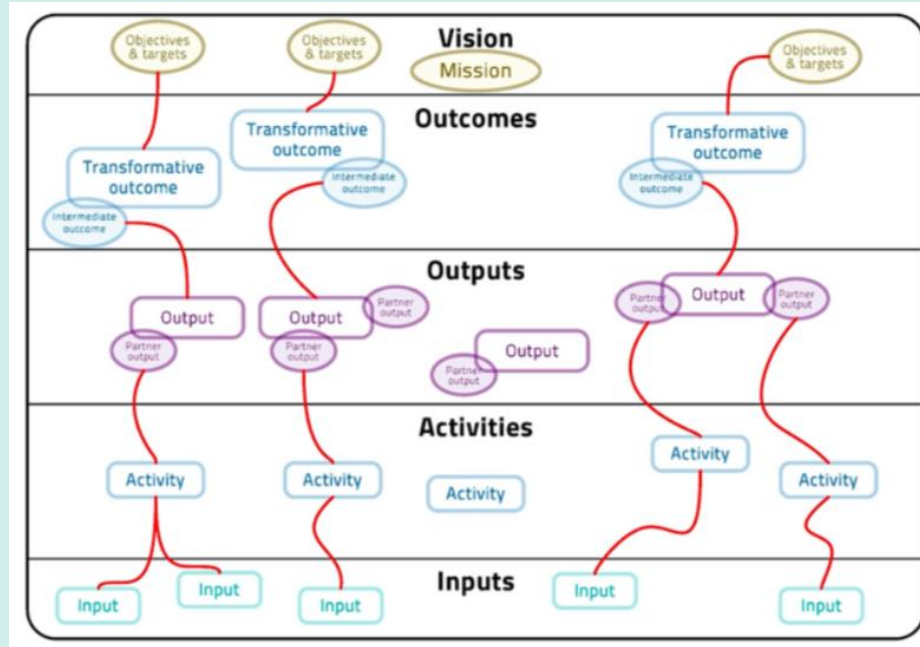
Three general macro processes that can facilitate transformations:

- 1) building and nurturing niches
- 2) expanding and mainstreaming niches
- 3) opening up and unlocking regimes

Each macro process consists of four sub-processes = 12 transformative outcomes



Theory of Change: A tool to operationalize system change

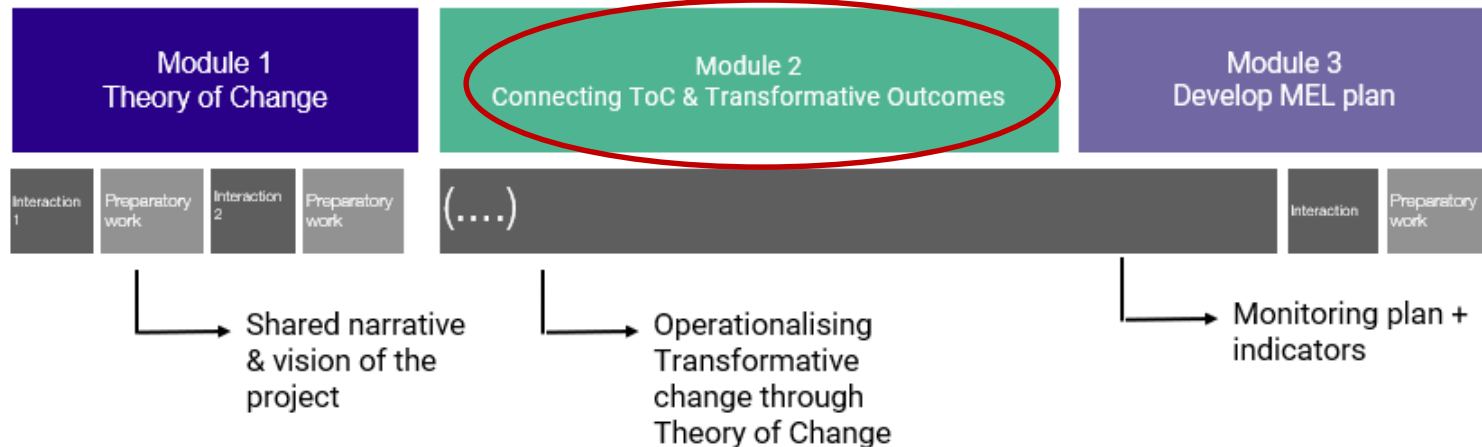


www.tipconsortium.net/tipc-methodology-a-formative-evaluation-theory-of-change-for-transformative-outcomes

Connecting a Theory of Change & Transformative Outcomes

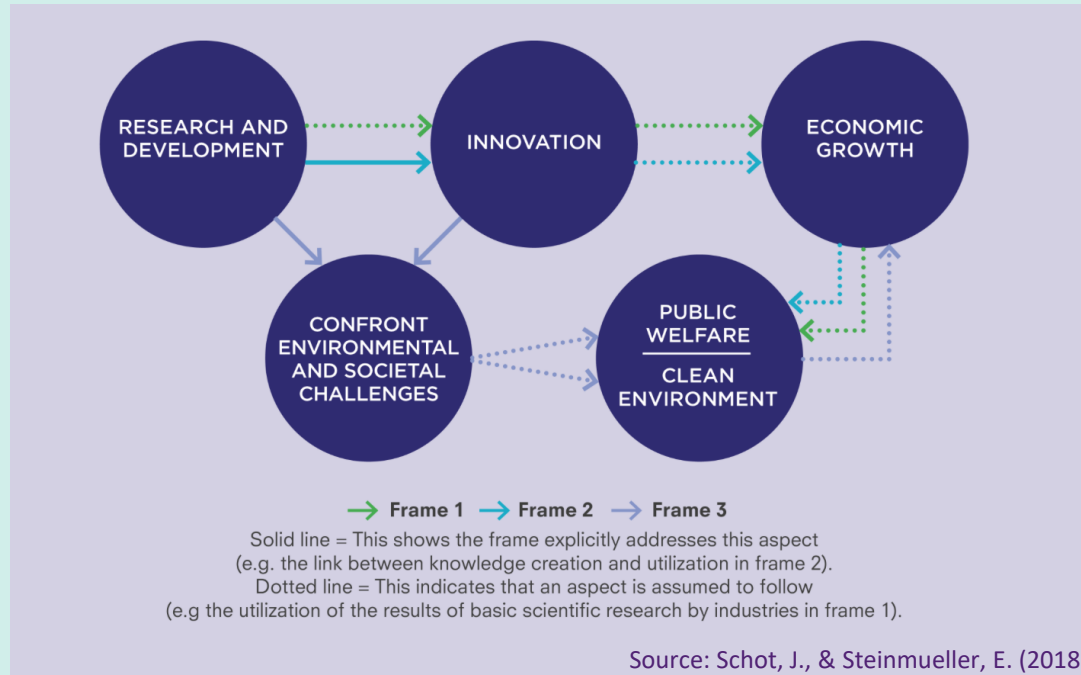
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MOTION: Formative Evaluation and Learning based on Transformative Theory of Change



www.tipconsortium.net/experiment/the-motion-project

Three Frames of Innovation



Looking forward to the debate!
To stay up to date, sign up for my newsletter:



List of References

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