

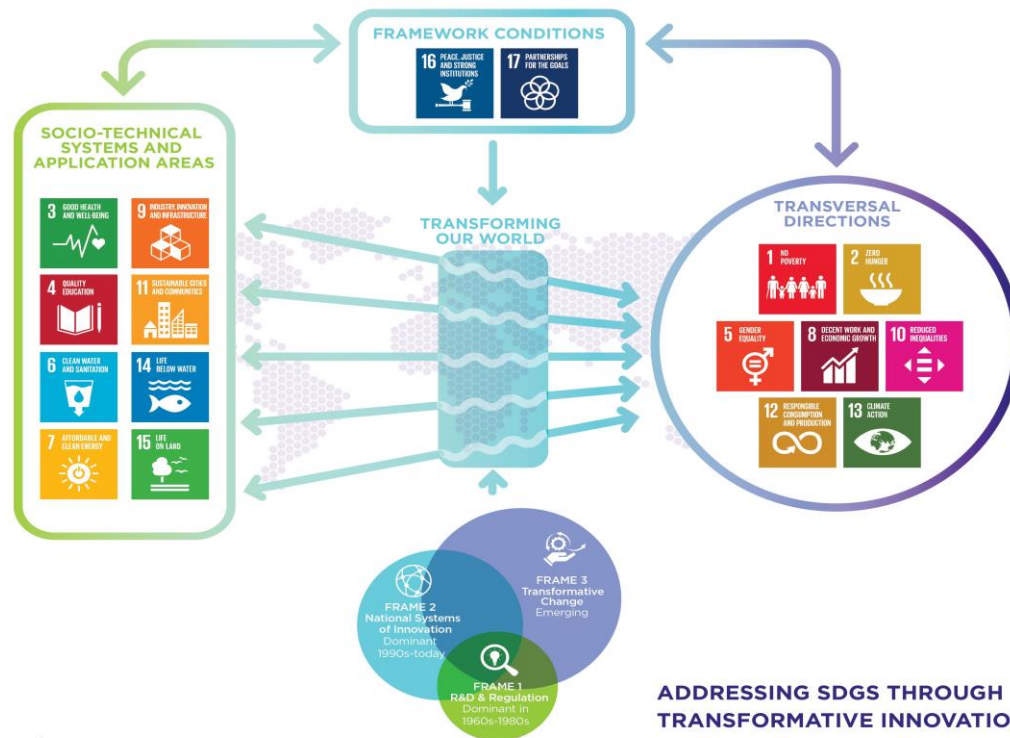
Introduction to transformative innovation policy – and TIPC

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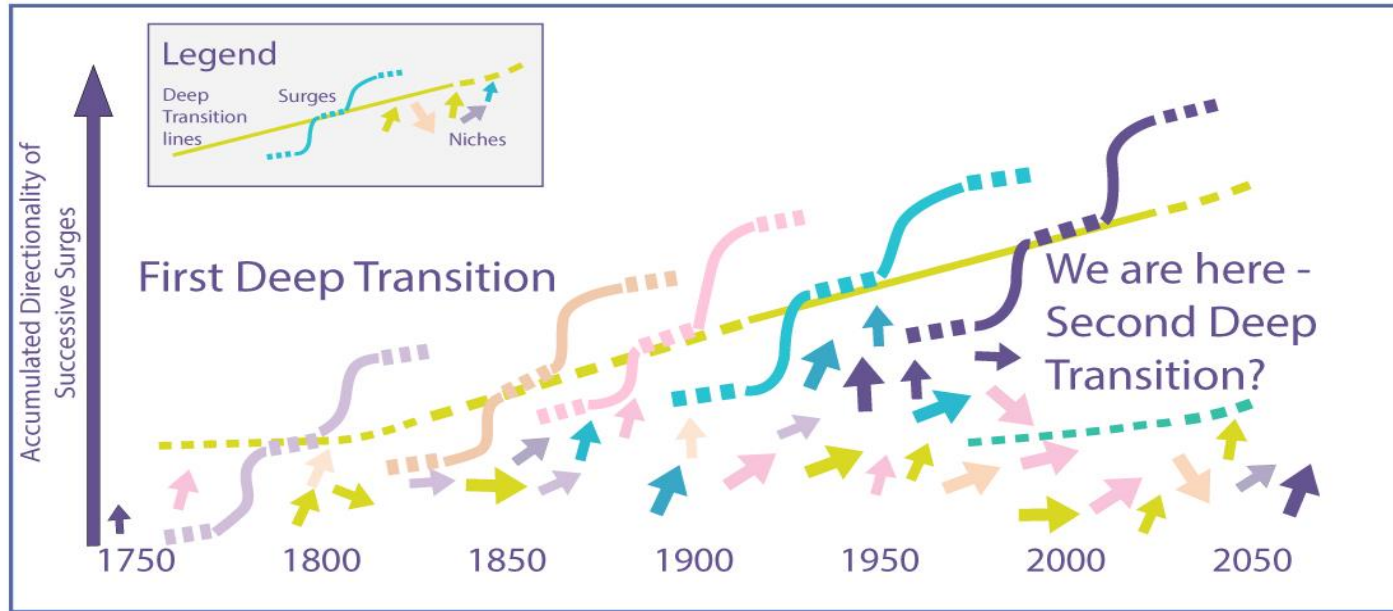
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Transformative Innovation & SDG Implementation

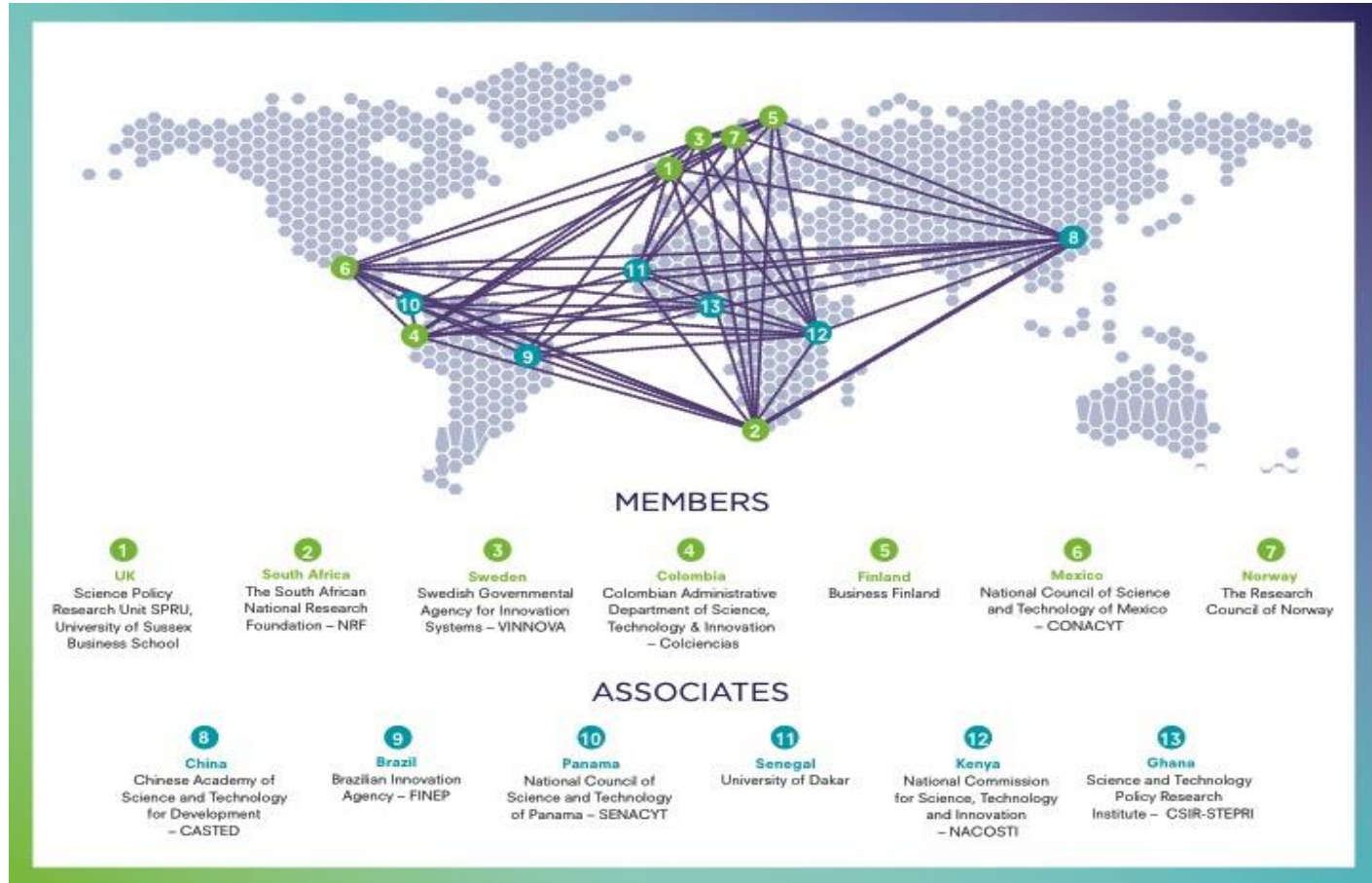


Deep Transitions

Long term continuity in Deep Transition Dynamics



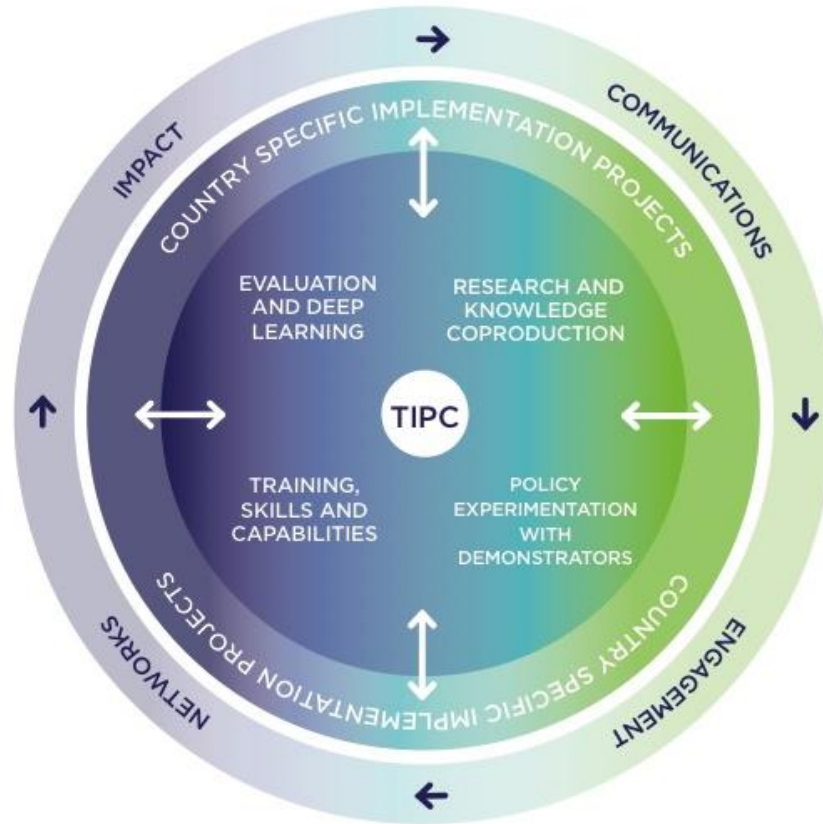
TIPC Members & Associates



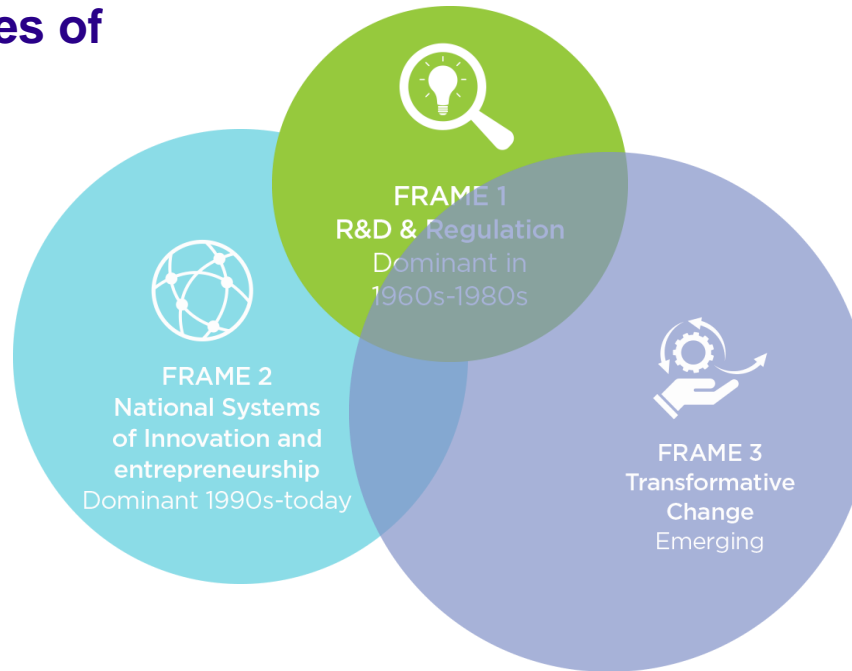
What does TIPC want to accomplish?

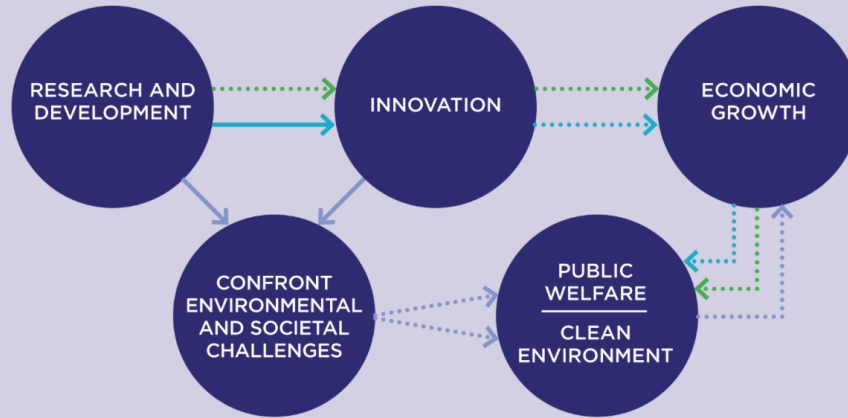
- New narratives around transformative innovation policy and Frame 3 thinking
- A set of demonstrators – how to approach, implement, evaluate
- A network of people and organizations working from transformative perspectives across the Globe
- Co-creation, with core program and in country work

TIPC 5 Year Programme



The 3 Frames of Innovation





→ Frame 1 → Frame 2 → Frame 3

Solid line = This shows the frame explicitly addresses this aspect
(e.g. the link between knowledge creation and utilization in frame 2).

Dotted line = This indicates that an aspect is assumed to follow
(e.g. the utilization of the results of basic scientific research by industries in frame 1).

R&D & Regulation: Frame 1

Dominant in 1960s-1980s and still influential

- Market Failures
- R&D produces economic growth, driven by productivity growth
- Policy instruments: Subsidies, IPR, Foresight, Education, Science for Society
- Markets lead to externalities & need regulation
- Emphasis on uncertainty, long-term public welfare gains and social & environmental missions

R&D & Regulation: Innovation Model for Frame 1

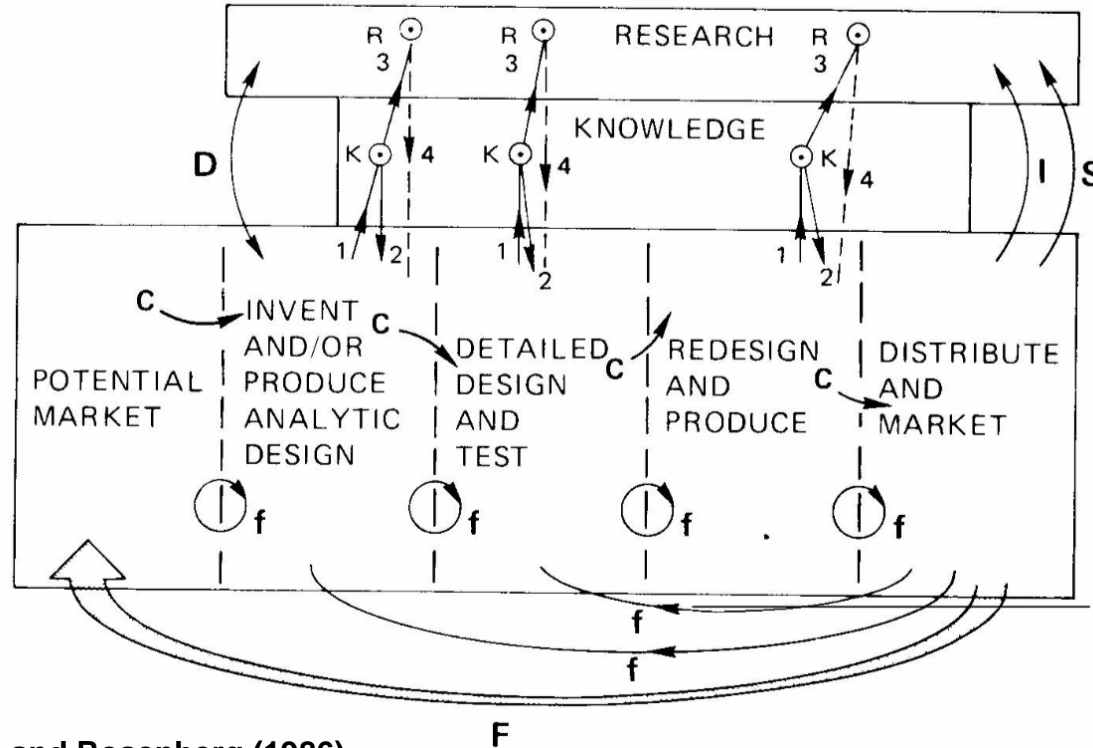


National Systems of Innovation: Frame 2

Dominant in 1980s – Present

- System or institutional failure, lack of absorptive capacity
- R&D & learning
- National, Regional & Sectoral Systems of Innovation, eco-systems, clusters (building on related variety)
- Coordination between STI and sectoral research
- Technology platforms (public & private R&D/partnerships)
- Entrepreneurship/role of business
- Education, with focus on STEM Skills

National Systems of Innovation: Frame 2 Innovation model

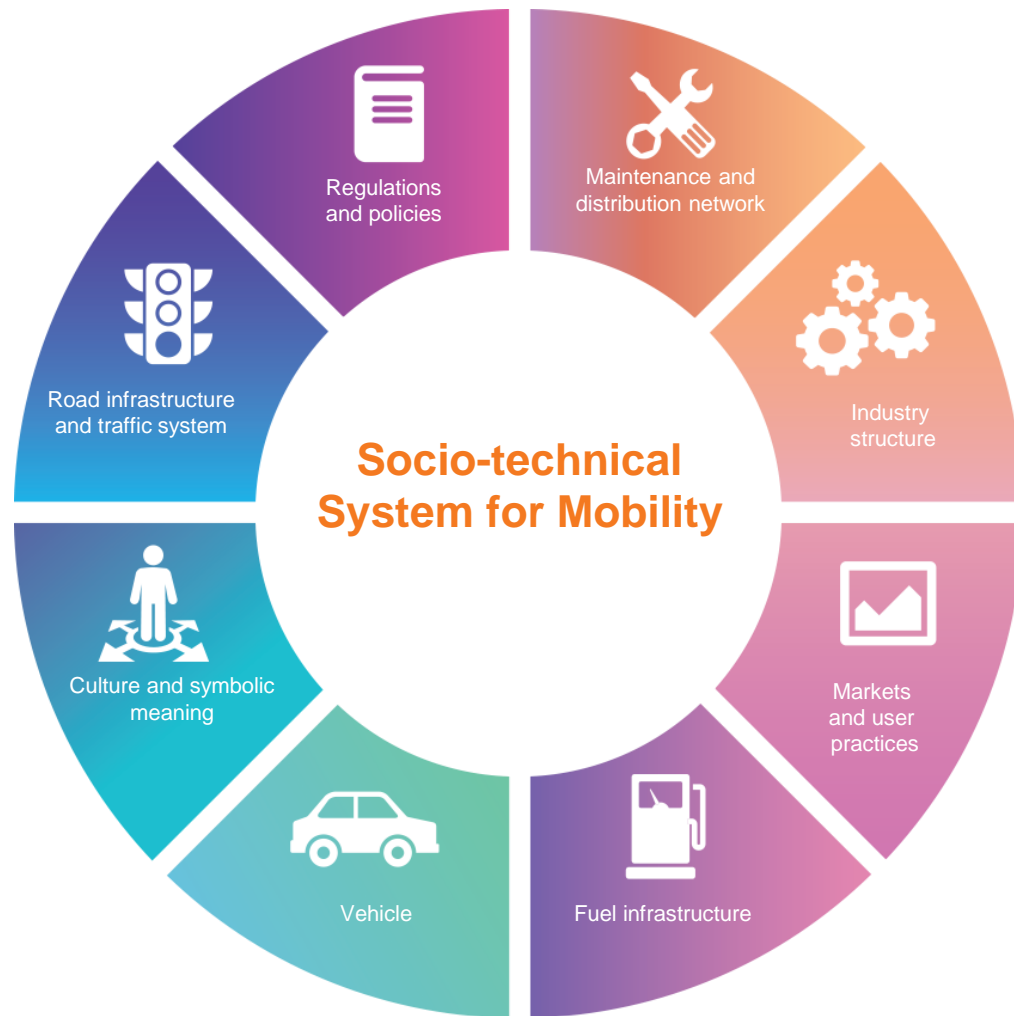


Kline and Rosenberg (1986)

Transformative Change: Frame 3

Emerging..

- Societal Challenges (SDGs) are the starting point
- Need for Transformative Change/Sustainability Transitions of socio-technical systems, introduction of notion of directionality
- Transition management, niche management/experimentation, inclusive innovation, social innovation, grassroots innovation, responsible research and innovation
- Policy facilitates/modulates ongoing change by making it more transformative



Socio-technical system is driven by rule-set = regime



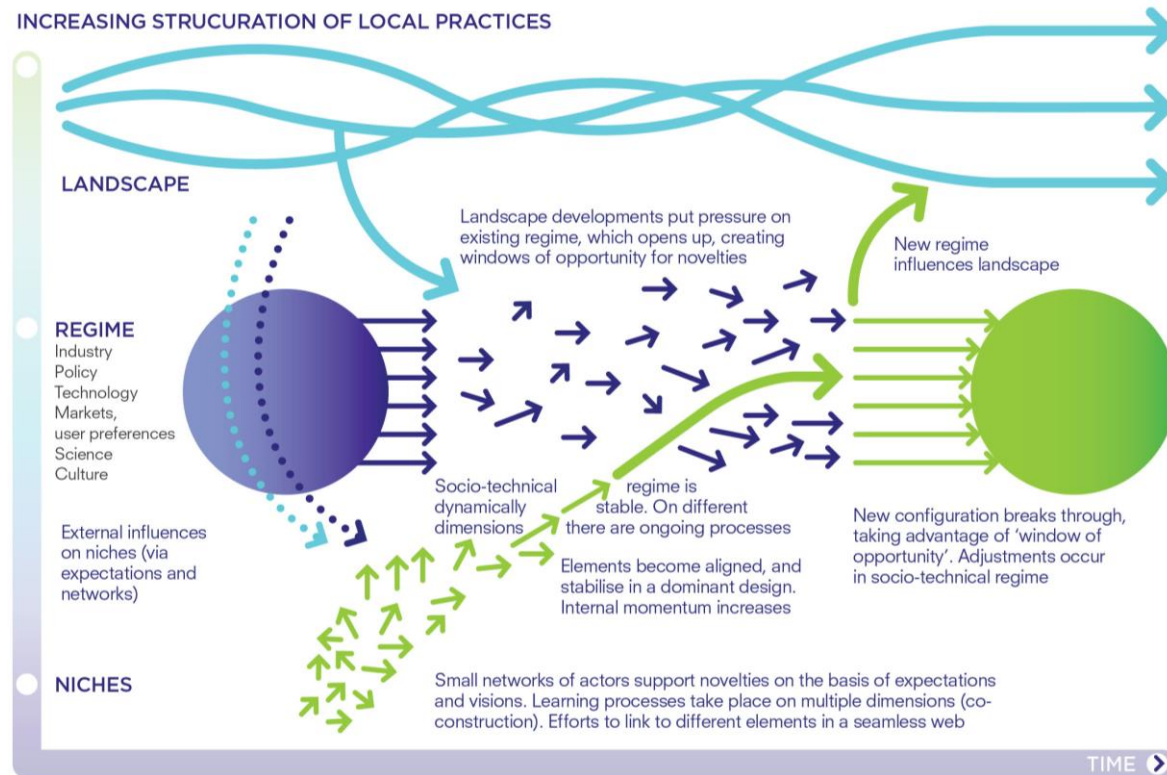
Behavioural
instructions

Cognitive
beliefs

Normative
formats
(values)

Transformative change is about a change of (collective) rules
embedded in socio-technical systems

Role of experimentation in sustainability transitions



Multi level perspective of the socio-technical transition framework. Source: Geels, 2002; Geels and Schot, 2007

CORE QUESTION FOR TIPC

How can STI policy contribute to transformative change?

Answer: by making experiments more transformative

Five modes of Experimental Policy Engagements

MODES OF
EXPERIMENTAL
POLICY
ENGAGEMENT

MODE 1:
POLICY DESIGN
EXPERIMENTS

MODE 2:
POLICY
INSTRUMENT
AND POLICY
PROCESS
EXPERIMENTS

MODE 3:
CREATING
EXPERIMENTAL
SPACES

MODE 4:
SUPPORTING,
CONNECTING
AND
EVALUATING
SOCIETAL
EXPERIMENTS

MODE 5:
EXPERIMENTAL
GOVERNANCE
CULTURE

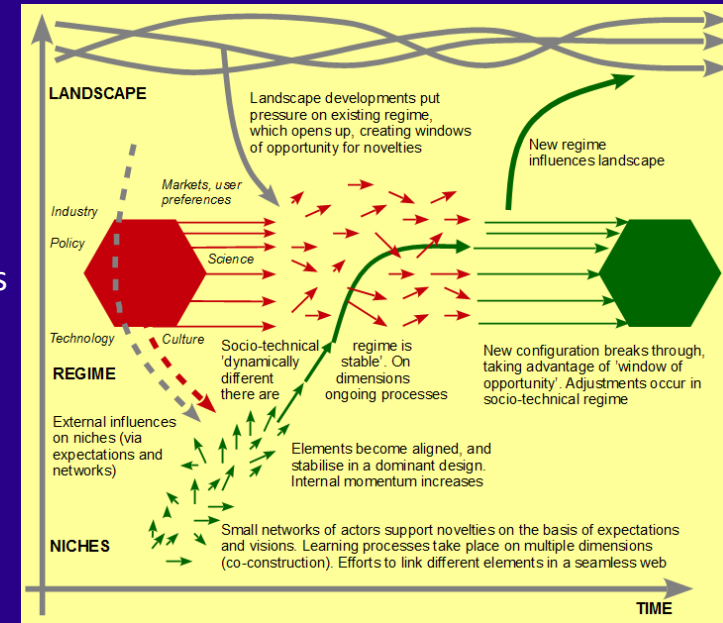
Transformative outcomes – theoretical foundations

3 main transformative processes

- I. Building or constructing niches
- II. Accelerating and embedding niches in the regime
- III. Opening up existing regime by unlocking path dependencies

We propose four transformative outcomes in each of these three transition processes.

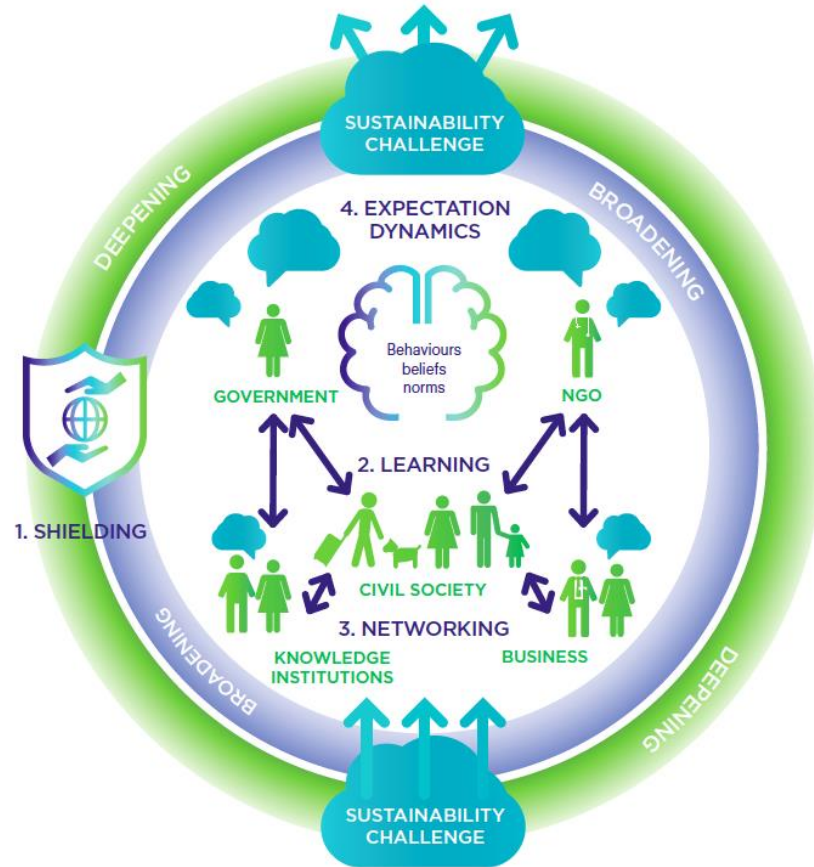
= 12 transformative outcomes (TOs)



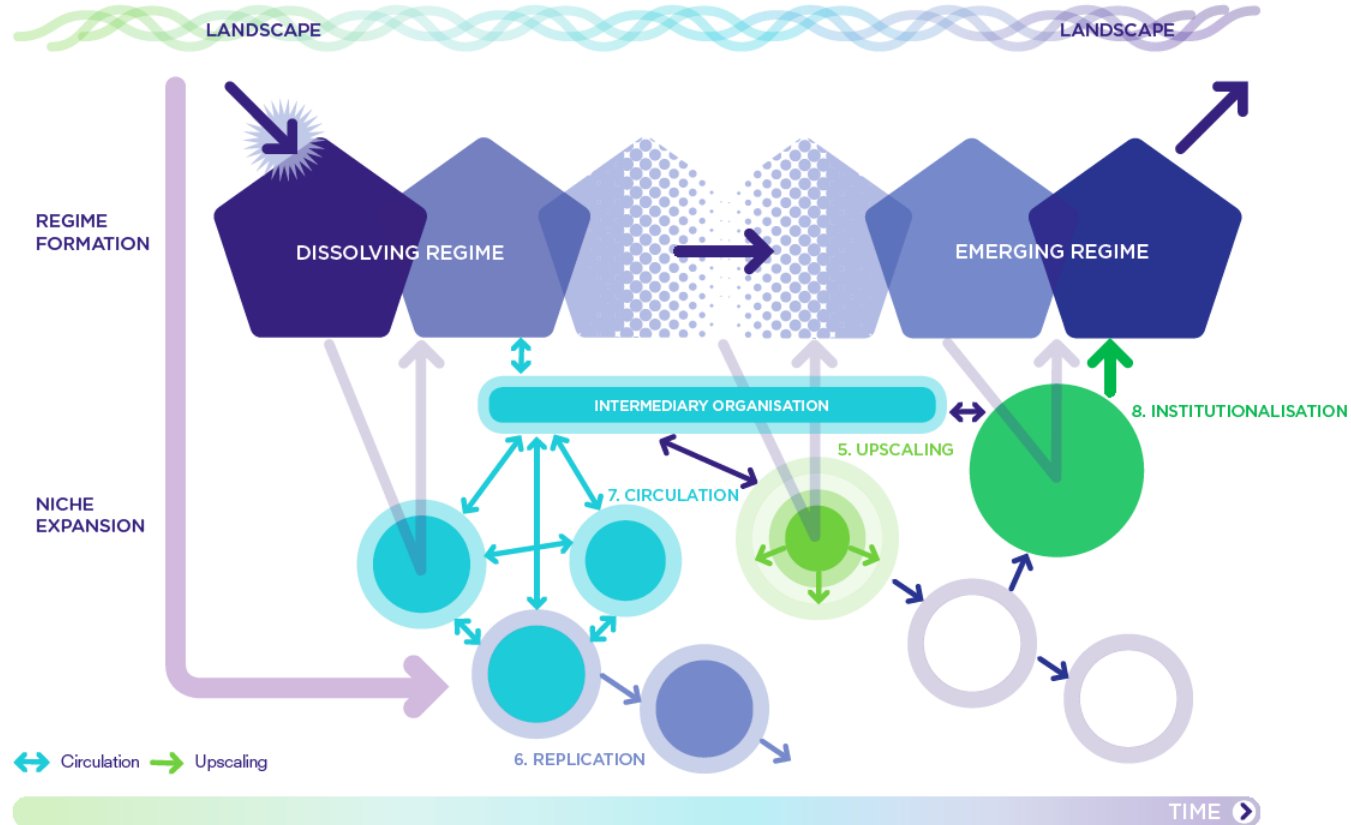
Multi-level perspective (based on Geels, 2002; Schot and Kanger, 2016)

TRANSFORMATIVE OUTCOMES FOR NICHE CONSTRUCTION

1. Shielding - Broadening and deepening
2. Learning - Broadening and deepening
3. Networks - Broadening and deepening
4. Expectations – Broadening, deepening and opening up



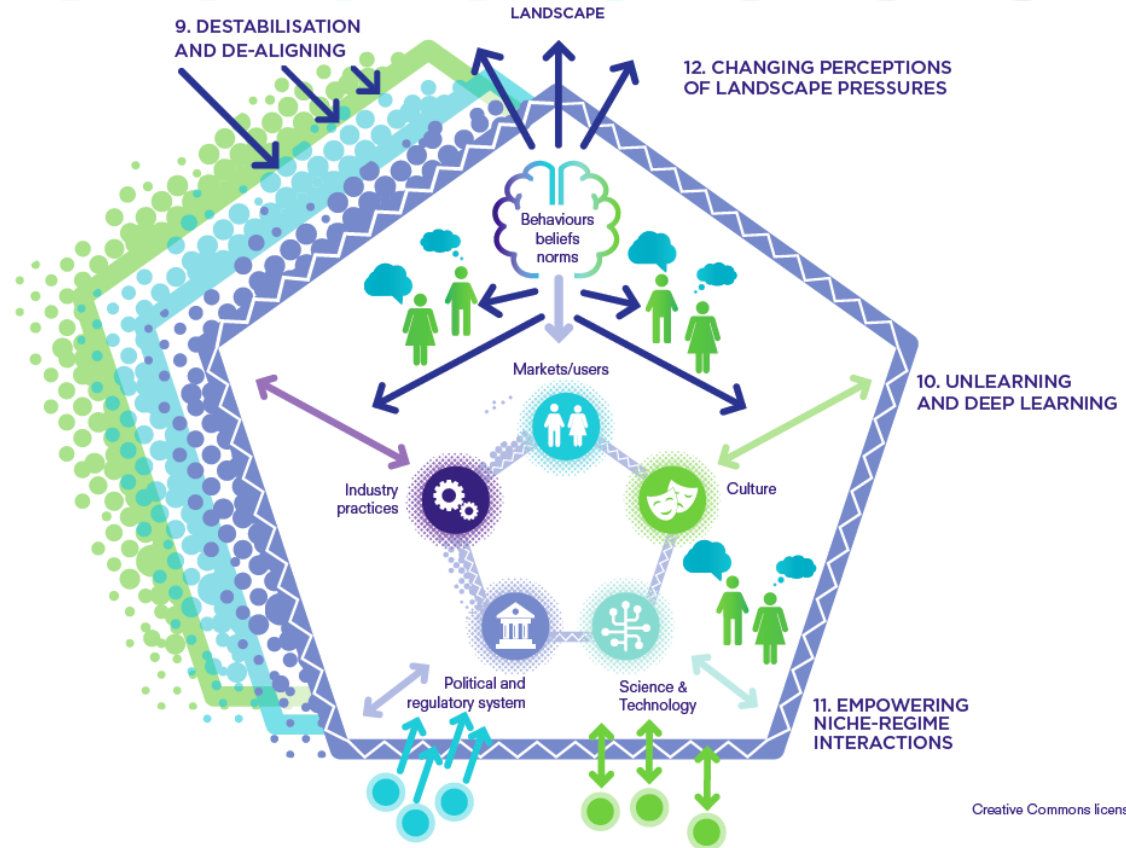
TRANSFORMATIVE OUTCOMES IN ACCELERATION AND EMBEDDING NICHE INNOVATIONS



- 5. Upscaling– increasing adoption
- 6. Replicating- locally and trans-locally
- 7. Circulating ideas, people, rules, knowledge
- 8. Institutionalizing formal and informal rules

OPENING UP REGIMES AND UNLOCKING PATH DEPENDANCIES

- 9. De-aligning and disrupting elements of the regime
- 10. Unlearning and reflexive learning for regime actors
- 11. Empowering niche-regime interactions
- 12. Changing perception of landscape pressure



Formative evaluation

- improving the design/implementation of an intervention with the direct participation of stakeholders – hence learning
- providing an understanding of why an intervention is contributing to transformative change (or not)
- Should not be combined with summative evaluation
- Use a MLP based Flexible Theory of Change, combined with monitoring
- Is adding a reflexive layer to experiments

Stay in touch

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