



Governance arrangements for transformative policy: Insights from a comparative case study

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Introduction

Motivation: Rising interest for 'transformative innovation policies', conform new rationales (Weber & Rohracher 2012; Steward 2012; Diercks et al. 2019).

Research gap: Implementation and governance (Borrás & Edler, 2020).

→ What is needed on part of policy entities to become more 'transformational'?

Focus (Theoretical approach):

- Investigation of specific governance arrangements and organizational changes for organizing a government's interactions with other elements of the system.
- Governance modes define in what ways and on what legitimacy basis governments can act (Bourgon, 2011). Thereby, they shape policy options.
 - E.g.: Public admin. might not be ready for transition tasks (Braams et al., 2021).

Research structure

RQ: How do characteristics of transformative innovation policies unfold in different governance modes? What are the challenges associated with each governance mode?

Theory: Transformative policy characteristics & Governance modes

Empirics: Through which specific governance arrangements are transformative features being implemented, and what hurdles are being encountered, in 7 European transformative policy initiatives (TPI)?

Objective: Informing and inspiring the shift to transformative governance.

Theoretical framework - 1

Key characteristics of transformative innovation policy:

Creating legitimacy and leadership	Multi-level, multi-actor and multi-instrumental coordination and alignment	Reflexivity, learning and experimenting	Resolving conflicts
<p>Identifying and demonstrating transformative failures (Weber & Rohracher, 2012)</p> <p>Acknowledging and managing the normativity of innovation policies for societal challenges (Uyarra et al., 2019; Schlaile et al., 2017)</p> <p>Accountability mechanisms (Rogge & Reichardt, 2016)</p>	<p>Vertical and horizontal policy coordination (Weber & Rohracher, 2012; OECD 2020)</p> <p>Multi-instrumental policy approaches / Policy mix (Rogge & Reichardt, 2016)</p> <p>Focus on multi-disciplinarity beyond epistemological boundaries (Cagnin et al., 2012)</p>	<p>Reflexive governance (Weber and Rohracher, 2012)</p> <p>Adaptability (Janssen, 2019)</p> <p>Experimental/ tentative governance (Torrens & Schot, 2017; Kuhlmann & Rip, 2018)</p> <p>Formative evaluation (Molas-Gallart et al., 2020)</p> <p>Second-order learning (TIPc, 2017)</p> <p>Consideration of system-level impact (TIPc, 2017)</p>	<p>Destruction policies / deliberate decline / destabilization / exnovation / phasing out (Rogge et al., 2020 ; Hekkert et al., 2020; Klerx & Begemann, 2020)</p> <p>Embracing contestation (Wanzenböck et al., 2020)</p> <p>“Conflict vs Consensus”/anticipatory deliberation (TIPc, 2017; Schot & Steinmueller, 2018)</p> <p>Establish corridors of acceptable development pathways (Schot & Steinmueller, 2018)</p> <p>Tilting the playing field (Kattel & Mazzucato, 2018)</p>

Theoretical framework - 1

Key characteristics of transformative innovation policy:

- Multi-level, multi-actor and multi-instrumental Coordination and alignment (vertical/horizontal coordination; policy mixes; multi-disciplinarity)
- Creating legitimacy and leadership (demonstrating transformative failures; managing normativity; developing accountability mechanisms)
- Reflexivity in policy design and process: Learning and experimenting (reflexive / experimental governance; adaptability; second-order learning; formative evaluation)
- Managing conflicts (embracing contestation; anticipatory deliberation, ...)

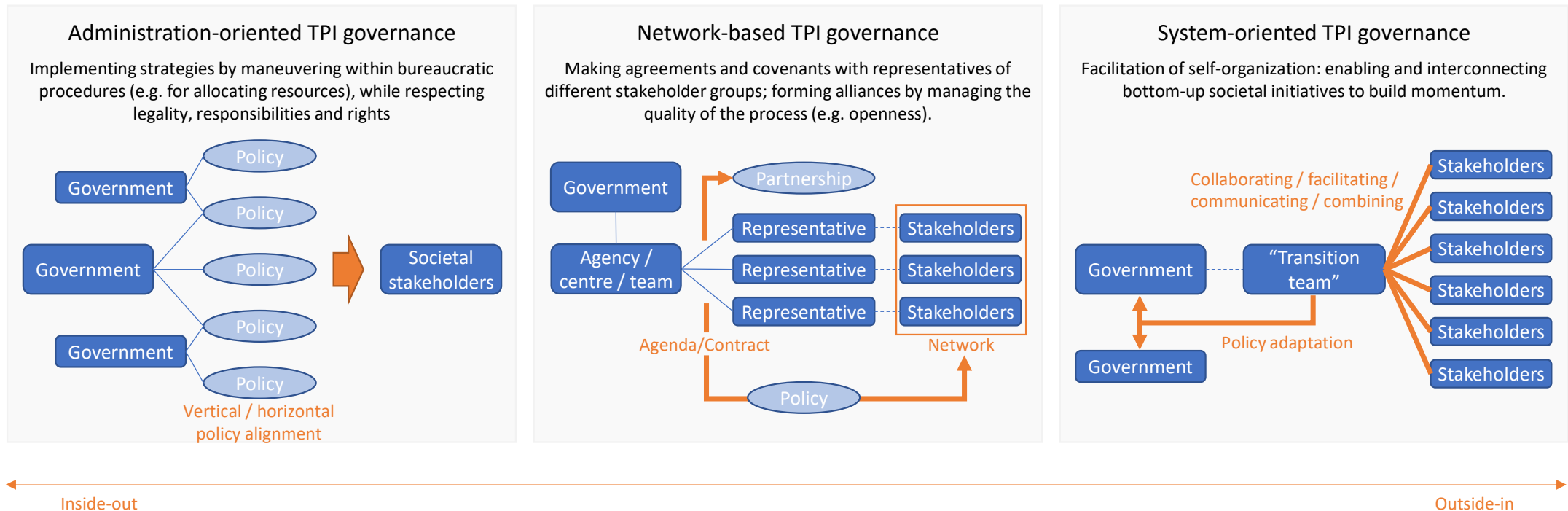
Theoretical framework - 2

Governance modes, based on distinct governance perspectives (Tenbensen, 2007; Treib et al., 2007; Van der Steen et al., 2015; 2018)

	Formality of institutions	Membership flexibility & diversity	Governance of change processes
Administration-oriented governance	High	Low, public actors leading	Inside-out, hierarchical organization
Network-based governance	Medium	Medium, public and non-public actors	Co-governance
System-oriented governance	Low	High, societal actors leading	Outside-in, self-regulated, community building

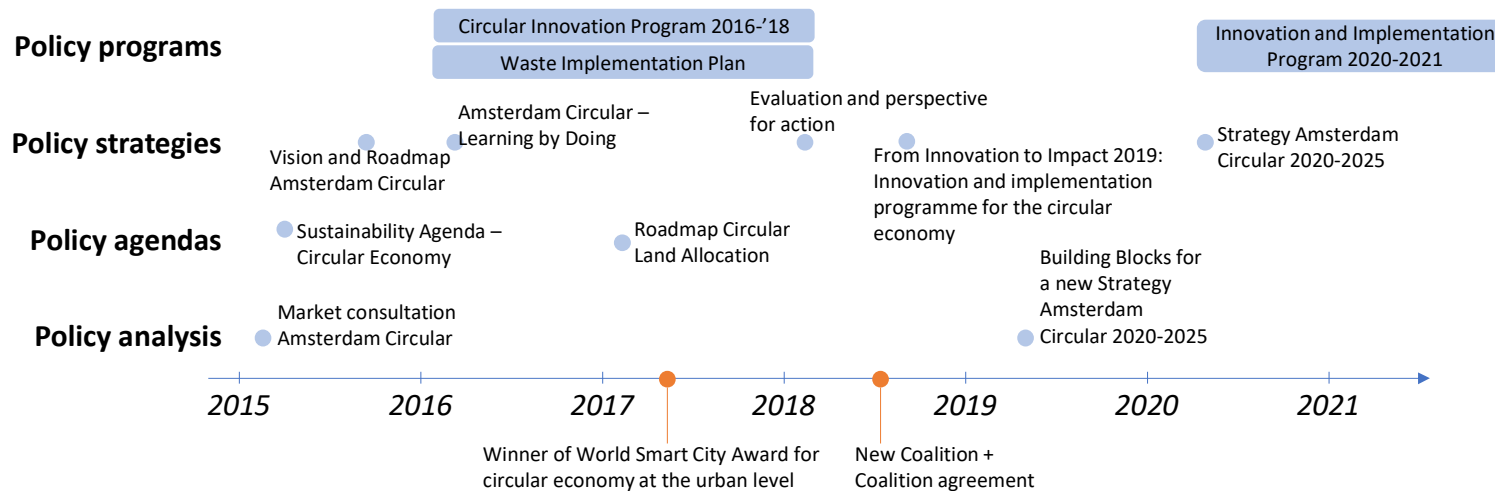
Theoretical framework - 2

Governance modes (visual):



Data and methods

- Desk research: policy documents, strategic agendas, monitoring reports, ..
- Interviews based on protocol: +- 17 interviews
- Validation by main policy officer



Cases (TPI strategies)

Name	Gov. Mode	Mission-orientation	Geogr. scope	Country	Sector	Year est.	Strategy type
Green solutions for the future	Adm.	Explicit	National	Denmark	Climate	2020	Extended R&D programme
German HighTech Strategy 2025	Adm.	Explicit	National	Germany	Broad	2018	Umbrella framework
Mission-oriented Topsector & Innovation Policy	Netw.	Explicit	National	Netherlands	Broad	2019	Umbrella framework
City of Tomorrow / Building of Tomorrow	Netw.	Implicit	National	Austria	Housing	2013	Extended R&D programme
Catalunya 2020 / RIS3CAT	Netw.	No	Regional	Spain	Climate	2012	Umbrella framework
Amsterdam Circular Economy	Syst.	Implicit	City	Netherlands	Circular Ec.	2015	Domain programme
Circular Flanders (part of Vision 2050)	Syst.	Implicit	Regional	Belgium	Circular Ec.	2017	Domain programme

Cases (TPI strategies)

Link between cases and governance modes

Gov. mode	Cases	Main characteristics
Admin. TPI	<ul style="list-style-type: none"> • DK Grand Solutions • German HTS2025 • Dutch MTIP 	One ministry in the lead and responsible, while engaging other ministries. Transformation focused on coordination: redesigning policies and horizontal/vertical collaboration structures.
Network TPI	<ul style="list-style-type: none"> • Austrian City of Tomorrow • Catalanian RIS3CAT • (German HTS2025; Dutch MTIP) 	Mobilizing capabilities and resources of societal stakeholders, via public-private partnerships, triple-/quadruple-helix teams (institutionalized representatives) and writing collective agendas.
System TPI	<ul style="list-style-type: none"> • Amsterdam Circular Economy • Circular Flanders 	Identifying and accelerating bottom-up initiatives from societal stakeholders, by creating visibility and making ad-hoc connections with (policy) partners able to overcome bottlenecks.

Results

Governance capacities, per principle & mode

Governance modes:	Transformative principle:			
	Legitimacy & Leadership	Collaboration & Alignment	Policy learning	Resolving conflicts
Admin. TPI	<ul style="list-style-type: none"> ▶ Legitimacy at high political level 	<ul style="list-style-type: none"> ▶ Change of innovation funding priorities ▶ Targeting multiple (existing) instruments, actors or policy fields at prioritized topics 	<ul style="list-style-type: none"> ▶ New monitoring and evaluation procedures beyond input/output 	-
Network TPI	<ul style="list-style-type: none"> ▶ Engage in partnerships based on shared agendas 	<ul style="list-style-type: none"> ▶ Involve key stakeholders in agenda-setting ▶ Shared ownership between policy partners 	<ul style="list-style-type: none"> ▶ Adapt policies based on network signals 	<ul style="list-style-type: none"> ▶ Community management
System TPI	<ul style="list-style-type: none"> ▶ Create a vision around perceived problem urgency ▶ Emphasize community-based problem-solving 	<ul style="list-style-type: none"> ▶ Establish a transition team ▶ Reinforce bottom-up initiatives ▶ Inspire / instruct policy makers 	<ul style="list-style-type: none"> ▶ Learning-by-doing (stocktaking) ▶ Monitor project outcomes for initiative re-orientation 	<ul style="list-style-type: none"> ▶ Install a field-level working group

Results

Challenges, per governance mode

Gov. mode	Challenges
Admin. TPI	<ul style="list-style-type: none">▶ Departmental thinking▶ Rivalry for recognition and resources▶ Reliance on strict administrative and budgetary cycles▶ Sensitive to periodic changes in leadership
Network TPI	<ul style="list-style-type: none">▶ Sensitive to capture▶ Lacking ability to respond to signals▶ Uncertainty about commitment levels▶ Resistance against increased guidance
System TPI	<ul style="list-style-type: none">▶ Building momentum in a responsive way (without clear action lines)▶ No catalysing possibilities without sufficient bottom-up initiatives▶ Less options for 'bold moves'

Discussion

- The mission-TPIs mostly fit the top-down admin.-oriented governance mode, which is more about adjusting policies and less about bottom-up initiatives.
 - Perhaps the mission-TPI's are not so transformative after all?
- Is moving to bottom-up governance modes desirable / necessary, or can the shift towards transformative governance possible within the various modes?
 - There can be merits in **multi-level governance mixes**, combining bureaucratic power and local responsiveness (cf. 'TIP as a third frame on top of the existing two innovation policy frames'; Schot & Steinmueller, 2018).

Conclusions

Theoretical contributions:

Different starting points (governance modes) imply different opportunities and challenges.
→ Alternative kind of contextualisation, besides e.g. mission types (Wittmann et al., 2021) and instrument types (Janssen, 2021).

Practical contributions:

Realism in terms of policy options and expectations in evaluation studies.
Basis for policy learning: inspiration from similar contexts, or more bottom-up ones?

Further research:

Link with assessment frameworks; are the TPis truly transformative?
Co-existence of different TPI types; reinforcement?



Upcoming MIPO events:

January 17–22 2022, at TIP Conference:
Panel debate on ‘industrial transitions’, with JRC and INTRANSIT.

For more info, see:

Mission-oriented Innovation policy observatory (MIPO)

www.uu.nl/en/research/copernicus-institute-of-sustainable-development/mission-oriented-innovation-policy-observatory