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Reconfiguration dynamics in and policy mix design for the protein transition

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Workshop Pathways to climate resilient agri-food systems in Belgium

Ukkel, 9/12/2025

Overview

protein: shift from animal to plant based human consumption: 60/40 → 40/60

transition: fundamental change in a system's structure, culture and practices

How can the protein transition be accelerated?

acceleration: transition management/governance
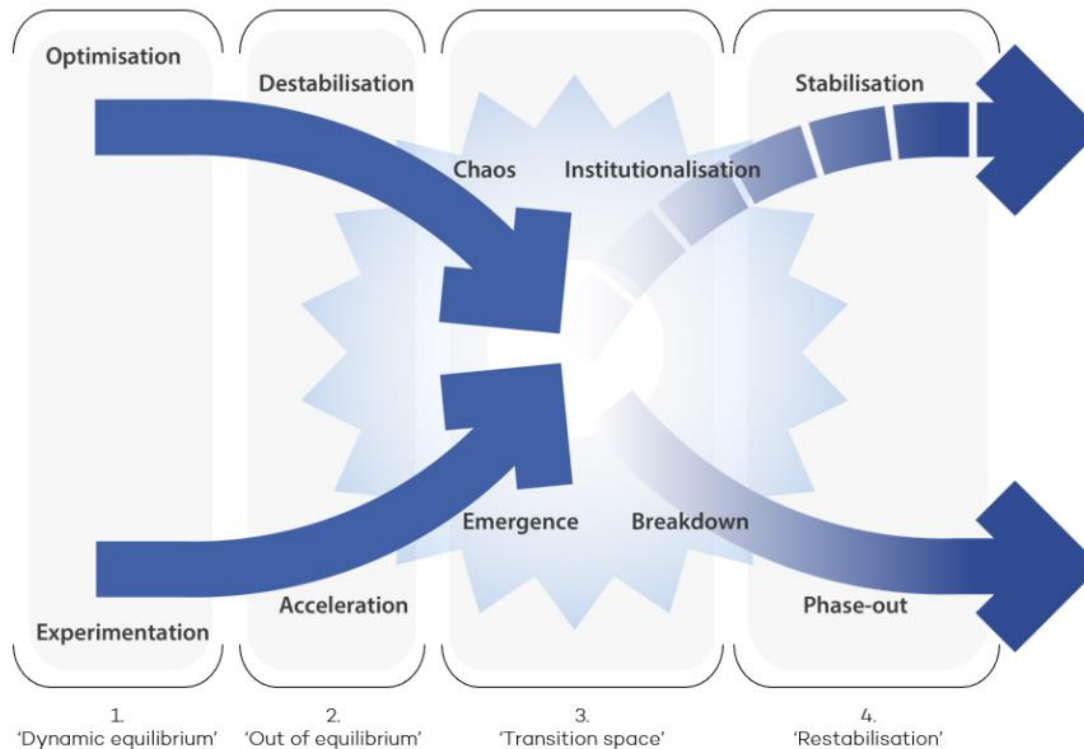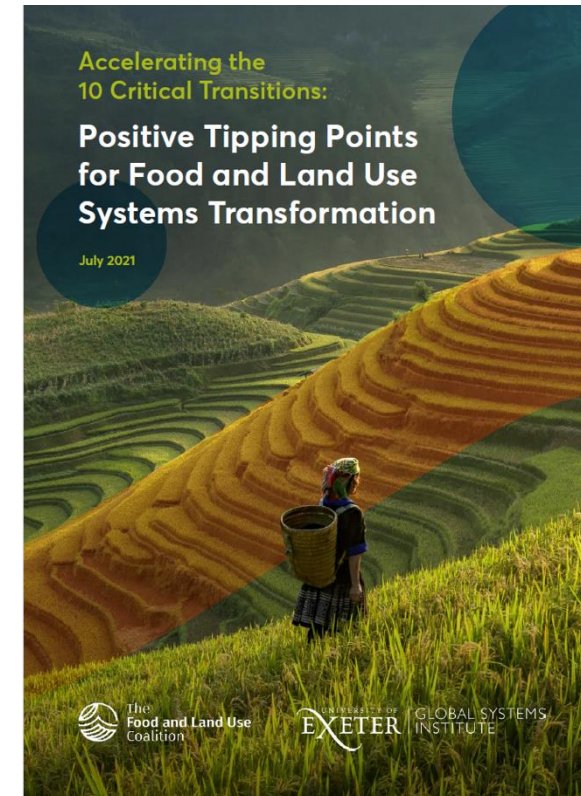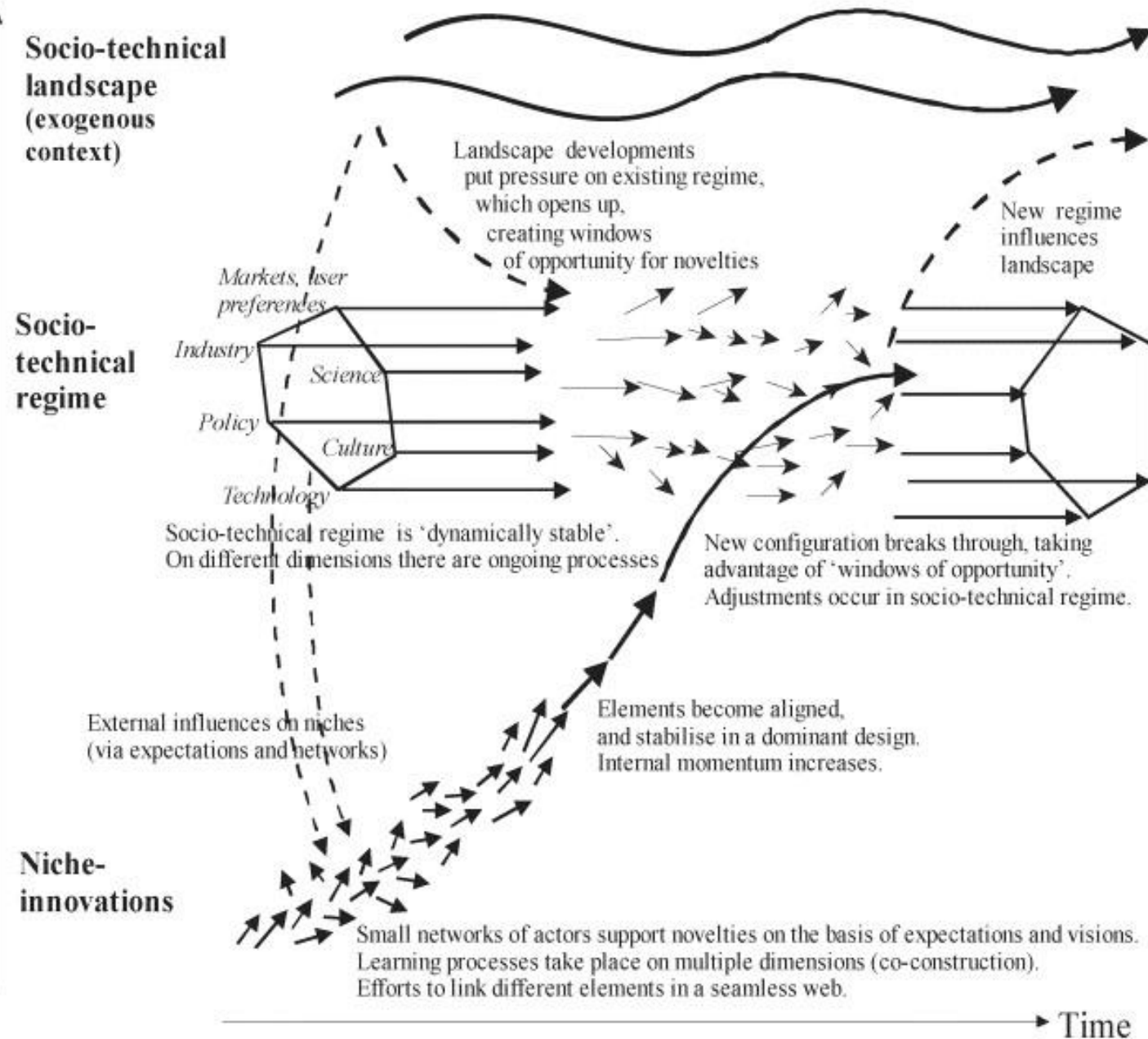
State of the art

Figure 1. The X-curve framework, which illustrates interacting patterns of build-up and break-down that enable societal transition. The different dynamics one can distringuish in an ideal type situation are outlined in the framework. Figure adapted from Hebinck et al. (2022).

Increasing structuration of activities in local practices

Socio-technical landscape (exogenous context)

Landscape developments put pressure on existing regime, which opens up, creating windows of opportunity for novelties

New regime influences landscape

Socio-technical regime

Markets, user preferences

Industry

Science

Policy

Culture

Technology

Socio-technical regime is 'dynamically stable'. On different dimensions there are ongoing processes

New configuration breaks through, taking advantage of 'windows of opportunity'. Adjustments occur in socio-technical regime.

External influences on niches (via expectations and networks)

Elements become aligned, and stabilise in a dominant design. Internal momentum increases.

Niche-innovations

Small networks of actors support novelties on the basis of expectations and visions. Learning processes take place on multiple dimensions (co-construction). Efforts to link different elements in a seamless web.

Time

Source: Geels and Schot, 2007, Research Policy, 36(3), 399-417

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Figure 6: Illustrative visualisation of dietary shift transition in Europe

Source: The Food and Land Use Coalition, 2021
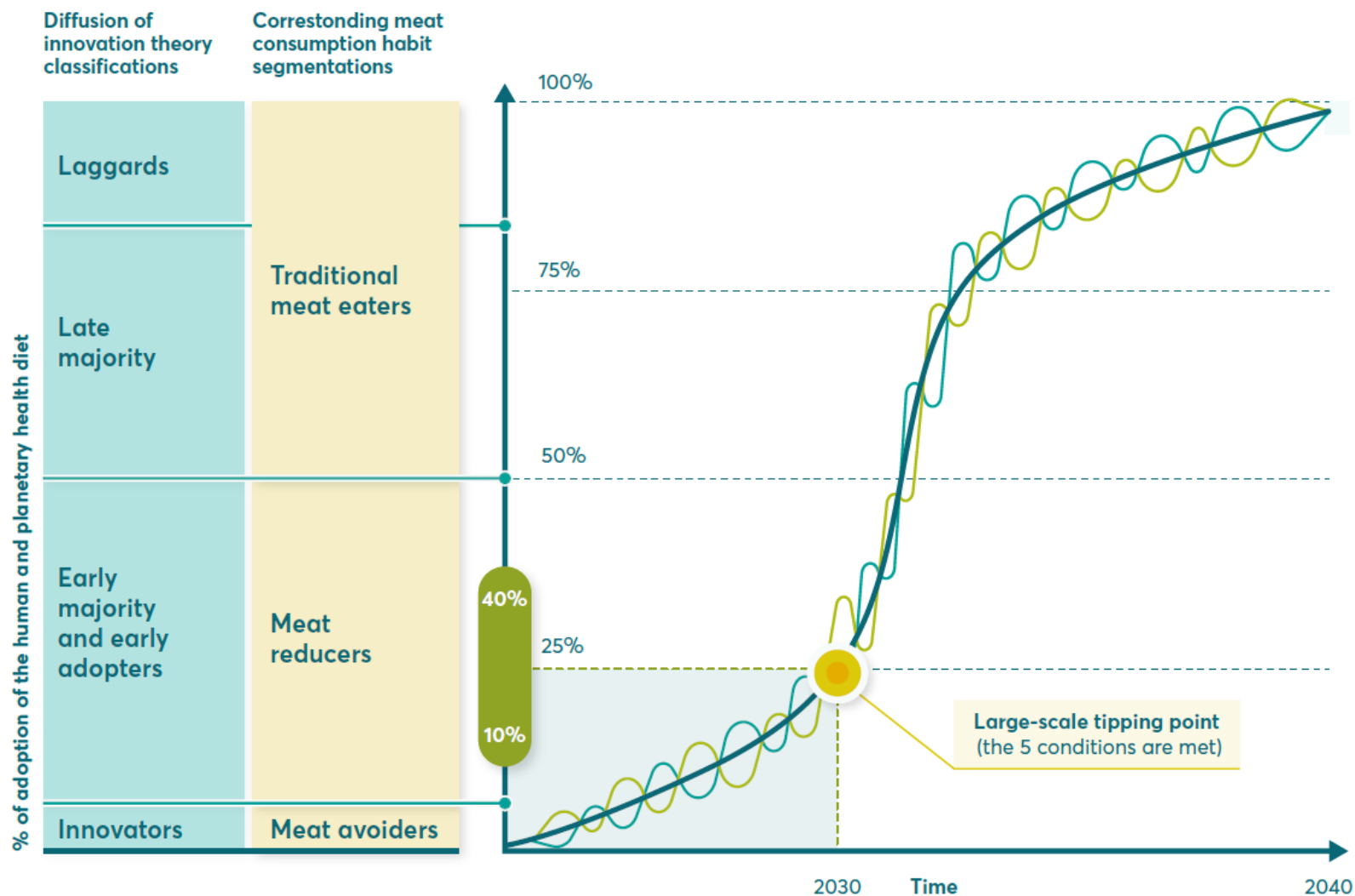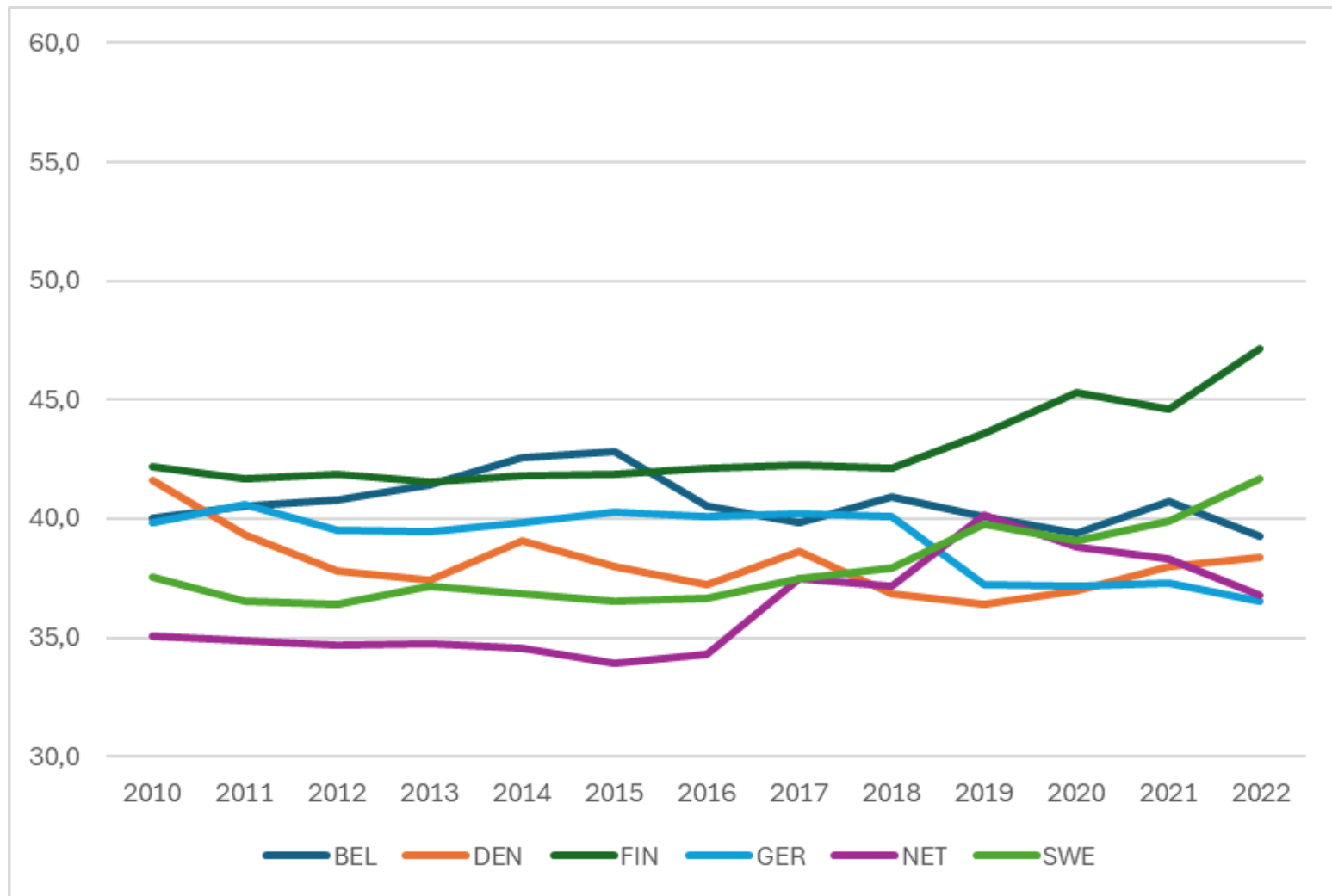
Vegetal protein consumption in g/capita/day - FAOSTAT

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Figure 1: Framework for triggering positive tipping points
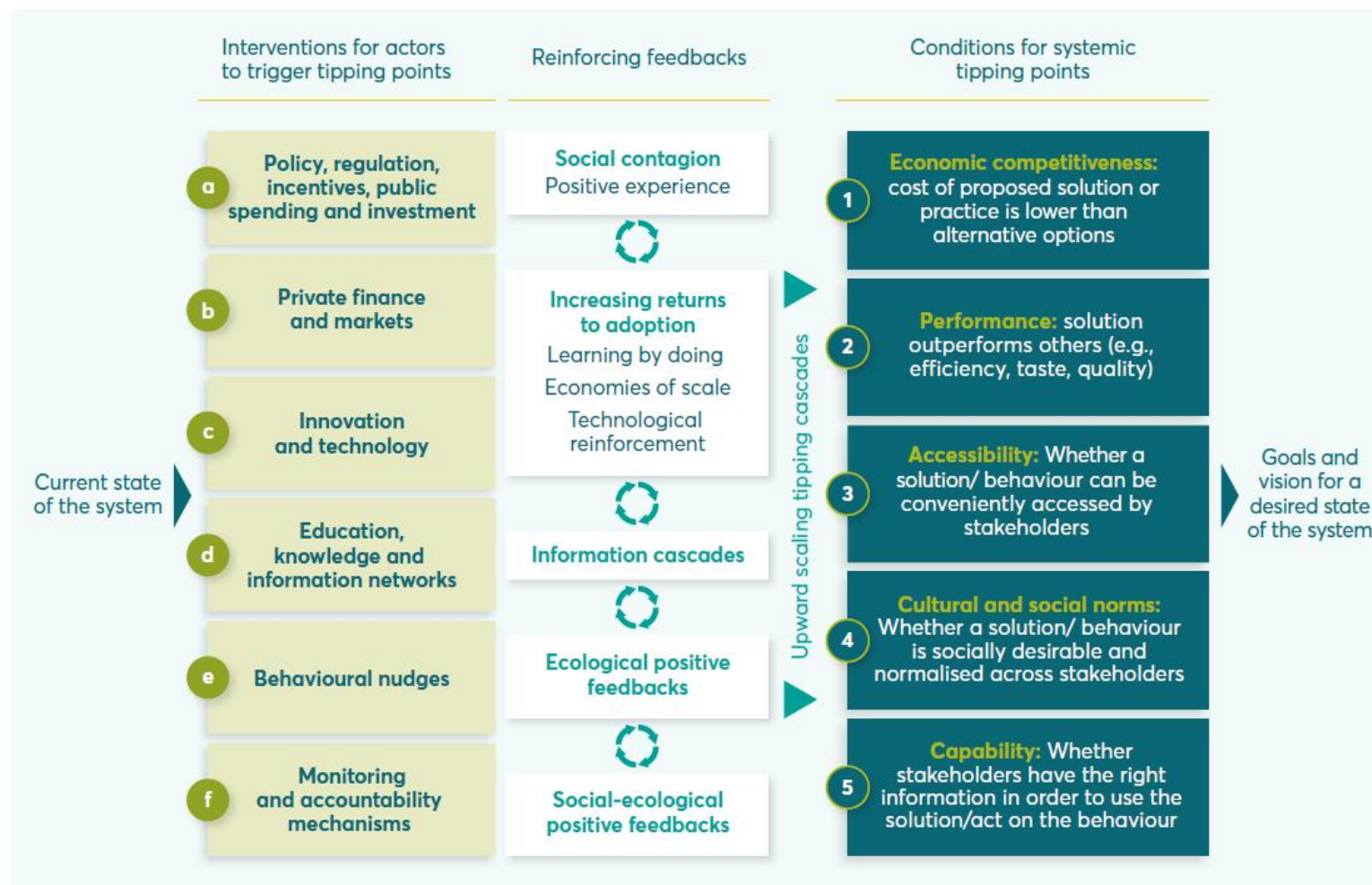
Please note: this framework does not include exogenous factors directly, but we recognise that they exist and can have fundamental impacts on the systems we are exploring here.

Source: The Food and Land Use Coalition, 2021

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Policy mix
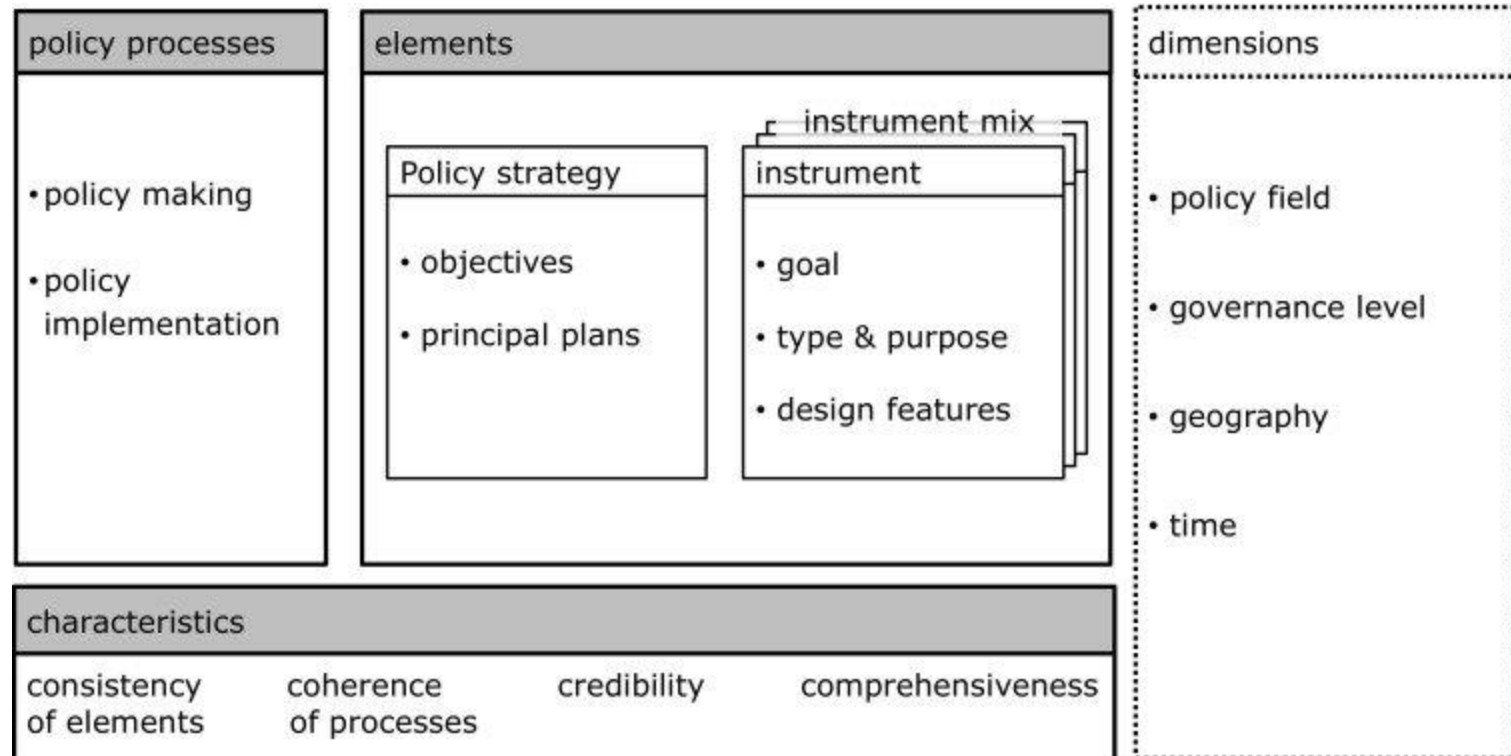
Rogge & Reichardt 2016, *Research Policy*

Policy Intervention Points for Sustainability Transitions

| INTERVENTION POINTS	DESCRIPTION	EXAMPLES
IP1: Niche stimulation	Stimulate the emergence of alternative products and practices.	R&D funding schemes, education and training programs
IP2: Niche acceleration	Accelerate diffusion of alternative products and practices through upscaling, institutionalisation and replication.	Incubators, public procurement, standards and labels, advisory services, tax exemptions
IP3: Destabilizing regime	Phasing down unhealthy, unsustainable products and practices.	Taxes, zoning laws, regulations on advertising, dismantling supportive tax structures
IP4: Address repercussion of regime destabilization	Anticipate and manage socio-economic disruption	Support for reskilling, creative labor adjustment programs, chefs training, compensation schemes
IP5: Coordination multi-regime interactions	Utilize synergies between incumbent actors and optimize consistency and coherence of policies	Intersectoral cooperation, coupling health, environmental sustainability and food policy, overarching strategies across policy areas, impact assessments
IP6: Tilt the landscape	Alter broader framework conditions and give direction to change	Overarching strategic frameworks supranational (e.g. European Green Deal, SDG's,...)

Kanger et al., 2020, *Research Policy*

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De Bauw, M., Reybrouck, K., Mathijs, E., & Vandevijvere, S. (2025). *Policy Mixes for Food Environment Transitions to Support Sustainable Healthy Diets: The Case of Multi-Level Governance in Belgium*. Sciensano & KU Leuven.
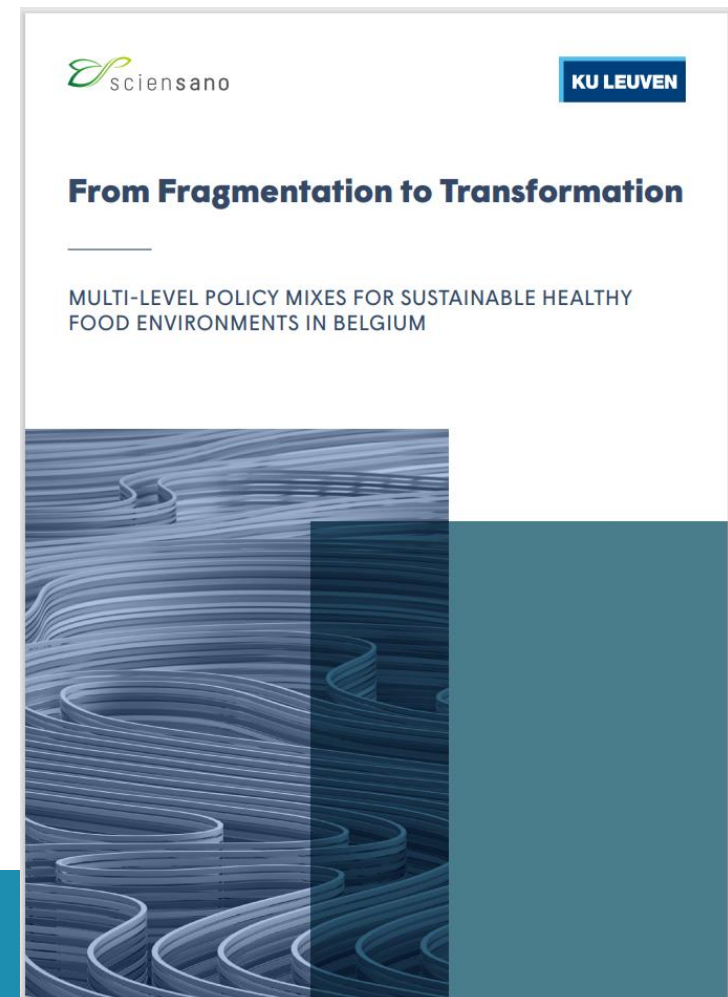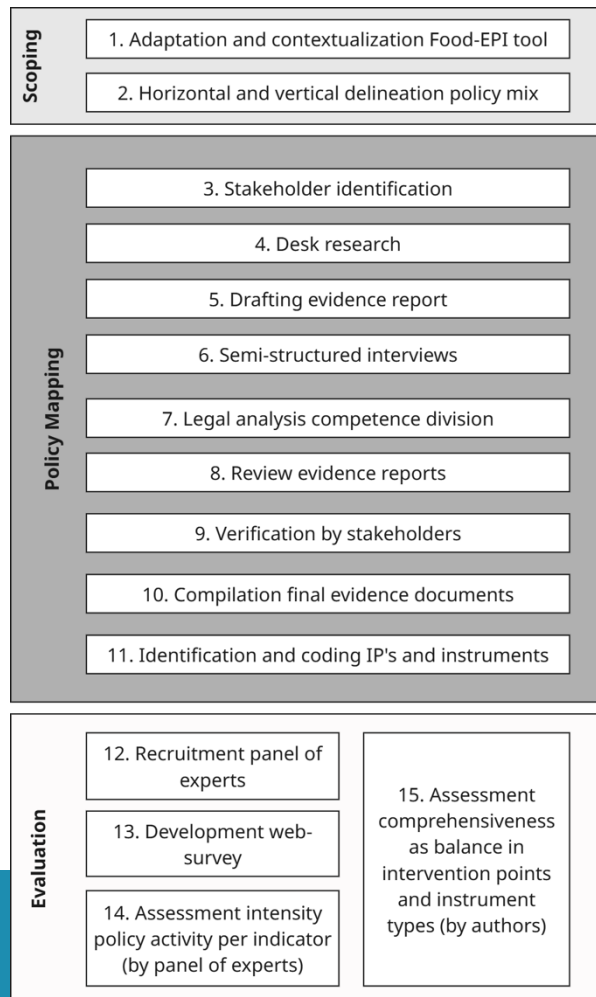
Balance in intervention points for the food environment in general (De Bauw et al., 2025)

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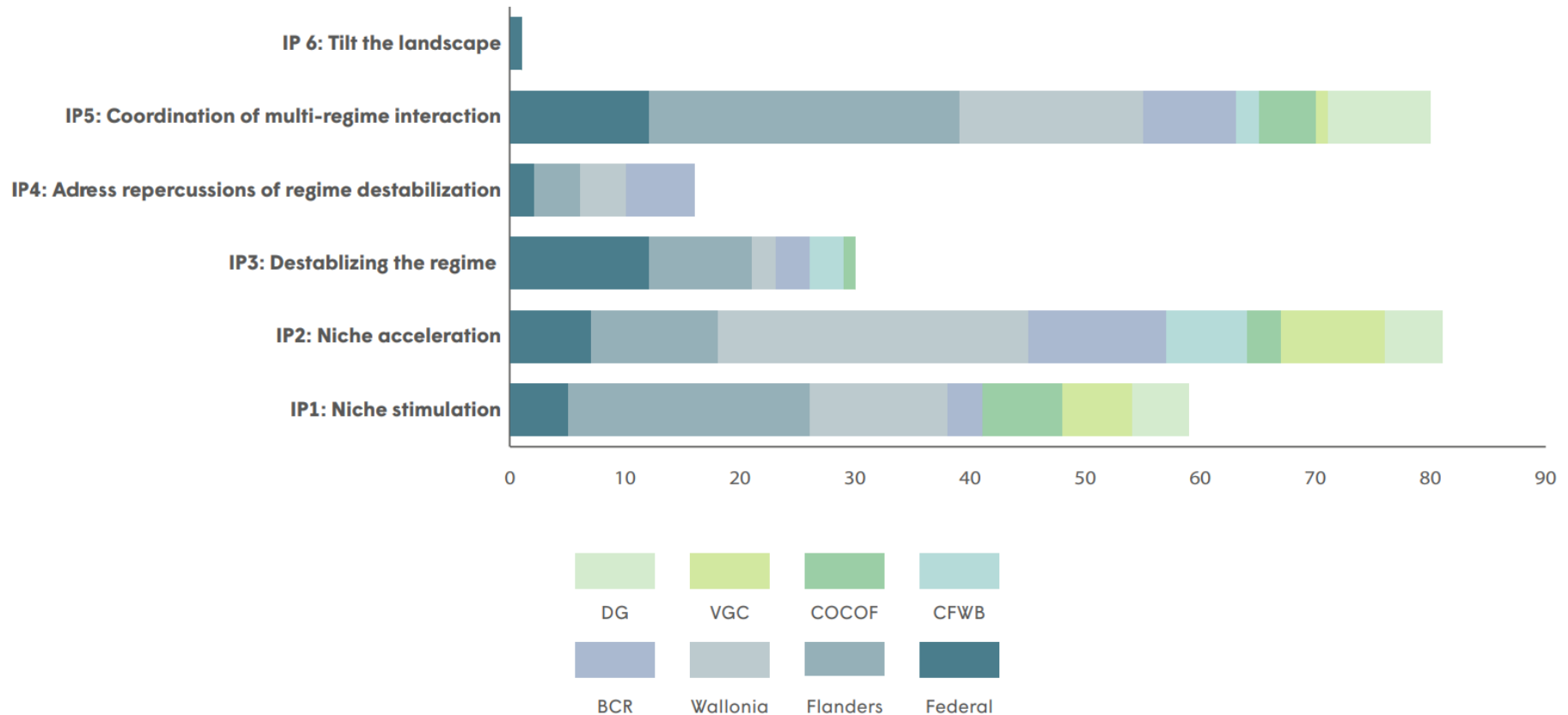
Green Deal Protein Shift on Our Plate

- Coalition of retail, catering, processing, public authorities, NGOs, knowledge institutes

- Predefined commitments

- Common narrative

- Knowledge sharing network

- Opportunties for collaboration

- Green Deal 1.0: 2021-2025

- Green Deal 2.0: 2025-2029
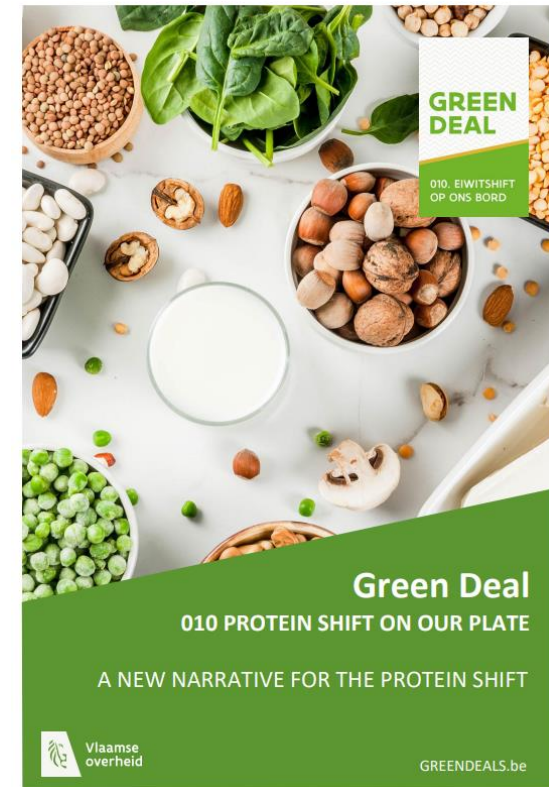
Green Deal
010 PROTEIN SHIFT ON OUR PLATE

A NEW NARRATIVE FOR THE PROTEIN SHIFT

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1	**Economic competitiveness:** cost of proposed solution or practice is lower than alternative options	Meat price relatively low
2	**Performance:** solution outperforms others (e.g., efficiency, taste, quality)	Ultraprocessed nature of some alternatives Performance at meal level (good recipes)
3	**Accessibility:** Whether a solution/ behaviour can be conveniently accessed by stakeholders	Meat analogues promoted more than legumes But all widely available in retail (less in restaurants)
4	**Cultural and social norms:** Whether a solution/ behaviour is socially desirable and normalised across stakeholders	Half half narrative Plant-based versus 'veggie'
5	**Capability:** Whether stakeholders have the right information in order to use the solution/act on the behaviour	Cooking skills of public at large but also of chefs (e.g., in catering)

Concluding remarks

- Intervention points to be triggered in logical order, but depends on the type of alternative (legumes vs. meat analogues, insect-based etc.)

- Government legitimacy of half half narrative precondition for retail scale-up

- Still insufficient traction for tipping point dynamics (and even stagnation)

- Policy mix: lack of regime-destabilizing measures + measures to address regime destabilization