

Background note for the TIPC conference session on ‘Policy for global transformations’

Session aims and approach

Within Europe, strategic policy frameworks increasingly reflect the need to transform key systems (food, energy, mobility, housing, etc.) in ways that promote multiple dimensions of sustainability and ensure socially fair outcomes. Most recently, the ‘Political guidelines for the next European Commission 2019-2024’, set out by President-elect Ursula von der Leyen, emphasise the need for far-reaching societal change in the next decade, engaging all sectors of the economy and society. As such, the key question is no longer why or whether transitions are necessary, but how to make them happen.

Responding to the new policy paradigm, public institutions are increasingly exploring the implications of transitions research. Interestingly, this arena is no longer purely the domain of innovation agencies. Environmental agencies and others are moving into the area of transformative innovation, providing niches where new ideas can be tested, and exploring how to operationalise transitions thinking.

The relative novelty of transitions research and policy means that these initiatives have largely emerged and developed independently so far, with limited knowledge exchange between the different public institutions or interaction with relevant research communities. The TIPC conference session on ‘Policy for global transformations’ therefore provides a valuable opportunity to start a conversation between public bodies and the TIPC research partners, which have been addressing these challenges for some years. In doing so, the session can potentially provide the basis for further network building in 2020 and beyond.

The session will focus in particular on monitoring and assessing transition processes, which represents a key challenge for public institutions. The uptake of transitions thinking creates the need for diverse new knowledge, as well as related competencies and institutional structures. This includes knowledge on the systems that need to be transformed (e.g. dynamics and impacts of existing systems, lock-ins and cracks, cross-system interactions), drivers of change at the landscape level (e.g. megatrends, emerging risks and opportunities, interactions), and innovations at the niche scale (e.g. initiatives and experiments, successes and failures, impacts and trade-offs, effects of policies, transformative potential).

The character and extent of the needed knowledge implies some challenging questions for the institutions involved. For example, with so many knowledge needs, where should public bodies focus their resources? What kinds of assessment approaches can best respond to the new knowledge needs? How can we create a knowledge system that enables agencies and researchers to share ideas and lessons learned? And how can such thinking be integrated in other public authorities, including at the regional and local level?

The session will comprise an introduction by the European Environment Agency and short presentations by a panel of five public bodies that are beginning to operationalise transitions thinking within Europe. It will then open up to a plenary discussion chaired by Prof. Fred Steward. The remainder of this note provides background information on the work of the different public bodies involved in the session.

Session participants and their work on sustainability transitions

The **European Environment Agency (EEA)** is an EU agency that supports environmental governance and sustainable development by providing environmental information and linking research to policy. The EEA identified the need to develop knowledge on systemic challenges and transitions as a key strategic area in its multi-annual work programme 2014-2020. It has since developed a series of reports addressing transitions research and its implications for policy, in collaboration with its network of public agencies, EU institutions and research partners.

The most recent EEA report, '[Sustainability transitions: policy and practice](#)', explores the implications of transitions research for public policies and institutions in the EU and was authored by leading scholars from the TIPC community. The report puts particular emphasis on the need for all policy areas and scales of governance to operate together coherently to enable the transformation of societal systems. It also stresses the importance of engaging a broad array of different actors in innovation processes and the need to reconfigure the knowledge systems guiding policy and action.

Building on this work, the EEA is now exploring how it can help develop networks and knowledge to support transitions processes and governance.

The **German Environment Protection Agency (UBA)** is tasked with ensuring a healthy environment by providing environmental information and projections, informing policy and the general public and implementing environmental law. UBA also runs an Environmental Innovation Programme, which funds state-of-the-art innovation projects in Germany.

The needed transformations cannot be achieved by technical innovations or top-down policies alone. Knowledge is needed on how the transformation and social change processes can be successfully initiated, shaped and stabilised, also in the face of various resistance factors and barriers. UBA's transformation research addresses the following issues:

- identifying sustainability-relevant trends (e.g. digitisation) early to enable systematic exploitation of opportunities and minimisation of risks;
 - better understanding and reducing concerns and social prejudices, e.g. in order to accelerate the conversion of energy and transport infrastructure required for a sustainable Germany;
 - recording, evaluating and promoting sustainability-relevant technical, social and societal innovations and lifestyles (e.g. to achieve a largely climate-neutral society);
 - negotiating fair exnovation (such as withdrawal from coal energy) with all relevant stakeholders;
 - involving and mobilising social actors and using the potential of new allies (e.g. trade unions, social and welfare organisations) for transformation
 - ensuring social participation of all population groups in sustainable consumption regardless of income and education;
 - identifying and using civil society practices, potentials and knowledge for the transformation towards sustainability;
 - building up and developing transformation competencies in public administration.
-

Switzerland's **Federal Office for the Environment (FOEN)** is responsible for ensuring sustainable use of natural resources, protecting against natural hazards and safeguarding the environment and human health. Its last State of the Environment Report in 2018 concluded that societal transformations – targeting the nutrition, mobility and housing systems – are essential to achieve sustainability. Alongside the report, FOEN published a website (umwelt-schweiz.ch) featuring a growing collection of people who become active for sustainability. The aim is to create visibility for innovative solutions and motivate others to get active.

The challenge is now to create a vision about what to address first and to understand how to organise FOEN's work so that it can identify and test interesting solutions, motivate others to work towards goals and create a collective learning process. To identify a path forwards, FOEN runs small pilot projects in four areas:

- **Innovation:** Research and collaboration projects to create solutions to improve the housing, mobility and food system.
- **Implementation / application:** Projects focusing on prototyping, testing in real life labs.
- **Communication:** Projects experimenting with different media formats and community building (online / offline).
- **Evaluation:** Projects addressing the issues of impact measurements and elaborating new policy proposals based on insights from transformation research.

The learnings derived from those small-scale projects will help FOEN to understand what works (and what doesn't) and to create a set of relevant criteria and 'rules of the game' for further projects.

The **Netherlands Environmental Assessment Agency (PBL)** is the national institute for strategic policy analysis in the fields of environment, nature and spatial planning. It improves the quality of political and administrative decision-making by conducting outlook studies, analyses and evaluations in which an integrated approach and policy relevance are paramount.

The Dutch government formulated various sustainability goals (addressing themes such as renewable energy and circular economy), which require system transformations throughout society. PBL monitors the effectiveness and efficiency of policy to achieve these goals, ex ante, as well as ex durante and ex post. Although policymakers prefer a single indicator, PBL is currently exploring a more complex method of assessing progress of these transitions because simple indicators such as CO₂ emissions reductions are inadequate for policymakers in deciding on short- and long-term policy to achieve sustainability transitions.

Building on previous work, PBL aims to develop a flexible evaluation method to assess transition progress and identify crucial decisions and challenges for policymakers, such as the possibility of lock-ins, educational needs for transforming the labour force, conditions for successful experiments and market introduction of promising technologies including spatial and infrastructural aspects.

DG RTD is the European Commission's directorate-general for research and innovation.

It is responsible for EU policy on research, science and innovation, with a view to help create growth and jobs and tackle societal challenges. The EU's research and innovation investment programme for 2021-2027, 'Horizon Europe', has the vision of achieving a sustainable, fair and prosperous future for people and planet. Climate action and the SDGs are central to this goal.

Transformative innovation and sustainability transitions are increasingly central to DG RTD's work. New units and matrix structures have been established to promote and embed transitions thinking across DG RTD and to facilitate interaction and co-creation with other European Commission services and programmes. Horizon Europe's emphasis on 'open science' aims to achieve better dissemination and exploitation of R&I results and to support active engagement of society.

The focus on mission-oriented innovation in Horizon Europe likewise provides a key means to foster normative directionality, connect with society's needs, enable collaborations with an ecosystem of public and private actors across the innovation chain, and enhance visibility and impact. The five missions already identified extend well beyond R&I policy and necessitate engagement with a broad array of societal actors, including scientific communities.

DG REGIO is the European Commission's directorate-general for regional and urban policy. It manages cohesion policy, the EU's main investment policy aimed at increasing economic, social and territorial cohesion with a particular

focus on less developed EU regions. Cohesion policy has for many years accompanied the structural change of regions and Member States with significant investment to protect the environment, reduce emissions, adapt to climate change and ensure compliance with environmental legislation.

For the post-2020 period, the European Commission wishes to further improve the effectiveness of cohesion policy investment in delivering the EU's environmental and climate goals. In this context, DG REGIO is working on a number of initiatives to help authorities in planning and using cohesion policy support for sustainability transitions in the 2021-2027 period. This work focuses on translating frontier academic knowledge on transitions to the realities of regional policy, assessing the capacity of administrations to manage sustainability transitions and developing a toolkit for authorities involved in the use of EU funds.

These initiatives should help national and regional authorities who benefit from cohesion policy funding and want to step up their efforts to take a more structured approach to managing the transition to a climate-neutral and circular economy.