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Implementation of the programme of work**Digital and green transformations: exploring the strategic dynamics of experimentation and learning****Note by the secretariat****I. Introduction**

1. This note presents good practices and policy recommendations on experimentation and strategic learning for transformative innovation policy. It is based on the presentations and discussions at the substantive segment on “Digital and green transformations: exploring the strategic dynamics of experimentation and learning” of the fifteenth session of the United Nations Economic Commission for Europe (ECE) Team of Specialists on Innovation and Competitiveness Policies (ToS-ICP), held in Geneva on 22 and 23 November 2023.¹ It reflects and benefits from the experiences of all relevant participating stakeholder groups, including national governments, academic institutions, the private sector, Non-Governmental Organisations and international organisations. It also benefits from the secretariat extensive desk research and interviews and comments provided by experts on transformative innovation policy.

2. ECE member States designated “Digital and green transformations for sustainable development in the ECE region” as the theme of the high-level segment of the seventieth session of the Commission (18 and 19 April 2023). At the session, member States requested relevant subsidiary bodies of ECE to consider how to enhance the impact of existing ECE instruments to foster digital and green transformations and propose ways to identify, assess and fill gaps in governance and good practices. The fifteenth session of ToS-ICP responded to this request and dedicated the substantive session to the topic of “Digital and green transformations: exploring the strategic dynamics of experimentation and learning”, defining the conceptual foundations of strategic learning for transformative innovation policy and sharing some experiences of existing initiatives.

3. Strategic learning for transformative innovation policy is also at the core of the 2024 activities of ETIN, the UN-ECE Network on Transformative Innovation, launched at ToS-ICP in 2022 (see box 1 for further information). On that occasion ToS-ICP defined transformative innovation as innovation that can drive significant systemic change towards the Sustainable Development Goals (SDGs), including by accelerating the green and digital

¹ The documents of the session can be found at: [Fifteenth session of the Team of Specialists on Innovation and Competitiveness Policies | UNECE](#)



transitions and helping to meet the triple planetary crisis of climate change, pollution and loss of biodiversity.²

4. Following this introduction, the second section presents the concept of transformative innovation policy and the reasons why it is so much needed today. The third section explores the concept of experimentation and strategic learning for transformative innovation policy. The fourth section advances policy recommendations for policy makers and identify some tools and good practices in the ECE region. The fifth section concludes.

II. Why transformative innovation policy

5. More than ever today governments are called to respond to what is referred to as “grand challenges,” such as addressing climate change, health crisis, and the difficulties of generating sustainable and inclusive growth.³ Those challenges are not only complex but also systemic, interconnected, requiring insights from many perspectives.

6. The response to the challenges is urgent, the risk of doing too little outweighs the risk of doing too much. The traditional policy making process thus is not fit to address grand challenges. The climate emergency, for example, requires a full transformation of energy, agri-food and mobility systems with simultaneous political, economic, behavioural, cultural and technological change needed at multiple levels of governance.⁴ Moreover, the COVID-19 pandemic revealed the limited capability of policy makers to think long-term and to access real-time data, a lack of agility and flexibility and resistance to change.⁵

7. Nowadays, technology is redefining industry structures by creating alternative business models and trade patterns that alter and extend the sources of competitive advantage. Disparate areas of innovation are increasingly intertwined and becoming critical drivers of economic growth. The result is a growing competition among leading knowledge-intensive regions. To remain competitive ECE member States have to understand and master the transformative dynamic of innovation itself.

8. Deep transformations of our societies and institutions are essential to achieve the objectives of the United Nations Agenda 2030 and to accelerate development and economic growth. Not only new technologies are needed but also new social and business models, and innovative infrastructures in the surrounding ecosystem⁶.

9. Against this background, transformative innovation policy is at the core of the change and transformation required. It is defined as a set of strategic measures aimed at promoting research and innovation activities with the goal of transforming social, economic, and environmental systems to create a more sustainable, inclusive, and resilient society.⁷

10. Transformative innovation policy promotes long-term strategic thinking and planning; it aligns research agendas with societal needs and factors in interdisciplinary collaboration and multi-stakeholder engagement to ensure that research and innovation activities are relevant, effective, and widely accepted. In 2022 ToS-ICP dedicated its fourteenth session to transformative innovation policy and identified first policy

² Definition from ToS-ICP policy paper “Transformative innovation for a sustainable future” available at: <https://unece.org/eci/documents/2023/03/working-documents/transformative-innovation-sustainable-future>

³ Mazzucato M., 2017, “Mission-oriented innovation policies: challenges and opportunities”, *Industrial and Corporate Change*, Vol 27, N.5, 803-815.

⁴ OECD, 2015, “System innovation, synthesis report”.

⁵ Palmer E., Cavicchi B., 2023, “Systems-based methods for research & innovation policy - How can they contribute to designing R&I policy for transitions?” R&I paper series, working paper 2023/5, European Commission.

⁶ Shot, J. and Steinmueller, W.E., 2018, “Three frames for innovation policy: R&D, systems of innovation and transformative change” *Research policy*, 47 (9), pp. 1554-1567.

⁷ Definition from: Palmer E., Cavicchi B., 2023, “Systems-based methods for research & innovation policy - How can they contribute to designing R&I policy for transitions?” R&I paper series, working paper 2023/5, European Commission.

recommendations and good practices in the ECE region.⁸ On this occasion ETIN, the UN-ECE Transformative Innovation Network, was launched (see box 1 for more details).

Box 1: The UN-ECE Transformative Innovation Network-ETIN

The UN-ECE Transformative Innovation Network (ETIN) is a strategic platform and meeting place for peer learning and the joint exploration of policies and practices for transformative innovation. The initiative, which was officially launched at the fourteenth session of ToS-ICP in November 2022, is financed by the German Federal Ministry for Economic Affairs and Climate Action (2022-2024).

ETIN has around forty members among government representatives (Azerbaijan, Germany, Portugal, Sweden, The United Kingdom, Uzbekistan), entrepreneurs, academia, other international organisations, think tanks and other networks. The purpose is to gather experts and create a new dialogue on common opportunities and challenges.

In this effort, ETIN works on several fronts. It has produced twenty-one podcasts, and an additional nine live podcasts, discussing different aspects of transformative innovation. ETIN has established three task forces on circular platforms, innovation-enhancing procurement and strategic learning, and it provided novel and substantive input to international fora, such as Innovation Zero 2024, the World Circular Economic Forum and the European Forum for Studies of Policies for Research and Innovation.

ETIN is uniquely positioned to build bridges between transition economies and more developed countries. In September 2023, it held a first meeting in Montenegro to carry out a peer learning exercise in the Western Balkans region. A second follow-up meeting is scheduled to take place in Geneva in May 2024. On 1-3 October 2024 it will organize, in cooperation with the European Commission, an Action Forum, intended to be the first of a series of a peer learning events among changemakers.

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Source: ECE

11. Four elements characterize transformative innovation policy:⁹

(a) **Directionality:** policy measures and actions are intentionally focused on addressing major societal challenges and meeting the SDGs;

(b) **Demand articulation:** users' needs are anticipated and considered to define a shared direction of change and enable the uptake of innovations by users;

(c) **Policy coordination:** policies are coordinated horizontally across different domains beyond research and innovation, including for example agriculture, energy, transport, health, taxation, or finance (as demanded by systemic change) and also vertically across different levels of government;

(d) **Reflexivity:** Space is given for policy learning and experimentation, so that during policy design, options are kept open for the adjustments needed to deal with uncertainty along the policy cycle.

12. The European Union (EU) missions¹⁰ are an example of transformative innovation policies, providing a new model for innovation policy making and implementation.

13. The European Commission Directorate-General for Research and Innovation identified the need to inject a higher degree of directionality to support research and

⁸ These are available at: [Transformative innovation for a sustainable future | UNECE](#)

⁹ Definition from the European Commission.

¹⁰ Mission-oriented policies, as the EU missions, are defined as systemic public policies that “draw on frontier knowledge to attain specific goals”. Definition from Mazzucato M., 2018, “Mission-oriented research & innovation in the European Union -A problem-solving approach to fuel innovation-led growth”, European Commission.

innovation that contributes to solve sustainability challenges. The answers to this need are the EU missions, a key novelty in Horizon Europe. The missions provide a policy framework for tackling the grand challenges and formulate measurable, ambitious and time-bound goals. The missions set a direction for the solutions and do not specify how to achieve success.¹¹ Missions have inter-linked policy structures: institutional entrepreneurship and mission governance that enable collaboration and experimentation, available funding for a portfolio of missions, and the adoption of outcome-based procurement.

Figure 1. **From challenges to missions**



Source: European Commission, 2018, "Mission-oriented research & innovation in the European Union – a problem solving approach to fuel innovation-led growth".

14. In the Framework Programme of Horizon Europe, the European Commission involves external stakeholders in co-creation of strategic planning and programming for example through the EU barometer survey, the Conference on the Future of Europe and the citizens engagement. The EU missions are also an example of both horizontal and vertical policy coordination. The Commission has also been exploring ways to facilitate policy experimentation and regulatory learning, e.g., with the new Staff Working Document on experimentation spaces for regulatory learning.¹²

15. To be successful mission-oriented innovation policy must enable bottom-up experimentation and learning so that the innovation process itself is nurtured through dynamic feedback loops and an unplanned fortunate discovery.¹³

III. Experimentation and strategic learning for transformative innovation policy: the concept

16. Reflexivity has been defined as the capacity to learn from success and failures and experiment with new policy instruments and processes before implementation. Experimenting in small scale allows to learn and scale up the policies that work well. Reflexivity is thus closely linked to demand articulation (e.g., public consultations support

¹¹ European Commission, 2018, "Mission-oriented research and innovation in the European Union: a problem-solving approach to fuel innovation-led growth".

¹² European Commission, Directorate-General for Research and Innovation, 2023, "Horizon Europe strategic plan 2025-2027 analysis", Publications Office of the European Union.

¹³ Mazzucato M., 2018, "Mission-oriented innovation policies: challenges and opportunities", Industrial and Corporate Change, Vol 27, N.5, 803-815.

policy learning) and policy coordination (e.g., policy learning and experimentation can be used to adapt policy design and implementation as new needs and evidence emerge).¹⁴

17. The interaction between *innovation*, *experimentation*, and *learning* is fundamental. These interconnected forces drive progress and growth in various aspects of human endeavor. As such, they are the cornerstones of transformation.

(a) *Innovation* serves as the catalyst for change, inspiring individuals and societies to seek breakthroughs and improvements, by applying creative ideas and novel approaches to tackle existing problems or seize new opportunities.

(b) *Experimentation* is needed for a more elaborate process of learning. Large-scale sustainable transformations require an increasing amount of experimentation at all levels, including the systemic level, where experimentation has happened relatively little. Policy experimentation needs to be aligned with the direction of the change that is sought.

(c) *Learning*, finally, constitutes the driving force behind innovation and experimentation, by providing the process through which we acquire new knowledge, skills and insights that enhance our adaptability, resilience, and capacity to innovate.

18. The interconnectedness of *innovation*, *experimentation* and *learning* is what makes the entire process strategic. These elements are not standalone components but are deeply interconnected, forming a cohesive triad that drives progress and continuous improvement across various sectors. Securing appropriate and efficient feedback loops on results of experimentation and implementation is a critical component of innovation policy, adding to the careful selection of policy instruments and models.

19. The concept of strategic learning is dynamic and iterative, involving continuous adaptation and refinement of policies and practices to align with new insights and feedback. Such an approach is essential not only for navigating the complexities of policy implementation but also for developing new policies that are forward-looking. Thus, the notion of strategic learning as a vital tool to address global challenges is a critical and integrated part of policy development.

20. Learning, in its various facets, needs to be an integrated part of both the formulation and implementation of policies, particularly in situations characterized by uncertainty and rapid change. To support transformative innovation, the policy cycle has to enable strategic learning and adaptive policy development, evaluating the effects of different policy options, fostering collaborative governance and cross-sectoral collaboration, and long-term policy orientation.¹⁵

21. The case of Horizon Europe illustrates how experimentation and learning have been integrated in the policy making process of the EU Commission. Horizon 2020 and Horizon Europe responded to the need to address the lack of reflexivity throughout the lifespan of the project. They introduced public and inter-service consultations which provide opportunities for adaptations and revisions throughout the policy cycle. Moreover, in 2022 the European Commission adopted the New European Innovation Agenda¹⁶ to push forward the need for experimentation in innovation policy and, in 2023 it adopted the Staff Working Document on regulatory learning,¹⁷ which provides guidelines on how to run experiments with regulatory sandboxes, testbeds and living labs.

22. There are different policies and tools that governments can use for experimentation and strategic learning for transformative innovation. The next session explores some of those

¹⁴ Definition from the European Commission, 2023, “The transformative nature of the European Framework Programme for Research and Innovation”, R&I Paper Series, policy brief.

¹⁵ Palmer E., Cavicchi B., 2023, “Systems-based methods for research & innovation policy - How can they contribute to designing R&I policy for transitions?” 2023, R&I paper series, working paper 2023/5, European Commission.

¹⁶ https://research-and-innovation.ec.europa.eu/strategy/support-policy-making/shaping-eu-research-and-innovation-policy/new-european-innovation-agenda_en

¹⁷ https://research-and-innovation.ec.europa.eu/news/all-research-and-innovation-news/new-commission-staff-working-document-sheds-light-experimentation-spaces-regulatory-learning-2023-07-25_en

policies and tools based on good practices in the ECE region with the aim to identify policy recommendations.

IV. Strategic learning for transformative innovation – policies and tools in the ECE region

23. As argued in the section above, transformative innovation policies need to be dynamically informed and shaped by the continuous interplay among innovation, experimentation and learning to effectively respond to evolving societal and technological challenges. Policy makers are called to anticipate and adapt the policy portfolios according to the new evidence acquired and the evolution of events over time. The following policies and possible tools are recommended:

a. Ensuring flexibility and agility in policy development

24. Transformative innovation policies must have the **flexibility and agility** to consider the learning as we do (continuous learning), the learning from the past (e.g., similar projects in the past) and the learning about the future (innovation foresight exercises). The direction set out by the policy requires regular assessment and adaptation; therefore, informed policy experimentation should allow for regular adjustments of milestones, instruments and actions while maintaining the overall strategic alignment with the directionality chosen.

25. A good example of this is the Swedish Innovation Agency (*Vinnova*) - *Challenge Driven Innovation Programme*,¹⁸ which combines directionality and flexibility. The programme defines the overarching challenges to address and the objectives to meet, thus providing long-term orientation. Some of the projects funded deal with solving difficult societal challenges such as the climate crisis, the development of sustainable cities and transport systems and social vulnerability. The projects themselves define the solutions and choose the actors to involve so providing short-term flexibility.

26. At ToS-ICP, experts highlighted the need to support decision making and accelerate transformation with the integration of different *strategic intelligence*¹⁹ tools in policy making. Among those tools, *innovation foresight* combines past and potential future insights to help decision making. It can support the agenda setting, provide a direction and develop joint visions regarding new and emerging technologies. It also helps policy evaluation in assessing the impact of innovation policies.²⁰ Panels of informed citizens and stakeholders can for example be involved in a foresight exercise, to generate and discuss desirable scenarios when defining missions. This is the case, for example, of the *Austrian programme Mobility for the Future*²¹ which benefited from a foresight exercise conducted in cooperation with six different ministries. The exercise contributed to defining a research and innovation policy roadmap for the future development of mobility research and innovation.

b. Experimentation and learning within the policy cycle

27. Transformative innovation policies should **take up policy experimentation and learning within the policy cycle**. *Regulation and in particular regulatory sandboxes*²² can

¹⁸ <https://www.vinnova.se/en/m/challenge-driven-innovation/this-is-cdi>

¹⁹ Strategic intelligence refers to the provision of knowledge and evidence and its utilization in decision-making processes related to the formulation of Science Technology and Innovation policies and strategies, the allocation of resources and the governance of science and technologies (definition from Robinson D., Winickoff D., and Kreiling L., 2023, “Technology assessment for emerging technology: meeting new demands for strategic intelligence”).

²⁰ OECD, 2023, “OECD science technology and innovation outlook 2023: enabling transitions in times of disruption”, OECD Publishing, Paris.

²¹ [Mobility of the Future | STIP Compass \(oecd.org\)](#); “Mobility of the future - the research, technology and innovation program for mobility 2012-2020, the Federal Ministry for Transport, Innovation and Technology of Austria.

²² Regulatory sandboxes generally refer to regulatory tools allowing businesses to test and experiment with new and innovative products, services or businesses under supervision of a regulator for a limited period of time. As such, regulatory sandboxes have a double role: 1) they foster business learning, and

be a tool to facilitate learning. To strengthen policy and administrative learning, regulatory knowledge gain must be a key consideration in the design of regulatory sandboxes. Their design and implementation should be directly related to a regulatory question and a vision for an improved regulatory framework.²³

c. Adopting a portfolio approach

28. Transformative innovation policies should have a **portfolio approach** with a framework and **methodologies for appraisal and evaluation**. To date, only a few evaluation approaches successfully go beyond evaluation for accountability purposes with the explicit aim of analyzing how innovation policies support change in systems.²⁴ *Monitoring and evaluation* are one of the main tools for strategic learning. They have the dual purpose of supporting accountability and learning for adaptive policymaking to meet the complexity and uncertainty of transformative innovation.²⁵ When it comes to transformative innovation policy, new models and criteria for monitoring and evaluation are needed. *Formative evaluation*, a systematic approach, focuses on learning for development and adjustments rather than an external assessment for accountability which is the dominant purpose of ex-post evaluation approaches.²⁶

d. Ensuring policy coordination and mutual learning in the process

29. To advance systemic change, governments must ensure **policy coordination**, to define the change and the direction to follow, align policies and instruments in different domains with the strategic priorities and ensure policy coherence and synergies. **Policy experiments should be informed, based on learning throughout the process and among the different institutions and actors involved**, and should use a *mix of supply, demand and systemic instruments* that mutually support each other.

30. *Pilot-E in Norway*²⁷ is a good example of policy coordination with the use of a mix of dedicated instruments. Three agencies systematically coordinate their actions and sequence effectively different instruments (technology-push and market-pull funding instruments) to provide tailored support to industry-led consortia along all the different phases of the innovation chain from research to market deployment to climate emissions free and energy saving solution. Pilot-E aims at concrete results such as the deployment of new full-scale solutions in energy and transportation (e.g., electric ships) but without indicating any pre-chosen technology. Pilot-E is a joint funding scheme governed by a dedicated structure of governance of the three agencies.²⁸ The learning is continuous as the funding agencies and the applicants interact closely not only during the mobilisation phase but also during the evaluation process with tailored guidance to the applicants. The coordination approach of the agencies is also instrumental to diversify the risk and explore different technological options for various market segments.

e. Ensuring multi-level governance

31. The process of learning for transformative innovation policy needs to involve different levels of government, different departments and ministries to find agreement. There is a need to define what regional, national and local levels of government can provide, avoiding

2) support regulatory learning. In practice, the approach aims to enable experimental innovation within a framework of controlled risks and supervision, and to improve regulators' understanding of new technologies (definition from the European Parliament Research Service).

²³ For ECE work on innovation in the public sector, including regulatory sandboxes consult: [Public Sector Innovation for web.pdf \(unece.org\)](#)

²⁴ Borrás S., M. Laatsit, 2019, "Towards system-oriented innovation policy evaluation? Evidence from EU 28 member states", *Research Policy*, Vol 48/1, pp. 312-321.

²⁵ Magro E., J. Wilson, 2019, "Policy-Mix evaluation: governance challenges from new place-based innovation policies", *Research policy*, Vol. 41/6, pp 955-967.

²⁶ European Commission, DG RTD, 2023, "Experimenting with transformative innovation policy: theoretical and practical perspectives".

²⁷ <https://www.enova.no/pilot-e/information-in-english>.

²⁸ OECD, 2021, "The design and implementation of mission-oriented innovation policies – a new systemic policy approach to address societal challenges", *OECD Science, Technology and Industry policy papers*, n. 100.

overlaps. Governments should thus ensure **multi-level governance** with horizontal and vertical coordination. Participants at ToS-ICP agreed upon the need for cross-sectoral and institutional coordination and cooperation at the national and international level.

32. A good example of multi-level governance coordination is the *Netherlands Mission-Driven Top Sectors and Innovation Policy (MTIP)*²⁹ that strongly engages all relevant partners including the private sector. This is one of the most ambitious mission-oriented strategic frameworks as it systematically structures the interaction between economic actors and societal missions. The theme “Agriculture, water and food”, for instance, has the objective of making the agriculture and nature system carbon-neutral by 2050. The policy has a three-layer governance framework: at the level of the overall policy (steering committee); within each top sector; and for each of the societal themes. Moreover, within each societal theme, a thematic team oversees the activities and mission teams take care of implementation. Representatives of government departments, universities and research institutes, regions and investors are part of the teams. Various officials of ministries and regional authorities are involved in the sectoral and thematic bodies to facilitate policy and regulatory co-ordination, together with business firms, research organisations and other stakeholders.

f. Creating dynamic and participatory spaces and processes

33. To build legitimacy, transformative innovation policy needs **continuous stakeholder engagement**. The process of strategic learning needs to involve the actual users from the beginning, not only experts and economic actors, but also citizens to create commitment and buy-in and promote legitimate policy decisions.³⁰ A process is needed to capture all their inputs in the decision making. To this extent, *living labs* are a good tool to engage a broad range of stakeholders to identify problems and challenges, co-create innovative solutions and build actor networks in support of such solutions.

34. An example of engaging with stakeholders with different means is the *Industrial Strategy Challenge Fund in the United Kingdom*.³¹ Here the government identified the challenges (such as clean growth and future of mobility) through an internal wide consultation and extensive external engagements with experts and stakeholders through workshops and direct negotiations with the industry. Industry actors were mobilised through a bottom-up process. The government used series of 'deep-dive sessions' within challenge areas to scope key areas of interest from industry and academia community for cross-sector collaboration and to raise awareness on the funding opportunities. These events included a mix of plenary sessions and brainstorming and community building break-out groups.

g. Fostering a culture of participation and learning

35. Finally, a good policy practice emerging in the ECE region is the fostering of a **culture of experimentation and learning in public sector organisations**. This is achieved through building staff competencies and skills and by creating organisational routines that allow for experimentation and learning in daily practices. It makes experimentation and learning a structural feature of policy making, allowing for risk taking and dealing with failure, without which experimentation will not happen. This is implemented by workshops, trainings and dedicated innovation teams for testing new approaches and experimenting with new ideas. Governments should develop holistic and values-based leadership, responsiveness and agility, evaluation and iteration, a culture of evidence, and human resource management processes that develop the skills of individuals.³²

²⁹ OECD, 2021, “The design and implementation of mission-oriented innovation policies – a new systemic policy approach to address societal challenges”, OECD Science, Technology and Industry policy papers, n. 100.

³⁰ Paunov C. and S. Planes – Satorra, 2023, “Engaging citizens in innovation policy”, OECD Publishing Paris.

³¹ [UKRI Challenge Fund: for research and innovation - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

³² Van Oers, L. et al., 2023, “Unlearning in sustainability transitions: Insight from two Dutch community-supported agriculture farms”, Environmental innovation and Societal Transitions Vol. 46, p. 100693.

36. The *Danish Design Centre*,³³ as an example, has developed a core learning culture for the whole project portfolio. Employees have adopted the practice of questioning and interviewing colleagues, creating dialogue and training people. Its experience highlighted the necessity to build new collaborations and new forms of consortia.

37. Based on all the above, the table below summarizes key recommendations and related good practices and tools for experimentation and learning for transformative innovation policy.

Table 1. Recommendations and tools for experimentation and learning for transformative innovation policy

<i>Policy recommendation</i>	<i>Tools and practices</i>
a. Ensure flexibility and agility in policy development with regular assessments and adjustments to maintain alignment with the direction chosen by the policy	<ul style="list-style-type: none"> ✓ Strategic intelligence tools ✓ Innovation foresight ✓ Formative evaluation and assessments
b. Uptake experimentation and learning during the whole policy cycle	<ul style="list-style-type: none"> ✓ Regulation and regulatory sandboxes ✓
c. Adopt a portfolio approach with a framework and methodologies for appraisal and evaluation	<ul style="list-style-type: none"> ✓ Monitoring and evaluation ✓ Formative evaluation
d. Ensure policy coordination, alignment of policies and instruments in different domains, policy coherence and synergies and mutual learning throughout the policy cycle	<ul style="list-style-type: none"> ✓ A mix of supply, demand and systemic instruments in policy experiments (e.g., technology-push and market-pull funding instruments)
e. Ensure multi-level governance with horizontal and vertical coordination, involving different levels of government, departments and ministries	<ul style="list-style-type: none"> ✓ Cross-sectoral and institutional coordination and representation ✓ Cooperation at national and international levels
f. Create dynamic and participatory spaces to increase the quality of the decision-making process, ensure commitment and buy-in	<ul style="list-style-type: none"> ✓ Living labs ✓ Workshops and break-out groups ✓ Deep-dive sessions and direct negotiations with industry
g. Foster a culture of experimentation and learning in public organizations. Develop appropriate skills and organisational capabilities within the public sector to make experimentation and learning a structural feature of policy making	<ul style="list-style-type: none"> ✓ Workshops ✓ Trainings ✓ Interviews ✓ Dedicated innovation teams

Source: ECE

V. Conclusions

38. Governments, businesses, and civil society are called to respond to “grand challenges”, systemic, interconnected, urgent challenges that require insights from different perspectives.

³³ As presented by the Danish Design Centre at ToS-ICP 2023.

39. Transformative innovation policy is at the core of the transitions required, as it promotes long-term strategic thinking and planning, it aligns research agendas with societal needs and facilitates interdisciplinary collaboration and multi-stakeholder engagement.

40. Strategic learning is the driving force behind innovation and experimentation, as it provides the process, through which we acquire new knowledge, skills and insights to enhance adaptability, resilience and capacity to innovate. It is a dynamic and iterative process which requires continuous adaptation and the refinement of policies and practices; it allows to develop forward looking policies and it is a critical and integrated part of policy development and implementation.

41. At its fifteenth session ToS-ICP identified a first set of policy recommendations, tools and practices on strategic learning for transformative innovation. The work will be taken forward by ETIN, who has elected strategic learning as a core theme of its agenda in 2024. An ETIN working group on strategic learning for transformative innovation was established in January 2024 with the purpose to investigate the efficient use of strategic learning as a critical part of transformative innovation policy.

42. Moving forward, ETIN will work closely with policy makers and experts to explore the various ways in which alternative modes and processes for strategic learning influence experimentation and innovation as a vehicle for sustainable transformative change. Representatives of governments, industry, academia and civil society will exchange experiences and engage in a process-oriented work to complement and enforce already existing policy interventions to support transformative innovation.

43. Strategic learning has so far received less attention than other components of transformative innovation policy. This shortcoming is particularly noteworthy given the close link between *experimentation* and *learning* as the principal pillars of *innovation*. Thus, to pursue transformative innovation there is an imminent need for both transition economies and more developed economies to better understand the dynamics of strategic learning. In response to the observations raised at ToS-ICP, along with more informal requests from some beneficiary countries for future capacity building on strategic learning, ETIN is developing a specific workstream on strategic learning. In parallel, the ETIN secretariat is currently working to mobilize the necessary funds to secure the continuity of ETIN and make the latter a long-term, meaningful endeavor.
