



Economic Commission for Europe

Committee on Innovation, Competitiveness and Public-Private Partnerships

Team of Specialists on Innovation and Competitiveness Policies**Fifteenth session**

Geneva, 22 and 23 November 2023

Item 2 of the provisional agenda

Review of the work of the Team of Specialists on Innovation and Competitiveness Policies since its fourteenth session**Progress report on the Innovation for Sustainable Development Review of Ukraine****Note by the secretariat¹****I. Background**

1. In 2020, Ukraine participated in the inaugural ECE Sub-regional Innovation Policy Outlook: Eastern Europe and the South Caucasus.² The Outlook assessed and benchmarked the scope, quality, and effectiveness of innovation policies, institutions and processes relative to sub-regional peers and international good practice, identified common strengths and weaknesses, and recommended policy reforms to address them. Subsequently, Ukraine participated in regular policy dialogues among the national focal points for the Innovation Policy Outlook to discuss the implementation of innovation policy reforms. Ukraine also participated in an Interim Innovation Policy Outlook in 2022 that updated some of the earlier findings and took a more in-depth look at two key innovation policy issues of shared concern to all participating countries: enhancing science-business linkages, and innovation-enhancing procurement.³

2. In 2022, ten years after ECE first reviewed Ukraine innovation performance and policies⁴, the Government of Ukraine requested a new national Innovation for Sustainable Development Review to complement the comparative assessment in the sub-regional Outlook, to assess progress made since the first Review, to analyse how innovation contributes to achieving the country's national sustainable development priorities, and to develop recommendations for further policy reforms in support of innovation for sustainable development in light of good policy practices developed under the Committee.

¹ This document has not been formally edited.

² United Nations Economic Commission for Europe (2021), [Sub-regional Innovation Policy Outlook 2020: Eastern Europe and the South Caucasus](#), New York-Geneva.

³ United Nations Economic Commission for Europe (2022), [Interim Sub-regional Innovation Policy Outlook 2022: Eastern Europe and the South Caucasus](#), New York-Geneva.

⁴ United Nations Economic Commission for Europe (2013), [Innovation Performance Review of Ukraine](#), New York-Geneva.

3. Based on the Government's request, the Committee at its fifteenth session on 2-4 June 2022 included the Review in its implementation plan for work in 2022-2023 (Decision 2022 – 4b.4).
4. Extrabudgetary support for the Review is being provided by the Government of Sweden under the project “Promoting innovation policy capacities in Eastern Europe and the Caucasus”.
5. The Russian invasion of Ukraine has set the country back years on its path towards sustainable development.⁵ It has caused massive destruction of critical infrastructure and has displaced millions of people. The economy shrank by 30 percent in 2022,⁶ an estimated 30 percent of pre-war jobs have been lost, nearly half of Ukraine population need humanitarian aid,⁷ and the impact of the war on the environment could take generations to reverse.⁸
6. All this has profound implications for the country's policy priorities, including in the sphere of innovation for sustainable development, as well as for policy design and implementation. A joint assessment by the Government of Ukraine, the World Bank Group, the European Commission and the United Nations estimates that the investment needs for reconstruction and recovery amount to USD 411 billion.⁹
7. The Government of Ukraine is in the process of developing a new national Strategy on Science, Technology and Innovation, as well as a new Roadmap on Sustainable Development and a State Strategy of Regional Development until 2027. The Review is therefore particularly timely.

II. Status of the project

8. Together with the national focal points for the project, the secretariat has developed a structure for the Innovation for Sustainable Development Review, while taking into account limitations in data availability, the high degree of volatility in the current situation, and the unpredictability of developments in the short term.
9. The Review focuses on (i) providing context by drawing on relevant case studies from other major conflicts,¹⁰ (ii) identifying options for effective innovation policy making under the current, very challenging circumstances, and (iii) developing scenarios for policies promoting innovation for reconstruction and, ultimately, sustainable development.
10. The secretariat has developed a mapping of innovation policy stakeholders in Ukraine as well as of key international partners, together with the national focal points for the Review.
11. The secretariat has also carried out desk research on the impact of the war on the country's national innovation system and has drafted an overview chapter for discussion with the national project focal points and the wider innovation policy stakeholder community. Like the economy overall, innovation capacity has been damaged severely by the war.¹¹ Among the preliminary findings are the following:

⁵ For a recent assessment of the impact of the war on the other 16 programme countries in Europe and Central Asia, see United Nations (2023), Implications of the war in Ukraine for sustainable development in Europe and Central Asia.

⁶ International Monetary Fund (2023), [Datamapper – real GDP growth](#), Washington D.C..

⁷ United Nations Office for the Coordination of Humanitarian Affairs (2023), [Ukraine | OCHA \(unocha.org\)](#).

⁸ United Nations Environment Programme (2022), [The Environmental Impact of the Conflict in Ukraine: A Preliminary Review](#).

⁹ World Bank et al. (2023), [Updated Ukraine Recovery and Reconstruction Needs Assessment \(worldbank.org\)](#).

¹⁰ Incidentally, part of the external financing provided to European countries under the European Recovery Program (“Marshall Plan”) after World War II was intended to support productivity increases in recipient countries through technology upgrading, a form of innovation. See Centre for Economic Policy Research (2022): Paris Report on [Rebuilding Ukraine: Principles and Policies](#).

¹¹ Organisation for Economic Co-operation and Development (2022), [Building back a better innovation ecosystem in Ukraine](#)”, Paris.

(a) *The innovation system has experienced a large loss of human capital.* In addition to tens of thousands of civilian casualties, over six million people have fled to neighbouring countries.¹² Some estimates put the share of the R&D workforce that has left the country at 25 percent.¹³ Thousands of schools and colleges have been damaged or destroyed. Millions of students have had their education disrupted. The capacity for academic research has been affected by the physical damage to research infrastructure and by the loss of human capital.

(b) *The business sector has experienced a significant loss of R&D capacity.* The shrinking economy leaves companies with fewer investible resources. The linkages between science and business, and among businesses, that are so critical for an effective national innovation system, have also been severely disrupted, not least because, in addition to those who have fled the country, over 5 million people have become internally displaced.¹⁴

(c) *Many potential innovators have experienced a dramatic loss in their ability to bear risk.* Innovation is a highly risky activity in the best of times. The economic hardship caused by the war has depleted the resources of many innovators, while the complete uncertainty about how the situation in Ukraine will evolve in the short to medium term is making innovation riskier than ever.¹⁵

(d) *The impact of the war creates unique challenges for policy making,* including in the sphere of innovation for sustainable development. These include unprecedented uncertainty about the future, severe constraints on human capacity and fiscal resources, and deteriorating quality and scope of data for ex ante and ex post policy monitoring, evaluation and learning.

(e) Nonetheless, *innovation will have a key role to play in the economic, environmental and social reconstruction* of Ukraine as a key driver of long-term sustainable development. In fact, there are already examples of companies adapting to the difficult economic situation through technological and management innovations.¹⁶ However, the overall environment for innovation remains extremely challenging.

12. The secretariat has assembled a team of leading international and national experts to provide additional analysis and to support the secretariat in developing findings and policy recommendations in light of international good practice.

13. An initial round of fact-finding consultations between the secretariat, the international expert team and national innovation policy stakeholders is being conducted at the time of writing.

III. Way forward

14. Based on the results of the initial round of fact-finding consultations, the ECE team will draft the analysis, findings and recommendations of the Review in the first quarter of 2024. Additional fact-finding consultations will be undertaken as required. A comprehensive peer review will be carried out to ensure maximum quality.

15. The secretariat will, together with the national focal points, explore the best possible strategy for making the Review's findings and recommendations available to the Government in a timely fashion. The secretariat aims to present the findings and recommendations to the 2024 session of the ECE Committee on Innovation, Competitiveness and Public-Private Partnerships.

¹² Office of the United Nations High Commissioner for Refugees (2023), [Ukraine emergency](#).

¹³ Organization for Economic Cooperation and Development (2022), [Building back a better innovation ecosystem in Ukraine](#)". Paris.

¹⁴ Office of the United Nations High Commissioner for Refugees (2023), [Ukraine emergency](#).

¹⁵ A recent survey of Ukrainian small and medium-sized enterprises commissioned by the European Bank for Reconstruction and Development finds that many businesses have shortened their planning horizons to a month, and only few work on longer-term strategies. See European Bank for Reconstruction and Development (2023), [Challenges and Needs of SMEs in War Time](#).

¹⁶ See for instance Chatham House (2023), [Ukraine business resilience can inform reconstruction](#).

16. Accompanying Ukraine in its efforts to maximize the benefits of innovation for a resilient, sustainable reconstruction is a long-term endeavour. ECE will seek additional extra-budgetary funding for follow-up analysis and support of innovation policy reforms in 2024 and beyond.
