Shared challenges, transformative actions

OECD Science and Technology Policy Ministerial

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Issues Brief

BETTER POLICIES FOR BETTER LIVES

Partnerships for Climate Action and Biodiversity:

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This document outlines several issues relevant to STI policy makers in their efforts to foment partnerships for climate change and biodiversity as part of the OECD Science and Technology Policy Ministerial Meeting of 23-24 April 2024. The debate will take place as part of the Multistakeholder High-Level Dialogue on 23 April at the OECD Conference Centre in Paris, from 14H05 to 15:50 CEST. It will gather experts, academics, policy makers and business representatives to discuss how STI partnerships can effectively address climate change and biodiversity challenges.

The Dialogue will inform the Ministerial Meeting on 23-24 April. This international gathering is set under the theme of "Shared challenges, transformative action" and aims to define internationally a transformative science, technology and innovation policy agenda focused on sustainability transitions, and how the OECD can best support countries. More information on the events can be found here: https://www.oecd-events.org/mm24/en

Relevant policy issues for discussion

1. **The success of STI strategies for green transitions demands comprehensive and balanced goals, integrated into policy programmes and assessed using modern technical tools.**

   Objectives related to achieving the net-zero greenhouse gas emissions target dominate on green STI policy agendas, while other goals – notably those related to biodiversity – are given less attention. This results in green STI policies disregarding potential synergies and trade-offs between climate, biodiversity and other green objectives. Developing more comprehensive STI strategies for the green transition that encompass various objectives and their associated targets is consequently important, provided that diluting actions due to multiplicity of objectives is avoided. These efforts should be done jointly with countries internationally.

   Their effective inclusion into policy programmes and assessing how they perform is key and requires embracing also experimental methods. Digital technologies facilitate gathering, sharing and analysing data and should be leveraged as much as possible, also for these policy purposes. Leveraging globally shared data infrastructures to track developments and establishing effective global governance systems to coordinate action is essential.

2. **STI partnerships for climate change and biodiversity, building on (international) public-private STI partnership experiences is a key success factor.**

   STI partnerships between research institutions, industry and civil society are uniquely placed in contributing to tackling climate change and biodiversity loss, if they engage widely, effectively, and in a cross-disciplinary way. These engagements should also involve citizens and local communities to raise their awareness, identify solutions that are most likely to be adopted and leverage their expertise and knowledge.

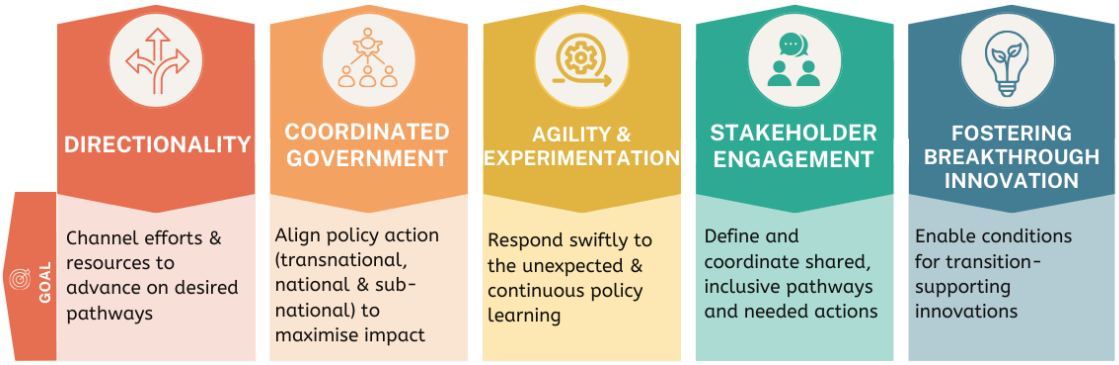
   International collaboration in addressing these global challenges can help speed up progress by pooling joint experiences. This should also involve supporting STI capability building of developing countries in these fields.

3. **Progress requires setting incentives for the private sector to engage in climate and biodiversity-friendly innovations.**

   The magnitude of the STI investments needed to curb climate change and reverse biodiversity loss requires the private sector engages in these efforts. Governments should continue to take action to incentivise businesses investments in innovation to tackle climate change. At the same time, it would be important to step up efforts to creating markets and demand for biodiversity friendly innovations and raise the costs for those that have adverse effects on the environment. This can be done by embedding biodiversity requirements into public procurement processes, establishing standards, regulations and economic incentives for biodiversity conservation and its sustainable use, and mobilising private finance to support biodiversity projects.

These actions align with the policy framework summarised in Figure 1, which identifies key STI policy approaches and tools to advance on the ambitious goals of the twin green and digital transitions.

Figure 1. Five key STI policy approaches and tools for transitions



Source: Arnold, E., et al. (2023), "Navigating green and digital transitions: Five imperatives for effective STI policy", OECD Science, Technology and Industry Policy Papers, No. 162, OECD Publishing, Paris, https://doi.org/10.1787/dffb0747-en.

Potential OECD role in this area

The OECD could facilitate and contribute to international action in this area by:

- **Supporting countries define a balanced set of green STI policy objectives and effectively integrate them in STI policy in practice**.

  This requires identifying best practice in establishing targets that encompass both climate and biodiversity goals, address possible trade-offs across objectives, and deal with their long-term sustainability over the business cycle.
- **Exploring the most effective mechanisms to incentivise business R&D and innovation investments in the field of climate and biodiversity**.

  This involves understanding how to best maximise the potential of demand-side policies, such as incorporating requirements into public procurement processes. It also requires looking into ways for establishing effective international standards and regulations in green innovation areas that in turn encourage the private sector to invest more in STI projects that benefit biodiversity.
- **Articulating the policy rationales for supporting international collaboration in research and innovation for climate and biodiversity, and identifying mechanisms to best stimulate it.**

Given that the bulk of STI policies are set nationally, it will be valuable to strengthen international collaboration in research and innovation for tackling global climate and environmental challenges, while contributing to local and national socio-economic goals. Regarding biodiversity, such efforts in the field of STI policy can increase their impacts by engaging in ongoing international efforts to implement the goals and targets set by the Kunming-Montreal Global Biodiversity Framework (GBF), adopted in 2022.