

R&D policies for better post-pandemic futures: new approaches and tools

WORKING PARTY ON INNOVATION AND TECHNOLOGY POLICY

Virtual event | 20 and 21 May 2021

AGENDA



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Ministry of Economic Affairs
and Employment of Finland

VTT



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BETTER POLICIES FOR BETTER LIVES

LAUNCH EVENT:

R&D policies for better post-pandemic futures: New approaches and tools

Virtual event

Date: 20 and 21 May 2021

Time: 12h45-15h30 CEST (online connection at 12h15)

Register at: vttresearch.com/rd-post-pandemic

Introduction to the event

The COVID-19 pandemic and the policy responses to the crisis are expected to result in **lasting changes for science, technology and innovation (STI)**. The unequal impacts of the crisis on R&D investments across sectors and the accelerated adoption of digital tools and techniques for research and innovation purposes are, among others, likely to shape post-pandemic STI systems. These may be characterised by the widespread use of digital tools such as virtual conferencing for collaborative research, and artificial intelligence (AI) to optimise research processes; an increasing business focus on digital innovations to respond to growing demand for digital applications; and the wider automation of business processes to increase their resilience to future shocks. Not all actors however are equally prepared to adapt swiftly to the new context. Some sectors and firms are being severely hit by the crisis, and are less able to benefit from digital tools due to insufficient capabilities or resources to invest in them. This threatens to widen the gap between leading firms, sectors and research institutions that thrived during the crisis and the rest, particularly SMEs.

The purpose, design and execution of **STI policies could also experience fundamental changes** as resilience, environmental sustainability and inclusiveness become more prominent objectives on policy agendas. Systems approaches –which consist in setting policies considering that they are addressing issues that are part of a complex system of systems– could gain ground in policy making, but important questions remain on how to implement them in practice in the most efficient way.

This event will aim at identifying what are the main challenges facing STI systems in the post-pandemic world, particularly in terms of industrial inclusiveness, and exploring what could be efficient policy responses. By bringing together policy makers, business representatives and leading scholars, the event will aim at exploring innovative policy approaches. These will necessarily build on lessons from the past, particularly those stemming from country case studies developed in the context of the OECD TIP project on R&D intensity: extensive experiences across countries in targeting R&D investments and providing appropriate framework conditions for innovation provide invaluable insights to better understand what policies work under which conditions.

The event marks the launch of the outcomes of the 2019-20 OECD TIP project on R&D intensity. It is organised in two sessions:

- Day 1 (20 May 2021) will focus on exchanging evidence between academics and practitioners on the changing nature of innovation in the COVID-19 context and the implications for the future of STI policy, focusing in particular on policy responses to ensure inclusiveness of STI systems and the implementation of systems transformation approaches in practice.
- Day 2 (21 May 2021) will host high-level policy discussions on future directions of innovation policy, based on perspectives from policy makers and business representatives

The event is organised jointly by the OECD Working Party on Innovation and Technology Policy (TIP), the Ministry of Economic Affairs and Employment of Finland and the VTT Technical Research Centre of Finland.

Expected outcomes:

- Present the insights of the 2019-20 TIP project on R&D intensity and their implications for the future of R&D policy in light of current developments
- Invite the perspectives of scholars and practitioners from government, industry, and academia to discuss policy lessons for R&D intensity targeting today

AGENDA

Day 1: EVIDENCE SESSION

Thursday, 20 May 2021

Welcome and introduction

12h45-13h10

Opening of the event and initial perspectives:

- **Göran Marklund**, Deputy Director General and Head of Operational Development at VINNOVA and Chair of the OECD Working Party on Innovation and Technology Policy (TIP)

Introduction to the agenda:

- **Arho Suominen**, Principal Scientist, VTT Technical Research Centre of Finland Ltd
- **Caroline Paunov**, Head of Secretariat for the OECD TIP Working Party, OECD Directorate for Science, Technology and Innovation

Panel 1. The digitalisation of science and innovation in the time of COVID-19: opportunities and challenges for industrial inclusiveness

13h10-14h05

The pandemic considerably accelerated the adoption of digital products and services such as videoconferencing, digital collaboration tools, video and entertainment streaming, online shopping, e-learning and e-health. An acceleration in the business uptake of digital technologies has also been observed, including among traditionally low-tech industry segments such as retailers, restaurants and museums.

These trends have offered opportunities for some businesses, but posed important challenges for others. The ability to digitalise processes and products varies across sectors and firms and highly depends on prior capabilities, which tend to be higher among larger firms. This session will explore the implications of accelerated adoption of digital tools and techniques by less innovative firms and in traditional sectors to gauge the “industrial inclusiveness” of STI systems.

Key questions

- COVID-19 is accelerating the adoption of digital technologies and tools for science and innovation. What are the positive and less desirable implications for the inclusiveness of STI ecosystems?
- What role should policy play in ensuring these processes are industrially inclusive (i.e. do not leave SMEs and other actors behind)?
- What is the role of R&D as digitalisation changes the nature of innovation? How do traditional business R&D and digitalisation processes interact?

Chair: **Margherita Russo**, Professor at University of Modena and Reggio Emilia

Perspectives from TIP work:

- **Caroline Paunov**, Head of Secretariat for the OECD TIP Working Party, OECD Directorate for Science, Technology and Innovation

Speakers:

- **Paavo Ritala**, Professor of Strategy and Innovation, Lappeenranta University of Technology
- **Marianne Saam**, Professor of Innovation Economics and Policy at the Center for Entrepreneurship, Innovation and Transformation, Ruhr University Bochum, Germany
- **Nathan Brown**, Senior Policy Adviser, Confederation of British Industry (CBI), UK
- **Wonjoon Kim**, Head of the Graduate School of Innovation and Entrepreneurship, and Professor at the School of Business and Technology Management, KAIST

14h05-14h20: Coffee break

Panel 2. The changing nature of innovation policies: moving towards systems transformation approaches

14h20-15h15

The COVID-19 crisis highlights the need for new approaches to better understand the nature of global challenges and articulate appropriate policy responses that take into account the complexity and interconnectedness of systems. Systems approaches consist of setting policies considering that they are addressing issues that are part of a complex system of systems (economic, social, political, environmental, etc.), and that changes in one component may directly or indirectly shape impacts in others.

Systems approaches are not new to STI policy thinking. However, applying systems perspectives to the post-COVID-19 STI policy agenda is not straightforward in practice. New approaches to policy that effectively account for system dependencies and enable real-time STI policy making to respond to future shocks have yet to be developed.

Key questions:

- How can systems transformation approaches be implemented in practice?
- Which capabilities will we need at the policy end to implement such approaches?

Chair: **David Legg**, Regional Manager for London and South East England, Innovate UK, and Vice-Chair of the OECD TIP Working Party

Perspectives from TIP work:

- **Sandra Planes-Satorra**, Policy Analyst, OECD Directorate for Science, Technology and Innovation

Speakers:

- **Erkko Autio**, Chair in Entrepreneurship and Technology Venturing, Imperial College London
- **Maria Savona**, Professor of Economics of Innovation at SPRU, University of Sussex (UK) and Department of Economics and Finance, Luiss University, Rome (Italy)
- **Gaetán de Rassenfosse**, Assistant Professor, École Polytechnique Fédérale de Lausanne (EPFL), Switzerland
- **Masaru Yarime**, Associate Professor, Hong Kong University of Science and Technology, and Visiting Associate Professor at the Graduate School of Public Policy (GraSPP) in the University of Tokyo

Wrap up

15h15-15h30

- **Tiago Santos Pereira**, Principal Researcher, Centre for Social Studies, University of Coimbra, Portugal, and Vice-Chair of the OECD TIP Working Party
- **Sandra Planes-Satorra**, Policy Analyst, OECD Directorate for Science, Technology and Innovation

Day 2: HIGH-LEVEL POLICY SESSION

Friday, 21 May 2021

Opening session

12h45-13h30

Introductory words:

- **Dirk Pilat**, Deputy Director, OECD Directorate for Science, Technology and Innovation: *The way forward for STI policy: new trends, challenges and the future agenda*

Keynote address:

- **Antti Vasara**, President of EARTO, CEO of VTT, Member of the Finnish Research and Innovation Council (TIN), and Member of the Technology Advisory Board: *The role of technology in driving growth: key findings from the Finnish case study on R&D intensity and implications for the future*

Perspectives on R&D policies:

- **Kai Husso**, Chief Planning Officer, Ministry of Economic Affairs and Employment, Finland, and Vice-Chair of the OECD TIP Working Party: *R&D policies in Finland's current and future STI policy agenda*
- **Caroline Paunov** and **Sandra Planes-Satorra**, OECD Directorate for Science, Technology and Innovation: *Structural challenges for R&D policies in the context of COVID-19*

Panel 3. Industry perspectives on R&D activities and policy support

13h30-14h20

This session will provide industry perspectives on the challenges industry faces in conducting R&D activities, and the impacts that COVID-19 is having on them. It will particularly focus on the policy support that would be required to address such challenges. Industry representatives will also reflect on the role industry should play in moving towards more sustainable, inclusive and resilient futures.

Key questions:

- What are the challenges industry faces regarding R&D in general? Are challenges and opportunities expected to change in the post-COVID-19 context? What type of policy support would industry require?
- How can industry best support moving towards more sustainable, inclusive and resilient futures?

Chair: **Matthias Deschryvere**, Senior Research Scientist, VTT Technical Research Centre for Finland

Speakers:

- **Jaakko Hirvola**, CEO Technology Industries of Finland.
- **Annu Nieminen**, Founder & CEO, Upright
- **Timo Ahopelto**, Founding partner of Lifeline Ventures
- **Gerhard Huemer**, Director for Economic and Fiscal Policy, SMEunited

14h20-14h35: Coffee break and reproduction of video on country R&D case study contributions

Panel 4. High-level policy roundtable: Innovation and innovation policy post-COVID-19

14h35-15h25

Prior to the pandemic, there was an active discussion on how innovation policy should change. The COVID-19 pandemic has resulted in nations taking different types of action to ensure vaccine production, but also to reduce the economic burden of the pandemic. These measures could result in important changes in the purpose, design and execution of STI policies, and speed-up changes in innovation policy. Resilience, environmental sustainability and inclusiveness goals are gaining in importance in the recovery as the crisis sheds new light on the relevance of these goals. New data and tools could be increasingly used to inform policy making, following widespread experimentation during the crisis.

Key questions:

- How has COVID-19 changed practices, priorities, and objectives in policies to promote R&D?
- Are there new types of policy instruments being implemented? What do we know about their impacts thus far?

Chair: **Alessandra Colecchia**, Head of Science and Technology Policy Division, OECD Directorate for Science, Technology and Innovation

Speakers:

- **Julien Guerrier**, Director of the Common Policy Centre, DG Research and Innovation, European Commission
- **Michiel Sweers**, Director of Innovation and Knowledge, Ministry of Economic Affairs and Climate Policy, The Netherlands
- **István Szabó**, Vice President for Science and International Affairs, National Research, Development and Innovation Office of Hungary (NKFIH)
- **Carlo Andrés Altamirano Allende**, Head of Planning, Communication and International Cooperation, National Council on Science and Technology (CONACYT), Mexico

Closing remarks

15h25-15h35

- **Arho Suominen**, Principal Scientist, VTT Technical Research Centre of Finland Ltd
- **Caroline Paunov**, Head of Secretariat for the OECD TIP Working Party, OECD Directorate for Science, Technology and Innovation