



STI OUTLOOK 2020

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STI Outlook: Focusing on the challenges and opportunities that lay ahead (slide from 2019)

- The projection of a number of current trends in the longer-term future points to **important challenges** ahead
- STI policy makers **need to reflect on what the interplay of such trends means** in terms of opportunities to be seized and challenges to be met
- There is **untapped potential for STI** to address these trends
- At the same time, the **speed and uncertainty of technological change** makes it difficult for policymakers to **exert oversight of emerging technologies**
- There are also several key trends and issues specifically related to the organisation and conduct of STI activities that require policy responses
- Analysis of **future trends**, whether derived from extrapolations, simulations, projections or scenarios, can alert policy makers to important upcoming issues
- This can lead to the development of **more adaptive policies** that can better respond to disruptive scientific, technological and societal developments

OECD STI Outlook

Reports on the latest trends and issues relevant to STI policy

Authoritative, drawing on the latest evidence

Novelty through its international comparative analysis, its potential for new syntheses, and its future orientation

Serves as a platform to showcase OECD STI policy work and to explore new topics that might be covered in future projects



STI Outlook 2020: orientations

- STI Outlook's starting point:
  - Largely **embed production** of the STI Outlook 2020 in projects of the 2019-20 PWB and preparations for the next PWB.
  - Formulate an **overarching thematic framework** with a few compelling messages on issues of core importance for STI policymaking.
  - Move **beyond the single volume book**, so that the STI Outlook 2020 includes other content types produced and launched throughout the year.
  - Conduct **dedicated forward-looking analysis** to ensure a stronger futures perspective.
  - Ensure a **strong country perspective**, drawing on statistics and STIP Compass policy data.

The overall orientation is for an STI Outlook that is rooted in current and future OECD projects, while adding value to them by offering new insights based on forward-looking analysis

The current Covid-19 crisis, as well as the longer-running climate emergency, expose structural imbalances in our economies and societies, and imply the need to transition towards more equitable and sustainable futures. S&I policy has essential roles to play in making this transition a reality



STI Outlook 2020 dual format

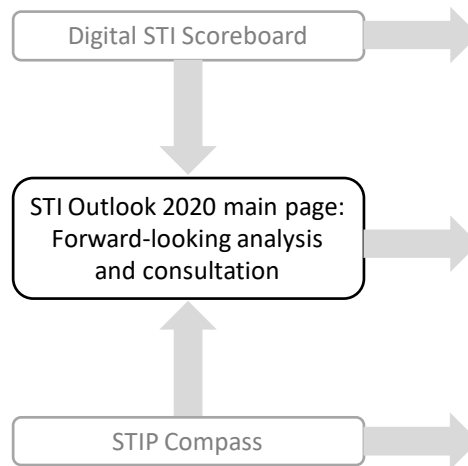
E-book published in November 2020

Limited to **100 pages**, highly stylised

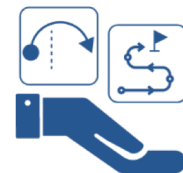


STI Outlook webpages launched from April 2020; thematic focus

Pages and content added progressively



Technology governance



Sustainability transitions



S&I human resources



Funding of S&I



Digitalisation of S&I



STI in a time of crises

Mix of content types across both formats



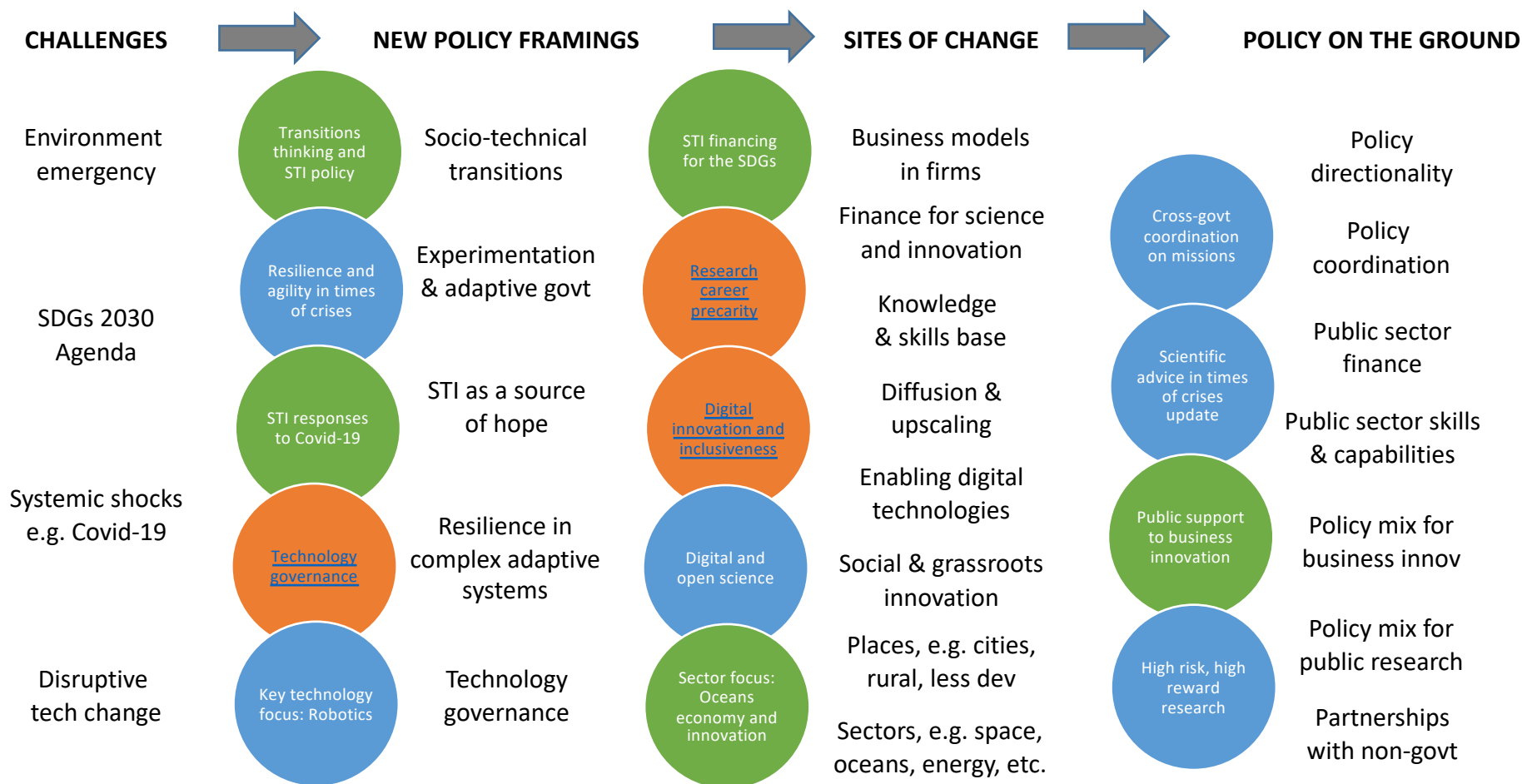
STI Outlook 2020 website launched in April

Many new thematic pages will be added in the coming weeks and months



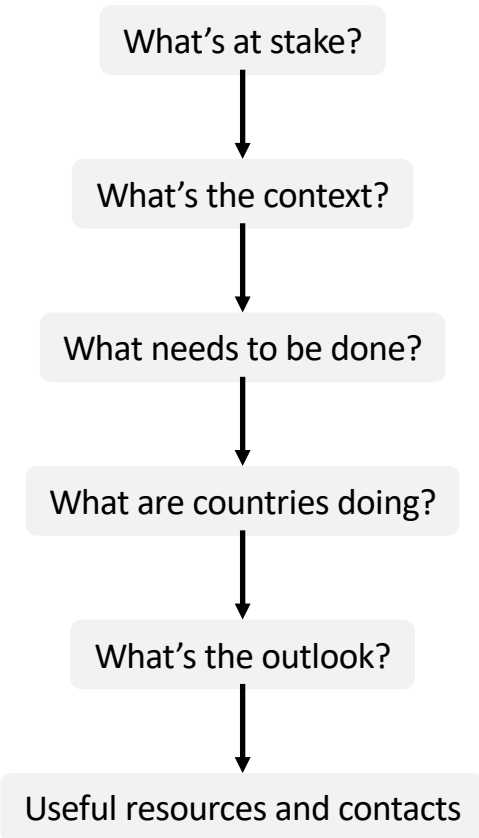
oe.cd/sti-outlook

Mapping thematic content to the e-book's narrative structure

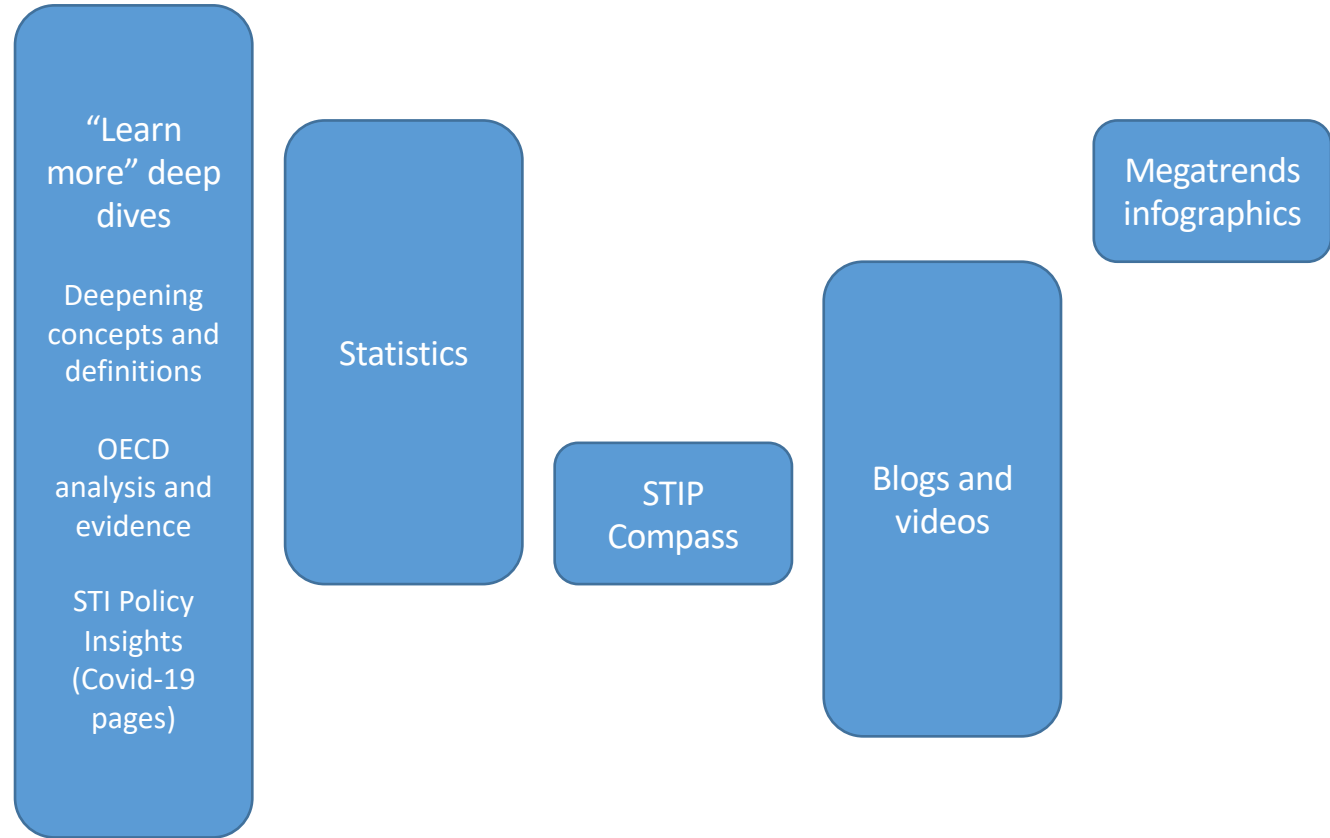


Generic model of an STI Outlook thematic webpage

Elements of narrative



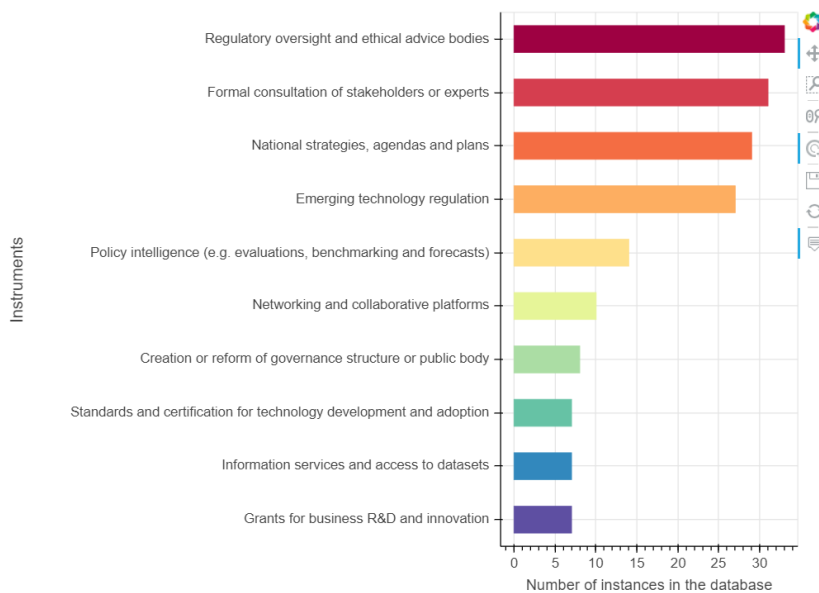
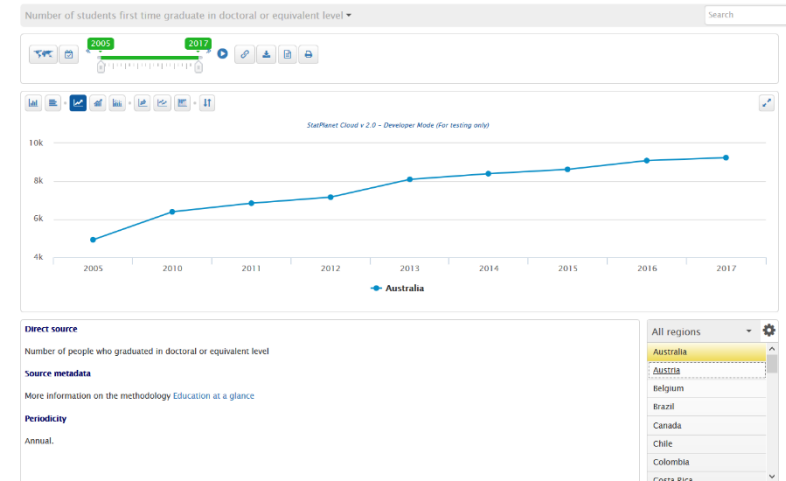
Types of content that could be embedded in / hung-off the narrative



Examples of STIP Compass and STI.Scoreboard charts embedded in thematic webpages

The *EC-OECD STIP Compass* contains information on more than one hundred policy initiatives that address the ethics of emerging technologies. Find out more by clicking on the interactive chart.

Top 10 instruments used in the "Ethics of emerging technologies" policy theme

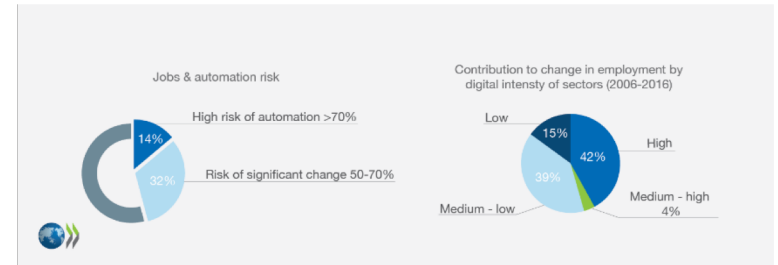
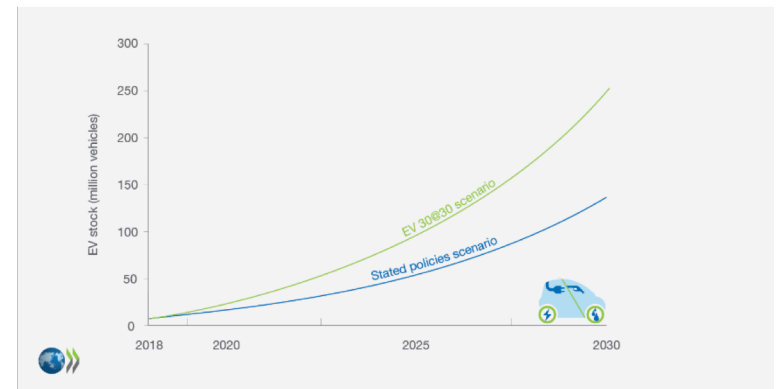
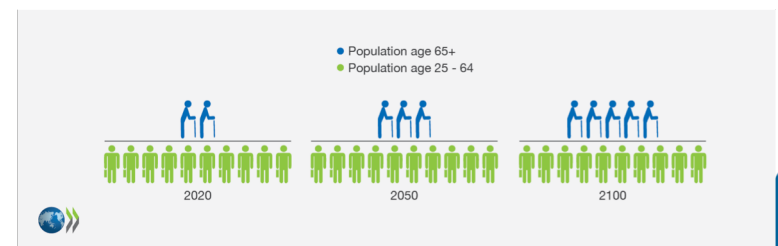


Both types of chart are fully interactive and allow for the underlying data to be downloaded



Megatrends

- Approx. 80 infographics, indicators of megatrends
- Based on OECD and other reputable sources
- Some infographics will be embedded in Outlook thematic webpages and the e-book
- All of them will be published electronically and in a single collection in partnership with the OECD's strategic foresight unit
- The Covid-19 crisis has required some reorientation, but megatrends are as important as ever when thinking about policy responses

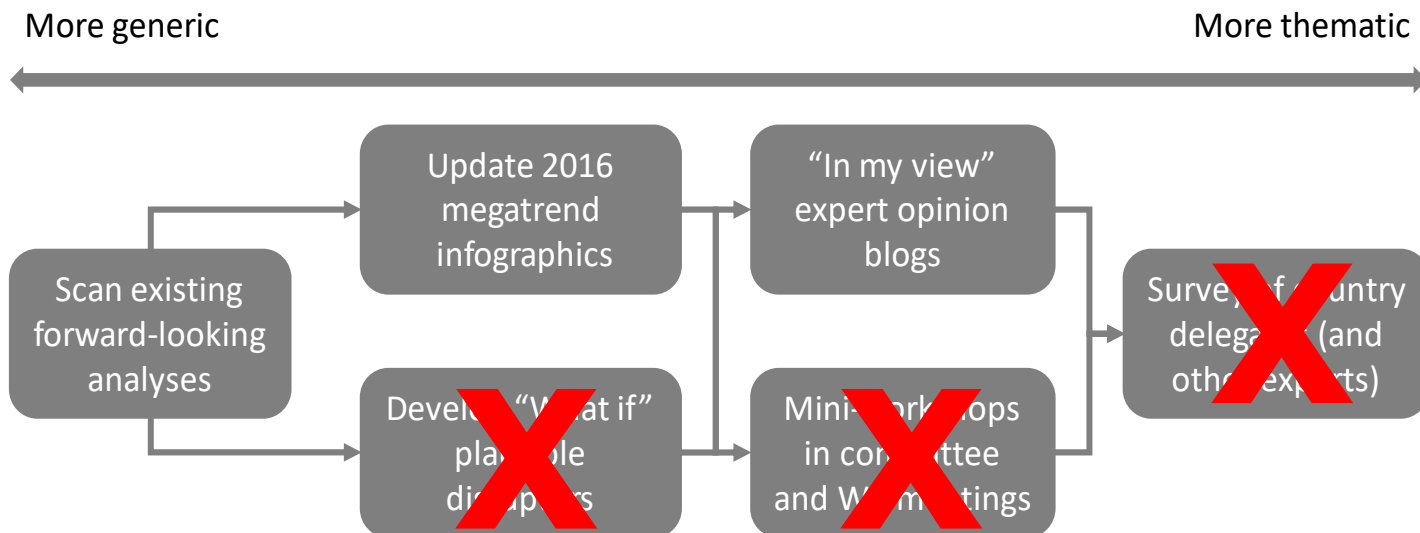




Foresight approach for STIO 2020

(slide from 2019)

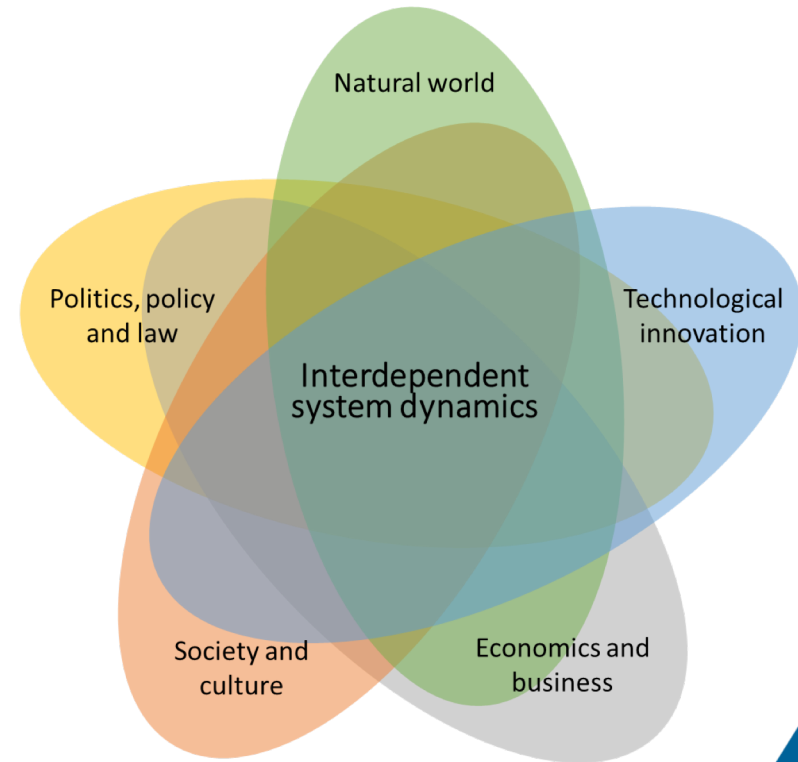
- The design of any forward-looking analysis should leverage the OECD's existing activities and processes, as these offer **unique opportunities** for value added at relatively low cost. They include:
  - regular meetings of country delegates, which can be used for consultation and policy discussions; and
  - a wide breadth of expertise and existing analysis within the OECD Secretariat, which can be tapped for inputs.
- The overall approach is a **mix of desk-based research and consultative process**, the latter involving country delegates and possibly other stakeholders.
- The time horizon will generally be in the **10-20 years range**, though could be longer or shorter, depending on the issues being analysed.





Revised foresight approach – a proposal

- Possible reframing: STI in times of crises (Covid + Climate)
- Longer time-frame: 12-18 months, i.e. beyond STI Outlook 2020
- Classical approach: horizon scanning, analysis of trends and disruptors, mapping uncertainties, scenario analysis, sense-making and planning
- A mix of desk-based research and consultative process (futures workshops and online survey)
- **We're open to ideas and cooperation!**





Building the evidence base: OECD STI Policy Covid-19 Watch

- Launched in April at the same time as the STI Outlook website
- Monitors countries' STI policy responses to Covid-19 through a survey:
  - Scientific advice and communication
  - Collaboration mechanisms
  - Specific or novel measures
  - Impacts on the STI system
- Responses searchable by policy topic and country
- 37 countries + EC are currently participating



OECD SURVEY ON THE SCIENCE AND INNOVATION POLICY RESPONSES TO CORONAVIRUS (COVID-19)

Science and innovation (S&I) policies have crucial roles to play in our responses to the Covid-19 crisis, with countries introducing new S&I policy measures on an almost daily basis across the OECD.

There is considerable variety in the types of S&I policy measures and arrangements countries are using to respond to the Covid-19 crisis. This monitor seeks to collect information on these, to provide a cross-country information service that S&I policy makers can use when designing their own policies.

Information to the monitor is submitted primarily by country delegates to the OECD's [Committee for Scientific and Technological Policy \(CSTP\)](#), though others in national government may also contribute information. As the situation is fast evolving, countries are submitting information to the monitor on a rolling basis. Data in the monitor is therefore updated daily.

POLICY RESPONSES BY COUNTRY



Click the flags below to access the survey responses

POLICY RESPONSES BY QUESTION

The monitor collects information on countries' responses to the Covid-19 crisis around a core set of issues, including scientific advice arrangements, promotion of R&D collaboration, and the STI content of economic stimulus packages. Click on the links below to learn how different countries are responding to these issues.

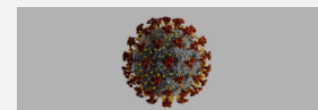


[H] SCIENTIFIC ADVICE AND COMMUNICATION

[H] COLLABORATION MECHANISMS

[H] SPECIFIC OR NOVEL MEASURES

[H] IMPACTS ON THE STI SYSTEM



<https://stip.oecd.org/Covid.html>



And upcoming workshops that will explore the many uncertainties for STI policy

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**Science,
technology and
innovation in
times of
COVID-19**

What policy responses for the recovery?

TIP virtual workshop

17 and 24 June 2020

oe.cd/tip-covid19

