

Science, Technology and Innovation Policy - STIP Compass:

A hub for data-driven STI policy analysis and advice

Presentation to the 9th ITF Transport Statistics Meeting

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Presentation outline

In the next few minutes, you will learn about

- A web portal for science, technology and innovation (STI) policies and related data maintained by the OECD and European Commission
- A biennial survey of >60 countries on their STI policies, which is the main data source underpinning the portal
- A new survey question collecting data on STI policies targeting the transport and mobility sectors
- How the data collected on transport and mobility will be used in the portal – and how you could help



- An **EC-OECD joint initiative** to collect together in one place qualitative and quantitative data on national trends in **STI policy**.
- It uses a **semantic database** for storing, accessing and linking various kinds of data (e.g. on policies, statistics, publication metadata, twitter feeds...).
- It is **publicly available** online at stip.oecd.org.

The screenshot shows the homepage of the STIP COMPASS website. At the top, there is a navigation bar with links for Home, Visualise data, Search data, Trends & data, Thematic portals, and About. The main header features the text "Your hub for data-driven STI policy analysis and advice" and a sub-header stating "The EC-OECD STIP Compass collects together in one place qualitative and quantitative data on national trends in science, technology and innovation (STI) policy". Below this are three main action buttons: "Visualise data" (to explore interactive dashboards), "Search data" (to find content and filter policies), and "Download data" (to export policy metadata). A "Featured" section displays several cards for "Insights from the 2023 policy data", "Net zero policies", "Space policies", and "Data stories". A section titled "Access the territory dashboards" includes a grid of national flags and a brief description of the dashboards. At the bottom, a list of "Policies recently added to the database" includes items like "DATA, ALGORITHMS AND SOURCE CODE POLICY - ROADMAP 2021-2024", "EUROPEAN PARTNERSHIP IN HORIZON EUROPE FOR CLEAN HYDROGEN", and "EXECUTIVE ORDER ON TACKLING THE CLIMATE CRISIS AT HOME AND ABROAD".



The EC-OECD STIP Survey

- The **main data source** for STIP Compass.
- Conducted **every two years**, it aims to collect data on **national STI policy initiatives**.
 - The survey is distributed across ministries and funding agencies by **national contact points**.
- The survey is divided into 6 main policy areas and one edition-specific “module”.
- In the 2023 edition, the specific module is on STI policies for **net-zero transitions** – and includes a question on the **transport and mobility sector**

STIPCOMPASS
INTERNATIONAL DATABASE ON STI POLICIES

European Commission

OECD
BETTER POLICIES FOR BETTER LIVES

2023 EC-OECD STIP Survey

Email user Update my account Manage users Survey guidance

List of Initiatives List of responsible organisations Export all Initiatives as PDF

Overall Survey Progress

Answers to policy debate questions	<div style="width: 29%;"></div>	29%
Initiatives with data reported for all mandatory fields	<div style="width: 42%;"></div>	42%
Initiatives approved by survey National Contact Point	<div style="width: 17%;"></div>	17%

Survey deadline
28 April 2023

Initiative color legend
National Contact Point details

1. Governance

2. Public research system

3. Innovation in firms and innovative entrepreneurship

4. Knowledge exchange and co-creation

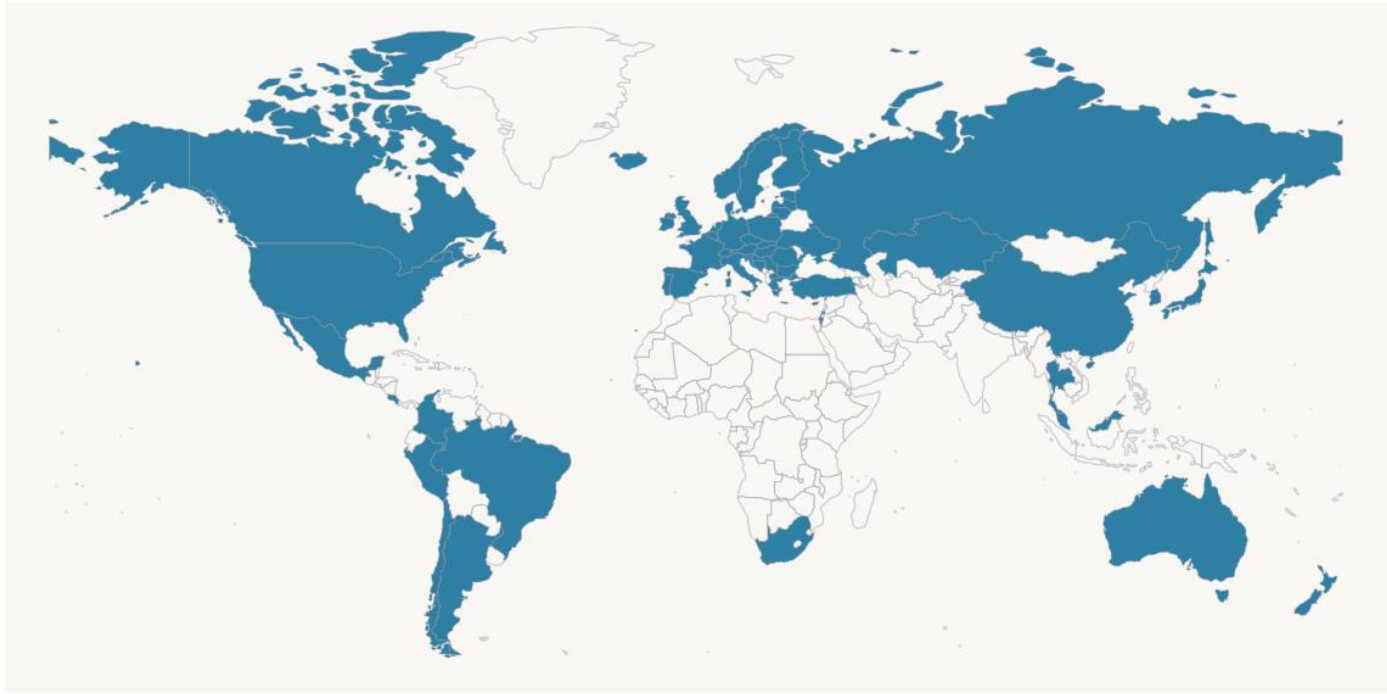
5. Human resources for research and innovation

6. Research and innovation for society

M.1 Net zero transitions



The 2021 edition of the STIP survey collected data on 6,600 STI policy initiatives in 57 countries + EU



Taken together, the countries covered in the STIP survey/STIP Compass database account for an estimated 97% of global R&D



Data linked to the STI policy data

- Semantic integration with **linked data**:
 - 9,000+ **publications from the OECD, EC, the International Energy Agency and UNESCO**
 - 35,000+ academic papers from relevant journals
 - Policy initiative data linked to **100s indicators** from the STI.Scoreboard infrastructure
 - 100s of relevant **RSS and Twitter feeds** in country pages

Related publications



From newest to oldest

Filter

- All sources
- All sources
- ScienceDirect resources
- MAG resources
- New Economic Papers resources
- Europa publications
- OECD publications

62 results



The dawn of an open science world

principles and practices of research teams in a digital world



The dawn of an open exploration era: Emergent principles and practices of open science and innovation of university research teams in a digital world



The Wrong Kind of AI? Artificial Intelligence and the Future of Labor Demand



Support to key activities of the European technology platform on renewable heating and cooling.

(Expand to see more results)





Data interfaces in STIP Compass

- Interactive dashboards
 - 700+ different kinds of dashboards
 - Country dashboards: Generate **overview documents** from live data
- Search engine
 - Google-like search
 - Narrow down by keywords using a dedicated innovation vocabulary
- Download data
 - Open API to download data in Excel/XML formats
- Thematic portals
 - Explorable explanations adding layers of guidance

STIP COMPASS Canada Country dashboard

Home → Visualise data → Canada

Search for a specific dashboard...

Policy landscape at a glance

National strategies, agendas and plans:

- A HORIZON FOR A HEALTHIER FUTURE: STRATEGIC PLAN (2021)
- EQUITY, DIVERSITY AND INCLUSION (EDI) ACTION PLAN FOR THE 16 AGENCIES (2021)
- NATIONAL SECURITY GUIDELINES FOR RESEARCH PARTNERSHIPS (2021)
- Cabinet Committee on the Federal Response to COVID-19 (2020)
- COVID-19 EXPERTISE NOTIFICATION APP ADVISORY COUNCIL (2020)
- COVID-19 SPECIAL ADVISORY COMMITTEE (2020)

230 policy initiatives

Download initiatives

- Download json file
- Download alpha file

Please refer to the database as EC-ORCID-ORCID:STIP Compass International Database on Science, Technology and Innovation Policy (STIP), edition November 24, 2021. View the dashboard

Responsible Organisations

By Initiative count

Themes

By Initiative count

All values

Budget ranges in EUR

Not applicable	200 000 - 299 999	300 000 - 399 999
14	24	12

country expertise

Policy implement

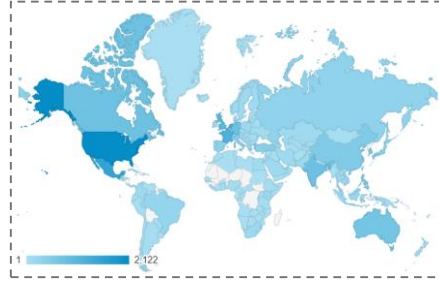
stakeholders in the

strategic guidance



Use of 2021 STIP Survey data

+100 K
PAGEVIEWS /
YEAR



STIP Compass has been cited
in **134** academic publications, including **54** since 2022.





Use of 2021 STIP Survey data

OECD Studies on SMEs and Entrepreneurship

Financing Growth and Turning Data into Business

HELPING SMES SCALE UP

AI in Business and Finance

OECD BUSINESS AND FINANCE OUTLOOK 2021

OECD Reviews of Digital Transformation Going Digital in Latvia

 OECD

OECD Studies on SMEs and Entrepreneurship

The Digital Transformation of SMEs

OECD Economic Surveys ICELAND

Strengthening FDI and SME Linkages in Portugal

 OECD

OECD Skills Studies

Innovative and Entrepreneurial Universities in Latin America

OECD Public Governance Reviews

The Public Governance of Anticipatory Innovation Ecosystems in Latvia

OECD Economic Surveys SLOVENIA

JULY 2022

 OECD



2023 EC-OECD STIP Survey: New uses of the data

 **STIPCOMPASS**
INTERNATIONAL DATABASE ON STI POLICIES

EC/OECD STIP SURVEY
15 FEBRUARY - 28 APRIL 2023



European
Research Area

S&T POLICY 2025
Enabling Transitions through
Science, Technology and Innovation

STI policies for net zero


Tracking Clean Energy Progress
Assessing critical energy technologies for global clean energy transitions


ITF Transport Outlook 2021


Agricultural Policy Monitoring and Evaluation 2022
REFORMING AGRICULTURAL POLICIES FOR CLIMATE CHANGE MITIGATION


Committee for Agriculture (COAG)







Thematic portal on STI policies for net zero

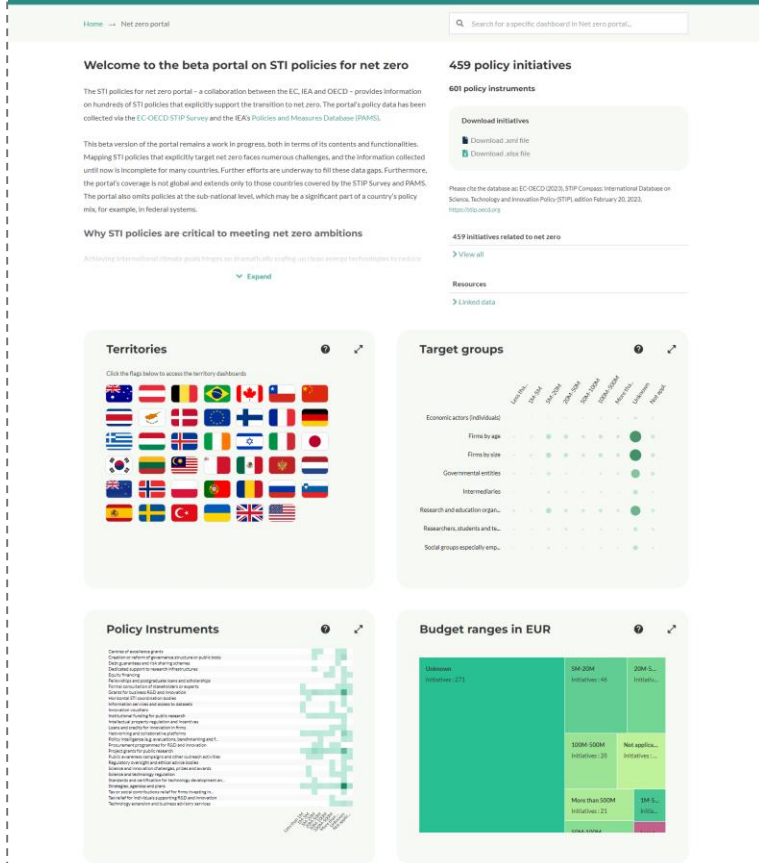
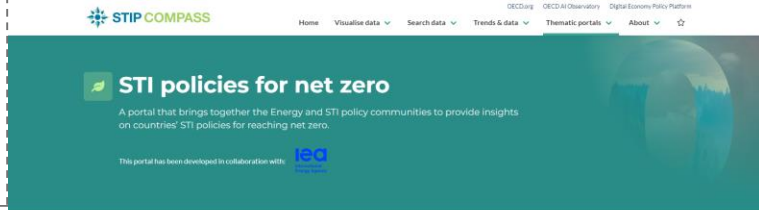
Launched with the **IEA** at COP26 in Nov 2021

Maps STI policies that explicitly support the transition towards **net zero carbon emissions in the energy sector**.

Data: Close to 500 policy initiatives from 40 countries and the EU, statistical indicators, relevant publications (EC, OECD, academic, etc.), etc.

Features

- Country dashboards
- Browse, filter and export policy initiatives
- Linked data dashboard
- Download full dataset





Expanding the net zero portal beyond energy: sector-specific questions on STI policies for net-zero

M1.3 What policy initiatives, if any, aim specifically to support research and innovation for net-zero carbon ambitions in the energy sector?

M.1.4 What policy initiatives, if any, aim specifically to support research and innovation for net-zero carbon ambitions in the transport and mobility sectors?

M.1.5 What policy initiatives, if any, aim specifically to support research and innovation for net-zero carbon ambitions in the food and agriculture sectors?



Guidance on policy initiatives to report

M.1.4 What policy initiatives, if any, aim specifically to support research and innovation for net-zero carbon ambitions in the transport and mobility sectors?

Guidance on policy initiatives to report:

- *Transport and mobility research and innovation strategies and policies (e.g. major R&D and demonstration projects, support schemes, emerging technology regulation) aiming to contribute to achieving net-zero CO₂ emissions (i.e. deep decarbonisation), in any supply-side or end-use sector (e.g. research and innovation for electric vehicles, public transport systems innovation, smart cities, shared modes of transport).*
- *Specific attention may be given to policies, strategies and/or programmes focusing on hard-to-decarbonise sectors where key technologies for decarbonisation are relatively less mature (e.g. long-distance transportation such as shipping and aviation), or on key emerging low-carbon energy technologies (e.g. low-carbon hydrogen, advanced biofuels).*

The question has been prefilled with 73 STI policy initiatives previously identified



“Policy initiative” as the unit of reporting

Defined as a public action that:

- i. aims to achieve one or several public **policy goals**
- ii. is expected to **modify or frame the behaviours** of actors and stakeholders
- iii. is **implemented** with a minimum time horizon or on a continuous basis (i.e. not as a one-off “event”).

Characterised by taxonomies

- Basic fields for **textual data** (name, short description, objectives, background)
- A **policy instrument** taxonomy built based on Lit. review and OECD workshops
- A taxonomy for **target groups** and list of **budget ranges**
- An **STI thematic taxonomy** that structures the questions of the STIP Survey



STIP survey administration

- The OECD DSTI administers the STIP survey
- Each country has a ‘national contact point’ – typically the delegate of the OECD Committee for Scientific and Technological Policy
- National contact points differ in their approaches to completing the STIP survey, but many distribute it across their government, giving officials from different ministries survey accounts to enter details on relevant policies
- The IEA is creating accounts for delegates in its Committee for Energy Research and Technology



Timeline for the 2023 edition of the STIP Survey

EC/OECD STI POLICY SURVEY
15 February - 28 April 2023

Road to STIP
Compass data

28 April 2023
End of the survey



15 February 2023
Launch of the survey



Early February 2023
IT developer releases the new version of the online questionnaire software with improved functionalities



End January 2023
CSTP approves survey and closure of the monitoring tool





STIP Survey support page

Contents

- Timeline reminder
- Video tutorials & full guide for respondents (pdf)
- How to administer the Survey: best practices
- What's new (structure changes)
- Definitions and FAQs (explanations of the survey questions and taxonomies)

Access: <https://community.oecd.org/community/cstp/stip>



Thank you

Contact us at:

STIPolicy.Data@oecd.org