Session 3: Informing climate change adaptation and response policies with SEEA

Climate change adaptation policies and SEEA-related information demands

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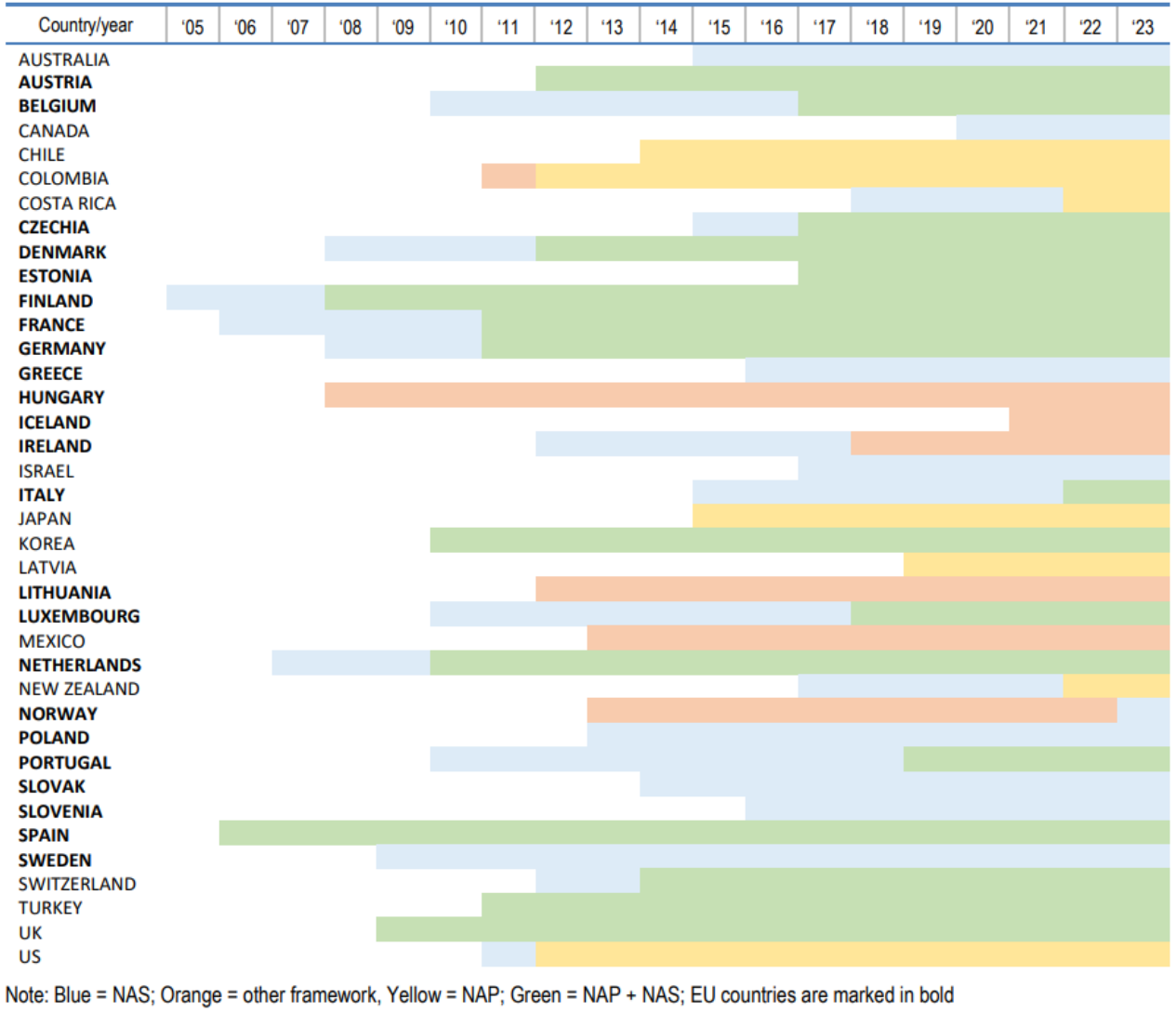
OECD Environment Directorate

Information demands for understanding progress on adaptation
National Adaptation Policies in OECD Countries

Data Indicators Reporting



Note: Blue = NAS; Orange = other framework, Yellow = NAP; Green = NAP + NAS; EU countries are marked in bold

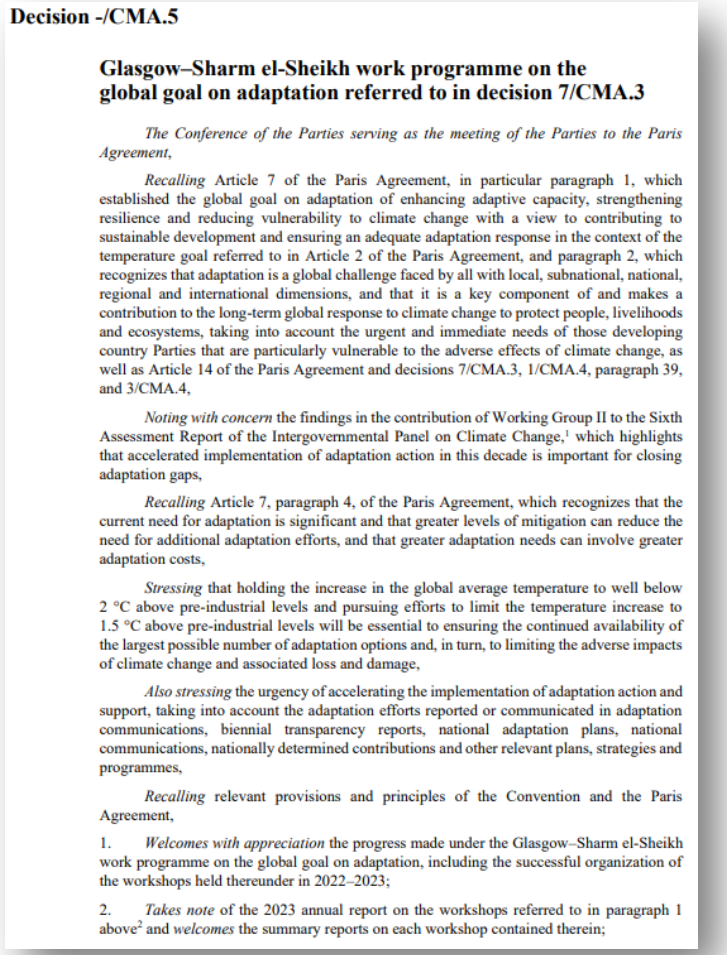
"Reduce vulnerability and improve the adaptive capacity of ecologic, social and economic systems against the unavoidable impacts of climate change"

- ✓ Reflecting key climate risks
- ✓ Specific (sector, geographic area, type of actions)
- ✓ With baseline and timeframe for achieving the objective

For more information: www.oecd.org/climate-change/adaptation-measurement/

Information demands for understanding progress on adaptation
At the international level, towards the Global Goal on Adaptation (GGA)

Data Indicators Reporting



Decision -/CMA.5

Glasgow–Sharm el-Sheikh work programme on the global goal on adaptation referred to in decision 7/CMA.3

The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement,

Recalling Article 7 of the Paris Agreement, in particular paragraph 1, which established the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal referred to in Article 2 of the Paris Agreement, and paragraph 2, which recognizes that adaptation is a global challenge faced by all with local, subnational, national, regional and international dimensions, and that it is a key component of and makes a contribution to the long-term global response to climate change to protect people, livelihoods and ecosystems, taking into account the urgent and immediate needs of those developing country Parties that are particularly vulnerable to the adverse effects of climate change, as well as Article 14 of the Paris Agreement and decisions 7/CMA.3, 1/CMA.4, paragraph 39, and 3/CMA.4,

Noting with concern the findings in the contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change,[1] which highlights that accelerated implementation of adaptation action in this decade is important for closing adaptation gaps,

Recalling Article 7, paragraph 4, of the Paris Agreement, which recognizes that the current need for adaptation is significant and that greater levels of mitigation can reduce the need for additional adaptation efforts, and that greater adaptation needs can involve greater adaptation costs,

Stressing that holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels will be essential to ensuring the continued availability of the largest possible number of adaptation options and, in turn, to limiting the adverse impacts of climate change and associated loss and damage,

Also stressing the urgency of accelerating the implementation of adaptation action and support, taking into account the adaptation efforts reported or communicated in adaptation communications, biennial transparency reports, national adaptation plans, national communications, nationally determined contributions and other relevant plans, strategies and programmes,

Recalling relevant provisions and principles of the Convention and the Paris Agreement,

1. *Welcomes with appreciation* the progress made under the Glasgow–Sharm el-Sheikh work programme on the global goal on adaptation, including the successful organization of the workshops held thereunder in 2022–2023;

2. *Takes note* of the 2023 annual report on the workshops referred to in paragraph 1 above[2] and *welcomes* the summary reports on each workshop contained therein;

→ *"enhance adaptive capacity, strengthening resilience and reducing vulnerability to climate change"*

- Glasgow-Sharm el-Sheikh work programme to accelerate action, guided by a set of thematic targets

- Adoption at COP28 of the *United Arab Emirates (UAE) Framework for Global Climate Resilience:*
  - sectoral **priorities with targets**
  - Sets out to further work to **develop indicators** with the two-year UAE – Belém work programme for measuring progress achieved towards the targets

Glasgow–Sharm el-Sheikh work programme on the GGA referred to in decision 7/CMA.3, https://unfccc.int/documents/636595

Information demands for understanding progress on adaptation
At the international level, towards the Global Goal on Adaptation (GGA)

Data Indicators Reporting

- **Priorities for adaptation across water, food and agriculture, health, ecosystems and biodiversity, poverty and livelihoods, infrastructure, and cultural heritage:**

✓ Significantly reducing climate-induced **water** scarcity and enhancing climate resilience to water-related hazards towards a climate-resilient water supply, climate-resilient sanitation and towards access to safe and affordable potable water for all

✓ Attaining resilience against CC-related **health** impacts, promoting climate-resilient health services, and significantly reducing climate-related morbidity and mortality, particularly in the most vulnerable communities

✓ Reducing climate impacts on **ecosystems and biodiversity**, and accelerating the use of ecosystem-based adaptation and nature-based solutions, including through their management, enhancement, restoration and conservation and the protection of terrestrial, inland water, mountain, marine and coastal ecosystems

Glasgow–Sharm el-Sheikh work programme on the GGA referred to in decision 7/CMA.3, https://unfccc.int/documents/636595

Information demands for understanding progress on adaptation

Rationale and challenges

Data Indicators Reporting

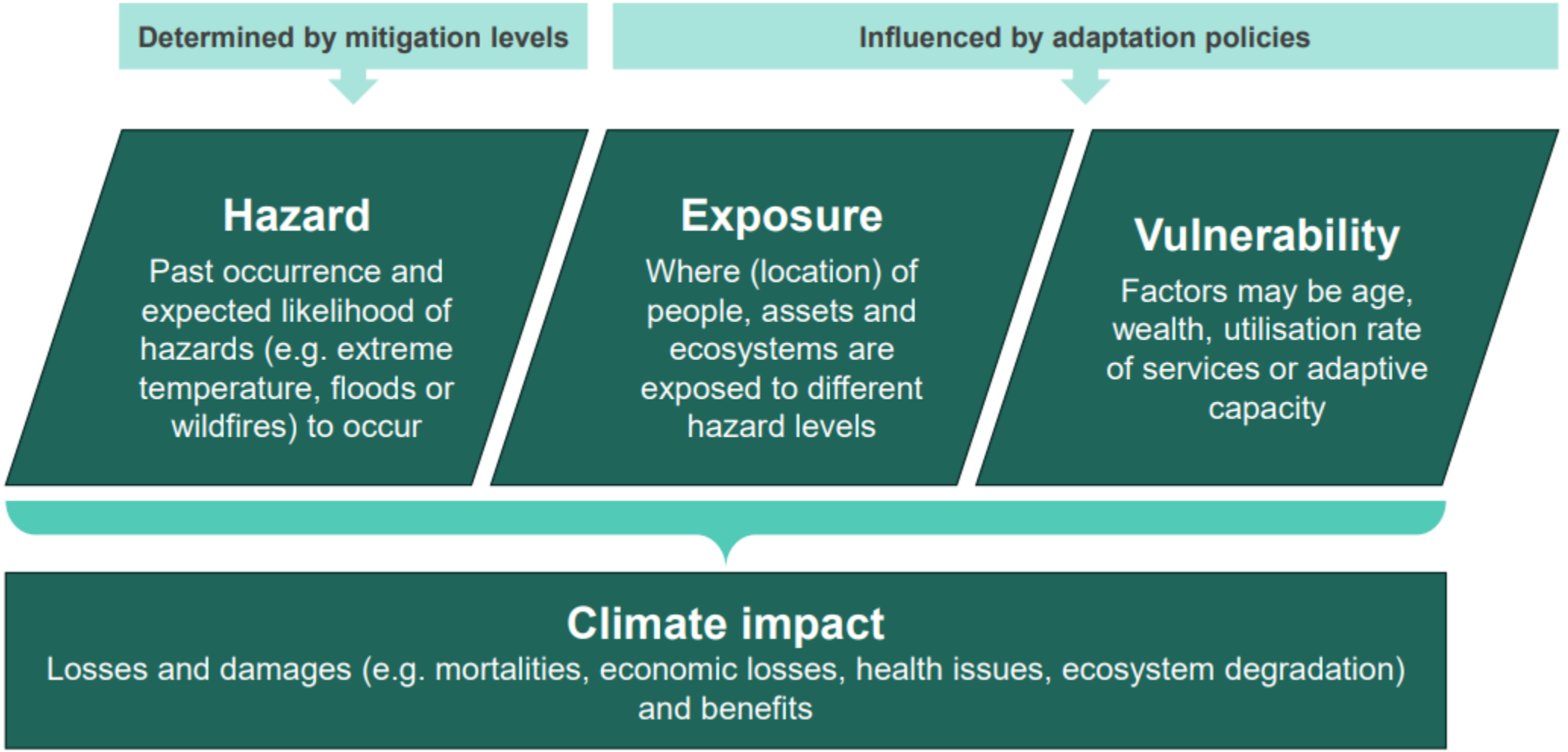
- Attribution & Measuring effectiveness
- Aggregating/comparing information collected across sectors or jurisdictions
- Inadequate technical, legal and financial resources

Support countries in their efforts to understand progress in implementing their national adaptation policies

For more information: www.oecd.org/climate-change/adaptation-measurement/

Information demands for understanding progress on adaptation

What are countries measuring?



Information demands for understanding progress on adaptation
What are countries measuring in practice?

Data Indicators Reporting

Hazard
Past occurrence and expected likelihood of hazards (e.g. extreme temperature, floods or wildfires) to occur

Exposure
Where (location) of people, assets and ecosystems are exposed to different hazard levels

Vulnerability
Factors may be age, wealth, utilisation rate of services or adaptive capacity

Climate impact
Losses and damages (e.g. mortalities, economic losses, health issues, ecosystem degradation) and benefits

Example: "*Annual damages from flooding, agricultural losses from drought, number of heat-related deaths*"

◆ Gaps remain in measuring **observed climate impacts**

! **Challenge of attributing** actions to reduction in climate risks and impacts

For more information: www.oecd.org/climate-change/adaptation-measurement/

Information demands for understanding progress on adaptation
What are countries measuring in practice?

Data Indicators Reporting

Direct results
"Physical measures, regulations or plans implemented"

- Common practice to measure direct results
- Increasing number of tracking tools (UK & France track 253 and 240 NAP actions, respectively)

Resources engaged
"Annual expenditure for flood defences"

- Ambition to measure the resources (e.g. budgets and staff) engaged for adaptation actions
- Difficult due to lack of resources tagging

For more information: www.oecd.org/climate-change/adaptation-measurement/

How can we better estimate public expenditure on CCA?

How can we better estimate public expenditure on climate change adaptation?

21 March 2024 14:00-16:00 (CET)

Online zoom registration

Adaptation funding is an often-cited bottleneck to accelerate adaptation investments across OECD countries and beyond. Yet, little is known how much of countries' national budgets is currently dedicated to adaptation. This is partly due to the absence of dedicated adaptation funds in many countries as well as the embedded spending that is relevant for adaptation, but not as such tagged in national accounts. Spending information on adaptation is critical to inform the resource and finance gap that needs to be addressed through additional budgetary or fiscal measures.

This OECD Adaptation Dialogue, organised jointly with Germany's Environment Agency (UBA) brings together experts that have developed and tested methodologies to identify adaptation-relevant expenditures in national accounts. The Dialogue seeks to discuss the expected benefits of such approaches to countries and the remaining challenges.

Speakers:

- Opening remarks, **Catherine Gamper**, OECD Climate Change Adaptation Team Lead
- **Clemens HAßE**, German Federal Environment Agency
- **Guillaume Dolques**, I4CE
- Discussant: **Rodrigo Pizarro**, OECD IPAC Team Lead

You're welcome to join the discussion by registering on Zoom **here**

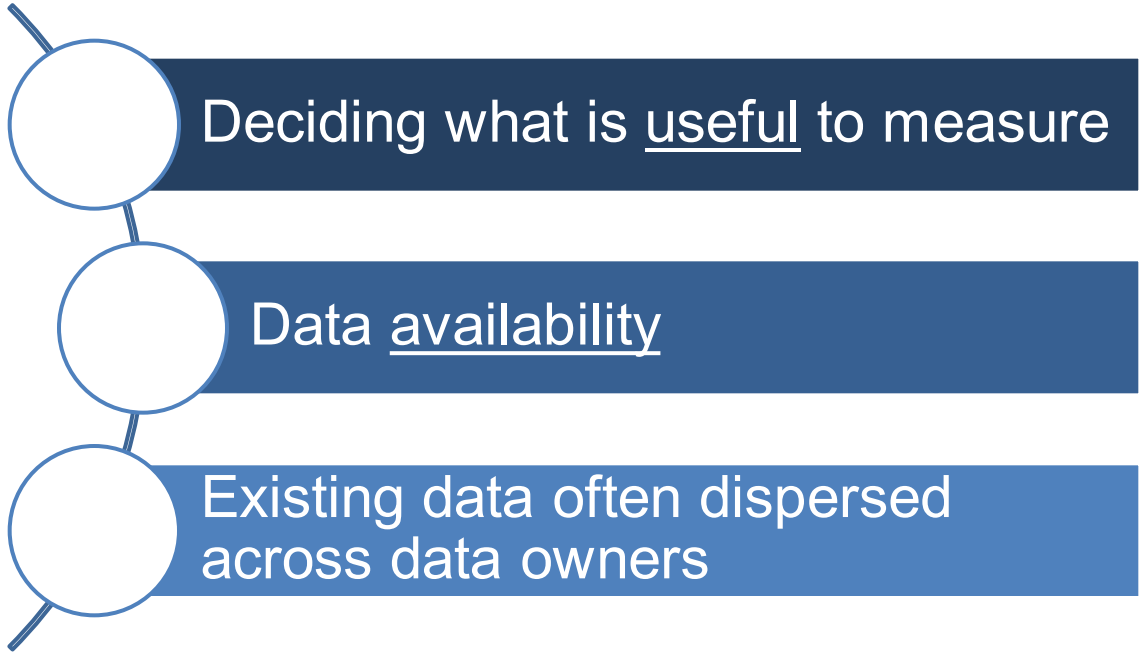
Information demands for understanding progress on adaptation
Indicators in use

Data Indicators Reporting

Many country respondents (83%) are engaged in the development of indicators

Many country respondents (71%) associate their objectives with indicators

But for nearly half of them... Indicators are not in use to measure progress



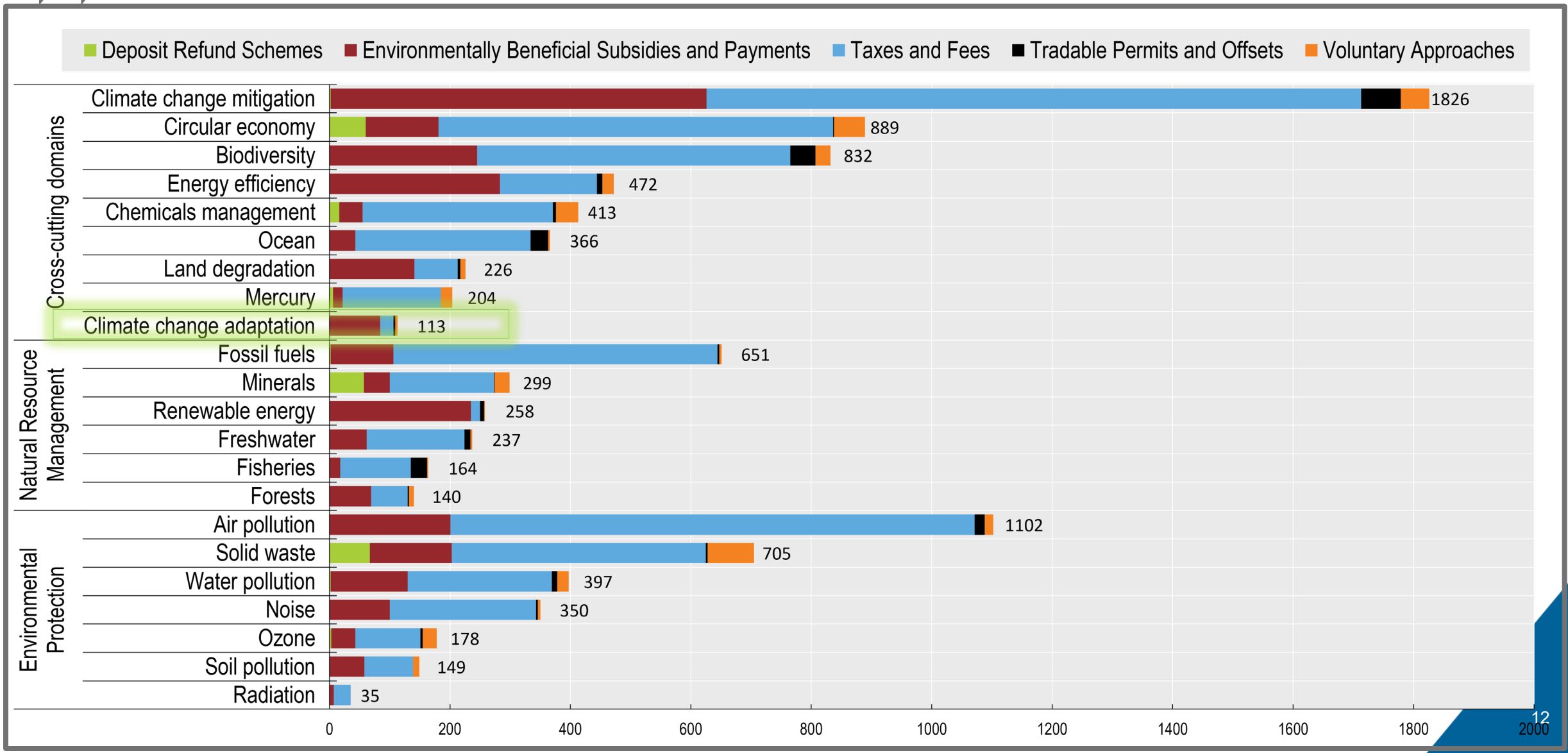
Note: 16 responses received to question 21 “What challenges have you encountered in defining and using adaptation indicators?” as a total of 29 respondents to the questionnaire. Open-ended question.
Source: 2022 OECD questionnaire on Measuring Progress in Implementing National Adaptation Policies.

OECD PINE DATABASE

OECD Policy Instruments for the Environment (PINE) Database

Five types of instruments for 22 environmental domains

Data Indicators Reporting



Environmental domain tagging

OECD PINE database approach (OECD paper)

Scope

- The PINE database scope is limited to instruments:
  - incentivizing environmentally *beneficial* products or activities
  - disincentivizing environmentally *harmful* products or activities
- Motivation, names, or descriptions vary across countries, and may not reflect environmental considerations.

PINE Definitions

- The CCA domain focuses on the subset of adaptation instruments which incentivize nature-based (structural) solutions addressing climate-related impacts and risks. (.e.g., riparian buffers, promotion of costal wetlands, storm water retention ponds, green spaces, afforestation, …).
- Excluded: grey or engineered or structural adaptation solutions, or other social or institutional measures (due to scope of PINE).

Climate change adaptation policies & SEEA

- **IPCC definition of Climate Change Adaptation goes beyond scope of SEEA**
- **Distinguish between motivation and technical nature of activities**
  - International comparability and mutually exclusive categories may be clarified by focusing on activities and products (similar to the PINE approach)
    - However, it may be inconsistent with *functional* classifications like COFOG
  - The technical nature of CCA policies may be difficult to identify, in particular for government expenditure, which may not be sufficiently specific or environmentally focused
  - For other transfers to government like taxes, the current classifications may need to be further disaggregated at the project or policy base level.
  - Detailed lists climate change adaptation-related activities and products would be helpful.

Forthcoming OECD work

- **Measuring climate change adaptation policies**
  - Paper on Measuring progress on adaptation
  - Case studies on the UK, Korea and Chile
  - Sectoral deep-dive on indicators related to adaptation in agriculture
- **PINE database**
  - Strengthening of thematic coverage
  - Integration of climate change mitigation policy initiatives into a common database infrastructure
  - Expanding beyond economic instruments
- **Framework for assessing and addressing adaptation needs and priorities,** by the OECD Economics Department
- **Ongoing work to update Rio Markers (incl. adaptation)** by Development Assistance Committee of OECD Development Co-operation Directorate

www.oecd.org/climate-change/theme/resilience/

OECD.Adaptation@oecd.org

Thank you!

oe.cd/pine

oe.cd/pinedatabase

pinedatabase@oecd.org

Overview of OECD work on adaptation measurement

Cross-country

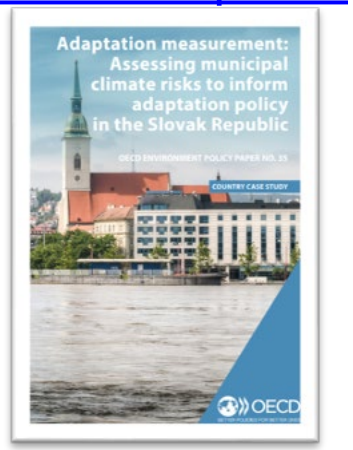
Survey

Cross-country analysis of challenges and approaches

Country case studies

United Kingdom

[Slovak Republic]



Korea & Chile

Forthcoming

Peer-learning

[Measuring progress in implementing national adaptation policies]

[Tracking a moving target: How to measure progress and policy effectiveness in adapting to climate change]

[Developing meaningful adaptation policy indicators]

OECD/DAC Dialogue on Using Evidence and Learning to Achieve Climate Adaptation Results

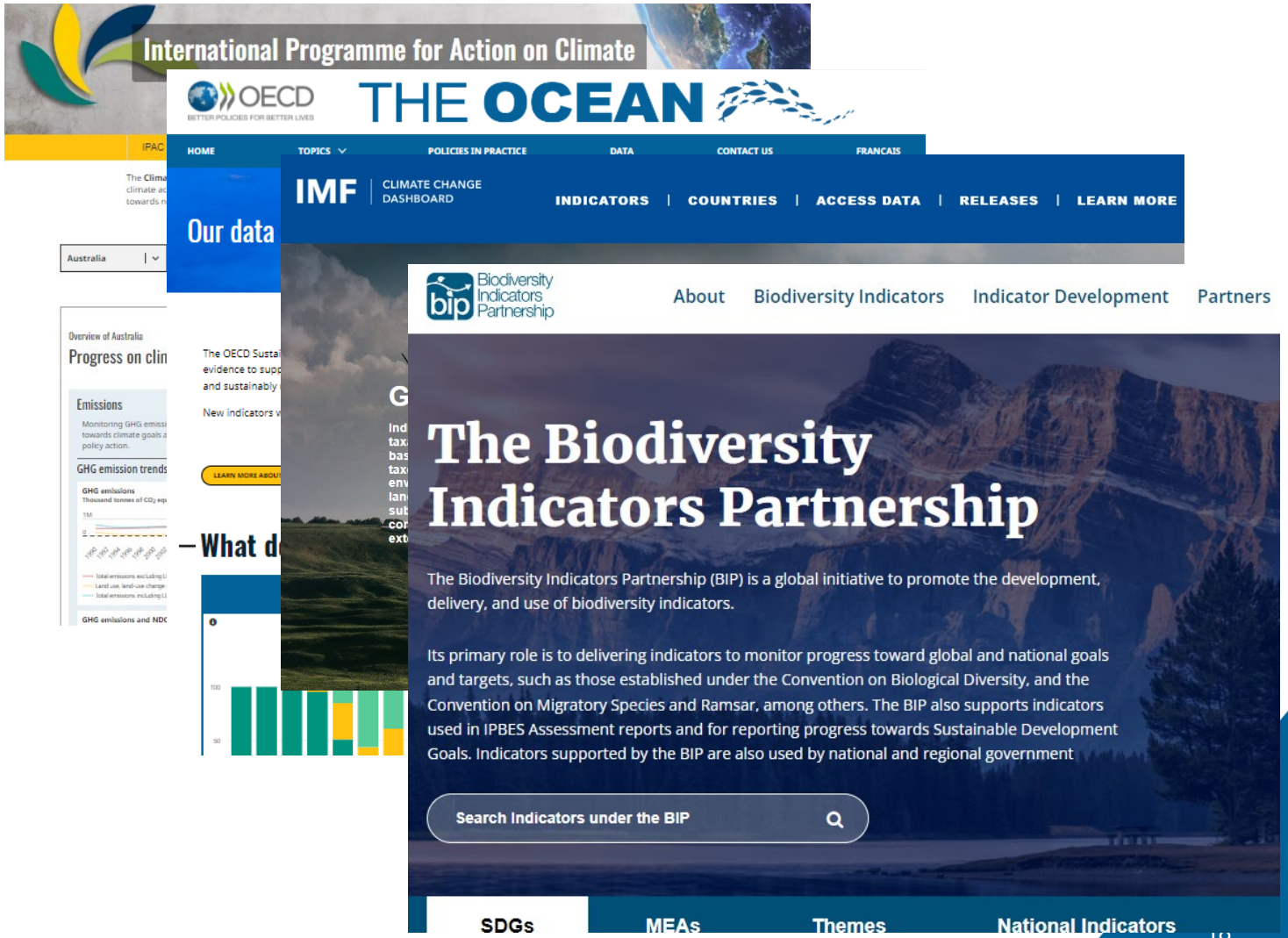
Measuring progress in implementing national adaptation policies – COP27 Korean pavilion

[Making effective progress on adaptation from project to national and global levels] - OECD IDDRI Deval

Find out more on: oe.cd/adaptation-measurement

PINE DB Applications

- **ERTR statistics and accounts**
- **OECD country reviews & policy indicators (CAPMF, EPS, IPAC Dashboard,** Sustainable Ocean database, IFCMA)
- IMF dashboard
- BIP indicators
- **Kunming-Montreal Global Biodiversity Framework**



Environmental domain tagging in the PINE database

OECD paper on tagging of policy instruments:

- Discussed at OECD working party meetings (incl. Biodiversity, Chemicals, Agriculture, Taxation, Environmental information, etc.). Accepted for publication.
- 22 domains: 7 environmental protection, 6 natural resource management, and 9 cross-thematic domains (incl. climate change adaptation).

Methodology:

Step1: Definition

Based on international classifications and literature review.

Step 2: Scope

Inclusion and exclusion criteria outlined for each domain.

Step 3: Keyword search

Keywords list to identify instruments potentially relevant to the domain.

Step 4: Individual review

Verify compliance with definition and scope.

Keywords for climate change adaptation:

adaptation, adapt, filtration, bioretention, fire, climate change, climate risk, damage, drought, landslide, mudflow, mudslide, ocean acidification, sea level rise, ecological restoration, ecosystem-based
*embankment, flood, riparian, *forest*, green infrastructure, green roof, grassland, extreme heat, heat island, heatwave, mangrove, nature based, NBS, porous, rainwater, resilient, retention areas, runoff, saltmarsh, peatland, coral reef, sink, desalin**
shade, storm, urban park, weather, wetland, wildfire, erosion, vegetation, buffer, disaster, cool roofs, blue infrastructure, floodplain, silvo-pastoral, crop. basin