



# TENTH MEETING OF THE EXPERT GROUP ON ENVIRONMENT STATISTICS

INTERNATIONAL PROGRAMME ON ACTION ON CLIMATE (IPAC)

Rodrigo Pizarro  
IPAC Manager





# WHAT: IPAC and Objectives

---

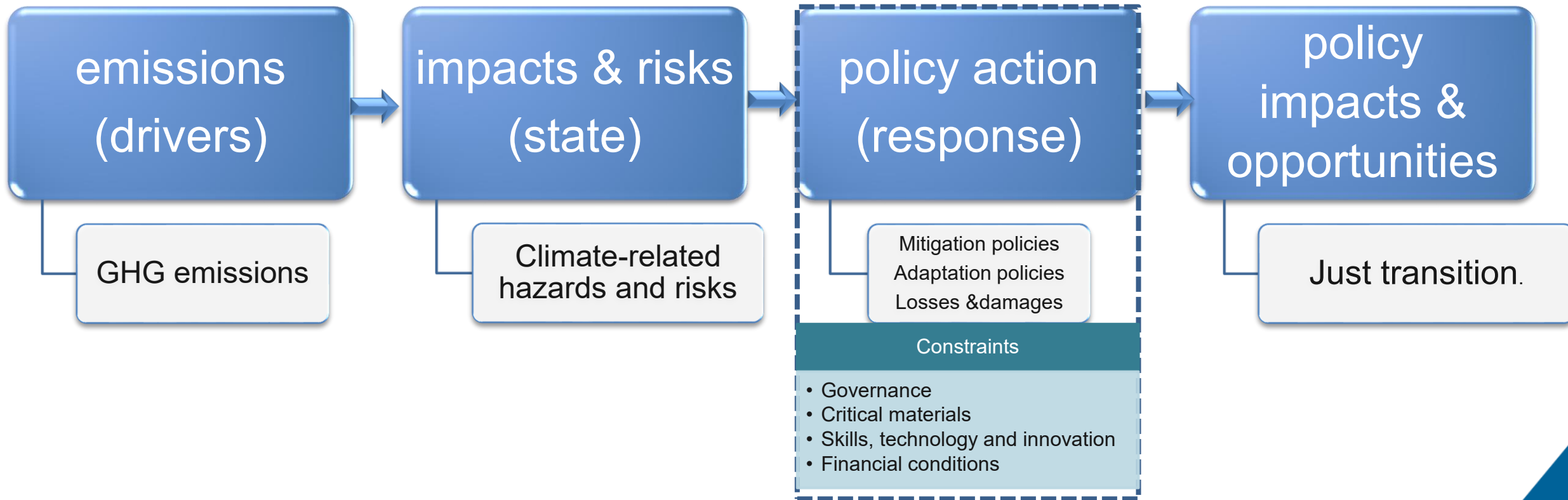
- IPAC is a new climate change programme that collects, coordinates, and captures climate change relevant data and indicators.
- IPAC responds to countries' need for up-to-date, comparable and comprehensive indicators to support the full range of climate policy-making (mitigation, adaptation and losses and damages).
- It is a foundational component of the OECD climate work (eg. HP and IFCMA).
- **Specifically, IPAC:**
  1. Provides consistent, comprehensive climate-related data on (1) GHG emissions and (2) environmental impacts.
  2. Assesses (1) country-specific climate objectives and (2) policy responses, accounting for the socio-economic and technological developments to guide policy choices.



# The analytical approach to environmental data collection: PSR model

Foundational Work on data development

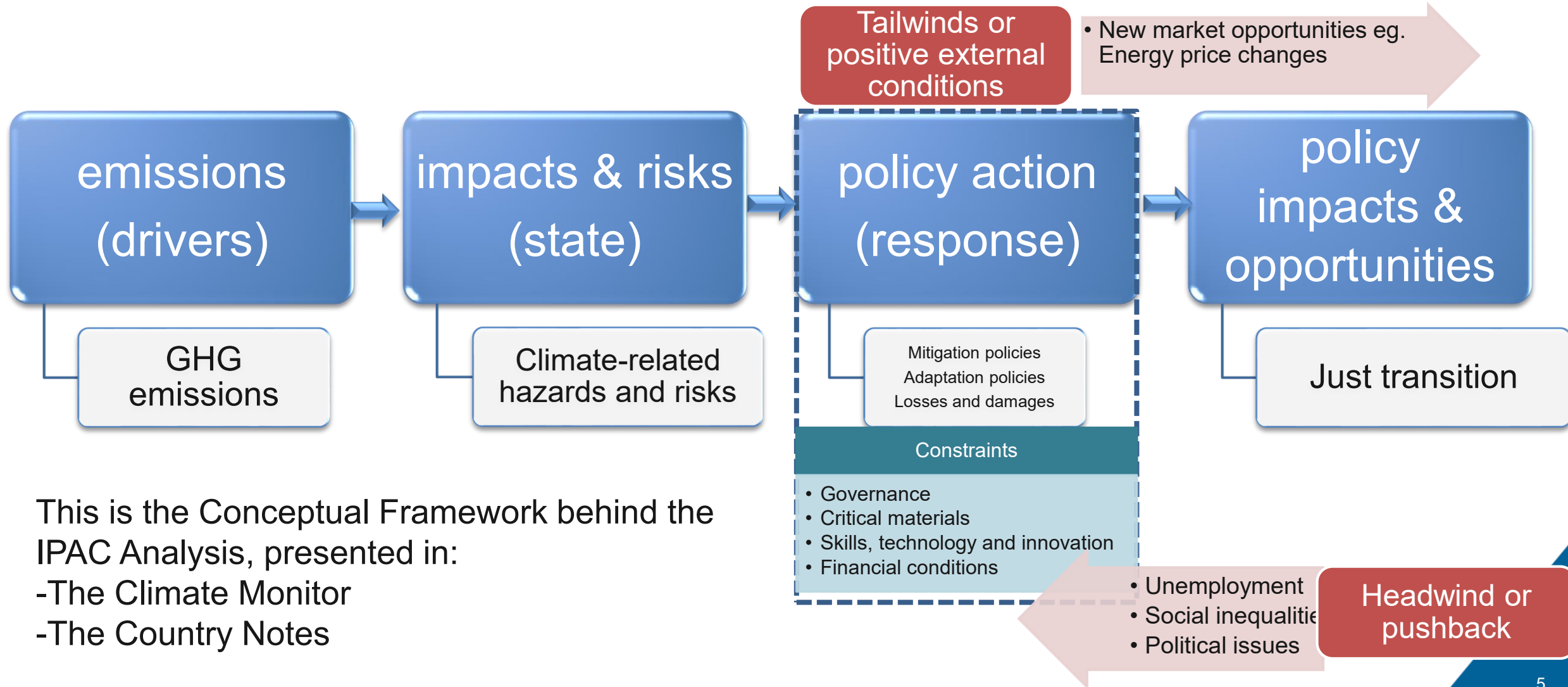
Feeds into best practice policy responses



Note: materials and skills necessary to implement policy choices will also be addressed



# The IPAC analytical approach: Consider external environment on policy responses





# HOW: IPAC's Programme structure

- IPAC consists of four components:
  - An **Indicator Dashboard** - official and comprehensive individual country level data, considering the pressure-state-response framework;
  - **Climate Action Monitor** - An annual summary of climate action across the world;
  - **Policies in Practice** – Examples of best climate policy practices;
  - **Country Notes** – An annual individual country assessment of climate action (will cover 51 IPAC countries: 38 Members, 6 accession candidates, major emitters)
- The IPAC webpage (<https://www.oecd.org/climate-action/ipac/>):  
A **one-stop resource** to support policy choices.



# IPAC Deliverables

[IPAC Home](#)

[About](#)

[Dashboard](#)

[The Climate Monitor](#)

[Policies in Practice](#)

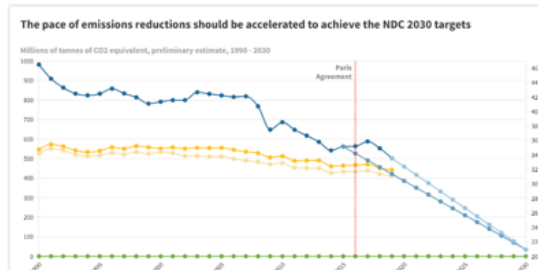
## — The Annual Climate Monitor

At the start of COP26, country commitments to net zero do not match the level of ambition of the Paris Agreement. Yet the message is perfectly clear: climate risks will only be significantly reduced if we can achieve net zero in carbon and sharply reduce other emissions, in particular from methane.

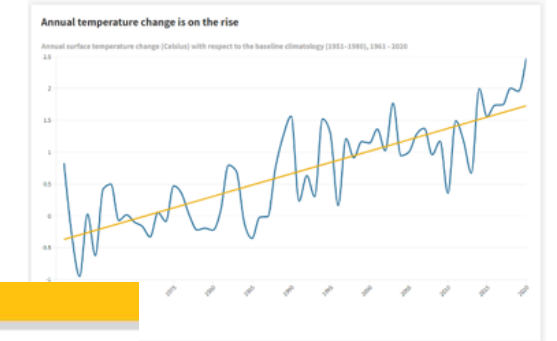
For this to happen, a profound transformation of the structure of the world economy is required, one that halts and economic interests that continue to be geared towards fossil fuels and carbon-intensive activities.

### Climate Action Performance

How far is [Country] from achieving national and global climate objectives?



How vulnerable is [Country] to climate impacts and risks?



[IPAC Home](#)

[About](#)

[Dashboard](#)

[The Climate Monitor](#)

[Policies in Practice](#)

## — Learning together



[View all](#)



### The United Kingdom's pioneering Climate Change Act

The 2008 Climate Change Act is the foundation of United Kingdom's approach to reducing emissions and preparing for the impact of climate change. Legally binding emissions targets for 2050 and the coming 15 years underpin...

06/10/2021

[> READ MORE](#)



### The pan-Canadian framework for carbon pricing

The 2016 Pan-Canadian Framework on Clean Growth and Climate Change revolutionised carbon pricing in Canada. It requires all jurisdictions to put their own form of carbon pricing in place or adopt the federal carbon price...

06/10/2021

[> READ MORE](#)



### Australia's green bank to scale up low-carbon investment

The Clean Energy Finance Corporation is one of only a handful of national green banks in OECD countries. Its main purpose is to help scale up investment in clean energy projects, thereby contributing to Australia's...

06/10/2021

[> READ MORE](#)

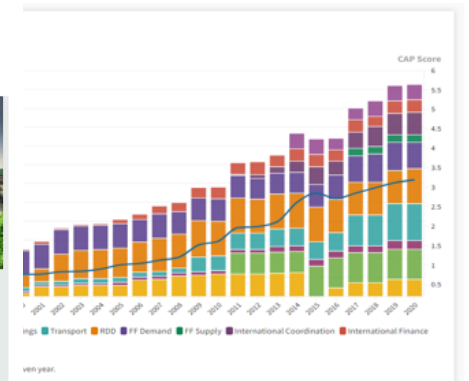


### A Climate Pact to strengthen the role of Luxembourg's municipalities

The Climate Pact is a co-operative agreement through which local governments commit to implement certain environment- and climate-related measures. In return, they receive government financial and technical assistance, as well as an environmental certification. The...

06/10/2021

[> READ MORE](#)





## Progress: 2022/3 IPAC Deliverables

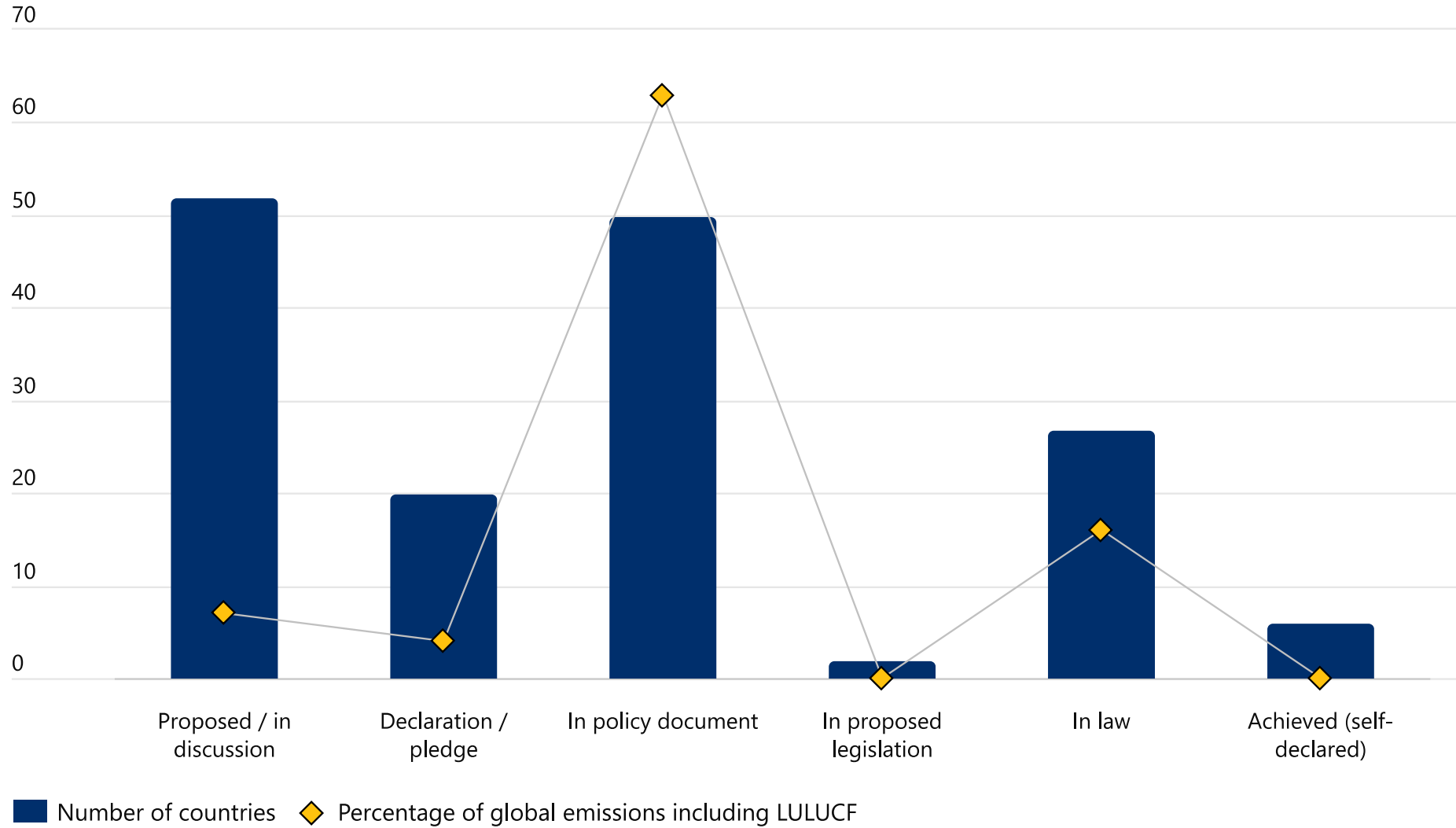
---

1. **The Climate Dashboard:** New updated Dashboard (October)
2. **The Climate Action Monitor** (COP27/8, November )
3. **Climate Policies in Practice** (COP27/8, November)
4. **Climate Action Country Notes** a full set presented by Q1 2024.



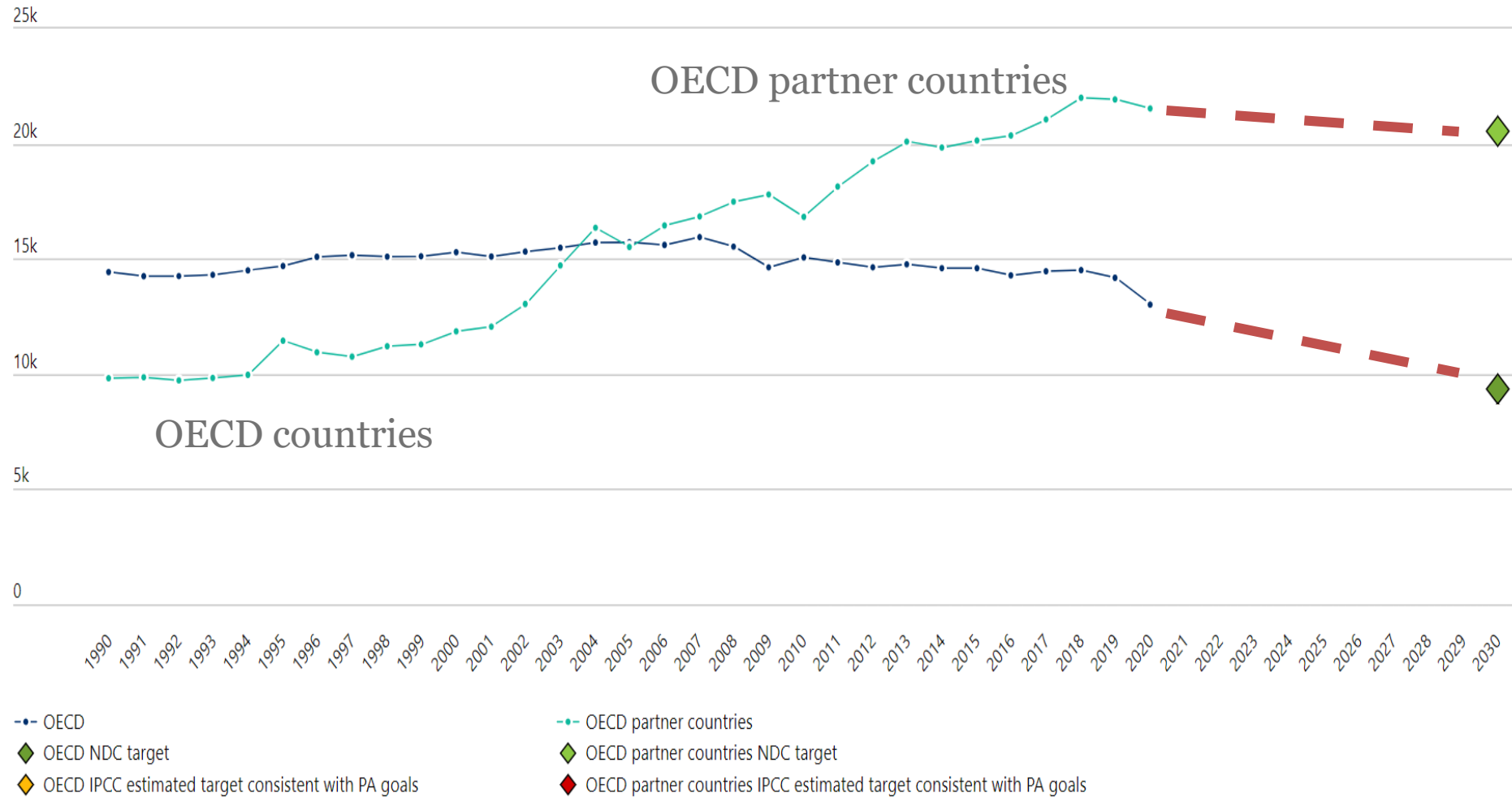


# Number of countries with a net-zero pledge by type and their % share in global emissions





# Total emissions including LULUCF (1990 - 2020), NDC targets and IPCC estimated targets consistent with PA goals, OECD and OECD partner countries, Mt CO<sub>2</sub>e

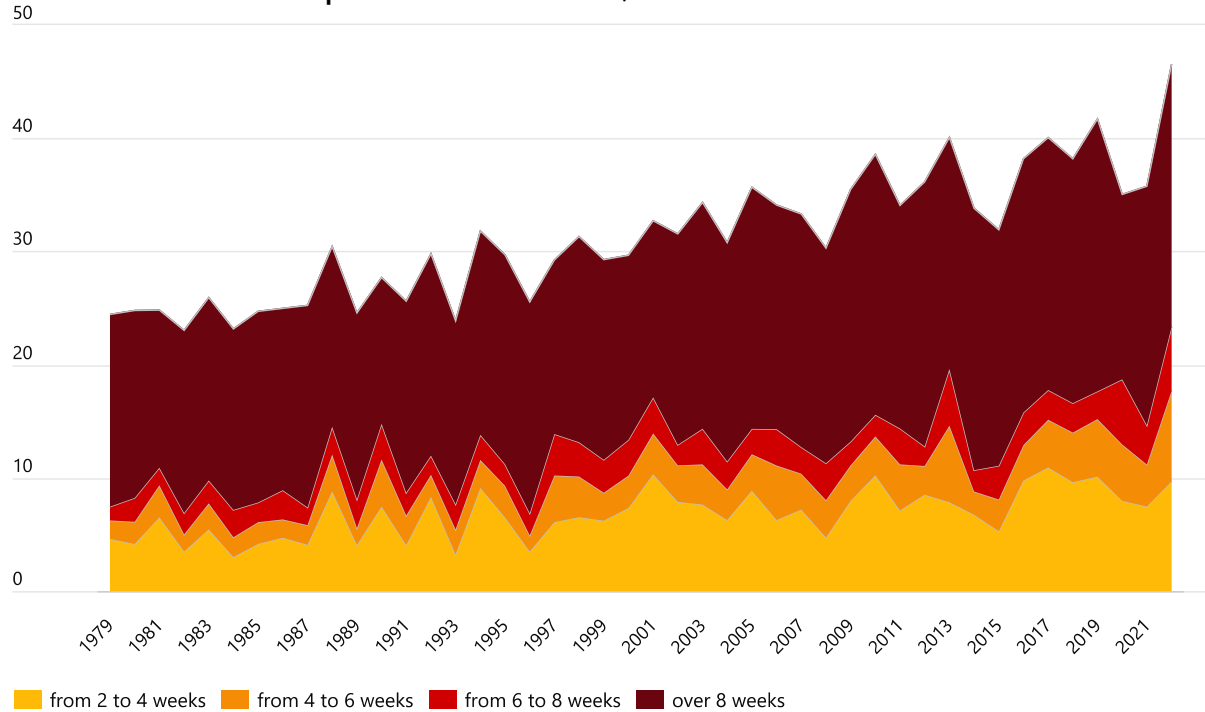




# The population exposed to extreme temperatures is an alarming and escalating phenomenon.

## Population exposure to hot days increases across OECD and OECD partner countries

Percentage of population exposed to more than 2 weeks of hot days, OECD and OECD partner countries, 1979-2022

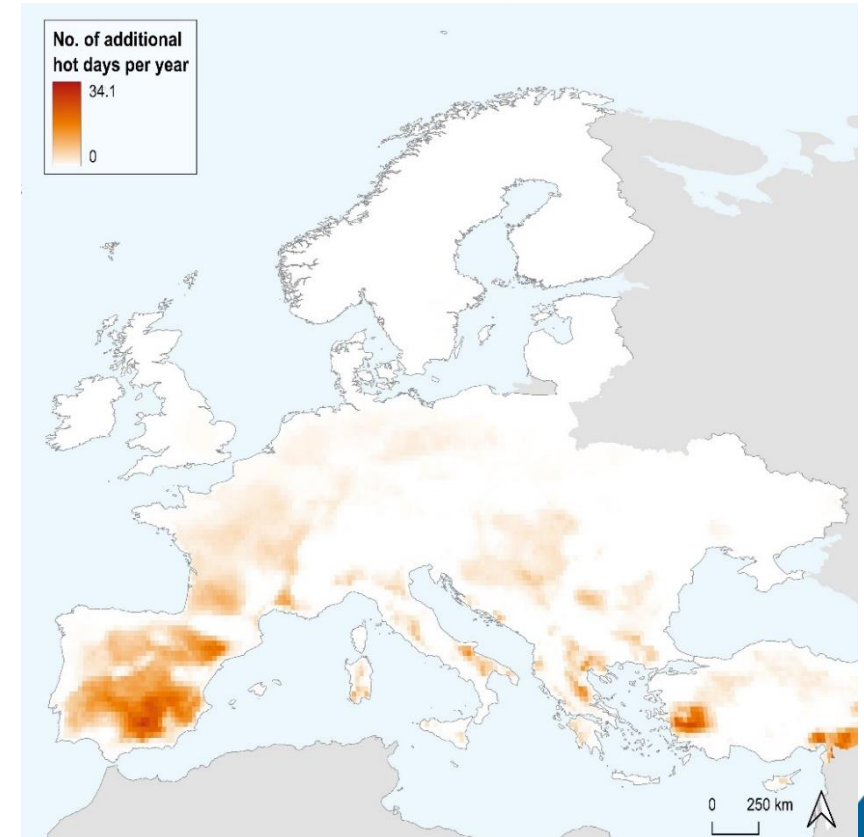


Note: Over- or under-estimations of the estimated exposure to extreme temperature are possible due to the spatial resolution of gridded data, particularly for smaller countries or regions. A variety of indicators have been developed that estimate exposure to extreme temperatures; these should be consulted for more detailed analysis of individual countries.

Source: IEA/OECD (2022), "Climate-related hazards: Extreme temperature", Environment Statistics (database), <https://oe.cd/dx/58r>.

## Increasing extreme temperatures across southern Europe

Annual number of additional hot days (2018-22 average) compared to the reference period 1981-2010 across the European region.

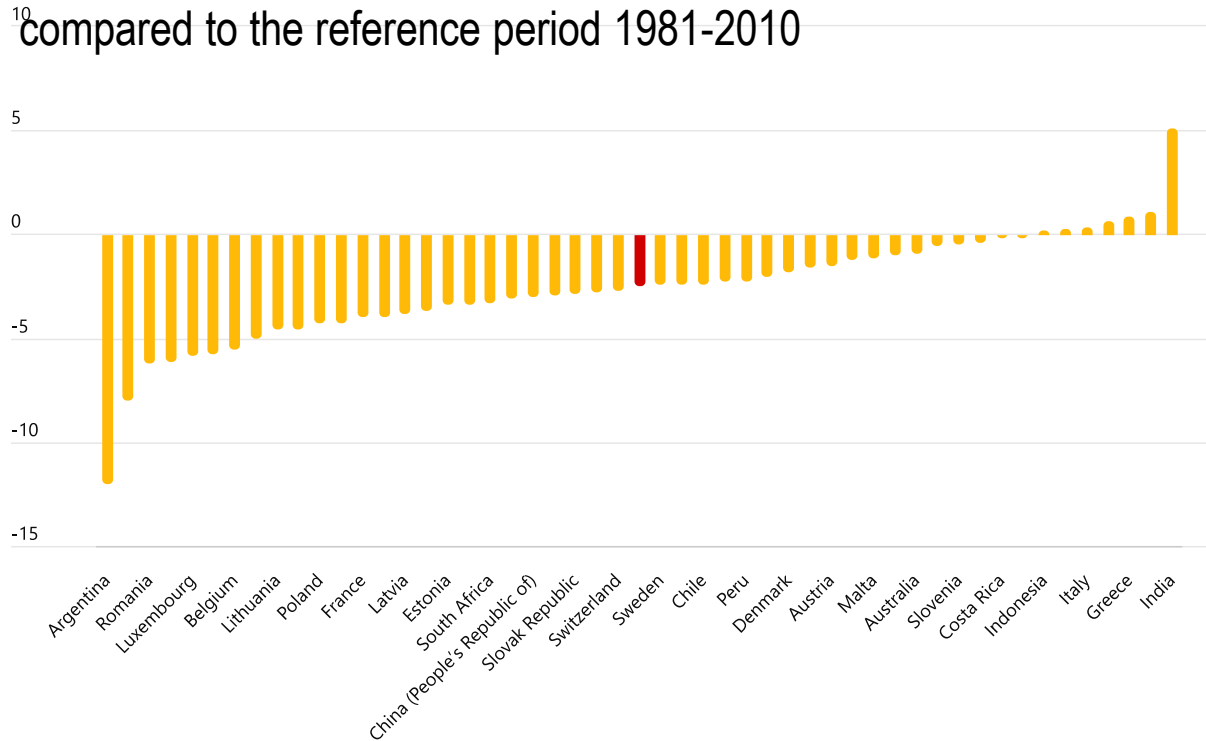




# Increasing mean temperatures alter rainfall patterns, intensify drought, and affect agricultural production and vulnerability.

## Agricultural drought is worsening for a majority of OECD and OECD partner countries

Cropland soil moisture anomaly (%), 2018-22 average compared to the reference period 1981-2010

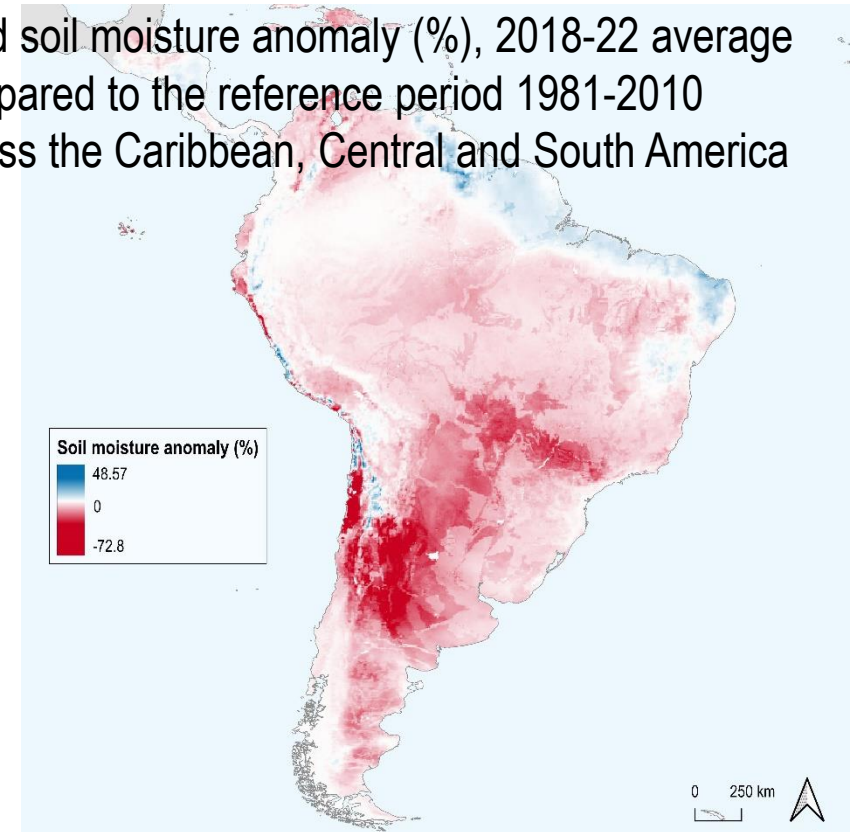


Note: No results are available for Iceland since no cropland cover is detected using Copernicus global land cover data. Caution is advised interpreting results for Saudi Arabia because cropland cover is low.

Source: IEA/OECD (2022), "Climate-related hazards: Drought", Environment Statistics (database), <https://oe.cd/dx/58t>.

## Intensifying drought impacts across Central and South America

Land soil moisture anomaly (%), 2018-22 average compared to the reference period 1981-2010 across the Caribbean, Central and South America

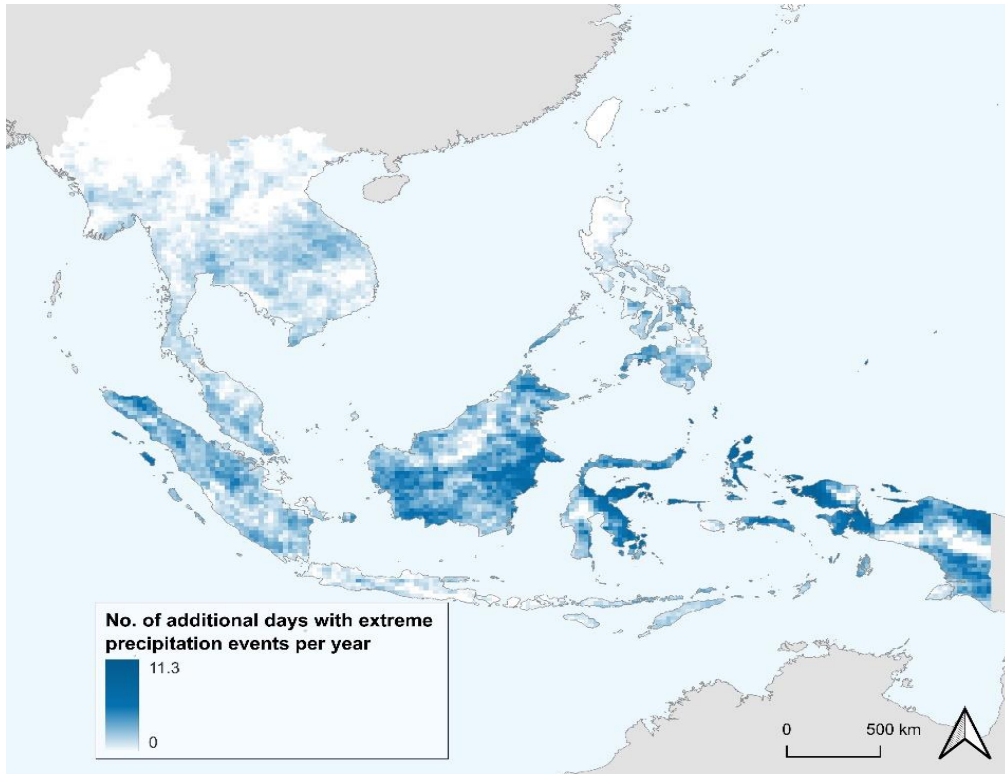




# Flooding events this year were devastating, and likely to continue.

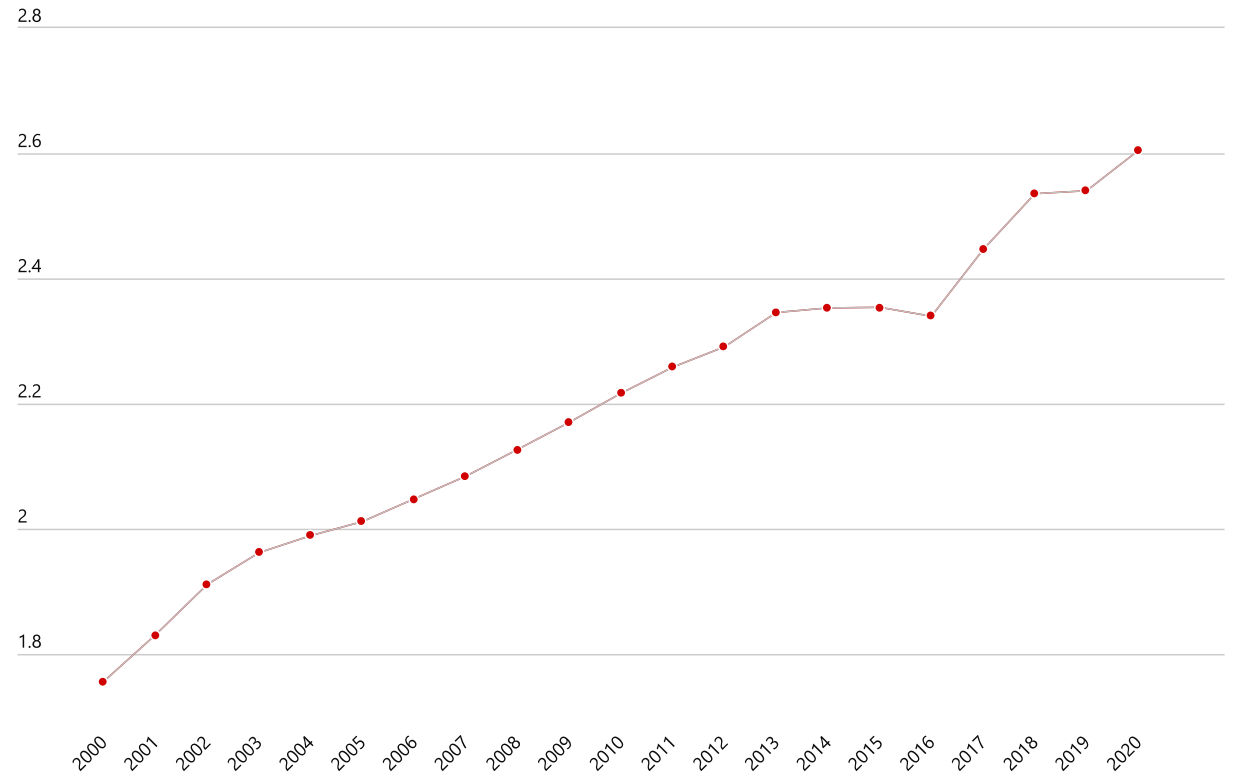
## Increasing extreme precipitation events across Southeast Asia

Yearly number of additional days with extreme precipitation events (2018-22 average) compared to the reference period 1981-2010 across Southeast Asia



## Built-up area exposure to coastal flooding increased across OECD and OECD partner countries

Percentage of built-up area exposed to coastal flooding, with a return period of 100 years, OECD and OECD partner countries, 2000-2020



Source: IEA/OECD (2022), "Climate-related hazards: Coastal flooding", Environment Statistics (database), <https://oe.cd/dx/58x>.



# A new comprehensive dataset on climate action (CAPMF)

## Countries adoption of price-based climate policy action

Policy	Number of countries adopted	Share of global emissions from region/country where policy is implemented (1)	Sector
Emissions trading scheme - Electricity	35	45%	Electricity
Carbon tax - Electricity	11	10%	Electricity
Fossil fuels excise taxes - Electricity	6	2%	Electricity
Emissions trading scheme - Industry	36	46%	Industry
Fossil fuels excise taxes - Industry	22	5%	Industry
Carbon tax - Industry	14	10%	Industry
Fossil fuels excise taxes - Buildings	28	9%	Buildings
Carbon tax - Building	17	11%	Buildings
Fossil fuels excise taxes - Transport	44	39%	Transport
Carbon tax - Transport	18	12%	Transport
Emissions trading scheme - Transport	4	35%	Transport

1. Share of emissions of the country or subnational region where policy is implemented as a % of global emissions.

Note: 2020 data, but considers China although the ETS was implemented in 2021.



## Next Steps

---

### IPAC's future goals:

1. Deliver country-level targeted advice with Country Notes.
2. Expand indicator framework and datasets.
3. Develop a platform for peer exchange on best practices.
4. Develop new analytical work based on countries' needs and concerns.



THANK YOU

[WWW.OECD.ORG/CLIMATE-ACTION/IPAC](http://WWW.OECD.ORG/CLIMATE-ACTION/IPAC)