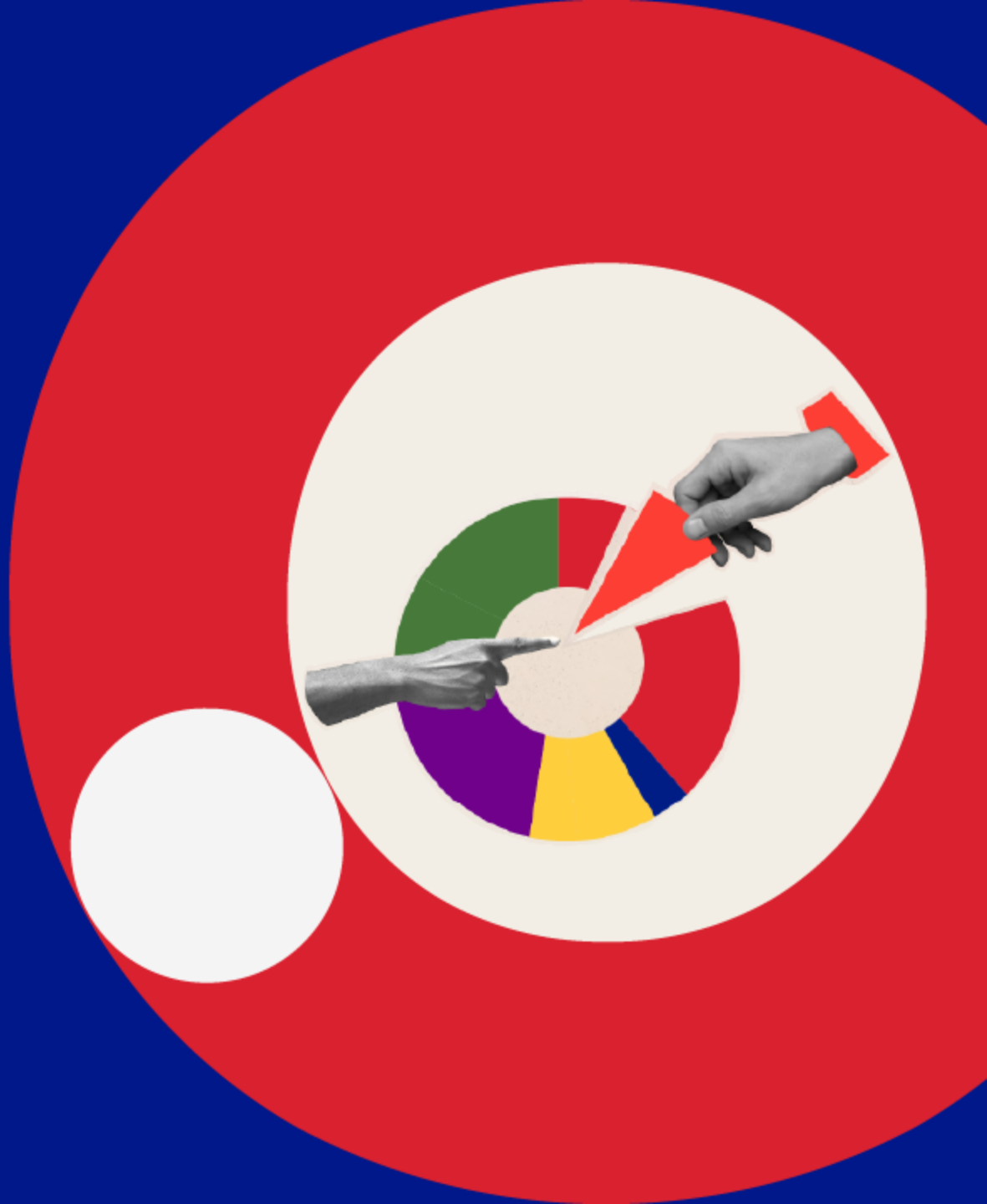
WEBINAR

# Driving climate action with open data: visual stories and impactful reuse cases



data europa academy

7 November 2025

10:00 – 11:00 CET

# Rules of the game

The webinar will be recorded and published on the data.europa academy

For questions, please use the ClickMeeting chat

Please reserve 3 min after the webinar to help us improve by filling in our feedback form

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# Today’s speakers

**Flora Kopelou**
European Data Portal (data.europa.eu), Publications Office of the EU

**Renato Berrino Malaccorto**
Research Director, Open Data Charter

**Karim Douieb**
Visualisation Expert and Co-Founder of Jetpack.AI

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# Agenda

| | |
|---|---|
| 10.00 – 10.05 | Opening and introduction – *Flora Kopelou* |
| 10.05 – 10.25 | Publishing climate data and unlocking public value through innovation challenges – *Renato Berrino Malaccorto* |
| 10.25 – 10.45 | Emotion in data: visualising climate change – *Karim Douieb* |
| 10.45 – 11.00 | Q&A and closing remarks |

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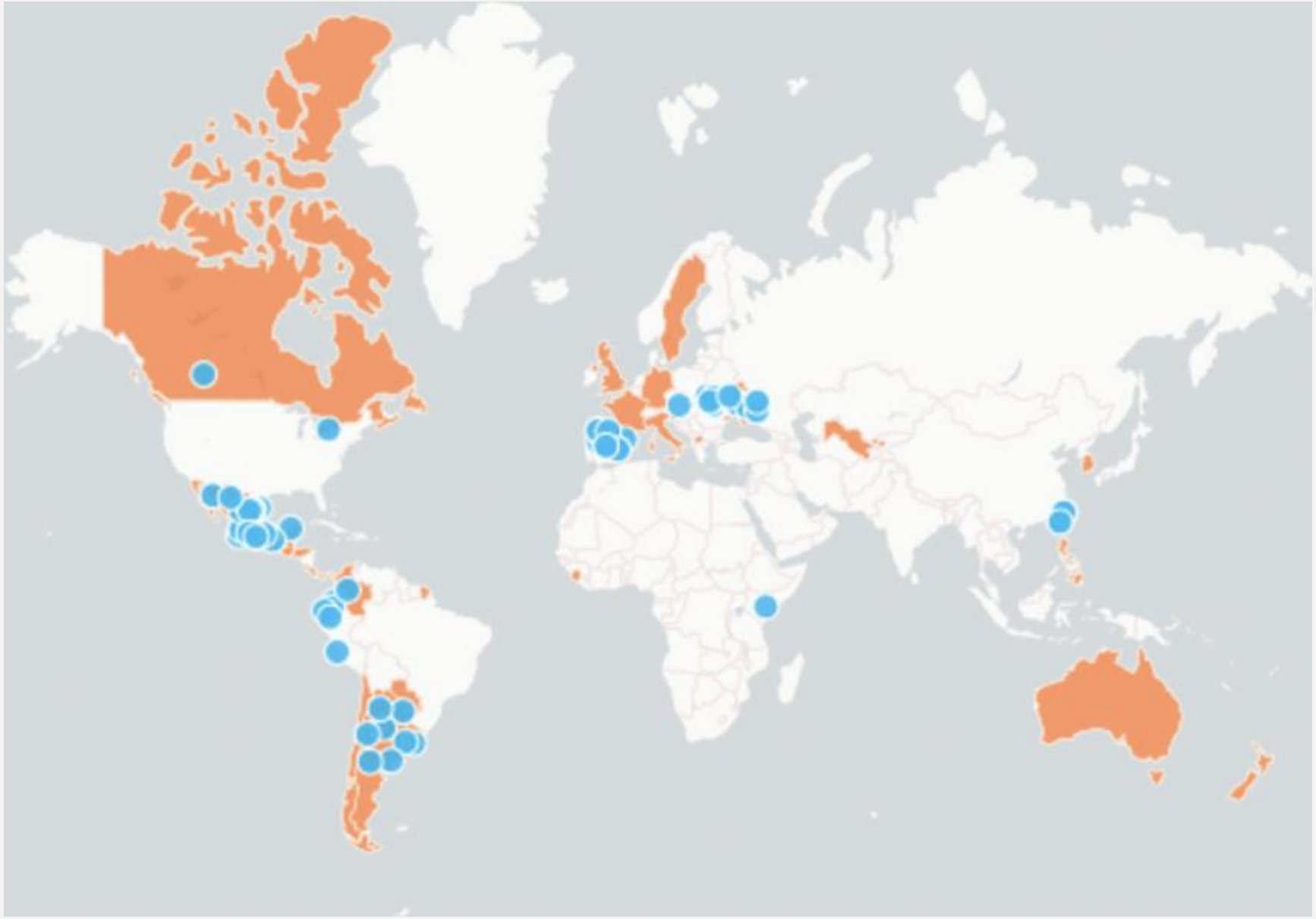
# Publishing climate data and unlocking public value through innovation challenges

November | 2025

**Renato Berrino Malaccorto**
Open Data Charter

## 96 governments
## + 74 CSOs

The **Open Data Charter** is a collaboration between over 170 governments and organisations working to open up data based on a shared set of principles.



# The Charter works in the following ways:

1. Providing a common framework

1. Supporting government implementing open data projects.

1. Connecting with different sectors to turn high-level open data principles into practical action.

1. Champions high-level commitments for open data in key international fora.

# 6 global principles

Open by default

Comparable and interoperable

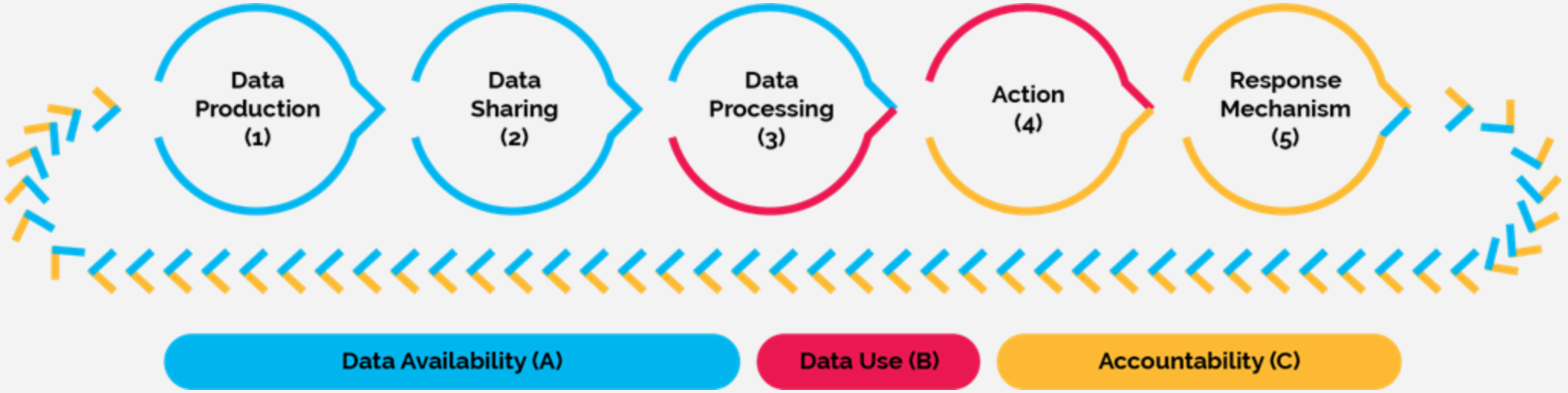
Timely and comprehensive

For Improved Governance and Citizen Engagement

Accessible and usable

For Inclusive Development and Innovation

# Data Impact Framework




There has been a growing recognition that opening up data in isolation is less effective than it can be if targeted at solving specific policy problems—that **"publish with purpose" can deliver more than "publish and they will come".**

The Charter's Open Up Guides explain in practical terms what types of datasets can be used to solve specific problems and how this data should be published.

# Open Up Guide

Agriculture

Climate Action

Anti-Corruption

Land Governance

Tools aimed to be used by governments to collect, manage and release sectoral data to improve data quality, availability, accessibility and use to promote citizen engagement, decision making and innovation.

# Open Up Guides

- Key datasets
- How they could be collected, stored, shared and published
- Good data policies and frameworks, including metadata, standards and governance frameworks if available;
- Existing gaps or challenges in the policies and frameworks; and
- Use cases from real-life examples

Photo by John Schnobrich on Unsplash

# Open Up Guide on Climate Change

- **The Challenge:** Data related to climate is varied according to stakeholders, including civil society, citizens, private sector, and government agencies.

  Climate-relevant data is often collected by multiple agencies in any given country, such as: meteorological services, regional and urban planning, natural resource and park management, and mapping agencies.

- **The Solution:** Our Open Up Guide for Climate Action helps establish clarity and direction for governments looking to improve their climate-related open data publication.

# Open Up Guide on Climate Change

## Context

- Interest in this topic within the framework of the Open Government Partnership, especially after the Paris agreement.
- Renewed attention to transparency issues around climate impact and action
- Movement towards digitization of data in many Open Government Partnership member countries, including countries in the region.

# Open Up Guide on climate change

## Content

- Facilitate a baseline assessment, based on national circumstances in terms of data governance and climate priorities. Support in the identification of necessary and priority data, evaluation of its current state of accessibility and generation of opportunities to reuse it.

**The Guide does NOT seek to prescribe the data that should be generated and published**

# Key Components of an Open Climate-Relevant Data System

- United Nations Framework Convention on Climate Change (UNFCCC) Reporting Requirements
- Type of information reported: National greenhouse gas (GHG) inventories; Information necessary to track progress made on implementing and achieving mitigation targets; Information on climate change impacts and adaptation; Information on support provided and mobilized (Developed) OR needed and received (Developing).

# High value datasets


Scan this QR to access the Open Up Guide for Climate Action in Gitbook or Airtable

# Existing public repositories of climatic and climate-relevant data

Some types of climate-relevant data at the global, regional, and national levels are already available in the public domain. This includes historical climatic data (such as temperature and precipitation data), projections of future climatic conditions and climate impacts, and earth observation data collected and made available by space agencies. Some of the main repositories of this data include:

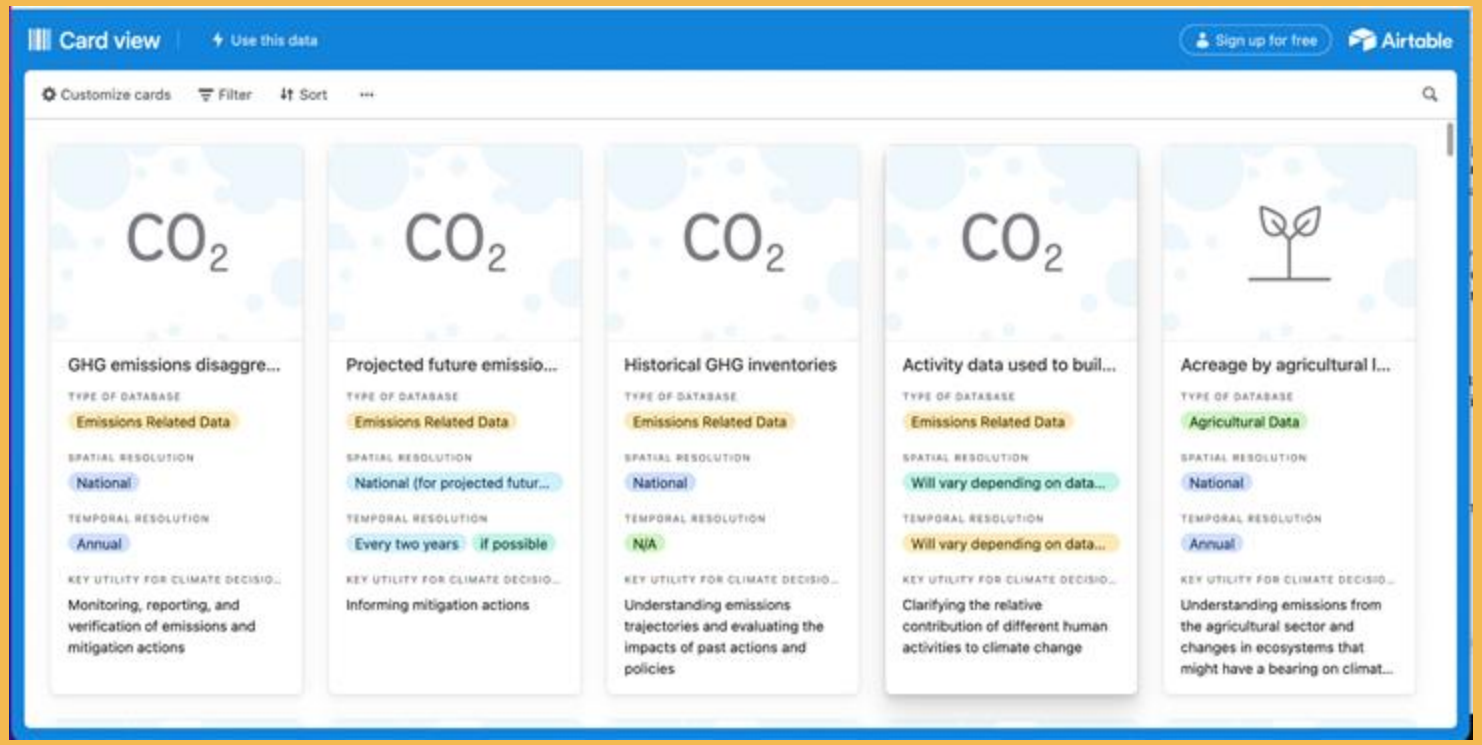
- World Bank's Climate Change Knowledge Portal: http://sdwebx.worldbank.org/climateportal/index.cfm
- IPCC's Data Distribution Centre: https://www.ipcc-data.org/index.html
- UN's Global Risk Data Platform: https://wesr.unepgrid.ch/?project=MX-XVK-HPH-OGN-HVE-GGN&language=en&theme=color_light
- European Space Agency's Climate Change Initiative: https://climate.esa.int/es/odp/#/dashboard
- Global Climate Observing System: https://public.wmo.int/en/programmes/global-climate-observing-system
- UNFCCC: https://unfccc.int/documents
- FAOSTAT: https://www.fao.org/faostat/en/#data
- PREPdata: https://www.prepdata.org/about
- National Center for Atmospheric Research's (NCAR) Climate Data Guide: https://climatedataguide.ucar.edu/about

# What's missing?

Considering the types of information deemed relevant to address climate change and the types of information currently available in the public domain through global, regional, or national sources, we see a need for increased awareness of data collection and publication efforts, as well as greater availability/synergies of a wider set of environmental and socio-economic information to better understand:

- the demographic, socio-economic and technological factors driving GHG emissions and vulnerability to climate impacts;
- the adaptive capacity of different sectors of the economy and of society;
- the likely impacts of climate change on marginalized groups and its effects on existing inequalities and other social and economic challenges (e.g. gender-disaggregated data);
- the effects of policies and programs on GHG emissions and climate preparedness.

# Uruguay - Implementing Climate Action Guide




- Data assessment: 20 of 72 datasets had some degree of openness.
- Ministry of Environment + AGESIC identified priorities (wastes and climate finance) and cocreated a strategy for opening data.
- Openned 29 new datasets
- Improve data skills within the public sector
- Publication plan included CSOs demand

# The importance of a participatory prioritization process

- Understanding the “demand side” is critical for a successful open data policy.
- Setting realistic expectations of publication.
- Understanding the reality of which data exists, is digitized, the type of work (data mining, regulations, etc) that is needed.
- Setting the space for collaboration.

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# Open Data - National Catalog - Uruguay


https://catalogodatos.gub.uy/dataset?q=cambio+climatico

# Evaluation **criteria**

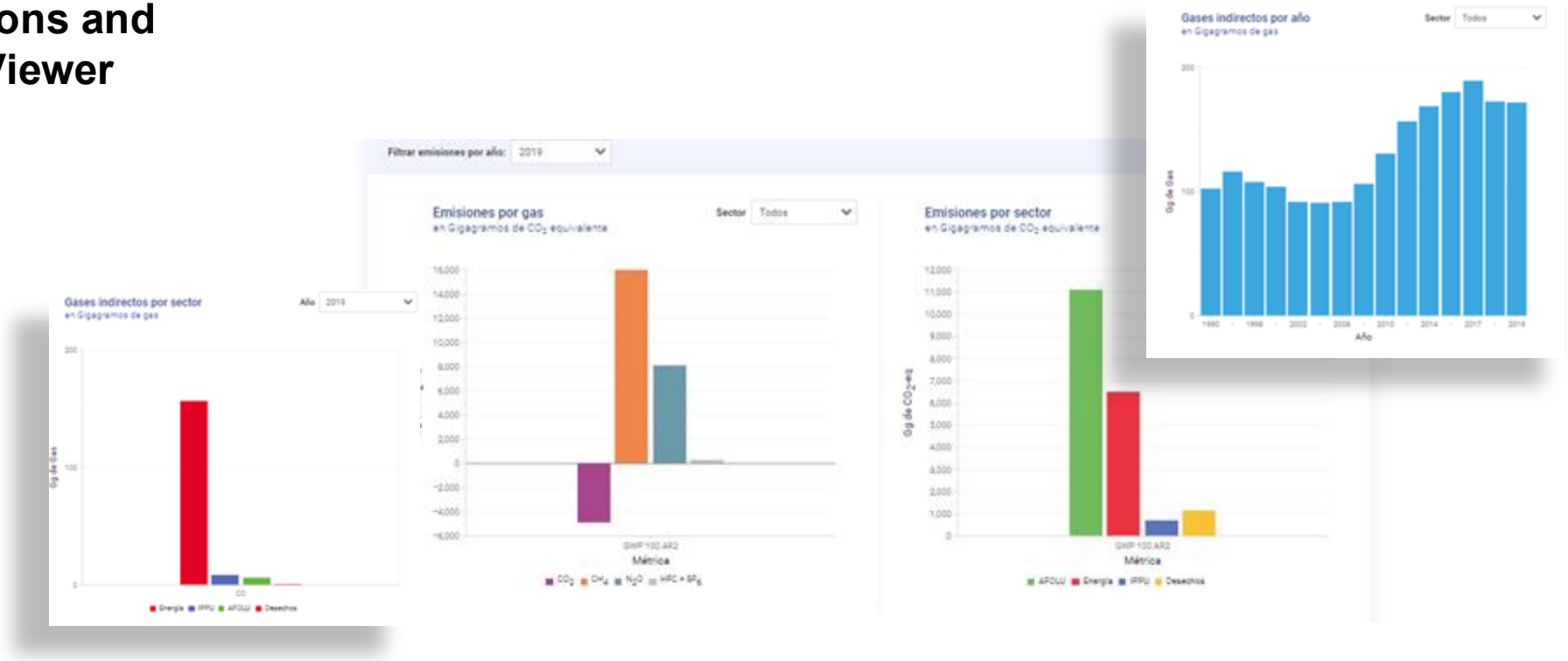
In Uruguay, the mapping data was evaluated based on 15 criteria to measure its accessibility, comparability and quality used in the main open data indicators, including the Open Data Barometer, OURdata OECD and GODI:

1. Published in data portal
2. Available data
3. Machine readable data
4. Downloadable by batch
5. API available
6. Open Licence
7. Updated
8. Easy to find
9. Linked data
10. Available backups
11. Metadata
12. Data dictionary
13. Documentation on quality and generation processes
14. Vertical Evaluation (complete)
15. Horizontal Evaluation (relevant)

## Open Data for climate action in Uruguay

# Data reuse: Visualizations

**Uruguay Greenhouse Gas Emissions and Removals Viewer**




https://visualizador.gobiernoabierto.gub.uy/visualizador/api/repos/%3Apublic%3Aorganismos%3Aambiente%3Avisualizador_inventario.wcdf/generatedContent

# Promoting data reuse: ODC´s Data Innovation Challenge in Uruguay

## Objectives

**Promote the use of open data on climate change** by continuing the opening and publication process initiated within the framework of the pilot developed in 2020.

**Link** the environment and climate change communities with those of entrepreneurs and developers linked to open data.

## Challenge organized in phases

**Introductory sessions:** Governmental teams introducing the existing data and key challenges.

**Call for proposals and pitch day.** An open call for proposals and selection of teams going forward.

**Mentoring:** Expert mentoring during the development process and allocation of seed funds.

**Presentation and awards ceremony:** One team ended up being the final winner

# Promoting data reuse: ODC´s Data Innovation Challenge in Uruguay

The winning project was **Uruguay 2100**, which seeks to tell a story of how sea level rise will affect the Uruguayan coast by the year 2100. To do this, the team created maps showing the areas at risk of flooding in Montevideo by collecting and analyzing data.

Zona costera. Fuente: Plan Nacional de Adaptación para la Zona Costera Ante la Variabilidad y el Cambio Climático Ministerio de Ambiente.

https://amenazaroboto.com/uruguay2100/montevideo

# Promoting data reuse: ODC´s Data Innovation Challenge in Uruguay

## Other finalist initiatives

**Sea lion:** focused on cyanobacteria, this project seeks to unify the scientific knowledge generated on the subject in Uruguay and analyze the available data to generate a diagram and then disseminate it on Instagram, Twitter and Facebook. This project shows the link between climate change and cyanobacteria blooms.

**Climate Change Trends in Uruguay:** is a microsite that facilitates the visualization, comprehension and understanding of the main indicators on climate change in Uruguay. They use the narrative technique of scrollytelling, favoring qualified decoded information sources.

**Waste collection and recovery:** using data from Montevideo's recyclable waste collection circuits and reception infrastructure, this project seeks to create a map of waste generation in the city. The group analyzes recyclable waste recovery rates as a contributing factor to climate change mitigation.

**Uruguay Agroecological:** focused on showing how food production (agriculture and livestock) impacts climate change. Through a portal, people can find information about the current process of agriculture, as well as options of suppliers that use alternative and organic methods.

# Global Data Barometer: climate module

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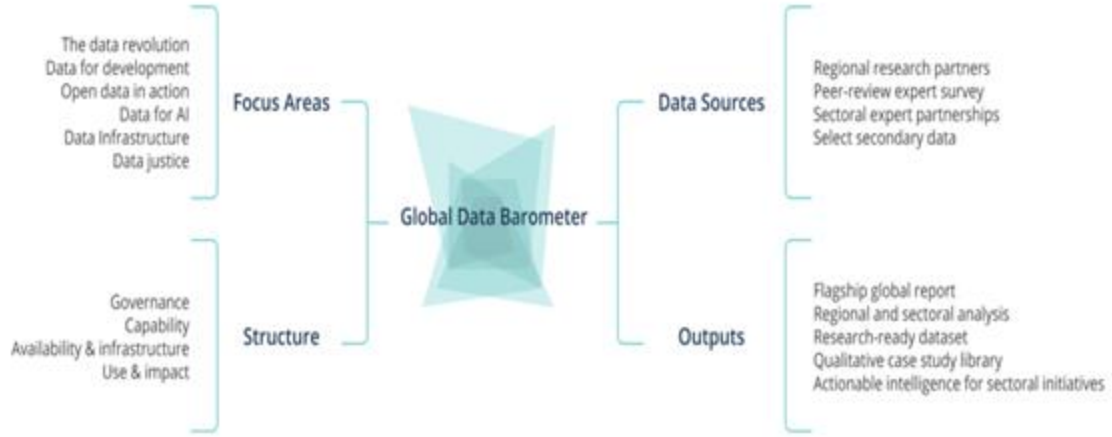
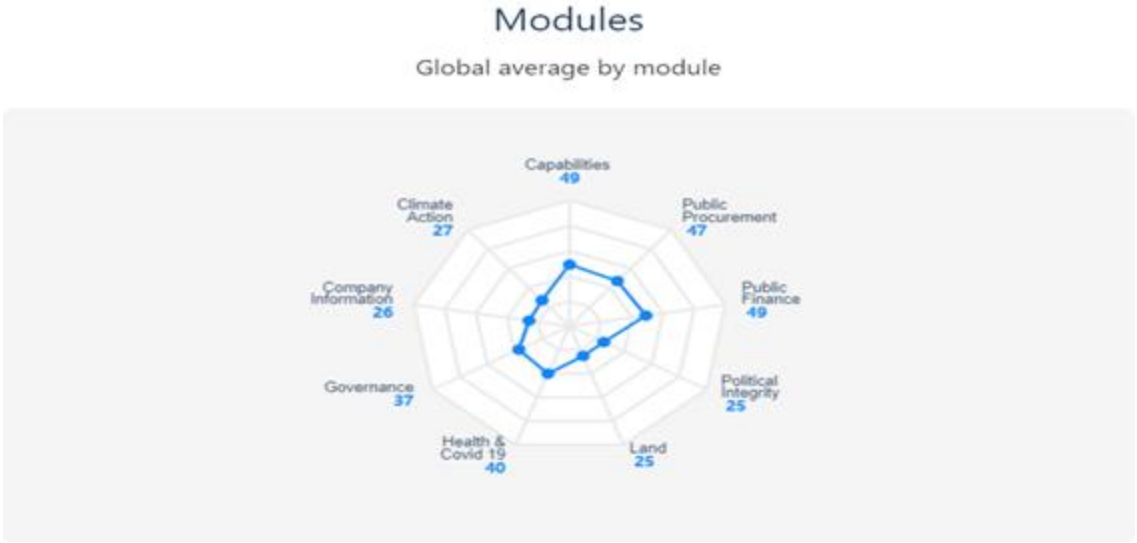
https://globaldatabarometer.org/module/climate/

# Environment and Climate in OGP

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## WHAT ARE OGP MEMBERS DOING?

- → Creating climate change adaptation and mitigation policy
- → Publishing data and research about pollution and climate change
- → Ensuring citizen participation in the creation of environmental policy
- → Creating public accountability mechanisms for environmental complaints

## NOTABLE COMMITMENTS

### Recent Results

**Canada - Expanding Transparency of Federal Science (2016)**

Prior to 2016, government research lacked transparency and scientists were described as "muzzled." Through their 2016 action plan, Canada's environment and climate department took action to expand access to government research data. This commitment also included the re-establishment of dialogue between government scientists and non-governmental organizations, the appointment of a chief science officer, increased public availability of data and publications from federal science and technology activities, and metrics to track open science activities and assess their impact.

**Germany - Increasing Participation in Environmental Policy (2017)**

As part of their 2017 action plan, the German government hosted four events, including a youth dialogue and a large-scale online consultation, to solicit citizen input on policy topics such as climate change, conservation, and resource efficiency. The commitment also improved the quality of participation by integrating citizen engagement in the binding rules of the Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety.

### Commitments to Watch

**Ecuador - Implementing the Escazú Agreement (2019)**

To make environmental governance more open and accountable, Ecuador committed to implementing the Escazú Agreement. The agreement aims to provide citizens full and effective access to environmental information, opportunities to participate in environmental decision-making, and access to justice for environmental matters. It also increases opportunities for participation through the creation of a national observatory with members from civil society, academia, and local groups. The observatory will collaborate with the government to develop a roadmap with concrete proposals to implement the agreement, and oversee its implementation.

**Peru - Improving Interoperability of Environmental Data (2019)**

Peru's 2019 action plan includes a commitment to improve the quality of their environmental data. Although Peru previously worked on improving access to environmental information in their 2017 action plan, environmental data is still disjointed among national government agencies and regional governments. Improving the interoperability of data will allow citizens to better participate in and monitor environmental decision-making.

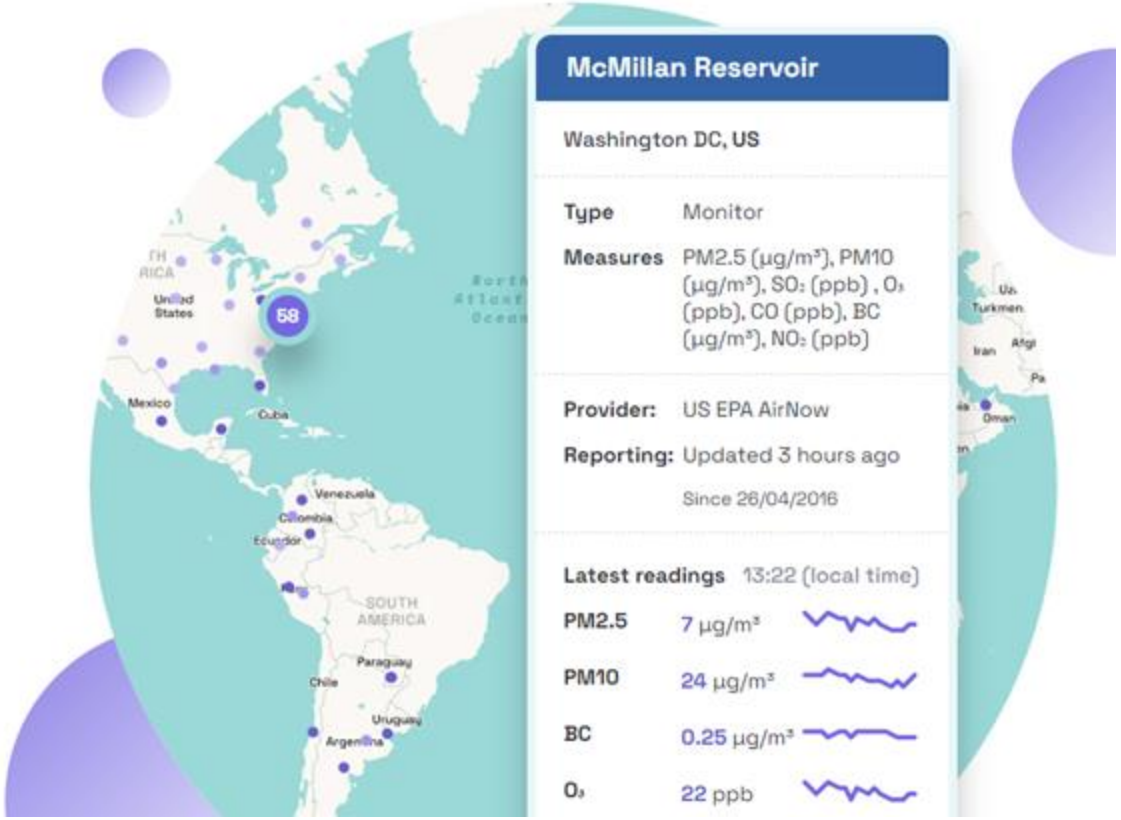
# Climate Action Tracker


https://climateactiontracker.org/

# Open QA

## Fighting air inequality through open data.

OpenAQ is a nonprofit organization providing universal access to air quality data to empower a global community of changemakers to solve air inequality—the unequal access to clean air.




https://openaq.org/

# Reuse: transparent public policy (Climate Action BA)

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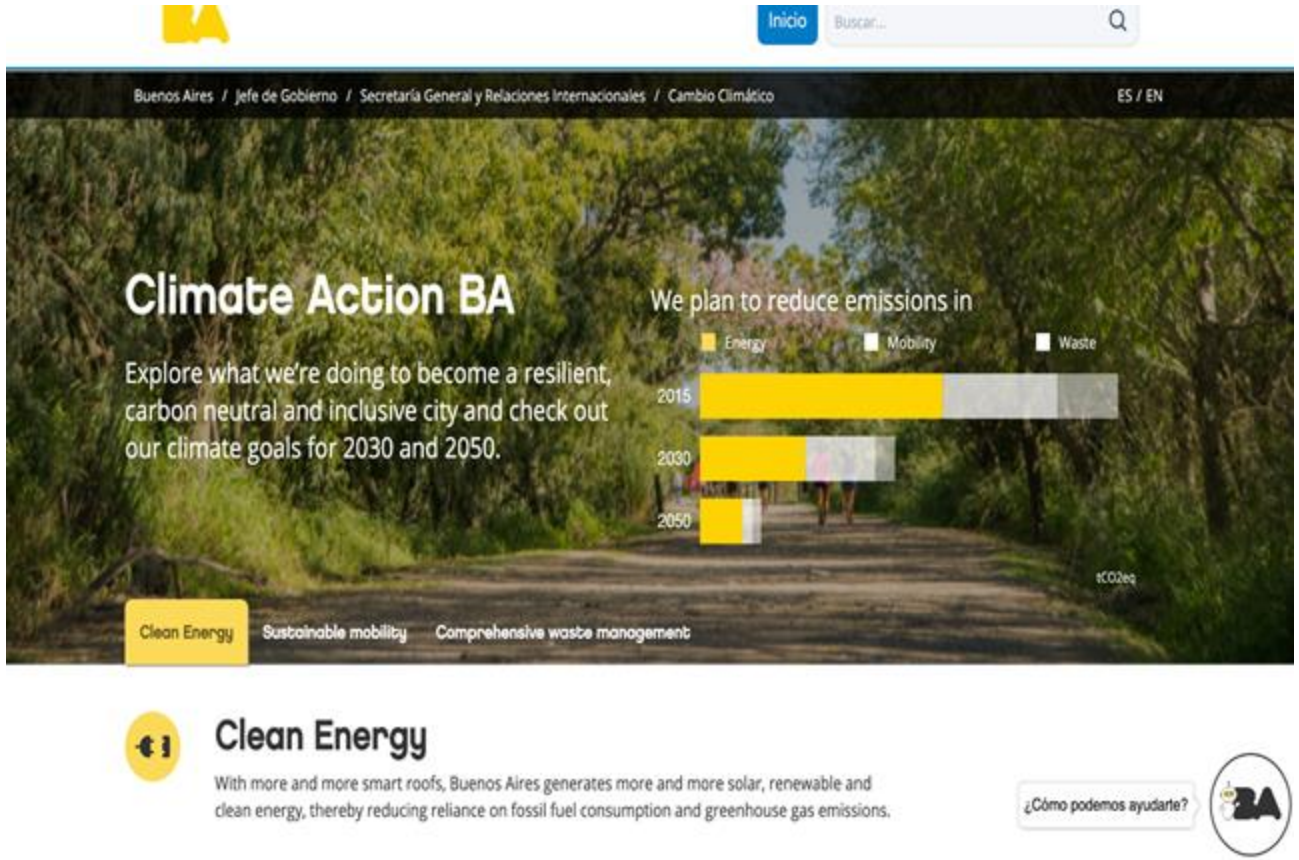



The project combines openness of environmental information and civic-led activities to encourage collective action for cultural change to mitigate climate change. In addition, it has interactive visualizations on greenhouse gas inventories, emissions by sector, subsector, source and scope, evolution of temperature and precipitation, and air quality.

https://buenosaires.gob.ar/cambioclimatico

# Environmental information systems

opendatacharter.org

Colombia


Chile

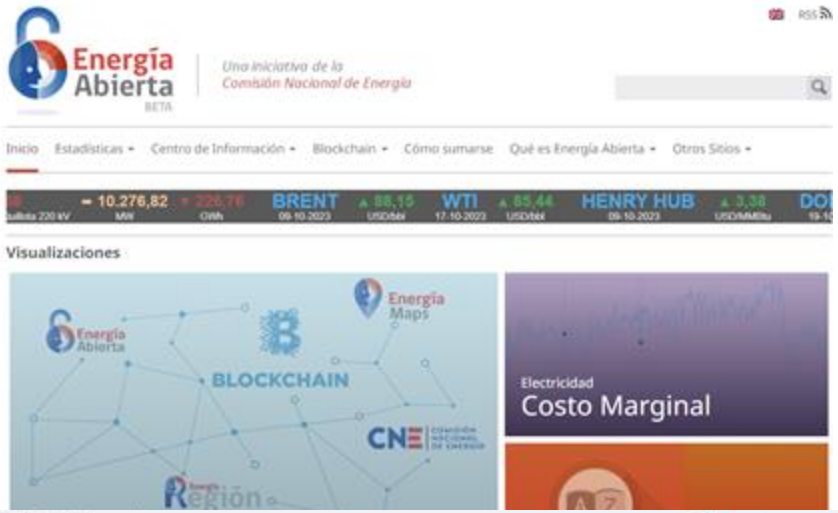

Panamá

# + Good practices

## Long-term climate strategy for Colombia.


## Panamá: National Climate Transparency Platform


## Chile: Open energy and Climate Change

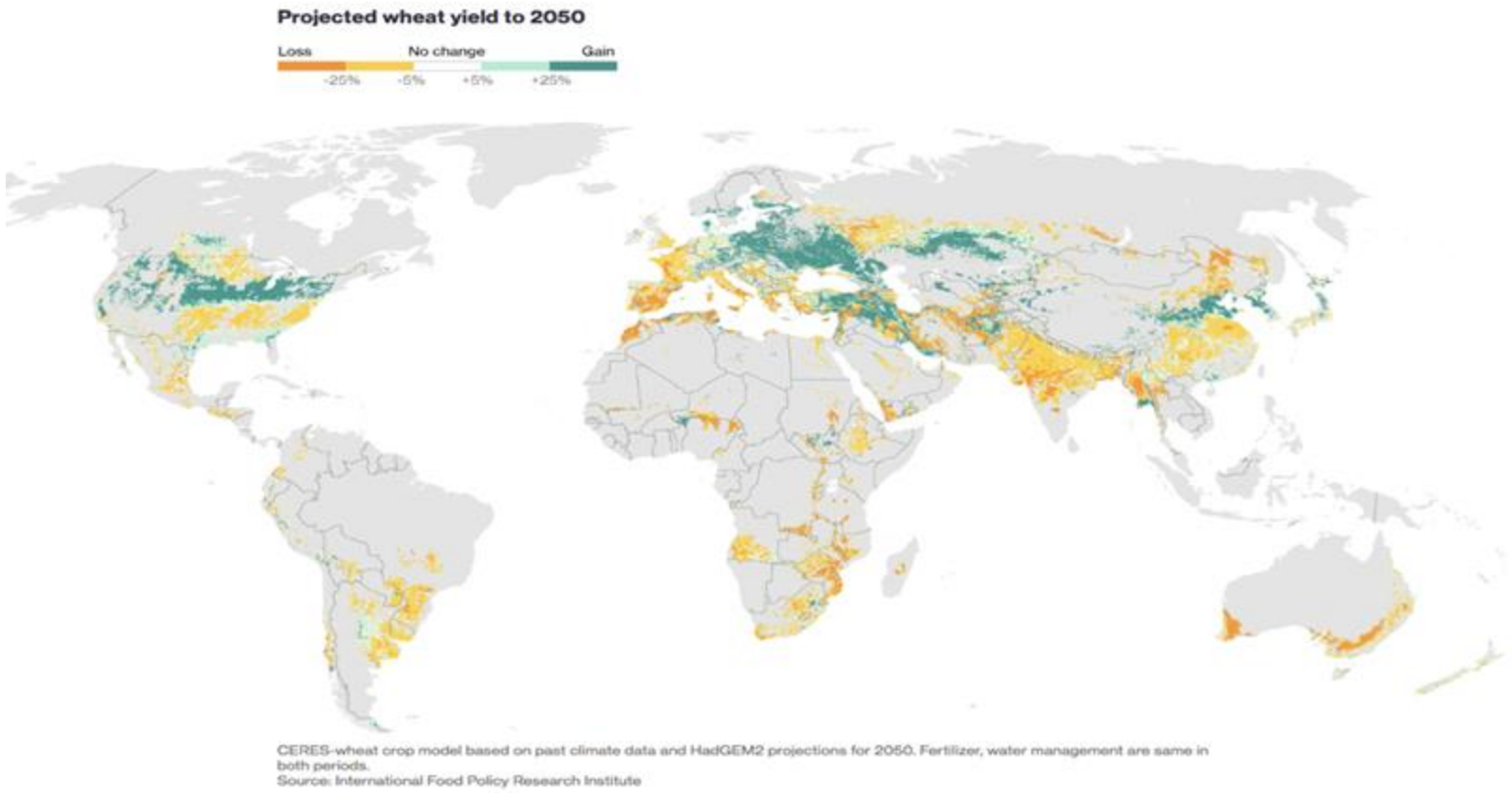



# Reuse: telling data-based stories



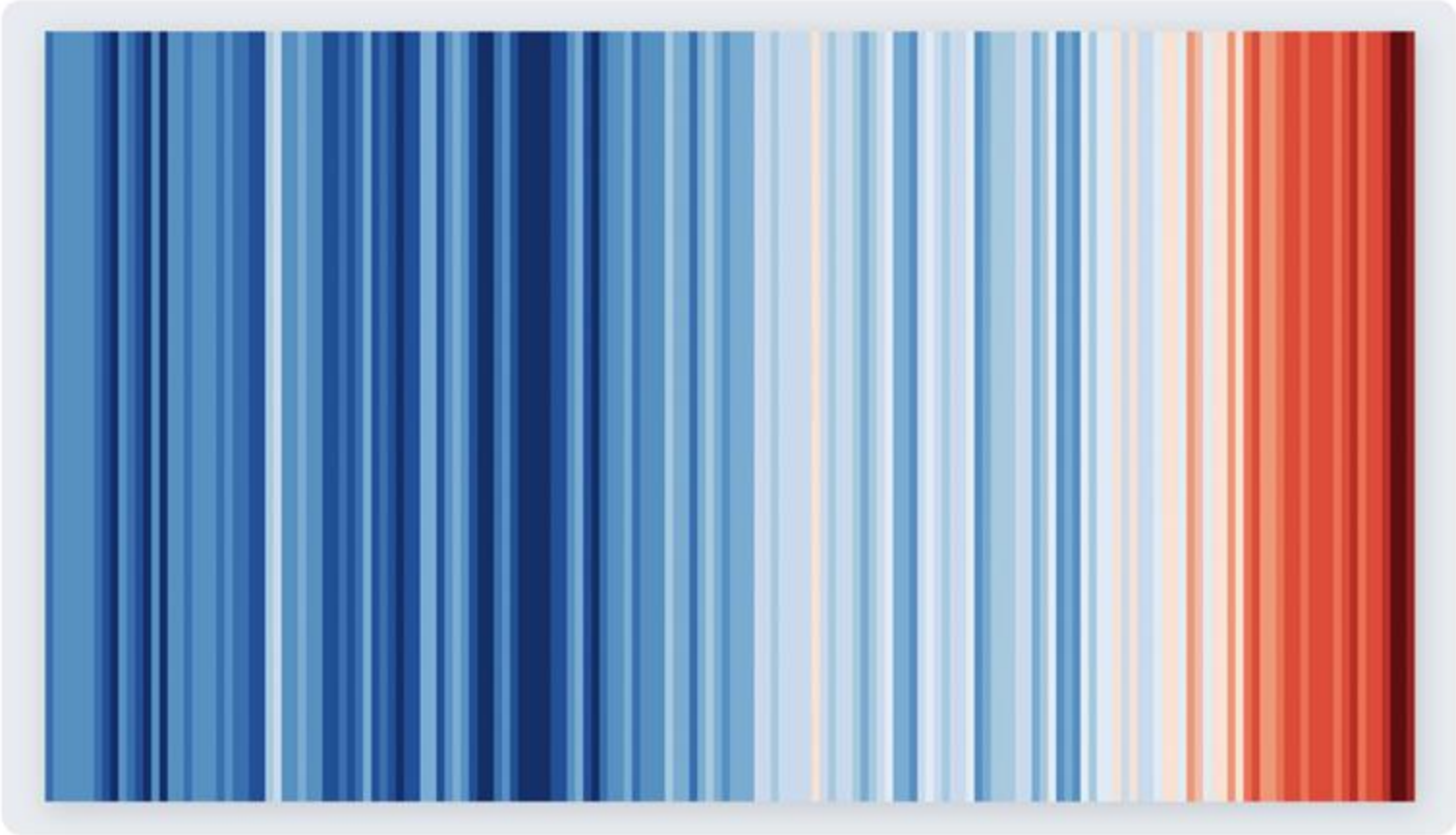

https://ladatacuenta.com/

# Data reuse: Visualizations




https://visme.co/blog/climate-change-facts/

# Data reuse: Visualizations



https://visme.co/blog/climate-change-facts/

# Research: opportunities for focused collaboration

- With Luminate's support, we conducted a **research project to understand how open data global organizations are trying to fit into the climate change discussion.** The objective was to bring together stakeholders to discuss and understand why open data for climate action is important, how the open data community can help the well-established climate change community in their advocacy agenda.

- From the review of studies in the previous section as well as interviews, an agreement on **possible contributions of open data in the climate action agenda** can be summarized into the following aspects: Increase access to reliable climate data and data governance; More citizen friendly information for advocacy efforts; Supporting climate data policy agendas; Bringing new voices into the climate action conversation.

- The main **challenges and opportunities** identified during this process revolved around five major themes: 1) User capacity to understand and analyze climate data; 2) communication of data; 3) data standardization and interoperability (international and regional standards); 4) data ownership; and 5) new groups that can innovate with climate data.

# Addressing climate change through openness

- Open Government can help move forward on climate action and environmental sustainability through fostering transparency, accountability and citizen participation in the development and implementation of climate policies related to the reduction of pollution, the conservation of natural resources, the improvement of mitigation and adaptation planning and the development of capacities and resilience to climate change.

- This model of governance can also help to improve urban resilience, promote a more sustainable use of water and energy, integrated waste management, and participatory planning approaches that integrate risk prevention.

- Data has become central to the environmental movement. In this context, the production, disclosure, and use of data will be essential to understand risks, track progress, enable informed action, and evaluate impact across a range of sectors.

- National Governments must play a lead role in responding to climate change, but like all complex public policy challenges, the action and collaboration of different actors is required to succeed. Contributions from subnational governments, the private sector, and civil society are crucial.

# Learnings

1

Little link between the climate action and open data communities is not always strong

2

Disaggregation into multiple institutions at the time of data generation.

3

Low level of data publication in open format.

4

Climate change data can be highly technical, so collaboration between the climate change and open data communities is necessary to promote its reuse

# Learnings

5

Datasets from the Guides look different in each context

6

We need both interoperability of data and people

7

Work with users for a constant feedback mechanism

8

Assign resources and monitor progress

# Thank you very much!

Renato Berrino Malaccorto
renato@opendatacharter.org

# Slides Karim Douieb

- Karim Douieb's slides can be accessed via the following link: https://www.figma.com/deck/g2ANCSkZMZNXpi2xTX769x

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# Q&A

**Flora Kopelou**
European Data Portal (data.europa.eu), Publications Office of the EU

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**Karim Douieb**
Visualisation Expert and Co-Founder of Jetpack.AI

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# Register for our upcoming webinar!


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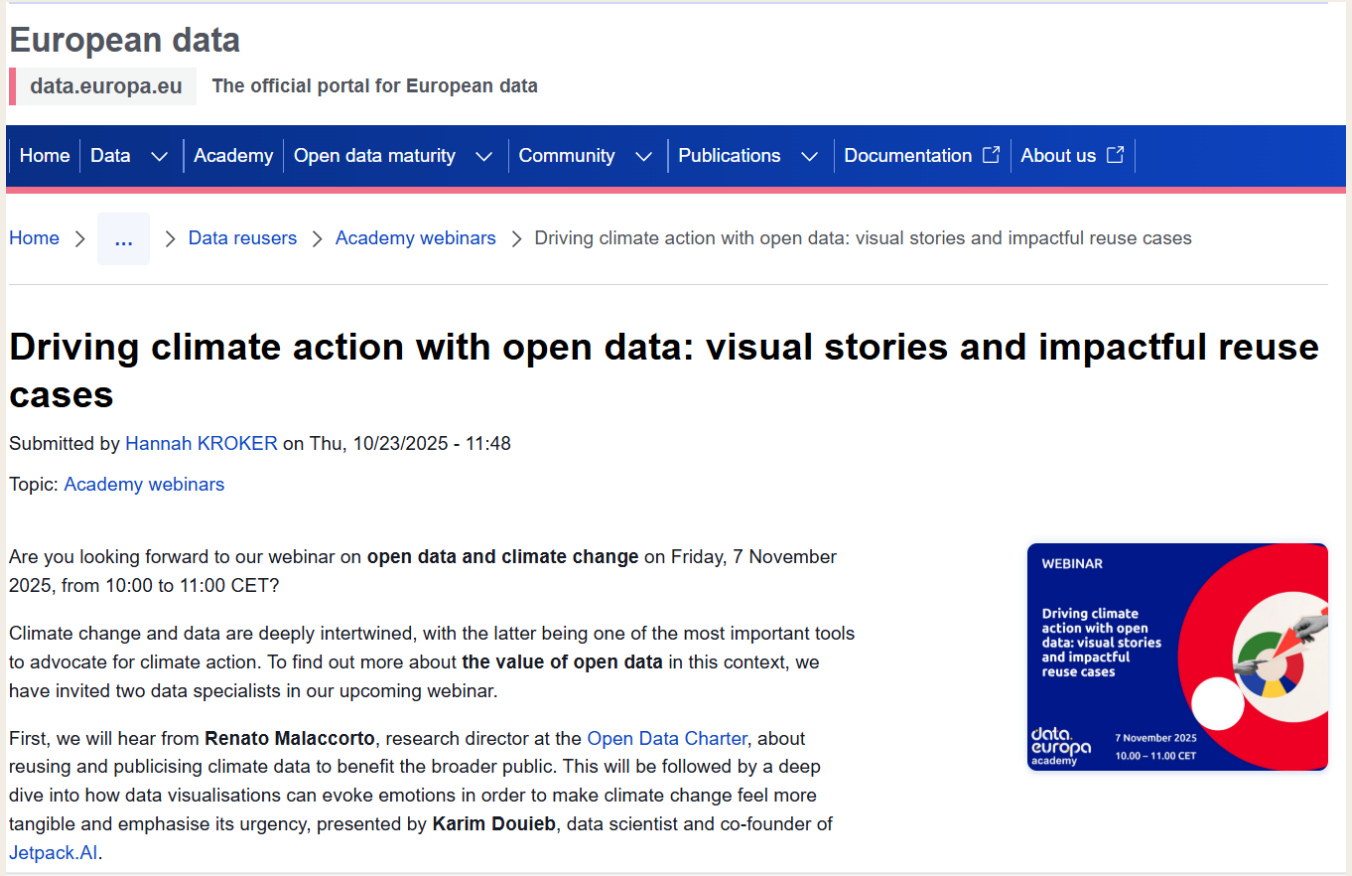
# Continue the discussion after the webinar!



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## Driving climate action with open data: visual stories and impactful reuse cases

Submitted by Hannah KROKER on Thu, 10/23/2025 - 11:48

Topic: Academy webinars

Are you looking forward to our webinar on **open data and climate change** on Friday, 7 November 2025, from 10:00 to 11:00 CET?

Climate change and data are deeply intertwined, with the latter being one of the most important tools to advocate for climate action. To find out more about **the value of open data** in this context, we have invited two data specialists in our upcoming webinar.

First, we will hear from **Renato Malaccorto**, research director at the Open Data Charter, about reusing and publicising climate data to benefit the broader public. This will be followed by a deep dive into how data visualisations can evoke emotions in order to make climate change feel more tangible and emphasise its urgency, presented by **Karim Douieb**, data scientist and co-founder of Jetpack.AI.



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# Your opinion is important to us!

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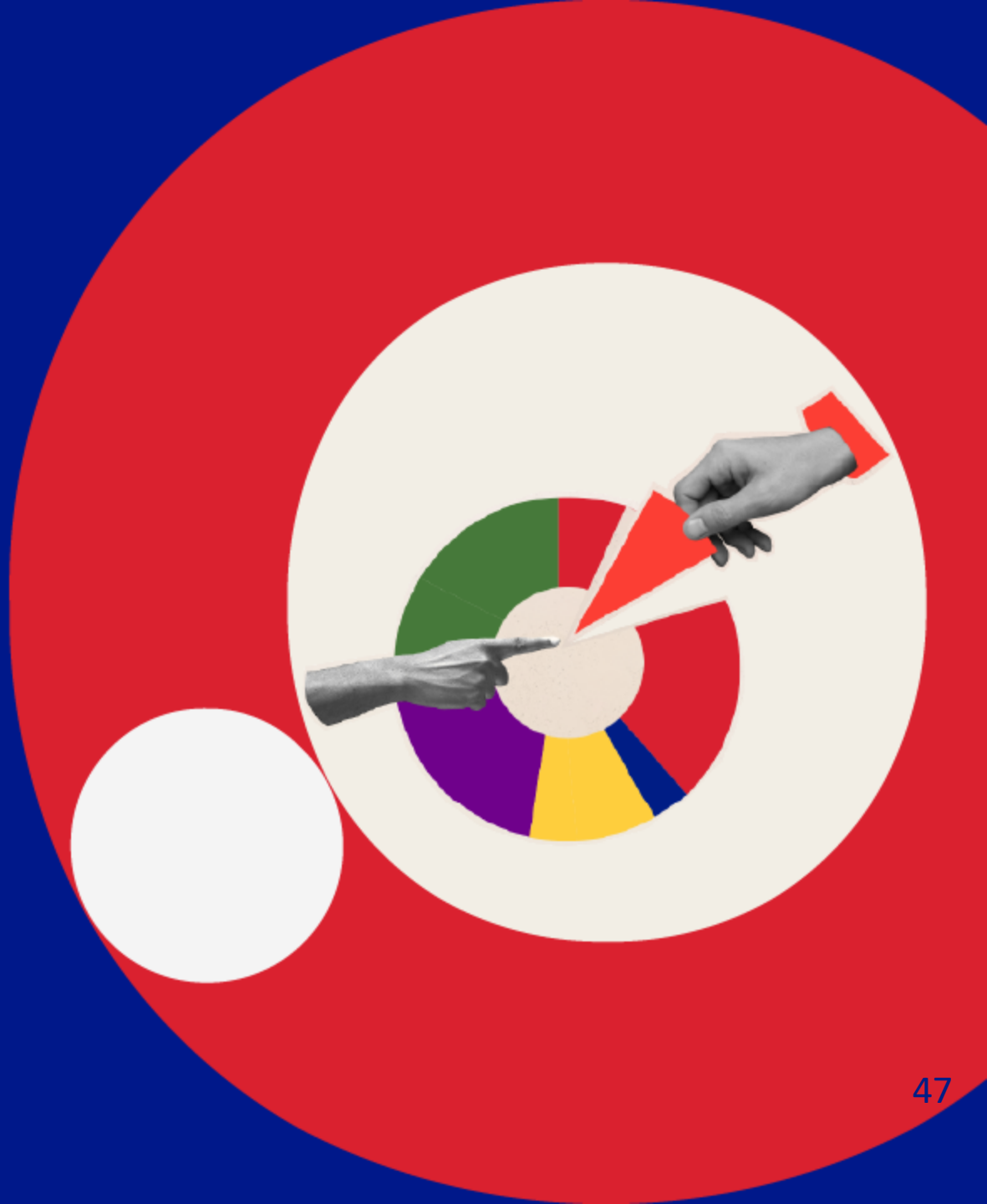
# Thank you!



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