WORLD RESOURCES INSTITUTE

CLIMATE DATA AND TOOLS

Independent mitigation/adaptation data and online visualization platforms for climate change audits

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WRI is a global research organization that makes big ideas happen.

Programs: Cities, Climate, Energy, Food, Forests, Water
Centers: Business, Economics, Finance, Governance

WORLD RESOURCES INSTITUTE

What We Do

- ✓ Rigorous research
- ✓ Coalition-building
- ✓ Standards
- ✓ Tools
- ✓ Services

OUR APPROACH

Count It

Change It

Scale It

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The Questions

1. Where do you as an auditor find data to carry out mitigation and adaptation audits?
2. What is the difference among data sources?
3. How do you apply the data to key questions?

OFFICIAL AND INDEPENDENT DATA

Type	Official data	Independent “Unofficial” data
Definition	Official data published by governments about their own jurisdiction	Data published by non-governmental organization or governments with a global scope
Purpose	Reported under specific commitment (UNFCCC, EU or national legislation) for policy objectives or tracking progress	Complementing official data for where data is missing, not comparable across countries or not fully reliable
Methods	Often more granular data, higher tier methodology – less uncertainty	Often more consistent across countries, more comparable. Lower tier methodology
Scope	Covers their mandates and reporting commitments.	Sometimes covers much more variety of data, adds information to official data, compares official & unofficial
Access	Data sometimes not open, lots of data is in tables. EU better than others.	Trend towards open data and visualizations

TYPES OF RELEVANT CLIMATE DATA

Mitigation

- Emissions
- Targets
- Scenarios
- Sectoral data

Adaptation

- Impacts
- Vulnerability
- Plans
- Sectoral data
- Context, like water, air pollution, ecosystem, health, economy

Other

- Policies
- Governance
- Finance

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SOME INDEPENDENT DATA SOURCES

Mitigation/Policies

- Climate Watch
- Climate Action Tracker
- Greenhouse Gas Protocol

Adaptation/Vulnerability

- PREPdata.org
- Aqueduct Water Risk Atlas
- Resource Watch

MITIGATION QUESTIONS 1

1. What are the overall trends and projections for GHG emissions?
2. What are the main sources of GHG emissions?
3. What are the international mitigation commitments?
4. What are the national targets for mitigating GHG emissions?

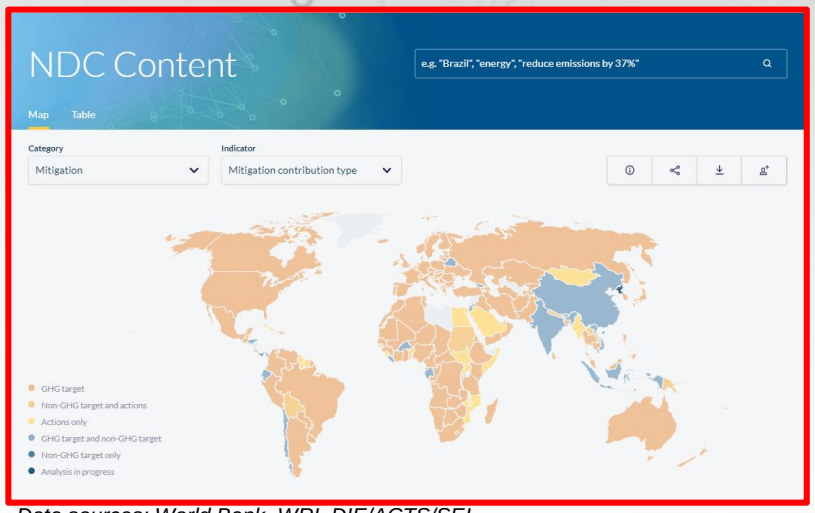
CLIMATEWATCH

Climate Watch

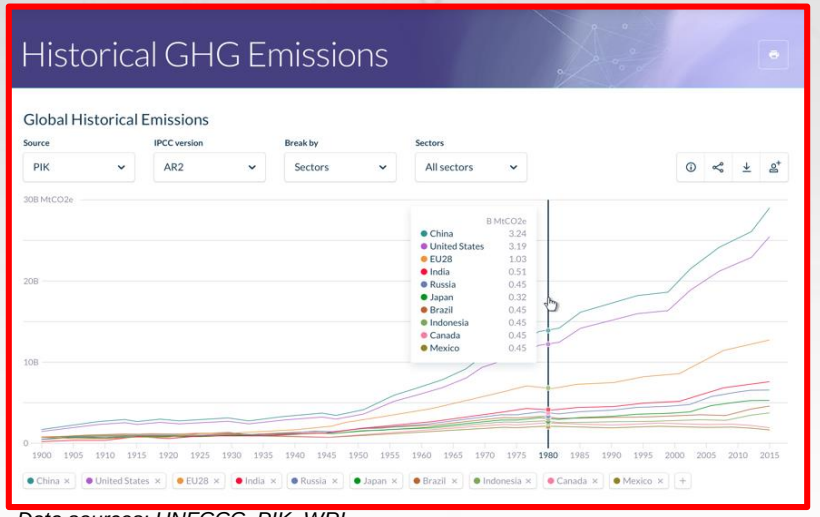
Open data, visualizations and analysis to help policymakers, researchers and other stakeholders gather insights on countries' climate progress

https://www.climatewatchdata.org/

Climate Watch: Key components

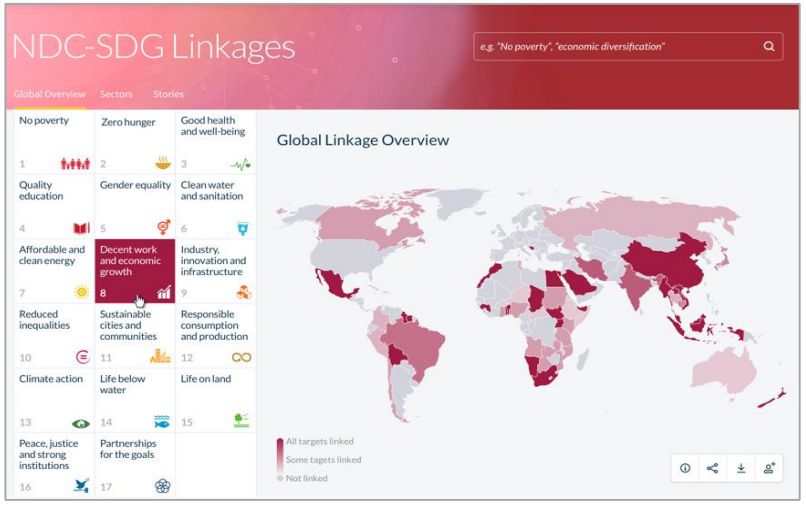


Data sources: World Bank, WRI, DIE/ACTS/SEI

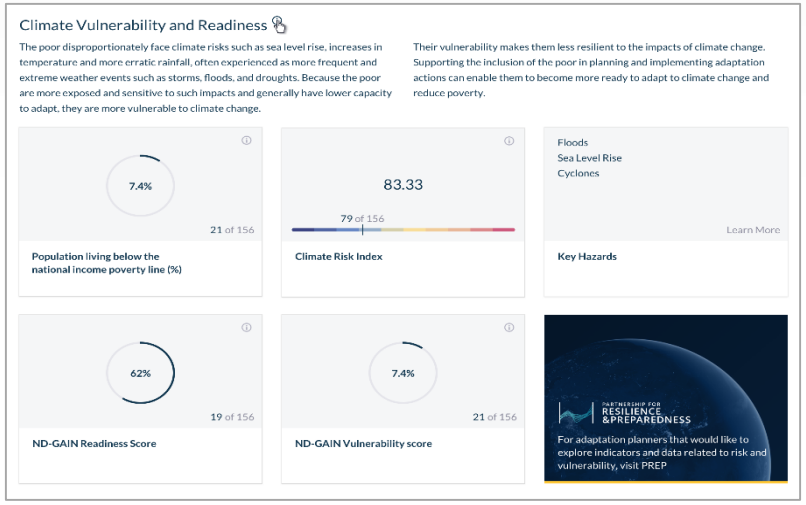


Data sources: UNFCCC, PIK, WRI

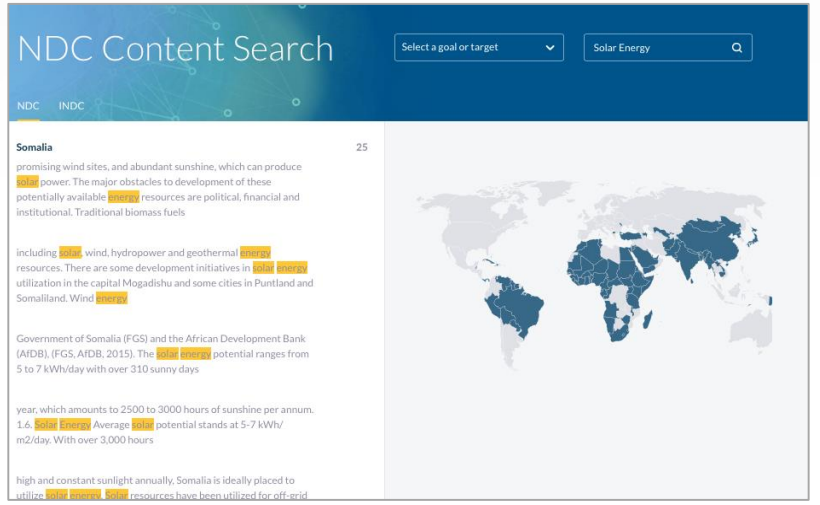
Data sources: CPRI, CENSE/NOVA, University of Oxford, University of College Cork, JGCRI, PSI, US-EIA, UNFCCC, etc.



Data sources: WRI



Data sources: World Bank, ND-GAIN, German Watch



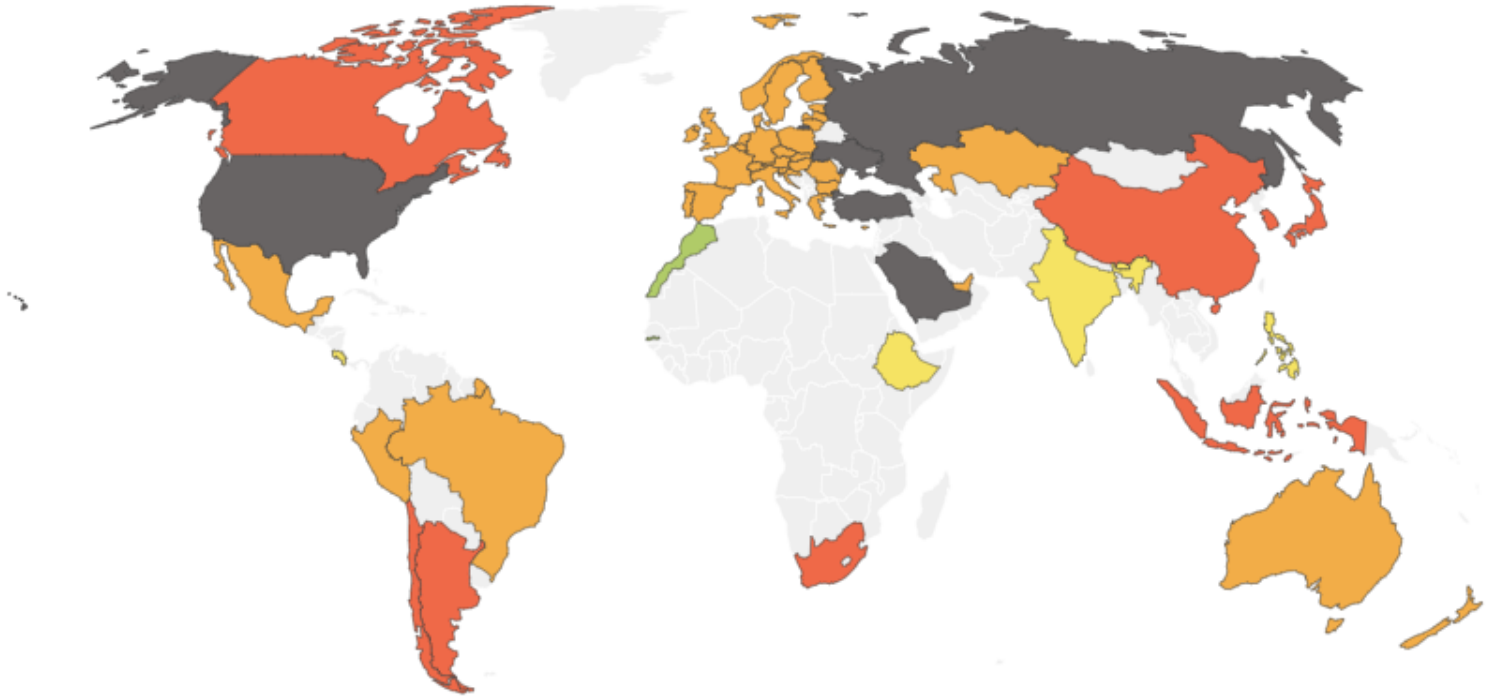
Data sources: UNFCCC, WRI

CLIMATEWATCH

CLIMATE ACTION TRACKER - https://climateactiontracker.org/

Climate Action Tracker

Home | About | Global | Countries | Methodology | Publications | Press | Data portal



LAST UPDATE: *September 2018*

CRITICALLY INSUFFICIENT	HIGHLY INSUFFICIENT	INSUFFICIENT	2°C COMPATIBLE	1.5°C PARIS AGREEMENT COMPATIBLE	ROLE MODEL

MITIGATION QUESTION 2

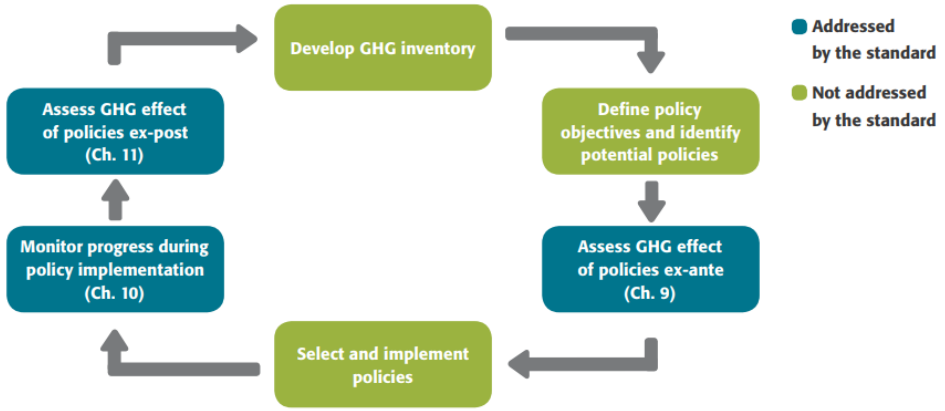
1. Will the government meet its emissions targets or commitments?
2. What are the key policy instruments for reducing GHG emissions?
3. Are policy instruments effective?

GHG Protocol Policy and Action Standard

A standardized approach for estimating the greenhouse gas effect of policies and actions.

GHG Protocol

Figure 1.1 Assessing GHG effects throughout a policy design and implementation process



Overall steps	Detailed steps	Chapter
Define policy/action	Define the policy or action to be assessed; choose ex-ante or ex-post assessment	5
Identify effects	Identify all potential GHG effects of the policy or action; include them in a map of the causal chain	6
	Define the GHG assessment boundary around significant effects; identify the sources/sinks in the boundary	7
Estimate effects	Estimate baseline emissions for all affected sources/sinks included in the boundary	8
	Ex-ante assessment: Estimate policy scenario emissions for affected sources/sinks; subtract baseline emissions to estimate GHG effect	9
	Identify key performance indicators; monitor performance over time	10
	Ex-post assessment: Estimate policy scenario emissions for affected sources/sinks; subtract baseline emissions to estimate GHG effect	11
	Assess uncertainty (relevant to Chapters 8, 9, 10, and 11)	12
Verify	Verify results (optional)	13
Report	Report results and methodology used	14

ADAPTATION QUESTIONS

- What are the actual and potential impacts of climate change?
- What is the adaptive capacity?
- What is the vulnerability to climate change?

PARTNERSHIP FOR RESILIENCE &PREPAREDNESS

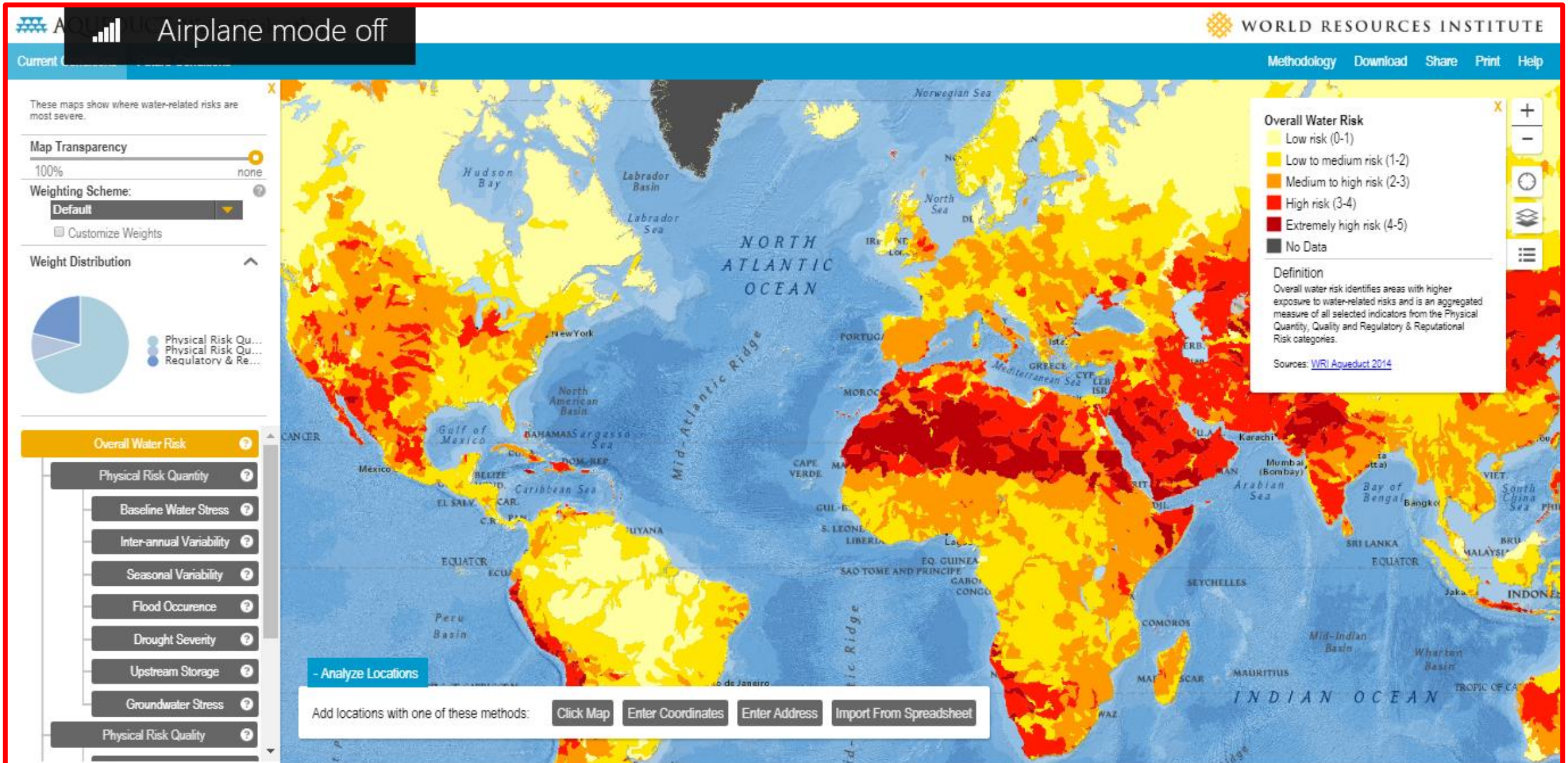
Visualizing data to build climate resilience

PREPdata is a map-based, open-data online platform that allows users to **access** and **visualize** climate, physical, and socioeconomic data for climate adaptation and resilience planning.

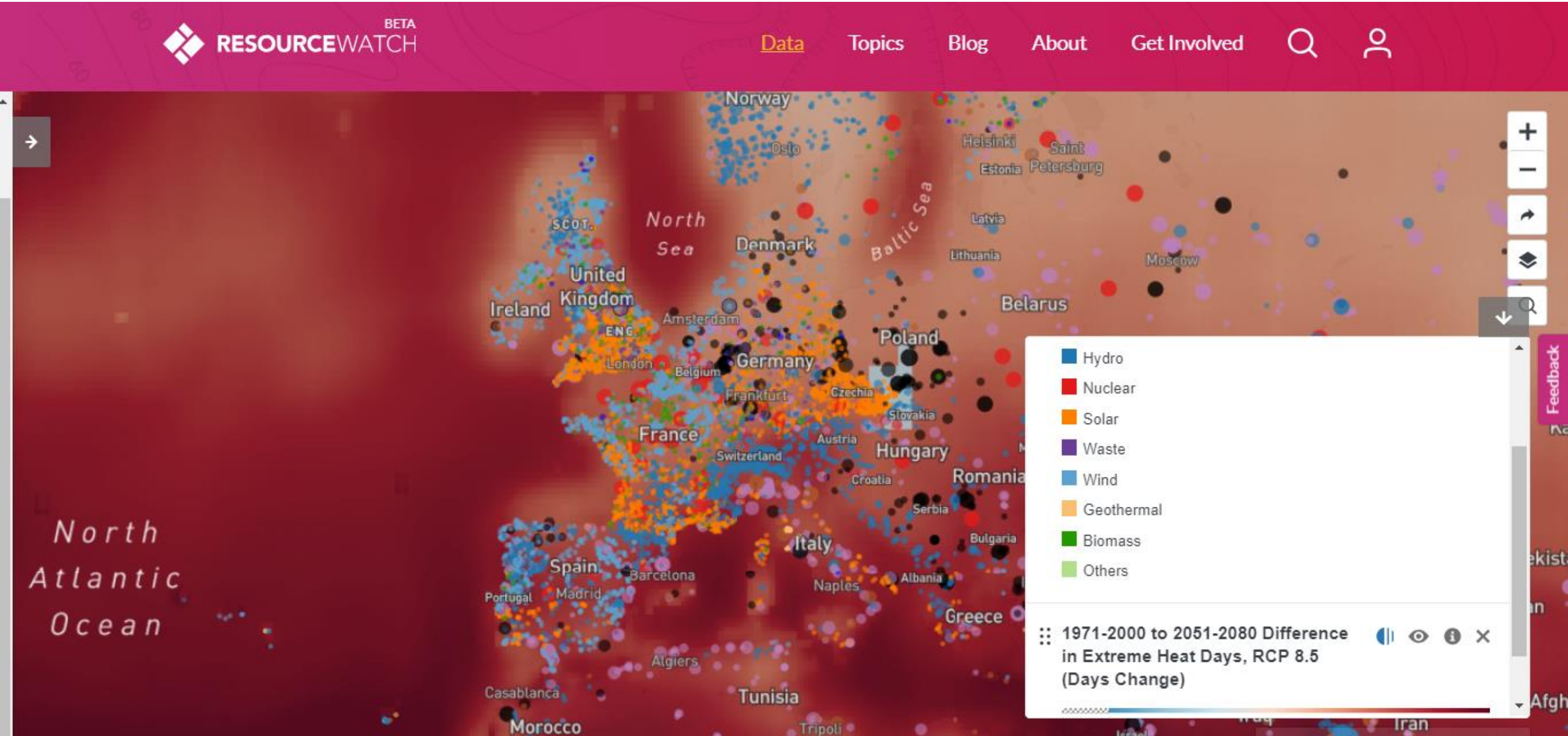
What makes PREPdata unique?

- Open source / open data
- A focus on visualizing data for climate resilience
- A map-based platform that is user-friendly and customizable to different contexts and skill levels
- Active curation of data sets
- Commitment to global coverage
- A user-needs based strategy for platform development and data content
- Benefits from diverse partner / expert input

AQUEDUCT WATER RISK ATLAS



RESOURCE WATCH - https://resourcewatch.org/



CONCLUSIONS

1. Official data is a great starting point
2. Independent data sources can be useful for cross-country comparison and to expand toward information that is not published by governments themselves
3. Application of official and independent data depends on the specific questions and problems you want to solve