



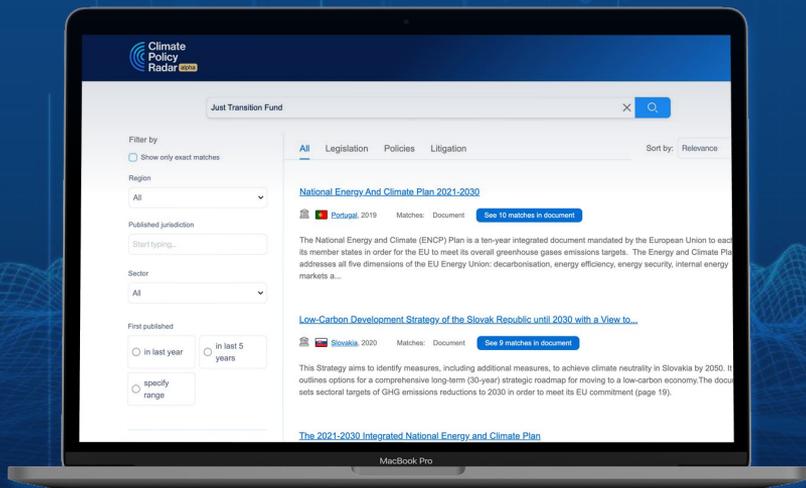
Who we are

We are on a **mission** to organise, analyse and democratise data on global climate law and policy.

Our tools help people discover, understand and generate **useful, data-driven insight**.

What we do

We're building a comprehensive, independent, open digital infrastructure and knowledge graph for climate law & policy



We harness leading data science and machine learning methods to massively scale and automate the collection, organisation and analysis of previously untapped data. Our platform and analytical tools are a pioneering application of AI to the global climate policy landscape.

Our work provides a foundational layer of rich and accessible data, catering to a variety of stakeholders, from policymakers and researchers to civil society and the private sector.



SAVES
COUNTLESS
HOURS



BREAKS
DATA
SILOS



ENABLES
RESEARCH
AND ACTION

Core Product Overview

Our app allows users to quickly and easily find relevant information for exploration, analysis and understanding of global climate legislation and policy.



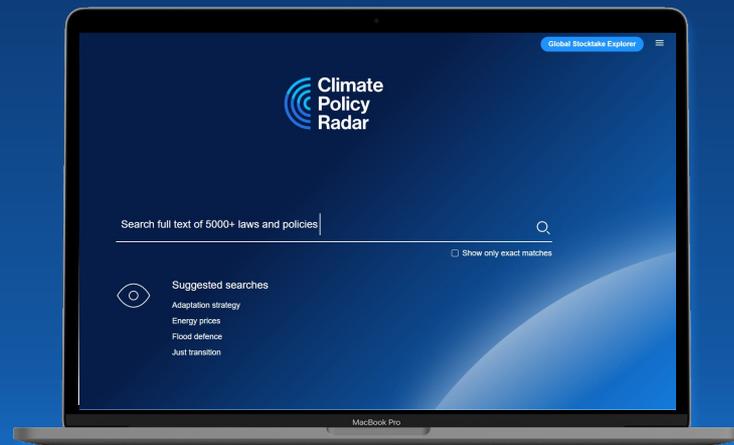
Full-text semantic search for over 5000+ climate laws, policies and UNFCCC submissions from every country.



Find net zero targets and other climate targets linked to laws and policies for each country with over 200 country profiles



Open data, open source, free to use, democratising access to the information in our tools



<https://climate-laws.org/>

Climate Change Laws of the World

Powered by Climate Policy Radar, the CCLW database builds on more than a decade of data collection by the Grantham Research Institute at the London School of Economics and Political Science, with institutional partners.



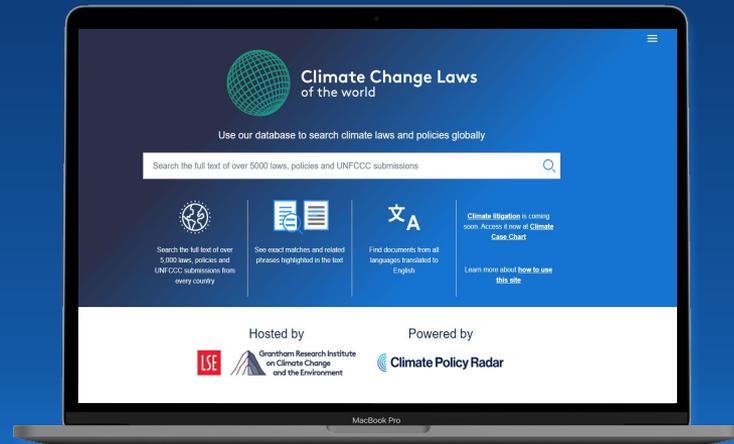
Now powered by machine learning and natural language processing technology developed by Climate Policy Radar



Together, CPR and GRI maintain and update what is currently the most comprehensive global resource on climate law and policy



The database has over 5000+ climate laws, policies and UNFCCC submissions from every country, updated by GRI & CPR on a rolling basis



<https://climate-laws.org/>

Our Impact

Our impact is multi-faceted, as demonstrated by our web-based apps, open publishing, and community building initiatives.



Our app

Our app, launched in May 2022 and integrating the LSE database (climate-laws.org) draws over **300,000 annual users** globally. The **Global Stocktake Explorer** (gst1.org), unveiled at the UN Climate negotiations in June 2023, received acclaim from UN leaders and thousands of users.



Our Ecosystem

We actively engage in open publishing and community empowerment. Data and code are shared on [Github](#) and [HuggingFace](#), advancing collaborative climate policy research. By convening a **Climate NLP community**, we facilitate knowledge sharing through online collaborations, calls, and hackathons.



External recognition

Our influence is recognised worldwide. Featured on the BBC, Carbon Brief, Financial Times and Business Insider, we've presented at forums like WIRED Impact, Reuters Impact, and the World Law Congress. We were acknowledged by **UNESCO** as a Top 100 Global AI project, and cited in over 10 papers and several PHD theses, solidifying our role in the climate AI ecosystem.

Impact, equity and community in CPR's data science

CPR's data science work centres around **classification of spans in documents**

As of DATE **30 June 2021**, there were 25.2 million GRID_TECHNOLOGY **smart and advanced meters** in homes and 211 businesses across Great Britain, representing 46% smart coverage.²

These text spans are only useful at scale if we can link them to real-world concepts

As of DATE **30 June 2021**, there were 25.2 million GRID_TECHNOLOGY **smart and advanced meters** in homes and 211 businesses across Great Britain, representing 46% smart coverage.²

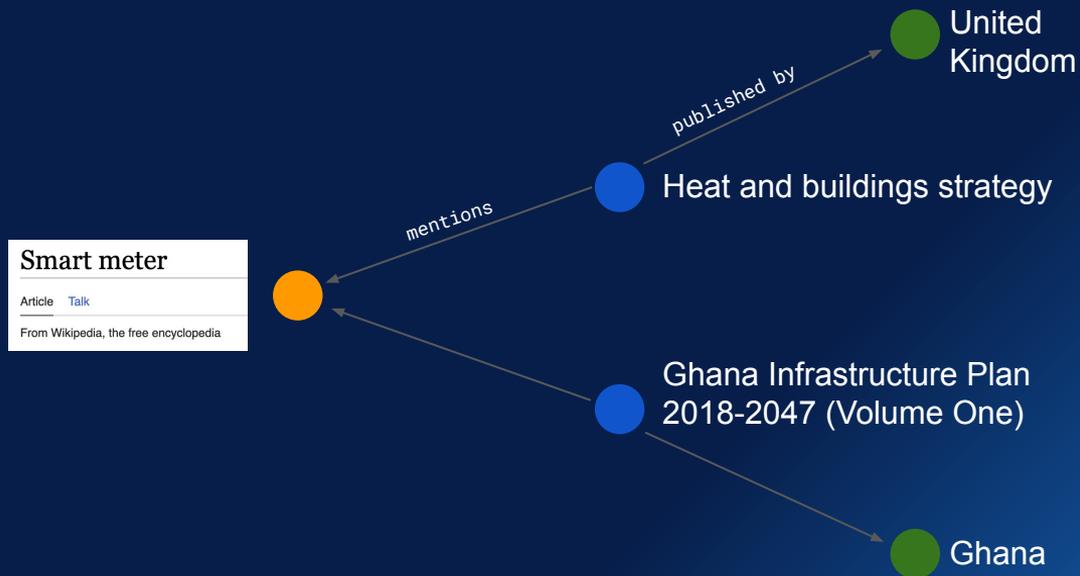
Smart meter

Article Talk

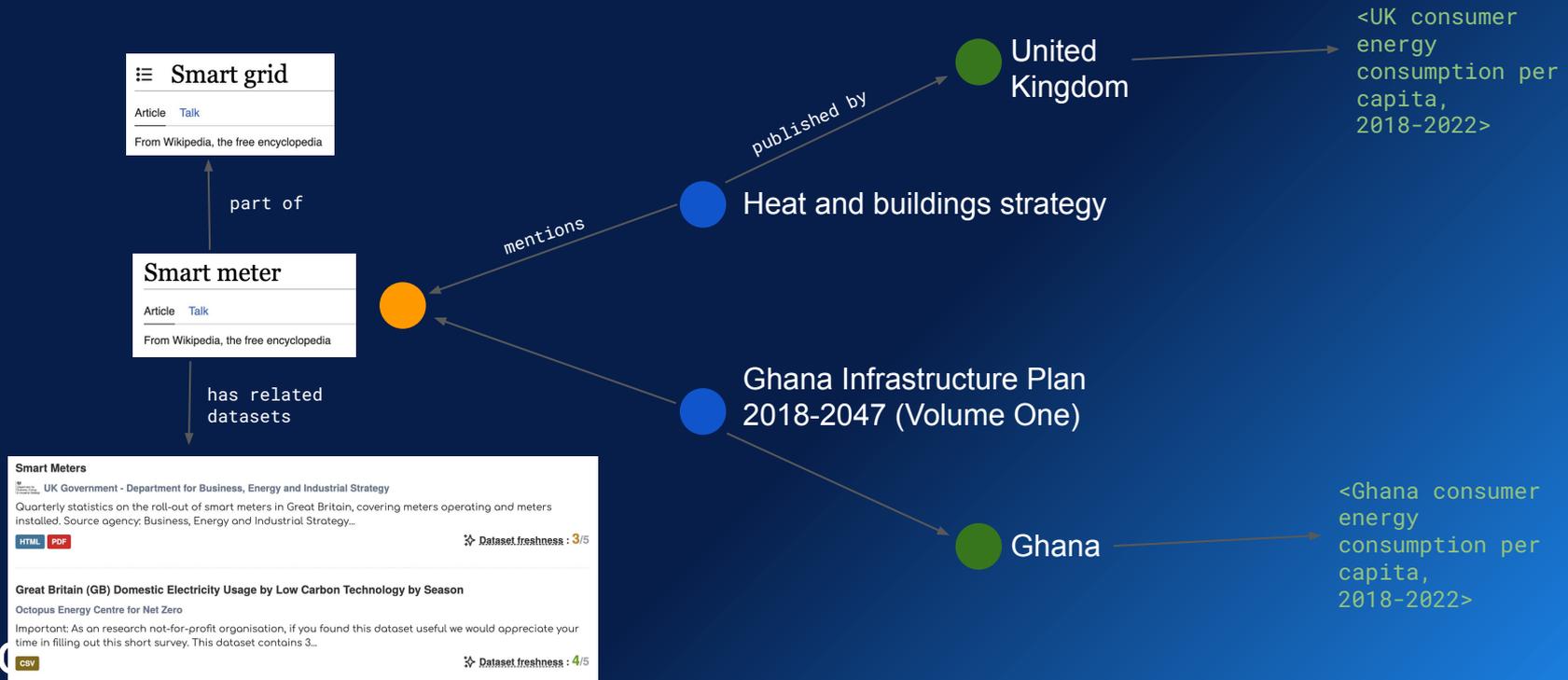
From Wikipedia, the free encyclopedia

i. GRID_TECHNOLOGY **Advanced Metering Infrastructure** and Automatic Meter Reading; Automatic Meter Reading (AMR) system will provide a facility for remote disconnection and reconnection of electricity supply from an AMR control centre

If we run this NLP across a bunch of documents, we end up with a graph structure. This is our knowledge graph; or 'evidence base'.



As each node on the graph is a real-world concept, we can embellish the graph with things we know about each concept



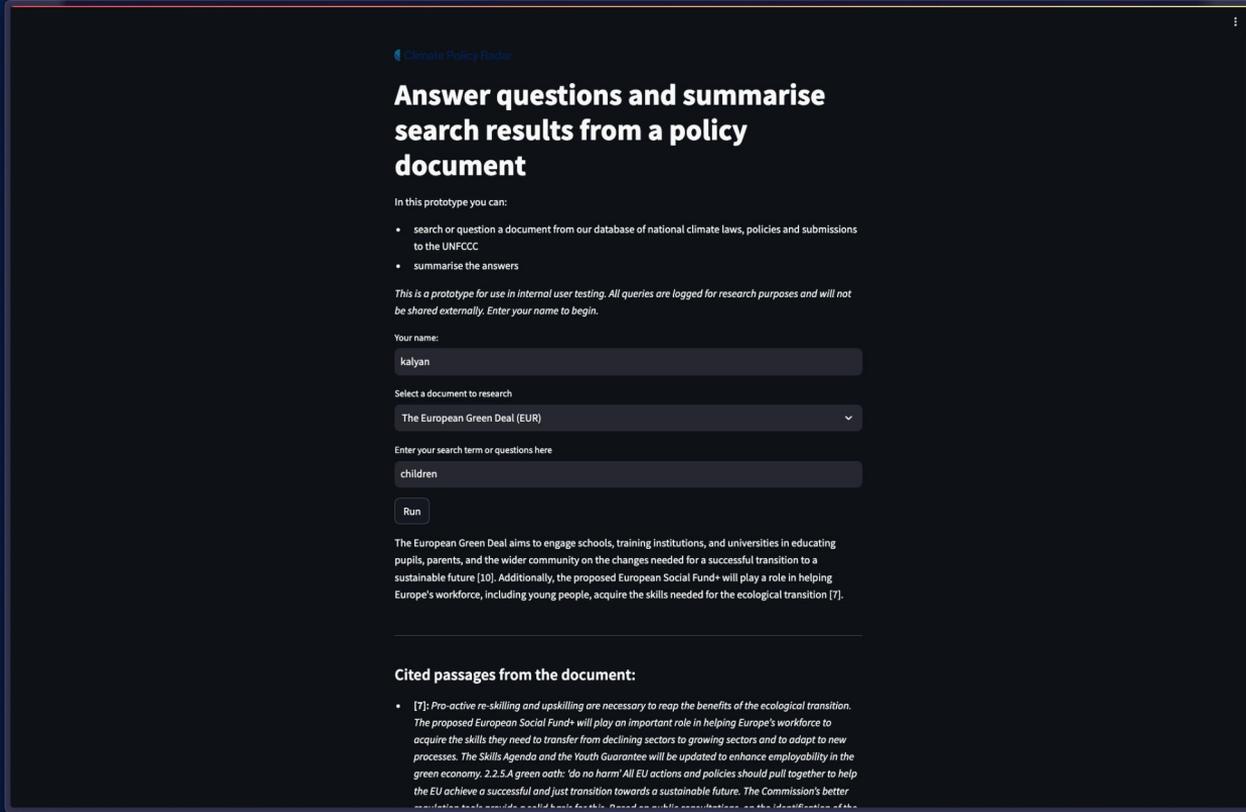
This graph can be used to help to answer **new types of questions** that are difficult to answer using text search alone

Precise queries:

*What **targets** about **energy efficiency** have been made in climate laws and policies since 2015, and **what years are they targeting?***

*Show me every document that mentions **risks and potential dangers** of **wind energy**, alongside a table of **wind energy projects for each geography.***

and, search and generative AI are important tools in getting this right too



Climate Policy Radar

Answer questions and summarise search results from a policy document

In this prototype you can:

- search or question a document from our database of national climate laws, policies and submissions to the UNFCCC
- summarise the answers

This is a prototype for use in internal user testing. All queries are logged for research purposes and will not be shared externally. Enter your name to begin.

Your name:

Select a document to research

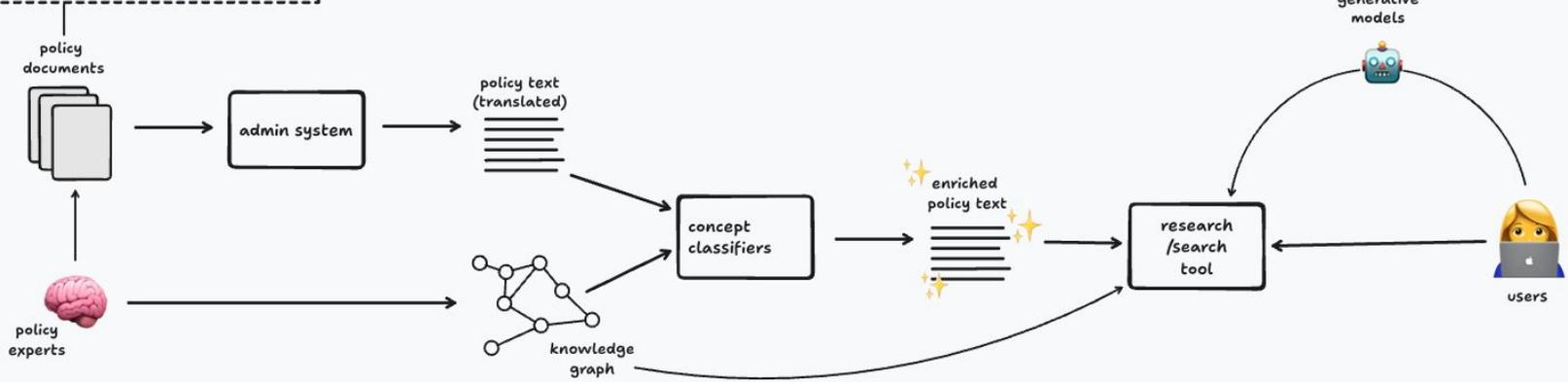
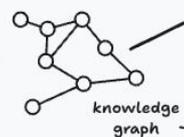
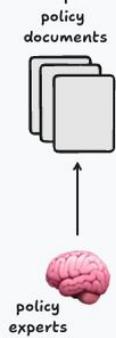
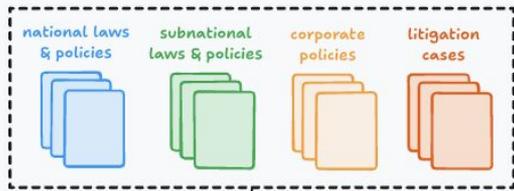
The European Green Deal (EUR) ▾

Enter your search term or questions here

The European Green Deal aims to engage schools, training institutions, and universities in educating pupils, parents, and the wider community on the changes needed for a successful transition to a sustainable future [10]. Additionally, the proposed European Social Fund+ will play a role in helping Europe's workforce, including young people, acquire the skills needed for the ecological transition [7].

Cited passages from the document:

- [7]: *Pro-active re-skilling and upskilling are necessary to reap the benefits of the ecological transition. The proposed European Social Fund+ will play an important role in helping Europe's workforce to acquire the skills they need to transfer from declining sectors to growing sectors and to adapt to new processes. The Skills Agenda and the Youth Guarantee will be updated to enhance employability in the green economy. 2.2.5.A green oath: 'do no harm' All EU actions and policies should pull together to help the EU achieve a successful and just transition towards a sustainable future. The Commission's better regulation tools provide a solid basis for this. Good example: consultation on the identification of the*



Climate change is a
'high-stakes domain'¹

Climate change is a 'high-stakes domain'¹

- High impact on human wellbeing and safety
- Mistakes can have an outsized impact on vulnerable communities and contexts
- Every 1% performance can be crucial

High-stakes AI¹ means:

- Low-resource
- Limited existing high-quality datasets
- Naturally interdisciplinary

¹Sambasivan, Nithya et al. "“Everyone wants to do the model work, not the data work”: Data Cascades in High-Stakes AI." *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (2021)

AI can cause harms

Our aims

The screenshot displays three incident cards from the AI Incident Database. Each card includes a thumbnail image, a title, a source, a date, a brief description, and a 'Show Details on Incident' button. The first incident is about YouTube's recommendation algorithm promoting climate misinformation. The second is about a deepfake video of the Belgian Prime Minister. The third is about Google's Perspective API assigning higher toxicity scores to certain groups.

Incident #	Title	Source	Date	Description
#305	YouTube's Recommendation Algorithm Allegedly Promoted Climate Misinformation Content	axios.com	2020	YouTube's recommendation system and its focus on views and watched time were alleged by an advocacy group to have driven people towards climate denial and misinformation videos.
#201	Climate Action Group Posted Deepfake of Belgian Prime Minister Urging Climate Crisis Action	brusselstimes.com	2020	A deepfake video showing the Belgium's prime minister speaking of an urgent need to tackle the climate crises was released by a climate action group.
#13	High-Toxicity Assessed on Text Involving Women and Minority Groups	techxplore.com	2017	Google's Perspective API, which assigns a toxicity score to online text, seems to award higher toxicity scores to content involving non-white, male, Christian, heterosexual phrases.

AI Incident Database:
incidentdatabase.ai

Promote accountability
of decision makers

Researchers
Policy advisors

Civil society
Journalists

Analyse policy and
share insights

Researchers
Policy advisors
Civil servants

Policy analysts
Consultants

Inform deployment of climate
finance and risk modelling

Corporations
Policy analysts
Policy advisors

Investors
Consultants
Insurers

Track progress and
identify gaps

Researchers
Policy advisors

Policy analysts
Consultants

High-stakes AI means:

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4 principles for AI in climate:

1. Good quality climate data = public good
2. Measure everything & make measurement a habit
3. Short feedback loops with experts
4. We need to pool resources

How does CPR apply this in practice?

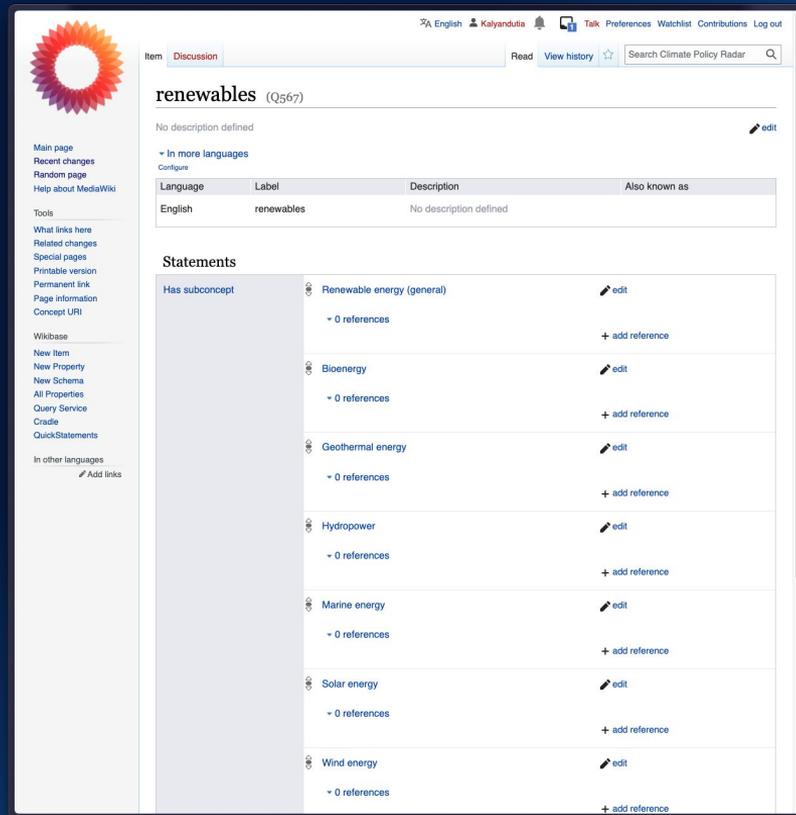
Measuring everything & making measurement a habit

Things we've done so far:

- **Measuring data quality:** text quality metrics; labeller agreement
- **Measuring equity through subpopulations:** we measure performance across world regions; whether text has been translated; different corpora
- **Setting up infrastructure:** concept store; weights & biases

Some current & future challenges:

- Equity in search
- Ethics in gen ai - 'CPR Generation Policy'
- Do we care about classifier stability?
- More public consultation & agenda setting on our ethics policies



The screenshot shows a Wikibase interface for the concept 'renewables' (Q567). The page includes a navigation menu on the left, a main content area with a table of language labels, and a 'Statements' section listing various energy types with their reference counts and edit options.

renewables (Q567)

No description defined 

+ In more languages
Configure

Language	Label	Description	Also known as
English	renewables	No description defined	

Statements

Has subconcept	 Renewable energy (general) 
	- 0 references 
	+ add reference
	 Bioenergy 
	- 0 references 
	+ add reference
	 Geothermal energy 
	- 0 references 
	+ add reference
	 Hydropower 
	- 0 references 
	+ add reference
	 Marine energy 
	- 0 references 
	+ add reference
	 Solar energy 
	- 0 references 
	+ add reference
	 Wind energy 
	- 0 references 
	+ add reference

Convening community; pooling data and resources

Sharing at conferences / furthering climate as an 'interesting' domain within AI

NLP for Climate Community

We're a group of practitioners who work in the domain of Natural Language Processing for climate change. As this is a naturally interdisciplinary field we're from a range of backgrounds.

As a community, we aim to:

- Collaborate and provide feedback on concrete, impactful climate NLP projects
- Share resources, e.g. data, code, learning, infrastructure and project outcomes
- Share learning, informing each other of current developments and interesting resources
- Proactively mentor female* and underrepresented groups to be involved in the work of this community

Community resources

- [Slack workspace](#)
- [Monthly community calls](#)
- [NLP for climate resources: datasets, models, tutorials, publications, ...](#)

(message me if you work on climate and NLP and you'd like to join)



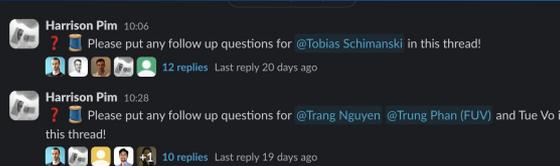
ClimateNLP 2024
Natural Language Processing meets Climate Change
ACL 2024 Workshop, Aug 16, Bangkok

AMLD 2024 Track: Accelerating Climate Change Action through Machine Learning

[About](#) [Schedule](#) [Organizers](#)

Knowledge sharing

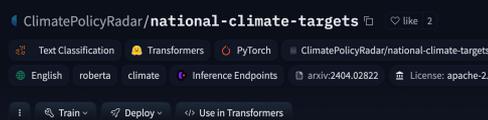
Name	↑
2023-08-09	Legal challenges of dataset access
2023-09-20	ML in practice
2023-10-18	Retrieval Augmented Generation
2023-11-22	Misinformation and Conspiracy
2024-01-17	fact-checking climate claims; extrac...
2024-03-13	subnational climate targets; open s...
2024-04-10	Evidence based QA, NuocGPT



Harrison Pim 10:06
Please put any follow up questions for @Tobias_Schimanski in this thread!
12 replies Last reply 20 days ago

Harrison Pim 10:28
Please put any follow up questions for @Trang_Nguyen @Trung_Phan (FUV) and Tue_Vo in this thread!
10 replies Last reply 19 days ago

Open data and model reuse



ClimatePolicyRadar/national-climate-targets like 2

Text Classification Transformers PyTorch ClimatePolicyRadar/national-climate-targets

English roberta climate Inference Endpoints arxiv:2404.02822 License: apache-2.0

Train Deploy Use in Transformers

Comparing netzero-reduction classifiers

Based on our trial runs, the 'ClimatePolicyRadar/national-climate-targets' model is more conservative and more accurate than 'climatebert/netzero-reduction'

climatebert/netzero-reduction			ClimatePolicyRadar/national-climate-targets		
Label	False Positive*	True Positive	Label	False Positive*	True Positive
net-zero	12	1	net-zero	0	0
reduction	45	13	reduction	0	3
			other	1	11

© Scetti *As per manual annotation performed by Scetti

Labs: short feedback loops

We build tools to help people make better decisions around climate law and policy - **this needs rigour.**

CPR labs is a place for us to **show earlier-stage work and validate ideas for our main tool**, with suitable warning signs.

Climate Policy Radar Labs About Experiments Contribute / Contact Us

Targets explorer

[Climate Policy Radar Labs](#)

Creating a comprehensive picture of what governments have committed to do to address climate change, and by when, is critical to help identify gaps, trends, and opportunities to accelerate climate action. Yet, identifying targets in national laws, policies, and UNFCCC submissions usually relies heavily on manual research through hundreds and thousands of relevant documents, and can be limited in scope and scale.

This tool is a prototype using a machine learning classifier we've trained to automatically identify quantified targets in national laws, policies, and UNFCCC submissions. [Click here for more information about our methodology.](#)

Use the filters on the left-hand side to change the data that's displayed in these plots and the table below. The plots and table will update automatically.

Read more

Future years mentioned in target text, by publication year

Caution: plot reflects analysis based on filtered data. Data from Climate Policy Radar Labs.

Number of target mentions

Publication year

Future year mentioned: 2020, 2021, 2025, 2030, 2050

Target mentions per year, by World Bank Region

Caution: plot reflects analysis based on filtered data. Data from Climate Policy Radar Labs.

Number of target mentions

Year

World Bank Region: East Asia & Pacific, Europe & Central Asia, Middle East & North Africa, Sub-Saharan Africa, Latin America & Caribbean, South Asia, North America

Showing **1495** targets from **567** documents, published by **160** authors. [Download CSV](#)

[Table](#) [List](#)

How to use this table:

labs.climatepolicyradar.org/targets

We've got a long way to go. Interested in learning from you and others!