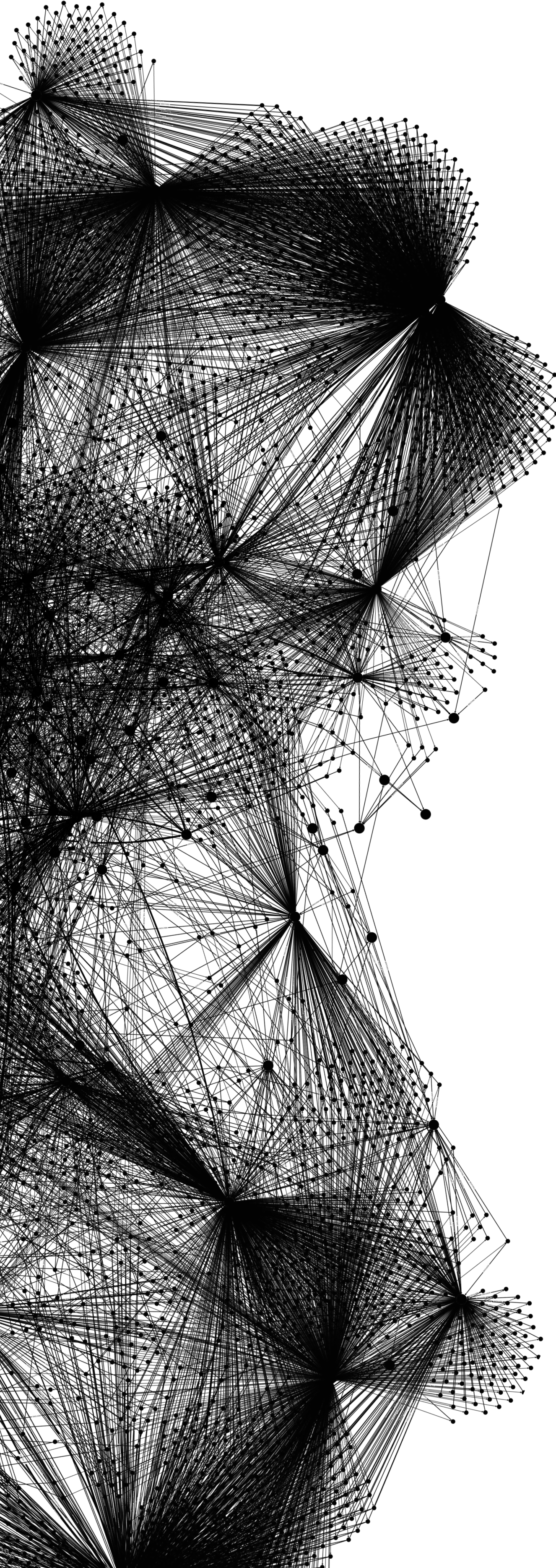


CLIMATE POLICY RADAR

Climate Policy Radar's Open Knowledge Graph

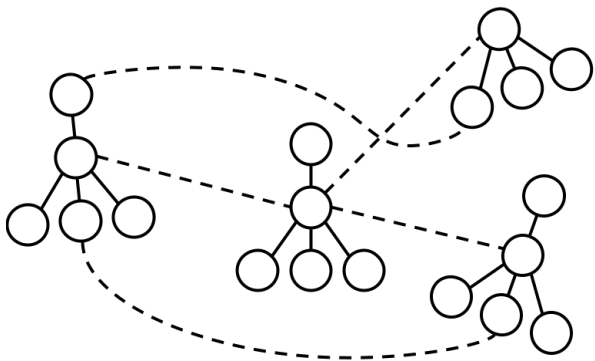
Tackling Climate Change with Machine Learning, NeurIPS
San Diego, December 2025
Kalyan Dutia, Anne Sietsma, Julie Saigusa, Harrison Pim



Climate Policy Radar is a library of the world’s climate laws, policies, litigation, corporate disclosures, funding documents, and more. Our datasets and tools help governments, researchers, international organisations, civil society, and the private sector to understand and advance climate policy, and deploy effective climate finance. We’ve used those documents to build a knowledge graph of the climate policy landscape, which is powering new analysis.

Concepts: Our in-house team of policy experts has built an ontology of climate concepts, based on expert interviews and literature reviews. So far, we’ve collected and connected a graph of >1,500 individual concepts.

The policy world contains many overlapping perspectives, which don’t fit neatly in a single, strict, hierarchical taxonomy. Instead of connecting concepts through hierarchy alone, we represent these topics as a graph.

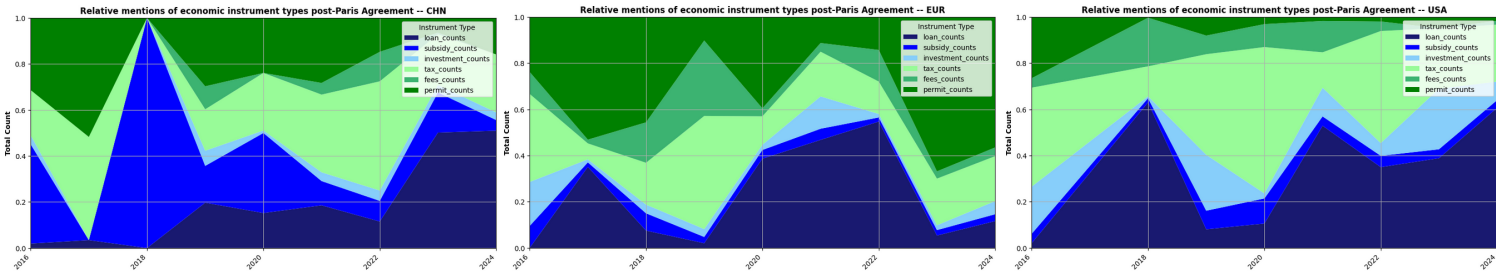


Concepts are allowed to sit within multiple hierarchies, with multiple parents. We also allow our policy experts to express non-hierarchical, associative relationships between topics. These nuances allow us to better represent the complexity and richness of the real world.

Classifiers: For each concept, we build a single-class classifier to identify where the concept is mentioned in our documents. Some of our models are keyword-based, some are fine-tuned BERT models, and some are optimised prompts to large language models. All of our models are heavily evaluated against human expert performance, both qualitatively and quantitatively.

Every time we identify a new mention of a concept, we add a new edge to our knowledge graph, connecting the concept and that passage of text. The figure on the left shows a tiny slice of the resulting network ←

Analysis: This graph data can rapidly deliver new insights. For example, here’s the relative share of economic policy instruments mentioned in China, Europe, and the USA since the Paris Agreement (2015).



Globally, **fees** and **charges** seem to be decreasing, and **loans** increasing. In the USA, the first Trump administration (2017-2020) seems to have had more mentions of **permits**, **tax** and **fees** than the Biden administration (2021-2024). Moreover, in this period, China seems to have tamped-down on its **subsidies** and increased its **loans** - perhaps in line with its increased standing in the climate discourse, where China is increasingly a provider rather than a recipient of finance. China has also set up its own emissions trading system during this period, so even though the total counts show that **permits** are not mentioned nearly as often as in the EU, in recent years, it is a much larger part of Chinese climate policy discourse. The topic is missing almost entirely from the USA policy documents.

This is one quick example, but we hope that this open dataset will provide the foundation for many future analyses. We are particular excited about graph-based approaches to interpreting the climate policy landscape!

Tutorial Notebook



Github repo



Concept store

