Analysing The Public Concern vs. Cumulative Number of Policies (2005-2022)

Introduction

Question: How does public concern about climate change correlate with national greenhouse gas emission reduction targets across different countries?

Description: The aim of the files address the relationship between public concern about climate change and the rigor of national emission reduction policies. The goal is to determine if higher public concern correlates with stricter policies, or if discrepancies suggest areas for increasing public awareness to support more robust climate action.

Used Data

Data Source1: Climate change mitigation policies

Metadata URL: https://data.europa.eu/data/datasets/data_climate-change-mitigation-policies-and-measures-1?locale=en

Data URL: https://www.eea.europa.eu/data-and-maps/data/climate-change-mitigation-policies-and-measures-1/pam-table/climate-change-mitigation-policies-and-3/download.csv

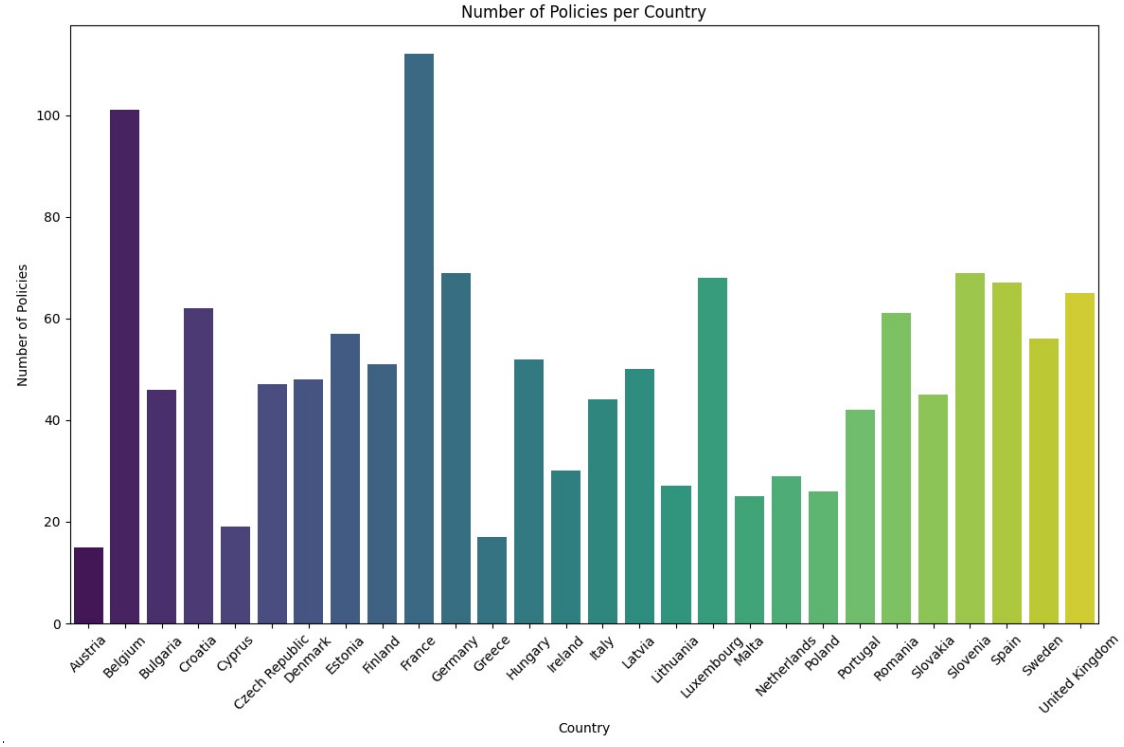
Data Source2: International Climate Change Opinion Survey

Metadata URL: https://data.europa.eu/data/datasets/https-opendata-edf-fr-explore-dataset-enquete-dopinion-internationale-sur-le-changement-climatique-obscop-?locale=en
Data URL: https://opendata.edf.fr/api/explore/v2.1/catalog/datasets/enquete-dopinion-internationale-sur-le-changement-climatique-obscop/exports/csv

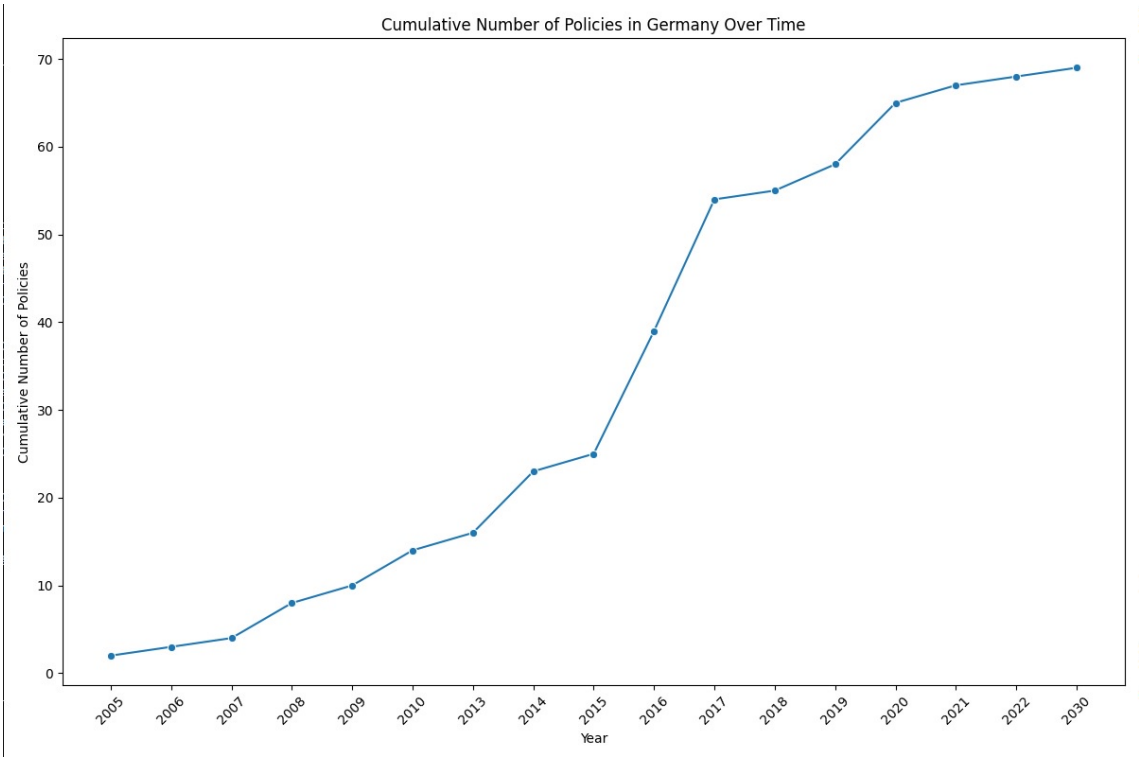
Analysis

Climate change mitigation policies and measures (greenhouse gas emissions)

This bar chart shows the number of climate change policies implemented by various countries in 2030. Each bar represents a country and its total policies. Germany leads, followed by Belgium and Finland, highlighting their strong commitment. The varying policy counts indicate different national engagement levels and strategies. This visualization emphasizes the importance of both collective and individual efforts in addressing climate change and reflects global climate policy trends over the decades.

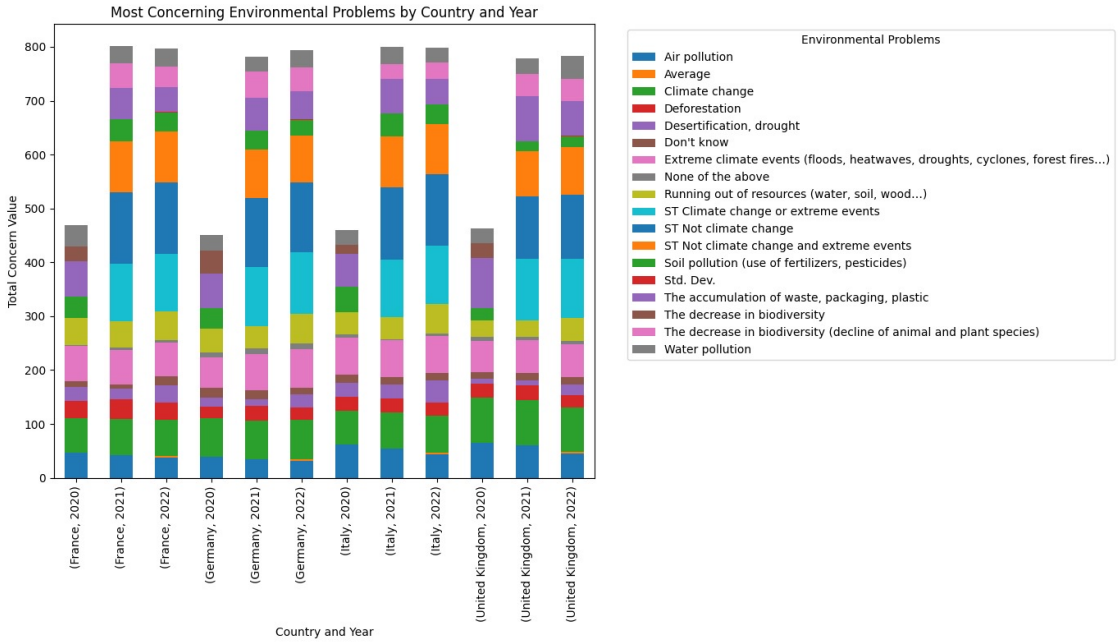


To gain a deeper understanding of countries' climate change policies, the line chart shows a detailed analysis has been conducted on a country like Germany between 2015 and 2016. There is a steady increase until 2014. After this, the growth continues steadily, demonstrating Germany's ongoing commitment to climate action and a proactive stance in mitigating climate impacts.



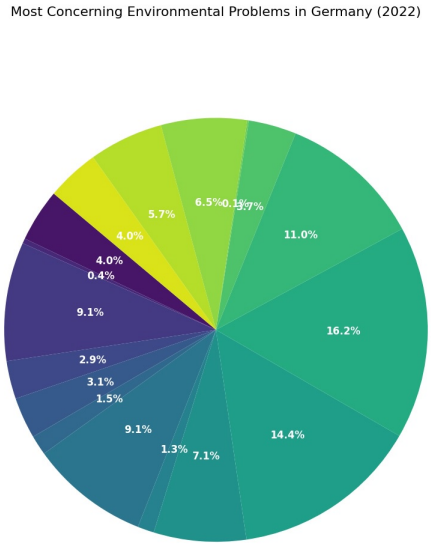
International Climate Change Opinion Survey

This stacked bar chart compares environmental concerns in France, Germany, Italy, and the UK over 2020-2022. Each bar shows total concern values for various issues reported by the population in each country and year. Consistently high concerns include climate change, extreme weather events, and waste accumulation, but there are variations in specific issues, reflecting different national priorities. This chart emphasizes evolving public concerns and the need for tailored environmental policies.



To gain a deeper understanding of countries’ climate change survey, a detailed analysis has been conducted on a country like Germany in 2022. The pie chart shows that 16.2% of respondents are worried about issues not directly related to climate change, while 14.4% focus on climate change or extreme events. Other significant concerns include extreme climate events and climate change, each capturing 9.1% of responses. The accompanying table provides a detailed breakdown, reflecting the

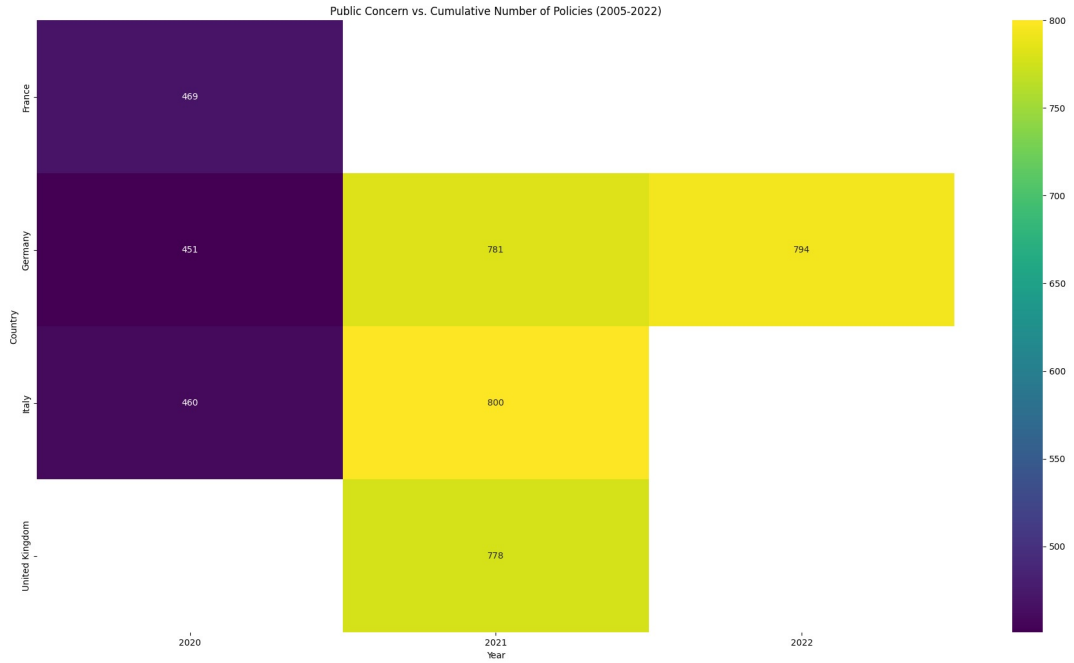
diverse environmental concerns among the German population.



Environmental Problem	Percentage
Air pollution	4.0%
Average	0.4%
Climate change	9.1%
Deforestation	2.9%
Desertification, drought	3.1%
Don't know	1.5%
Extreme climate events (floods, heatwaves, droughts, cyclones, forest fires...)	9.1%
None of the above	1.3%
Running out of resources (water, soil, wood...)	7.1%
ST Climate change or extreme events	14.4%
ST Not climate change	16.2%
ST Not climate change and extreme events	11.0%
Soil pollution (use of fertilizers, pesticides)	3.7%
Std. Dev.	0.1%
The accumulation of waste, packaging, plastic	6.5%
The decrease in biodiversity (decline of animal and plant species)	5.7%
Water pollution	4.0%

Public Concern vs. Cumulative Number of Policies (2005-2022)

This heatmap shows the relationship between public concern about climate change and the number of climate policies in various countries from 2005 to 2022. The x-axis represents years, and the y-axis represents countries. Brighter colors indicate higher public concern. The heatmap reveals a significant increase in concern for Germany, Italy, and the UK in 2021 and 2022, indicating heightened awareness. France shows consistent concern but not as significant an increase as the other countries.



Conclusions

The cumulative number of policies appears to be associated with these changes in public concern, with countries displaying more policies also reflecting higher levels of public concern. This correlation underscores the potential influence of public sentiment on national policy decisions regarding climate change. The overall trend indicates that as public concern grows, countries are more likely to implement additional measures to address climate change issues. The data reveal a positive correlation between public concern and the number of GHG reduction policies. Notably, Germany, Italy, and the United Kingdom show significant increases in public concern and corresponding policy measures in 2021 and 2022. This suggests that higher public concern drives governments to implement more climate policies. In conclusion, it demonstrates that as public concern about climate change increases, countries respond with more robust GHG emission reduction policies, highlighting the influence of public opinion on national climate action.