

GHG Emissions

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HELLO THERE!



I'm Hasbleidy! I have a degree in Neurodiagnostics and I currently work as a Neuro Tech at high level intensive care units.

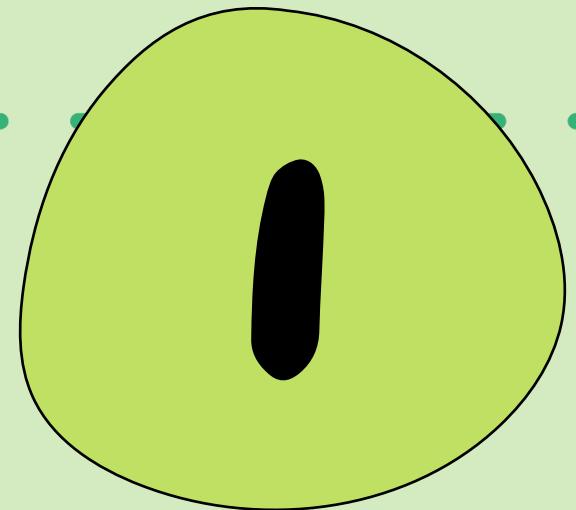
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What are GHG emissions?



Greenhouse Gases

These are gases that trap heat in the atmosphere and act like the glass walls of a greenhouse. The four most common are:

- Carbon Dioxide (CO₂)
- Methane (CH₄)
- Nitrous Oxide (N₂O)
- Industrial Gases

Summary and breakdown to follow!



CARBON DIOXIDE

It's a colorless and non-flammable gas at normal temperature and pressure. It comes from the extraction and burning of fossil fuels (oil, coal).

NITROUS OXIDE

Is a colorless gas that's most commonly found in pressurized canisters. It's emitted from wastewater that contains nitrogen-based organic materials.

METHANE

Is an odorless, colorless flammable gas. It forms by the decay of natural materials and is common in landfills, marshes, septic systems, and sewers.

INDUSTRIAL GASES

Are the gaseous materials that are manufactured for use in industry, such as HCFCs and HFCs.



GHG IMPACT



Nitrous Oxide

Stays in the atmosphere 120 years.

Carbon Dioxide

Stays in the atmosphere 1,000 years.



Methane

Stays in the atmosphere for around a decade.

1.5 degrees Celsius

800,000 years

418.28 parts per million

14% of Earth's population will be exposed to severe heat waves every 5 years.

It's how much the GHG emissions for top contributors has increased since 1750.

Global monthly average concentration increase in March of 2022.

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The Analysis

Methodology

The Data

Greenhouse Gas Emissions, Worldwide population,
Greenhouse Gas Inventory by country.

Data Manipulation

Recode bigger variables, Renaming countries,
Dropping columns.

New Data

World numbers for more analysis and European
Union numbers for comparison.

The Datasets

Greenhouse Gas Emissions,
Greenhouse Gas Inventory, and Population

Sample Size

2000
to 2014

The Questions



**Which country produces
the most GHG
emissions?**

Is this based on socio-economic
factors or population?



**Who is the biggest
contributor to one single
emission?**

Were there socio-economic impacts
and do they correlate?



**What are the gases
with most contribution
continuously?**

Is there a constant? Do some waver?
Are there any decreasing?

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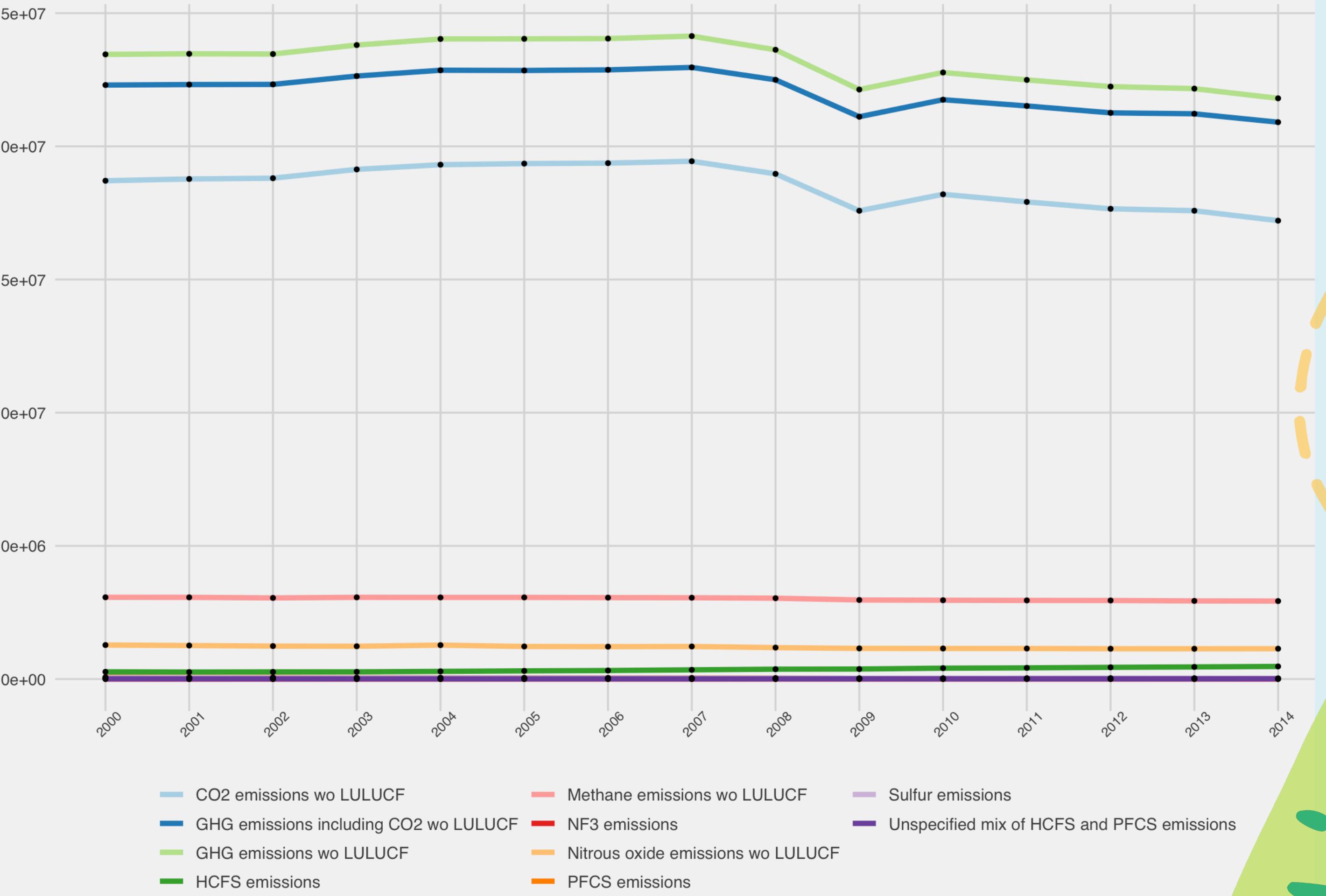
The Results

TOTAL CONTRIBUTION

An overview by year.

GHG Emissions

summed by all countries per year



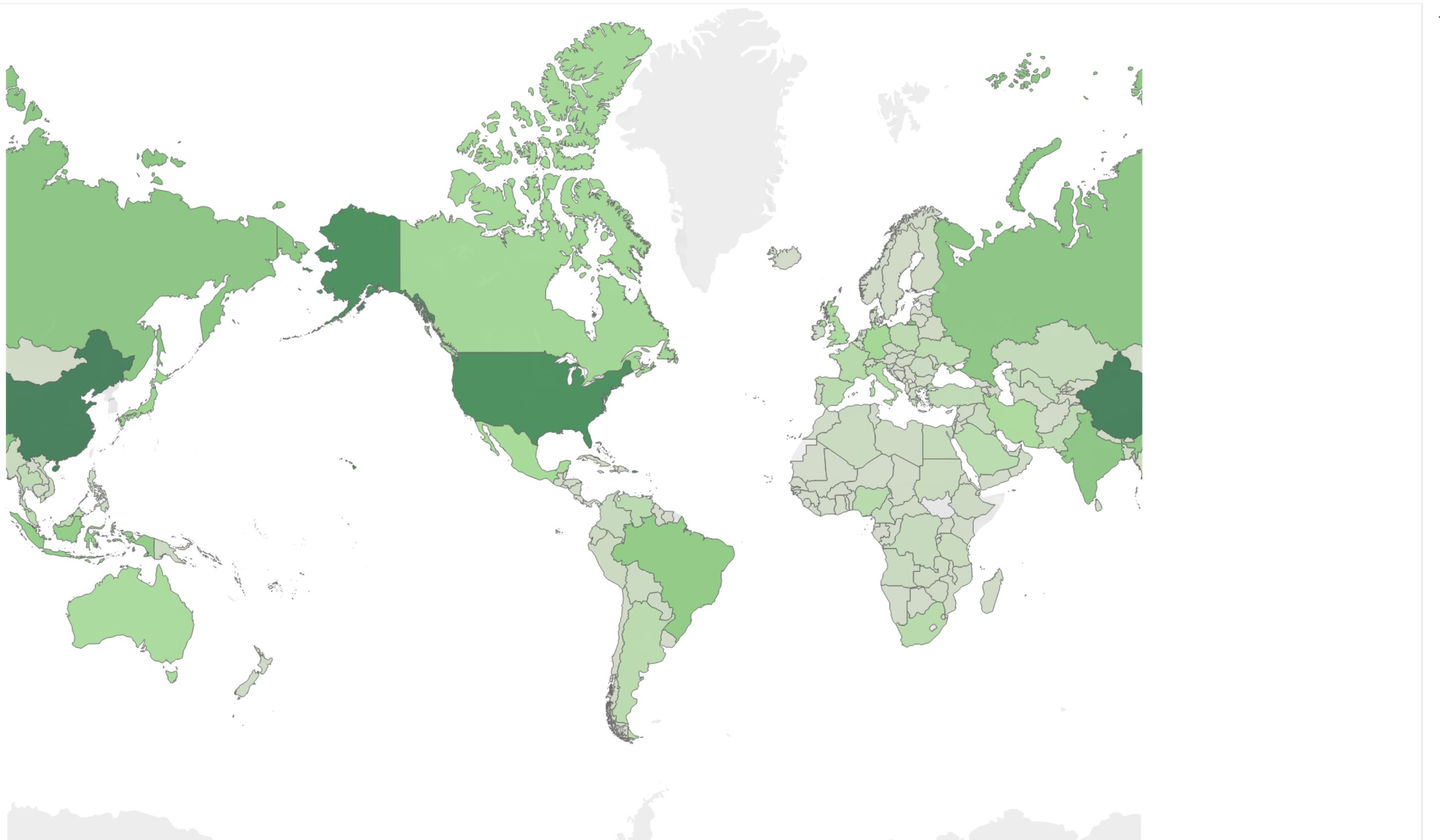


GHG IMPACT

By country.

GHG EMISSIONS

impact by country.



Color shows sum of Total GHG Emissions w LULUCF. Details are shown for Country.

A stylized illustration of a person from the waist up, wearing a yellow patterned shirt and black pants. They are holding a green protest sign with white text that reads "PROTECT OUR PLANET".

PROTECT
OUR
PLANET

Which country
produces the most
GHG emissions? ”

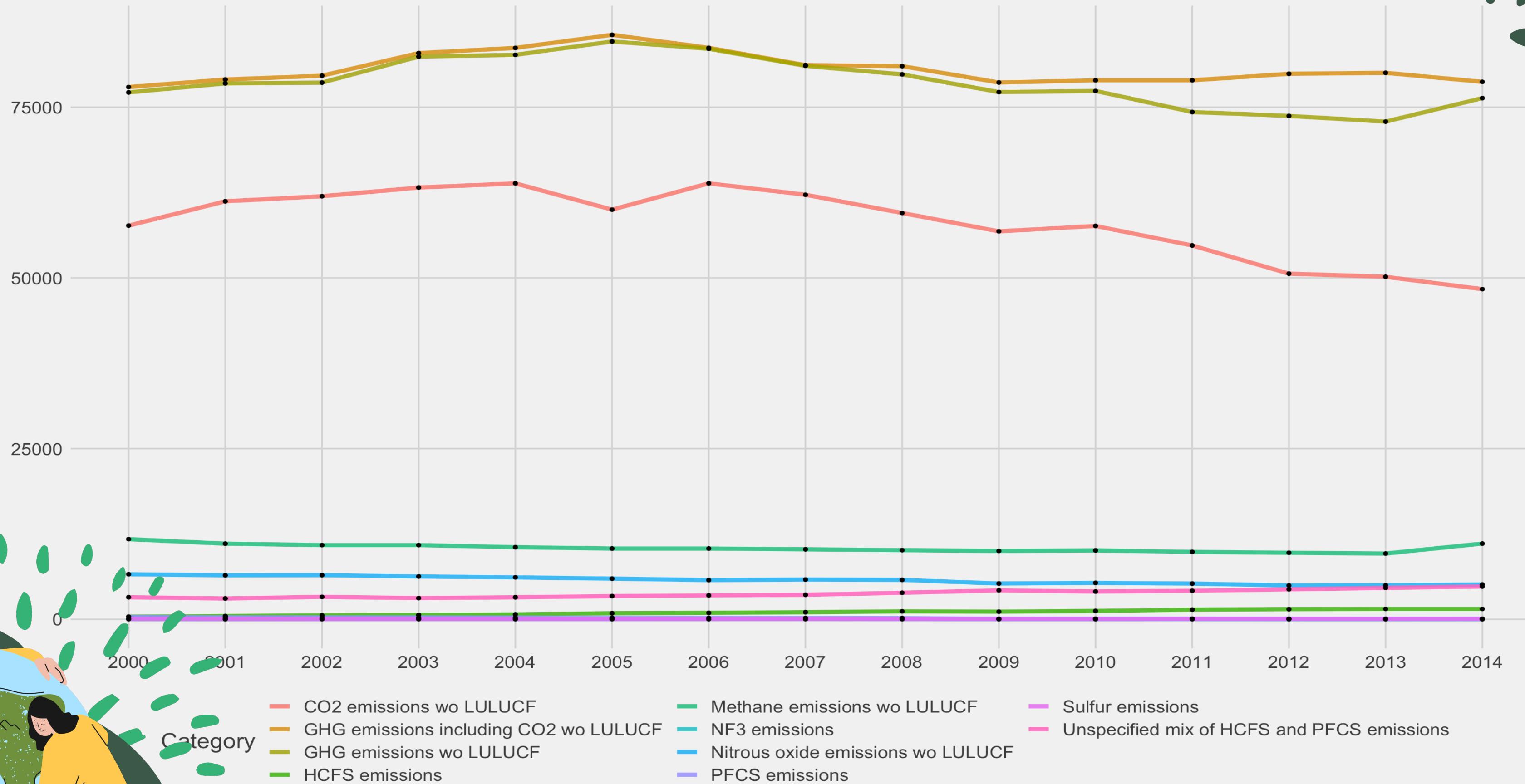


WORLDWIDE GHG EMISSIONS

Median taken by country and year.

Worldwide Greenhouse Gas Emissions

in kilotons CO₂ equivalent. Value is median taken over countries per year



A stylized illustration of a person from the waist up, wearing a yellow patterned shirt and black pants. They are holding a green protest sign with white text that reads "PROTECT OUR PLANET".

PROTECT
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What are the gases
with most
contribution?

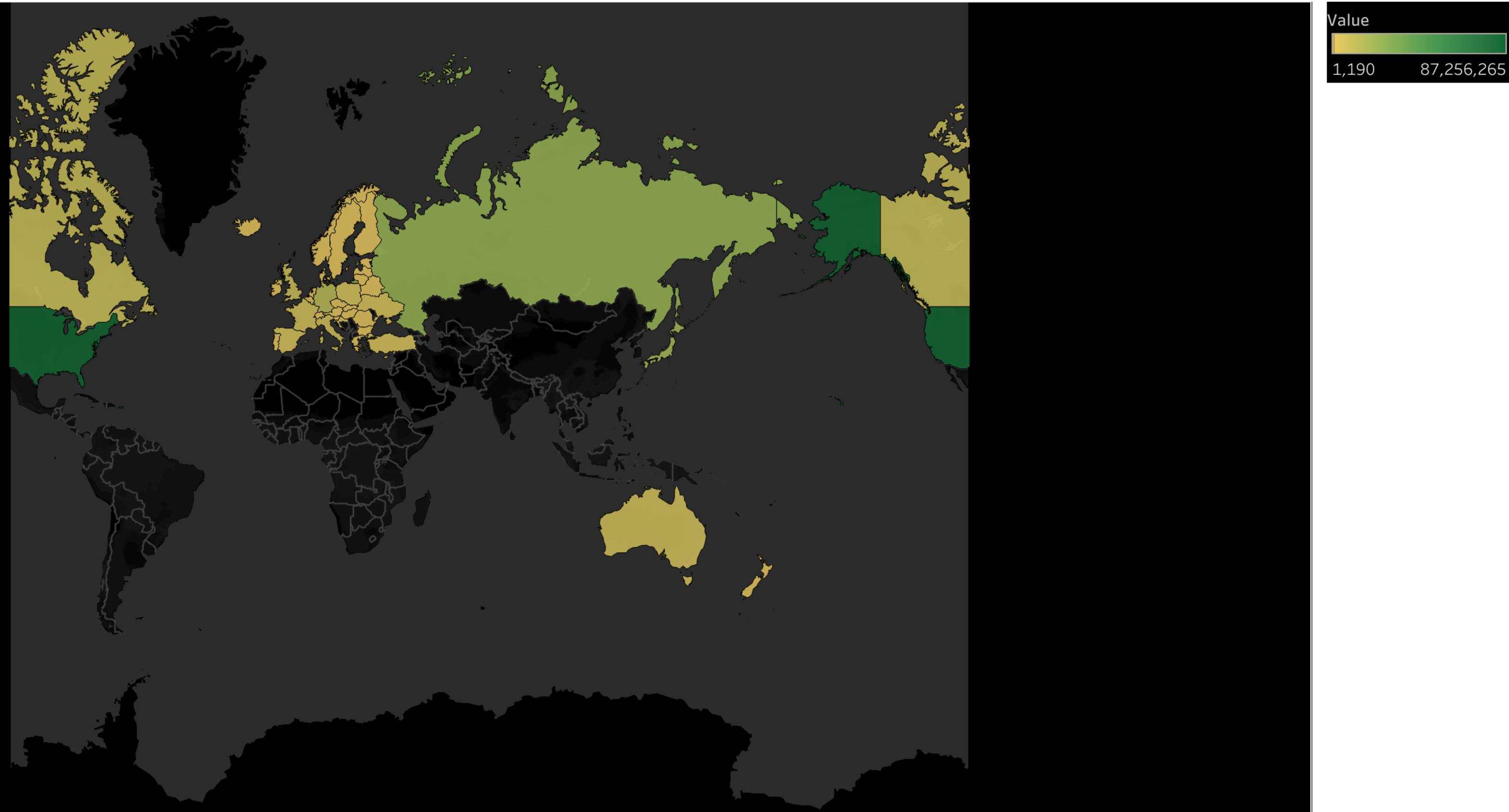
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WORLDWIDE CO₂ EMISSIONS

Contribution by country.

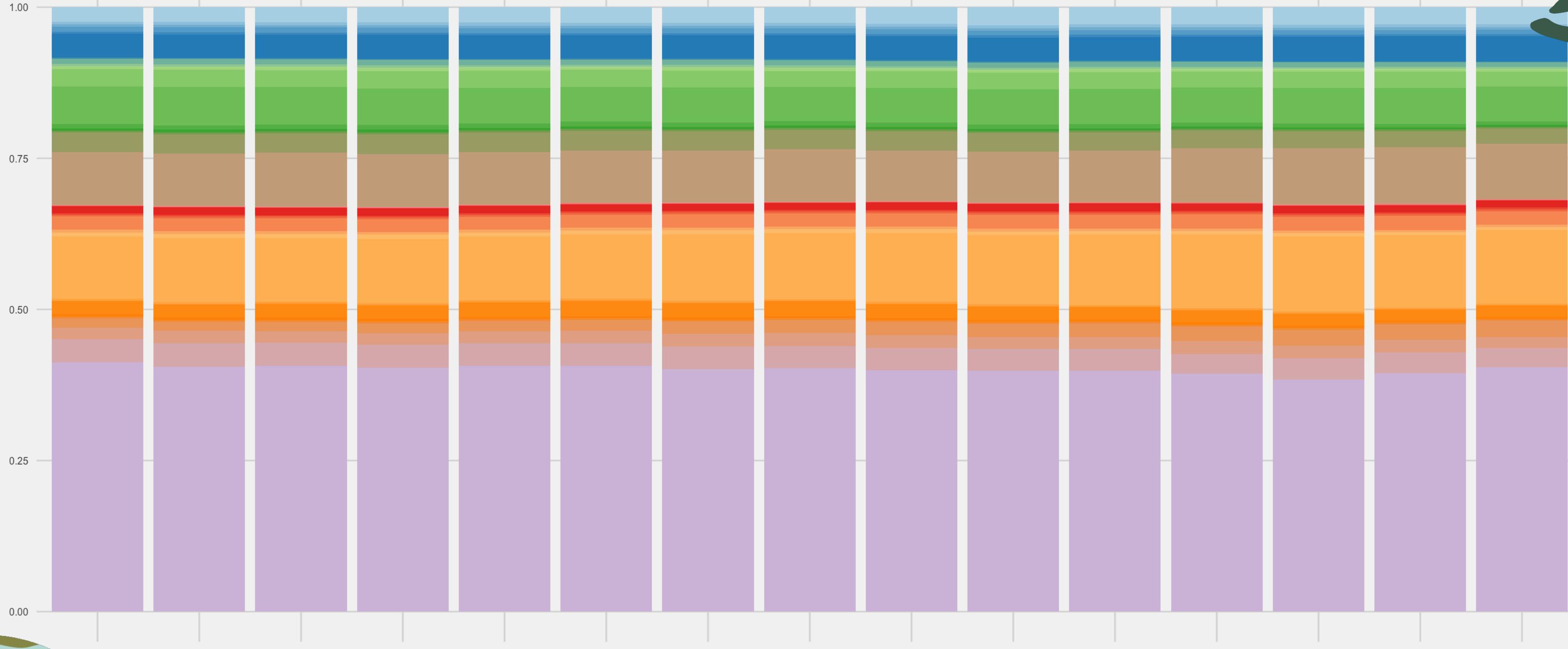
CO2 Emissions

without LULUCF, contribution by country.



CO₂ emissions wo LULUCF

contribution by country and year.



Australia	Bulgaria	Czech Republic	France	Iceland	Latvia	Malta	Norway	Russian Federation	Sweden	United Kingdom
Austria	Canada	Denmark	Germany	Ireland	Liechtenstein	Monaco	Poland	Slovakia	Switzerland	United States of America
Belarus	Croatia	Denmark	Greece	Italy	Lithuania	Netherlands	Portugal	Slovenia	Turkey	
Belgium	Cyprus	Estonia	Hungary	Japan	Luxembourg	New Zealand	Romania	Spain	Ukraine	



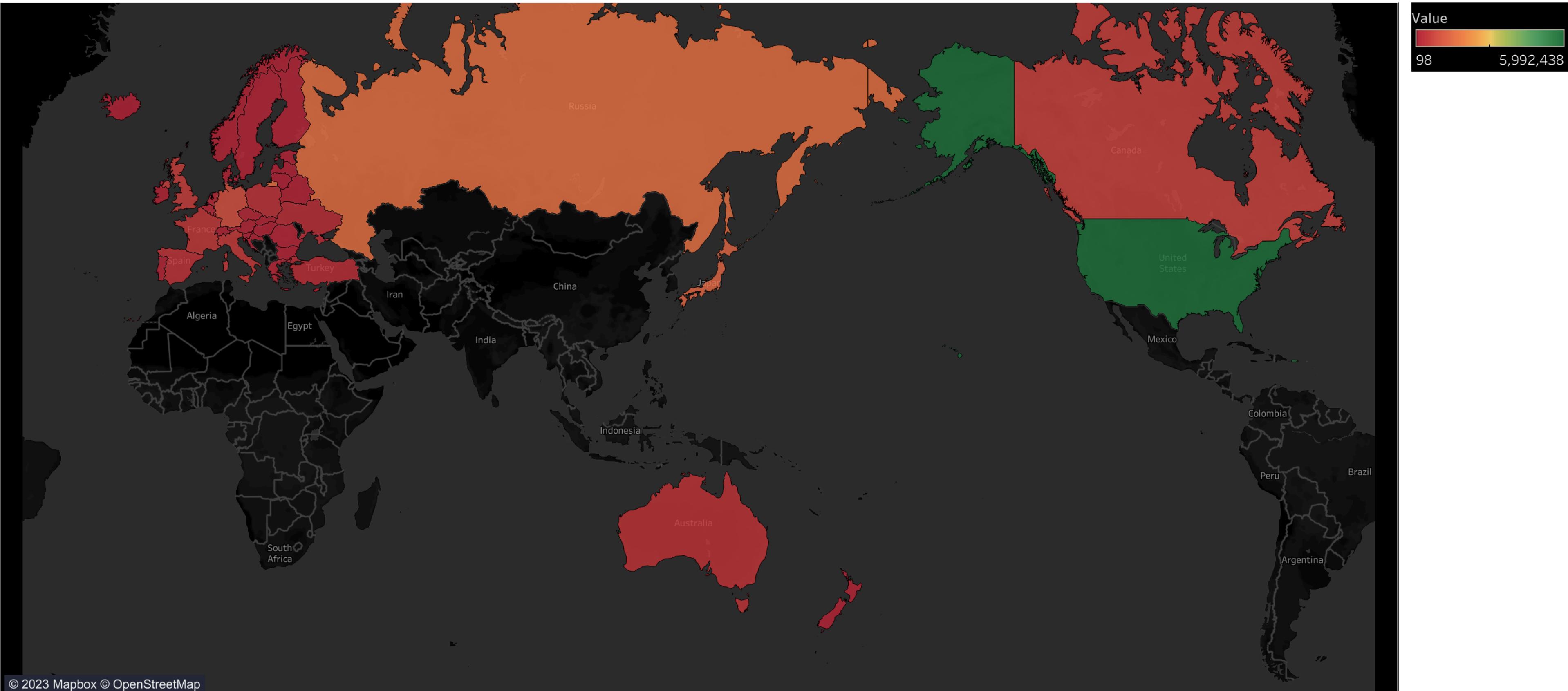
PROTECT
OUR
PLANET

Who is the biggest
contributor to one
single emission?

”

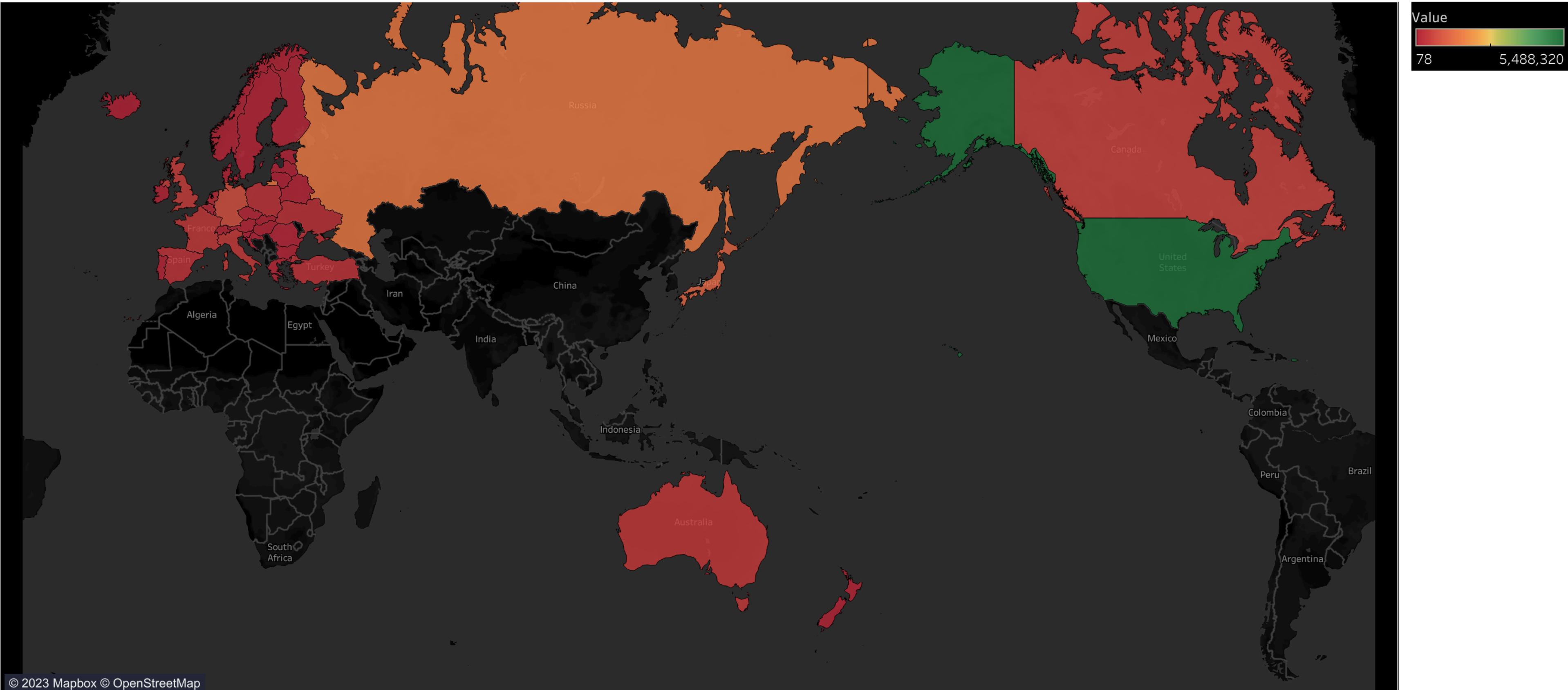
CO2 EMISSIONS

sum of year 2000.



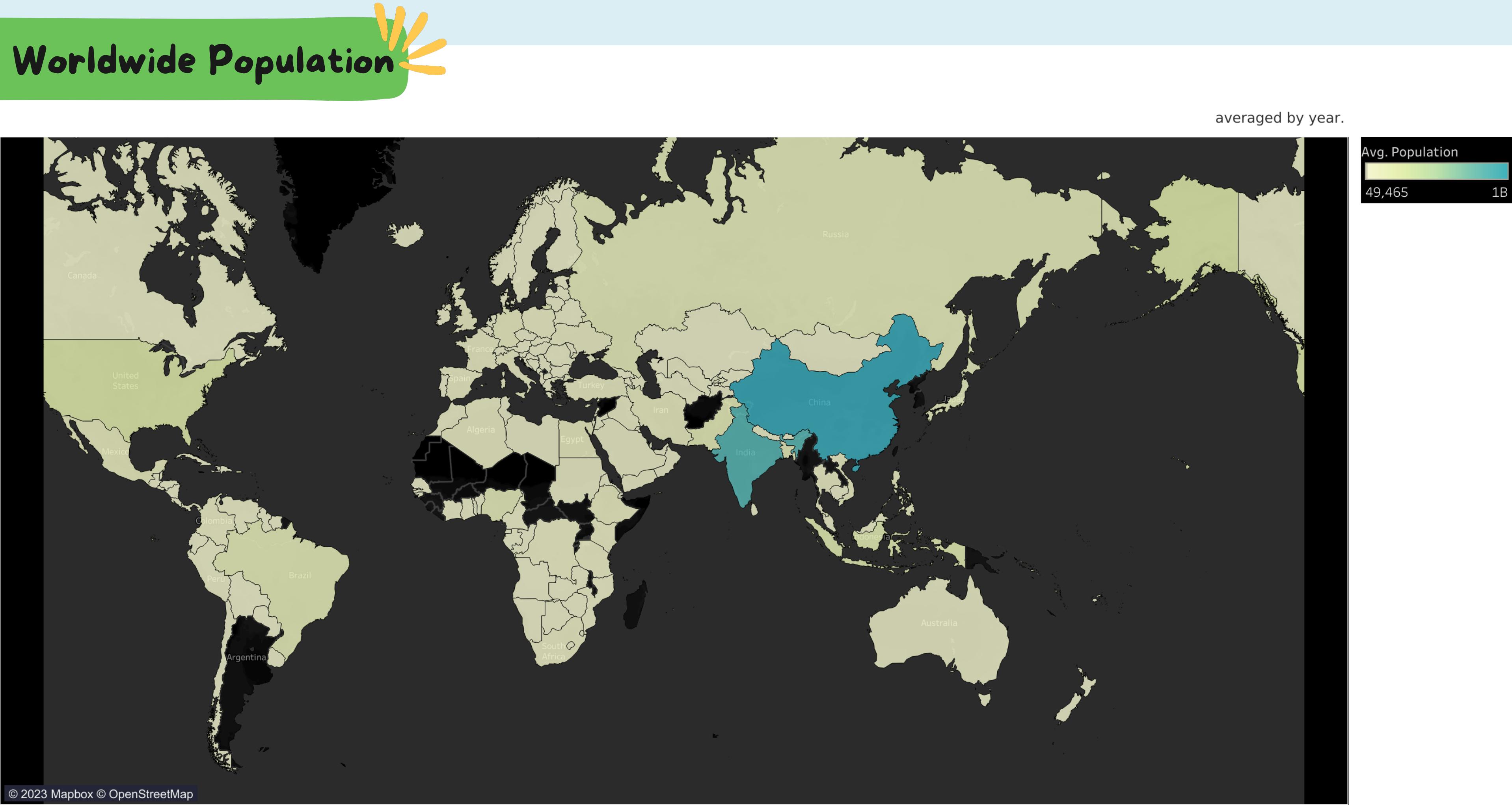
CO2 EMISSIONS

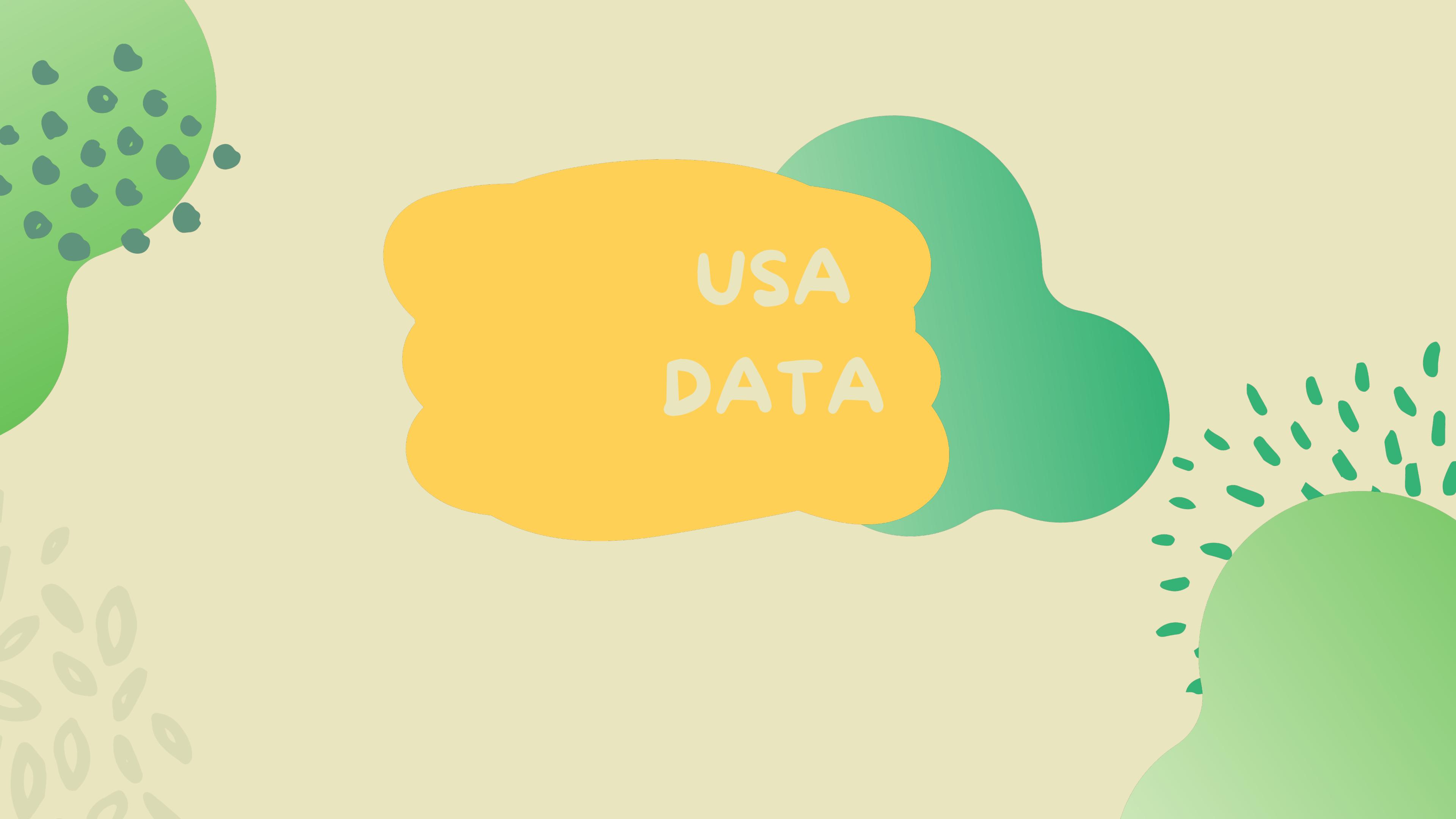
sum of year 2009.





WORLDWIDE
POPULATION

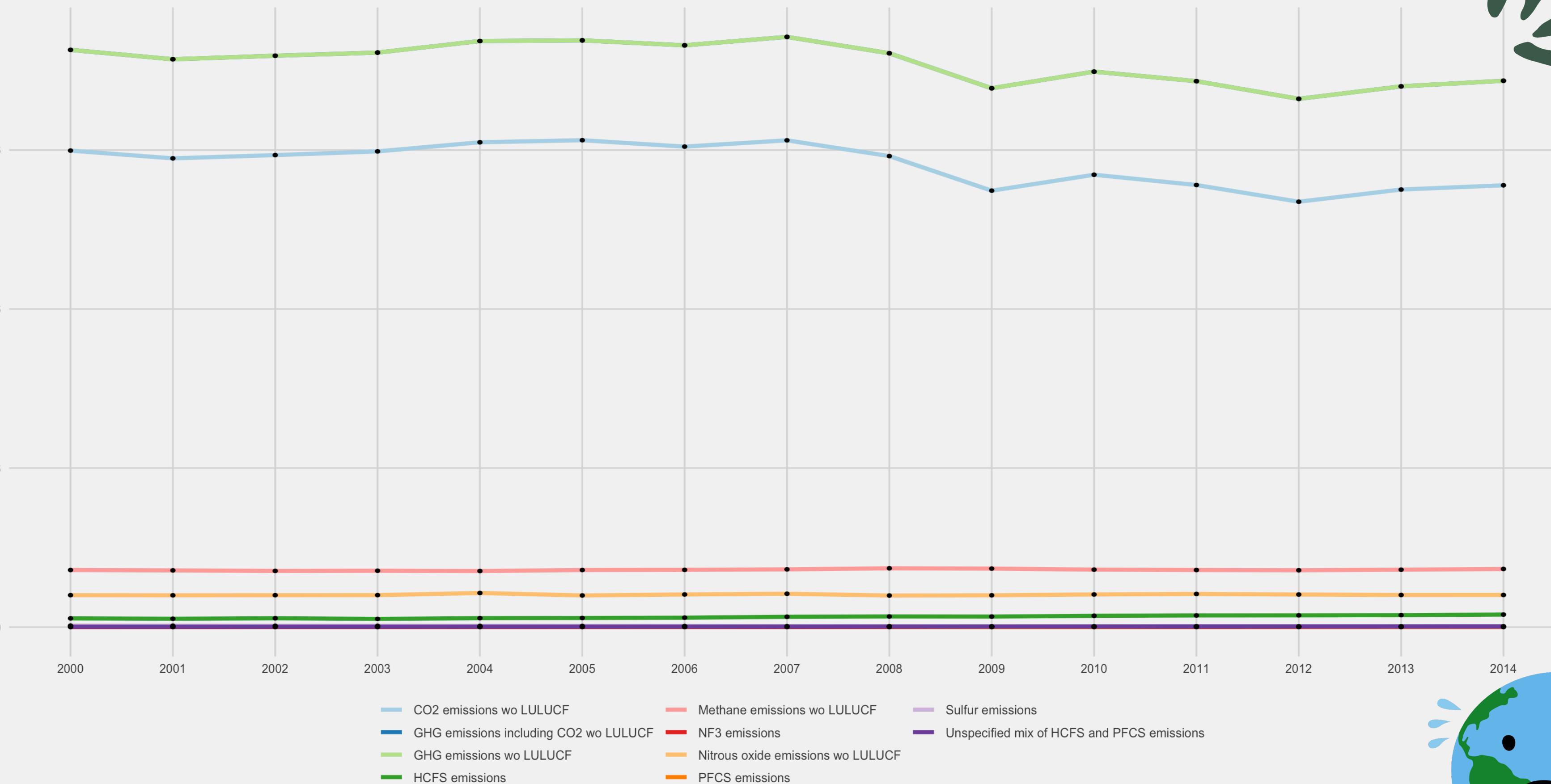




USA
DATA

USA GHG Emissions

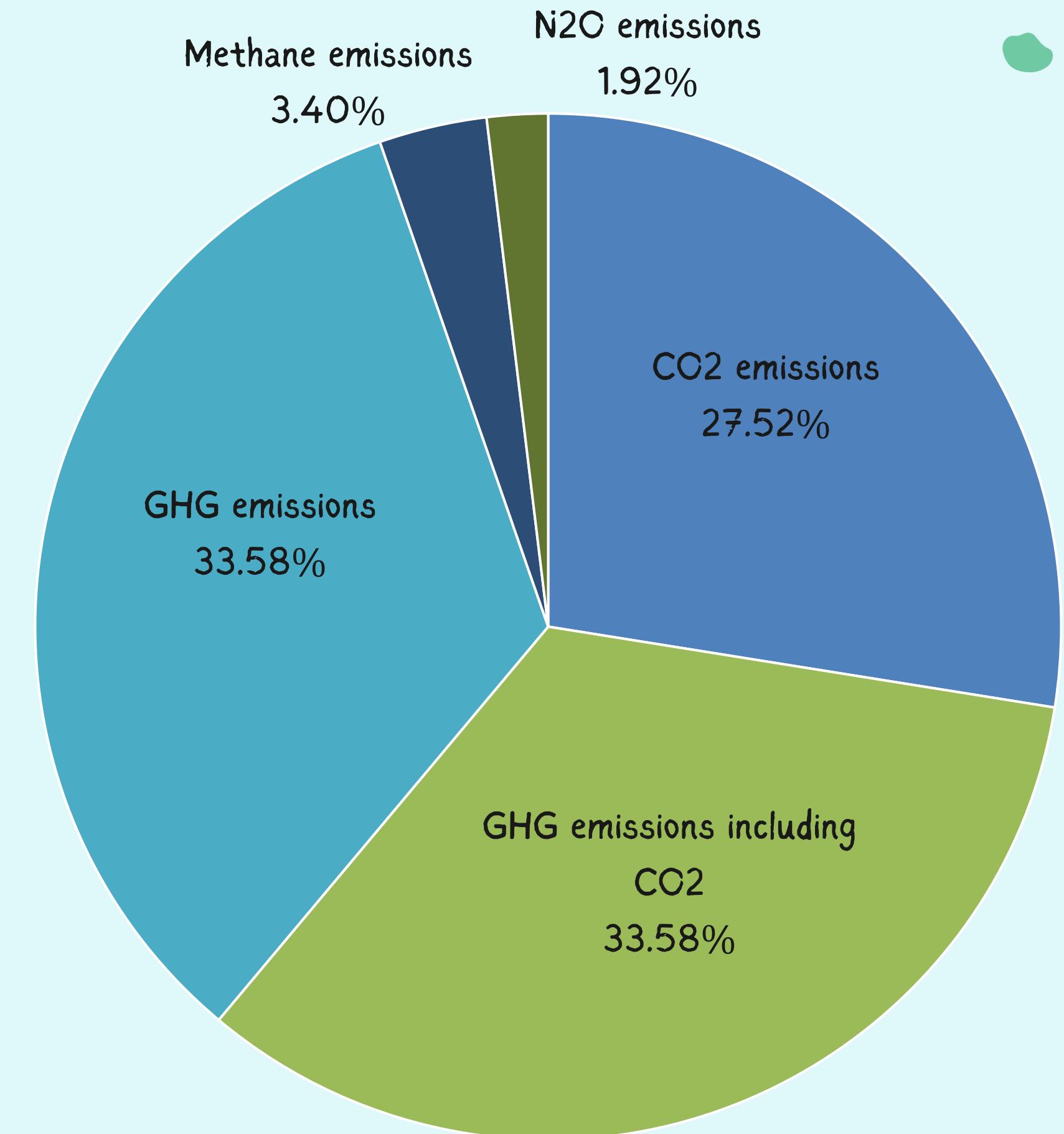
in kiloton CO₂ equivalent



United States Data

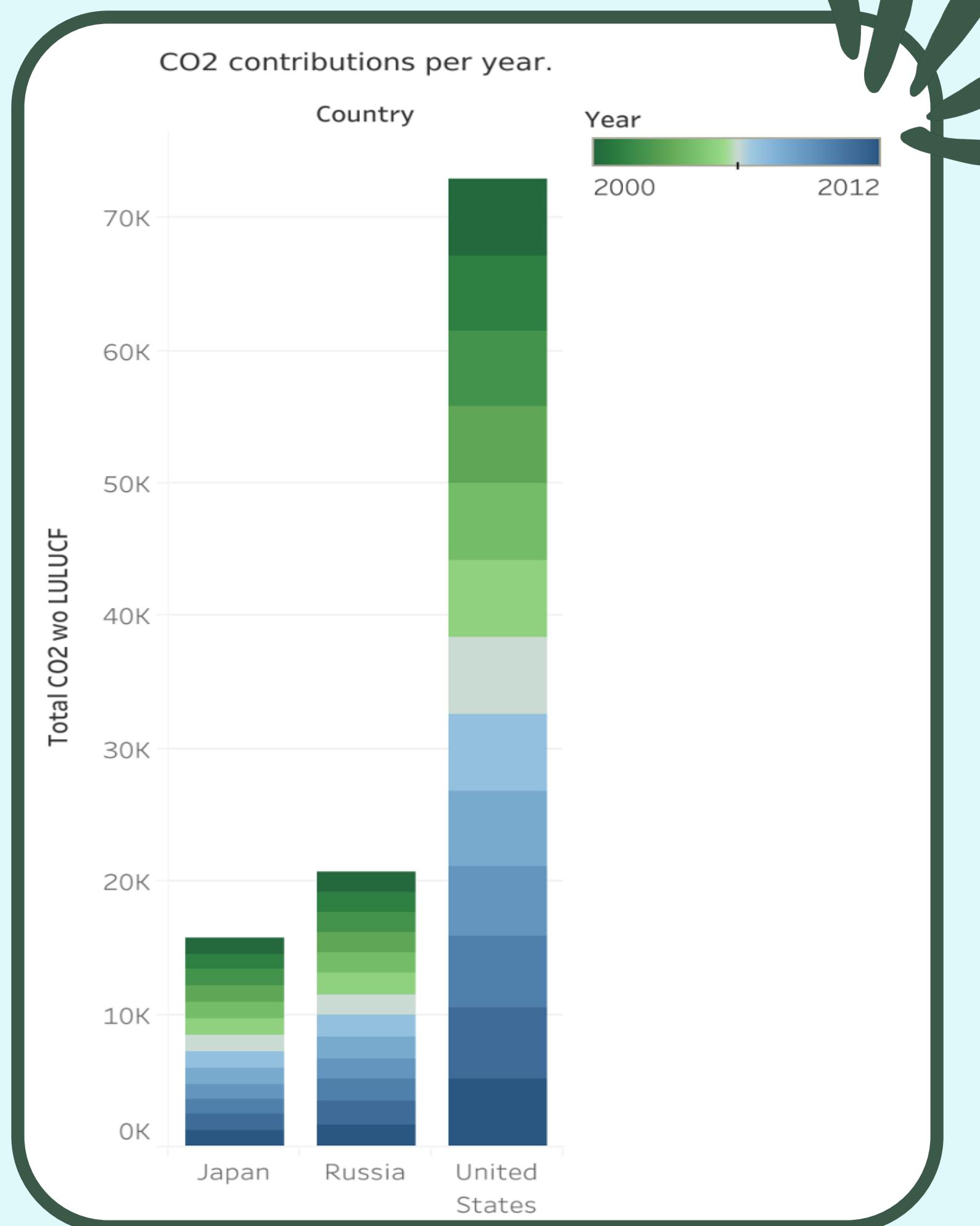


Greenhouse gases emitted by
the United States alone.



Top three contributors...

CO₂ contributions per year.



Summary

1990

The United States has been one of the main contributor for CO₂ emissions.

CO₂ emissions

For the United States were only 8% lower than in 1990.

Fossil fuel combustion

Accounts for a majority of global GHG emissions, increasing them by 47%

2012

The United States saw another dip in numbers due to another recession.

Socio-economic impact

Is more prevalent than population.

2009

Saw a dip in numbers due to recession

Questions?





THANK YOU!

Remember to recycle!

