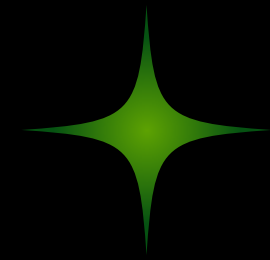
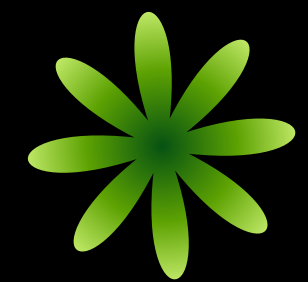
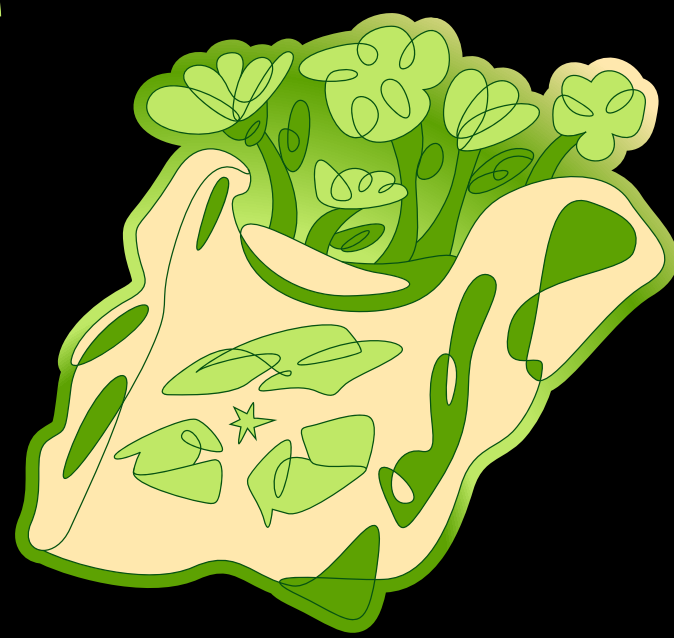


GREEN HOUSE

GAS EMISSIONS

KRITTAPAD HARNCHANG



AGENDA



1

Introduction

3

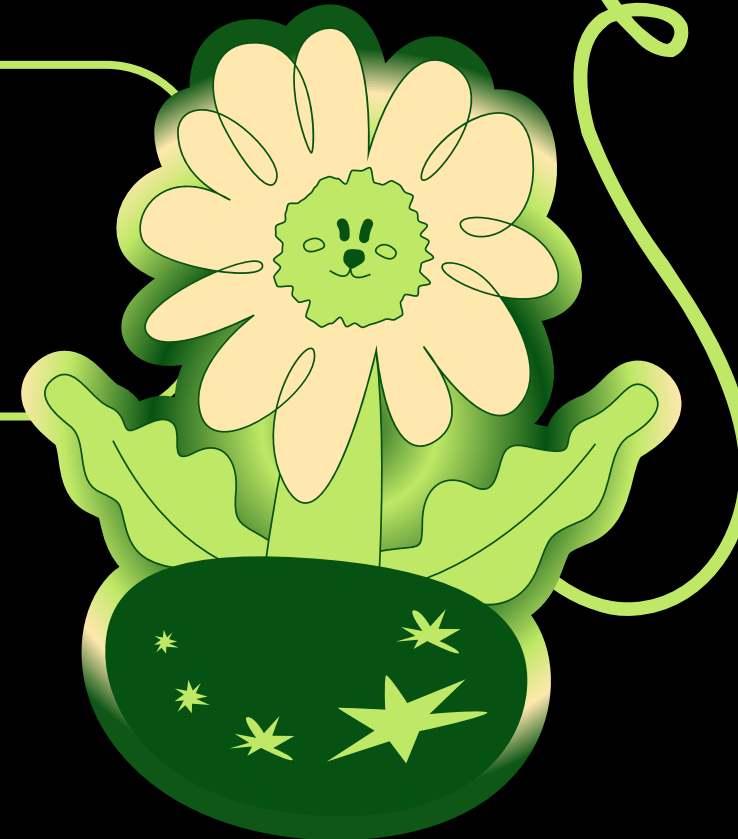
What's about Thailand

2

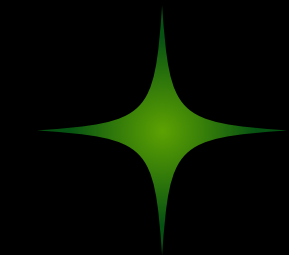
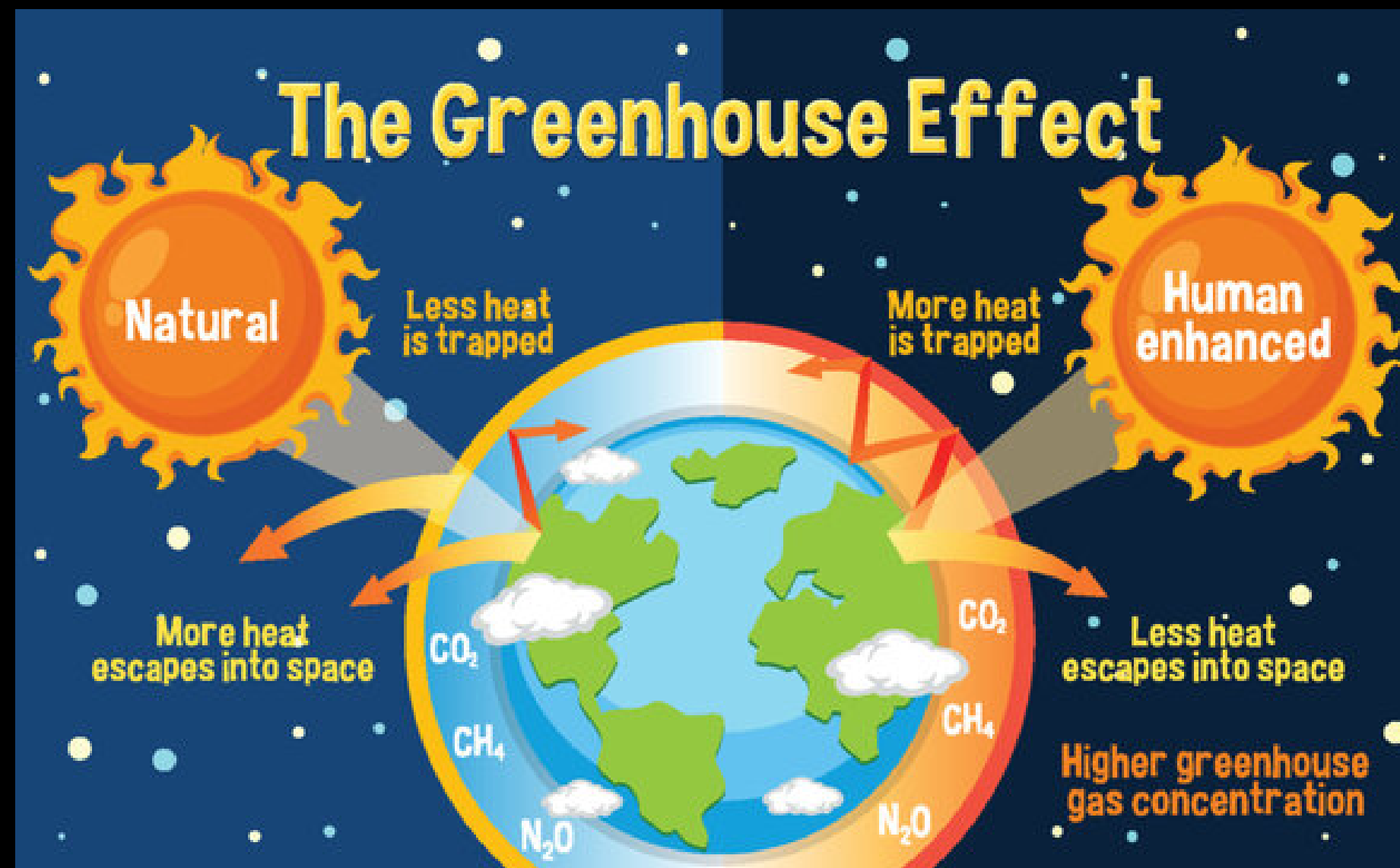
Overview situation around
the world

4

Recommendations



GREEN HOUSE EFFECT AND GLOBAL WARMING



THESE PROBLEMS IMPACT OUR DAILY LIVES...

- More extreme weather events
- Rising sea levels
- Changes in ecosystems and biodiversity



ABOUT DATA

- Range of year 1990 – 2022 (missing < 5%)
- Fill Null value with median ----> Right skew distribution in Features
- 8536 rows, 79 columns

WHICH COUNTRIES EMIT THE MOST TOTAL GREENHOUSE GASES?

Country	Total green house gas emission (millions tonnes)
China	224570.87
United States	184169.12
India	65281.22
Russia	54589.28
Brazil	53224.91

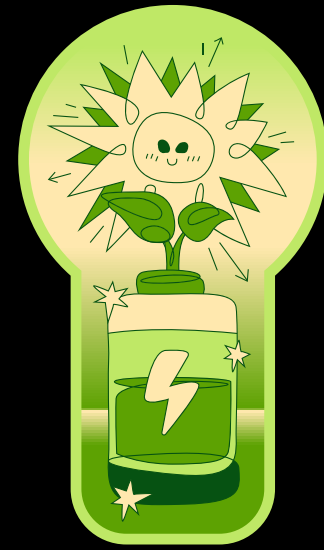
WHICH COUNTRIES EMIT THE MOST TOTAL GREENHOUSE GASES PER CAPITA ?

Country	Total green house gas emission per capita (tonnes per person)
Qatar	1639.959
Bahrain	1082.794
United Arab Emirates	1046.7450000000001
Kuwait	1036.865
Belize	972.456

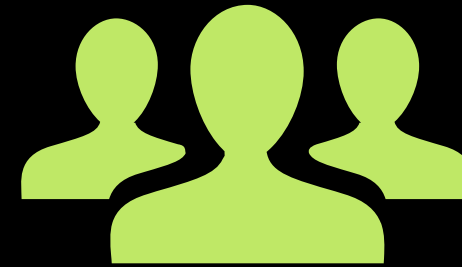
FACTORS AFFECT GREEN HOUSE GAS EMISSIONS



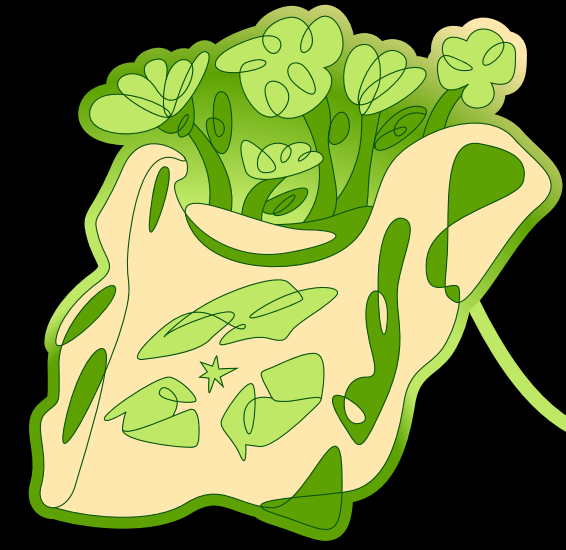
GDP



**Primary consumption
energy**

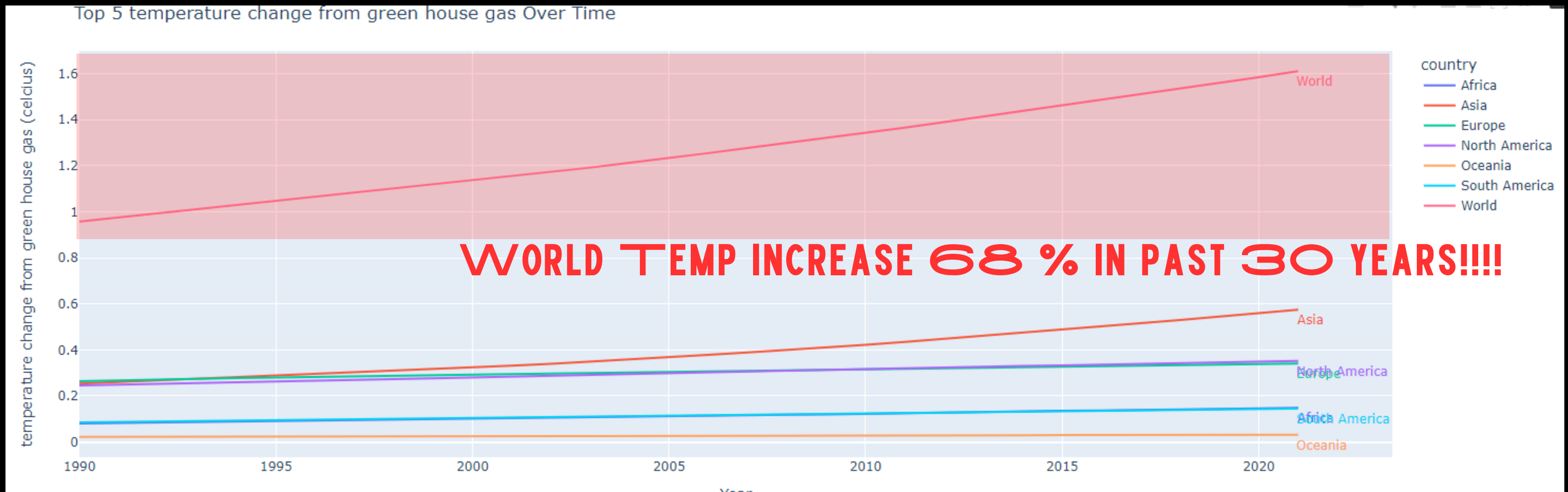


Population

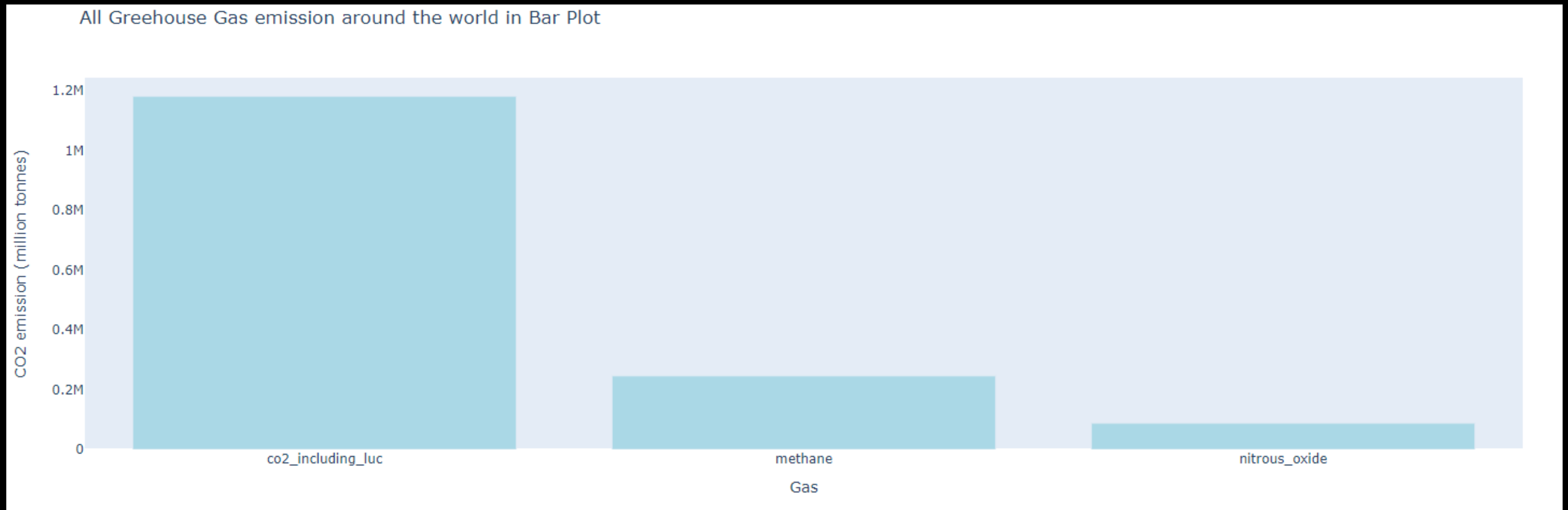


Land use change

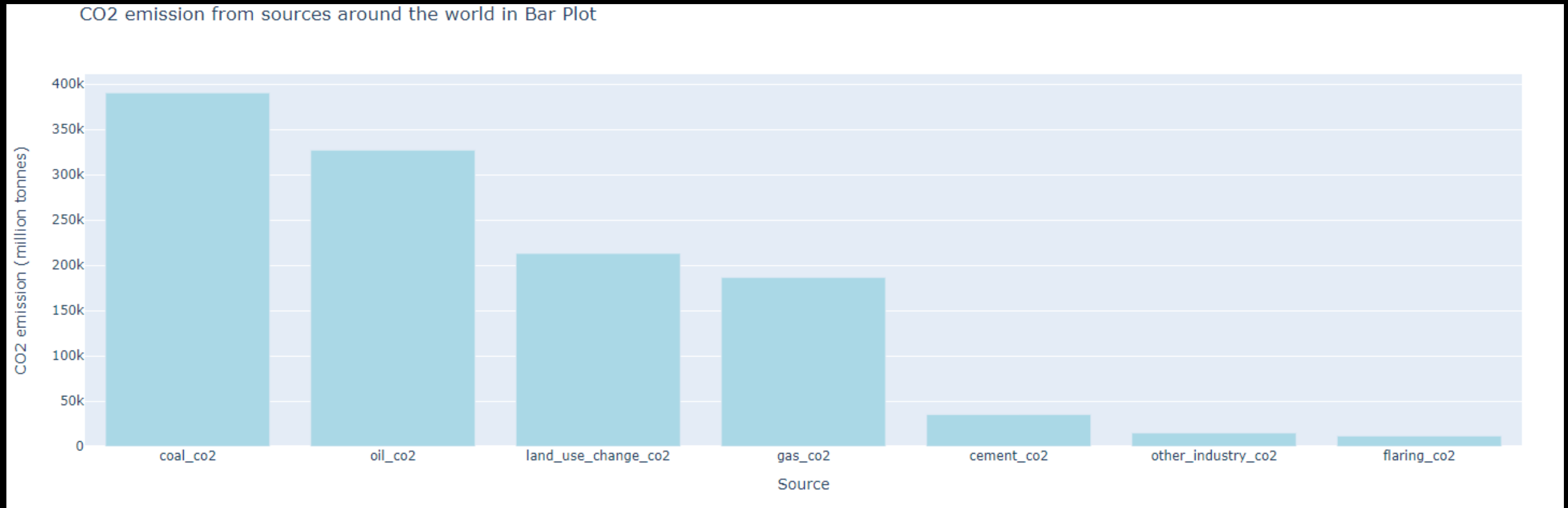
GREENHOUSE GASES CAUSE THE EARTH'S TEMPERATURE TO RISE.



CO₂ IS THE MOST ABUNDANT EMISSION GAS IN THE WORLD !!!!!!!

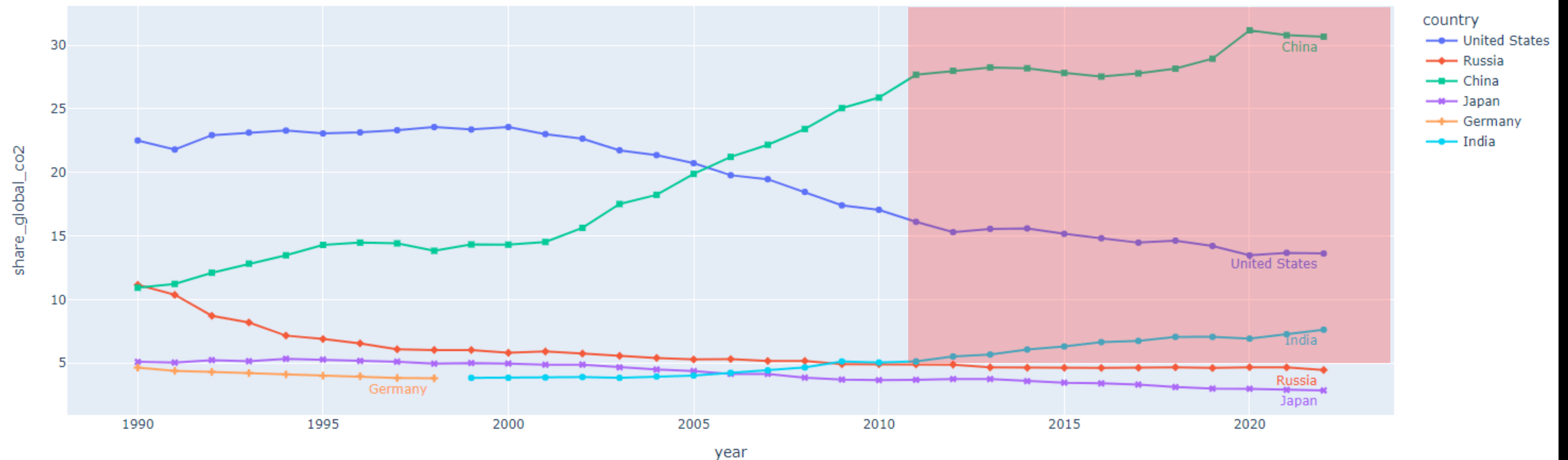


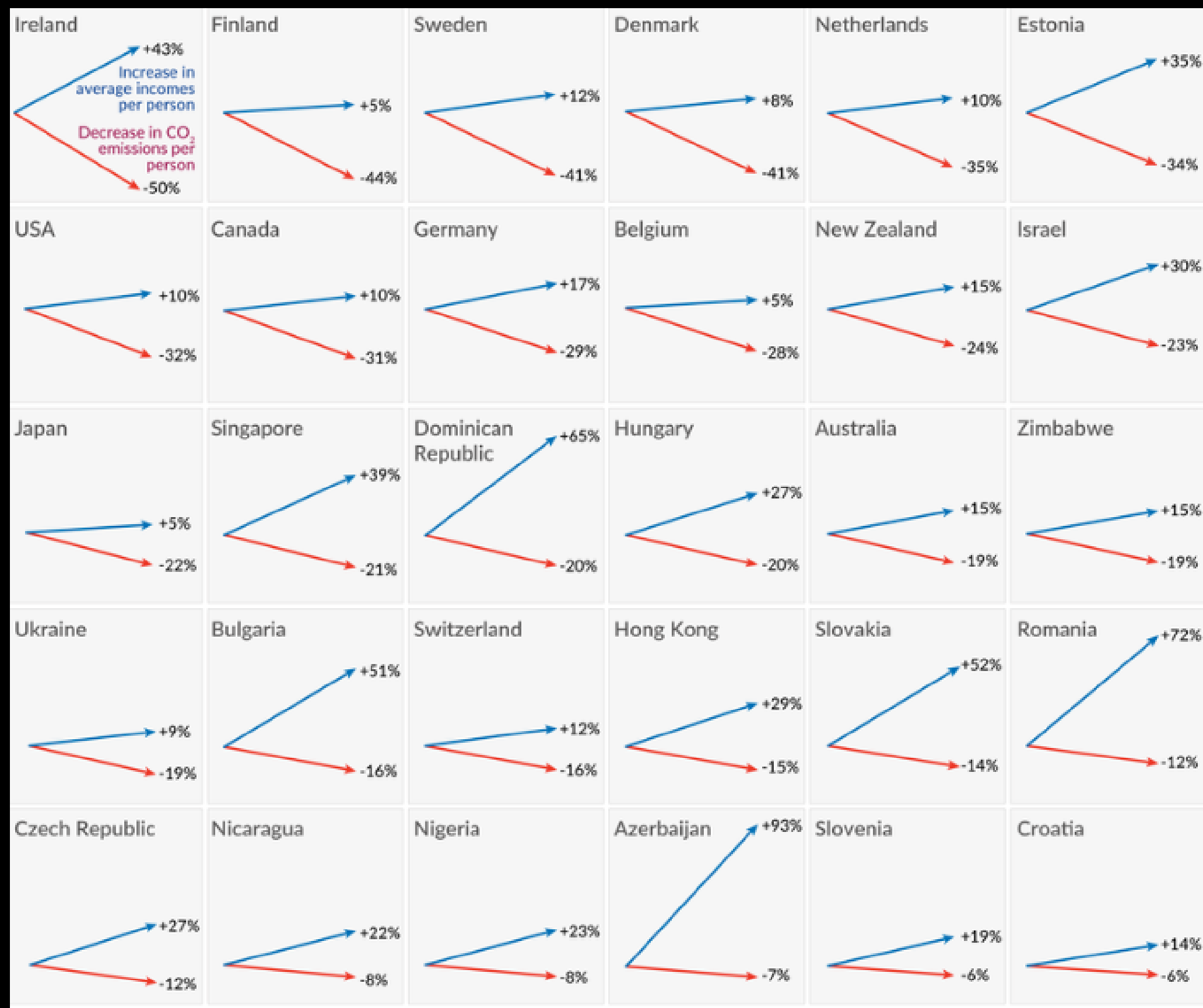
3 MAIN SOURCES : COAL , OIL , LAND USE CHANGE !!!



CHINA AND USA ARE THE MAIN CO2 EMITTING COUNTRIES, INDIA IS RISING

Top 5 CO2 Emitting Countries from 1990 to 2022 in share





**MANY COUNTRIES
HAVE REDUCED
THEIR CO₂
EMISSIONS**

THAILAND

rank 25 in Total green house gas emission country
: 9,648.20 millions tonnes

Average green house gas emission
: 292.37 millions tonnes / year

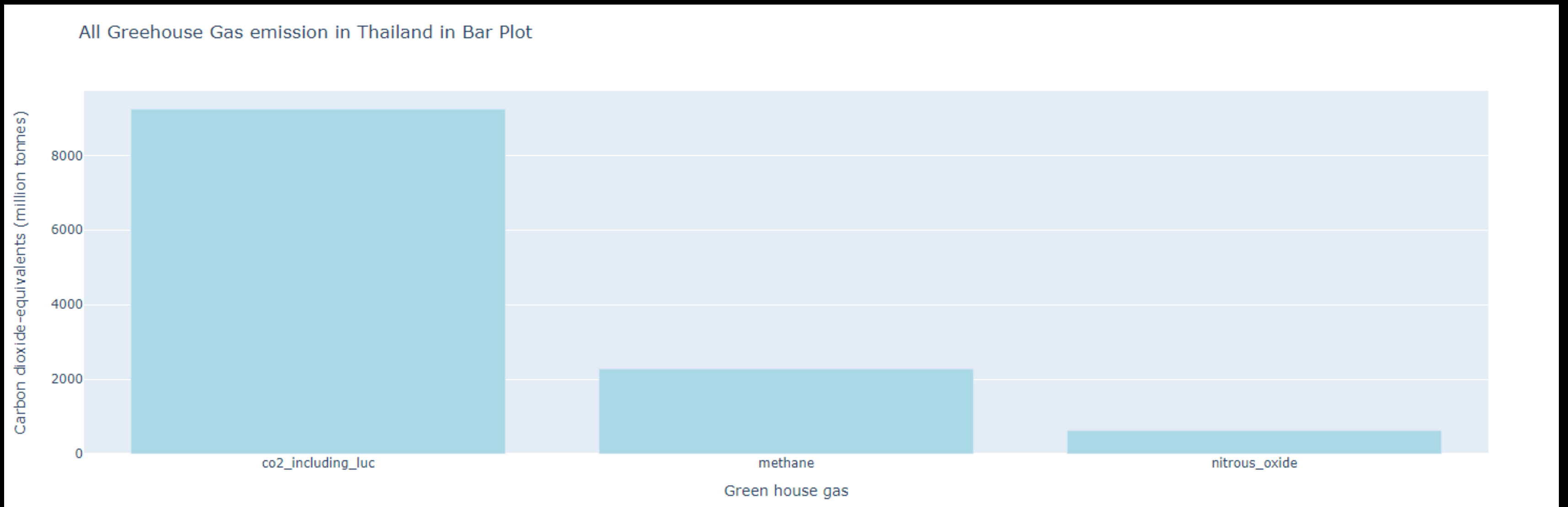
rank 130 in Total green house gas emission per capita country
: 156.14 tonnes / person

Average green house gas emission per capita
: 4.73 tonnes / person / year

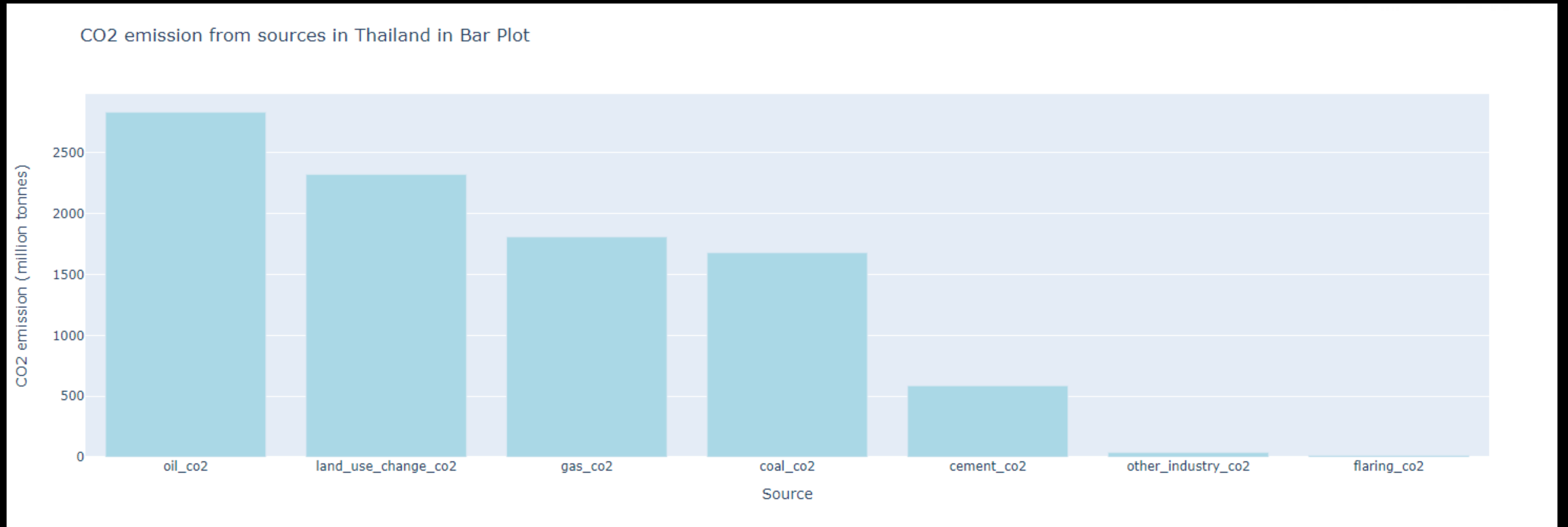


***There are 219 countries in this data**

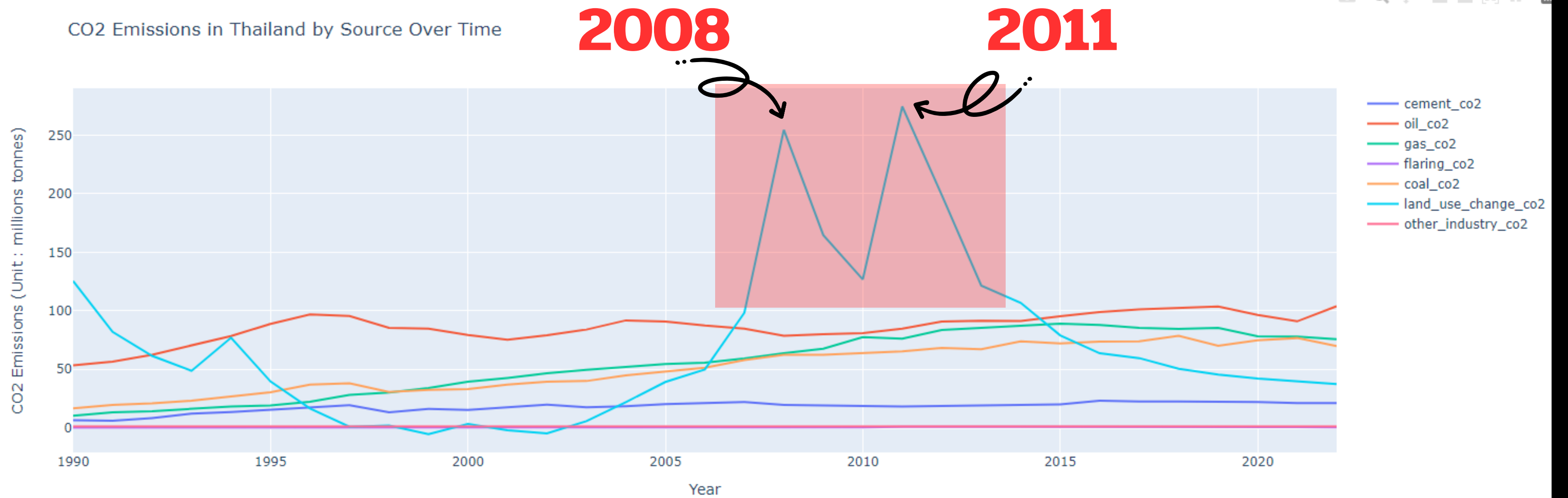
CO₂ IS THE MAIN EMISSION GAS IN THAILAND



MAINLY COME FROM OIL , LAND USE CHANGE



CO2 Emissions in Thailand by Source Over Time





Regulation of Industries



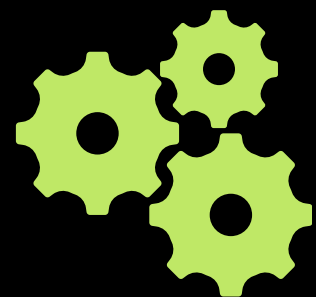
Subsidies and Incentives



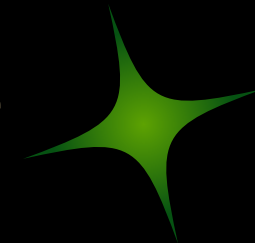
Land Use and Forestry
Management

RECOMMENDATION

Research and Development



Clean Energy Infrastructure



**IT'S TIME TO
TAKE ACTION!**

