

CLIMATE CHANGE

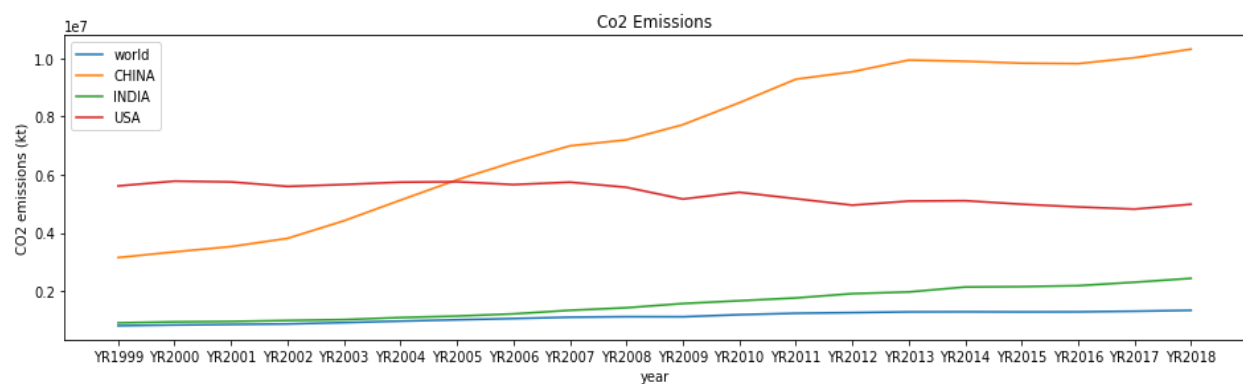
A long-term or large-scale shift change in temperature & weather patterns around the world is known to be "climate change." Climate change can affect depending on a single location or the entire globe. As a result of climate change, weather patterns can be difficult to predict. Climate change is caused by both human and natural processes. Activities such as the burning of fossil fuels like natural gas, oil and coal, release greenhouse gases which releases into the atmosphere, trap heat by sun's rays and raise the average temperature of the earth. Climate change is a term used to describe the rise in temperature.

The Earth is warming at an alarming rate, having already grown by around 1.10C (degrees Celsius) since the pre-industrial era. Climate change is already creating extensive disruption in every corner of the planet, according to the Intergovernmental Panel on Climate Change (IPCC) study, with just 1.10 C (20 F) of warming. Limiting global warming to 1.5 degrees Celsius, as set out in the Paris Agreement (Conference of Parties 21) on 12 December 2015, in Paris, will be insufficiently safe because many glaciers around the world will melt or lose most of their mass if global warming is only 1.5 degrees Celsius by 2030.

CO2 emisisions:

Climate change mainly caused by carbon dioxide emissions, Green house gases, other emissions. It is known that entire world must and should reduce emissions as soon as possible to avoid further effects of climate change. However, how such obligations are divided among regions, countries and individuals has long been the subject of debate

The below plot is showing time-series variation of CO2 emissions for CHINA, INDIA & USA to the world. It is clear that Co2 emissions for the countries INDIA and CHINA are gradually increasing after the year 2004, whereas we can see USA are consistently decreasing after the year 2005.

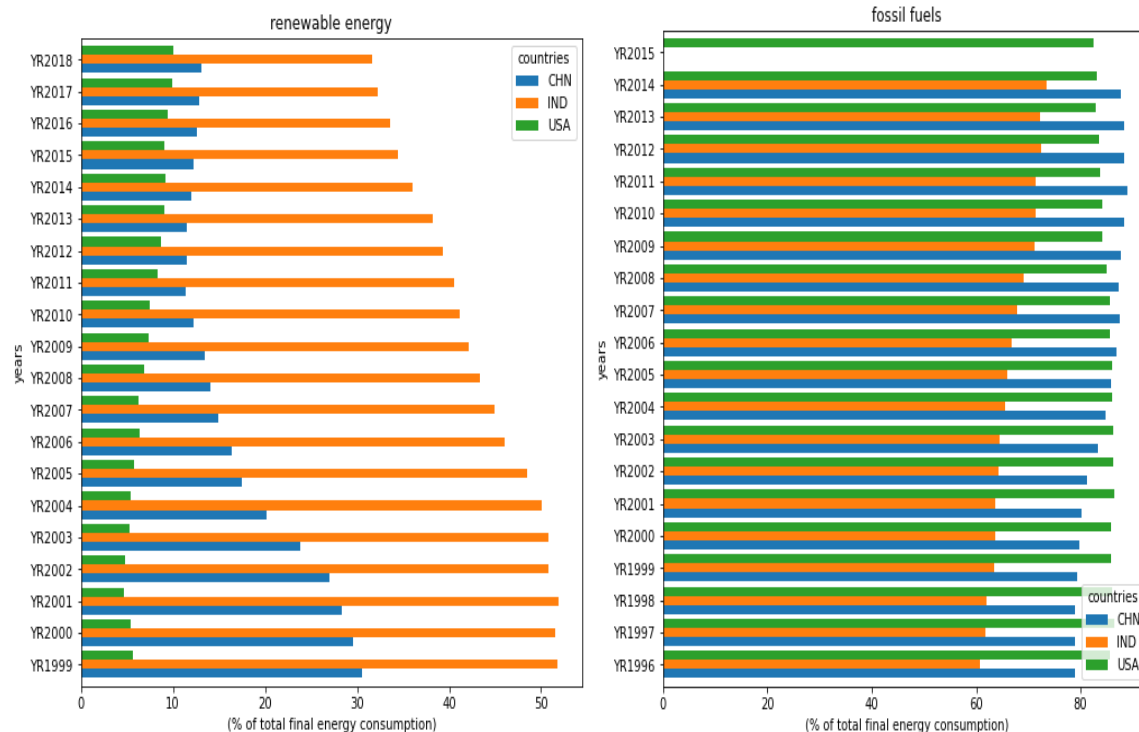


in international forums.

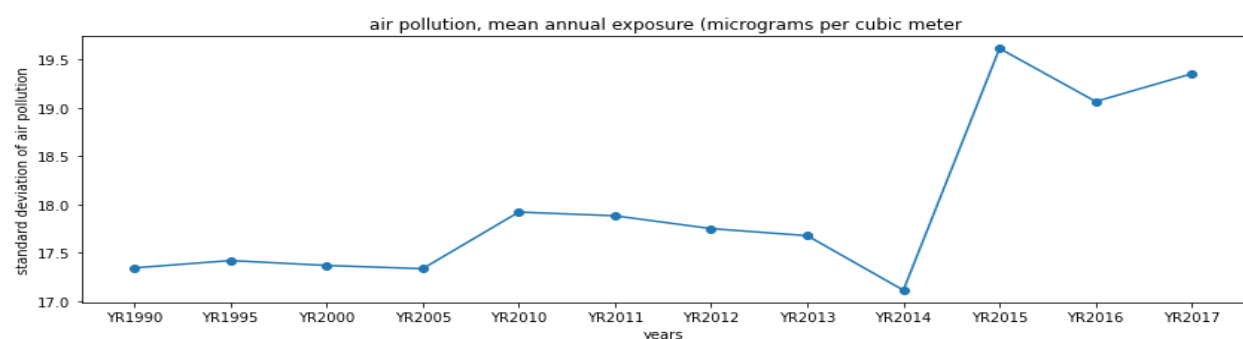
Renewable Energy and Fossile fuels:

Combustion of fossil fuels is accelerating this global phenomenon. Renewable energy is one of the solutions to minimize the effects of climate change and global warming.

Below bar graphs shows the usage of renewable and fossil fuel consumption over years. As per the given data we see that INDIA is using more renewable energy compared to other two countries. The renewable sources in USA are less when compared to other 2 countries but surprisingly CHINA is using more fossil fuel energy than USA and IND. These 3 countries play a major role in consumption of Oil.



Pollution:



As per the above graph we see that there is drastically increase in pollution from the year 2014, this is an on-going issue in every country. Although it is possible to measure the effects of air pollution on substances, vegetation and animals, the effects on human health can only be estimated using epidemiological evidence. To reduce air pollution, we can practice using public transport, saving electricity, reusable materials, avoiding plastic, implementing Afforestation, etc...

Reference: <https://data.worldbank.org/indicator>