

## Milestone 1 : Define problem/problem understanding

### Activity 1 : Specify the business problem

Global warming is one of the biggest challenges currently being faced by the human race, although correlation is not causation, a likely cause of global warming is due to increased atmospheric carbon dioxide from human activities. CO2 Emission refers to the carbon dioxide emitted throughout the world. For this analysis we will be focusing on CO2 Emissions and its effect on the world we live in as well as some key factors and stats that may play a role in the emission of CO2 globally. Fossil fuel use is the primary source of CO2. The data throws light onto how much fossil fuels are burnt, per year per nation, which amounts to an increase in CO2 every year. This will help researchers and environment experts to predict global warming. So countries should set a goal to decrease this amount yearly.

Analysing global CO2 Emission across countries from 1975 to 2020. This dataset contains a record of CO2 Emissions by each country and region of earth, here we are going to analyse and visualise country wise, region wise and overall CO2 emission on earth.

### Activity 2 : Business requirements

The business requirement for analysing the CO2 Emission Globally over time, identifying affecting factors, creating interactive dashboards and reports, areas for improvement, making data-driven decisions, comparing to countries average and creating forecasting models for future performance. The ultimate goal is to gain insights and creating forecasting models for future performance. The ultimate goal is to gain insights and reduce the emission through data visualization techniques.

### Activity 3 : Literature Survey

Carbon emission research was initiated in 1981 with the first published focusing on volatile organic carbon emission of cooling tower water. Thereafter several researched explored the domain without significant impacts until the Kyoto protocol was signed in 1997. However, carbon emission research became a trending topic after 2007, resulting in a significant increase in research publications. With the rising global temperatures, climate change has become a major global concern which is also considered as the most serious issue global community has to address in the 21st century. Research on global carbon emissions has significantly increased after discovering carbon emissions as the major cause of climate change.

Increasing carbon emissions have caused significant concern amongst the countries such as China, United States, Russia, India, European Union, and Japan as the leading carbon emitters of the world.

### Activity 4 : Social or Business Impact

**Social Impact :** Carbon dioxide emissions are the primary drive of global climate change. It's widely recognised that to avoid the worst impacts of climate change, the world needs to urgently reduce emission.

Business Model/Impact : By conducting an analysis the counties can identify areas for improvement and take steps to reduce factors that are responsible for CO2 Emission for environmental sustainability by improving the efficiency and transitioning to low carbon alternatives.