Air pollutant emission

Introduction: Research Problem

1. Background

With the "Fridays for future" strike going on, we can see an increasing attention on climate change among the younger generation. Extreme weather, heavy flood and drought arouse the public's anxiety about the global warming. One of the major drive of climate change is air pollutant emission. Green House Gases (GHGs), carbon dioxide (CO2), aerosol particles and so on are acting as heating intermediate in the atmosphere. Human activities, industry productions, road vehicles as well as biogenic and oceanic sources are emitting chemical species into the atmosphere. After certain import chemical and micro-physical processes , these chemicals exert different influence on the climate.

To slow the pace of climate change, different protocols, for instance the Montreal Protocol and the Paris agreement, have been discussed and applied to different countries, Many countries are trying to cut down their emissions and to reach the goal made in protocols.

2. Problem

The first question to cut down emission is to evaluate emissions from each country., including the amount, emission categories, key pollutants, the drive behind the trend of emission values. This is project will focus on to the above mentioned points to analyze air pollutants from some countries. Besides, caparison between/among countries is also done to find target countries, which emits relatively more air pollutants and its emission should be strictly monitored and controlled.

3. Interests

policy makers could be interested to see such a report about their own country's emission values and trend. Thus they can contribute to making policies on industry emission standards, public transport and so on, to decrease air pollutant emission. This may also interest environmentalists and even ordinary people, by providing them hints to cut down air pollutant emissions from their own perspective.