An Approach to Quantitatively and Qualitatively Justify the Need of a Continuous Pollution Action Plan in New Delhi using the GAINS Model

Aryan Ashok Trehan

805, Raheja Classic, 2A, Andheri (West), Mumbai-400053. India

The National Capital Territory of Delhi has been long observed for its immensely high AQI levels and PM emission from vehicular and industrial sources. According to IQAir's live US AQI map Delhi has the third highest Air Quality Index in the world at 200 US AQI. Currently, Delhi's main policy for fighting against PM emissions and air pollution in general is the Graded Response Action Plan (GRAP) which is an emergency measure. The GAINS Model estimates historic emissions of 10 air pollutants and 6 GHGs for each country based on data from international energy and industrial statistics, emission inventories and on data supplied by countries themselves. In this, we shall use a few pre-existing scenarios to show what will happen if a continuous plan is followed. At the end, we will try to modify said testing scenarios to make a better Delhi-specific emission scenario we can follow and we will detail the policy changes we must make. We aim to discuss the reason for a continuous plan for improving the AQI of Delhi by using the GAINS Model as a quantifying tool to measure the trends in emissions.

Biography

Aryan graduated from his sophomore year (10th Grade) of is ICSE Affiliated high school at the age of 15 with an overall grade of 99.2% and has been a staunch environmentalist using his expertise in computer science to make complex models to derive quantitative solutions to the world's problems. He has been volunteering in research for many reputed environmental and climate science organizations and has conducted multiple research missions under The Leadership 30- a nonprofit. He hopes to make great changes in the world of Pollution Policy and Technology using academic ventures as his medium.

Tre_aryan@outlook.com