**Technical Problem Statement**

Climate change due to carbon dioxide (CO 2) emissions is one of the most complex challenges threatening our planet. This issue considered as a great and international

Concern that primary attributed from different fossil fuels. To reduce the effect of Global Warming caused mainly due to CO 2 cars manufacturing companies are pre-estimating the CO2 emissions for a newly manufactured car that is about to launch in the near future based on the features of the car.

This project deals with estimating the CO 2 Emissions for a newly manufactured car by making Regression models which can accurately predetermine the car CO 2 emissions

before it is being launched.

**Expected tools and technologies to be used**

For solutioing on this Project, we recommend the use of Python 3.x version with libraries such as Numpy, Pandas, Matplotlib, Seaborn, SkLearn, Scipy, statsmodels, Jupyter Notebook, MySQL.

**Project Outcome**

Your task is to create a Predictive Model using Linear Regression Technique by splitting the original data into test and train datasets.

Also to prepare the solution design to explain the techniques used and why.

**Attachments**

* Data Set in CSV format

**Data Definition**

The Data given here is for the Year 2014 manufactured Cars.

* YEAR – Year of manufacturing of car.
* MAKE – Manufacturing company name.
* VEHICLECLASS – Type of vehicles like SUV or medium-sized etc.
* ENGINESIZE – Size of the car’s engine (expressed in cc or cubic centimetre).
* CYLINDERS – Number of Cylinders in the engine.
* TRANSMISSION – Automatic or manual transmission with the number of gears.
* FUELTYPE – It indicates the type of fuel car use i.e. Diesel, Petrol, Z (Unleaded Petrol) etc.
* FUELCONSUMPTION\_CITY – Fuel consumption or Fuel economy of car while running in city expressed in miles per gallon.
* FUELCONSUMPTION\_HWY - Fuel Consumption or Fuel economy of car on highway expressed in miles per gallon.
* FUELCONSUMPTION\_COMB – Net or combination of Fuel Economy expressed in miles per gallon.
* FUELCONSUMPTION\_COMB\_MPG – Total fuel economy expressed in miles per gallon.
* CO2EMISSIONS – The CO 2 emitted by the car expressed in grams.