Case Study:

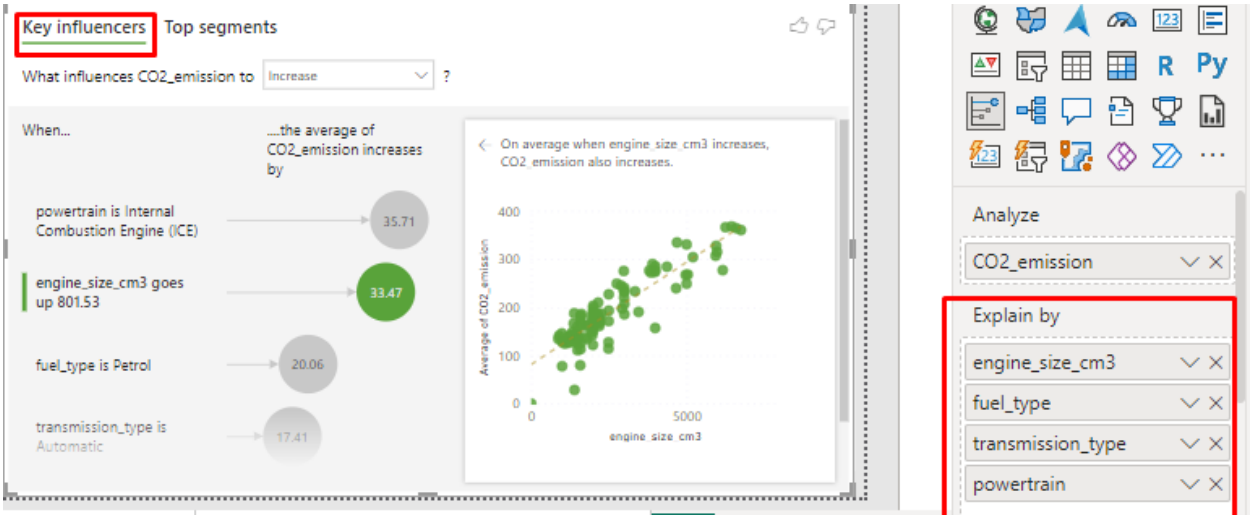
In this case study, I'll focus on a targeted investigation: using root cause analysis to identify the vehicle attributes that have the greatest impact on air pollution.

To achieve this goal, the following steps must be taken:

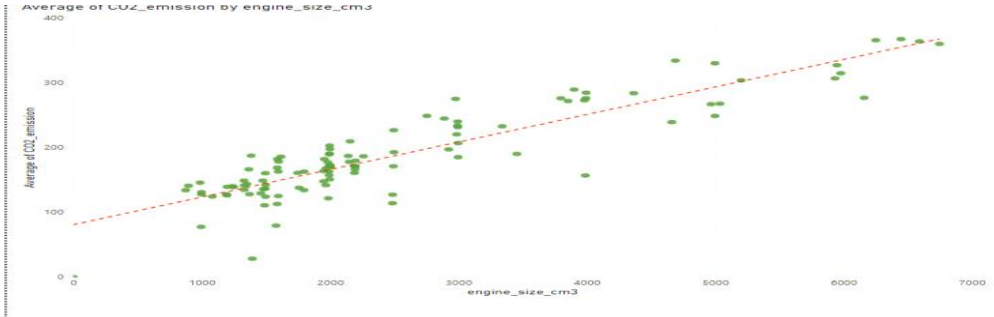
- Identify the key vehicle attributes that have the most impact on CO2 emissions in the environment.
- Identify the major contributors to pollution through a perceptive root cause analysis, leveraging the AI-driven visualizations of Power BI.
- Create relevant visualizations to enrich your report, including a decomposition tree, allowing users to freely explore and navigate the dataset's values.

Solutions:

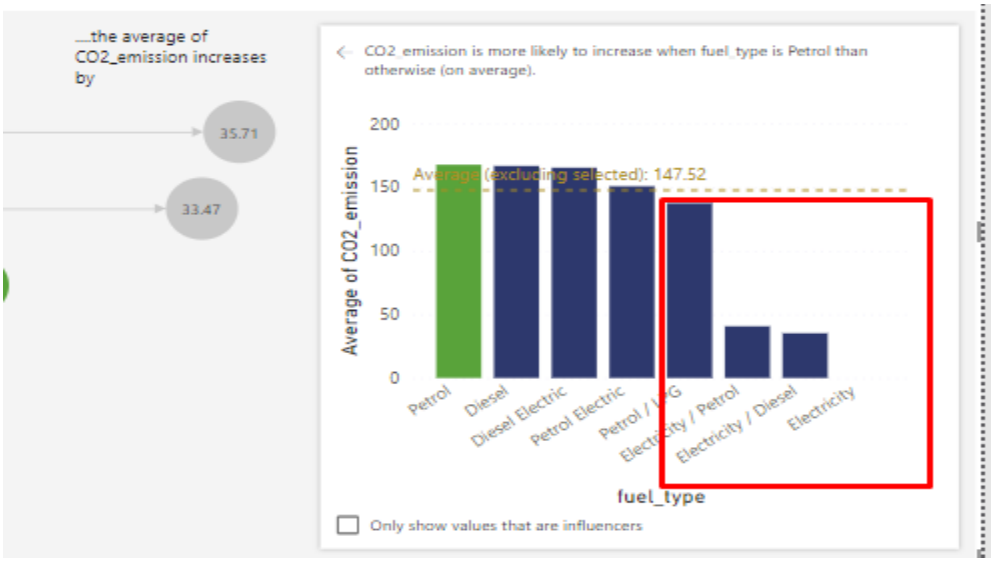
- Identify the key influencers of CO2 emissions: all the attributes influence CO2 except car_id simply because it's just index of the vehicle values and does not represent a numerical attribute, so is not affecting CO2 emissions in any way.



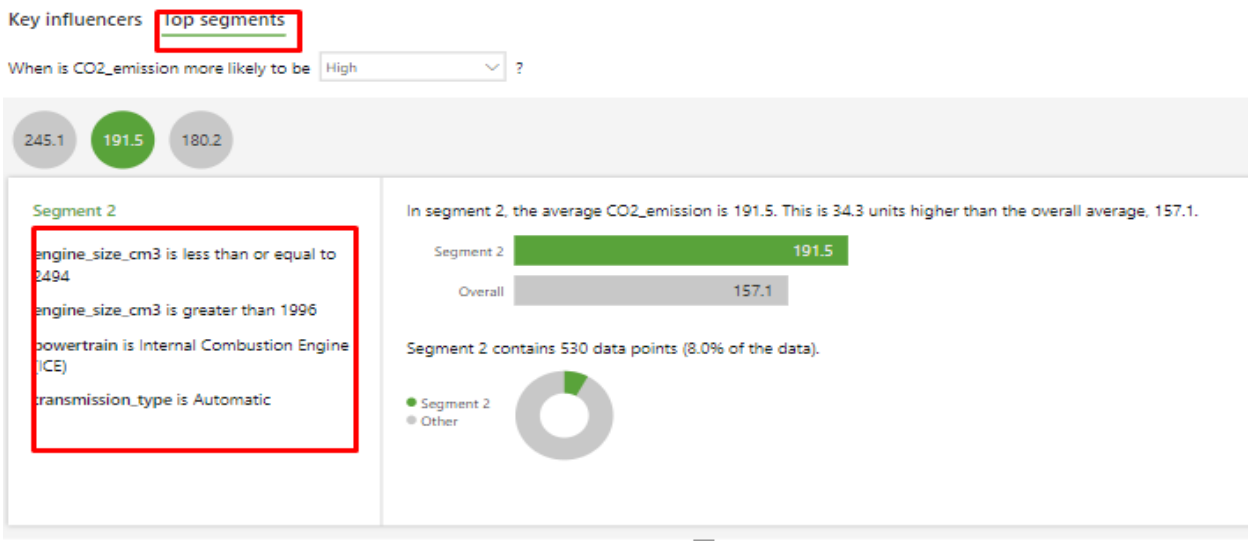
- This chart This chart shows that the larger the engine, the more (CO2) it emits.



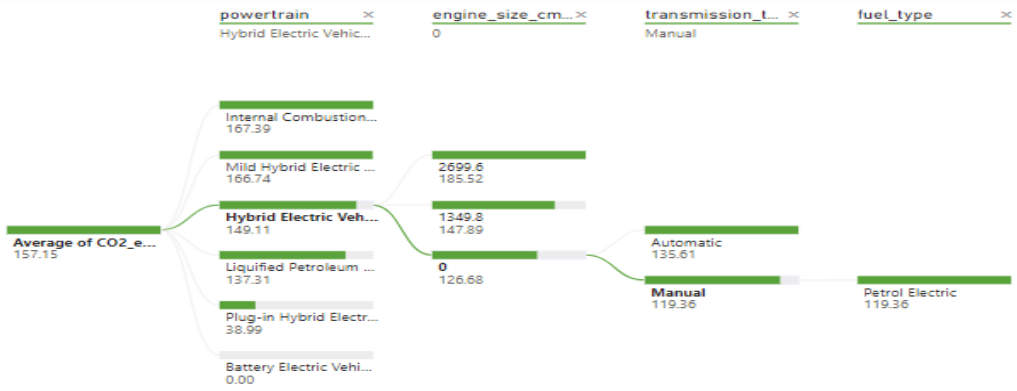
- the following fuel type attributes are scoring below the Average of CO2 emission line:



- Influencing factors:



- The lowest average CO2 emission on a vehicle with **Powertrain: Hybrid Electric Vehicle**



- To conclude all vehicle attributes are associated with air pollution from CO2.