Fleet Management: A push for a Carbon neutral future

Chris Eng, Philip Caggiano, Ryan Arnold, David Orpen, Justin Wain, Adeena Ahmed, Hafsah Shaik

Need

The stakeholders of this project are:

- Ewing and the Surrounding communities
- The College of New Jersey
  - Students
  - Faculty
  - Staff

The market of this project would be:

- Global sustainability projects

The goal is to become carbon neutral by 2040

- Try to determine the most cost-effective method of meeting this need

Approach

- We cannot jump into a solution for the carbon neutral problem without a system for testing the possibilities towards reaching this point. There needs to be a plan of action when considering the costs of performing this transition and what the best course of action could be.
- Our unique approach for addressing this need is the gathering of empirical data in order to provide accurate information. Our produced system allows you to calculate costs and emissions associated with a vehicle type and its emissions type. Additionally, you can calculate the annual costs and emissions associated with a fleet. Using these functionalities, informed decisions can be made about TCNJ's vehicle fleet now and in the future.

Benefits

- The benefits include a much more sustainable and efficient vehicle fleet system, which will also lead to a cleaner-air environment across the TCNJ campus and the general Ewing community

Costs

- The main cost of implementing our database is creating a new website to house the database and make the software associated with it available to the public

The End