

Project 2 – Electric Vehicles

Taking a deep dive into the carbon footprint of Americans through electric vehicle ownership. We have gathered the following data points:

- Make of vehicles
- Location of buyers
- Fuel types of vehicles

EXTRACT

The following original sources of data were used:

- Format: CSV
 - <https://catalog.data.gov/dataset/electric-vehicle-population-data>
 - <https://catalog.data.gov/dataset/electric-vehicle-population-size-history>
- Format: API
 - <https://www.back4app.com/database/back4app/car-make-model-dataset/get-started/python/rest-api/requests?objectClassSlug=all-cars-by-model-and-by-make-and-by-year>

CSV files and an API were used as it is more likely in the data industry to find data formatted in this manner and can be manipulated through Python.

TRANSFORM

We transformed our data using the Pandas library. The csv datasets were cleaned and trimmed to include pertinent data. The original columns contained blanks and were flattened to extract pertinent column information.

LOAD

Our final location for the data is through a PostgreSQL database. We created our electric vehicle database and created one table – with columns that exactly matched those in our initial data. Their primary keys were the 'city,' 'model year,' 'make,' 'model,' and 'electric vehicle type' columns, respectively. The tables could presumably be joined in the database on the 'make' and 'model' columns. This final representation of the data would prove useful for surveying popular motor vehicle trends in the electric vehicle market.