

Project Company

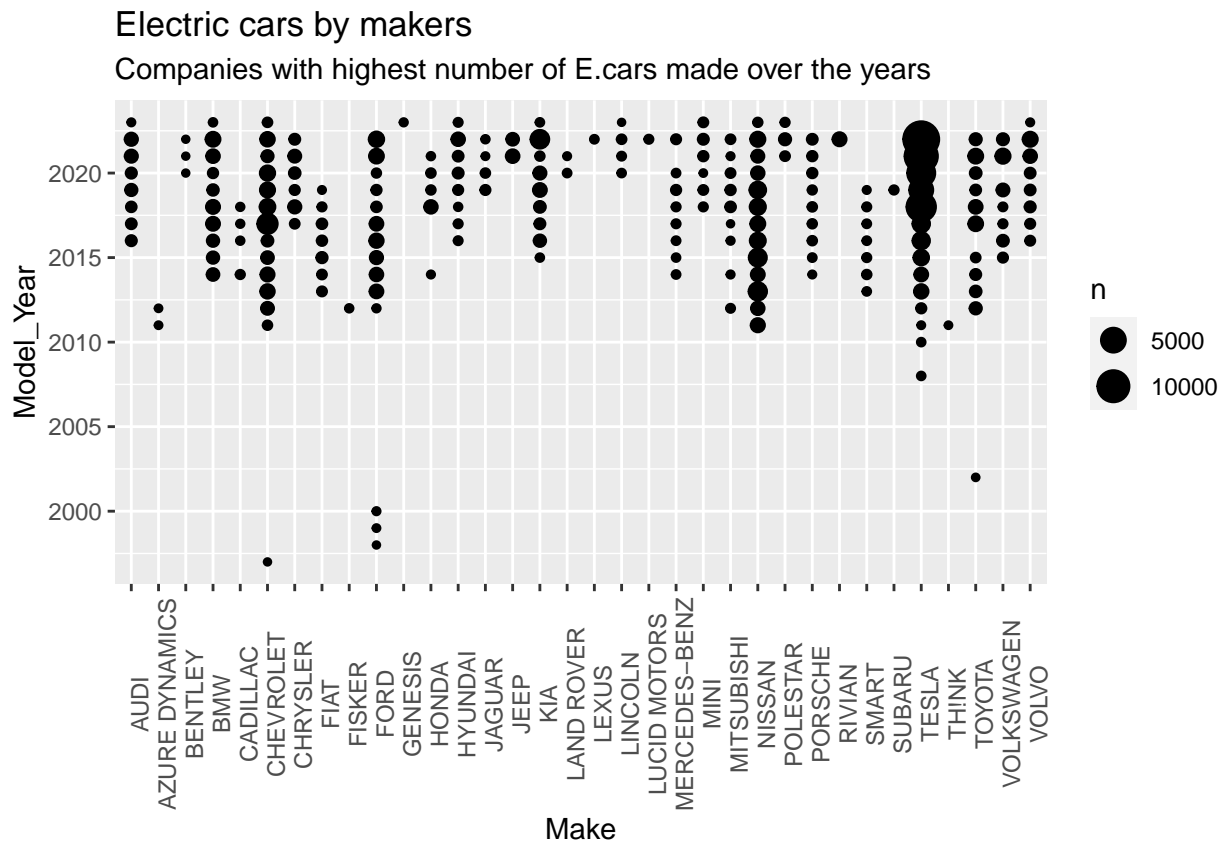
George.B

2022-12-19

Summary

project.

- Electric Vehicle(E.V) that has a total distance of over 220 and their Models.
- Company with the highest number of E.v since the invention of E.V.
- Number E.v that runs on Battery to those that are Plug_in Hybrid.
- This data and it's findings are all based in USA.



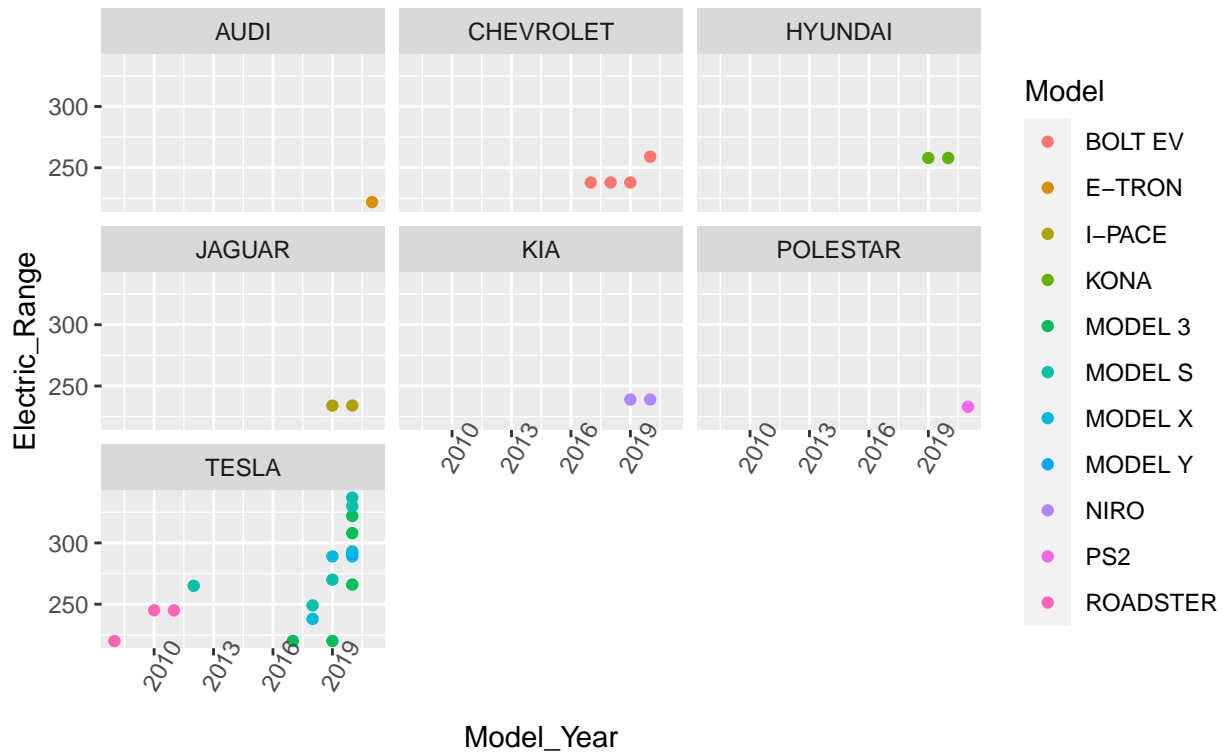
- The viz above shows the Companies with highest E.V made and the years this Vehicles were made.

- Tesla has the largest amount of E.V's made among others, starting from 2018 up to 2022.

```
## # A tibble: 30 x 6
## # Groups:   Electric_Range, Model_Year, Make, Model, Electric_Vehicle_Type [30]
##   Electric_Range Model_Year Make      Model      Electric_Vehicle_Type Clean~1
##         <dbl>      <dbl> <chr>    <chr>    <chr>                <chr>
## 1             220        2008 TESLA    ROADSTER Battery Electric Vehicl~ Clean ~
## 2             220        2017 TESLA    MODEL 3 Battery Electric Vehicl~ Clean ~
## 3             220        2019 TESLA    MODEL 3 Battery Electric Vehicl~ Clean ~
## 4             222        2021 AUDI      E-TRON  Battery Electric Vehicl~ Clean ~
## 5             233        2021 POLESTAR PS2      Battery Electric Vehicl~ Clean ~
## 6             234        2019 JAGUAR    I-PACE  Battery Electric Vehicl~ Clean ~
## 7             234        2020 JAGUAR    I-PACE  Battery Electric Vehicl~ Clean ~
## 8             238        2017 CHEVROLET BOLT EV Battery Electric Vehicl~ Clean ~
## 9             238        2018 CHEVROLET BOLT EV Battery Electric Vehicl~ Clean ~
## 10            238        2018 TESLA    MODEL X Battery Electric Vehicl~ Clean ~
## # ... with 20 more rows, and abbreviated variable name
## # 1: Clean_Alternative_Fuel_Vehicle_Eligibility
```

E.V,Makers and Miles Covered

Total Distance Covered by Electric Vehicles (E.V)

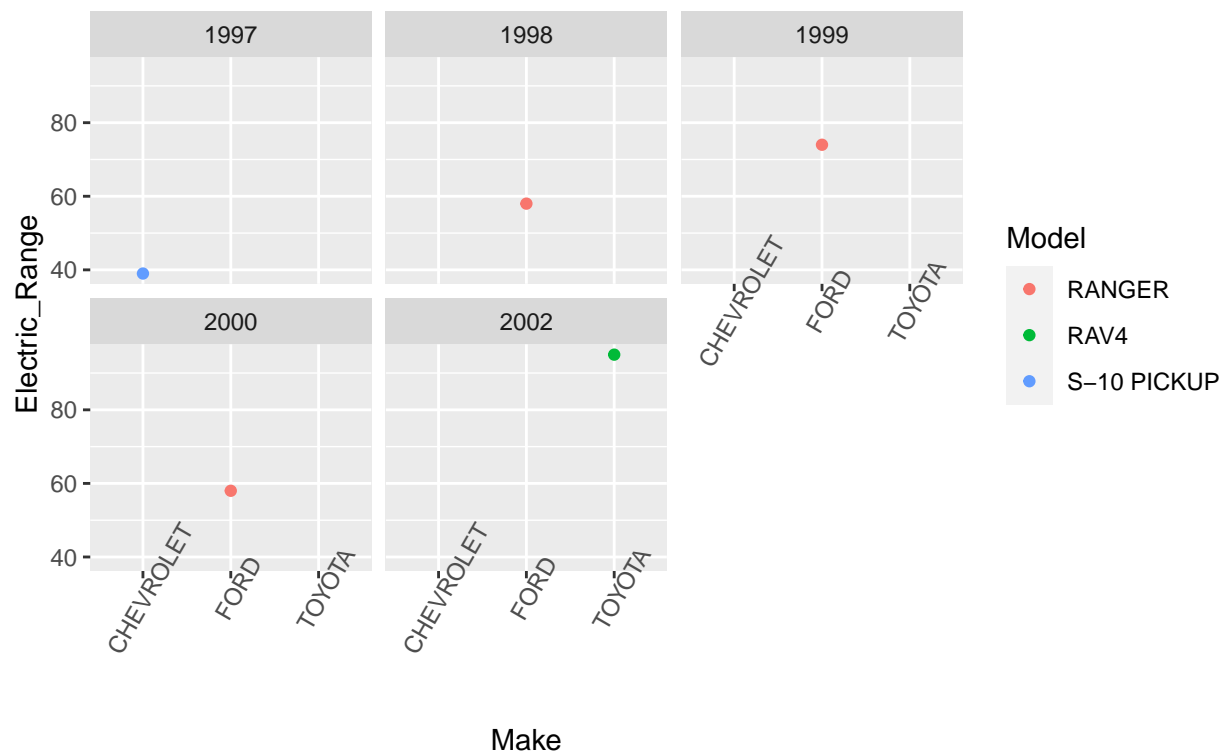


- the chart above shows E.V that covers a distance of above 220 miles.
- Tesla has the only E.V that covers a distance above 300 mile in total, with it's 2020 Model 3 covering a distance of 308 to 322 miles in total, while it 2020 Model S cover a distance above 330 to 337 miles in total.
- All this E.V are all powered by Battery Electric Vehicles(BEV) and not Plug-in Hybrid Electric Vehicle(PHEV).

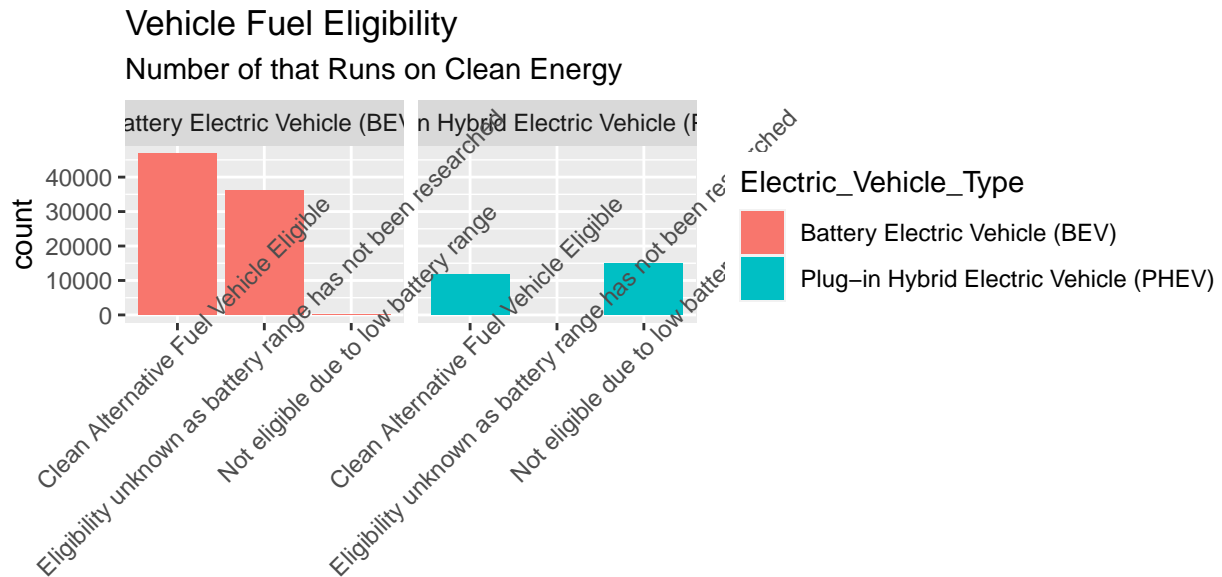
```
## # A tibble: 5 x 6
## # Groups:   Model_Year, Electric_Range, Make, Model, Electric_Vehicle_Type [5]
##   Model_Year Electric_Range Make      Model      Electric_Vehicle_Type Clean-1
##   <dbl>         <dbl> <chr>    <chr>    <chr>                <chr>
## 1     1997           39 CHEVROLET S-10 PICKUP Battery Electric Vehi~ Clean ~
## 2     1998           58 FORD      RANGER    Battery Electric Vehi~ Clean ~
## 3     1999           74 FORD      RANGER    Battery Electric Vehi~ Clean ~
## 4     2000           58 FORD      RANGER    Battery Electric Vehi~ Clean ~
## 5     2002           95 TOYOTA   RAV4      Battery Electric Vehi~ Clean ~
## # ... with abbreviated variable name
## #   1: Clean_Alternative_Fuel_Vehicle_Eligibility
```

First E.V Made And Makers

The First Electric Vehicles (E.V) Made by Car Companies

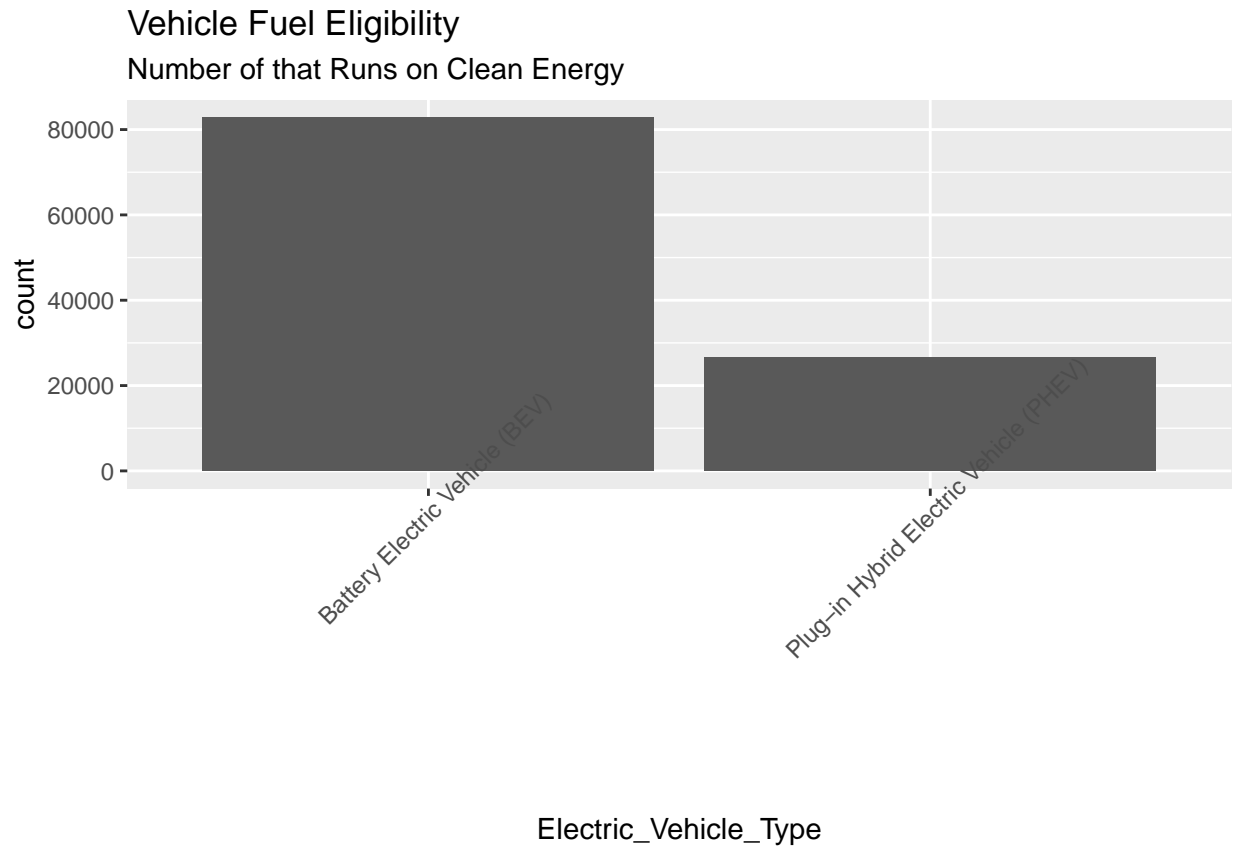


- The chart above show the earliest E.V to be invented by cars makers.
- Chevrolet were the first company to make E.V Modeled S-10 pickup and it covers a total distance of 37 miles in total, it was invented in the year 1997.
- Ford was the second company to have create an E.V in the 1998, 1999 and 2000 with and the E.V model was Ranger, and it covered a total miles of 54(1998), 74(1999) and 54(2000).
- Toyota latter created the RAV4 in 2002 has a total miles of 95.



Clean_Alternative_Fuel_Vehicle_Eligibility

- the chart above show the Eligibility and E.V that runs on clean alternative, not eligible due to low battery and those that have not yet been researched on.
- on the Battery Electric Vehicle(BEV) the number of E.vehicles fueled clean alternative are above 45,000, while those that have not yet been researched on is above 35,000 E.V in USA.
- while those E.V powered by Plug-in Hybrid Electric vehicle(PHEV), the number of E.V that runs on clean alternative are above 10,000 and those on not eligible due to low battery are close to 15,000 in USA.



- This chart show the total number of E.V powered by Battery Electric against those powered Plug_in Hybrid.
- Battery Electric Vehicles has the highest number of Vehicles manufactured by manufacturers with a number between 84,000 to 86,000 E.v in the USA
- While the Plug-in Hybrid has a number between 27,000 to 28,500 in the USA.