# FINAL REPORT DATA SCIENCE - CAPSTONE PROJECT

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#### BUY AN ELECTRIC CAR IN SPAIN?

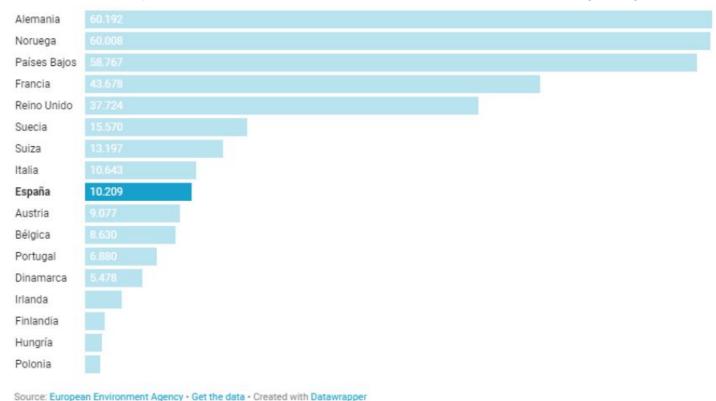
On climate change, there are many actions that scientists and the entire population are taking, trying to improve efforts seeking a change and everything that contributes to reduce the carbon footprint.



## **DATA DICTIONARY**

Columna	Tipo	Etiqueta	Descripción
Titular	text		
Situación	text		
Longitud	numeric		
Latitud	numeric		
Número de conectdores	text		
Tipo de conectores	text		
Precio	text		
Cables y adaptadores	text		
Reservar	text		
Horario	text		
Límite de tiempo	text		

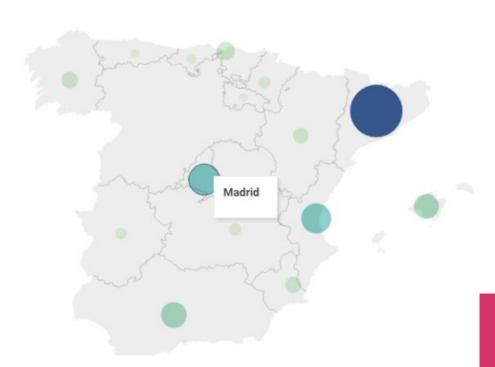
## Number of registered electric cars, country by country



## Public access charging points

Número de puntos de carga

12 2,961



### **NOTEBOOK RESULT**

```
In [99]: venues map = folium.Map(location=[latitude1, longitude1], zoom start=11) # generate map centred around the Conrad Hotel
          for lat, lng, label in zip(df4.lat, df4.lng, df4.categories):
               folium.CircleMarker(
                   [lat, lng],
                   radius=5,
                   color='blue',
                   popup=label,
                   fill = True.
                   fill color='green',
                   fill_opacity=0.6
               ).add to(venues map)
          venues_map
                                                                                                                         Cobeña
Out[99]:
                                                                                                                                                   Camarma
                                                                                                                                   Daganzo de
                                                                                                                                                    Esteruela
                                                               Monte A
                                                                                           Alcobendas
                                                                                                                                    Arriba.
                                                             de El Pardo Monte
                                                                                                                  Paracuellos
                                                                                                                   de Jarama
                        Villanueva
                                          as Rozas de
                        del Pardillo
                                           Madrid.
                                                                                                                                        Base Aérea
                                          Majadahonda
                                                                                                                            Torrejón de
               Villanueva
              de la Cañada
                                                       Pozuelo de
                                                       Alarcón
                                                                                                               Coslada
                                                                              Madrid
                              M-513
                                         Boadilla del
                 Brunete
                                                                                                                           -Mejorada del
                                                                                                                                              M-206
                                                                                                                            Velilla de San
```

#### **CONCLUSIONS**

The figures and the analysis carried out show that there has been a slow growth in the purchase of electric vehicles and the adoption of this new technology is surrounded by causes other than the technology itself. It is evident that the purchase costs between electric vehicles and combustion vehicles are increasingly closer and that greater impetus is required from the Spanish government for the implementation of more charging points and service stations available for this type of vehicles.

Currently the decision to buy an electric vehicle is correct for the cities of Madrid and Catalonia according to the analysis carried out, which coincides with the figures obtained in the study loaded in the notebook.

#### REFERENCES

https://hipertextual.com/2021/05/coches-electricos-espana-plan-moves-iii

https://www.autocasion.com/actualidad/noticias/cuantos-coches-hay-espana-mas-viejos

## Thanks