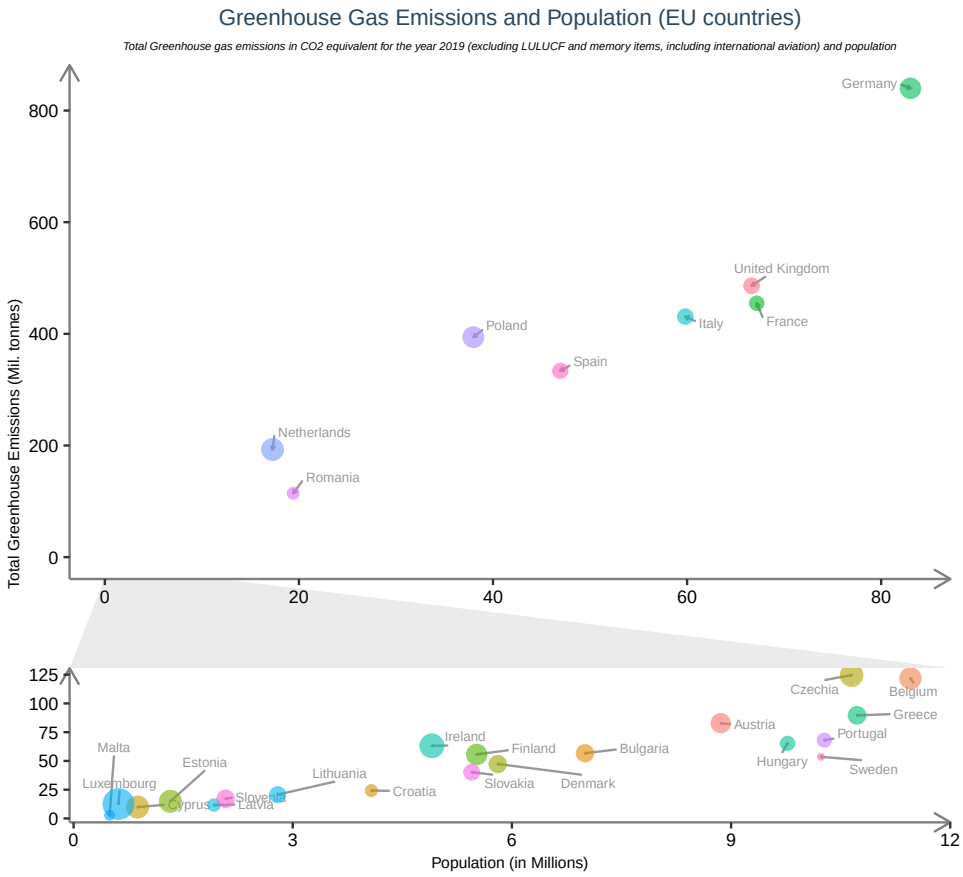
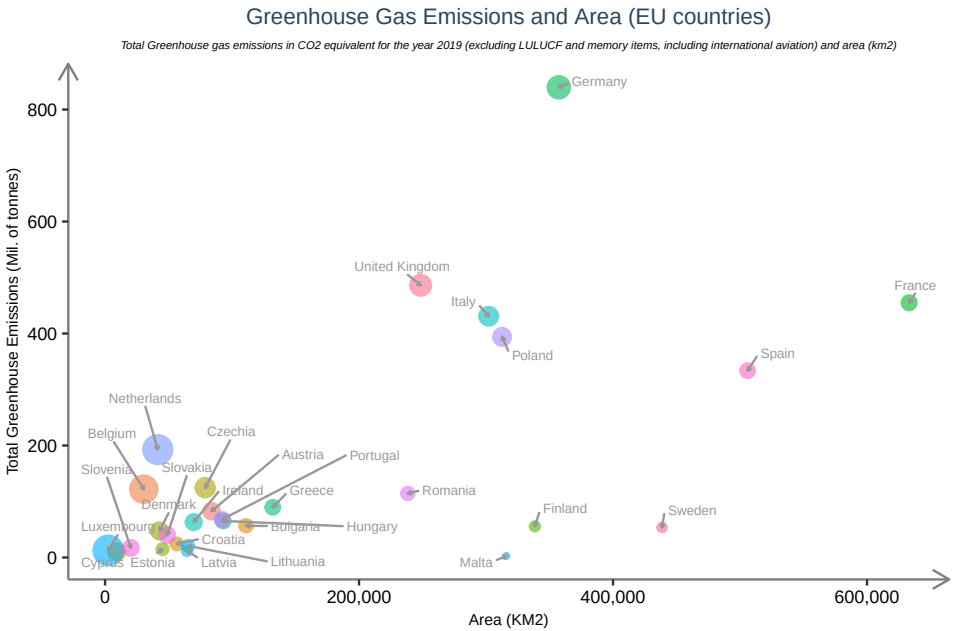
Greenhouse Gas Emissions in the European Union (2019)

A. Name of the applicant: Andrea Colombo

B-C. Charts





The size of the points depends on the relative amount of greenhouse gas emissions, compared to population:

$$Size\ Points = \frac{Total\ greenhouse\ gas\ emissions}{Population}$$

The same is valid for the second chart, where Population is replaced with the Area

D. Brief analysis

An interactive version of these analysis, including further ones, has been developed in a R Shiny app, available at https://andreacolombo.shinyapps.io/gasemissionapp/

1. Direct relationship between tonnes of greenhouse gas emissions and number of people living in a country: the higher is the population the more emissions that country will emit. Looking at the relative terms of this relationship (the size of the points) we can see that some smaller countries are the worst placed, as Luxembourg, which is the worst ranked country with around 20 tonnes of greenhouse gas emissions per millions of people, while the EU mean is 8.28 tonnes.

2. Unclear relationship for chart 2, although an underlying direct relationship may be observed. In relative terms, Finland, Sweden and Malta are the EU countries that emit the less emissions compared to the size of their territories. The worst placed EU countries are the ones with an high population density and host of many industries.

3. A comprehensive analysis of the charts and the underlying data shows that Scandinavian countries are the less polluting EU countries in terms of CO2, with Finland and Sweden performing well in both the charts showed.