**GENERAL QUESTION**

**WILL IT BE POSSIBLE TO HAVE A FUTURE POWERED ONLY (OR PRINCIPALLY) BY RENEWABLE ENERGIES IN 10 YEARS?**

**Principal aim is FORECASTING** (observations are geographically correlated, for this reason we imagine that a non parametric approach could be used**)**

**SUBQUESTIONS:**

- How are the renewable energies levels of consumptions growing? And the unrenewables ones?

- How can we compare the level of production of renewable energy with the level of consumption, for each different country?

- Which country will have the economic possibility to completely switch to renewable energy?

- How will the population growth affect global energy request?

**DATASETS (We decided to consider the datasets year by year, but we could also decide to use and analyze monthly progressions):**

From: <https://ec.europa.eu/eurostat/web/energy/data/database>

* **Complete** energy balances (final energy consumption) <https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_bal_c&lang=en>
* Supply, transformation and **consumption of oil and petroleum products** (gross inland deliveries) <https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_cb_oil&lang=en>
* Supply, transformation and **consumption of** **solid fossil fuels** (inland consumption) <https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_cb_sff&lang=en>
* Supply, transformation and **consumption of renewables and wastes** (inland consumption) <https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_cb_rw&lang=en>
* **Energy productivity** (euro per kilogram of oil equivalent) <https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_ind_ep&lang=en>
* Share of energy from renewable sources (**renewable energy sources percentage over total energy available**) <https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_ind_ren&lang=en>
* **Imports of solid fossil fuels** by partner country <https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_ti_sff&lang=en>
* **Imports of oil and petroleum products** by partner country

<https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_ti_oil&lang=en>

(we decide to neglect exports because we’re interested in analyzing what enters in the country to analyze its consumptions and its renewable transition)

From: <https://ec.europa.eu/eurostat/web/population-demography/demography-population-stock-balance>

* Population on 1 January by age and sex (provisional: do we need to consider population growth to estimate energy demand? Or could the level of consumption be sufficient?)

<https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_pjan&lang=en>