All the counselling that is happening to us

# Counselling 02-22-2023

* Writing a report for pre-project? When is the deadline?

We find agreement. Ask Marta.

* Calculation of wind speed at 100 m, what method to use?

Logarithmic is better for 10 m wind speed. Will interpolate using CMIP and access different height data and interpolate instead of extrapolating.

* 5MW turbine?

We approximate Gaussian the power curve instead of using the exact (not continuous)

For now, pick turbine, make code work, then find out how the impact is on final result.

* Irradiance (PV) is usually modeled 21 % better than reality, should it be reduced in our project?

NO! It applies only to that specific research paper.

* Scripts from past MSc projects

Waleed hasn’t uploaded them, yet :D

* Table 2 - Capital cost of technologies

Use GitHub repository for costs that PyPSA community has.

* How is the exam conducted?

Prepare report and oral discussion (20-30 pages).

Notes from Ebbe:

* Atlite: Use version mentioned in Marta’s guide (same as Waleed used)
* Download from ESGF
* ERA5 vs UERRA

**To do:**

* Find requirements in course catalogue.

# Counselling 03-01-2023

Update:

* Download Atlite – Xarray is being annoying
* Talking about UERRA vs ERA5

Questions:

* .nc and CMIP - we didn’t have all values (rsus, rdsd, tas, sfcwind and mrro
* UERRA – what variables do we need to determine irradiance / PV production?
  + Maybe not use UERRA for PV but only for wind if it is more suitable there

General advice:

* Make a script that compares the values from e.g. ERA5, ENTSO-E, European wind atlas etc. to historical data.
* Then later reuse script with CMIP6 data.

<https://transparency.entsoe.eu/generation/r2/actualGenerationPerProductionType/show?name=&defaultValue=true&viewType=TABLE&areaType=BZN&atch=false&datepicker-day-offset-select-dv-date-from_input=D&dateTime.dateTime=01.03.2023+00:00|CET|DAYTIMERANGE&dateTime.endDateTime=01.03.2023+00:00|CET|DAYTIMERANGE&area.values=CTY|10Y1001A1001A65H!BZN|10YDK-1--------W&productionType.values=B01&productionType.values=B02&productionType.values=B03&productionType.values=B04&productionType.values=B05&productionType.values=B06&productionType.values=B07&productionType.values=B08&productionType.values=B09&productionType.values=B10&productionType.values=B11&productionType.values=B12&productionType.values=B13&productionType.values=B14&productionType.values=B20&productionType.values=B15&productionType.values=B16&productionType.values=B17&productionType.values=B18&productionType.values=B19&dateTime.timezone=CET_CEST&dateTime.timezone_input=CET+(UTC+1)+/+CEST+(UTC+2)>

<https://map.neweuropeanwindatlas.eu/>

# Councelling 03/15

* Solar layout – we do not have access to information about where PV installations are located for every country.
* PVlib
* Waleed gets CF directly from ERA-5??? Does it make sense to calculate CF ourselves when many others have done it (e.g. PVlib)?
* What did Ebbe mean with the comparison thing from 03-01-2023???