

# Global electricity statistics 1980 – 2021

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## Motivation:

Honestly, there was no bigger motivation behind project, I've tried searching Kaggle for something and this piqued my interest.

**Data source:** <https://www.kaggle.com/datasets/akhiljethwa/global-electricity-statistics/data>

Data preprocessing: Data was in the format "country", "feature", "region", "all the years" so I've changed it to two formats based on the use case – "country", "feature", "region", "year", "value" and "country", "region", "year", "features – value"

I also had to change dtypes of data values to something reasonable – object to category/integer.

## Design choices:

I decided to go with a really minimalist design because I was having huge problems with the styling of the website, and in the end, I decided that, while it would be prettier and more pleasing to the eye, just getting everything I needed in there was a bigger priority than the visualisation layout looking pretty.

And all the design choices were done with this rule in mind, thus the design is minimalistic and little thought was given to the layout – looked good to me, so that's the way it is.

## Interesting observations in the visualisation:

Some data don't seem to add up – "imports + generated power - consumption - loses – exports" don't sum to 0 as they should. Outside of that it's interesting to see how wildly the developed parts of the world differ from the less developed ones.

## Used technologies:

I've used Dash Plotly for the visualisation as I've used it before and as it is relatively low effort framework to learn to make something quick and interactive. The resolution used for the visualisation was QHD (2560x1440), browser was Firefox.

To run it simply run all the cells in the jupyter notebook and access the address:  
<http://localhost:8999>

## Lessons learned:

I really dislike styling things, CSS and HTML just plainly don't work predictably and that design is really hard. Dash is pleasant to work with though, the visualisations are relatively easy to make and do show a lot. However, I never want to work with data including countries as there is a lot of unpleasant preprocessing involved with this.

However, Dash likes to troll – it likes to trigger randomly all the callbacks, has a lot of problems with state and actually making anything bigger in it requires global state which took me a long time to realize.

Other lessons are more personal – working through burnout is hard, because motivation to do things is just gone (this might partially explain my unwillingness to properly style the project as even working on it requires severe mental strength that I'm lacking as even in this version it took several days to get to a somewhat decent state).

One thing is to also get a dataset that is more to my liking – I kinda lost interest in this topic and finding motivation to finish it was hard.

## Screenshots:

