

Topic Description Research Internship

Cooper and chemical industry sites (de/en)

Background

Chemical industry as well as cooper production industry belong to energy-intensive industry sectors and therefore significantly shape the overall industrial energy consumption. Their geographical positions determine the load distribution in the electricity grid and infrastructural requirements for the feedstock supply. However, the information on locations and capacities of chemical industries as well as of cooper mines and production sites are not systematically available.

Goals:

- Where are the chemical industry sites world-wide?
- Where are the where are the cooper mine or production sites world-wide?
- How to present them in program QGIS (free available)?
- Optionally: which capacities per product do the sites have?

Requirements

- Interest in energy demand modelling
- Optional: experience with GIS data







Figure Source:

- [1] https://gishub-h-gac.hub.arcgis.com/
- [2] https://blog.technavio.org/blog/evolving-landscape-digitalization-chemicals-industry
- [3] https://abcdust.net/20-biggest-copper-mines-in-the-world-and-dust-control-challenges/

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