# open-mastr: A Python package to download and clean the energy database Marktstammdatenregister (MaStR)

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Summary

- What is Marktstammdatenregister
- Two ways to get data
- Download from both sources to the same database
- Basic data cleansing
- Processing to combined .csv files

The Marktstammdatenregister (MaStR) is a German register provided by the German Federal Network Agency (Bundesnetzagentur / BNetzA) (Bundesnetzagentur, 2019). It was first published in 2019 and includes detailed information about more than 8.2 million electricity and gas producers, electricity and gas consumers, storages, grids, and actors from the energy market. The python package open-mastr provides an interface for accessing and cleaning the dataset. It can be used to build and update a local database of the whole registry.

Statement of need

- No other software that handles Marktstammdatenregister, can save several days for individual user
- Data comes in hard to handle format (substituted words with numbers,)
- Two ways of receiving data combined in one package
- Merged information about technologies in .csv files
- State of the field:

Package description

It contains methods to download and parse the data from the two different sources: the bulk download and the SOAP web service (API). The cleaned data is then written to a SQL database.

Research and Future Development

- Used in previous paper
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For a quick reference, the following citation commands can be used: - @author:2001 -> "Author et al. (2001)" - [@author:2001] -> "(Author et al., 2001)" - [@author1:2001; @author2:2001] -> "(Author1 et al., 2001; Author2 et al., 2002)"

Figures

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Acknowledgements

References

Bundesnetzagentur. (2019). *Marktstammdatenregister*. https://www.marktstammdatenregister.de/MaStR