

The OpenEnergy Platform (OEP)

A web-platform to improve transparency and reproducibility of energy system analyses

Objectives and Technical Properties

Main Objectives

The developed modules of the OEP help to increase transparency, reproducibility and quality in energy system research. Each module focusses on a specific aspect of the process from raw data to result data. The OEP aims at giving support to modelers to provide a proper documentation of the code and assumptions used for a publication. It also provides the possibility to directly connect a model to the database to import and export data using an API. The implemented modules and tools as well as new planned features are discussed, developed and revised collaboratively at the openmod workshops, at project meetings and different online discussion platforms to achieve common solutions to improve transparency.

Technical Properties

The platform software is written in *Python* and *Django* and the source code is published under the open software license AGPL-3.0.

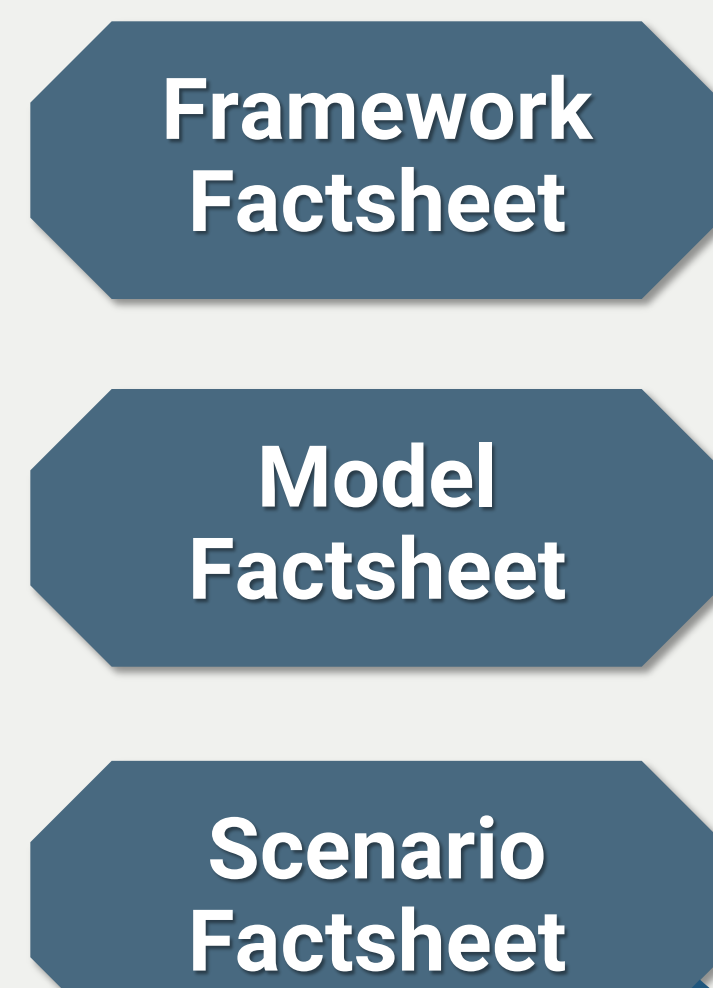
Related Projects



Modules and functions of the OEP

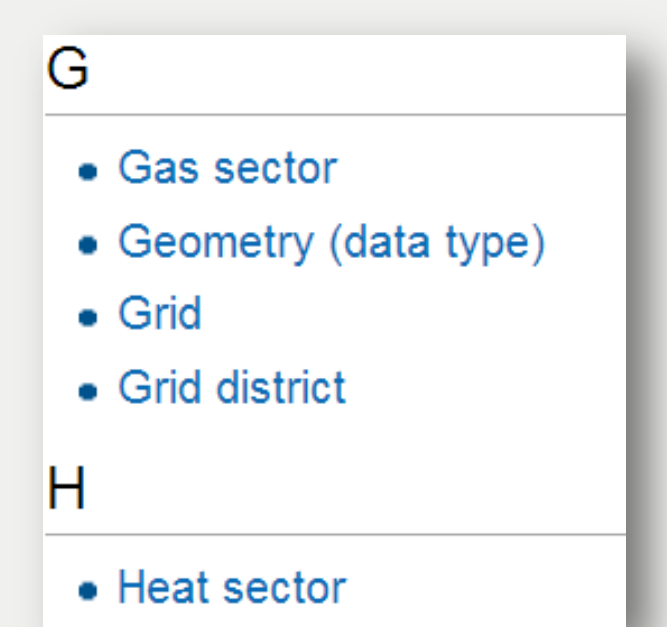
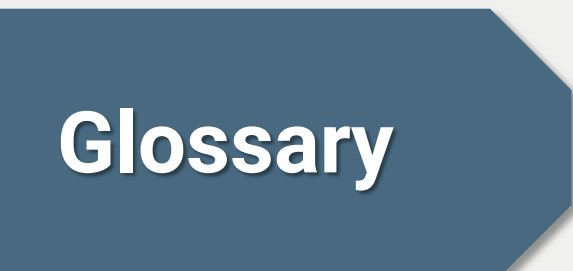
You can describe, find, and compare energy system models, frameworks as well as concrete studies and scenarios with the various **Fact Sheets**. You can link your code to the model description and give specific information about methods and assumptions.

The Factsheets are a standardized collection and presentation of information about modelling frameworks, models and scenarios used in climate and energy system modelling. It is presented in a format which emphasizes key points concisely. The use of interactive fields and pre-defined responses is designed to filter for existing entries.

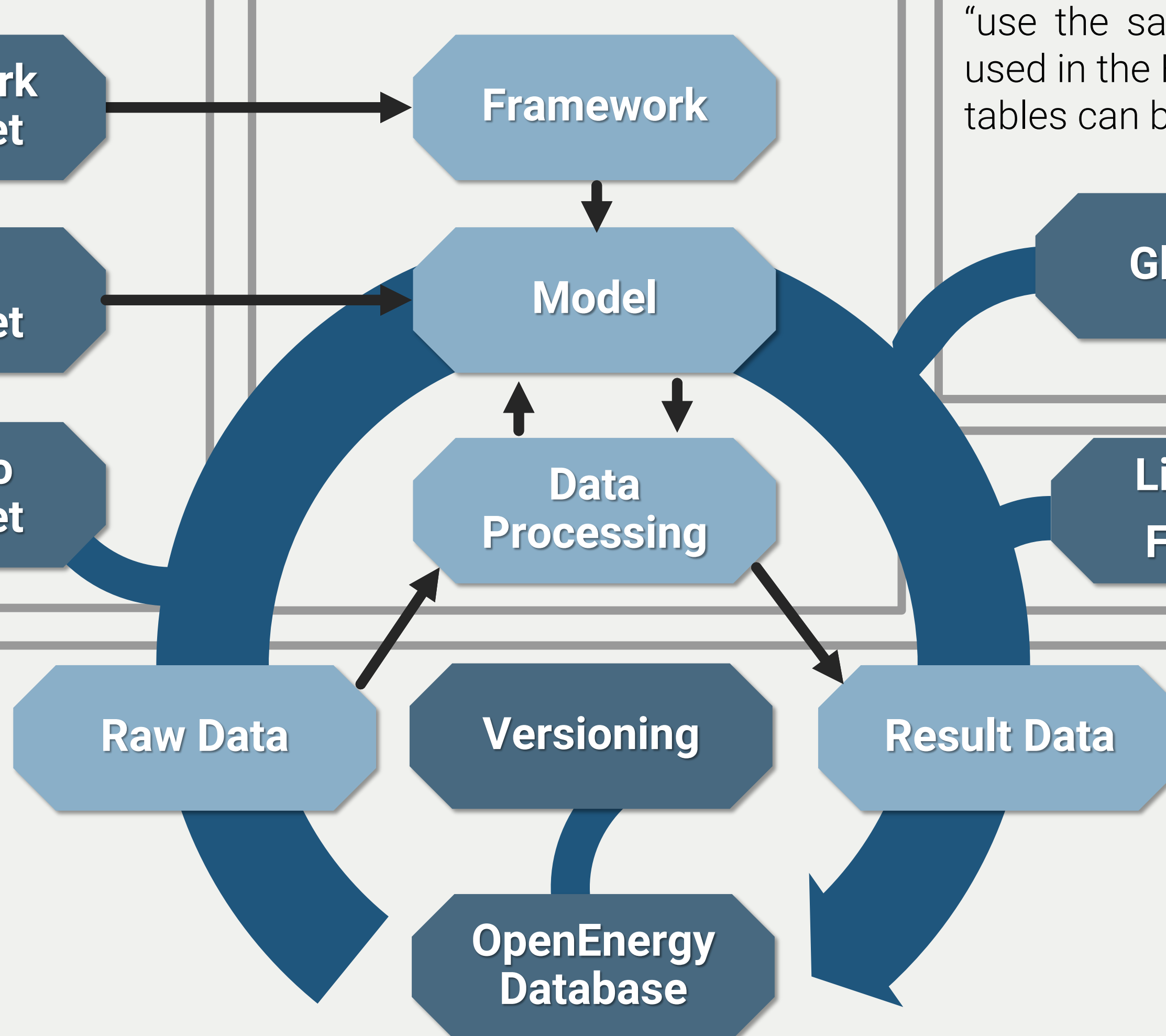


You can link your **code** to another platform or repository.

You can harmonize your wording with other researchers using the **Glossary**. Access to data and code doesn't mean that the results and conclusions of a study are understandable. Within discussions it is a crucial point to "use the same language". In the Glossary the expressions used in the Fact Sheets and in the data tables can be explained and discussed.

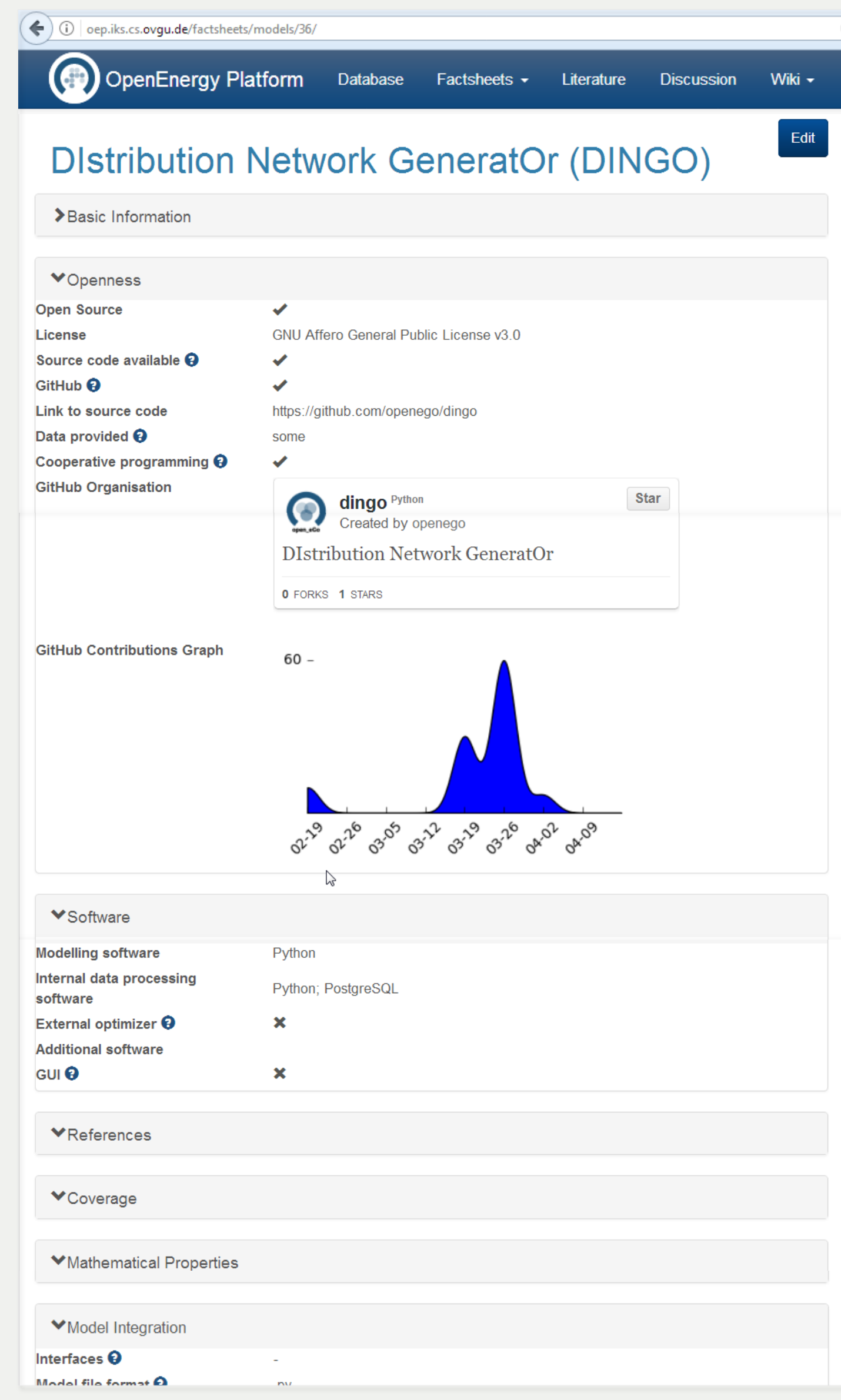


You can refer to literature (e.g. sources, papers and studies) using the literature-function.



You can publish, receive and document data of your modelling process through to the **OpenEnergy Database (oedb)**. This includes raw data, processed data and results. For all data in the database a minimum of metadata is required in order to improve the transparency.

result_id	view_id	branch_id	f_bus	t_bus	br_r	br_x	br_b	rate_a	rate_b	rate_c
1	1	24383	26709	24114	0.00054...	0.00291...	0.00000...	280		
1	2	24384	24023	24175	0.00058...	0.00312...	0.00000...	280		
1	3	24385	27049	4153	0.00061...	0.00329...	0.00000...	280		
1	4	24386	25358	28167	0.00064...	0.0034098	0.00000...	280		
1	5	24387	1080	25358	0.00043...	0.00232...	0.00000...	280		
1	6	24388	24517	24096	0.00064...	0.00342...	0.00000...	280		
1	7	24389	27365	23704	0.00065...	0.00351...	0.00000...	280		
1	8	24390	25825	26722	0.00070...	0.00376...	0.00000...	280		



Popular tags:

- Solar, Oil, oemof, open_FRED, open_eGo, ego v0.2
- Germany, Global, Africa, Europe, North America, Asia
- NEW, South America, Oceania, Powerplant, Electricity
- Heat, Gas, Renewable, Water, Biomass, Transport
- Industry, Commercial, Households, Conventional, Nuclear
- Coal, Wind, Biogas, 2017, 2016, 2015, 2014, France
- demand, weather, supply, social, borders, grid
- environmental, economic, ODbL

Manage Tags

You can assign predefined or self-created **tags** to each dataset. They can be used as filters and can be included in searches and queries. In addition it increases visibility of similarities and differences. The categories and colours of the tags can be discussed and adapted.

Access & Participate

Visit and use the OEP

<http://oep.iks.cs.ovgu.de/>

Meet the developers

You can meet us at the openmod workshops.

<https://wiki.openmod-initiative.org/wiki/Events>

Get involved and contribute

You are invited to join our discussion if you have suggestions or you want to get involved in the development.

<https://github.com/openego/oeplatform>

You can access all modules on the internet without restrictions. In order to participate and contribute you must create a user profile. You can give information about your person and your qualifications and get in contact with other users and researchers. You are welcome!

Acknowledgment

Contact & Copyright

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