

Scenario Data on the OpenEnergyPlatform SzenarienDB on the OEP

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

Objectives and Technical Properties

OpenEnergyPlatform (OEP)

The OEP increases transparency, reproducibility and aims to ensure quality in energy system research. The OEP enables modelers to provide proper documentation of data, code and assumptions. An API allows connecting a model in order to import and export data.

SzenarienDB

This research project develops and improves features to represent energy system scenarios in the OEP. We are currently creating an OpenEnergyOntology (OEO), improving scenario fact sheets and developing a structure for scenario data.

Technical Properties

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

Related Project

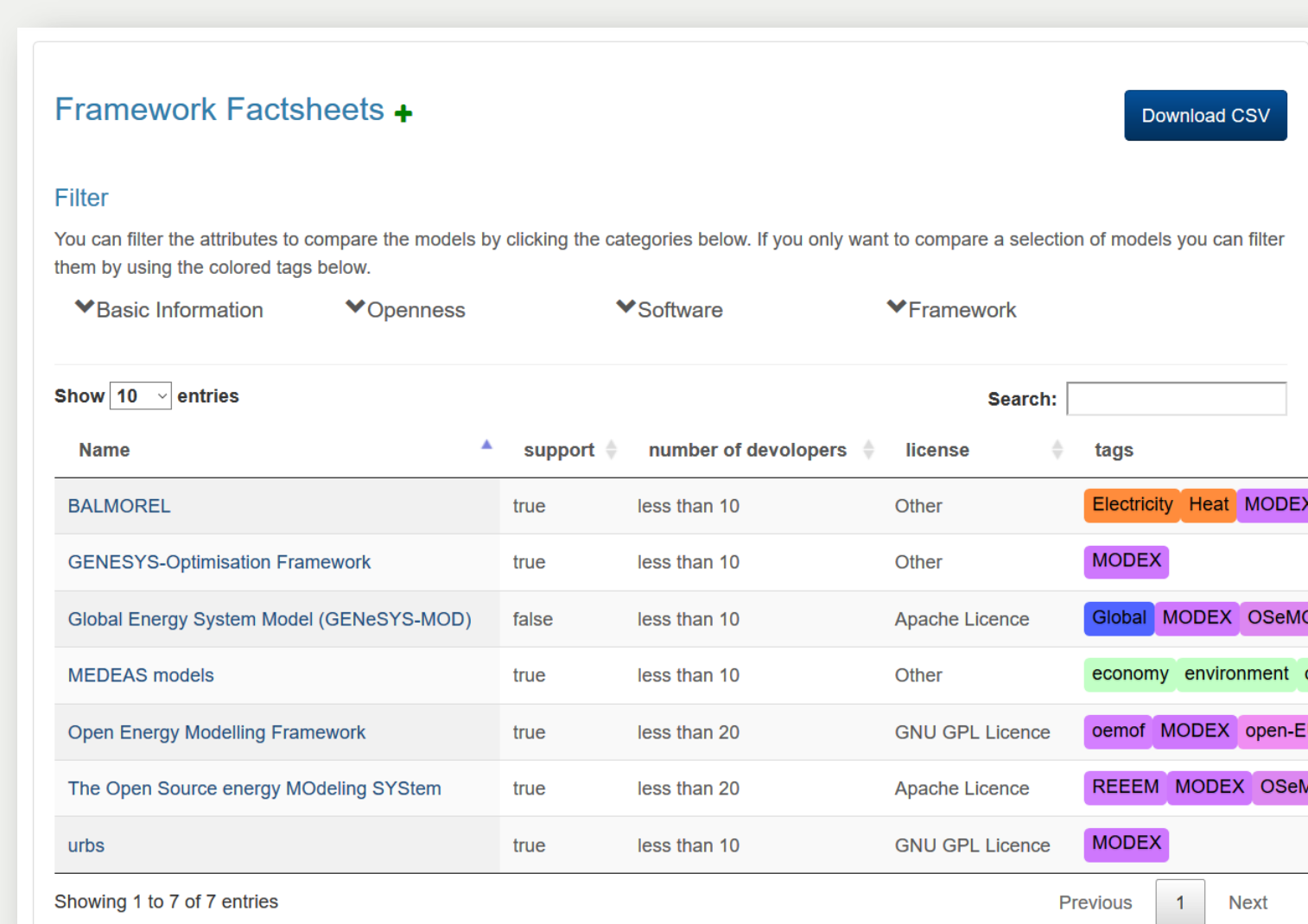


SzenarienDB

Modules and Functions of the OEP

Standardized factsheets help you to describe, find, and compare energy system frameworks, models and scenarios.

The **Scenario Factsheet** provides a link between the content of a study, the model and the data involved (input and output). By linking via the ontology, data from different studies with different structures and terms can be made comparable.

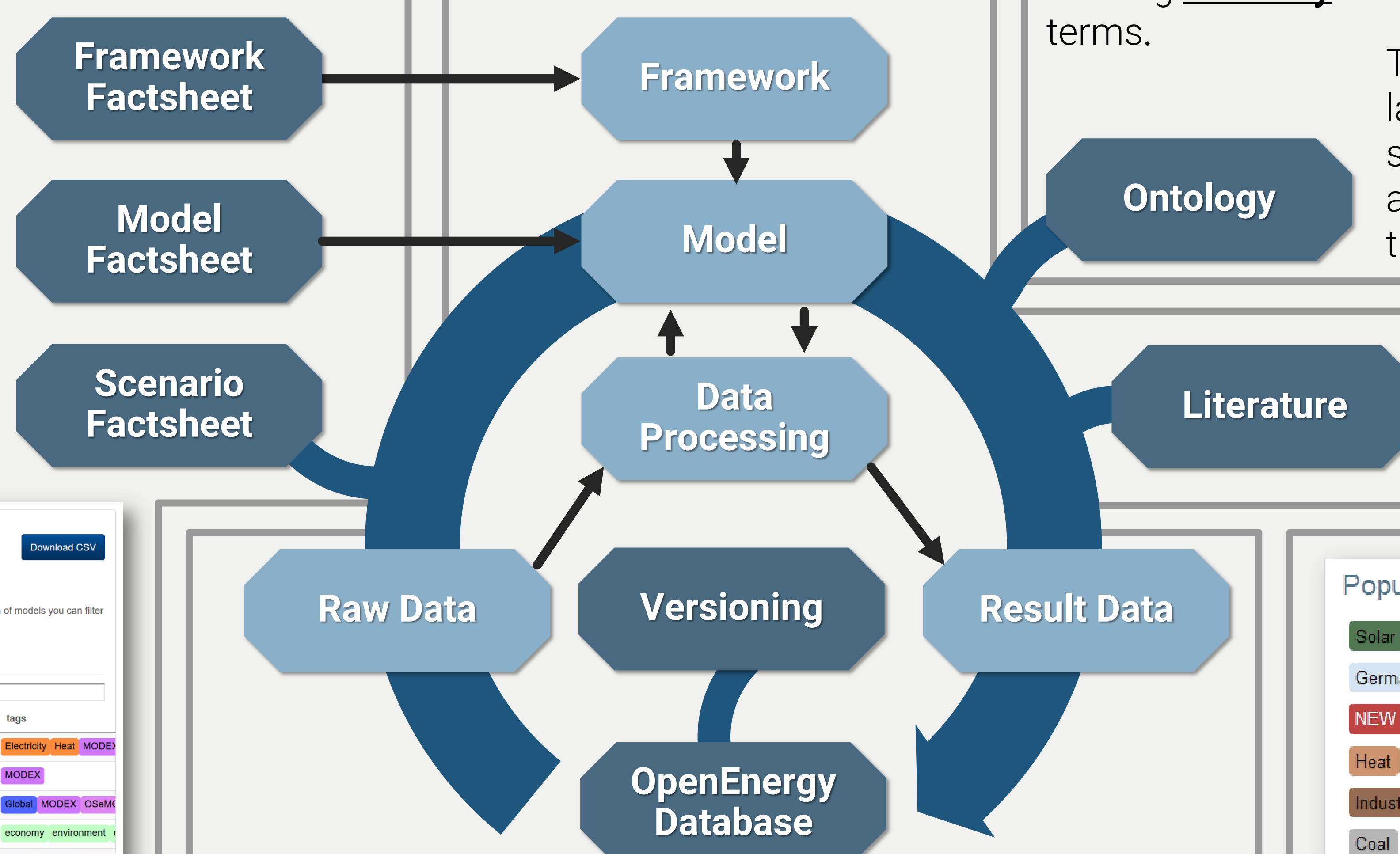


Access the platform on openenergyplatform.org

The OEP also provides a REST-full HTTP-interface: The **OEP-API**.

Tutorials and templates make it easier to get started. Experienced python users can use the specially developed **SQLAlchemy dialect** (*oedialect*).

Link your **Code** to another platform or repository.



In the **Ontology** we describe relations between commonly used terms in energy system modelling. The ontology thus provides an extension to the existing **Glossary** which defines commonly used terms.

This helps with “using the same language” and improves understanding when different terms are applied but mean the same thing (or the other way around).

The OEP collects **Literature** references to articles, sources, and studies.

Publish and document data in the **OpenEnergyDatabase**. This includes raw data, processed data, and modeling results.

What the OEP asks from you in return: provide metadata documentation and an open license using FAIR principles.

result_id	view_id	branch_id	f_bus	t_bus	br_r	br_x	br_b	rate_a	rate_b	rate_c
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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		
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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		



Assign **Tags** to datasets or factsheets. They serve as filters and can be included in searches and queries. They increase visibility of similarities and differences.

We need an active community to agree on the meaning and use of tags: You are welcome to participate!

Access & Participate

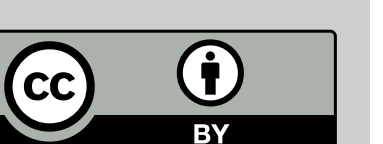


Get involved and contribute

You can access all modules online without restrictions. All you need is a user profile on the OEP and/or GitHub. We would like welcome you at the OEP!

<https://github.com/OpenEnergyPlatform>

Contact & Copyright



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Acknowledgment

