Scenario Data on the OpenEnergyPlatform
SzenarienDB on the OEP

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.

Modules and Functions of the OEP

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

The Scenario Fact sheet 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.

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.

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

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).

Contact & Copyright

Authors
K. Reder, C. Pape, M. Stappel
H. Förster, L. Ernele, C. Winger
L. Hülk, C. Hofmann, E. Koetter
M. Glauser, T. Mossakowski

Contact
Ludwig.Huelk@rl-institut.de

Fraunhofer Energiewirtschaft und
Energiesystemtechnik (IEE)

Öko-Institut
Reiner Lemoine Institut
Otto von Guericke Universität Magdeburg

Please cite as
"Scenario Data on the OpenEnergyPlatform (OEP)"
@ Reiner Lemoine Institut @ Fraunhofer IEE
@ Öko-Institut e.V. @ Otto von Guericke Universität Magdeburg | CC BY 4.0