Open Energy Modelling Initiative
3rd Online Lightning Talk Mini-workshop

Open Energy Ontology

An Ontology for the Domain of Energy System Modelling

2020-05-13
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What is an Ontology?

- An ontology is a way of showing the properties of a subject area and how they are related, by defining a set of concepts and categories that represent the subject.
- An ontology encompasses a formal naming and definition of the categories, properties and relations between the concepts, data and entities.
- The OEO aims to be the ontology in the domain of energy system modelling.
What is an Ontology good for

- Standardising Terminology in a Field
- Data Annotation and Integration
- Templates for Data Capture
- Visualisation
- Text and Data mining
- Semantic Similarity Analysis
- Data analysis
OEO Characteristics

- Domain Ontology for and by Energy Research Modellers
- Manchester OWL Syntax
- Uses BFO¹ as Top Level Ontology
- Developers use protégé² as main development tool
- Openly Licensed (CC0) for Open Science
- Public Development on GitHub³
- Early stages, first release scheduled 1st July

¹ https://basic-formal-ontology.org/
² https://protege.stanford.edu/
³ https://github.com/OpenEnergyPlatform/ontology
Open Energy Family

- Tutorials
- Factsheets
- Open Energy Platform
- Web Interface
- API & Python ORM
- Open Process Integration
- Open Energy Database
- OEO
- OMI
- metadata
- OEDB
- OPI

Open Energy Family
Who’s involved

• **Institutions:**
  – OvGU, Öko-Institut, Fraunhofer, RLI, FZJ, DLR, Leipzig University

• **Projects:**
  – SzenarienDB, LOD-GEOSS

• **Steering Committee**\(^4\)

• **You** (hopefully soon)

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\(^4\) [https://openenergy-platform.org/ontology/ontology/oeo-steering-committee](https://openenergy-platform.org/ontology/ontology/oeo-steering-committee)
„Metadata is a lovenote to the future“

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