

OEO Developer Meeting #28

Pads:

- Pad to this meeting: <https://etherpad.wikimedia.org/p/oeo-dev-28>
- Pad for next meeting: <https://etherpad.wikimedia.org/p/oeo-dev-29>
- Notes from last meeting: <https://etherpad.wikimedia.org/p/oeo-dev-27>

Date: 18.11.2021, 10:00 -- 12:00 a.m.

Participants: Kai, Mirjam, Carsten, Ludwig, Lukas, Janna, Hannah, Patrick

- moderator: Kai
- main reporter: Ludwig
- next meeting organisier: SIROP project team decides

Preparation:

- Read last protocol:
<https://github.com/OpenEnergyPlatform/ontology/wiki/OEO-developer-meetings>
- Check issues for next release:
<https://github.com/OpenEnergyPlatform/ontology/milestones>
- Load software (GitHub, git, Protégé, DFN)

Agenda:

- Next meeting
 - Collision with project meeting of SIROP
 - Make it part of the project meeting or find another date -> 24.11.2021
- Upload protocols in the Wiki repo
 - <https://github.com/OpenEnergyPlatform/ontology/wiki/oeo-dev-meeting-plan#aftermath>
 - #27 and #28 [LH]
- **RDF/SHACL** discussion is a larger discussion. bigger than possibly our current project. so maybe a good follow-up project. rdf based technology database. Let's talk about that some more! Maybe let's talk about that more next week.
- Options that need to be evaluated:
 - Nested triples using existing oeo classes
 - advantage: smaller and better OEO
 - dis: complicated and long rdf
 - Shortcut in the OEO
 - advantage: easy triples and rdf
 - dis: more classes in the OEO
 - SHACL hack?
 - middle layer
- Create real life examples to showcase

Janna's email: hastings@ovgu.de

- There is an existing version of the SFS in .ttl
 - https://github.com/OpenEnergyPlatform/ontology/tree/feature/annotations/Knowledge_Graph
- Prepare the examples for as soon as possible [Patrick and Adel]
- Include math. formulas in the OEO
 - https://de.wikipedia.org/wiki/Mathematical_Markup_Language
 - Create an example for tee next meeting [LH]
- Open issue ready for implementation
 - #892 rotor diameter - CHK
 - needs to be implemented
- From meeting #26 @Hedda
 - Meta Issue: Collection of new OEO terms originating from LOD-GEOSS @Hedda
 - <https://github.com/OpenEnergyPlatform/ontology/issues/822>
 - Capacity factor
 - <https://github.com/OpenEnergyPlatform/ontology/issues/890>
 - entity/continuant/generically dependent
continuant/information content entity/**quantity value**
 - entity/continuant/specifically dependent continuant/quality
 - entity/occurrent/process attribute/ (emission factor)
 - Suggestion from 890: *A net capacity factor is a fraction that is calculated by dividing the net electricity generation over a given time step by the declared net capacity times the length of this time step.*
 - net capacity / block size / power rating
 - gross or **net** production (production of the pp is neglected -> feedin)
 - -> quantity value because it is a calculated value
 - Add editorial note: *A net capacity factor is typically calculated for a year but other time steps (e.g. month or day) are possible.*
 - alt term: Capacity factor
 - axioms: nope
 - Implementation: Kai- > Review Hedda
 - Extensions to existing concepts:
 - Variable cost
 - <https://github.com/OpenEnergyPlatform/ontology/issues/891>
 - parent class variable cost -> Variable production cost / Variable consumption cost
 - Decision: not yet continue with including variable consumption cost, rather focus on production for the time being and see whether consumption-related information is required at a later

stage.

- *suggestion: Variable costs are costs that depend on an amount of goods or services*
 - Subclass: Variable production cost
 - entity/continuant/generically dependent
continuant/information content entity/quantity
value/economic value/cost/variable cost
 - *suggestion: Variable costs are a producer's costs that depend on the amount of goods or services produced. A producer's variable costs ... increase and decrease with production volume.*
 - Editorial notes:
 - An example for variable cost are costs incurred for raw materials (of which more are needed if production is increased)
 - Variable costs are sometimes called **unit-level costs** as they vary with the number of units produced.
 - connected discussions: marginal cost / total cost / fixed cost / levelised cost of electricity
 - LCOE:
<https://github.com/OpenEnergyPlatform/ontology/issues/906>
 - difference of costs for consumers (expenditure) and producers
 - Grundgebühr und Arbeitspreis
 - Subclass: Variable consumption cost
 - *suggestion: Variable costs are a consumer's costs that depend on the amount of goods or services consumed. A consumer's variable costs ... increase and decrease with production volume.*
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- From last meeting @Hedda
 - Operation & maintenance costs
 - entity/continuant/generically dependent
continuant/information content entity/quantity
value/economic value/cost
 - Cost of Equipment
 - entity/continuant/generically dependent
continuant/information content entity/quantity
value/economic value/cost
 - Cost of grid connection
 - entity/continuant/generically dependent
continuant/information content entity/quantity
value/economic value/cost
 - Cost of rent of land
 - entity/continuant/generically dependent
continuant/information content entity/quantity

value/economic value/cost

- Cost of decommissioning
 - entity/continuant/generically dependent
continuant/information content entity/quantity
value/economic value/cost
- Other costs
 - entity/continuant/generically dependent
continuant/information content entity/quantity
value/economic value/cost
- Investment costs:
 - *Capital investment costs means costs, beyond the research and development phase, associated with capital improvements, including the acquisition and development of land, the design and construction of new facilities, and the making of renovations or additions to existing facilities.*
- Fixed operation and maintenance costs:
 - *A company's fixed costs are costs for operation and maintenance that do not vary with the volume of production. Fixed costs remain the same regardless of whether goods or services are produced or not. Thus, a company cannot avoid fixed costs.*
- Delivery costs (for materials, energy carriers):
 - *Delivered costs for a product or service refer to the total unit cost of a product or commodity delivered to a certain market, city or customer. It is normally composed of all associated transport costs and the unit cost of production for that product.*

- Specific power
 - entity/occurrent/process attribute/power
 - specific separate?
- Lifetime
 - entity/continuant/specifically dependent continuant/quality
- Construction time
 - entity/continuant/specifically dependent continuant/quality