#### **OEO Developer Meeting #42**

#### Pads:

- Notes from last meeting: <a href="https://etherpad.wikimedia.org/p/oeo-dev-41">https://etherpad.wikimedia.org/p/oeo-dev-41</a>
- Pad to this meeting: <a href="https://etherpad.wikimedia.org/p/oeo-dev-42">https://etherpad.wikimedia.org/p/oeo-dev-42</a>
- Pad for next meeting: <a href="https://etherpad.wikimedia.org/p/oeo-dev-43">https://etherpad.wikimedia.org/p/oeo-dev-43</a>

# Date: 25.08.2022 Participants:

- Moderator: Christoph @25.08.22Main reporter: Martin (OvGU)
- Next meeting organiser:
- Developers with affiliation:
  - Christoph (RLI)
  - Alexandra (TUM)
  - Markus (OVGU)
  - Martin (OvGU)
  - Alexander(OvGU)
  - Beneharo (TUM)
  - Ludwig M (TUM)
  - Ludwih H (RLI)

## **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)

## Agenda:

#### Announcements

- Events Conferences etc.
- Personal changes @ MR
  - Markus will leave OEO team remaining tasks:
    - 1. restructuring of import modules (<a href="https://github.com/OpenEnergyPlatform/ontology/pull/1268">https://github.com/OpenEnergyPlatform/ontology/pull/1268</a>)
      - already implemented for RO modules
      - Additional PR review needed
      - Best before the end of the week
      - Same has been implemented to the IAO module -> reuse
    - 2. PR template
      - A new templae has been drafted [LINK]
      - Too many checkboxes were a problem
        - Compromise: Use checkboxes only where neccessary
    - AS will take over the term-list extraction during the release process (<a href="https://github.com/OpenEnergyPlatform/ontology/issues/1020">https://github.com/OpenEnergyPlatform/ontology/issues/1020</a>)
    - Many thanks to MR:)

#### Organisational

- Template Example Topic [Name]
  - o https://github.com/OpenEnergyPlatform/ontology/wiki/oeo-dev-meeting-etherpad-template
  - Note and comment

#### Release

## [RELEASE] on 01.09.22

- Check if there are not enough issues postpone the release
- https://github.com/OpenEnergyPlatform/ontology/blob/dev/CHANGELOG.md#changelog
  - o 9 PR's implemented | 3 Added | 6 Changed
  - 38 open issues for release 1.12.0
    - fewer than usual due to summer break
    - Postpone? Postpone the postponement decision until end of meeting

#### OEO Classes

## Adding more heat terms @ASei

- https://github.com/OpenEnergyPlatform/ontology/issues/1254
- Problem: heat plant -> heat transfer unit -> heat exchanger -> participates in 'heat transfer'
  - definition "Heat transfer is an energy transfer with thermal energy as the only input and thermal energy as the only output."
  - There are other inputs of "heat transfer"
    - e.g. Biomass for biomass energy
- We want heat plant to also convert other fuels (e.g. biomass, coal) heater was good suggestion!
- heater might be to generic -> maybe subclass: boiler or heat generation unit
- Heat plant:
  - A heat plant is an energy transformation unit consisting of <u>heat transfer units</u> or a <u>heater</u> and a grid component that feeds thermal energy <u>into a heating grid</u>.
    - Are ovens or electrical heaters "heat plants"? Answer: No: they are just heaters
    - distinguishing point of heat plant and heater: feed into grid vs not
  - <u>heat transfer units **or a heater**</u> Introduces disjunctions, which is not in EL, but in DL -> more expressive (read: slower) logic, but not a problem
  - make more subclasses for specific heat plants
- Heater
  - definition "A heater is an energy converting component that converts other forms of energy into useful heat."
  - o new subclass: boiler, combustion-based heater, electrical heater (?)
- Energy transformation can also just mean "Energy transport" over a spacial region
- Co-Generation
  - There is an ambiguity with "combined heat and power plant"
  - Superclass for 'combined heat and power plant'
  - Rename to "Cogeneration plant"?
    - Sounds too generic. Are there kinds of energy that could be "cogenerated" other than heat and power?

- Instead: New class "Cogeneration plant"
  - ... is a energy plant that has more than one kind of energy generating units.
- If there are other kinds of energy that should be considered, this would be a viable solution
- Otherwise: "combined power plant and heat plant" = "Cogeneration plant"
- Class combined power plant and heat plant:
  - Subclass 'heat plant' and 'power plant'
- Waste heat source: https://github.com/OpenEnergyPlatform/ontology/issues/1265
  - o possible waste heat sources -
    - Is it necessary to introduce all specific waste heat sources, that are mentioned in definition?
    - Not strictly required right now. The origins of waste are very heterogeneous (e.g. "data centers")
    - Applications that want to reference

## [5 Minute break]

## Geothermal @ASei

- Hydro vs Petrothermal introduce both?
- Deep geothermal energy vs Near-surface geothermal energy What is depth to distinguish both?
  - o avoid using a number
  - o analogues with sector definitions
  - o deep thermal energy & near surface energy distinguish with "depths distinction mechanism"
  - Sector division
    - is a specific way to subdivide a system
    - new subclasss of sector division: 'crust depth division'
      - is a specific way to subdivide the crust of the earth

## (~15min) older issues @ASta

- Issue #25 https://github.com/OpenEnergyPlatform/ontology/issues/25
  - o form to perceed disappeared awaiting feedback from maintainers
    - For Ontoology:technical issues: not all modules could be read
    - For OLS: It seems the process changed. The old registration form is gone, new process via Github (!?)
      - @MG will add new info to issue, then AS can investigate
- Issue #179 https://github.com/OpenEnergyPlatform/ontology/issues/179
  - Reuse terms from EnArgus
    - EnArgus is not publicly available (and will likely never be)
      - Copyright issues for some reason
    - https://www.enargus.de/wiki/
    - MG will contact TM on whether there is already an extraction tool for EnArgus

# **Postpone OEO Release?**

- Heat-related concepts will not be implemented in time
- if IAO is implemented -> will be big code change
  - Will it be a major change? Not really, a new module is added
- iff IAO changes are successfully implemented -> Do release
- Otherwise, slightly postpone until IAO changes are done

## Appoint meeting organisor

- CM finds organisor
- Template Ontology Workspace (use for joint development) [NAME]
  - o Add issue link
  - o Collect related terms
  - Create an aristotelian definition
  - Find axioms

OEKG

Other Topics

#### **Collection of Tasks:**

• Add something @A