

## **OEO Developer Meeting #15**

Pads:

- Notes from last meeting: <https://etherpad.wikimedia.org/p/oeo-dev-14>
- Pad to this meeting: <https://etherpad.wikimedia.org/p/oeo-dev-15>
- Pad for next meeting: <https://etherpad.wikimedia.org/p/oeo-dev-16>

**Date:**

- 2021-03-10 14:00 - 18:00

**Participants: Carsten, Christoph, Martin, Ludwig, Simon, Anna, Christian, Michaja, Vera, Janna, Lukas, Mirjam**

- moderator: Carsten
- protocol: Christian/Christoph

**Next meeting organiser** (2 people): (2021-04-14) ?

- organisers: Janna, Christian moderator: protocol:
- reach out to presenters about 1 week before the meeting
- detailed manual here: <https://github.com/OpenEnergyPlatform/ontology/wiki/oeo-dev-meeting-plan>

**Preparation:**

- Read last protocol:
  - <https://github.com/OpenEnergyPlatform/ontology/wiki/OEO-developer-meetings>
  - <https://etherpad.wikimedia.org/p/oeo-dev-14>
- Check issues for next release:
  - <https://github.com/OpenEnergyPlatform/ontology/milestones>
- Load software (GitHub, git, Protégée, DFN)

**Agenda:**

General:

- Summary of the last release 1.4.0 / next release on 01.05.2021 - MS
- Master -> Main umbenennen?
- Naming of branches - LH
- How to insert relations to classes - LH & ??
- OEO Paper documentation

Ontology discussion:

- ENVO Ontology
- Subclasses of Heat #393 @Mirjam
- state of issue #476 Use an external ontology for economic terms ??

- ENVO Ontology
- Ocean Energy @ ??

### Potential topics for dev-meeting-16:

- JH prepares ENVO class mapping
- CH rename master branch
- find a boundary between geothermal and ambient thermal energy (after expert consultation)
  - revisit subclasses of heat
- Ocean Energy

### Meeting Notes:

- **Meeting release update: Summary**
  - Recent work (release 1.4.0 on March 02 2021)
    - 30 issues closed
    - Energy subclasses and energy transformation processes
    - Solar, wind, radiative, nuclear, potential energy...
    - Economic FIBO terms:
      - price, cost, currency, market exchange, trader,...
      - CO2 equivalents and GWP
    - General axiomclasses for energy carriers
    - Improved Workflow for dev meetings and GitHub discussions
  - Focus of the upcoming release 1.5.0 on May 03, 2021
    - Finish energy subclasses and energy transformation processes
    - Finalize FIBO terms
    - Finish scenario factsheet terms?
    - Some IAMC terms?
    - Some ENVO terms?
    - check for stale branches
  - -> Discuss in next meeting what can realistically be achieved. Note that there are subgroups working on these issues as well.
- Master -> Main renaming? - CH
  - <https://waylonwalker.com/blog/master-no-more/>
  - <https://www.hanselman.com/blog/easily-rename-your-git-default-branch-from-master-to-main>
  - renaming no problem for git
  - symbolic link from master to main?
    - suggestion naming it release/deployment/stable instead of main
    - let's do this but not in a hurry!
    - prepare background info both for discussion and technical implications
  - CH prepares this for the next meeting
- Naming of branches - LH
  - current naming convention: [type]/[short-description]-#[issue-nr]
    - Pro: established and consistent style
    - Con: Sorting after first letter of [short-description], we have (too)

- many (stale) branches
- Best-Practice: <https://codingsight.com/git-branching-naming-convention-best-practices/>
  - proposed convention: [type]-[issue-nr]-[short-description]
    - increases sorting, increases readability, better identification of stale branches, less characters (-/ -#)
- [type]
  - master -> main ??? see above
  - dev
  - feature
  - hotfix (for urgent implementations that cannot wait for a release)
  - release
- [short-description]
  - Avoid long and short descriptive names for branches
  - 2 --4 words are optimal
- Other hints:
  - Git Branch with Author Name -> not needed in a collaborative project
  - Avoid using numbers only
  - Avoid using all naming convention simultaneously
  - Branch names should be precise and informative
  - Avoid using capital letters
- Examples:
  - old: feature/sector-division-#461
  - new: feature-461-sector-division
- only implement for new branches
- delete merged branches to improve readability
- contact stale branch people if can be deleted
  - <https://github.com/OpenEnergyPlatform/ontology/branches/stale>
  - Branch feature/sector-and-sector-concepts should be kept as it contains the conceptual work for the sector/sector division topic in file test\_sectors\_and\_sector\_concepts.omn
  - Branch feature/geo should be kept as it contains our work on the geo topic before we decided to use an external ontology for that topic
- CH does this as part of the preparation for the next meeting
  - add this to release documentation to have a look at stale/merged branches
- adapt the documentation if change of naming is approved (Contribute.md)

### Voting on changing the issue naming convention:

YAY: +++++++

NAY:

don't care ~\\_(\`)/~:++++

- Agreed to proposed convention: [type]-[issue-nr]-[short-description]
- (See <https://codingsight.com/git-branching-naming-convention-best-practices/>)
- Change it in the CONTRIBUTING.md [LH]
  - <https://github.com/OpenEnergyPlatform/ontology/pull/712>

- How to insert relations to classes - LH
  - How to derive good relations from definitions
  - How to formulate the relations. Document the basic rules (classes always 'some', 'value'...)
  - Object properties
  - How to enter the relations in Protégée
    - Live demo last time
  - this is already documented in the ontology itself and it's definitions
  - so this would be redundant and there doesn't seem to be a need
  - something like a documentation for newcomers might come in handy, but for now, we'll leave it as is.
  
- OEO Paper documentation. Links please.
  - 2020 EKAW (rejected)
  - 2020 ESWC (rejected)
  - 2020 Energy (rejected) not very helpful in addition to Energy and AI paper
  - 2021 Energy and AI - publish preprint as soon as accepted
- Collection of submitted versions? Links?
- Publication as preprints?

COFFEBreak until 15:10

Import ENVO Classes?

- consider to adopt (better) definitions of overlapping classes from ENVO
- [https://docs.google.com/spreadsheets/d/1EJ\\_c\\_t1WQhi\\_hLvAe8RIhUqZ0tdhKpKfce53fwXX44A/edit#gid=0](https://docs.google.com/spreadsheets/d/1EJ_c_t1WQhi_hLvAe8RIhUqZ0tdhKpKfce53fwXX44A/edit#gid=0)
- for discussion notes see link above, column A
- main outcomes: keep our own definition and make connection to ENVO clear (sameAs-relation)
- todo's:
  - revisit and refine i.a. coal, (solar energy), oil and petroleum products definition
  - JH creates mapping until next time
  
- Subclasses of Heat: <https://github.com/OpenEnergyPlatform/ontology/issues/393> / @Mirjam
  - **geothermal energy**
    - currently: OEO\_00000191 --> needs new definition
    - A primary energy process:
      - Nuclear energy as the heat comes from nuclear decay? But tidal forces! Both process contribute, don't they?
      - Depletion of Earth's thermal energy storage
      - **Heat transfer** is an energy transformation where thermal energy is exchanged from one medium to another. ✓ Synonym: Thermal energy transfer
        - **Geothermal heat transfer** is a heat transfer from the



- heat pumping process? --> own issue
- C: primary energy
  - Proposal of #393: *Ambient thermal energy is thermal energy that is naturally around us in its diffuse and extended form and emanates from a diversity of heat sources, including earth, water, or air.*
- D: primary energy carrier:
  - earth/rock, water, air
- E: Relations

**Task:** find a boundary between geothermal and ambient thermal energy as well as geothermal heat transfer and ambient thermal energy transfer

--> CH asks an expert (Jann) from RLI

--> next OEO-SC meeting if that approach fails

Topics for next meeting:

- ○ **derived heat / district heat**
  - currently equivalent classes, subclasses of thermal energy
  - --> rather an energy transformation process than subclass of (thermal) energy?
    - A: primary energy process: heat transfer?
    - B: district heating (process)
    - C: thermal energy
    - D: water
    - E: relations
- Continue with technologies and transformation processes:
  - **energy subclasses:**
    - **last meetings:** <https://etherpad.wikimedia.org/p/oeo-dev-energy-subclasses>
    - <https://etherpad.wikimedia.org/p/oeo-dev-14>
  - Missing subclasses:
    - Nuclear energy #692
    - Geothermal energy (#393)
    - combustion energy?
    - Bioenergy
  - --> define 4 classes for them:
    - A: primary energy process
    - B: transformation process
    - C: primary energy
    - D: primary energy carrier
    - E: Relations
- Ocean Energy
  - Preparation @???
  - Overview of concepts and technologies
    - Ocean/Marine energy

- tidal
    - [https://en.wikipedia.org/wiki/Tidal\\_power](https://en.wikipedia.org/wiki/Tidal_power)
  - marine current
    - [https://en.wikipedia.org/wiki/Marine\\_current\\_power](https://en.wikipedia.org/wiki/Marine_current_power)
  - wave energy
    - [https://en.wikipedia.org/wiki/Wave\\_power](https://en.wikipedia.org/wiki/Wave_power)
  - Osmotic
    - [https://en.wikipedia.org/wiki/Osmotic\\_power](https://en.wikipedia.org/wiki/Osmotic_power)
  - (Ocean thermal energy)
    - [https://en.wikipedia.org/wiki/Ocean\\_thermal\\_energy\\_conversion](https://en.wikipedia.org/wiki/Ocean_thermal_energy_conversion)
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- if there is time: complete **transformative measure and policy instrument**
  - <https://github.com/OpenEnergyPlatform/ontology/issues/444>
  - check the two last comments