## **EERAdata Preparatory Workshop "FAIR and Open Metadata for Low Carbon Energy Research"**

## Links & comments from the chat

- Machine actionable and generic metadata template for dataset currently being implemented in CEDAR: <a href="https://github.com/fair-data-collective/generic-dataset-metadata-template">https://github.com/fair-data-collective/generic-dataset-metadata-template</a>
- DTU **Wind** onto stack for serving controlled vocabs to humans and machines accessible with a few examples: <a href="https://data.windenergy.dtu.dk/ontologies/view/en/">https://data.windenergy.dtu.dk/ontologies/view/en/</a>
- Arts: HAIKU = it would be an great exercise to create a short poem (haiku) for HAICU!
- Is the work on tackling the Babylonian challenge (i.e. generic metadata template)
  related to RDA MIG: <a href="https://www.rd-alliance.org/system/files/documents/RDA\_Towards-Metadata-Rosetta\_Alex\_Ball.pdf">https://www.rd-alliance.org/system/files/documents/RDA\_Towards-Metadata-Rosetta\_Alex\_Ball.pdf</a> (Towards a metadata Rosetta Stone)? Answer: Yes.
- Not specifically related to energy, an interesting toolkit particularly for data validation and data integration through the datapackage concept: <a href="https://frictionlessdata.io">https://frictionlessdata.io</a>. What you experience with the tool? The frictionless data concept is widely discussed within the openmod community. Frictionless Data can be found: <a href="https://blog.okfn.org/2018/08/14/frictionless-data-and-fair-research-principles/">https://blog.okfn.org/2018/08/14/frictionless-data-and-fair-research-principles/</a> and: <a href="https://www.youtube.com/watch?v=3Ranx9Jz0Ro&feature=youtu.be">https://www.youtube.com/watch?v=3Ranx9Jz0Ro&feature=youtu.be</a>. Seems to make life of data user easier, i.e. avoid knowing all various data access protocols, formats, etc.
- The HotMaps project used it for energy-related datasets
   <a href="https://wiki.hotmaps.hevs.ch/uploads/Hotmaps\_Data-upload-on-Gitlab\_2017-12-04">https://wiki.hotmaps.hevs.ch/uploads/Hotmaps\_Data-upload-on-Gitlab\_2017-12-04</a> V4.pdf
- DOI for posteriori metadata paper mentioned: <a href="https://dx.doi.org/10.1186/s13321-017-0242-y">https://dx.doi.org/10.1186/s13321-017-0242-y</a>
- It would be good to have a semi-central place to share info about these kind of tools
  as well our experience on using them. For example I saw this one:
   <a href="https://intake.readthedocs.io/en/latest/">https://intake.readthedocs.io/en/latest/</a>
- Antoine Queric from Ifremer from France gave a nice short presentation on how he is using INTAKE in Marinet2 project: <a href="https://github.com/Marinet2/byod-workshop-2020/blob/master/slides/VRE\_data\_access\_presentation\_20200619.pdf">https://github.com/Marinet2/byod-workshop-2020/blob/master/slides/VRE\_data\_access\_presentation\_20200619.pdf</a>
- At the risk of being partisan, the Open Energy Modelling Initiative is a reasonable place to discuss experiences with open data formats and metadata models: <a href="https://forum.openmod-initiative.org">https://forum.openmod-initiative.org</a>
- Because **semantics seems key**, this **Open Energy Ontology** (OEO) preprint might assist: <a href="https://svn.aksw.org/papers/2020/EKAW">https://svn.aksw.org/papers/2020/EKAW</a> OEO/public.pdf
- The OPSD project spent considerable effort in harmonizing national terms across the European power sector: <a href="https://open-power-system-data.org">https://open-power-system-data.org</a>
- Is this a good example?
   <a href="http://www.electropedia.org/iev/iev.nsf/6d6bdd8667c378f7c12581fa003d80e7?OpenForm">http://www.electropedia.org/iev/iev.nsf/6d6bdd8667c378f7c12581fa003d80e7?OpenForm</a>
- Many key IEC standards are both closed and expensive, for example, CIM: https://en.wikipedia.org/wiki/Common\_Information\_Model\_%28electricity%29
- LF Energy are currently leaning of IEC to release the CIM standard under a Creative Commons open license, we'll see where that goes? That would be great. Since we can push them to do the same for wind energy related CIM. Currently we are referring to their naming convention using SKOS (altNames and notation). LF Energy: <a href="https://www.lfenergy.org">https://www.lfenergy.org</a> (the "L" is linux). A final thought: the Data Licenses Clearance

**Center (DALICC) project**, Austria may be of interest in the context of legal metadata (FAIR R1.1) and automated license compliance (underutilized concept): <a href="https://dalicc.net">https://dalicc.net</a>

- Licensing paper Applying licenses, waivers or public domain marks:
   https://discuss.okfn.org/t/applying-licenses-waivers-or-public-domain-marks/6440/16,
   https://www.sciencedirect.com/science/article/pii/S2211467X17300949?via%3Dihub
- Paper on "Energy system modeling: Public transparency, scientific reproducibility, and open development":
  - https://www.sciencedirect.com/science/article/pii/S2211467X17300949?via%3Dihub