Sharing clean energy knowledge via (Linked) Open Data and controlled vocabularies

Introduction

The Renewable Energy and Energy Efficiency Partnership (REEEP) [1] located in Vienna, Austria is a non-profit market catalyst for clean energy in developing countries and emerging markets. In this role, it acts as a funder, information provider and connector for up-scaling clean energy business models. For more than 6 years, REEEP has been operating the clean energy information portal http://www.reegle.info [2], which provides easy access to high quality information on clean energy. This access is provided by taking advantage of (linked) open data sources, by publishing all data in open and machine readable formats and by tagging content using controlled vocabularies based on common thesauri to organise and structure knowledge. REEEP strongly believes that opening data can play a critical role in improving clean energy policy, accelerating investment in clean energy businesses, supporting more successful clean energy projects, and improving co-operation across regions and sectors.

How sharing clean energy knowledge via (Linked) Open Data and controlled vocabularies can make a difference

The world actually already has virtually all of the data it needs to manage the energy and climate transformation. However, this information is not currently accessible to those who need it most: policy-makers, investors, project developers and thought leaders. There are two reasons for this:

1. The information is scattered in silos – largely in “closed” databases at public, private and academic institutions around the world. Most institutions still share the traditional view that data is an asset. Thus, they also believe that holding data privately and restricting access to it actually creates value for the owner.

2. Every human being and organisation naturally classifies and categorises things in a way that fits their own world view. This means that the information is not indexed or tagged consistently, and that there is no universal library-style catalogue or directory of the content that is (and is not) available.

Together, these slow down the global transition to clean energy. Policy-makers lack the best data to support decisions, and investors and project developers cannot easily identify and exploit the best opportunities. Data often exists only on a commercial basis, is kept confidential by the organisation that has collected it, or not collected at all. Even when available, it is published in widely varied formats, and it is not categorised in ways that are comparable.

Opening up and linking data (Open Data), and then categorising it automatically using consistent terms based on common thesauri ("controlled vocabularies") can help dissolve both of these barriers. Government data is theoretically in the public domain already, with information available on everything from energy consumption to traffic, population and infrastructure. Making this data

available for public re-use is a first step that can unleash whole new waves of development. In parallel, using consistent terminology to classify all online resources - whether public or private - will improve collaboration between companies, across sectors and regions.

The presentation will

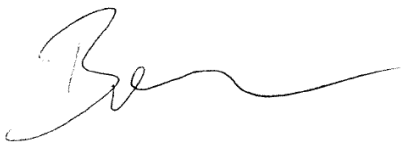
- explain why opening up data and increasing consistency in describing knowledge is essential for the energy transformation
- give an overview on existing examples of beneficial (linked) open data cooperations,
- show how terms based on common thesauri can help to increase consistency in describing and tagging documents
- demonstrate how free and easy to integrate services (such as the reegle tagging API) can help to connect knowledge brokers

Speaker

- Florian Bauer: REEEP's Operations & IT Director [3] and co-author of the book "Linked Open Data: The Essentials" [4]

Thank you very much for considering inviting REEEP to this workshop

With best regards



Florian Bauer

Links

[1] http://www.reeep.org

[2] http://www.reegle.info

[3] http://www.reeep.org/users/florian-bauer

[4] http://www.reeep.org/linked-open-data-essentials