Creating and adopting a set of recommendations for improving cross-disciplinary FAIR data sharing in wind energy

What:

The goal of this project is to create and adopt a set of recommendations for improving cross-disciplinary FAIR data sharing in wind energy. This is desperately needed in the wind energy industry, and a lack of data sharing is one of the largest barriers to reducing costs of wind energy and contributing to the world’s ambitious net zero goals. At the Eastern Switzerland University of Applied Sciences we have recently developed WeDoWind, which is a method to foster collaborative mindsets by empowering and motivating a diverse range of stakeholders to work together and to share and manage data and knowledge in a safe and trusting way that creates a win-win situation for all parties. It does this based on the idea of “challenges”, and provides both challenge providers and solution developers with added value. Challenge providers receive diverse state-of-the-art solutions to their problems from international teams, increased visibility and contact with the research community. Solution developers get access to relevant problems and data from the industry and get visibility within a vibrant international research and teaching community.
Our first case studies showed that WeDoWind is a promising solution for improving data sharing in wind energy. However, during the evaluation process, several challenges were experienced relating to the quality and structure of the provided data as well as to the heterogeneity of the solutions. We therefore aim to use this funding to investigate how data standards – and in particular the vast knowledge available from the RDA outputs – can be applied to WeDoWind, ultimately improving cross-disciplinary FAIR data sharing in wind energy. The steps to achieve this are as follows:

1. Review and evaluate existing initiatives related to metadata in wind energy, including RDA outputs.
2. Adopt and test the existing recommendations in a pilot data-sharing project.
3. Create a set of new recommendations for enabling cross-disciplinary FAIR data sharing in wind energy.

Who:

Sarah Barber, Head of Wind Energy Innovation Division at the Eastern Switzerland University of Applied Sciences

Biography:

Sarah Barber is Head of the Wind Energy Innovation Division at the Eastern Switzerland University of Applied Sciences and is founder and president of the Swiss Wind Energy R&D Network. She is a lecturer in wind energy at the universities of St. Gallen and Graubünden. She is also a qualified Business Coach and runs leadership workshops for engineers in her spare time. She recently became Chair of the Diversity Committee at the European Academy of Wind Energy. Sarah has a joint M.Eng. in Mechanical Engineering from the University of Cambridge (UK) and MIT (USA) and a Ph.D. in from the University of Sheffield (UK). Sarah has been active in the R&D of wind energy since 2007, as a Postdoc and Lecturer at ETH Zurich, Wind Energy Expert at BKW Energie AG, Chief Technology Officer at Agile Wind Power AG (CH) and Group Manager at Fraunhofer IWES (DE).

Scientific Domain:

Wind energy

Your Promotion and Networking:

The project's activities and outputs are featured on the RDA website.

Country:

Switzerland