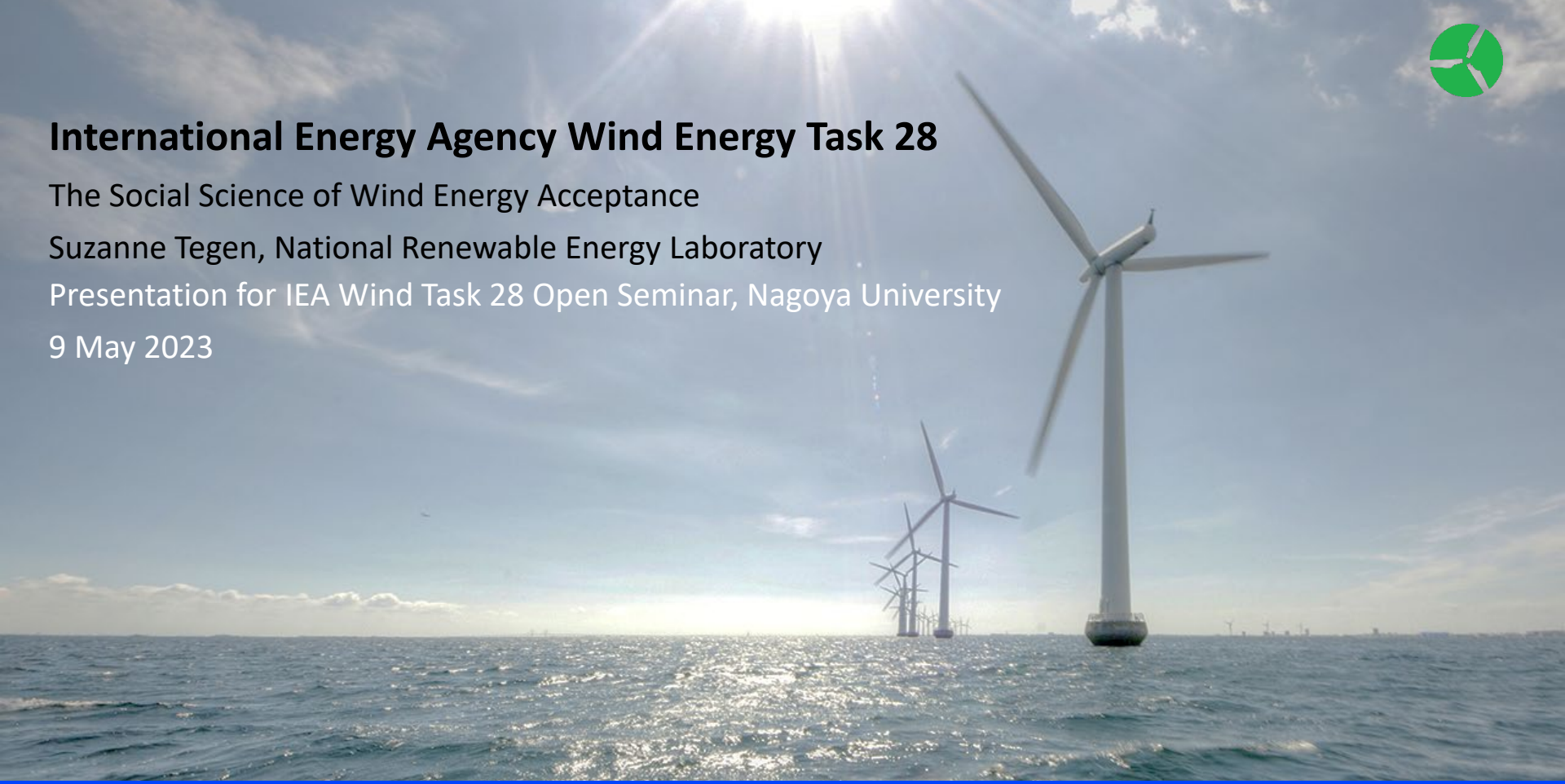

International Energy Agency Wind Energy Task 28

The Social Science of Wind Energy Acceptance

Suzanne Tegen, National Renewable Energy Laboratory

Presentation for IEA Wind Task 28 Open Seminar, Nagoya University

9 May 2023

IEA Wind & Task 28 on Social Acceptance

IEA Wind TCP

The International Energy Agency Wind Technology Collaboration Program is an international cooperation of 23 countries and sponsor members that share information and research activities to advance wind energy deployment.

Photo Credit: Dennis Schroeder, NREL

Task 28: Social Science of Wind Energy Acceptance:

- Ensuring diverse participation from a larger number of countries and a variety of researchers and social scientists interested in the responsible and appropriate deployment of wind projects;
- Maximising the value of the Task outputs through engagement of end users and broad systems thinking;
- Exploration of increasing the Task's reach to emerging economies and to help with the global energy transition

Task 28 Member Countries and Representatives (2023)

- **Canada** Jamie Baxter
- **Denmark** Kristian Borch, Tom Cronin
- **Germany** Gundula Huebner, Jan Hildebrand
- **Ireland** John Aston, John McCann
- **Japan** Yasushi Maruyama
- **Switzerland** Saskia Bourgeois,
- **U.S.A.** Joe Rand, Suzanne Tegen
- **Sweden** Amanda Ros

Assistance from observers:

- **Netherlands** Marielle deSain
- **Norway** Jon Krogvold, Kristian Borch
- **Wind Europe** Dorina Iuga
- **UK** Neil Farrington, Patrick Devine-Wright
- **France** Magali Collin (will become a member in May 2023)
- **Finland** (2022-2024) Lasse Peltonen

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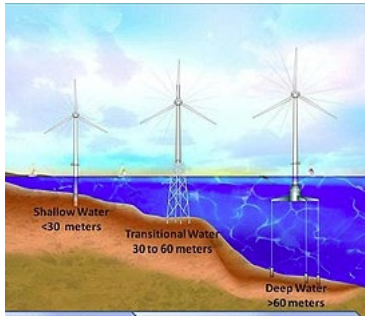
Task 28 Track 1: Research Synthesis and Gap Analysis

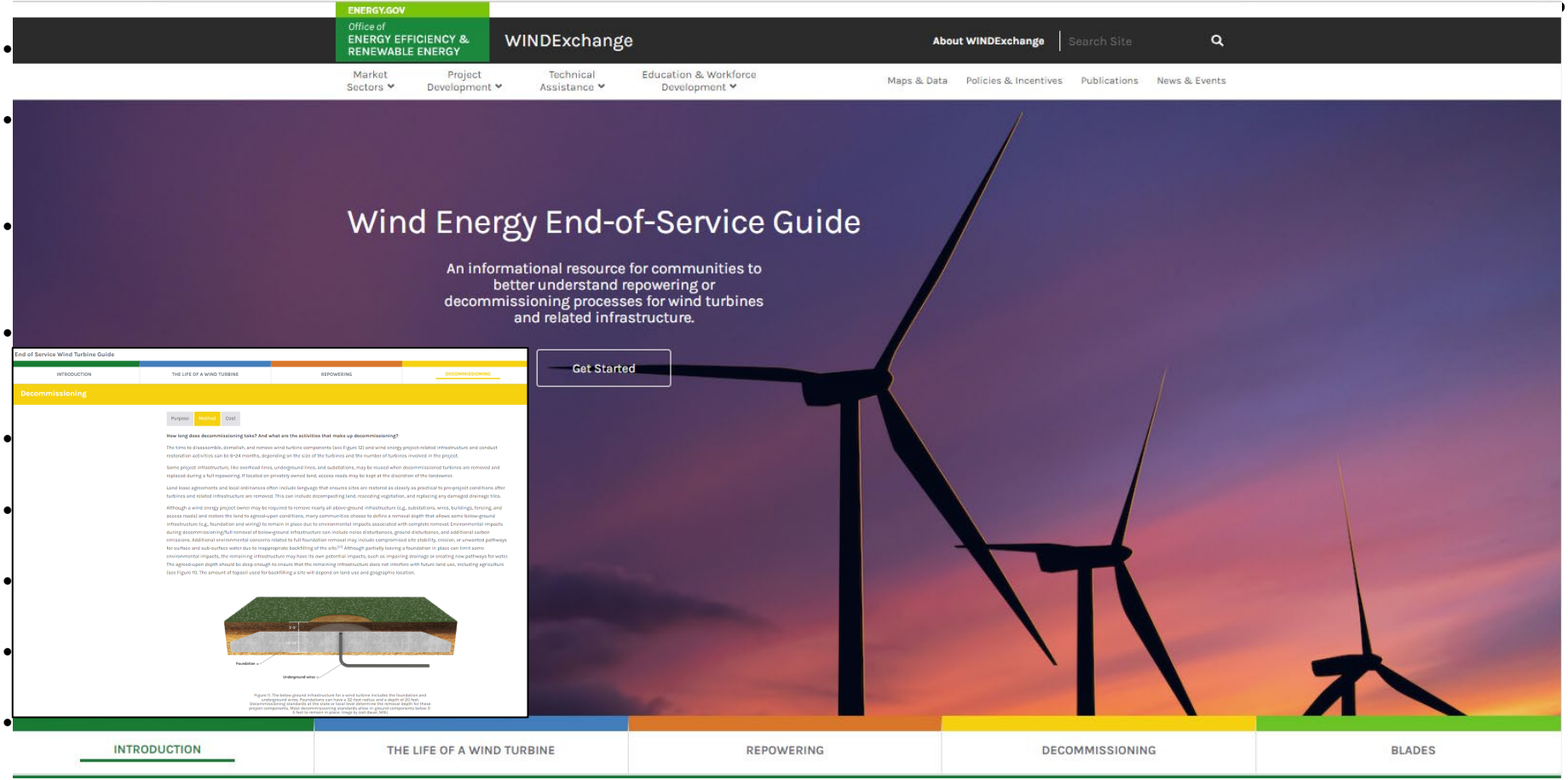
1. Innovations in value additions and benefit schemes from wind projects
2. Understanding costs associated with community engagement and opposition
3. New and emerging issues in wind energy acceptance (e.g., supersized turbines, airborne wind, floating offshore wind)

Task 28 Track 2: Research Dissemination, Facilitation, and Knowledge Exchange (ensuring research is shared globally)

4. Increased global engagement and knowledge exchange of wind energy acceptance and social science
5. Offshore Wind Working Group on Social Science and Wind Energy Acceptance: expert convening exchange and information dissemination



Technical Results: Publications & Presentations



Other Task 28 Work

Rebecca Messner, Grist

- Following extensive engagement with 7 developers and 150+ near neighbours, John Aston (Ireland) is developing the Earning Local Support Academy (ELSA) to enable and advance constructive, mutually supportive, and trustful relationships between communities, developers and local authorities.
- Jamie Baxter (Canada) is working with a Canadian indigenous community to research the social acceptance of their community-owned wind turbines.
- Matilda Kreider (US) is researching end of turbine life social acceptance issues and will provide a peer reviewed report and webinar on this topic in 2023.
- There were multiple social science and social acceptance tracks at conferences such as the *North American Wind Energy Academy* and Europe's *Wind Energy Science Conference* where numerous Task 28 representatives presented.
- Multiple members of Task 28 and their colleagues participated in the Technical Experts Meeting: The Grand Challenges of Wind. Lena Kitzing (Denmark) and Suzanne Tegen (US) led the social science group.

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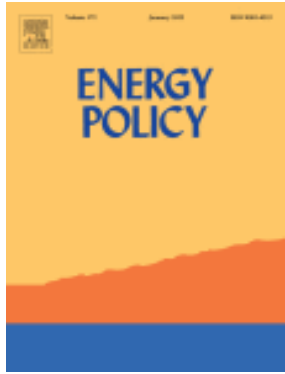
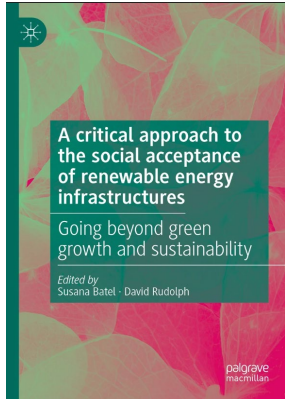




The Grand Challenges of Wind Energy – Bringing in Social Science

IEA Wind TCP

Considering the Life Cycle from a Socio-Technical Perspective

Activity & Industry Involvement

Industry is involved in Task 28 in every member country.

Patrick Devine-Wright (Exeter University in UK) advises policymakers and provides written submissions for the UK Government about community engagement and consent for onshore wind projects. In Ireland, Steering Group of the Sustainable Energy Authority of Ireland's Renewable Electricity Support Scheme Community Measures Evaluation & the Steering Committee of the SEAI funded research project.

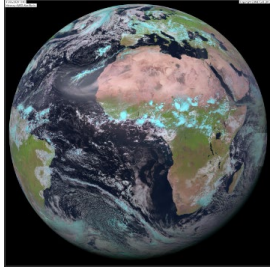
Jan Hildebrand (Institute for Future Energy, Saarbrucken, Germany) advises the Ministry of Energy from Saarland on the development of a new law on public participation about wind energy projects (including financial and planning).

Lasse Peltonen is working with the Finnish government and the wind industry in Finland with the objective of a more equitable, just deployment process that will lead to reaching state and national climate goals. The U.S. and other countries are collaborating with Finland.

John Aston (Ireland) is developing the Earning Local Support Academy (ELSA) to enable and advance constructive, mutually supportive, and trustful relationships between communities, developers and local authorities.

In Denmark, social scientists from DTU are helping communities install wind turbines that fit with what they see as their identity. Seventeen older-model Vestas V70s are being installed instead of larger more modern turbines, and the community is in favor of this.

Collaboration with other IEA Tasks



Other groups have reached out to collaborate on knowledge sharing and dissemination. Social acceptance and equity are more important to renewable energy deployment than ever.

- Quiet Wind Turbines
- Distributed Wind
- Airborne Wind
- Technical Experts Meeting #107 Emerging Markets is forthcoming.
- Technical Experts Meeting #109 Grand Challenges of Wind Energy, February 2023
- MISTRAL – training the future social science-renewable energy workforce

MISTRAL: We work with graduate students to mentor them and co-publish peer-reviewed reports. The biggest official international collaboration is called Multi-sectoral approaches to Innovative Skills Training for Renewable Energy and Social Acceptance, also known as MISTRAL. This innovative and international training network is to train the future social science and energy workforce. -

What's Next for Social Science and Community Alignment?

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Task 28 ends in April 2024. Task 28 will present plans for new social science tasks, given input from IEA, other wind tasks, industry, governments, and researchers.

Thoughts/Ideas – We would like to hear your ideas.

- Task inclusive of all clean energies to focus on social acceptance and community alignment
- Cradle to grave procedural fairness - environmental/energy justice
- Community benefits and alignment with local priorities
- Intentional inclusion of emerging economies
- Emphasis on talking points for policymakers

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Thank you!

Suzanne.Tegen@colostate.edu

Photo credit: Suisse Eole – Felix Broennimann