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Social Acceptance of Airborne Wind Energy

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Airborne wind energy (AWE) has recently been called a potential game changer for the energy transition [1]. Yet, the success of AWE is determined not only by its technical and economic feasibility but also by its acceptability. Strong negative reactions of the public have slowed down the deployment of other renewable energies in the past [2,3].

Our recent review showed that the existing literature mainly paints an optimistic picture of the social acceptance of AWE but lacks empirical evidence for this assessment [4]. Social science studies, as done in this PhD, will help achieve a more accurate understanding of how different stakeholders, including hosting communities, perceive and respond to the technology. For the long-term success of the industry, it is important to identify critical acceptability issues at an early stage of technology development and to engage relevant stakeholders in the development and deployment of AWE.

In this talk, I will present preliminary outcomes from

systematic interviews that I am conducting with stakeholders. Examples of these stakeholders are residents, developers, policymakers, regulators, NGOs and interest groups. I will discuss stakeholders' experiences, concerns, and expectations regarding the technology.

References:

[1] IRENA: *Offshore Renewables: An Action Agenda for Deployment*. International Renewable Energy Agency. Abu Dhabi (2021)

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[3] Upreti B.R., van der Horst D.: *National Renewable Energy Policy and Local Opposition in the UK: The Failed Development of a Biomass Electricity Plant*. *Biomass and Bioenergy*, 26, 1, 61–69 (2004)

[4] Schmidt H., de Vries G., Renes R.J., Schmehl R.: *The Social Acceptance of Airborne Wind Energy: A Literature Review*. *Energies*, 15, 4, 1384 (2022)

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