

Session proposal: "Wind Energy in the current European energy context: challenges beyond techno-economic efficiency"

<https://justwind4all.eu/> <https://wimby.eu/>

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As wind energy is key in the European energy transition strategy. Therefore, the challenges it might result in a delay of the energy transition altogether. These challenges are diverse. Societal opposition stems from concerns about visual and noise impacts, and environmental effects, as well as debates on the suitability of other energy sources. The variability of wind energy complicates grid integration and stability, requiring substantial investment in energy storage and infrastructure. Regulatory obstacles and lengthy permitting processes, coupled with a lack of necessary skills and capacities at government levels, delay project deployment. High initial costs, land use competition, and questions about who benefits or suffers from wind energy projects further complicate its expansion. And furthermore, the recent increase of the price of materials Addressing these barriers needs collaborative efforts and innovative approaches for successful integration into the European energy landscape.

In this session, we aim at providing a space to discuss the current situation of the complex world of wind energy, with an inter- and transdisciplinary focus. Co-hosted by EU funded JUSTWIND4ALL and WIMBY projects, this session is an open invitation to academics from various disciplines to share their insights and engage in a rich dialogue around wind power development and its role in the energy transition in the EU. The session is structured in a first part of presentations highlighting ongoing work, followed by a guided discussion.

We call for contributions related to innovative ways to assess, govern or implement wind energy projects including:

- Modeling of energy scenarios for the implementation of wind energy
- Regionalized socio-environmental impact assessments
- Job creation estimates
- Market, State, and Community Interests in the Wind Energy Sector

The coproduction forum is meant to produce a policy brief addressing the following questions:

- How do we choose the best scenario options for European wind energy deployment, considering technological, economic, social as well and environmental factors?
- How can energy models and impact assessments be better defined to support sustainable and inclusive decision-making processes within wind energy governance?
- How does the expansion of wind energy technology shape existing wind energy governance and practices and vice versa?
- How can we cope with a potential crisis in the wind sector? What does it mean for the energy transition in Europe?