Brief description of the project

The project aims to develop an innovative and interdisciplinary mixed-methods approach integrating concepts of sociology (stakeholder analysis), economic philosophy (capability approach), and technology systems (energy systems modelling) to better define the 'real world' feasibility of large-scale wind farms from a range of economic, political, regulatory, and societal perspectives. This new methodology will be developed and applied to the case of Norway, a country with excellent wind resources but high local opposition towards their development. This will define socially acceptable renewable energy scenarios for Norway, which can also contribute to a better understanding of Europe's decarbonisation pathways.

The selected case study is to be confirmed but will most likely be the NVE area No. 40, which includes the municipalities of Hasvik, Hammerfest, Måsøy, Kvalsund, Alta, Porsanger, and Nordkapp. Research methods will follow a community-led approach that will include participant observation; conversations with community members, authorities, and other stakeholders; workshops and a larger-scale participatory survey.

Once data has been analysed and processed, the economic, political, regulatory and societal impacts will be documented to provide guidelines for considering the factors affecting the community's acceptance of wind energy. These factors will then be built into a 'socially informed' highRES model for renewable energies in Norway to determine their effects on decarbonisation strategies, as well as the cost-benefits of mitigating these factors.

By following this community led approach, the project will benefit society by providing new decarbonisation scenarios that aim to expand affordable, reliable, and sustainable energy while considering perspectives of well-being and social justice of communities where renewable energies are installed. These scenarios will require policymakers at the national and EU levels to introduce sufficient flexibility within regulatory frameworks to account for local needs and aspirations.

Name of supervisor(s)

This work will be supervised by Paola Velasco Herrejón, postdoctoral research fellow and Marianne Zeyringer, associate professor at the Section of Energy Systems, Department of Technology Systems, University of Oslo located in Kjeller.

Preferred background of candidates

- Psychology, Development, Environmental Sciences, Human Geography, Social Anthropology, Economics, or closely related subject areas. Candidates studying Energy Systems or other Energy related subjects with an interest in learning qualitative data collection and analysis are also highly encouraged to apply.
- Ability to undertake desk-based documentary evidence collection and analysis.
- Experience in field data collection and analysis (desired)
- Experience using NVIVO (desired)
- Experience using STATA (desired)
- Experience in writing project reports and contributing to outputs in peer-reviewed journals (desired)
- Fluent written and verbal communication skills in English
- Fluent written and verbal communication skills in Norwegian (desired)
- Ability to work independently and collaboratively.
- Readiness to present and discuss findings at conferences and meetings.
- Willingness to engage social media and non-academic organisations in the dissemination of research outcomes.

Number of available projects

1 (four positions needed)

Preferred project period

- The project will ideally start from May 2024, but can also begin during the summer recess.

Outline of project work including expected outcomes/deliverables

- Designing, conducting, and analysing semi-structured interviews to explore respondents' relationship to the energy industry, particularly wind energy. Open-ended questions will enquire about (1) elements of a good life (used as a simplified definition of capabilities), (2) how these conceptions are associated with everyday interactions with wind farms (suitability zones, technical restrictions, relevant ecological criteria (protected areas), as well as other social, environmental, economic, and technical barriers), and (3) how they drive (or not) wind energy acceptance.
- Designing, collecting, and analysing surveys. We anticipate engaging at least 700 public respondents from two regions in Norway (350 respondents each). The questions will be similar to those posed in the individual interviews.
- Running focus groups and deliberative workshops. To complement and supplement the surveys, public focus group interviews will be conducted (ideally with a mix of urban and rural areas). The questions posed to the focus groups will also be similar to those presented in the individual interviews/survey.
- Conducting literature reviews to rigorously assess the environmental, technical, economic, social, and political feasibility of relevant renewable energy options or conduct broader literature or evidence synthesis and analysis relevant to the project.
- Preparation and writing of project reports, peer-reviewed publications in high-quality scientific journals, and non-academic dissemination.
- Travel. Data collection will require travel of 1-3 weeks to one or the two regions selected for field research.