UiO:Energy and Environment Summer Research Project 2025

Project name: Sound and the sociomaterial: Acoustic methods and hydroelectric power in Norway

Supervisor: Andrea Nightingale and Steve Williams

Project suitable for: Master student

Number of students on the project: 1

Preferred academic background: Master student in the social sciences, e.g., human geography, political science, or environmental science, with some experience with survey and interview methods, data organization, Excel. Experience with acoustic methods (soundscapes, field recording, audio editing) would be beneficial.

Expected research period: July 1 – mid-August (six weeks full time)

Project Work and Expected Outcomes:
The student would contribute to a research project in human geography: "Unruly Sustainability Challenges: addressing uncertainty in governing energy transitions". This project aims to innovate new methods to gain novel insights into sociomaterial change. Energy transitions provide a dynamic example of how uncertainty and unruliness can undermine efforts at prediction and governing change. The Thematic Research Group brings together a unique interdisciplinary team spanning between the humanities, social science and stochastic mathematics. The main focus is to develop new methods that can help understand how uncertainties are shaping trajectories of change, with a particular focus on acoustic methods. The overall research question asked is, how do prediction and planning create new uncertainties and governance challenges in sustainable energy transitions?

The student's research would contribute to our work on acoustic methods in sociomaterial change and uncertainty. The work would support analysis of Norwegian prototypes conducted in Oslo at Hammeren Dam and/or in Vestland (Sogndal and Fjærland). The work would involve data (document) collection from the Internet related to hydroelectric power development in Norway, data organization (interview transcripts and recordings; soundscape and audio recordings), qualitative analysis of interview transcripts in NVivo using a codebook developed in collaboration with the supervisor, and database management (e.g. tagging audio files with codes). The supervisor would provide methodological training to enable the student to complete these tasks. The student would be involved in drafting a research article based on the work completed, becoming a co-author of a potential publication.