UiO:Energy  Summer research project, application

Project title: Marginalization and green energy in Norway

Leader: Mariel Aguilar-Støen. E-mail: mariel.stoen@sum.uio.no

Preferred background of candidates: one with background in social sciences, interdisciplinary social sciences, and one with background in quantitative spatial analysis (GIS and similar spatial competence)

Number of available projects: one that requires an interdisciplinary team consisting of two students

Preferred project period: From May to August 2020

Project focus and aim
This project places itself within the research area “Energy Transition and Sustainable Societies” of UiO Energy. I aim to recruit two master students who would cooperate in an interdisciplinary research project to test a method to identify and spatially locate marginalized municipalities in Norway and how they correlate with windmill projects (existing and planned).

Background
The problem that motivates the summer research project proposed here is my research interest on the recent increasing opposition to windmills among rural residents of Norway. Such opposition is so strong that the Norwegian Directorate for Waterways and Energy (Norges vassdrags- og energidirektorat, NVE) expressed in its long-term analysis that due to popular opposition to wind energy projects it is unclear how many more windmills could be built in Norway (see for example, Skårdalsmo 2019).

Studying this issue can help further our understanding of a significant societal challenge, namely, why the recent expansion of wind energy in rural parts of the country frequently – and increasingly – faces opposition among local populations. I lead a research group, “Rural Transformations” at the Centre for Development and the Environment (SUM), within my group one PhD candidate and one postdoc fellow are working with opposition to wind energy in Norway and in other parts of Europe. I am currently developing a grant research application that would allow me to theorize changes in energy regimes in rural Scandinavia towards renewable energy.

One of the hypotheses guiding such application is that opposition to green energy in Scandinavia correlates with social and economic marginalization. To test that hypothesis I should be able to develop a method for identifying the places where the study is going to be conducted. This involves the identification of “marginal areas”. I want to test a method by way of which I can build a gradient of rural patterns of marginalization. To do so, I will use a set of socio-economic and demographic data combined with spatial data to establish if operating and planned windmills correlate with a certain rural pattern. This pattern could be, for example, identified based on changes during the last twenty years in the distance between rural areas of residence and the closest elementary school, the closest post office, the closest police station and the closest welfare administration office, income of the inhabitants of different municipalities, primary occupation of the inhabitants of a given municipality etc. Once the pattern of marginalization has been identified, I want to superimpose another layer of spatial data (planned and existing windmills) and observe if marginalization correlates with the spatial distribution of windmill projects.

The summer project
Marginalization has been defined in a number of ways in Norway, but the spatial relation and distribution of marginal municipalities and its correlation with renewable energy projects has not been previously explored in social science literature. What does it mean to talk about ‘marginalization’ in rural parts of Norway? How do ongoing protests against wind energy projects correlate with such
marginalization? By operationalizing these questions and then producing a mapping of the relationship, this summer project aims to contribute crucial knowledge that will contribute to broader ongoing research in the Rural Transformations research group at the Centre for Development and the Environment.

The project will contribute to an interdisciplinary research interest comprising the geography of energy, political ecology and related fields where the rural dimensions of energy transitions have remained underexplored to date, despite the central role rural areas plays in the advancement of renewable energy. Recent scholarship suggests that this central role of rural areas entails the possibility for conflict, especially as green energy tends to be advanced in peripheral and often marginalized rural areas in both the Global South and North (Huber and McCarthy 2017; Naumann and Rudolph 2020).

Student research tasks, capabilities and outcomes
In order to advance our understanding of the relationship between marginalization and green energy in Norway, two students will carry out an interdisciplinary project that involves (1) conceptualizing rural marginalization in the Norwegian context and (2) mapping this concept in relation to ongoing wind energy projects in Norway.

The first task will involve working with existing social scientific literature on marginalization in rural areas, striving to arrive at a conceptualization of ‘marginalization’ that is fruitful for empirical application in the specific Norwegian context. This is a task that demands solid understanding of qualitative research including the application of conceptual terms to varied empirical contexts. Norway has a wealth of socio-economic data available for the whole country through SSB. However, the summer project will concentrate on one “fylke” in Norway to start testing the method.

The second task will involve working with existing data available with Norges vassdrags- og energidirektorat (NVE) and Statistisk sentralbyrå (SSB) pertaining to (a) wind energy projects and (b) the indicators for socioeconomic marginalization developed in task 1 above. This second task aims at mapping how marginalization correlates with ongoing wind energy projects in Norway, and this mapping exercise can be expected to be carried out using Geographic Information Systems (GIS) and other spatial tools and will consequently demand a student with skills in the use of such tools.

Combining the two tasks will be a highly educational task, providing experience with conceptualization, development and presentation of varied forms of data and not least, experience working in interdisciplinary teams. The composite nature of these tasks demands two students to work together on the project, one trained in qualitative social science and another trained in GIS (or similar).

The main outcome of this research project will be the result of this mapping exercise, in other words testing a method for future application. The researchers at SUM working on the overarching broader study of rural dimensions of energy transitions in Norway will be able to utilize the method for operationalizing research questions involving the whole country at a later stage. The proposed research project is therefore highly valuable to ongoing research at SUM and can potentially provide crucial foundations for efforts towards major competitive research grants.

References
