

Funded graduate research opportunities in the social and spatial dimensions of energy transition

Our global energy system is in the early stages of a structural transition away from 'below ground energy' (coal, oil, natural gas) and toward 'above ground energy' including solar, wind, biomass, and other forms of renewable energy. We see this transition in the landscapes all around us as wind turbines dotting the country side; solar panels covering roofs and fields; and new kinds of biomass being harvested. This transition is most pronounced where access to renewable energy is highest – in rural areas. Simply stated, the transition to renewable, sustainable energy transition is at the same time a profound transformation of rural landscapes.

Are you interested in developing advanced knowledge and skills to contribute to, and help manage, this energy transition/rural transformation? If yes, you should consider joining a dynamic team of researchers at the University of Guelph who are combining rigorous academic analysis with community engaged, applied research. The group is advised by Dr. Kirby Calvert, Assistant Professor in the Department of Geography, Environment and Geomatics and Co-Director of the Community Energy Knowledge-Action Partnership (www.cekap.ca). For a 2019 start date, there are opportunities to join the following fully-funded research projects (in no particular order of significance):

1. Spatial analysis of land-suitability for renewable energy development using geographic information systems. We model different policy and technology scenarios in order to provide decision-support for the integration of energy planning and land-use planning for municipalities and regional planners. This will help to ensure that we capture the benefits, but minimize the impacts, of renewable energy development on the land-based services that rural areas already provide (e.g., food, wildlife habitat, recreation/tourism).
2. Participatory mapping in geographic information systems to engage with communities and better understand their objections / opposition to renewable energy development. Our aim is to develop processes for community involvement in energy planning, while improving urban-rural relations as the transition to renewables continues to unfold.
3. Discourse analysis and stakeholder interviews to study the social and governance dimensions of renewable energy development in emerging grape-and-wine regions. This will provide insight into the unique barriers and opportunities for renewable energy development in 'high amenity' (i.e., tourism-based) landscapes more generally.
4. Qualitative policy analysis to examine the changing relationship between land-use planning and energy planning in the context of renewable energy development.

We will be accepting applications for prospective Masters and PhD students – PhD students would have the opportunity to work at the overlap across the projects described above, and / or build their own research program from one project. Applicants should have a background in geography, planning, environmental studies, resource management, energy policy, or related fields. Please send expressions of interest including (1) an up-to-date resume or CV; (2) an unofficial transcript; (3) a brief rationale of your interest in the project; and (4) a sample of your work / writing to Dr. Calvert at calvertk@uoguelph.ca.

