**Description of Research Project (1500 characters maximum)**

Given the importance of mitigating catastrophic climate change and concerns over energy affordability, this future-oriented research engages with the question of what an energy transition from fossil fuels to renewables will mean for home life and personal mobility in the Greater Toronto Area (GTA). It explores how scholars, advocates, professionals, climate and energy organizations, and governments are discussing and thinking about the future of the city and energy. With a focus on the transformation of our homes and the way we move around the city, it considers changing automobility, home energy production, energy affordability and suburban vulnerabilities. It seeks a unique integrated perspective that brings together diverse insights into the challenges and potential impacts of the transition.

The objective of the research is to identify the technical, planning and cultural challenges for the municipalities that make up the GTA. Studies of previous energy transitions and “technologies of the future” demonstrate the way that technical development and planning is prioritized, yet transitions and new technologies are not realized or significantly delayed most often because of cultural challenges that can be social, political and economic in nature. With a focus on home and mobility, this research is designed to interrelate technical, planning and cultural perspectives to identify a broader range of challenges. These perspectives will be assembled through interviews, participant observation, and analysis of planning documents and technological reports.

**Undergraduate Student Responsibilities (1500 characters maximum)**

The undergraduate student researcher will be responsible for key aspects of the research in four main areas.

- Collection and analysis of planning documents: the researcher will engage in the collection and analysis of planning documents of the municipalities of the GTA related to climate change and a transition to renewable energy sources. The researcher will engage in context analysis and comparative analysis of official plans, identifying planning priorities, initiatives and indicators used in relation to the home and personal mobility.

- Collection and analysis of technical and scholarly documents: the researcher will engage in the collection and analysis of technical and scholarly documents related to the development and use of new technologies for home and mobility connected with a move to energy efficiency, lower carbon emissions or renewable energy production.

- Collection of information on informant businesses and organizations: the researcher will conduct a search of media items, background information and organization documents related to the interviewees. The supervisor and researcher will collaboratively develop additional questions for informants from this material.

- Post-interview transcribing and analysis: The researcher will assist in the processing of interviews (transcribing) manually or through voice-recognition software. The researcher will prepare their own analysis of several interviews and both supervisor and researcher will discuss the interrelation of the findings to the rest of the research.

**Qualifications Required (750 characters maximum)**

Students who have an interest in postcarbon cities, climate change mitigation, and the challenges of a renewable energy transition are encouraged to apply.

Desirable skills

- Navigating websites of large organizations, searching databases, and downloading documents;
- Keeping track of documents, organizing and classifying information;
- Ability to identify and summarize key information from technical and academic documents;
- Use of specialized online search platforms (e.g. Google Scholar);
- Clear writing.
experience conducting ethnographic or qualitative research;
- Experience with accessing academic journals and using a range of databases.