Sustainability Fellowship
Advancing the Net Zero Energy Roadmap
Burlington Electric Department
Burlington, VT

About the Sustainability Fellows Program:
UNH Sustainability Fellowships pair exceptional students from across the U.S. with municipal, educational, corporate, and non-profit partners in New England to work on transformative sustainability initiatives each summer. Sustainability Fellows undertake challenging projects that are designed to create an immediate impact, offer a quality learning experience, and foster meaningful collaboration. Fellows work on-site with their mentors at partner organizations for 10 weeks, supported by a network of Fellows, partners, alumni, and the UNH Team. Graduate students, exceptional undergraduate students, and recent graduates from any accredited college or university are eligible to apply.

A detailed description of one Fellowship follows. To learn more about the other Fellowships offered this year, and for application instructions, see: www.sustainableunh.unh.edu/sustainability-fellows

About the Fellowship:
Burlington, Vermont is the state’s largest city with a population of 42,000 and a municipal electric department (the Burlington Electric Department, or “BED”) responsible for serving over 20,000 customers. In 2014, Burlington became the first city in the country to source 100% of its electricity from renewable generation. Building on this achievement, BED recently announced its goal to transition the city to “net zero energy” (NZE) by 2030 in the thermal and transportation sectors by managing demand, realizing efficiency gains, and expanding local renewable generation, while increasing system resilience.

In order to achieve NZE, Burlington will need to grow its renewable energy portfolio, while supporting transportation and thermal/heating initiatives. Achieving NZE will also entail managing the load growth from any strategic electrification activities that increase electric use. To launch this transition process, BED issued a request for proposals (RFP) in July 2018 to create a Net Zero Energy (NZE) Roadmap for Burlington, ultimately hiring Synapse Energy Economics to spearhead this work. Synapse product, the NZE Roadmap, will be available in the early summer and consist of several pathways to NZE that achieve more progress than business as usual. The Roadmap will also identify existing barriers to each pathway to NZE, and consider potential policy changes and regulatory flexibility (such as changes to energy efficiency) that would facilitate these pathways. BED is looking for a Fellow to assist with moving the Roadmap to a set of action plans.
This position requires a broad set of skills focused on implementing and integrating the NZE Roadmap into BED’s workflow; facilitating collaboration between a diverse team to establish repeatable processes; advancing a wide range of customer programs; coordinating across stakeholders and City departments; and overcoming potential barriers with innovative solutions. Among the barriers that will need consideration are the constraints imposed by existing statute and regulation that may need to be modified. The right candidate will have experience in modeling and analysis and the ability to collect and synthesize data to support/shape specific actions. This person will also have experience in policy and the ability to work within a regulatory structure.

Outcomes:
We hope that the main outcome will be the advancement of actions identified in the NZE Roadmap. The work product could include reports and presentations on how to implement change and overcome barriers in the energy space, or dashboards charting progress and identifying delays in achieving short-term goals.

Impact:
The Fellow will learn how to overcome challenges related to implementing a wide variety of decarbonization solutions. The Summer Fellow will join our team and help pave the way for multi-modal transportation opportunities and heat up the renewable thermal space in Burlington. This project should be a model for other cities to follow when implementing their decarbonization plans.

This is an opportunity for a Summer Fellow to influence a major climate initiative and be at the forefront of advancing the City of Burlington’s NZE goals. This is a project that is ambitiously breaking new ground and BED is looking for a Fellow that does not shy away from challenges and has the resourcefulness to contribute meaningfully as a part of the BED team.

Desired Qualifications:
- A passion for climate and energy related issues;
- Experience with program design/implementation;
- Background in the electric utility industry, strategic electrification/decarbonization, or related government work;
- Demonstrated skill in research and quantitative analysis (Excel, R, Matlab, Tableau, Python, etc.);
- Experience in producing reports for use by decision makers;
- An understanding of energy systems and technologies;
- Academic background in a related field(s) (Energy, Building Science, Economics, Engineering, etc.).
Work Location: Burlington Electric Department, 585 Pine Street, Burlington, VT 05401

Mentor(s): James Gibbons, Director, Policy & Planning, and Jennifer Green, City Sustainability Officer

Compensation: $6500 summer stipend (taxable and paid on a two-week payroll cycle over the course of the Fellowship term)

Expectations:
Fellows are expected to be primarily dedicated to their assigned projects throughout the summer, and also participate in a variety of networking activities, professional development opportunities, and presentations coordinated by UNHSI. Specifically, Fellows are expected to:

- Attend a mandatory orientation at UNH prior to the start of the Fellowship term, May 28-30, 2019. (Travel scholarships may be available for students traveling from outside New England.)
- Work full-time on-site at the partner organization for 10 weeks, for a total of 400 hours, June 3 - August 16, 2019 (an eleven-week period, allowing for one week off, as mutually agreed upon with supervisor).
- Complete a Fellowship project according to the work plan (with adjustments as necessary).
- Participate in weekly webinars or advisory group meetings.
- Present work at mid-term and final poster sessions at UNH on July 12 and August 9. (Travel support available.)
- Engage in additional professional development, networking, and advisory activities as offered.
- Provide and receive feedback at the end of the Fellowship.

Apply by February 7 at www.sustainableunh.unh.edu/sustainability-fellows.

Questions may be addressed to megan.carney@unh.edu.