Sustainability Fellowship
Comprehensive Solar Implementation Roadmap
Town of Hanover - Sustainability, Planning, and Zoning
Hanover, NH

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:
In May 2017, the Town of Hanover, NH was the first municipality in the state of New Hampshire to adopt Ready for 100 goals of achieving 100% renewably generated electricity by 2030 and 100% renewable fuels for transportation and thermal energy by 2050. Hanover was the first in the country to endorse these goals by popular vote. Since 2016, New Hampshire has welcomed an additional 4 communities, representing 5% of US communities nationwide endorsing RE100, and more than 12 communities with equally aggressive clean energy supply or deep decarbonization goals.

An EPA Green Power community since 2014, we have a history of supporting consumer choice, purchasing green-e certified power via organized buying cooperatives, and purchasing municipal electricity on wholesale markets. Since the May 2017 vote, Hanover’s municipal staff and sustainability committee have pushed forward key initiatives including the establishment of neighborhood clean energy action groups, adoption of a Solar Zoning Ordinance (2018) to permit ground mount solar installations, as well as, a town-wide study to baseline electricity usage by customer class, and deployment of cold climate air source heat pumps and rooftop solar on municipal buildings.
In 2019, the Sustainable Hanover Committee and Municipality will be drafting a renewable electricity deployment action plan outlining objectives for broad deployment of solar, solar + storage, and potentially wind energy, with accessibility for all customer classes. The fellow will work alongside the Sustainability Director and assist the Town Staff and the Sustainable Hanover Committee on the comprehensive solar implementation roadmap and communications strategy component of the action plan. In particular, the fellow will assist in analyzing the electricity baseline data to inform a portfolio approach to the percentage of solar/solar+storage within each customer class. Additionally, the fellow will draft an implementation and communications strategy for each, and assist with various outreach and implementation initiatives required for each of those customer groups.

Outcomes:

- Finalize solar implementation plan from spring 2019 comprehensive energy planning initiative, incorporating resilient energy system design, progress and impact tracking. The fellow can work alongside municipal staff on the management of an RFP to solicit proposals for municipal solar + storage installations, while specifically supporting the development of a community solar + storage framework
- Communication and outreach strategy, including website, written and social media presence as well as, attendance at and support for key stakeholder meetings (including with major institutional, industrial, commercial, and residential energy users; solar installers; land owners; policy makers; local associations).
- Preparation of Hanover’s solar energy data for GIS visualization, and for inclusion in a future NH clean energy dashboard
- Development of process outlining site specific guide of best practices in NH, for deployment of non-municipal community solar installations

Impact:

This project will directly support Hanover’s plans to deploy more solar installations within our town borders, within our utility’s service territory, within the state, and broadly within the NE-ISO region. The intention is to measure impact and map installations in order to assist the state and other national efforts to more accurately measure New England and US goals related to climate change mitigation.

As a result, Hanover will leverage this project to gain better insight into best practices across the state of NH and the broader New England region, how best to leverage the expertise of our NH based associations, and to share the outcome of our work as a guide book for others wishing to implement similar strategies. Additionally, the fellow’s work will directly support the inclusion of our community in the growth of better NH data on clean energy deployments.

The fellow will also have the opportunity to work with a dedicated group of municipal and committee staff, working on a project that is directly implemented. The fellow will gain experience in a smaller municipality with less bureaucracy and high degree of access to decision makers, specifically increasing:
- Understanding of/interest in learning about municipal operations, finance, budgeting, and strategic decision making (town meeting form of government)
- Experience with all-volunteer community organizations and driving community action campaigns
- Understanding of solar RFP process, solar installation development process, commercial & residential solar developers
- Experience in strategic communications with various non-municipal entities including commercial, institutional, and residential energy users
- Presentation and data analysis skills
- Solar mapping and GIS visualization
- Website, written and social media communications

This is a fantastic opportunity to gain specific experience in taking a strategy/plan and guiding implementation, in this case, of solar installations.

**Desired Qualifications:**
- High degree of curiosity and an analytic frame of mind
- Academic background in environmental science/policy, engineering, economics, urban planning, data analysis, or a related field
- An understanding of solar PV implementation, solar development/finance, and/or sustainability policy would be helpful
- Exceptional qualitative and quantitative research and analysis skills are a must, including the ability to utilize multiple data sources to inform planning
- Specific skills in Excel and/or database software are desired, GIS skills are a plus
- Strong oral and written communication skills - experience with communication strategy and/or graphic design skills would be helpful
- The ability to work both independently and within a group to think creatively to solve problems, including willingness to encourage and display empathy for diversity, and emotional maturity
- Interests in clean energy technology and policy implementation at the municipal scale are desired, along with a genuine passion for researching and using data to answer questions

**Work Location:** Town of Hanover, Sustainable Hanover Committee, 41 S Main Street, Hanover, NH 03755

**Mentors:** April M. Salas, Sustainability Director, Town of Hanover, NH; Julia Griffin, Town Manager, Town of Hanover, Judi Colla and/or Yolanda Baumgartner, Sustainable Hanover Committee

**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](http://www.sustainableunh.unh.edu/sustainability-fellows).

**Questions** may be addressed to [megan.carney@unh.edu](mailto:megan.carney@unh.edu).