

2020 Sustainability Fellow / Social Innovation Intern Project Application and Partner Organization Agreement

Project Application

Organization: City of Concord, New Hampshire

Address: 41 Green Street, Concord, NH 03301

Supervisor/Mentor's:

Name: Rob Werner

Title: Concord City Councilor; Concord Energy and Environment Chair

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Name: Sam Durfee

Title: Concord City Planner

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1) One Sentence Project Overview:

The City of Concord would like to request the help of a Sustainability Fellow to produce a baseline greenhouse gas inventory (c. 2016-2019) for Concord, New Hampshire, as a result of electricity, heat, and transportation energy use throughout the city, including the municipal government and surrounding community.

Description of Organization, Company or Agency:

The City of Concord, with a population of 42,000 people, is the state capital of New Hampshire. In July 2018, Concord adopted a 100% renewable energy goal by unanimous vote of the City Council. Specifically, the City committed to the following community-wide goals:

- 100% of electricity consumed in Concord will come from renewable energy sources by 2030;
- 100% of thermal energy (heating and cooling) consumed in Concord will come from renewable energy sources by 2050; and
- 100% of transportation in Concord will be clean transportation by 2050.

2) Project Description:

Be sure to include project goals, anticipated outcomes, and which tangible product(s) will result from this project (e.g. a report, an event, a video, a presentation, etc.).

The City of Concord requests the help of a Sustainability Fellow to produce a baseline greenhouse gas emissions inventory for a recent year (2017-2019) in order to set interim targets and measure progress against the city's 100% renewable energy goal. The inventory should represent all major sources of greenhouse gas emissions from electricity, thermal, and transportation fuel consumption within the city. A standardized and replicable methodology needs to be applied so that future monitoring efforts can be compared against the baseline year inventory. To date, the city has produced a cursory greenhouse gas emissions inventory based on volunteer effort, but this method needs to be verified and subsequently expanded upon with the addition of more data sources. Specific deliverables for this internship includes:

1. A proposed, replicable methodology to represent greenhouse gas sources and emissions used for the municipal government and community. Methodology should include a list of proposed data sources, a reference methodology, and proposed conversion factors from fuel consumption to emissions.
2. A greenhouse gas emissions inventory for the baseline year, stating consumption and estimated emissions from all major and minor sources of electricity, thermal energy, and transportation fuel energy consumed

in the city in the baseline period. Inventory should be broken down by municipal, residential, and commercial sources as possible.

3. A final report and presentation to city staff and the Concord Energy and Environment Advisory Committee (CEEEAC). The final report should include the proposed methodology, the inventory, assumptions and shortcomings, and proposed next steps.

3) If the proposed project is data intensive (e.g. a greenhouse gas inventory), describe your plan and timeline for acquiring the data necessary for completion of the project.

CEEEAC volunteers and Concord city staff have already identified major sources of emissions and acquired data from Unitil on electricity consumption, from the city on the number of cars registered in Concord by fuel consumption type. We have requested natural gas usage information from Liberty Utilities, and we are continuing to follow that. To date, we our home heating information is disparate, and comes from the American Community Survey (2013-2017) on residential thermal heating by type. We also have data on number of commercial natural gas customers, and therms used annually. We will continue to identify and pursue data sources, but will look to the fellow to review and augment the list as part of this project.

4) What specialized skills, degrees, or experiences would Fellow(s)/Intern(s) need to succeed in the proposed project, and in your organization?

We expect that the Sustainability Fellow will be pursuing, or will have recently completed, graduate work in the area of Environmental or Climate Change science. They should have comfort with data collection and analysis, and basic excel skills.

5) What skills/expertise will potential Fellow(s)/Intern(s) gain from this project with your organization?

The fellow will gain experience applying theoretical applications of greenhouse gas emissions inventories to a real-world situation. The fellow will communicate with a variety of stakeholders, and present findings in written and oral format.

6) Describe how this project is likely to catalyze long-term, substantial change, and/or provide a replicable model for other organizations to use.

The results of the fellow's work will have immediate impacts. The inventory will identify greenhouse gas emissions "hotspots" within the city, and help us to set priorities for reducing our fossil fuel use. The methodology developed will be further elaborated on after the term ends, and will be updated with new data at regular intervals.

7) Why should an exceptional sustainability-oriented student choose this project – what makes it special?

The Sustainability Fellow's efforts will have direct implications for directing the City of Concord's progress towards reaching its 100% renewable energy goal and weaning off fossil fuels. As the capital city of New Hampshire and the 72nd city in the US to sign a 100% renewable energy commitment, we expect that other cities will be looking to Concord as a model to learn from. Finally, since Concord, NH is one of a short but growing list of governments and companies that have signed a 100% renewable goal, we expect that the fellow will be well-situated to take on a sustainability, climate change, or consulting role with a host of organizations and companies.

Partner Organization Agreement

My organization would like to be considered to host:

One student:

- One UNH Sustainability Fellow
- One Social Innovation Intern
- Either one Sustainability Fellow OR one Social Innovation Intern

Multiple students:

Host sites are encouraged to consider hosting multiple students, and in particular, a combination of Fellows and Interns. In our experience, both the project's impact and the students' experience benefit substantially from this arrangement.

My preference for multiple students is as follows:

Partner Agreement:

I have read, and understand, what is expected of a Partner Organization, and am authorized to commit to these requirements on behalf of my organization.

- [Social Innovation Internship Host Site Expectations](#)
- [Sustainability Fellowship Host Site Expectations](#)

I agree that the Fellowship Mentor/Social Innovation Internship Supervisor from my site (or a proxy on my behalf) will (check each):

- Submit position description and high-resolution company/organization logo by January 13.
- Provide input on Fellow/Intern selection.
- Be accessible on a day-to-day basis, and reserve at least one hour per week to meet with Sustainability Fellow/Social Innovation Intern.
- Encourage Fellow/Intern's participation in weekly training, networking, and development activities.
- Provide a workspace, computer, phone, and other necessary project-related resources for the Fellow/Intern (including support for project-related travel).
- Provide a written evaluation at the end of the summer.

For Sustainability Fellow Sites Only:

- Submit draft workplans, and final workplan by April 30.
- Attend Orientation in Durham (May 27, 2020).
- Attend either Mid-term (July 10, 2020) or Final (August 7, 2020) Presentations in Durham.
- Participate in 2-3 coordination calls and provide 2 written updates.

For Social Innovation Internship Sites Only:

- Attend the End of Summer Showcase (July 23, 2020) presentations in Durham.

Check here if the potential Fellow(s)/Intern(s) will require personal vehicle(s) for project-related travel.

Fellow(s)/Intern(s) will be reimbursed by host organization at standard mileage rates for project-related travel using personal vehicles. *[not required, but recommended]*

If required by law, my organization is an Equal Opportunity Employer and has an Anti-Discrimination Policy in place, and we understand that [UNH has a Discrimination and Discriminatory Harassment Policy](#) in place as well. Any incidents of discrimination or discriminatory harassment involving a Social Innovation Intern or Sustainability Fellow will be reported without delay to UNH (contact info below).

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Match Agreement:

- I am authorized to invest \$5,000 per student to support the work of Sustainability Fellow(s)/Social Innovation Intern(s) at my organization. **OR**
- My organization would like to apply for a grant to reduce the matching cost. Check all that apply:
 - This would be the first UNH Sustainability Fellow/Social Innovation Intern for my organization.
 - My organization is a non-profit.
 - My organization is a small municipality (pop. less than 50,000).
 - My organization is a start-up.
 - I am submitting on behalf of a New England Municipal Sustainability Network Working Group.
 - My organization has limited resources (please explain below).
 - I am authorized to commit to providing \$ _____ in matching costs to support the work of a Sustainability Fellow/Social Innovation Intern at my organization.

For Sustainability Fellows Sites Only:

- My organization will provide the match contribution to UNHSI by May 1. **OR**
- My organization would like to request a modified payment schedule as such:

We do not have funding for this position, and would like to request grant coverage of \$5000 . We are still in the strategic planning phase for the 100% renewable energy goal, so funding has not been allocated towards activities. However, we find this proposed activity to be essential towards setting priorities for implementation and mobilizing stakeholders towards a comment set of goals.

For Social Innovation Intern Sites Only:

- My organization will hire the selected Social Innovation Intern as a temporary employee and pay the Intern \$4,000 for their work over the course of the internship term.
- My organization will contribute \$1,000 toward the operation of the Social Innovation Internship program, which will be paid to Changemaker Education by May 1. **OR**
- My organization would like to request a modified payment schedule as such:

Signature

Date

Questions?

Contact Megan Carney for Sustainability Fellowship information at megan.carney@unh.edu.
Contact Faina Bukher for Social Innovation Internship information at faina.bukher@unh.edu.