



## Call for Proposals

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BU Sustainability, in collaboration with the Office of Research, is soliciting ideas for the Campus Climate Lab at Boston University! The Campus Climate Lab is an opportunity to use the BU campus as a living laboratory to advance sustainability practices and support the University's [Climate Action Plan](#). We are soliciting requests for research proposals from students and faculty to generate new knowledge on the impacts, adaptation, and/or mitigation of climate change that can be implemented at BU.

### Overview

Cities are feeling the brunt of climate change, but are also centers for innovation. Cities increasingly bear the impacts of climate extremes, including flood and heat events and unhealthy levels of air pollution. With a population of about 45,000 and 324 buildings that span 134 acres on its campuses, BU is a city within a city.

Using the BU campus as a living laboratory provides an opportunity to harness the University as a testbed for innovative climate solutions. The Campus Climate Lab seeks to advance research and catalyze our community by promoting, demonstrating, and implementing our commitment to sustainability and climate action. Efforts can range from science and engineering to health and communications, and partnership with University operations is essential to access data and implement change.

Project ideas can originate from students (from undergraduates to PhD students), faculty, the BU Climate Action Plan, BU Sustainability, or other avenues. However, **all projects should support the goals of the University [Climate Action Plan](#) and create new, actionable knowledge to be integrated into BU operations and culture.**

### Research Teams

All Campus Climate Lab research teams must include **student(s), faculty mentor(s), and a collaborator from BU Operations**. Implementation is our primary goal, and BU Operations (e.g., facilities, grounds, building systems, etc.) is critical to locating appropriate data, establishing study sites, and implementing real change. Sample project ideas are provided to illustrate what these collaborations might look like.

Campus Climate Lab research teams provide unique opportunities for interdisciplinary collaborations and student mentorship. Graduate-level students can carry out research as part of a team and/or help mentor undergraduates in the research. Research teams can be comprised of multiple faculty members, students (from undergraduates to PhD students), or Operations partners.



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## Process

Campus Climate Lab research projects will be awarded following the submission of a 2-page research proposal. To be considered for funding, research proposals must include a complete research team with student(s), faculty, and a clear, meaningful connection to University Operations.

Proposals will be evaluated by a Campus Climate Lab team of reviewers, consisting of faculty from BU departments including Earth & Environment, Environmental Health, and Engineering, as well as BU Sustainability and the Initiative on Cities.

### Brainstorming initial project ideas: Virtual Campus Climate Lab “Office Hours”

Do you have an idea for a Campus Climate Lab project and need help connecting with faculty or students, finding an Operations partner, or refining your proposal? Join us for Campus Climate Lab Office hours! Members of the Campus Climate Lab team will be available to help brainstorm and refine ideas before proposals are due. Join us on Zoom on these dates:

- **Tuesday, February 1, 9 – 10am.** Register for [Zoom details](#).
- **Thursday, February 3, 1 – 2pm.** Register for [Zoom details](#).

*\* Participation in Campus Climate Lab Office Hours is optional and will not affect the award process.*

### Submit your research proposal

Research proposals should be no more than 2 pages in length (single space in 12-point Times font; abstract and budget not included in 2-page limit) and include the following elements:

1. Include a full project team, with involvement from student(s), faculty, and Operations. List all team members and their respective departments and roles (faculty, operations, undergraduate student, PhD student, etc.).
2. Include a project title.
3. Articulate a clear linkage to the goals of the BU Climate Action plan.
4. Describe the proposed activities, timelines, and anticipated new actionable knowledge.
5. Describe a vision for how the research can be implemented to advance sustainability.

Additionally, include a detailed budget with justification (1-page maximum) and a 150–200 word abstract. Abstracts should:

- Describe the research question & sustainability issue you’d like to address.
- Describe how the results of your work could be implemented at BU to advance sustainability.

**Submit your research proposal as a single PDF to [cclab@bu.edu](mailto:cclab@bu.edu) by 11:59pm on Wednesday, February 9, 2022.** Research awards are open to students and faculty of all BU schools and colleges.

## Sample Topics

Below are a few examples of potential research themes and projects based on the University [Climate Action Plan](#). These are intended to be illustrative – do not feel limited to these themes.

### Prepare BU for Climate Change

- Develop early warning capabilities for heat waves and air quality alerts.
- Monitor indoor or outdoor air quality in real-time on both the Charles River and Medical Campuses.



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- Identify best practices and locations for permeable pavement to reduce flooding.
- Identify best practices to reduce the urban heat island effect.

## **BU Net Zero Direct Emissions by 2040**

- Research toward reducing BU energy demands by 31% by 2032.
- Determine pathways to improve building efficiency.
- Explore strategies to shift energy sources toward renewables.
- Accurately track, manage, and report carbon sequestration on BU properties.

## **Act on BU's Indirect Emissions**

- Improve waste stream logistics, metrics, and greenhouse gas accounting.
- Develop system for real-time waste/recycling weight and composition data at the container level.
- Develop Scope 3 analysis for the University's waste stream.

## **Funding**

Funding will be commensurate with the scope of the project, with awards anticipated in the range of ~\$1,000 to > \$10,000 per year. Project duration can range from one semester up to one year. We anticipate work can begin by the week of 2/22/2022.

Allowable expenses include student salary/stipend, research supplies, analytical costs, and publication/dissemination costs. For parity across projects, the undergraduate student hourly rate will be \$14.25/hour with no fringe. The graduate student hourly rate will be \$17/hour with 9.9% fringe.

Project implementation costs do not need to be included in the project budget.

## **Anthony Janetos Climate Action Prize**

Students who participate in the Campus Climate Lab and successfully complete the requirements will be eligible for the Anthony Janetos Climate Action Prize. This prize honors and continues the legacy of Professor Anthony Janetos, who chaired the 2017 Climate Action Plan Task Force, leading to the creation of the University Climate Action Plan and the Campus Climate Lab.

This recognition will be awarded annually each spring to the student or team of students involved in a project through the Campus Climate Lab that is judged to have the most substantial potential impact on advancing the goals of BU's Climate Action Plan and shifting toward more sustainable University operations.

## **Submission Timeline**

**Friday, 1/28:** Campus Climate Lab information & presentation session, 1 – 2:30pm ET.  
*Register for [Zoom details](#).*

**Tuesday, 2/1** Campus Climate Lab Office Hour, 9 – 10am ET.  
*Register for [Zoom details](#).*

**Thursday, 2/3:** Campus Climate Lab Office Hour, 1 – 2pm ET.  
*Register for [Zoom details](#).*

**Wednesday, 2/9:** Full proposals are due by **11:59pm on February 9, 2022.**

**APPLY ONLINE BY 2/9/22: [bu.edu/urbanclimate/apply-now](https://bu.edu/urbanclimate/apply-now)**