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House Select Committee on the Climate Crisis
H2-359 Ford Building
Washington, DC 20515

Via email: ClimateCrisisRFI@mail.house.gov

To Whom It May Concern:

Thank you for the opportunity to respond to the House Select Committee on the Climate Crisis Request for Information (RFI) regarding climate policy. Boston University (BU) is committed to addressing the changing climate both as an organization with a large physical presence in an urban community and as an organization that conducts research into issues such as urban sustainability and resilience.

BU's [Climate Action Plan](#) calls for us to achieve net zero emissions by 2040, and we have taken aggressive action to reach that goal. We are currently building a [19-story academic and laboratory space](#) that will operate without fossil fuels. Instead, this Data Science Building will rely on [geothermal wells](#) and advanced energy efficiency measures. We have also signed a power purchase agreement with a [South Dakota wind farm](#) to offset BU's emissions by 53%.

We have also organized teams of researchers to tackle the climate issue collectively. The [Institute for Sustainable Energy](#) (ISE) is a university-wide center dedicated to accelerating the transition to a sustainable, climate-safe global energy system through research, policy analysis, and collaborative engagement. The [Urban Climate Initiative](#) is an interdisciplinary effort to develop effective solutions to urban climate mitigation and adaptation challenges and to improve the health and livability of cities. We would be pleased to share the expertise of our faculty with the Committee.

We appreciate the Committee's engagement with stakeholders, and would like to submit responses to two of your questions.

Cross-Cutting Policies

5. Innovation:

a. Where should Congress focus an innovation agenda for climate solutions? Please identify specific areas for federal investment and, where possible, recommend the scale of investment needed to achieve results in research, development and deployment.

Congress should significantly invest in the federal research agencies that fund innovative science and technology solutions and develop the next generation workforce needed to address the changing climate: the National Science Foundation (NSF), the U.S. Department of Energy (DOE), and the National Aeronautics and Space Administration (NASA), among others. Without substantial financial support from these agencies, universities like BU would not be able to carry out important scientific inquiries such as the following:

National Science Foundation

- *NSF Coastlines and People (COPE)*: BU ocean scientists are developing novel sensor systems that will allow for a wide variety of stakeholders in coastal communities to "rent" state-of-the-art carbon cycling sensors. COPE collects critical data on [coastal carbon cycling](#), which is currently not well understood, and assesses the technological needs of coastal communities to adapt to their changing ecosystems.
- *NSF Research Traineeship Programs (NRT)*: The BU URBAN program [provides Ph.D. students in environmental sciences and public health with training in policy](#), communications, governance and management. The program prepares them for careers in academia, government agencies,

nongovernmental organizations, and the private sector that require a multi-faceted understanding of how science and policy intersect.

- *NSF Future of Work at the Human-Technology Frontier*: Artificial intelligence researchers at BU are developing robots that will [revolutionize recycling](#). A key component of the project is to evaluate better job options for those displaced by the potentially automated process, ensuring that workers are properly prepared for future opportunities.
- *NSF Office of Polar Programs*: A BU archaeologist is leading a team [analyzing how previous climate change in coastal Alaska impacted animal biodiversity and human foraging](#) activity.

Department of Energy

- *DOE Office of Energy Efficiency and Renewable Energy*: A BU engineer is using a DOE grant to develop a [toolkit to reduce energy use and improve indoor air quality in multifamily buildings](#).
- *DOE Advanced Research Projects-Energy (ARPA-E)*: BU led a team of researchers across the country to develop an “[internet of cars](#)”— smart cars that can communicate with each other and infrastructure to make better traffic decisions. This technology has the potential to reduce energy consumption and air pollution.

These projects are just a small sample of the important research our federal research agencies support to help us better understand our changing climate and its impacts on society. Any comprehensive climate legislation should include strong investments in NSF, DOE, NASA and other research agencies to ensure we are investing in the best science possible to inform how we address and adapt to climate change.

Climate Information Support

12. Our understanding and response to the climate crisis has relied on U.S. climate observations, monitoring and research, including regular assessment reports such as the National Climate Assessment. What policies should Congress adopt to maintain and expand these efforts in order to support solutions to the climate crisis and provide decisionmakers – and the American people – with the information they need? Where possible, recommend the scale of investment needed to achieve results.

Congress should increase funding for research programs and infrastructure that enhance our understanding of the changing climate, including the following:

- *NASA Science Mission Directorate*: BU scientists use research funding for NASA satellites and monitoring to holistically understand Earth as a unified system. They are [predicting future climate change](#), [monitoring greenhouse gas emissions in cities](#), and [studying how human and natural emissions interact to impact air quality](#). Utilizing these tools enable us to more accurately predict climate shifts, and better inform climate policy as a result.
- *NSF National Ecological Observatory Network (NEON)*: BU earth scientists are collaborating with colleagues across the country to build a community that can provide [accurate forecasts for how ecological systems will evolve](#) utilizing data from NSF’s NEON.

Thank you again for the opportunity to share our views with the Committee. Please do not hesitate to contact me if you would like to discuss our comments in further detail.

Sincerely,



Gloria Waters

Vice President and Associate Provost for Research