



Boston, Massachusetts

A White House Climate Action Champions Case Study

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Executive Summary

The City of Boston has long been a leader on climate action, working toward a dramatic reduction in its greenhouse gas emissions (GHG) and preparing for the unavoidable impacts of climate change. Of the most notable accomplishments to achieve that end, Boston has been a leader in reducing citywide GHG emissions by encouraging and supporting energy efficiency in large buildings and institutions through the Mayor's Carbon Cup. The Carbon Cup recognizes large organizations, and their commitment to reducing their emission of GHGs 35 percent by 2020. This voluntary program is unique in that it spurs innovation and carbon reductions with minimal cost to the City. The recognition provided by this initiative provides the incentive to participate which has yielded seven commitments of approximately 19.2 million square feet.

Climate Action Champion

The City of Boston has always taken an integrated approach to address climate change, starting with the City's Executive Order on Climate Action in 2007, which set municipal and community-wide goals for both mitigation and preparedness. Despite a growing population and economy, Boston has achieved a measurable GHG emission reduction of 17 percent since 2005. Looking forward, Boston is working diligently and creatively to achieve its GHG emissions reduction goal of 25 percent by 2020 and 80 percent by 2050, while continuing to account for continued growth. In fact, across municipal operations, Boston has already achieved the 2020 goal this year – six years ahead of schedule. This commitment to going above and beyond the original goals, and developing a program that yields low cost reductions sets Boston apart as a Climate Action Champion.

Project Spotlight: Mayors Carbon Cup

The Mayor's Carbon Cup recognizes the commitments of large organizations – hospitals, universities, and commercial building portfolios – to reduce their greenhouse gas emissions intensity 35 percent by 2020, and is a critical strategy in achieving citywide GHG emission targets.

Together, large buildings and institutions contribute approximately 50 percent of Boston's GHG emissions. A large percentage of Boston's total building square footage and carbon emissions is concentrated in a relatively small number of these buildings. Thus, participants of the Carbon Cup have an immense impact on the City's climate goals and serve as leaders for others within the sector. The recognition provided by the Carbon Cup program also serves to elevate the importance of the emissions reductions undertaken by the participants, and set an example for others.

Since its launch in April 2014, there are a total of seven participants in the Carbon Cup, which have collectively committed approximately 19.2 million square feet to a 35 percent greenhouse gas emission reduction. The participants to date include: Partners HealthCare-Brigham and Women's Hospital, Boston University, Harvard University (within Boston city limits), Partners HealthCare-Massachusetts General Hospital, Boston Properties, Boston Medical Center, and the Federal Reserve Bank of Boston.

Those pledging to the Carbon Cup commitment must enroll at least 1 million square feet and commit to a 35 percent reduction in GHG intensity. Pledges may choose 2005, or the next earliest available year with energy data, as a baseline for reductions. The City's Building Energy Reporting and Disclosure Ordinance (BERDO) establishes the reporting framework for easy participation in the Carbon Cup. Through BERDO, the City will track year-over-year progress towards each portfolio's goal.

A continuous key partner in these efforts is the Boston Green Ribbon Commission (GRC). The GRC, formed in 2011 and now co-chaired by Mayor Walsh, is a group of business, institutional and civic leaders in Boston working to develop shared strategies for fighting climate change in coordination with the City's Climate Action Plan.

Co-benefits for Boston

The Carbon Cup's public pledge is a platform that provides recognition to leading organizations who make the commitment for progressive GHG emission reduction goals. This mechanism demonstrates to institutions in similar sectors that deep cuts are a realistic part of operations; these leaders provide a model that makes an abstract concept both more concrete, as well as prove its feasibility.

The program also creates opportunities for economic growth through multiple avenues. First, it saves businesses on energy costs in the long run through the use of energy efficiency technologies. Secondly, it creates employment opportunities through driving demand for efficiency services, and demand for renewable energy technologies.

Ongoing challenges and lessons learned

The first obstacle was determining strict guidance on the assessment of emissions reductions. To address that, Boston set a limit on the amount of reductions that could be attributed to renewable energy purchases to keep the focus on existing building energy efficiency. Additionally, Boston needed to streamline the reporting process and integrate that into current practices. Using the City's Building Energy and Reporting Ordinance, participants now use the same tracking system as the annual energy reporting for all large buildings. Having a centralized and standardized emissions reporting system is a vital part of what makes the Carbon Cup program successful and unique.

The ongoing challenge is that it's a major commitment to pledge to a 35 percent GHG reductions by 2020. To encourage and support new participants, Boston works to identify realistic and ambitious candidates to achieve such a complex target, and key partners like the GRC help in that process.

Resources/Learning More

1. http://www.greenovateboston.org/carbon_cup
2. <http://www.cityofboston.gov/eeos/>

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Project Facts

Project Duration

April 2014 – Ongoing

Project Staff Required

Climate and Buildings Program Manager

Population Served

Approx. 656,000

Community Type

Neighborhoods, Large Buildings and Institutions

Partners

Boston Green Ribbon Commission

Tools & Resources

http://www.greenovateboston.org/carbon_cup

Project Impact

- Large buildings and institutions contribute approximately 50 percent of Boston's GHG emissions.
- Total of 7 Carbon Cup participants since 2014 launch
- Approximately 19.2 million square feet, to date, committed to a 35 percent GHG reduction

Project Costs and Funding

The Mayor's Carbon Cup is an initiative of the Mayor's Office of Environment, Energy, and Open Space with help from the Boston Green Ribbon Commission. There is a member of EEOS staff who manages the recruitment, participation, and tracking of the Carbon Cup. Participants receive an award presented by the Mayor that is hand-crafted by Artists for Humanity www.afhboston.org.