1. Prepare for climate change
2. Net zero direct emissions by 2040
3. Act on indirect emissions
4. Climate change education & research
5. Integrate CAP with BU strategic plan
**TIMELINE**

**BU WIND**
- FIRST ATTEMPT
- CAP
- PPA PROCESS
- CONSTRUCTION
- ZERO EMISSIONS FOR 100% OF BU ELECTRICITY

**CENTER FOR COMPUTING & DATA SCIENCES**
- FIRST DESIGN
- UPDATE DESIGN
- WELLS
- CONSTRUCTION

**timeline**

- 2013
- 2014
- 2015
- 2016
- 2017
- 2018
- 2019
- 2020
- 2021
- 2022
- 2023

BU wind
Center for computing & data sciences
CENTER FOR COMPUTING & DATA SCIENCES
6 REASONS IT IS LEADING THE TRANSFORMATION
First Floor set at 1.25 feet above
BU Elevation of Resilience
1. Reduce demand by 31% by 2032

2. Shifting away from fossil fuel use to electricity for heating and cooling to enable a transition to renewables

3. Sourcing renewable energy to match 100% of the University’s electricity demand, and

4. Beginning the transition of BU’s fleet of vehicles to electric
REASON #2 ENERGY EFFICIENCY

BUILDING ENCLOSURE

Diagonal Louver Facade Design

Sawtooth Facade Design

Triple Glazing
REASON #2 ENERGY EFFICIENCY

BUILDING SYSTEMS

1. Enhanced HVAC System
2. Chilled Beams
3. 1,500 foot deep geothermal systems
Reason #2 Net-zero Direct Emissions

Carbon Free Building - Achieving a Carbon Free Center for Computing & Data Sciences

- Base Case: 1,388,488 kg CO₂e
- Efficiency: 988,901 kg CO₂e
- Electrification Geothermal (Fossil Free)
- Renewables: Zero kg CO₂e
REASON #2 NET-ZERO DIRECT EMISSIONS

GEOTHERMAL WELL DRILLING
REASON #2 NET-ZERO DIRECT EMISSIONS

RENEWABLE ENERGY
REASON #3 INDOOR ENVIRONMENTAL QUALITY

INTERCONNECTED SPACES
REASON #4 OUTDOOR ENVIRONMENTAL QUALITY

SEVEN LEVELS OF GREEN ROOFS

L17 East Terrace
L10 North Terrace
L7 West Terrace
L5 South Terrace
L15 South Terrace
L12 East Terrace
L17 Sky Court
REASON #5 EMBODIED CARBON

REDUCING EMBODIED CARBON
REASON #6 CLIMATE LEADERSHIP

SEEKING LEED PLATINUM

Certified
40-49 points earned

Silver
50-59 points earned

Gold
60-79 points earned

Platinum
80+ points earned

- Integrative Process
- Location & Transportation
- Sustainable Sites
- Water Efficiency
- Energy & Atmosphere
- Materials & Resources
- Indoor Environmental Quality
- Innovation in Design
- Regional Priority
- TOTAL
Mayor Martin J. Walsh joins BU leaders at the Center for Computing & Data Sciences groundbreaking.
December 2019. Photo: Cydney Scott for Boston University Photography.
Mayor Martin J. Walsh signs Executive Order that all new municipal buildings will be carbon free. December 2019. Photo: Dennis Carlberg.