

# LBE EARTH WEEK 2021

In recognition of the 51st Anniversary of Earth Day, the LBE team would like to recognize the Massachusetts state entities taking leadership across a range of energy and sustainability initiatives. These entities represent just a few of the many facilities paving the way to a decarbonized future for the Commonwealth.

## Recent and Upcoming Facility Decarbonization Achievements

### LONG-RANGE PLANNING FOR EXISTING FACILITIES

- **UMass Amherst** and **UMass Dartmouth** have recently completed studies to chart pathways to net zero emissions for the campuses.
- **UMass Lowell** and **Salem State University** decarbonization plans are nearing completion, and a **UMass Boston** study will begin soon.
- The **Division of Capital Asset Management & Maintenance (DCAMM)** is integrating decarbonization with the master plan at **Mass. Maritime Academy** and reducing emissions through efficiency projects.



### NEW CONSTRUCTION & SUBSTANTIAL RENOVATIONS



Many DCAMM projects are prioritizing strategic electrification and are targeting superior energy performance for new construction and major renovations.

- The **Chelsea Soldiers' Home** new Community Living Center will use ground-source heat pumps, a tight envelope, and energy efficiency measures to virtually eliminate the need for onsite fossil fuel use.
- New buildings at **MassBay**, **Bunker Hill**, and **Cape Cod Community Colleges** will use ground- or air-source heat pumps for heating & cooling and will be net-zero energy ready.
- The **Westfield State** Parenzo building, **DUA Brockton**, and **Lowell Justice Center** were designed to achieve best-in-class energy use intensity: 39, 44, and 35 kbtu/square foot respectively.
- **DCAMM** is currently designing a Passive House facilities maintenance building, the first in the state portfolio.

### CLEAN ENERGY

- In an extensive energy project managed by DCAMM, **Massachusetts Emergency Management Agency (MEMA)** installed an air-source heat pump to meet heating/cooling needs along with a 275 kW solar canopy.
- **UMass Boston** completed an innovative energy system featuring 1.1 MW solar, 500 kW energy storage, and 11 EV charging stations.
- **MWRA** brought two standalone battery energy storage systems online in late 2020 through a demonstration program with Eversource.
- **MBTA** began running on 100% GHG emissions-free electricity from Maine hydropower.



### CLEAN TRANSPORTATION



- **Bristol** and **Mt. Wachusett Community Colleges** were each recently awarded MassEVIP grants to install Level II charging stations - 10 and 3 chargers respectively.
- **UMass Medical School** leveraged utility make-ready program funding to pay for a significant portion of equipment & installation costs for 18 Level II charging stations.
- **MassPort** recently installed 3 charging stations for employee use, bringing the total number of charging ports at Logan Airport to 43.
- **MassDOT** is implementing plans to install Fast Charging stations at 7 Service Plazas & Info Centers and 24 Level II stations at 7 Park & Ride sites.