

Commercial Battery-Powered Landscaping Equipment for MA State Facilities

Is your current gardening or landscaping equipment approaching the end of its useful life? Now is the time to look into clean alternatives!



Converting from gasoline and propane to battery-powered landscaping equipment offers an opportunity to reduce the onsite combustion of fossil fuels and associated emissions from landscaping and lawn maintenance, while providing additional benefits to staff, the local community, and surrounding environment. This guide is intended to provide an introduction to this equipment and outline steps your facility can take to procure them.

What is battery-powered landscaping equipment (BPLE)?

Several types of landscaping equipment, including mowers, string trimmers, and leaf blowers, are commercially available as battery-powered. This equipment has proven track records, often performing as well as traditional equipment and meeting the gardening and landscaping needs of many state and municipal facilities across the Commonwealth. Transitioning to this equipment offers several benefits, described below.



What are the potential benefits of converting to BPLE?

Reduce GHG emissions

CO₂

Traditional equipment relies on combustion of fossil fuels, resulting in the release of greenhouse gases. A 10 horsepower commercial walk-behind mower, for example, emits some 23lbs of CO₂ per hour⁽¹⁾. Switching to battery-electric alternatives eliminates these onsite emissions.

Lower maintenance and fuel costs



Gasoline and petroleum-powered equipment require regular oil changes, engine maintenance and part replacements, air filter changes, and more, in addition to fuel costs. Much of this care and maintenance cost is avoided in battery-powered equipment.

Improve health and wellness



The lack of direct emissions from electric landscaping appliances eliminates harmful fumes and particulate matter from the vicinity during use. State facility staff currently using BPLE have noted several other benefits, including reduced noise levels and irksome vibrations, eliminating the need to store hazardous chemicals, and overall ease of use and equipment care.

1: Based on [OSD Commercial Battery-Powered Electric Lawn and Garden Equipment Calculator](#)

Commercial Battery-Powered Landscaping Equipment for MA State Facilities (cont.)

What equipment is available and which state entities are using them?

BPLE currently available through OSD Statewide Contract FAC116 includes **push mowers, walk-behind mowers, ride-on mowers, zero-turn mowers, blowers, and string trimmers**. State entities currently using BPLE include the **Department of Conservation and Recreation, MassDOT Aeronautics, Massasoit Community College, UMass Amherst, and UMass Lowell**.



"Our battery powered mower works great! It is comfortable and quiet, has comparable power to any gas powered mower in its class, and there is very little maintenance. For those reasons my staff love to use it. It has 7 hours of run time and we haven't yet come close to running it out of power."

--Chris Hoffman, DCR Walden Pond

Picture Source:
MassDOT Aeronautics

What's the best way to get started?

- If you are interested in learning more or talking to state facilities using battery-powered equipment, contact the Leading by Example team to get connected.
- Equipment can be purchased from OSD Statewide Contract [FAC116 Lawns & Grounds, Equipment, Parts and Services](#).
- Additional resources, including a cost-benefit calculator comparing battery to gas-powered equipment, is available on the [Leading by Example website](#).

