

Decarbonization Outside Our Walls: Battery-Powered Landscaping and Electric Utility Vehicles

September 13, 2022

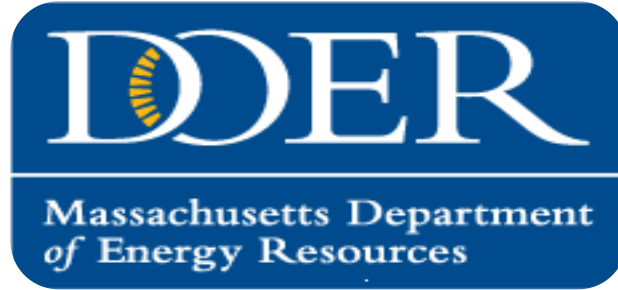
Agenda

11:15 a.m. - 12:00 noon - Landscaping and Non-Plated Vehicle Electrification Overview

- Reasons to target electrification - environmental, health, and financial benefits (Jamie Banks, Quiet Communities)
- Leveraging Statewide Contract (Julia Wolfe, OSD)
- Resources to support landscaping electrification (Julia Wolfe, OSD)
- User experience testimonies
 - Chris Hoffman, DCR Walden Pond
 - David Pinsonneault, Town of Lexington
 - Ben Smith, Town of Wellesley

12:00 noon - 1:00 p.m. - Ride and Drive

- Test battery-electric equipment offered through Statewide Contract FAC116
- Speak with FAC116 vendors
- Engage with presenters



Jamie Banks

Founder and President, Quiet Communities

Considerations in Making a Successful Transition to Battery Electric

Ride and Drive Event, Statewide Contract FAC116
Battery-Powered Landscaping Equipment

September 13, 2022



A big opportunity

- Better health, improved quality of life
 - Workers
 - Public
- Cleaner, quieter environment
- Healthier ecosystems
- Cost savings
 - Avoided fuel
 - Reduced maintenance
- Clean green jobs sector



The Future

Energy
(Solar/Wind)



Electric Motors



Fleet Management



Recycling



Electrical
Infrastructure



Energy Storage
(Batteries)



Software/
Data Analytics



Robotics/AI



Investment/ROI



Customer
Satisfaction

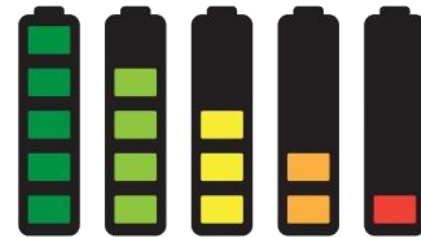
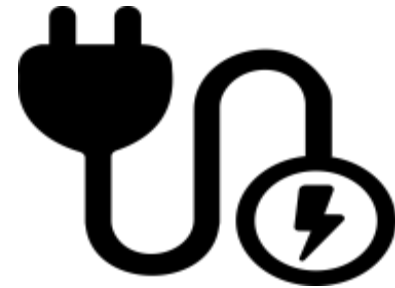
Considerations

- ICE vs battery electric
 - Implications
- Commercial vs prosumer vs residential grade
- Work productivity considerations –
 - Changes in practice to optimize
- Safe storage spaces
 - Mobile - fixed



Considerations

- Charging
 - Mobile vs fixed
- Adequate electric infrastructure
- Turnkey electric solutions
- Factors impacting battery life cycle
- Repurposing/recycle batteries



Equipment Selection

Overall Equipment Criteria

- Power levels
- Product quality
- Certification
- Run time
- Reliability
- Noise level
- Weight and ergonomic factors
- Certifications
- Customer support
- Warranty

Other Battery-Specific Criteria

- Chemistry
- Voltage
- Charge time
- Lifetime
- Interchangeability
- Damage, electric shock protection
- Water resistance
- End of use cycle indicator
- Recycling/repurposing
- Warranty

Education and training are critical

- For safety
- For performance, run-time
- For aesthetics
- For handling and operation
- For safe and proper charging
- For maximizing product life
- For getting an efficient ROI
- For generating long-term savings

Become a Certified *Sustainable* Land Care Professional

On-demand courses, resources & specialized training

VIEW COURSES

starting at \$149

Play Trailer



Examples of Upcoming Short Courses

Troubleshooting
Equipment
Problems

The Basics of
Robotics

Emerging
Technologies

Equipment Do's
and Don't's

Creating an AGZA
Green Zone®

Understanding
ELF™ Reports

New Equipment

Heavy Clean-Ups

Jamie Banks

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Dan Mabe

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agza.net

FAC116: Lawns & Grounds Equipment, Parts and Services



- **Nine Contract Categories**
- **Replaces FAC88 which expired April 2021**
- **47 Vendors Total – manufacturer and independent dealer representation**
 - Category 3: Utility Vehicles, Golf Carts, Snowmobiles, and Related Accessories
 - Utility vehicles, ATVs, snowmobiles, golf carts, sprayers, groomers & sweepers
 - Category 8: Commercial Grade Battery Electric Lawn Equipment (26 Vendors)
 - Lawnmowers (including ride on), blowers, trimmers, chainsaws & more
 - Category 9: Equipment Leasing for Categories 1-8
- **FAC116 Contract Terms**
 - ✓ Effective: May 1, 2021
 - ✓ Term: May 1, 2021 – April 30, 2027
- **Competitive Pricing and Discounts**
 - ✓ Volume Discounts
 - ✓ Dock Delivery
 - ✓ Prompt Pay Discounts

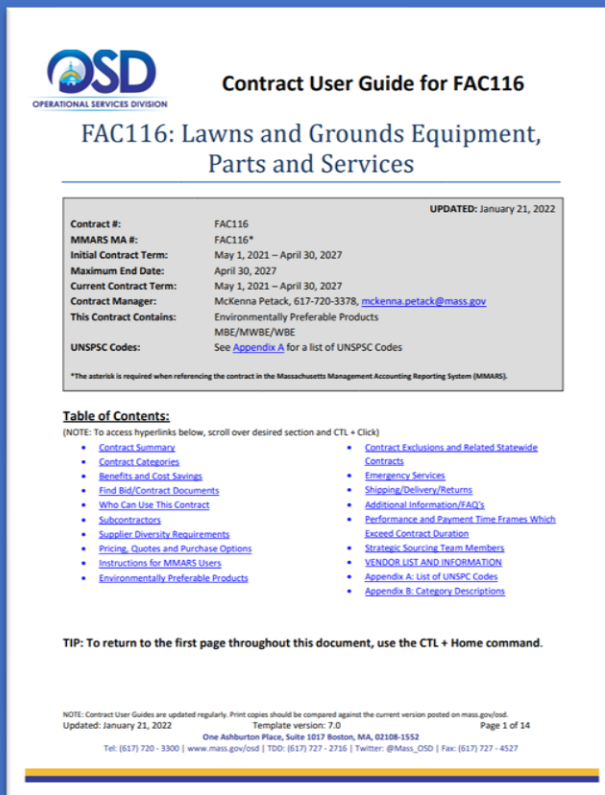
Contract User Guide

How to Learn More About the Contract?

The Contract User Guide is the buying guide for the contract that reviews:

- Contract Coverage
- How to Purchase
- Contract Exclusions
- Pricing and Quote Requirements
- Awarded Contractor Information – including links to their information in COMMBUYS

Contact Golnaz.tabatabai2@mass.gov for more information on the FAC116 contract.



OSD
OPERATIONAL SERVICES DIVISION

Contract User Guide for FAC116

FAC116: Lawns and Grounds Equipment, Parts and Services

Contract #: FAC116
MMARS MA #: FAC116*
Initial Contract Term: May 1, 2021 – April 30, 2027
Maximum End Date: April 30, 2027
Current Contract Term: May 1, 2021 – April 30, 2027
Contract Manager: McKenna Petack, 617-720-3378, mckenna.petack@mass.gov
This Contract Contains: Environmentally Preferable Products, MBE/MWBE/WBE
UNSPSC Codes: See [Appendix A](#) for a list of UNSPSC Codes

UPDATED: January 21, 2022

*The asterisk is required when referencing the contract in the Massachusetts Management Accounting Reporting System (MMARS).

Table of Contents:
(NOTE: To access hyperlinks below, scroll over desired section and CTL + Click)

- [Contract Summary](#)
- [Contract Categories](#)
- [Benefits and Cost Savings](#)
- [Find Bid/Contract Documents](#)
- [Who Can Use This Contract](#)
- [Subcontractors](#)
- [Supplier Diversity Requirements](#)
- [Pricing, Quotes and Purchase Options](#)
- [Instructions for MMARS Users](#)
- [Environmentally Preferable Products](#)
- [Contract Exclusions and Related Statewide Contracts](#)
- [Emergency Services](#)
- [Shipping/Delivery>Returns](#)
- [Additional Information/FAQ's](#)
- [Performance and Payment Time Frames Which Exceed Contract Duration](#)
- [Strategic Sourcing Team Members](#)
- [VENDOR LIST AND INFORMATION](#)
- [Appendix A: List of UNSPSC Codes](#)
- [Appendix B: Category Descriptions](#)

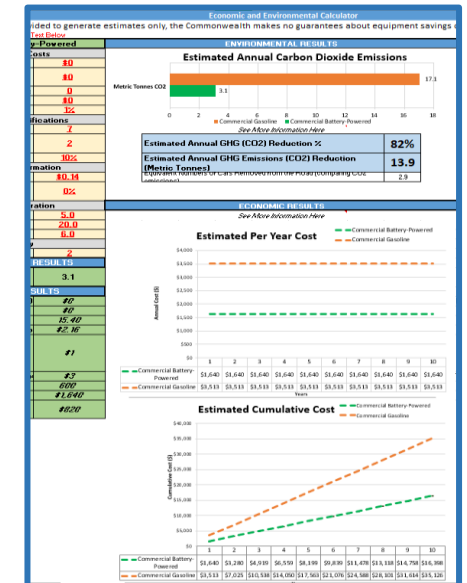
TIP: To return to the first page throughout this document, use the CTL + Home command.

NOTE: Contract User Guides are updated regularly. Print copies should be compared against the current version posted on mass.gov/osd.
Updated: January 21, 2022
Template version: 7.0
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What's New?




- Leasing opportunities expanded to include all categories
- Environmental Focus
 - More than 6X the number of vendors supplying battery-powered equipment
 - [Commercial Grade Battery Powered Landscape Equipment Specifications](#) located in COMMBUYS.
 - Cost and environmental savings tool (located in the COMMBUYS as well)



Resources



OPERATIONAL SERVICES DIVISION



FAC116 Ride and Drive Resources

Thank you for attending the September 13, 2022, Ride and Drive event! The Operational Services Division and the Leading by Example Program offer a variety of resources related to battery electric landscaping equipment and other sustainability initiatives.

Resources



- [FAC116 Contract User Guide](#)
- [FAC116 Commercial Grade Battery Powered Landscaping Equipment \(BPLE\) Specifications](#)
- [BPLE Benefits, Reports, and Other Resources](#)
- [BPLE Benefits and Available Products Flyer](#)
- [BPLE vs. Traditional Equipment Comparison Calculator](#)
- [Sustainable Landscaping at State Facilities](#)
- [Environmentally Preferable Products \(EPP\) Procurement Program](#)
- [Environmentally Preferable Products and Services Guide](#)
- [Green Communities Coordinators](#)
- [Statewide Contracts](#)
- [Local Government Resources](#)

Contact Us

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[Leading by Example Program](#), MA Department of Energy Resources
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[Operational Services Division](#)
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Decarbonization Outside Our Walls



Operational Services Division | One Ashburton Place, Suite 1017 | Boston, MA 02108 | 617-720-3300 | www.mass.gov/osd

- **Resources:**
 - ✓ Use the QR code located on the flyer to access resources
 - ✓ See the [LBE Sustainable Landscaping Page](#) and [OSD EPP Program on BPLE](#)
 - ✓ Specific to Municipalities:
 - OSD Local Government Enablement Team – Jen Forsey
 - Department of Energy Resources’ Green Communities Coordinators provides technical assistance for clean energy and sustainability efforts.
- **Training:** American Green Zone Alliance Service Pro Certification
<https://www.sustainablelandcare.org/>
- **MassSave Residential Rebate for Battery Powered Landscape Equipment (\$75):** <https://www.masssave.com/en/saving/residential-rebates/lawnequipment>
- **State Agencies** – MAFMA Tool Barn

Tool Barn Overview & Online Resources

- DCAMM's Tool Barn program is a resource available to state agencies only, to better assist you in the repair and maintenance of your agency's facilities.
- The program lends out a variety of tools and equipment to state agencies at no charge.
- Tool Barn is located at DCAMM Central Region Office 220 Old Common Road Lancaster, MA

Inventory: [Tool Barn Equipment Inventory](#)

Guidelines: [Tool Barn Guidelines](#)

Registration: [Toolbarn Request and Release Form](#)

Questions: Michele Davis, Tool Barn Manager
Contact: michele.davis@mass.gov or 617.939.1063
Lancaster: 978.365.7352



Gravely Pro Turn EV60 Mower



**Greenworks V82
Backpack Leaf
Blower**



Julia Wolfe
Director
Environmental Purchasing
Operational Services Division
617-720-3153

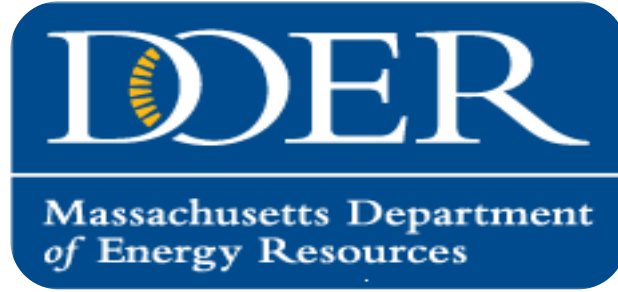
Julia.wolfe@mass.gov

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FAC116 Contract Manager:
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Operational Services Division
617-720-3105

Golnaz.tabatabai2@mass.gov





From the Grassroots: User Testimonies



Chris Hoffman
Park Supervisor
DCR Walden Pond

David Pinsonneault
DPW Director
Town of Lexington

Ben Smith

Groundskeeping Forman/Lead Tree Climber
Town of Wellesley

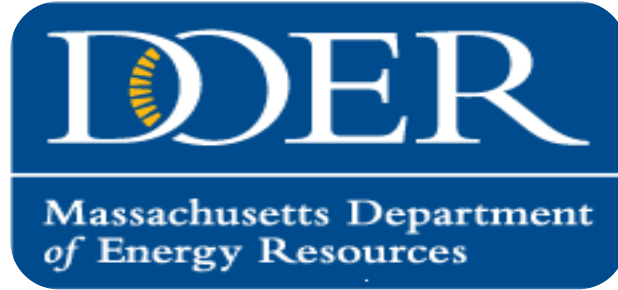
Exhibitors

Exhibitors at today's event:

- ✓ Bacher Corporation of Connecticut
- ✓ Country Club Enterprises
- ✓ Five Star Golf Cars
- ✓ Husqvarna Professional Products
- ✓ Maestranzi Brothers
- ✓ MTE Equipment Solutions
- ✓ Norfolk Power Equipment
- ✓ The Boston Lawnmower
- ✓ Tri-Country Contractors Supply

- ✓ Quiet Communities and the American Green Zone Alliance (AGZA)
- ✓ Operational Services Division
- ✓ Table to talk to users





Event Photos

Contact Julia.Wolfe@mass.gov or Ryan.Kingston@mass.gov for information on the event















