

**DER**

Massachusetts Department  
of Energy Resources

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

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September 13, 2022

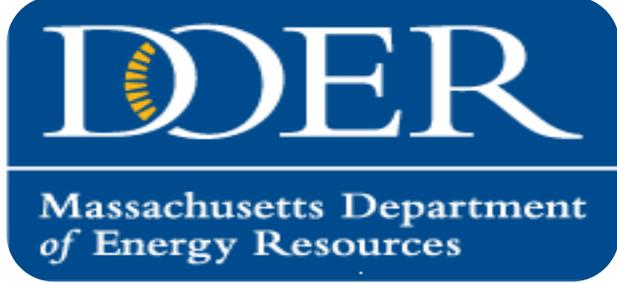
# Agenda

## **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



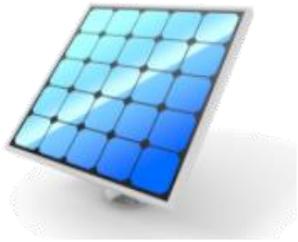
# A big opportunity

- 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



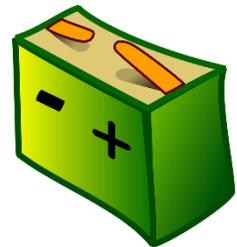
Fleet Management



Recycling



Electrical  
Infrastructure



Energy Storage  
(Batteries)



Software/  
Data Analytics



Customer  
Satisfaction



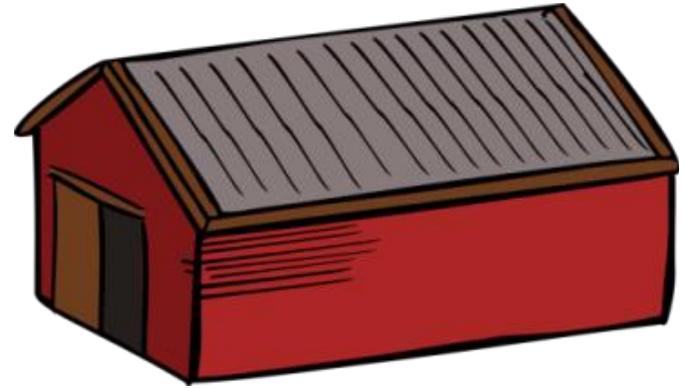
Robotics/AI



Investment/ROI

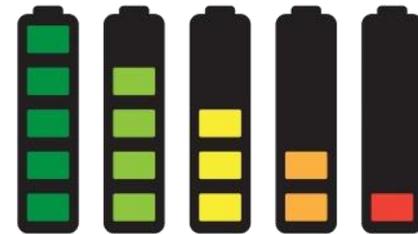
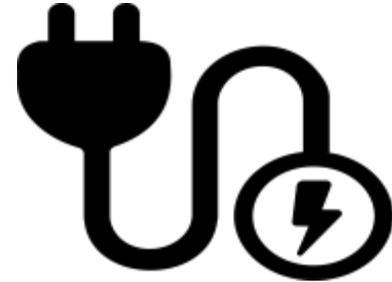
# Considerations

- 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**

[jamie@quietcommunities.org](mailto:jamie@quietcommunities.org)

**Dan Mabe**

[djmabe@agza.net](mailto:djmabe@agza.net)



[quietcommunities.org](http://quietcommunities.org)



[agza.net](http://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

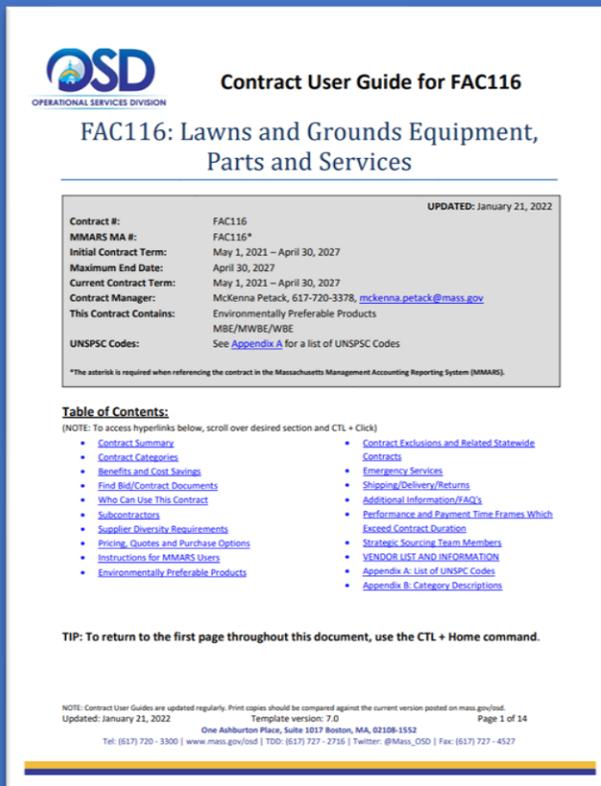
# Contract User Guide

## 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](mailto: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](mailto:mckenna.petack@mass.gov)  
**This Contract Contains:** Environmentally Preferable Products, MBE/MWBE/WBE  
**UNSPSC Codes:** See [Appendix A](#) for a list of UNSPSC Codes

\*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](#)

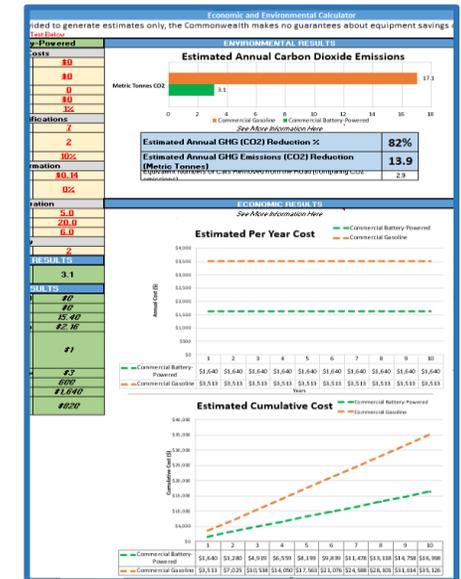
**TIP:** To return to the first page throughout this document, use the CTL + Home command.

NOTE: Contract User Guides are updated regularly. Print copies should be compared against the current version posted on [mass.gov/osd](http://mass.gov/osd).  
Updated: January 21, 2022      Template version: 7.0      Page 1 of 14  
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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)





## 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

**Ryan Kingston**, Sustainability Project Coordinator  
[Leading by Example Program](#), MA Department of Energy Resources  
[ryan.kingston@mass.gov](mailto:ryan.kingston@mass.gov)

**Julia Wolfe**, Director of Environmental Purchasing  
[Operational Services Division](#)  
[julia.wolfe@mass.gov](mailto:julia.wolfe@mass.gov)

Decarbonization Outside Our Walls



Operational Services Division | One Ashburton Place, Suite 1017 | Boston, MA 02108 | 617-720-3300 | [www.mass.gov/osd](http://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](mailto:michele.davis@mass.gov) or 617.939.1063  
Lancaster: 978.365.7352



**Gravelly Pro Turn EV60 Mower**



**Greenworks V82  
Backpack Leaf  
Blower**

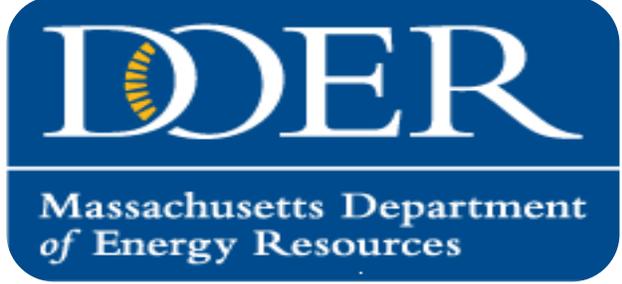


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[www.mass.gov/epp](http://www.mass.gov/epp)

FAC116 Contract Manager:  
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Sourcing Manager  
Operational Services Division  
617-720-3105  
[Golnaz.tabatabai2@mass.gov](mailto: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

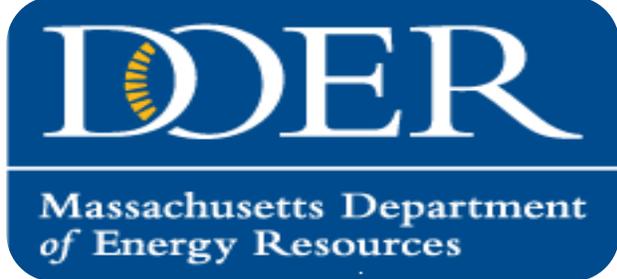
Groundskeeping Forman/Lead Tree Climber  
Town of Wellesley

# 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](mailto:Julia.Wolfe@mass.gov) or [Ryan.Kingston@mass.gov](mailto:Ryan.Kingston@mass.gov) for information on the event









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100% PLUG-IN DRIVE  
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