

Leading by Example Council Agenda March 12, 2024







Updates on Climate Office Recommendations



Innovative Tech Presentations



Climate News and Updates



LBE Updates

Creating A Clean, Affordable, Equitable and Resilient Energy Future For the Commonwealth



Massachusetts Department of Energy Resources

LBE Staff Updates

Welcome to Mark Scribner and Morgan Bowler!

Farewell to Ryan Kingston!

Creating A Clean, Affordable, Equitable and Resilient Energy Future For the Commonwealth



Massachusetts Department of Energy Resources

Updates on OCIR Recommendations



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- Recommendations of the Climate Chief Released October 25, 2023
- Pursuant to EO604, this report presents 39 recommendations on strategies around funding, protecting environmental justice communities, and advancing workforce, and economic development

Recommendations directly relate to state government operations:

#6: DCAMM Strategic Plan for state building decarbonization

47: Statewide plan for fleet vehicle and equipment electrification

#8: Ensure Secretariat awareness of EO594

#12: Institute process to ensure Buy Clean is implemented

#19: Ensure institutions comply with organic waste disposal ban

#7: Statewide plan for electrifying state-owned vehicle and equipment fleet

- Interagency working group including DOER/LBE, OSD/OVM, DCAMM, EEA, and MassDOT was established to develop preliminary recommendations for the Climate Office on state fleet electrification and charging station deployment
- Funding for DCAMM to target EVSE at high-traffic priority sites
- Funding for DOER/LBE to support other EVSE needs (leased facilities, smaller fleets, non-exec branch, mobile charging, domicile, etc)
- Key recommendations include:
 - > All EV charging stations for exec branch fleet should be networked
 - All executive department fleets should develop plans to electrify fleets
 - Group to further study creation of a dashboard for exec branch charging
 - DCAMM to determine necessity and number of DCFC at priority locations





NEW FLEET EV CHARGING GRANT DETAILS		Leased facilit
Eligible entities	State entities not receiving funding through DCAMM's EV charging station programs	 Non-executive Agencies with duty vehicles
Total available funding	\$1,800,000	Mobile EV chDomicile veh
Per entity funding cap	\$300,000*	For more in to the PON
Eligible property types	Owned & leased** sites	
Submission deadline	September 15, 2024	
Have questions?	Contact Sophia (<u>sophia.vitello@mass.gov</u>)	

*EJ adder for EVSE deployment in EJ communities

**Lease must have at least 1 year remaining; mobile charging as a service also eligible for funding under this grant

ailable to support:

- ities
- ive branch agencies
- th fewer than 10 light-
- charging
- hicles

info & links N and grant application, visit the **LBE EV Charging Deployment Grant** Program webpage

DCAMM Statewide Fleet EV Charging Project Goals

- \$9.5 million in ARPA funds
 - Encumbered by 12/31/24
 - Installed and paid out by 12/31/26
- Turnkey installation at ~50 out of 150 high priority sites
- 4 ports + 4 make ready spots per site
- Networking for planning and maintenance
- Maintenance agreements



Charging stations at Westfield State University







DCAMM Statewide Fleet EV Charging Project

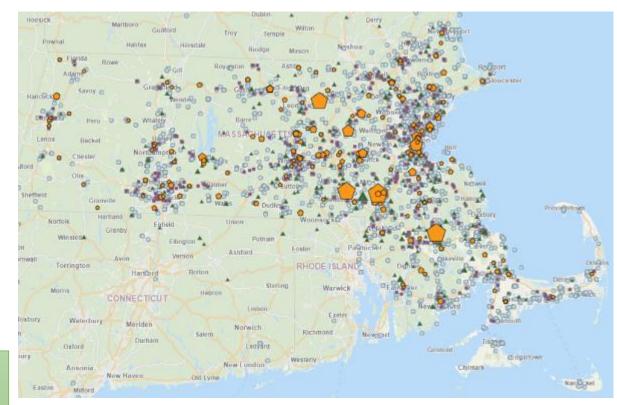
OVM high priority sites for Executive Branch fleet charging

- Identified by Telematics data
- 23 agencies
- @ 149 unique addresses

15-20 Non-Executive Branch sites identified through fleet/facility managers

DCAMM will be reaching out to sites that are within their list. Contact Betsy and Krista for more information:

- elizabeth.isenstein@mass.gov
- krista.lillis@mass.gov



OVM Telematics: Snapshot of Commonwealth vehicle overnight parking







#8: Ensure all Secretariats are aware of EO 594 goals and ensure appropriate staff are working toward them

- Commitment to communicate formally to leadership of all agencies on the importance of climate efforts and meeting goals of EO594 and statewide net zero targets
- Communication this spring may include:
 - The importance of prioritizing climate leadership within state government aligned with EO594 targets and requirements
 - Affirmation of, or request for, designated LBE
 Coordinators and LBE Council representatives
 - Responsibilities of LBE Coordinators, including engagement with LBE staff, reporting data, and coordinating internal efforts

What else would be helpful?







If we were to send a letter to leadership at your respective agencies/campuses, what would you want included?

(You can also send an email to Eric.Friedman@mass.gov)

(i) Start presenting to display the poll results on this slide.



Recommendation #12:

Institute process to ensure Buy Clean is implemented

Interagency team including DOER, DCAMM, MassDOT, and MassCEC convened December-January to develop both cross-cutting and agency-specific Buy Clean implementation recommendations:

1. Establish Buy Clean Guiding Principles to support individual state agencies as they develop and implement embodied carbon strategies and programs

2. DCAMM will develop and adopt a Buy Clean strategy specific to DCAMM processes and needs

3. MassDOT will develop and adopt a Buy Clean strategy specific to MassDOT processes and needs

4. Establish interagency advisory group to coordinate, share strategies and progress

5. Support development of Environmental Product Declarations (EPDs)



Recommendation #12:

Institute process to ensure Buy Clean is implemented

• Buy Clean Guiding Principles were developed to guide state entities that oversee construction in implementing Buy Clean into their processes

Principle 1: Capacity Building	Internal advisory group/point of contactEducation and training
Principle 2: Data Collection and Piloting	 Determine tools/strategies for data collection Pilot measurement and reduction strategies
Principle 3: Implementation	 Develop GWP targets or limits Modify specs and contracts
Principle 4: Evaluation and Continuous Improvement	 Further reduce GWP limits for both products and entire projects Add materials to Buy Clean as information becomes available Report on progress regularly

DCAMM Buy Clean: Progress

- ✓ Building reuse rather than new
- Projects use wood products in place of concrete
 - C. Gerald Lucey Building, constructed by DCAMM for the DUA
 - Cape Cod CC Science Building included wood decking
- ✓ Whole building analysis for carbon
- ✓ 2 projects are exploring use of products manufactured in the US

NEW ENGLAND | NEW ENGLAND CONSTRUCTION PROJECTS

ENR 2023 New England Best Projects

Project of the Year and Best Project Office/Retail/Mixed-Use: Mass Timber for Mass Workers: The C. Gerald Lucey Building

C. Gerald Lucey Building is the first publicly funded project of commercial scale in the state constructed with CLT slabs and glulam framing

By Bruce Buckley





DCAMM Buy Clean Steps

- Develop capacity of staff, consultants, and contractors
- Understand how the industry is addressing goals
- Pilot test
- Develop standards for products (concrete, steel, others)
- Modify relevant documents
 - DSB selection criteria
 - Workplans and templates
 - Contracts and Guidelines
 - Standard spec







MassDOT Buy Clean Steps

LBE Council Meeting March 12, 2024 Andy Paul



MassDOT Buy Clean

- MassDOT Step 1
- Ongoing
 - ➤MassDOT Research and Materials Lab
 - MassDOT Pavement Management Program



MassDOT Buy Clean Step 1

- Coordinate Buy Clean across MassDOT
- Develop capacity of MassDOT staff, consultants, fabricators, suppliers, vendors, manufacturers, and contractors
- Initiate MassDOT Buy Clean Task Force



MassDOT Buy Clean Steps

- Ongoing initiatives MassDOT Research & Materials Lab
 - Updating concrete specification to enhance long term durability and lower carbon footprint
 - Researching nano-silica Chemical Admixtures for our concrete to reduce cement content.
 - In discussion with MIT sustainably hub regarding their research and the use of concrete overlays



MassDOT Buy Clean Steps

Ongoing initiatives – MassDOT Pavement Management
 Two pilot projects requiring EPDs or submittals
 Developing a future EPD submittal for hot mix asphalts
 Working with UMass Dartmouth's Highway Sustainability Research Center (HSRC) to incorporate Life Cycle Cost Assessment and service life into an overall assessment of EPDs





Recommendation #19:

Ensure institutions comply with organic waste disposal ban

- Threshold for food waste disposal ban lowered from 1 ton to ½ ton per week effective November 2022
- Any significant food service operation likely subject
- Mattresses and textiles also added as waste ban materials
- Many other recyclable materials banned from disposal
- For more information see <u>https://www.mass.gov/guides/massdep-waste-</u> <u>disposal-bans</u>





RecyclingWorks in Massachusetts

- Free assistance available through RecyclingWorks in MA website
 - <u>www.recyclingworksma.com</u>
- Extensive resources focused on food waste reduction & diversion
- Online information and guidance
- Assistance via phone and email
- On-site technical assistance

Recycling Assistance for Businesses & Institutions

Any Material	~
Enter location	¢
Pick Up/Drop Off	
OR, try a keyword or biz name	Q
Search	

RecyclingWorks in Massachusetts is a recycling assistance program funded by the Massachusetts Department of Environmental Protection and delivered under contract by the Center for EcoTechnology that helps businesses and institutions reduce waste and maximize recycling, reuse, and food recovery opportunities.

LIST YOUR BUSINESS

ABOUT RECYCLINGWORKS

ABOUT THE FIND-A-RECYCLER TOOL

Creating A Clean, Affordable, Equitable and Resilient Energy Future For the Commonwealth



Massachusetts Department of Energy Resources

Innovative Technology "Speed Dates"

Disclaimer:

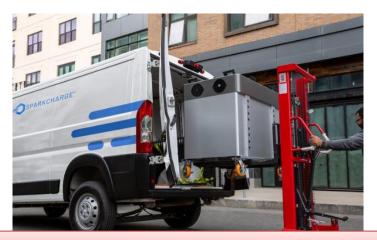
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- Provides charging option where electrical infrastructure may not be available
- On-site charging
 - Mobile charging solution through portable onsite batteries
 - Batteries charged by the consumer
- Charging as a Service: SparkCharge Fleet
 - Mobile charging service brought to site on set schedule and/or on demand
 - Per-vehicle and electricity cost

Learn more: https://www.sparkcharge.io/





Information is not provided by SparkCharge and is subject to change



Meet RYSE SmartShade

The Product:

• A retrofit solution for motorizing existing window shades.

Challenges We Tackle:

- When rebuilding for motorization, pricing ranges widely & total upfront cost lacks clarity
- Traditional solutions are not designed to motorize already installed window shades
- Unlock a 20.3% reduction to your cooling energy usage & a 24% reduction to your lighting energy usage resulting in savings of 557,225 kWh annually
- Support staff & individuals with disabilities can win back 2hrs/week

Development Stage:

• Available across Retail & Wholesale Partners



Applications

Healthcare

The healthcare industry has been a great application for the RYSE solution for facilities with different needs ranging from improving ADA compliance, reducing labour hours on miscellaneous tasks and improving support for functional disabilities.

MDUs & Commercial Offices

Add value within energy conservation efforts via connecting with a building automation system while also improving rental income.

Integration Timeline

RYSE is a day 2 solution that can be retrofitted at any point in time post development.

Presidio Bay

Springline is conveniently located just steps from the Caltrain Station and adjacent to downtown Menlo Park, the project includes two Class A office buildings with 183 apartments, retail space, 942 parking spaces spread over 2 subterranean parking levels, and inviting public plazas and open spaces.

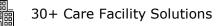
- $1 \overline{\boxtimes}$ 250,000 square foot floor area
- Rectangular shaped building
- 5 stories above the ground

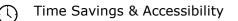
Presidio Bay

Horizon Health Network

Horizon provides services ranging from acute and specialized care to community-based health services. The team was looking for solutions to equip their long term care units and rehab facilities with in order to empower residents with independence throughout their facilities.







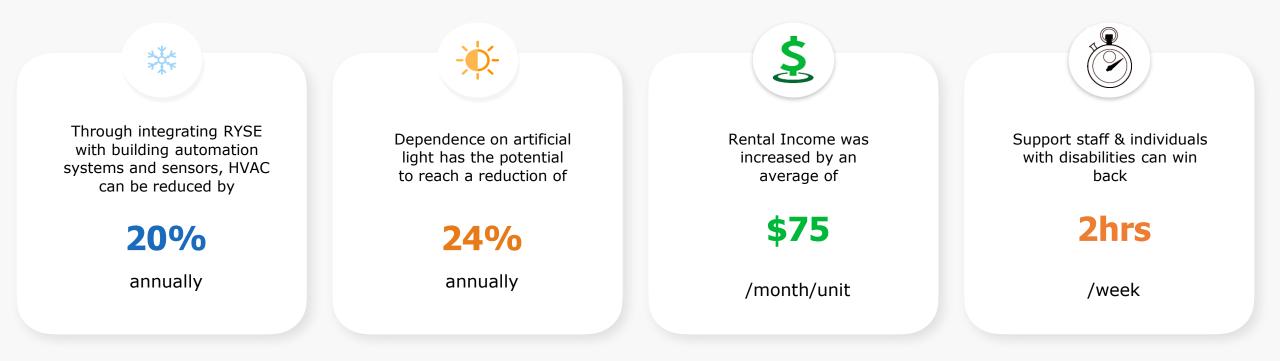




<u>Horizon</u>



Benefits

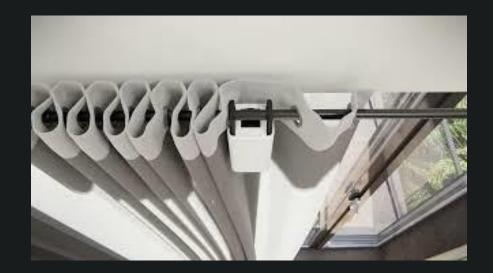


Access a low-lift & more accessibility friendly experience Elevate your LEED, WELL, and BREEAM certifications by reducing energy consumption

Keep your building up to code with ADA compliance

Product Demos (click for links)













WIRELESS SMARTSHADE BUNDLE

SPECIFICATIONS

1 x SmartShade, 1 x BatteryPack

PRODUCT AND SHIPPING DIMENSIONS

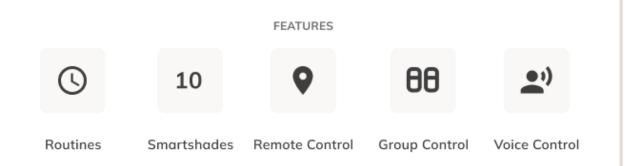
Product Dimensions: 1.8", 1.8", 5.1"; 0.73 lbs (SmartShade) 1.8", 1.8", 2.4"; 0.36 lbs (BatteryPack) Shipping Dimensions: 8.38", 10.38", 4.75" (2.2lbs)

MSRP: \$199.98

ALL PRICES IN \$USD

On-Device Controls





SMARTBRIDGE

SPECIFICATIONS

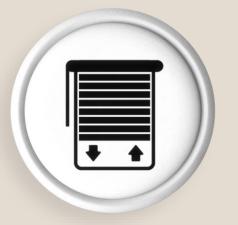
Connectivity: Ethernet Cable Connects up to 10 SmartShades

PRODUCT AND SHIPPING DIMENSIONS

Product Dimensions: 1.1", 3.6", 3.6"; (0.26 lbs) **Shipping Dimensions:** 9.25", 6.25", 3.5" (0.86 lbs)

MSRP: \$49.99

ALL PRICES IN \$USD



FEATURES



Remote Control Group Control

SMARTBUTTON

SPECIFICATIONS

Connectivity: Bluetooth low energy 5.2 Connects up to 4 SmartShades

PRODUCT AND SHIPPING DIMENSIONS

Product Dimensions: 40 mm diameter, 14.5 mm thick **Shipping Dimensions:** TBD

MSRP: \$29.99

ALL PRICES IN \$USD

IIIII RYSE

Kenzo Almasri Head of Business Development

(929) 416-3760 kenzo@helloryse.com All Weather 120V Window Heat Pump

Gradient

Company and Product Intro

- San Francisco based (startup) manufacturer
- Window heat pump that operates on 120v
- All of the benefits and comfort of a traditional heat pump but with the convenience and ease of installation of a standard window AC
- Launched Gen 1 (flagship) product in 2022. Currently phasing in our Gen 2 product-Q3/Q4 2024 Launch
- Current testing- NYCHA





Demo

Applicability

- Currently focusing on multi-family market but ideal for single family as well as office spaces and schools -any building with single/ double hung windows
- Ideal for retrofit opportunities
- Older buildings that need to electrify
- Great option for new construction in place of PTACs



NYCHA- Current program: 10,000 units Installation- November 2023

Costs and Benefits (fiscal and environmental)

Fiscal

- \$3800 unit- all in!
- Energy savings TBD post launch but preliminary estimates of up to 12% reduction operating costs
- No electrical upgrade, No professional HVAC installation, No permit/ design fees, No service interruptions
- IRA incentive eligible. Other state incentives as well

Environmental

- 30% more efficient
- R32 Refrigerant (very low GWP)
- Room by room comfort
- Noise reduction- very low dB(A)
- Washable filters

Thank You

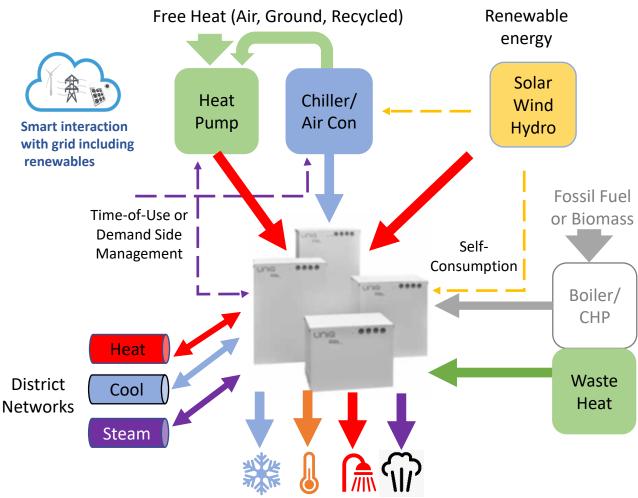
- Bryant Elder- bryant@gradientcomfort.com
- www.gradientcomfort.com
- <u>https://ny1.com/nyc/all-boroughs/news/2023/11/07/biden-tours-</u> <u>science-and-technology-demonstrations</u>

SUNAMP

No.

Sunamp: Integrator technology for the future world

- Sunamp is the world leader in Thermal Storage using phase change materials.
 - Thermal storage helps on the peak shaving, where off-peak power is used to drive heat pumps that can produce heat or cold by a cheaper electric power.
 - Helps to increase the overall building efficiency
- Our Thermal batteries store 4X the energy as traditional stores in the same volume
- The company has been commercially viable since 2015. we have sold over 25,000 units



Cool, Heat, Hot Water, and Steam

Applicability

- Sunamp's Thermal batteries are UL and NSF certified. They are also approved by the Mass Plumbing board.
- The variety of sizes allows them to be applied to any building that wants to store heat for central heating or domestic hot water or cooling air conditioning or food preservation



CENTRAL BANK MINI



CENTRAL BANK



Fiscal

- Priced competitively with existing indirect thermal stores
- Energy cost savings
- Case studies show a 50% reduction is energy costs
- The IRA bill provides a 40% rebate for Thermal storage
- Less investment capital cost for the combined storage system since thermal storage is cheaper than electric storage.
- Thermal storage systems can reduce cost of reinforcing the distribution grid in order to accommodate the increase in peak demand.



Environmental

- Case Studies show up to a 50% reduction in CO2 output
- The Phase Change material is listed by the FDA for Human consumption
- Sunamp's GHG intensity per sold product associated with the direct emissions of its business activity is approximately zero.
- Reduce CO₂ emissions and costs by making sure energy is used when it is cheaper and/or when is more renewable energy in the mix.



Sunamp Projects Inc

12 E 49th Street, New York, NY 10017

Tom.Sottile@Sunamp.com

Sunamp.com for case studies and product information



Company Intro

Chomp manufactures and sells communityscale, prefabricated Anaerobic Digestion systems that transform food waste, liquids, and other organic materials into renewable natural gas and biofertilizer with nearly zero waste.

Our solution:

- Cuts methane emissions and generates carbon credits
- Diverts food and organic waste from landfills
- Produces renewable energy to offset
 petrochemical fuel use and costs

We have:

- 9 years of product refinement and service optimization
- Delivered 14 projects; 200K operating hours



Applicability

- Our patented containerized solution is specifically designed for local use, near the source of waste. Our systems are odor-free, compact, and uniquely suited for urban and suburban environments.
- Our units can process between 25-4,500 wet tons of organic waste/year, and we can custom-build to manage up to 20,000 wet tons of organic waste/year.
- Our solution is modular and can be quickly and easily deployed with minimal site work and permitting at any point in the lifecycle of the host business or community.

Core System

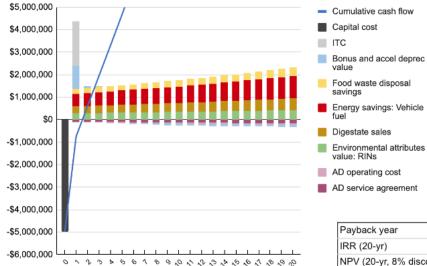
Waste Recovery	Typical Energy Output*	Base Capital Cost
185-4,500 tons/year	583—14,200 ммвти/year	\$600,000-\$5,300,000

Mini System

Waste Recovery	Typical Energy Output*	Base Capital Cost
25–175 tons/year	79—552 ммвти/year	\$209,000-\$580,000

Financial Benefits: Core 4500 example

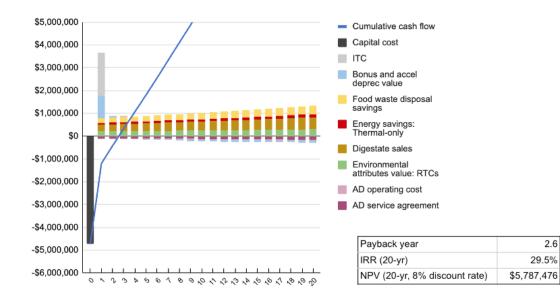
Scenario 1: vehicle fuel (hybrid: CNG/gas or diesel)



Capital cost
ITC
Bonus and accel deprec value
Food waste disposal savings
Energy savings: Vehicle fuel
Digestate sales
Environmental attributes value: RINs
AD operating cost
AD service agreement

Payback year	1.6
IRR (20-yr)	45.5%
NPV (20-yr, 8% discount rate)	\$12,380,291

Scenario 2: thermal/boiler fuel



Environmental and Societal Benefits

- GHG emissions reductions due to landfill diversion (methane), displacement of energy fossil fuels (CO2), and potential for secondary benefits (fertilizer, transportation, other lifecycle emissions)
- Environmental justice and high tech job creation (i.e., serving food hubs and pantries, urban farming, reduction in reliance on solid waste landfills)
- Education (serving universities and colleges, re: science and environmental education for students and faculty)
- Promotion of circular economies and distributed energy

Thank you

Learn more about our mission at <u>www.chomp.energy</u> Get in touch at info@chomp.energy

FREEWIRE

Modernizing the Grid with Battery-Integrated EV Charging

March 2024

Chip Silverman Director of Policy csilverman@freewiretech.com



Company and Product Intro

- FreeWire Technologies was founded in 2014 and is headquartered in the SF Bay Area
- FreeWire's "Boost Chargers" come with 150 kWh of integrated battery storage to minimize grid impact of DC fast charging
 - Hardware configuration allows them to provide up to 200 kW of output power to EVs using flexible and controllable grid input (maximum input of 53 kW)
 - Software can manage the charging load to require zero additional power from grid beyond site load
 - Flexible input; works with 208v, 240v, or 480v service with single or three phases
 - Increases resiliency of site and EV charging
- Lowers capital and operating costs



FreeWire enables faster and more cost-effective deployment of DC fast charging by reducing grid impacts by at least 75%

300+ Boost Chargers Deployed Globally

- Well-suited for a variety of deployment locations and use cases
 - Uniquely capable of enabling DC fast charging at sites with grid constraints, low voltage power, or high electricity costs

	Infrastru	ucture Req	uirements	D	river Experier	nce		
Charging Type	Phases	Voltage	Amp- erage	Output Power Range	Time to Charge*	Range per Hour*	ОрЕх	Time to Deployment
Level 2	Single	240 208	32 to 80 amps	3 to 19 kW	4 to 10 hours	10 to 20 miles	\$	Low
FreeWire DC Fast Charger	Single <i>or</i> Three	240 208 480	100 to 200 amps	200 kW	20 to 30 minutes	180 to 240 miles	\$	Low
Traditional DC Fast Charger	Three	480+	200 to 800 amps	100 to 350 kW	20 to 30 minutes	180 to 240 miles	\$\$\$	High

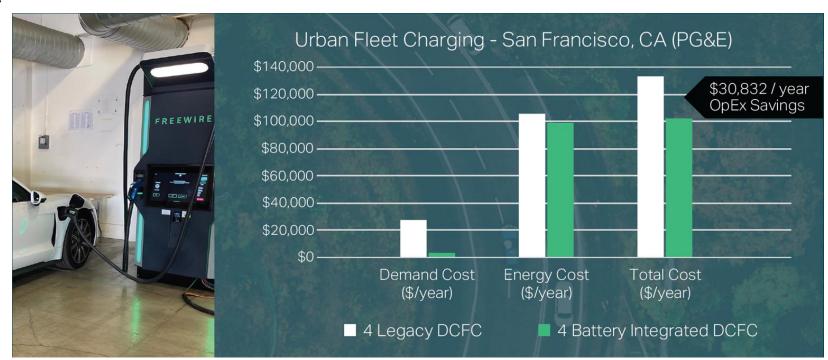
Costs and Benefits (fiscal and environmental)

Fiscal

- Battery increases cost of charger
- Grid upgrade cost savings
- Energy cost savings
- Available incentives and tax credits

<u>Environmental</u>

- Resiliency
- Energy savings
- Emissions reductions
- Increase renewables



Boost Lowered Annual Operating Costs by ~25% Compared to Conventional DCFC for an Urban Fleet Operator in San Francisco Chip Silverman Director of Public Policy <u>csilverman@freewiretech.com</u> <u>www.freewiretech.com</u>

Which vendor(s) are you interested in connecting with/learning more about?

Check all that apply!



Massachusetts Department of Energy Resources

Creating A Greener Energy Future For the Commonwealth

Creating A Clean, Affordable, Equitable and Resilient Energy Future For the Commonwealth



Massachusetts Department of Energy Resources

Climate News and Updates

Could a parasol in space cool the planet?

- Could a parasol shade the size of Argentina block enough sunlight to cool the planet by 1.5C?
- Researchers are working on a prototype of a series of small shades that could cast shade on earth and reduce solar radiation.
- Proponents of the shade argue that reductions in GHG emissions should still occur in tandem with the shade.

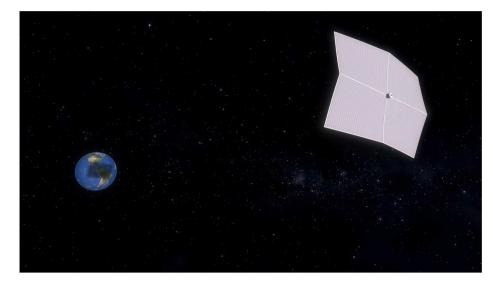


Image Credit: The New York Times

Energy Resources



Future EVs with OEMs on contract

Sedans/Crossovers

Make	Model	Release Date
Hyundai	loniq 6n	2025
Hyundai	loniq 5n	2025



Hyundai Ioniq 5n



Chevrolet Equinox EV

SUVs

Make	Model	Release Date
Chevrolet	Equinox EV	Mid 2024
Honda	Prologue	March 2024
Hyundai	Ioniq 7	Late 2024
Chevrolet	Blazer EV	Available for pre-order

Trucks & More

Make	Model	Release Date
Toyota	Tacoma EV	Late 2024 or 2025
RAM	1500 REV	Available for pre-order
Chevrolet	Silverado EV	Available for pre-order



Toyota Tacoma

All of these vehicles *could* be eligible for the federal Commercial Clean Vehicle Credit Source: Green Energy Consumers Alliance



Other EVs coming soon

Sedans/Crossovers

Make	Model	Release Date
MINI	Aceman	2025
Fiat	500e	Available for pre-order
vw	ID.7	Second half of 2024
Dodge	Charger EV	End of 2024
Audi	A6 e-tron	2024
Polestar	5	End of 2024



MINI Aceman

All vehicles in **bold** *could* be eligible for the federal Commercial Clean Vehicle Credit Source: Green Energy Consumers Alliance

SUVs

Make	Model	Release Date
MINI	Countryman EV	Available for pre- order
Polestar	4	Late 2024
Fisker	Pear	Available for pre- order
Volvo	EX30	Available for pre- order
Buick	Electra E5	Late 2024
Jeep	Recon	Late 2024
Acura	ZDX	Mid 2024
Volvo	EX90	Available for pre- order
Porsche	Macan EV	Mid 2024
Jeep	Wagoneer	Late 2024
Polestar	3	Mid 2024

Trucks & More

Make	Model	Release Date
VW	ID. Buzz	June 2024
Fisker	Alaska	Available for pre-order
Tesla	Cybertruck	Available for pre-order
GMC	Sierra EV Denali Edition 1	Mid 2024 or 2025



Fisker Alaska



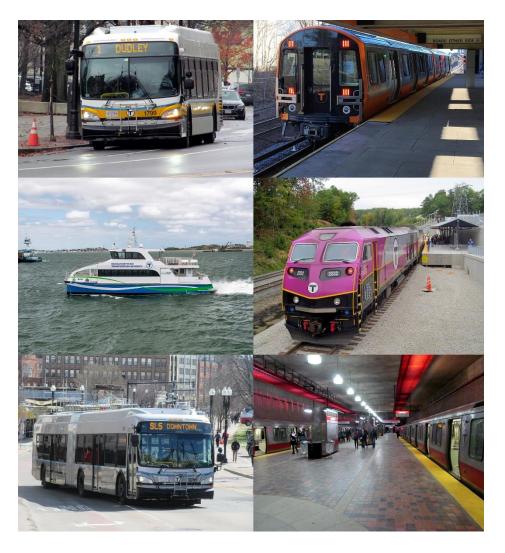
- Currently, non-Tesla vehicles can plug into Superchargers that are equipped with built-in adapters ("Magic Dock")
 - Locations can be found on the Tesla app and <u>Plugshare</u>
- Ford is among first to provide adapters for their vehicles
 - > Owners of 2021-2024 Ford EVs can order an NACS adapter from Ford for free until June 30, 2024
 - > As of July 1, customers must buy adapter from Ford for \$230
 - Payment at Superchargers integrated within existing FordPro app
- Nearly every major automaker has vowed to convert to NACS, with many gaining access via an adapter soon and adding the <u>NACS plugs to their electric vehicles some</u> <u>time in 2025</u>





Executive Order 626: Creating the Governor's Transportation Funding Task Force

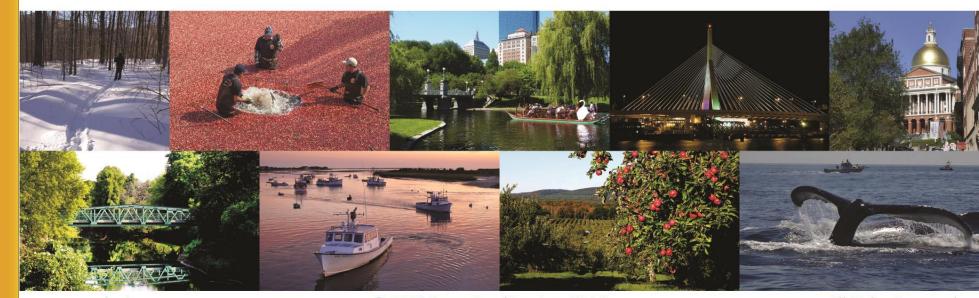
- Signed by Governor Healey 1/24/24
- Established Task Force to advise Governor on long-term, sustainable transportation finance plan
- Comprised of MassDOT, MBTA, and several executive branch offices including EEA as well as representatives of municipalities and legislature
- Written report to Governor on findings and recommendations by 12/31/24





FY23 EPP Annual Report

Julia Wolfe



mass.gov/osd

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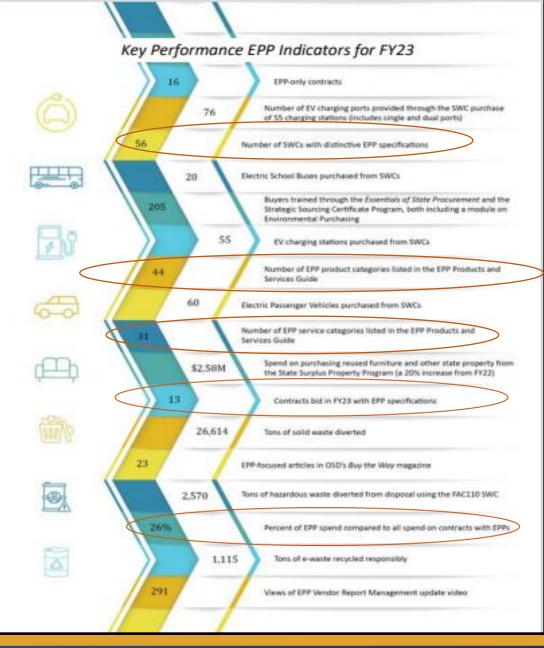


✓ EPP Annual Progress Report

- Since FY2011 the EPP Program has been <u>reporting on progress</u> with <u>EO515: Establishing an Environmental Purchasing Policy</u>
- Use vendor reported purchasing data to calculate:

	FY22	Cumulative FY21-FY23
Estimated EPP spending using Statewide Contracts	\$327M	\$1.092B
Estimated tons of waste diverted from disposal to recycling	105,895	150,216
Estimated annual savings, primarily from energy efficient purchasing choices	\$3.5M	\$8.7M
Estimated lifetime savings, primarily from energy efficient purchasing choices	\$8M	\$40.5M
Reduction in lifetime metric tons of carbon dioxide equivalent (MTCO ² e), primarily from purchasing energy efficient products, those containing post-consumer recycled content, or materials diverted from disposal	78,618	589,311





Highlights:

• Compliance:

- Vehicle Electrification
- Appliance Efficiency Standards
- Mattress and Textile Waste Ban

• Reporting

- Review of OSD Vendor Report Management System
- Electronic Procurement Environmental Assessment Tool (EPEAT) Awards

• Stakeholder Engagement

- EPP Products and Services Guide
- Continued marketing and communications outreach
- Focus on Third-Party Certifications: participating in standard setting with GreenScreen, GreenSeal and EPEAT.
- Toxics Reduction Task Force and the PFAS Free Buying Guide
- Training and Other Educational Opportunities
 - Battery Powered Landscape Equipment outreach
 - Sustainable Purchasing Leadership Council (SPLC) Climate Foundations workgroup
 - Integrating EPP into e-procurement systems



Creating A Clean, Affordable, Equitable and Resilient Energy Future For the Commonwealth



Massachusetts Department of Energy Resources

LBE Updates



LBE plans to release a Decarbonization Grant Program to cover the costs of smaller decarbonization projects focused on the replacement of fossil-fuel-based systems with electrified solutions.

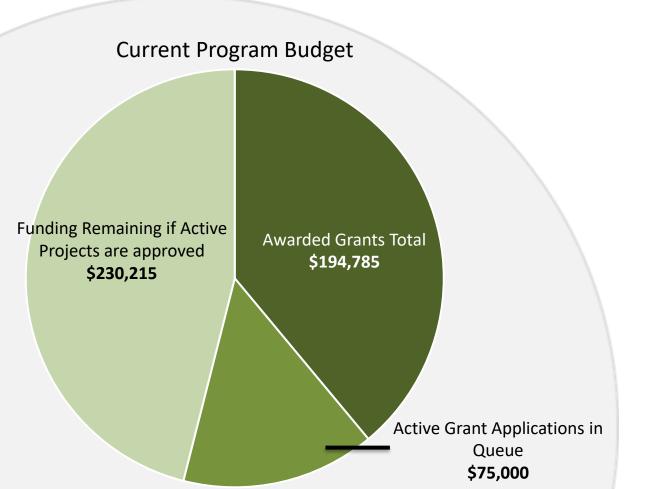
Grant Project Category	Base Grant Amount	Potential Grant Amount Adders
Space Conditioning System*	40% of project cost Max \$350,000 per site address	Climate and Economic Justice Adder
Service Water Heating*	40% of project cost Max \$150,000 per site address	Climate and Economic Justice Adder
Battery Powered Landscaping Equipment	Handhelds: 40% of project cost Ride-on Mowers and Utility vehicles: 55% of project cost Max \$150,000 per site address	Climate and Economic Justice Adder Pollinator Habitat Creation Adder
Commercial Kitchen Equipment	40% of project cost Max \$150,000 per site address	Climate and Economic Justice Adder

*Will need to be Build America Buy America certified



Feasibility Studies Grant Update

Total Budget: \$500,000 Award Maximum: \$75,000* per study * Increase to \$150k per study under consideration PON Response Submission Deadline: June 30, 2024



Current Projects

Agency/Campus	Status	Project Type
Montachusett Regional Transit Authority (MART)	Complete	Study of electrification at HQ (EVSE, solar, etc.)
UMass Chan Medical School	Complete	Decarbonization Roadmap
UMass Lowell	Awarded	Analysis of fleet EVSE needs and EVSE implementation plan
MWRA	Received	Feasibility of large- scale battery storage



State Fleet Electrification Planning Webinar

Looking for an introduction to fleet electrification planning?

Tune in to learn more about free fleet planning resources to help start the transition to electric vehicles!



Program representatives will share more about the following resources:

- National Grid & Eversource fleet advisory services
- MassCEC Fleet Advisor program
- DRVE fleet analysis tool
- State fleet experience



Next LBE Council Meeting

Save the Date!

May 14th 10am-12pm

Upcoming Tentative

Meeting Dates:

July 9th

September 3rd

