



MASSACHUSETTS
**DEPARTMENT OF
ENERGY RESOURCES**

Exploring Data

How to put energy data to use

Leading By Example Council Meeting
May 13, 2025

Presented by
Department of Energy Resources, Leading By Example Division

05/13/2025

Agenda

Introduction

LBE Updates & Reminders

Telling Our Story: 20 Years of Collecting State Data

Speakers: **Sophia Vitello**, Data & Project Analyst, DOER LBE; **Suzanne Wood**, Sustainability & Energy Manager, UMass Chan Medical

The Role of Data: Data that informs state policy

Speakers: **Daniel Engleberg**, Director of Climate Analysis, EEA; **Aimee Powelka**, Manager of Decarbonization Analysis, EEA

Tools of the Trade: Statewide Contract

Speakers: **Julia Wolfe**, Director of Environmental Purchasing, OSD; **Andy Paul**, Highway Design Engineer, MassDOT

Tools of the Trade: MassEnergyInsight (MEI)

Speakers: **Mark Rabinsky**, Deputy Director, DOER Green Communities Division; **Ryan Kingston**, Decarbonization Program Manager, DCR

Tools of the Trade: Commonwealth Energy Intelligence (CEI)

Speakers: **Krista Lillis**, Director of Energy, DCAMM; **Tim Spencer**, Energy Planner, DCAMM

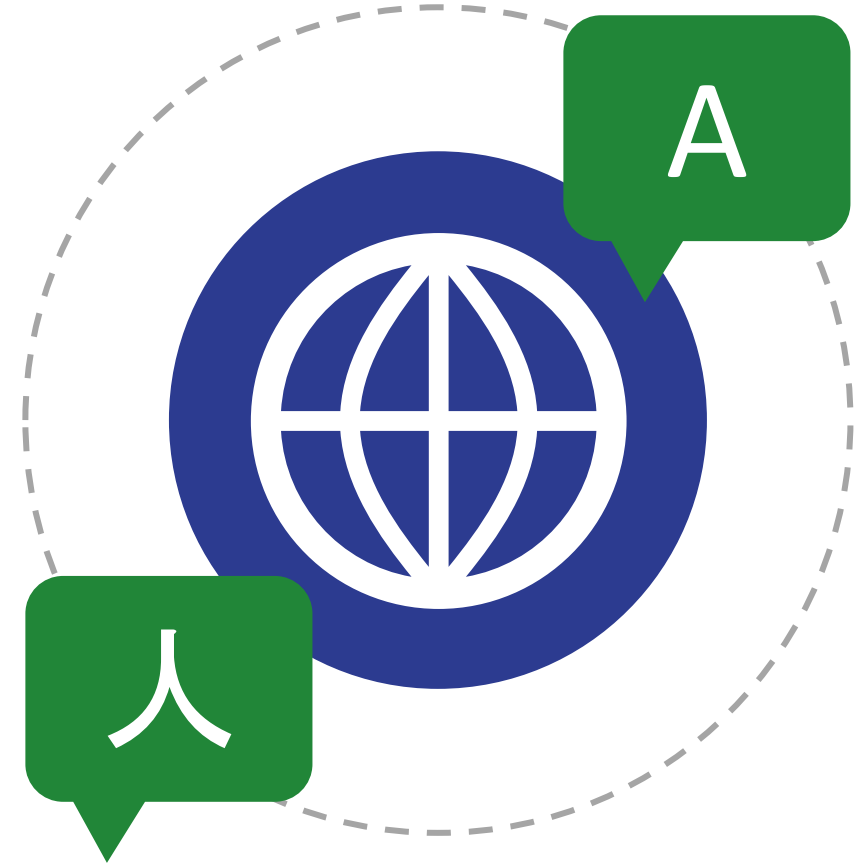
Closing

Language Access Services

DOER is committed to providing accessible language services to the public. In addition to the automated translation and accessibility embedded on our webpage, we offer free translation of public documents and interpretation in multiple languages to the greatest extent possible.

We will be translating our slides in other languages. If you require interpretation services during future Council Meetings (including closed captions or ASL), please let us know.

For more information about these services, please email Elischia Fludd (Elischia.Fludd@mass.gov). Please include "language access/services" in the subject line.





Updates

What's happening at DOER and the Commonwealth?

- New LBE staff!
- News around the Commonwealth

Welcome, Nicole!

Nicole Lepre is DOER's new Electric Transportation Program Manager

Nicole joined the LBE team last month as the team's Transportation Electrification Program Manager. Nicole will provide management and operational support for state electric transportation programs and serve as a central electric transportation expert for MA DOER.

Before joining MA DOER, Nicole spent five years doing transportation electrification work at a policy research company called Atlas Public Policy and, before that, Nicole worked in solar and wind energy development.



EV Charger Reliability Regulations



2024 Massachusetts Climate Bill requires EEA or designated agency to promulgate regulations for EV chargers in Massachusetts



EEA is in the process of seeking stakeholder input and undergoing internal rounds of review on regulation outline



Regulations to include:

- Charger utilization monitoring
- Charger reliability and availability monitoring
- Real-time data sharing by networks on charger location, availability, and price



Legislation requires, to the extent possible, definitions of “uptime” and “exempted downtime” that are consistent with other jurisdictions and the federal National Electric Vehicle Infrastructure Formula Program

Healey-Driscoll Administration Certifies First Climate Leader Communities (CLCs)

May 2 – 19 MA cities and towns were certified under the new Climate Leader Communities Program, which builds off DOER's Green Communities Program.

Now eligible for grants **up to \$1,150,000** each for technical support and projects that reduce municipal emissions.

New Climate Leaders Communities Requirements

1. Be a Green Community in good standing
2. Establish/maintain local committee to lead clean energy and climate activities
3. Commit to eliminating on-site fossil fuel use by 2050
4. Develop a roadmap for decarbonization
5. Adopt Zero Emission Vehicle First Policy
6. Adopt Specialized Stretch Energy Code

Acton	Amherst	Arlington
Ashfield	Cambridge	Carlisle
Chelmsford	Easthampton	Lexington
Melrose	Natick	Pelham
Salem	Somerville	Stow
Swampscott	Truro	Watertown
	Wellesley	

MA AG Challenges Federal Government on OSW

May 5 – 17 States, including Massachusetts, filed a lawsuit against the Trump Administration's efforts to halt development of offshore wind

According to AG Andrea Campbell's office, President Donald Trump's Jan. 20 directive and its implementation by federal agencies violates the Administrative Procedure Act.



Massachusetts has invested hundreds of millions of dollars into offshore wind to ensure our residents have access to well-paying green jobs and reliable, affordable energy that helps meet our clean energy and climate goals...

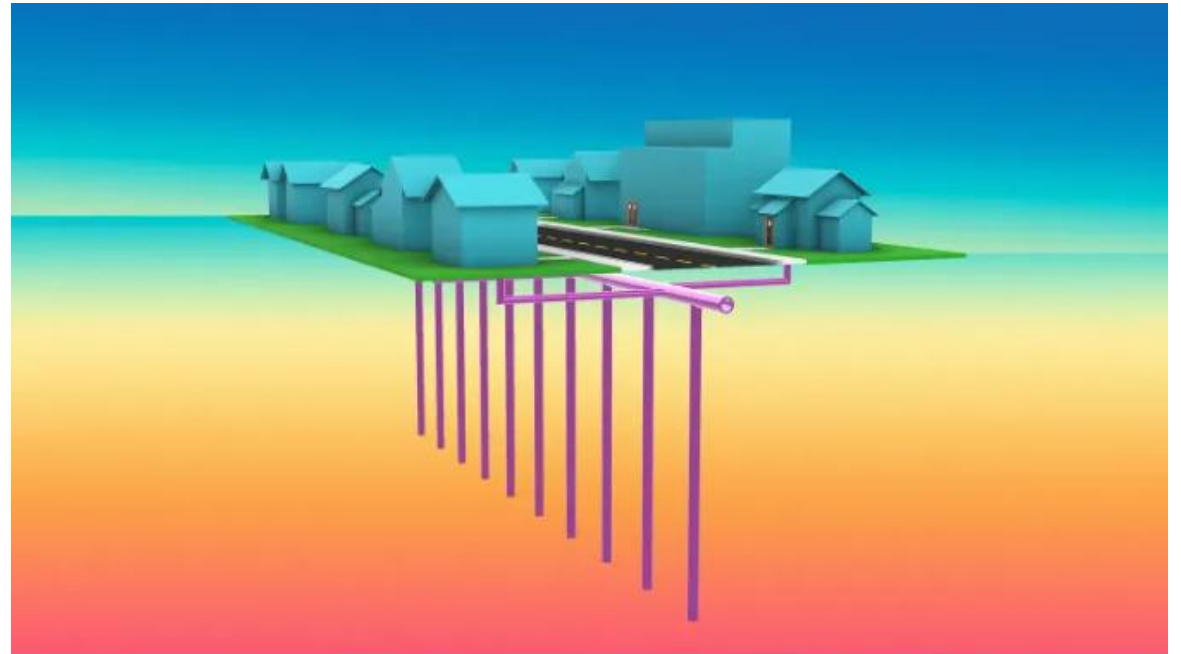
The President's attempts to stop homegrown wind energy development directly contradict his claims that there is a growing need for reliable domestic energy. My colleagues and I will continue to challenge this administration's unlawful actions to chill investment and growth of this critical industry.

Attorney General Andrea Campbell

Utility Networked Geothermal Challenges

February 2025 – Networked geothermal advocates optimistic despite Massachusetts setback

- In February, National Grid canceled networked geothermal heating pilot project in Lowell due to economic viability concerns
- Project would have brought heating and cooling to 31 buildings in Lowell, including several low-income households and part of the UMass Lowell campus
- However, advocates remain optimistic: the already operational geothermal network in **Framingham** is successful and plans for expansion are underway



[Rendering: Anara Magavi/HEET]

Mass Save Revised 3-Year Plan

In response to the DPU directive to reduce plan costs by \$500 million, the revised Mass Save 3-Year Plan proposes several cuts to planned investments.

	Original \$5B Plan	Proposed \$4.5B Plan	% change
Overall equity investments	\$1.9B	\$1.78B	-6%
GHG reductions (metric tons)	1,000,000	864,000	-14%
Total benefits	\$13.7B	\$12.1B	-12%
Equity benefits	\$4.4B	\$4.1B	-7%
Total homes weatherized	184,000	163,000	-11%
Total heat pumps (homes)	119,000	87,000	-27%
Total customer incentives	\$3.4B	\$3.0B	-12%



Reminders

Things to look out for in the next few months

- Large Building Energy Reporting
- SMART 3.0 Draft Regulations

What is LBER?

Large Building Energy Reporting (LBER) is the legislatively-mandated policy requiring the annual disclosure of energy data for large buildings in Massachusetts.

The first round of reporting (on calendar year 2024 energy data) is due **June 30, 2025**.

LBER requirements were created through [An Act Driving Clean Energy and Offshore Wind](#) (2022).

Large Buildings = covered buildings
≥ 20,000 square feet



What do I need to do for LBER as a building owner?

Review the
Covered
Buildings
List

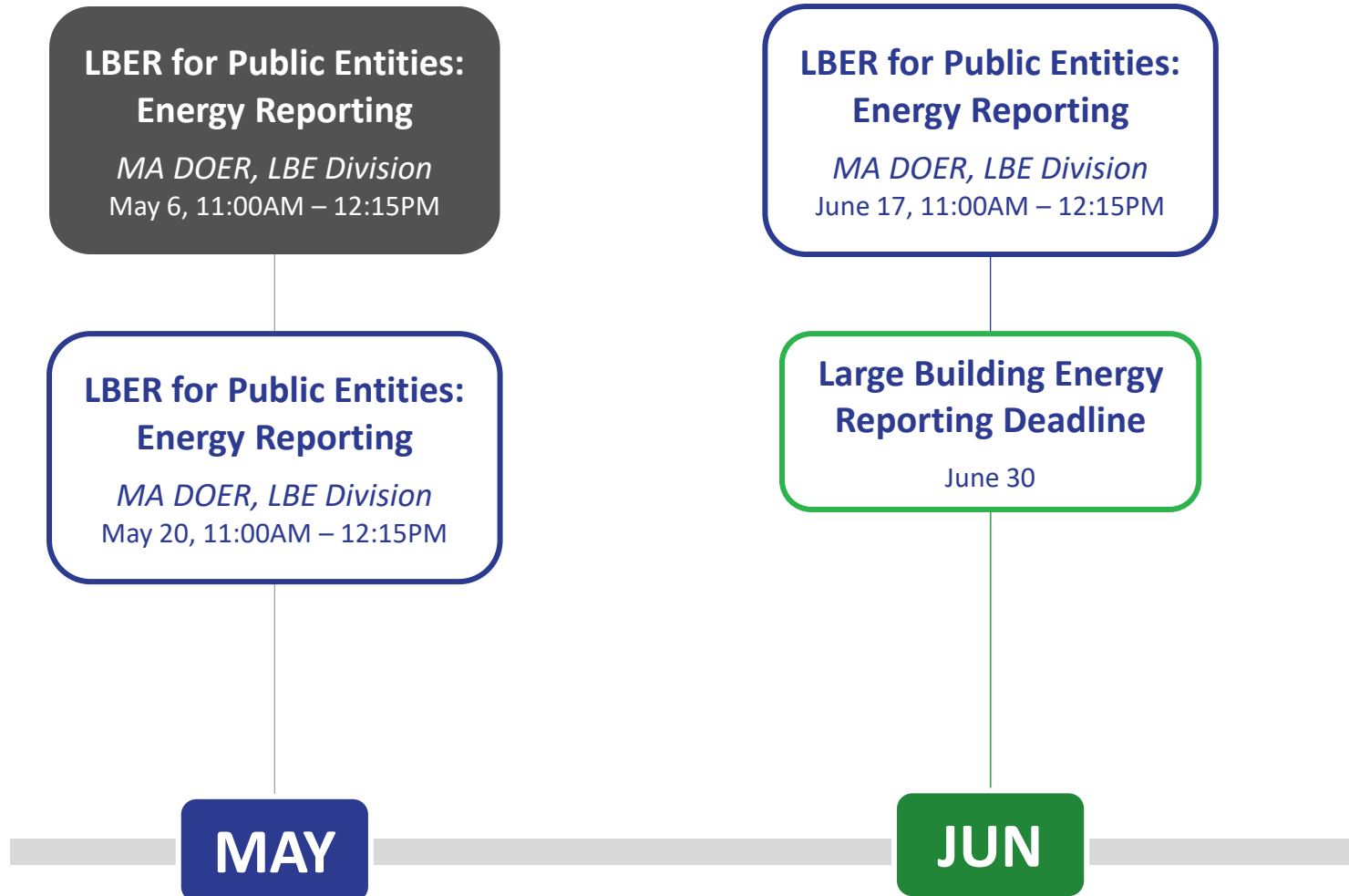
Claim your
building(s)

Optional:
Designate
your
buildings as
a campus

Gather your
buildings' or
campuses'
energy use
data
(if needed)

Submit your
energy use
data

Learn More About LBER



To get started with the LBER process, please visit the Knowledgebase:
<https://ma.beam-portal.org/helpdesk/kb/>

For **general** state entity questions, contact Arianna Zrzavy: Arianna.Zrzavy@mass.gov

For **site-specific** questions, contact the HelpDesk via email (DOER.BER@mass.gov) or submit a ticket online:
<https://ma.beam-portal.org/helpdesk/tickets/submit/3/>

SMART 3.0 Draft Regulations to be Released Soon

Current SMART Program	SMART 3.0 Proposed Changes <i>(not comprehensive)</i>
Predetermined solar capacity blocks with declining compensation rates	Allows DOER to make annual adjustments to blocks and rate structure based on progress toward statewide solar deployment targets and real-time solar costs
Solar capacity allocated on rolling basis year-round	Administer an annual February application period for large projects, sequenced by ISA execution date and assigned capacity accordingly; after that, capacity distributed on rolling basis until fully allocated
Small projects $\leq 25\text{kW}$ subject to capacity allocations	Small projects would not be subject to capacity allocations or annual capacity limits

May mean incentive values for projects farther out are harder to predict, but values would better reflect current market conditions

Could change how/when some projects enter the application queue



Before we get started...

Slido Activity

Energy Data Discussion

Please scan this QR code or go to slido.com and enter the following code to participate in this activity:

2665762





Telling Our Story: 20 Years of Collecting State Data

Sophia Vitello, Data & Project Analyst, DOER LBE

LBE Data Collection

Data LBE Collects

- Building energy & fuel use
- Vehicle fuel use
- Renewable generation & consumption
- GHG emissions
- Square footage
- Fleet inventory
- EV charging deployment
- Renewable energy deployment
- LEED buildings
- BPLE acquisitions
- Pollinator habitat
- Decarbonization, energy efficiency, and other sustainability projects

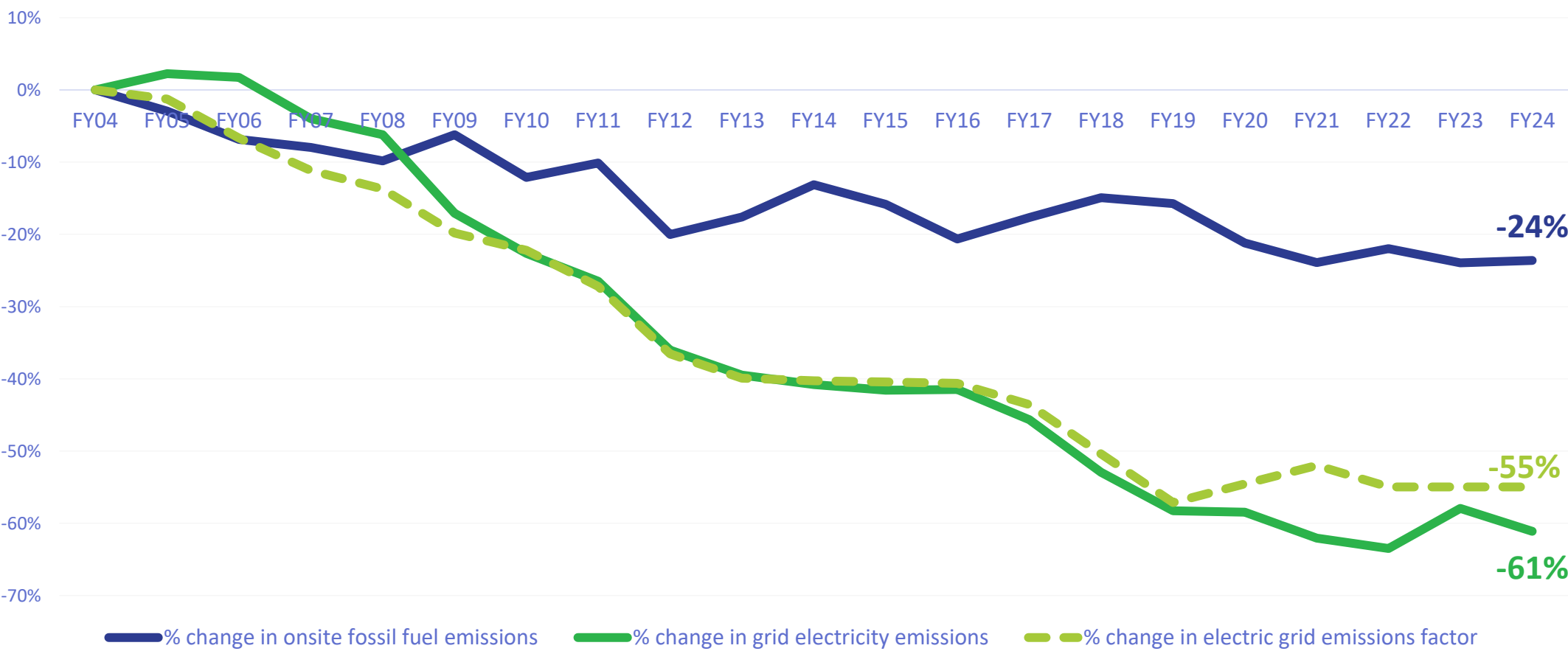
How LBE Collects Data

- Online utility databases (MEI & CEI)
- Statewide contract vendor reports
- CAMIS
- OVM fleet database
- DCAMM solar tracking
- Production Tracking System (PTS)
- **Annual LBE tracking form**

State entity data reporting and review is key to ensuring complete and accurate state portfolio data

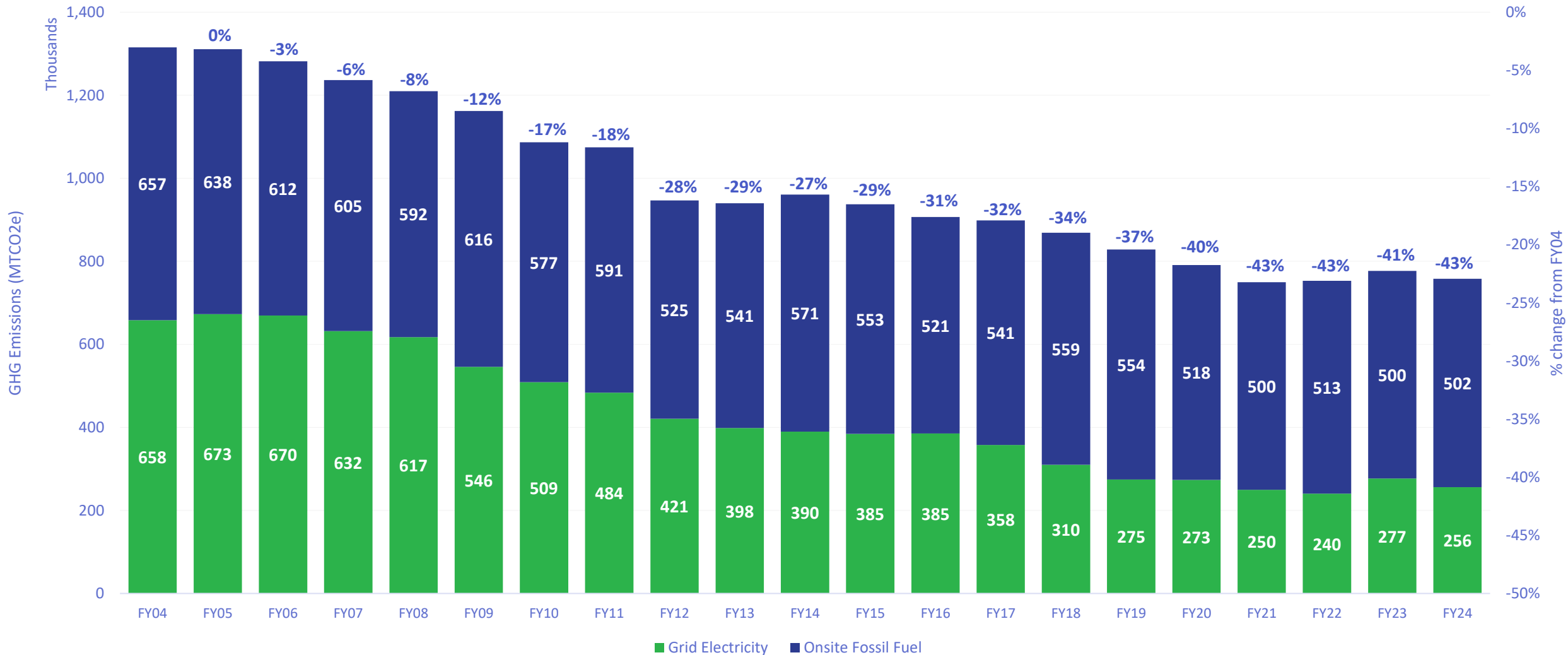
State Portfolio Focus on Onsite Fossil Fuel Emissions

FY04-24 State Portfolio GHG Emissions vs. Grid Emissions Intensity



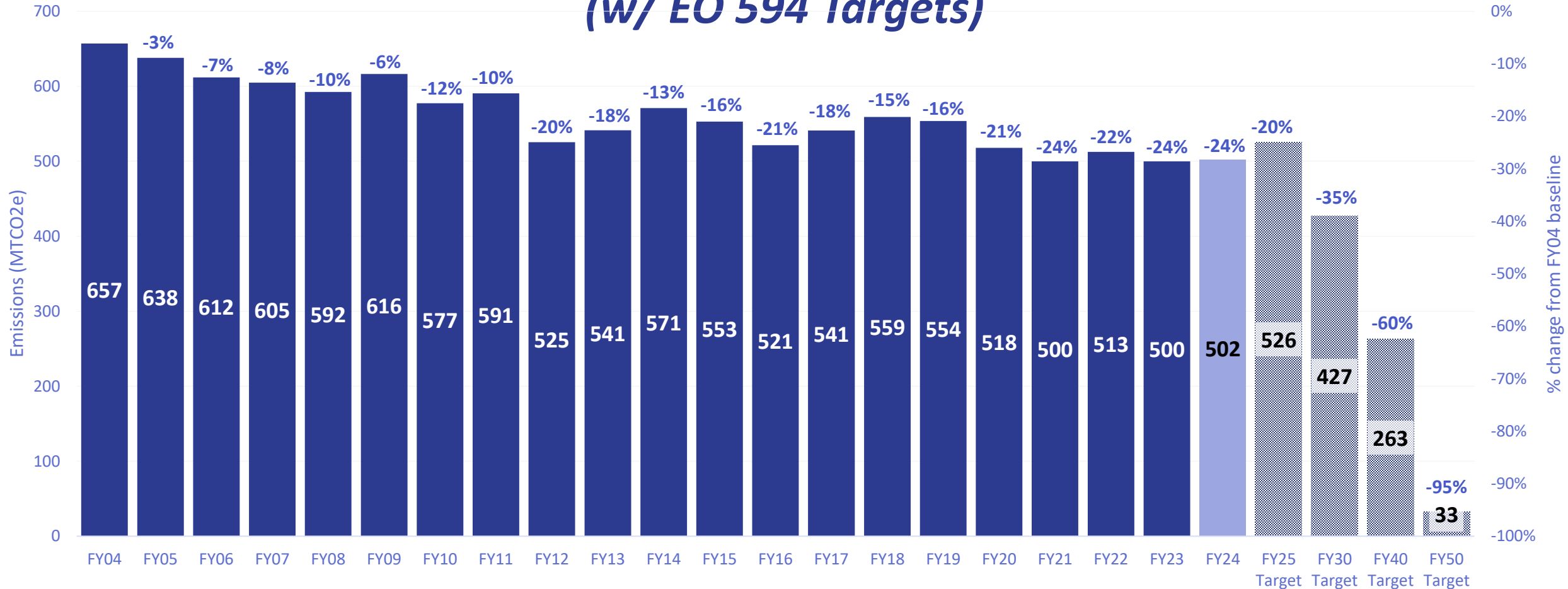
Data like this graph highlight that where the state portfolio needs to focus is on onsite fossil fuel emissions reductions (as electricity emissions decline, in large part, due to the electricity grid becoming cleaner with the deployment of renewables)

FY04-24 State Portfolio GHG Emissions



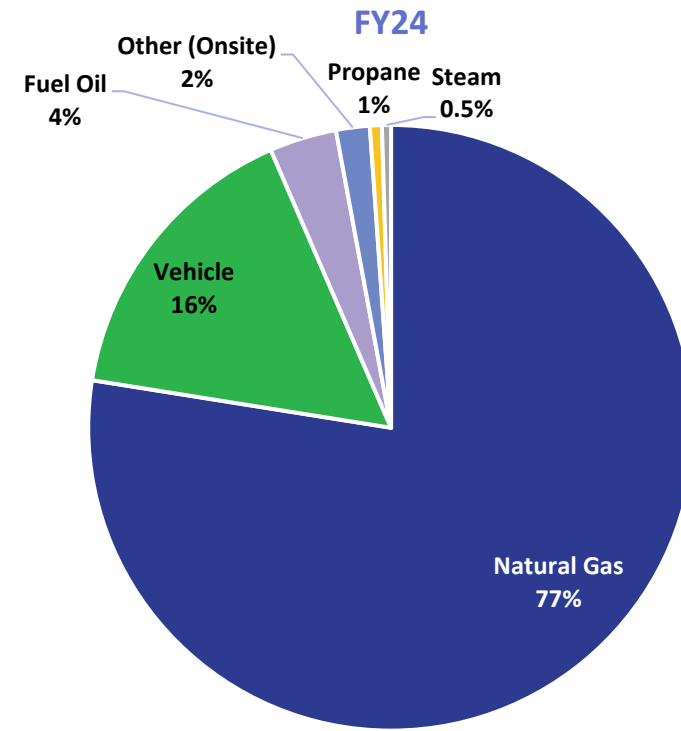
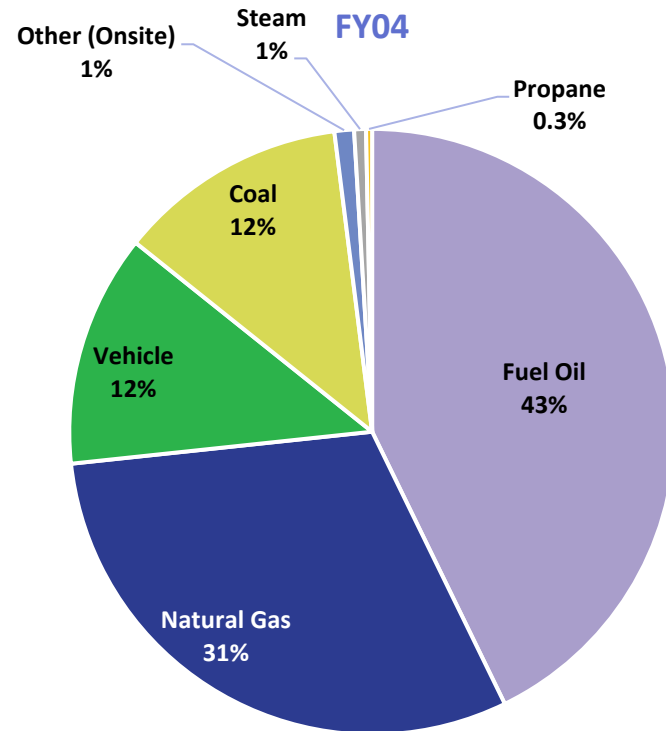
- Emissions reductions have remained fairly static over the past four to five years, but also no jump back up in emissions post-COVID
- Share of emissions from onsite fossil fuels is much higher in FY24 (67% of total GHG emissions) as compared to FY04 when grid electricity and onsite fossil fuel each accounted for about 50% of total GHG emissions

FY04-24 State Portfolio Onsite Fossil Fuel Emissions (w/ EO 594 Targets)



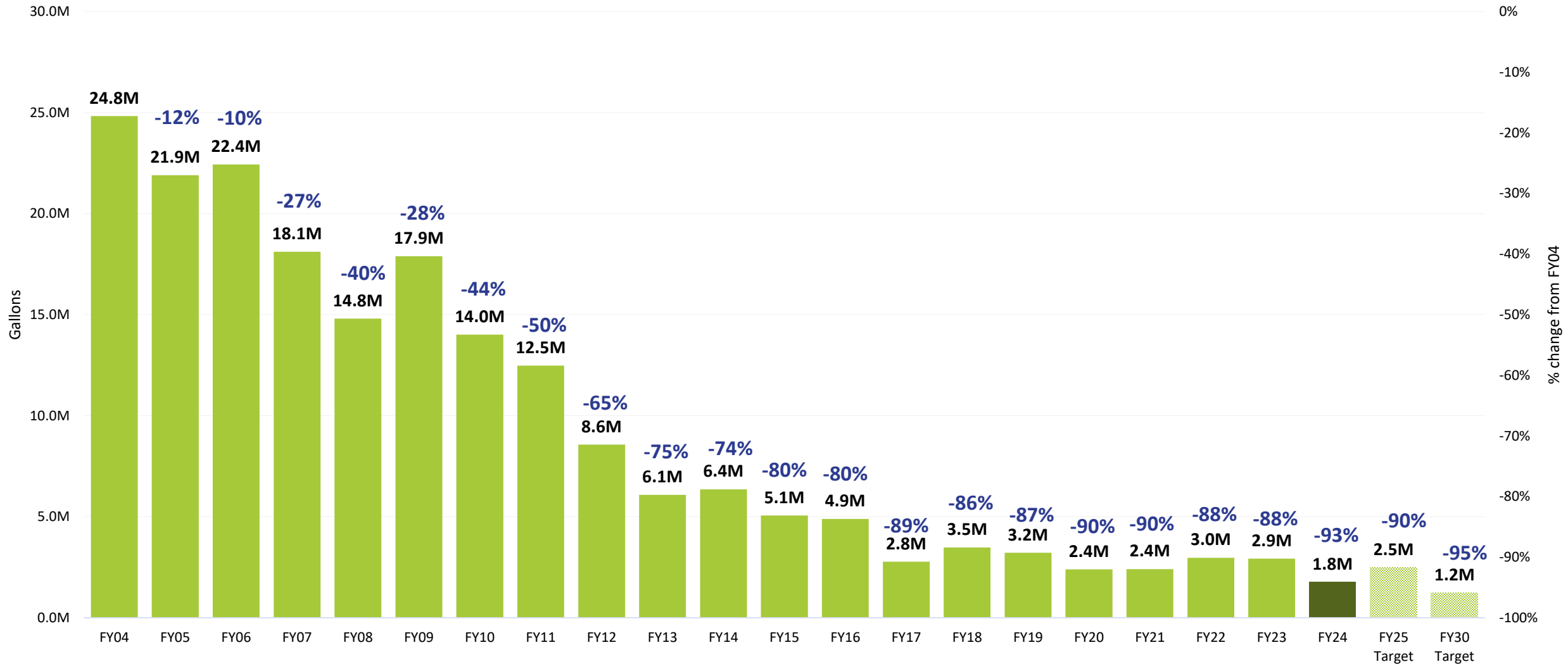
- Onsite fossil fuel emissions have remained fairly static over the past five years
- Portfolio reduced emissions by ~150,000 MTCO2e over 20 years but to meet FY30 target, need to reduce by ~75,000 MTCO2e (half of the previous 20-year reduction) in just the next 5-6 years

State Portfolio Onsite Fossil Fuel Emissions by Fuel Type



- Majority of onsite fossil fuel emissions now come from natural gas consumption (as compared to fuel oil use in FY04)
- Share of onsite fossil fuel emissions from vehicle fuel use has remained mostly the same since FY04

FY04-24 State Portfolio Fuel Oil Use (w/ EO 594 Targets)

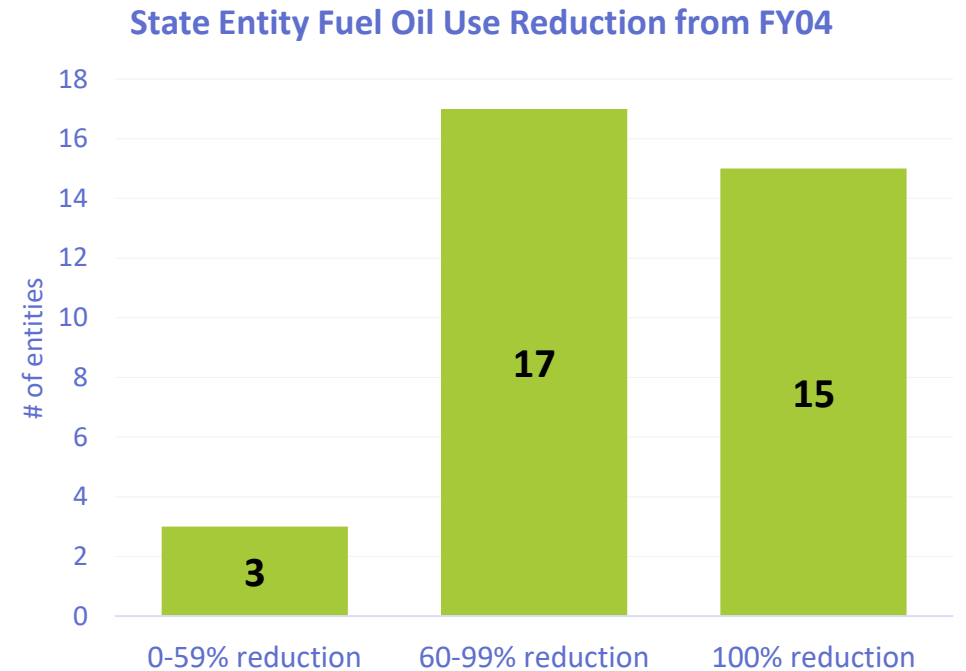


- To meet FY30 target, portfolio must reduce fuel oil use by ~519,000 gallons, equivalent to 30% of FY24 consumption

State Entity Fuel Oil Use Reductions

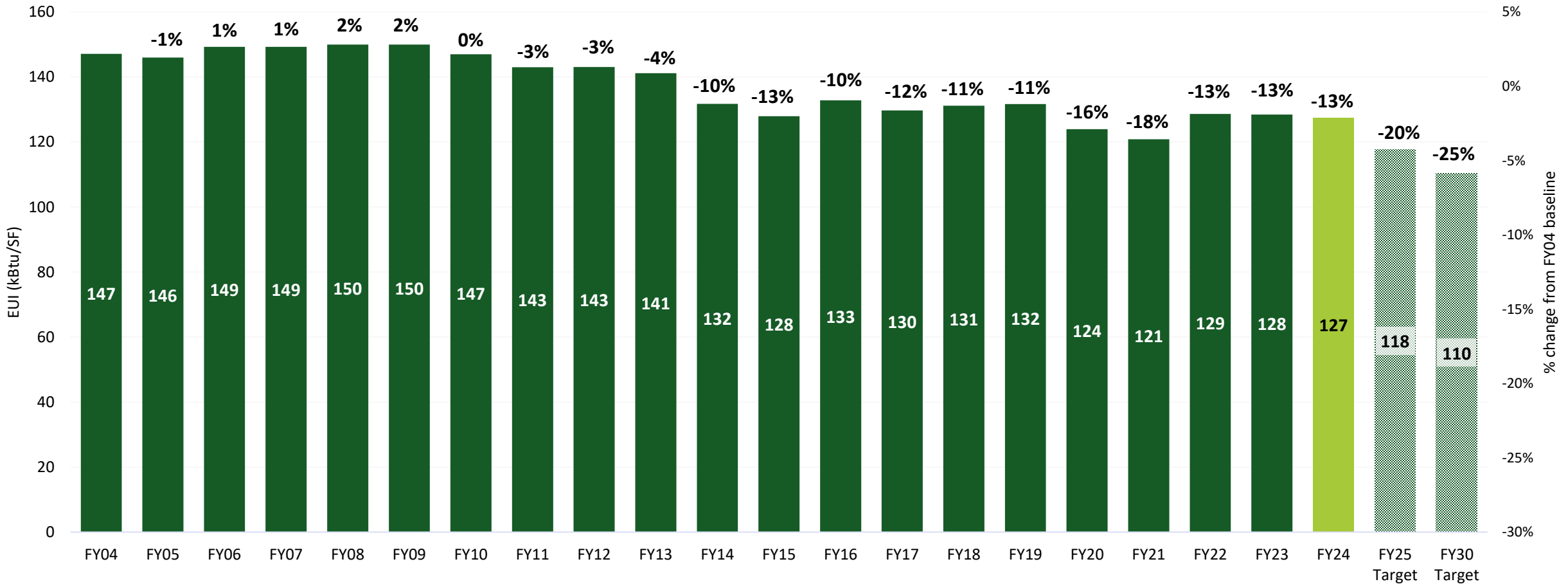
32 state entities have eliminated or greatly reduced their consumption of fuel oil since FY04

Largest 5 Oil Users in FY24 (Gallons)	FY04	FY19	FY24	% redux from FY04	% redux from FY19
Mass. Water Resources Authority	1,692,913	903,840	863,273	-49%	-4%
Dept. of Conservation and Recreation	295,762	231,957	179,409	-39%	-23%
UMass Amherst	558,719	661,391	124,691	-78%	-81%
MassDOT - Highway & Turnpike Divisions	283,599	112,320	113,629	-60%	1%
Dept. of Correction	3,119,665	635,136	108,032	-97%	-83%



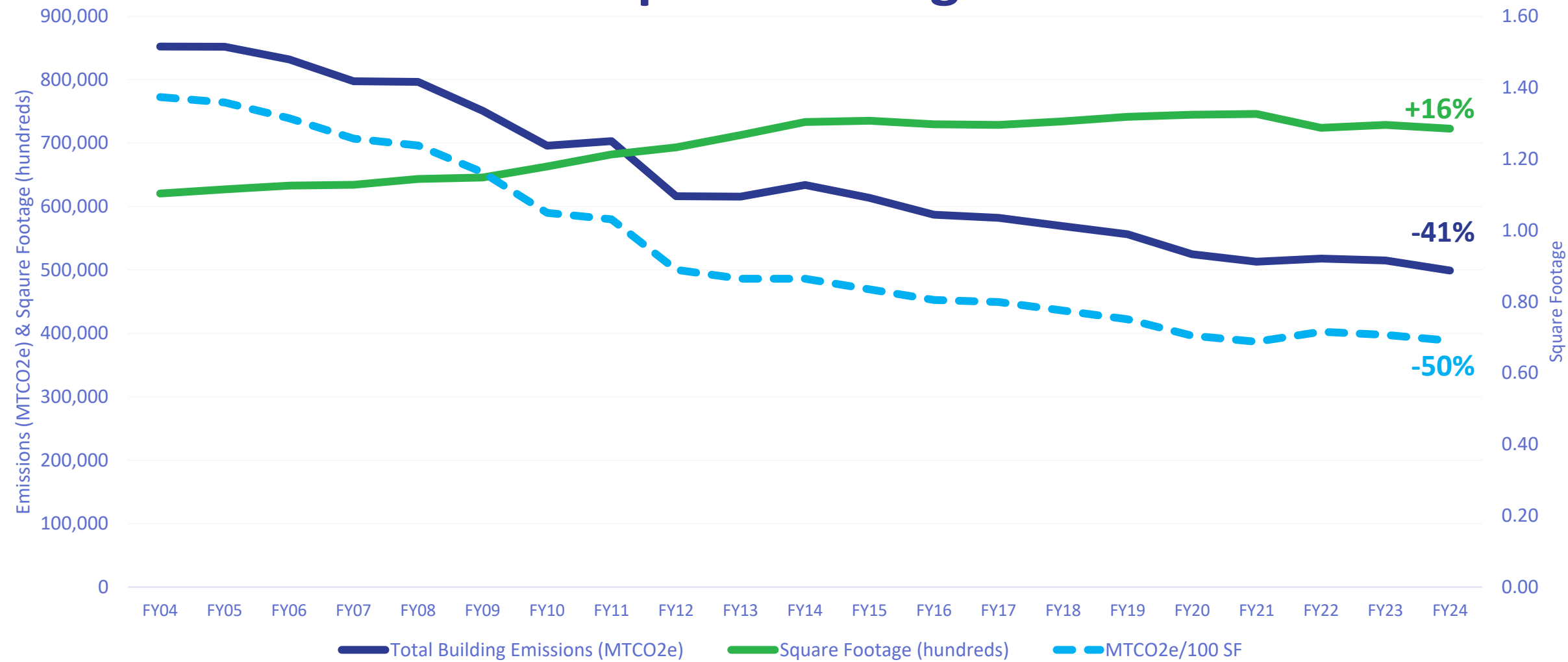
The largest 5 oil using entities as of FY24 have decreased their oil use by 39-97% from FY04 and many have also significantly reduced oil use since FY19

FY04-24 State Portfolio Weather-normalized Energy Use Intensity (EUI)



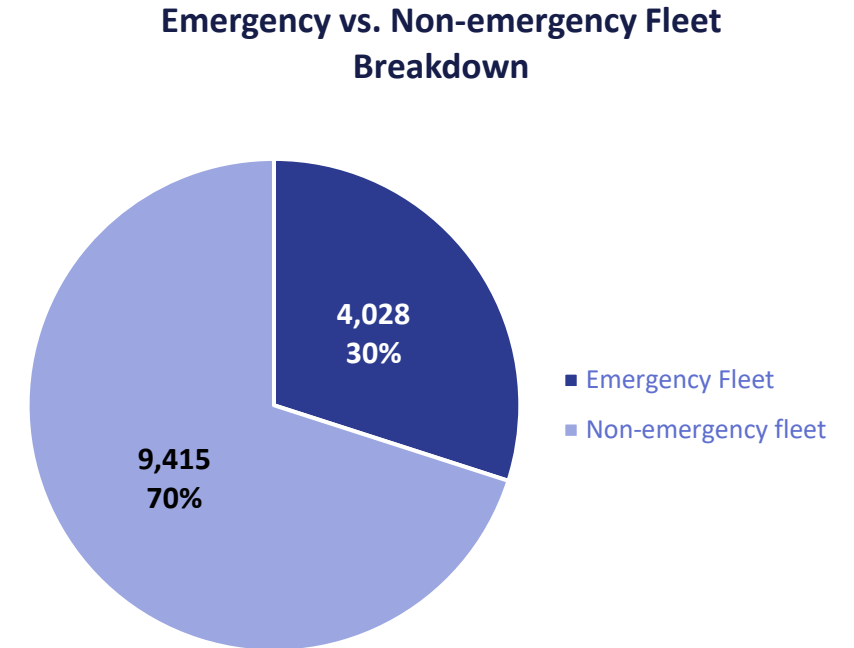
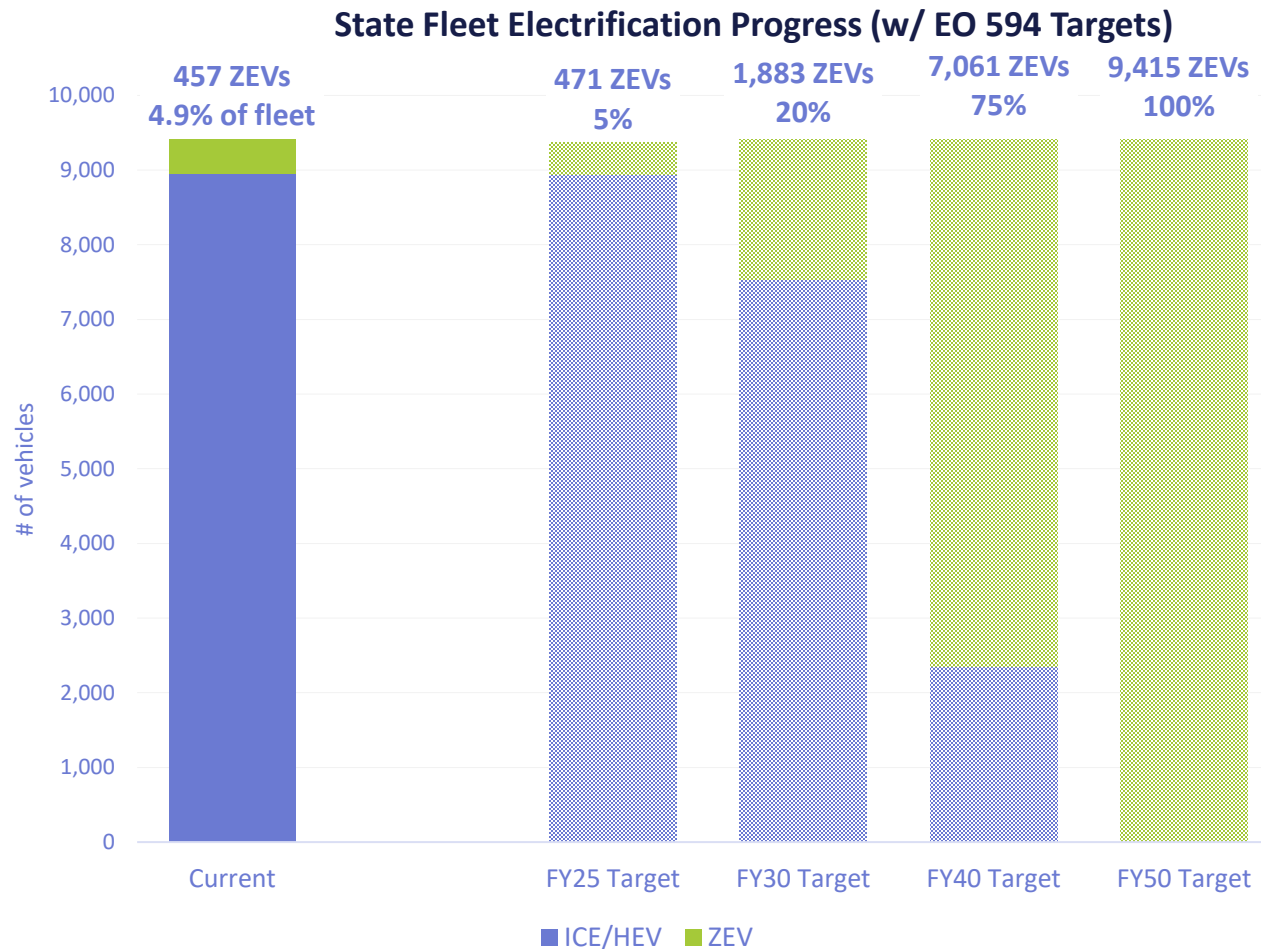
- As of FY24, the state portfolio has reduced weather-normalized energy use intensity by 13% from the FY04 baseline
- While many other metrics have seen significant reductions, EUI has not declined much over the past 10 years

FY04-24 Change in Building GHG Emissions vs. Square Footage



While the square footage of the state portfolio has increased by 16%, the total building emissions per hundred square feet have declined by 50%

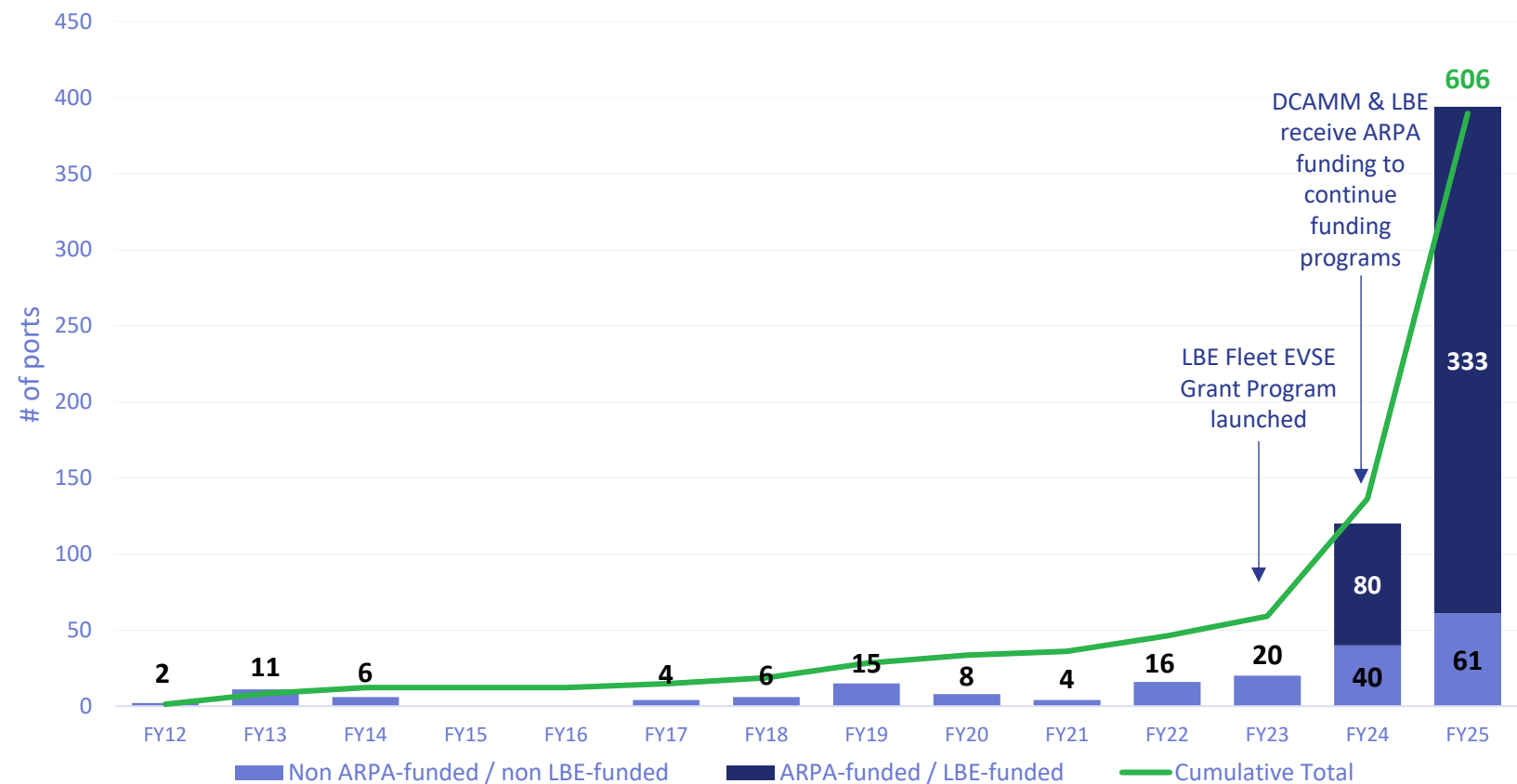
State Portfolio Fleet Electrification



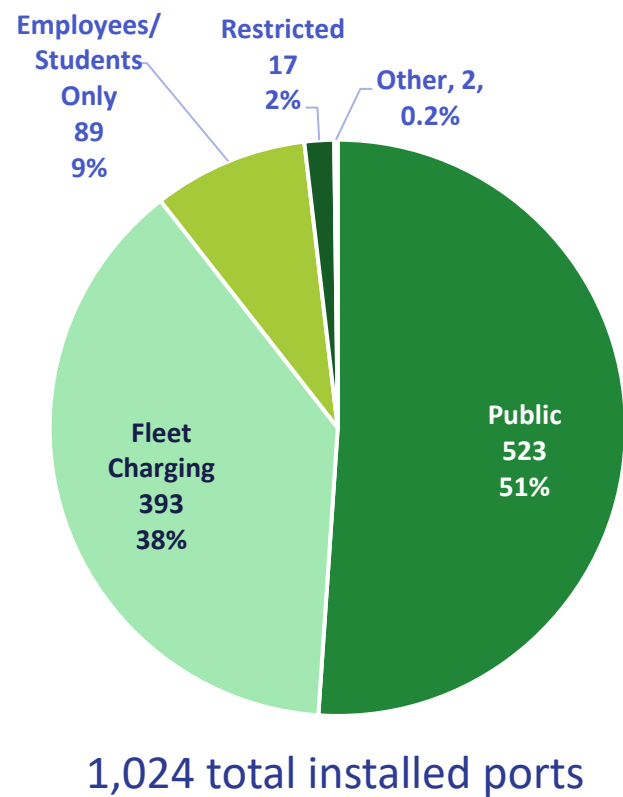
- To meet FY30 goal, fleet must transition another 1,412 vehicles to ZEVs
- Fleet data help inform the fleet electrification planning process; such planning then can inform future acquisition decisions and creates a roadmap to meet the FY30 target

EV Charging at State Sites

State Fleet EV Charging Deployment by Fiscal Year & Funding Source

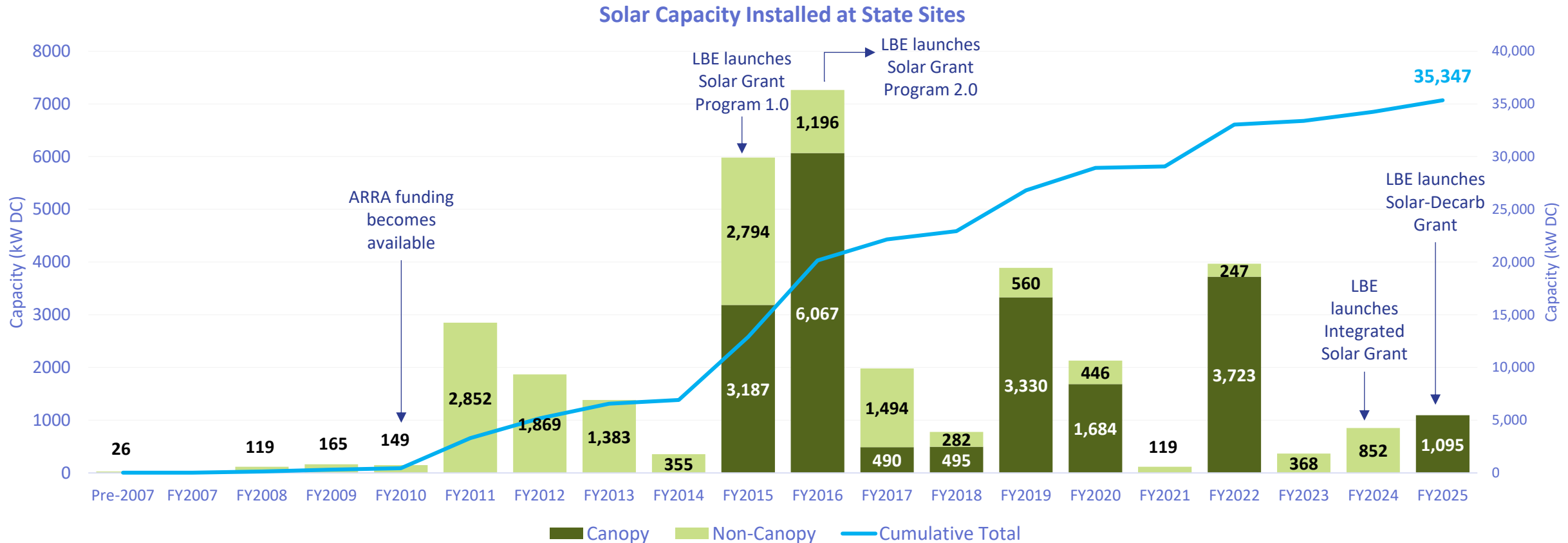


EV Charging Ports Installed at State Sites by Access Type



- Over half of charging ports installed at state sites are available for public use
- Fleet EV charging deployment has grown significantly over the last two years, due in large part to increased availability of grants & funding resources

Solar Deployment at State Sites



- LBE grant programs have helped incentivize the deployment of canopies at state sites
- More than 35 MW of solar installed at state sites (57% canopy, 43% non-canopy)

LBE Data for Decarbonization and Sustainability

UMass Chan Medical School



Office of
Sustainability

Tuesday May 13th, 2025

LBE Dataset – Our Core Tool

LBE Dataset

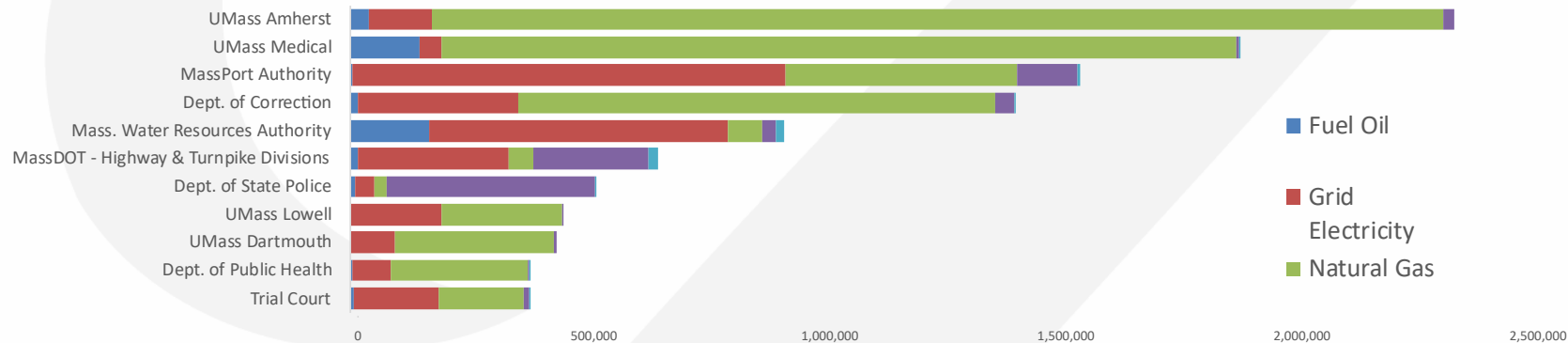
- Tracks Scope 1 & 2 GHG emissions
- Required annual submission to MA LBE Program
- Consistent methodology with 2004 baseline



Benchmarking & Public Transparency

Benchmarking & Accountability

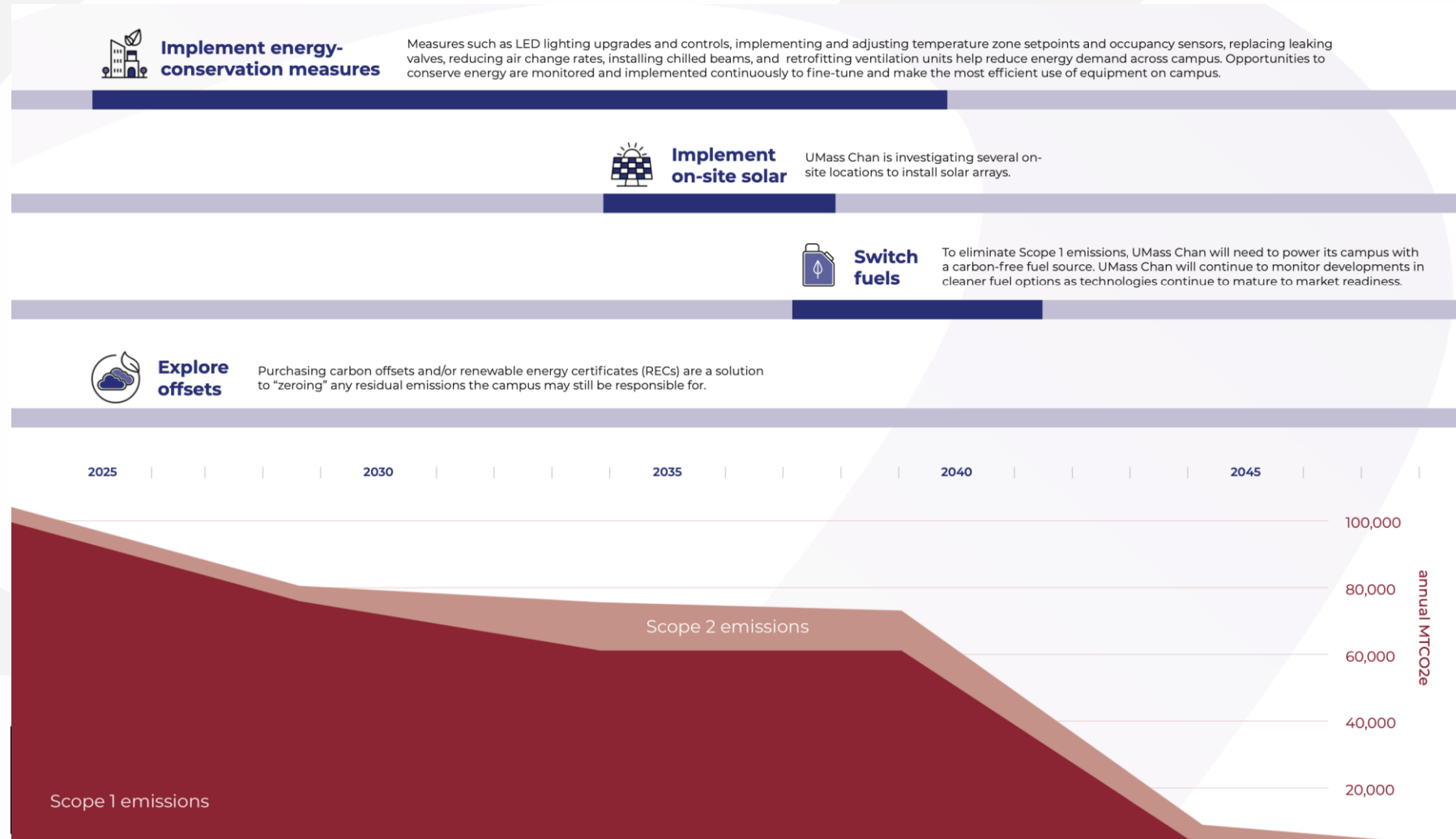
- Compare to peers: GHG Rankings, AASHE STARS
- Data supports sustainability ratings & visibility
- Public reporting builds trust



Planning and Leadership Engagement

Planning & Leadership

- LBE data informed our Decarbonization Plan
- High-level view helped set goals
- Key input for leadership briefings



Grant Relevance

Grants & Emissions Data

- Required for some grant applications
- Demonstrates climate readiness





Commonwealth of Massachusetts
Executive Office of
Energy and Environmental Affairs

Decarbonization Analytics

LBE Council
May 13, 2025

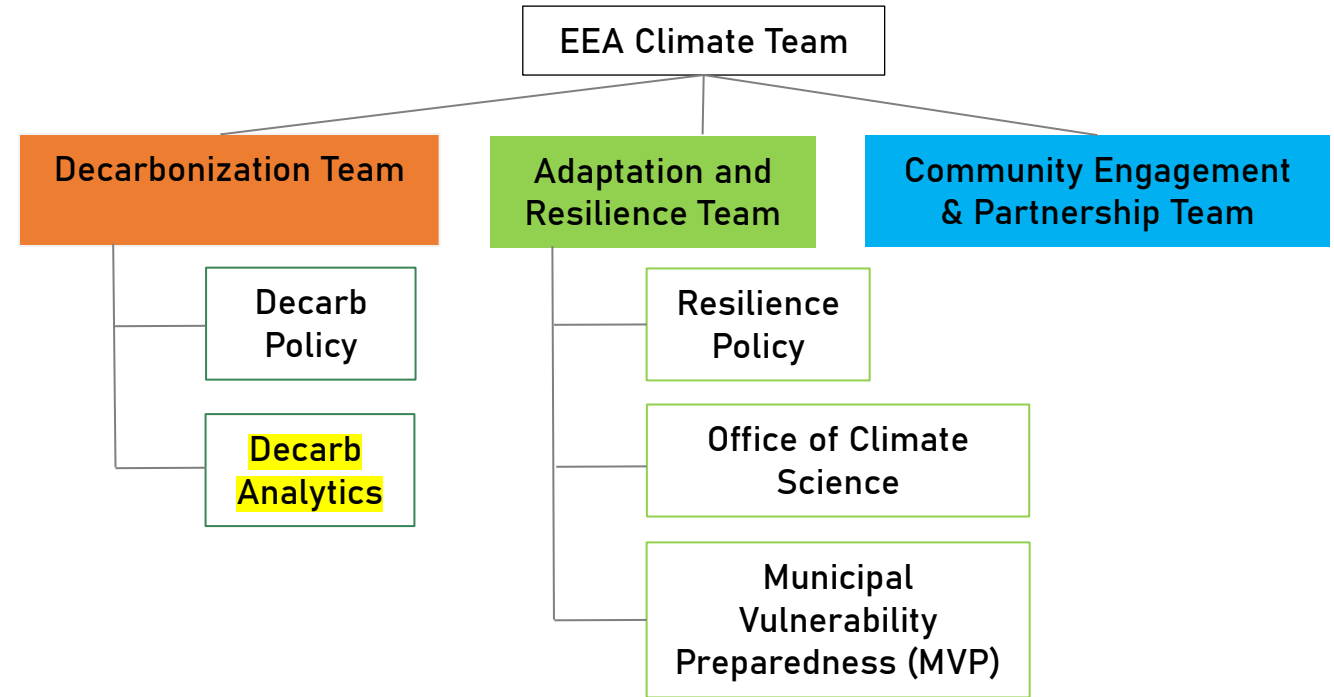
Daniel Engelberg & Aimee Powelka



Analytics Team

Mission Statement

The Decarbonization Analytics team is responsible for analysis and insights in support of achieving Massachusetts's equitable decarbonization and net zero targets as set forth in the Global Warming Solutions Act and Clean Energy and Climate Plans. This includes working across EEA agencies to analyze the effectiveness of existing policy, monitoring of relevant metrics, and modeling of pathways to achieve our targets. The team seeks to remain grounded in the real opportunities and challenges for decarbonization at the individual, household, community, municipal, and statewide level.



Daniel Engelberg
Director



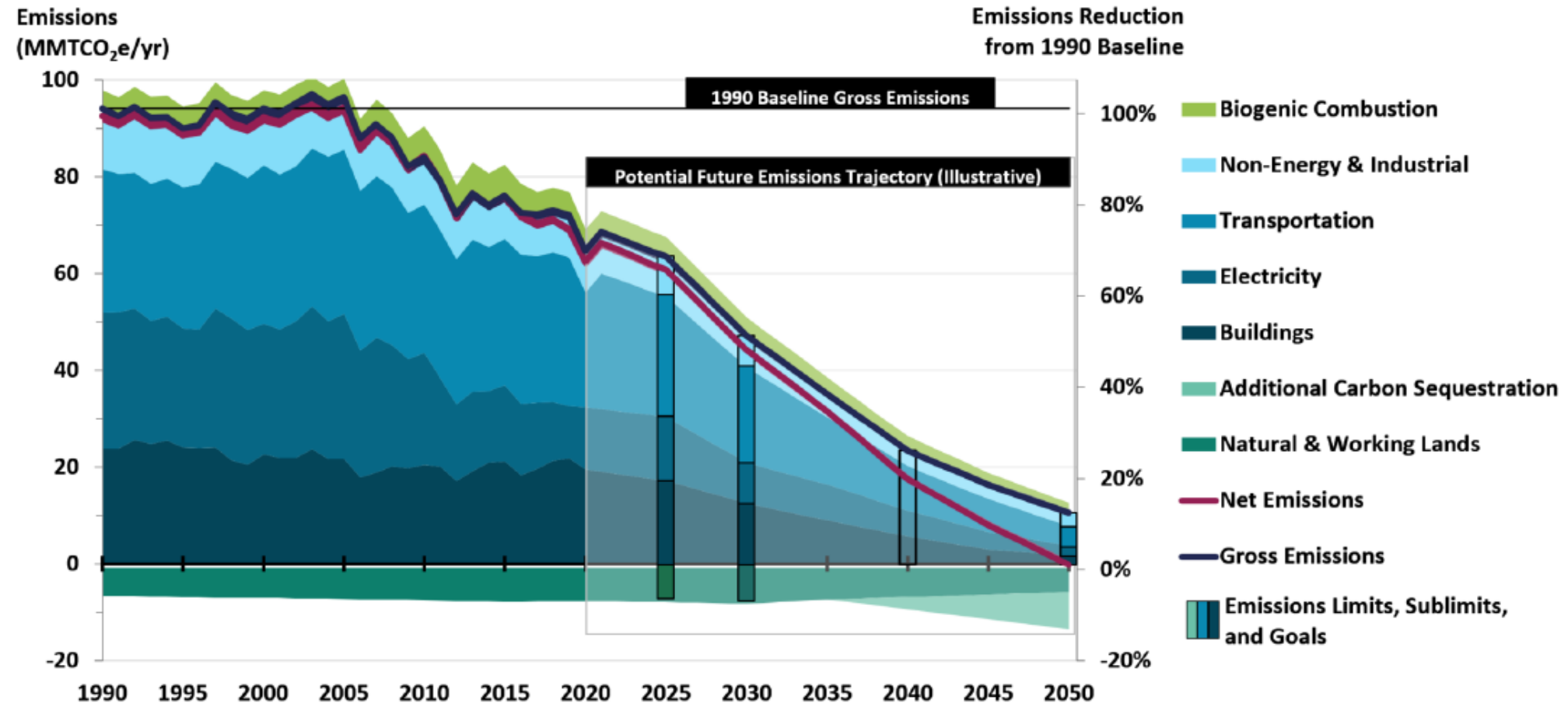
Dunbar Carpenter
Lands



Aimee Powelka
Buildings

Equitable decarbonization and net zero targets

FIGURE 3-5. PAST EMISSIONS THROUGH 2020, EMISSIONS LIMITS AND SUBLIMITS, AND ILLUSTRATIVE POTENTIAL EMISSIONS TRAJECTORY THROUGH 2050



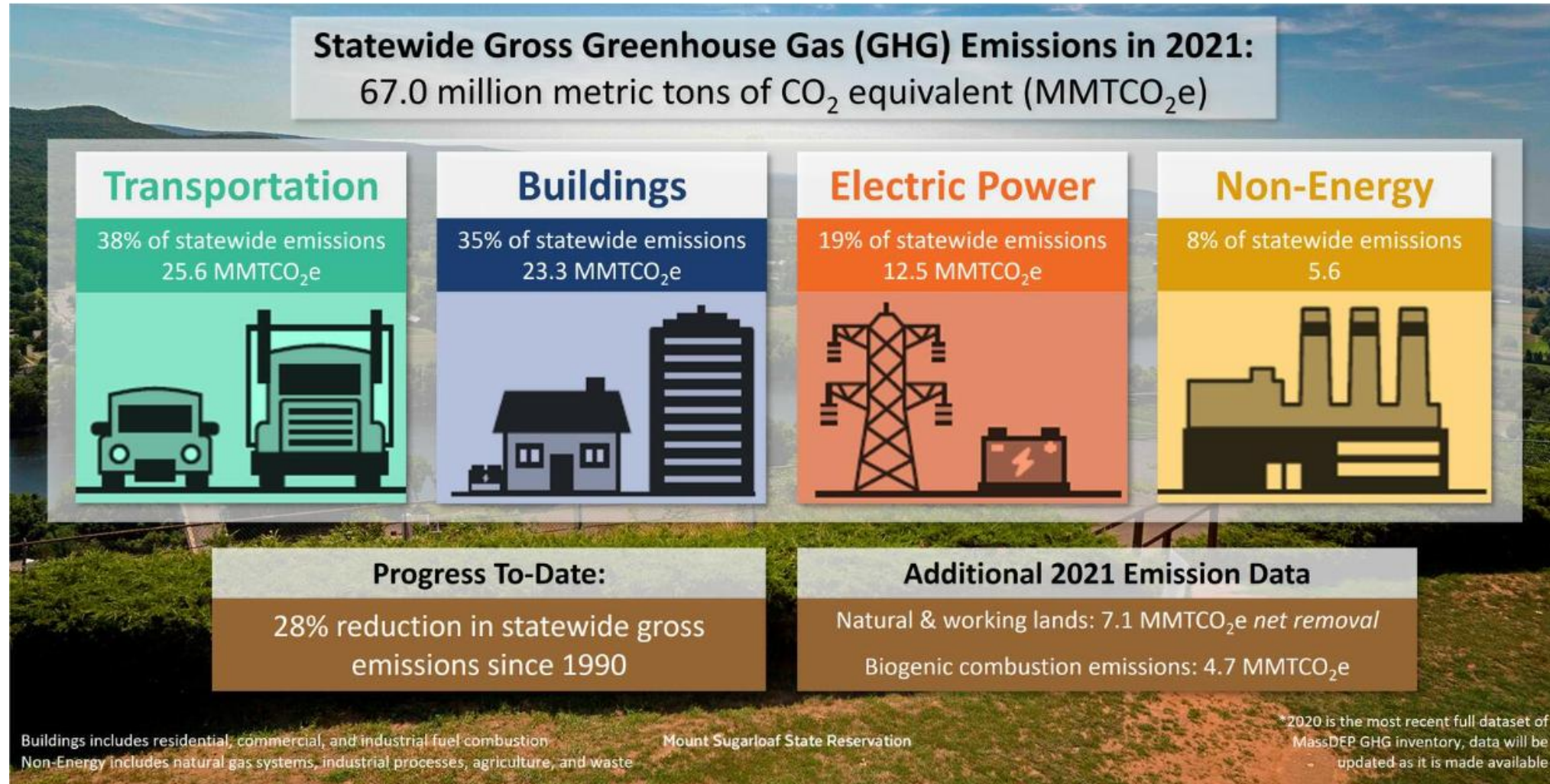


Analyze the effectiveness of existing policy

Influences on Transportation Emissions Since 1990

	Household Growth	VMT Per Household (10-year average)	ICE Fuel Efficiency (5-year average)	Ethanol	EVs	Overall
Influence on LDV Gasoline Consumption	+25%	+14%	-30%	-7%	-1%	-10%
Influence on MHDV Diesel Consumption	+25%	+11%	+1%	N/A	N/A	+38%

Monitoring Ongoing Trends



[Climate Report Card](#)
[Climate Dashboard](#)

Modeling of pathways to achieve our targets

Statewide Building Sector Model

- **Address relevant policy questions of this moment**
 - Building performance standard
 - Appliance emissions standards
 - Grid impacts
- **In-house** tool that we maintain and keep up to date
 - Building stock and decarbonization options for all building sector analysis
 - Internal and external stakeholders can go deeper with shared assumptions/data
- **Bottom-up**
 - Every building in the Commonwealth allows us to scale to any geography
 - Flexible to evaluate range of policies current and potentially new policies



All icons credited to MassCEC
Clean Energy Lives Here

Remain Grounded





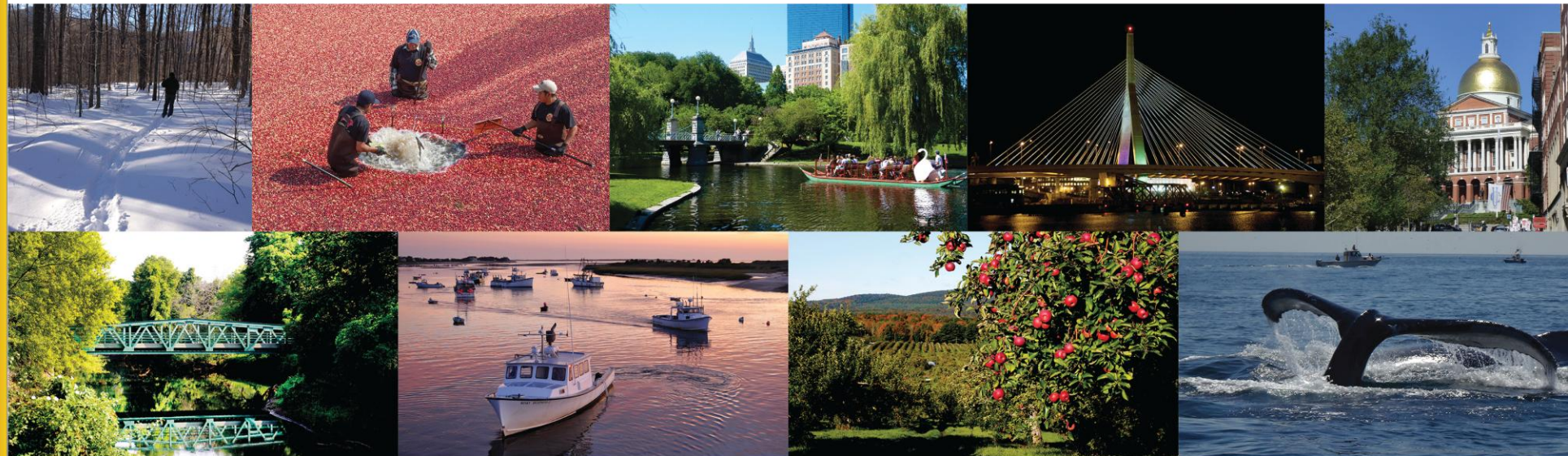
Priority Projects

- Scoping 2035 CECP Modeling
- Building Sector Model Development
- Support Massachusetts Integrated Land Use Strategy
- Strategic Policy Making Under Uncertainty
- Internal and External Dashboard Development
- Participatory Modeling



Operational Services Division - Data

Julia Wolfe, Director of Environmental Purchasing



Vendor Reported Sales Data



OSD requires vendors to provide quarterly sales reports. **NOTE: This is vendor reported data and not verified.**



Automated data collection, via B2GNow Vendor Report Management System



Basic sales data fields (Purchasing Entity Name, Invoice Number, Invoice Date, Product/Service Description, Unit of Measure, Unit Price, Quantity, Line Total Purchase Amount), other contract specific data, and EPP data fields



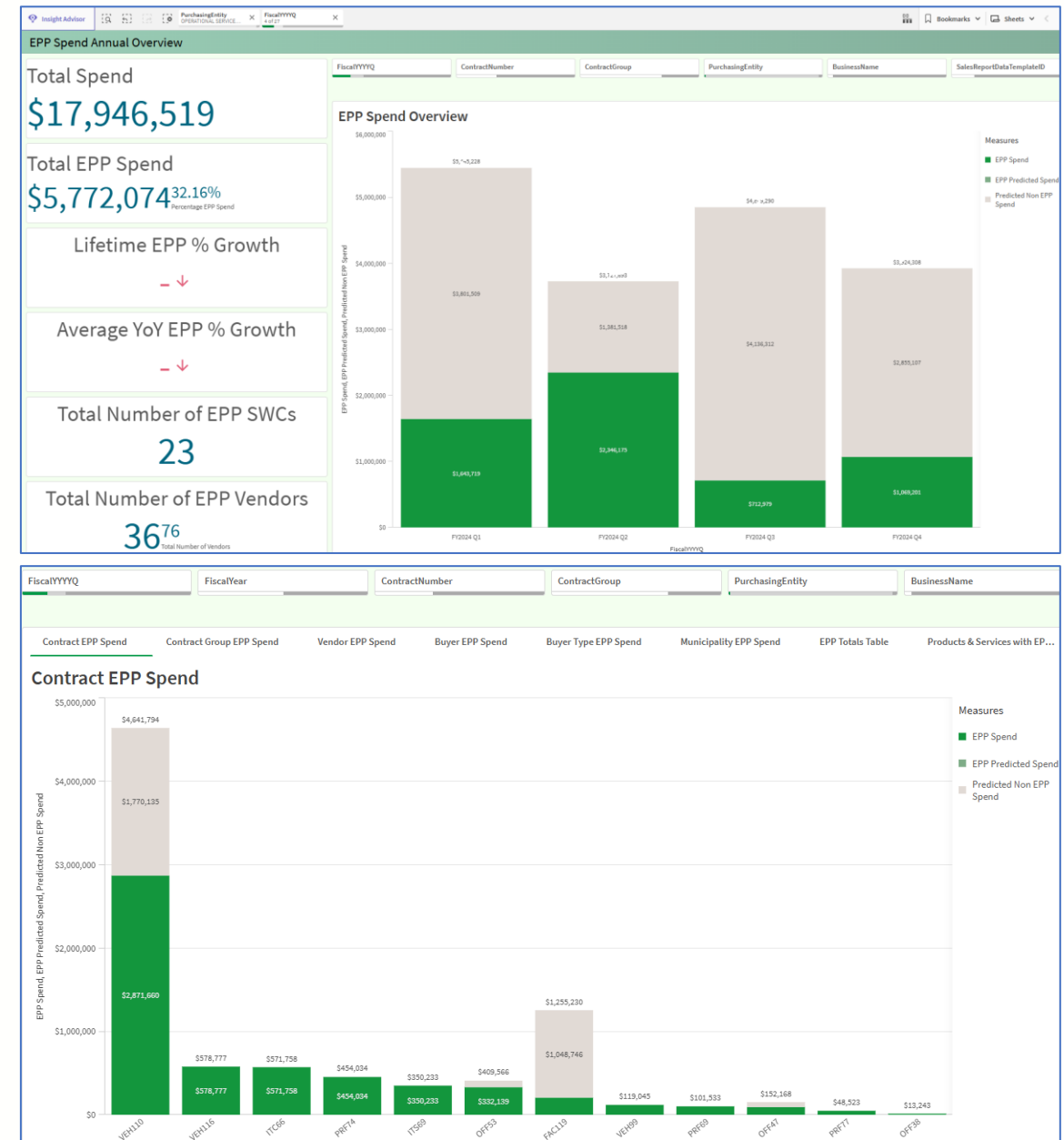
Use Qlik performance analytics tool to view data. Qlik is not public facing, but buyers may request reports from OSD.



Vendor Reported Data - Qlik

All contract sales data may be sorted and filtered by many data points in Qlik:

- Buying Entity
- Contract
- Vendor
- FY and Quarter
- Total and EPP Purchase Amounts



Vendor Reported Data

- OSD may provide buyer purchasing reports (excel) enabling further sorting and filtering:
 - ✓ Contract specific
 - ✓ Consolidated buying entity purchases within a specific time frame
- Examples of climate and environmentally preferable contract specific fields for certain contracts:
 - ✓ Third-party environmental certification or standard
 - ✓ Fuel types
 - ✓ Battery powered
 - ✓ EV/PHEV/HEV
 - ✓ Recycled content
 - ✓ Product/Service description (e.g., mini split, heat pump, LED, solar, etc.)
- QLIK DEMO

Buying Entity Purchases Report Example

Operational Services Division				
FY24/25 as of 5/5/25				
Row Labels	Sum of AmountPaid	Sum of EPP Spend		
OPERATIONAL SERVICES DIVISION	\$ 27,992,516.44	\$ 7,884,670.37		
CLT08	\$ 4,577.39	\$ -		
ENE48	\$ 12,150.78	\$ -		
Dennis K. Burke Inc.	\$ 12,150.78	\$ -		
Mid Grade Gasoline	\$ 12,150.78	\$ -		
ENE54	\$ 2,547.35	\$ -		
Dennis K. Burke Inc.	\$ 2,547.35	\$ -		
Mid Grade Gasoline	\$ 2,547.35	\$ -		
FAC100	\$ -	\$ -		
U.S. Electrical Services, Inc.	\$ -	\$ -		
N/a	\$ -	\$ -		
FAC101	\$ 5,248.98	\$ 1,032.33		
FAC110	\$ 452.50	\$ -		
VEOLIA ES TECHNICAL SOLUTIONS, L.L.C.	\$ 452.50	\$ -		
Issuance Certificate of Recycling	\$ 20.00	\$ -		
Recycle - Hard Drive Destruction	\$ 280.00	\$ -		
Supply 5 gallon poly pail	\$ 52.50	\$ -		
Transportation	\$ 100.00	\$ -		
FAC115	\$ 128,103.44	\$ -		
Jet Security, LLC	\$ 31,668.00	\$ -		
Overnight security Westborough	\$ 31,668.00	\$ -		
Madison Security Group	\$ 96,435.44	\$ -		
Discount	\$ (1,283.10)	\$ -		
Guard Services	\$ 2,268.00	\$ -		
Security Services	\$ 91,491.66	\$ -		
Security Services - Holiday	\$ 1,620.00	\$ -		
Security Services-Holiday	\$ 2,338.88	\$ -		
FAC116	\$ 101.19	\$ -		
CRANDALL-HICKS COMPANY, INC.	\$ 101.19	\$ -		
94-074 BLADE TORO	\$ 101.19	\$ -		
FAC118	\$ 522.58	\$ 522.58		
W. B. Mason	\$ 183.31	\$ 183.31		
SOAP,DISHMATE,FREE&CLEAR,6-25OZ/CT	\$ 14.96	\$ 14.96		
TOWEL,KITCH,85/RL,30RL/CT,WH	\$ 168.35	\$ 168.35		
WB MASON	\$ 339.27	\$ 339.27		
BODY FLUID SPILL KIT,4.5X11.88X11.5,CLAMSHELL CS,2REFILLS/CT	\$ 260.88	\$ 260.88		
FACE MASK, 3-PLY, DISPOSABLE, 50/BX, 1000EA/CT (MFMW2050)	\$ 9.00	\$ 9.00		
TOWEL,KITCH,85/RL,30RL/CT,NTWH	\$ 21.29	\$ 21.29		
TOWEL,KITCH,85/RL,30RL/CT,WH	\$ 48.10	\$ 48.10		
FAC119	\$ 1,729,603.19	\$ 206,484.58		
FAC126	\$ 5,119.10	\$ -		
FAC86	\$ 2,434.65	\$ 2,434.65		
FAC96	\$ 4,289.30	\$ -		
GRO39	\$ 2,732.57	\$ 1,825.61		
HLS06	\$ 2,012.40	\$ 551.36		

OSD Resources

Sign up for Communications: bit.ly/OSDsignup

OSD: www.mass.gov/osd

EPP Program: www.mass.gov/epp

COMMBUYS: www.commbuys.com

OSD Help Desk: 1-888-627-8283 or OSDHelpDesk@mass.gov

OSD Blog: www.mass.gov/collections/procurement-insights



Follow Us!

@Mass_OSD



Case Study: MassDOT

Andy Paul, Highway Design Engineer, MassDOT

MassDOT Facility Decarbonization



MassDOT worked with LBE to review DOT statewide contract **fuel oil data**



MassDOT used this data to start **to identify sites still using fuel oil and which use the most oil**



MassDOT then has used this site list to begin outreach and site visits **to determine potential pilot sites for facility decarbonization**



DCR did similar process and MassDOT took **lessons learned** from their experience

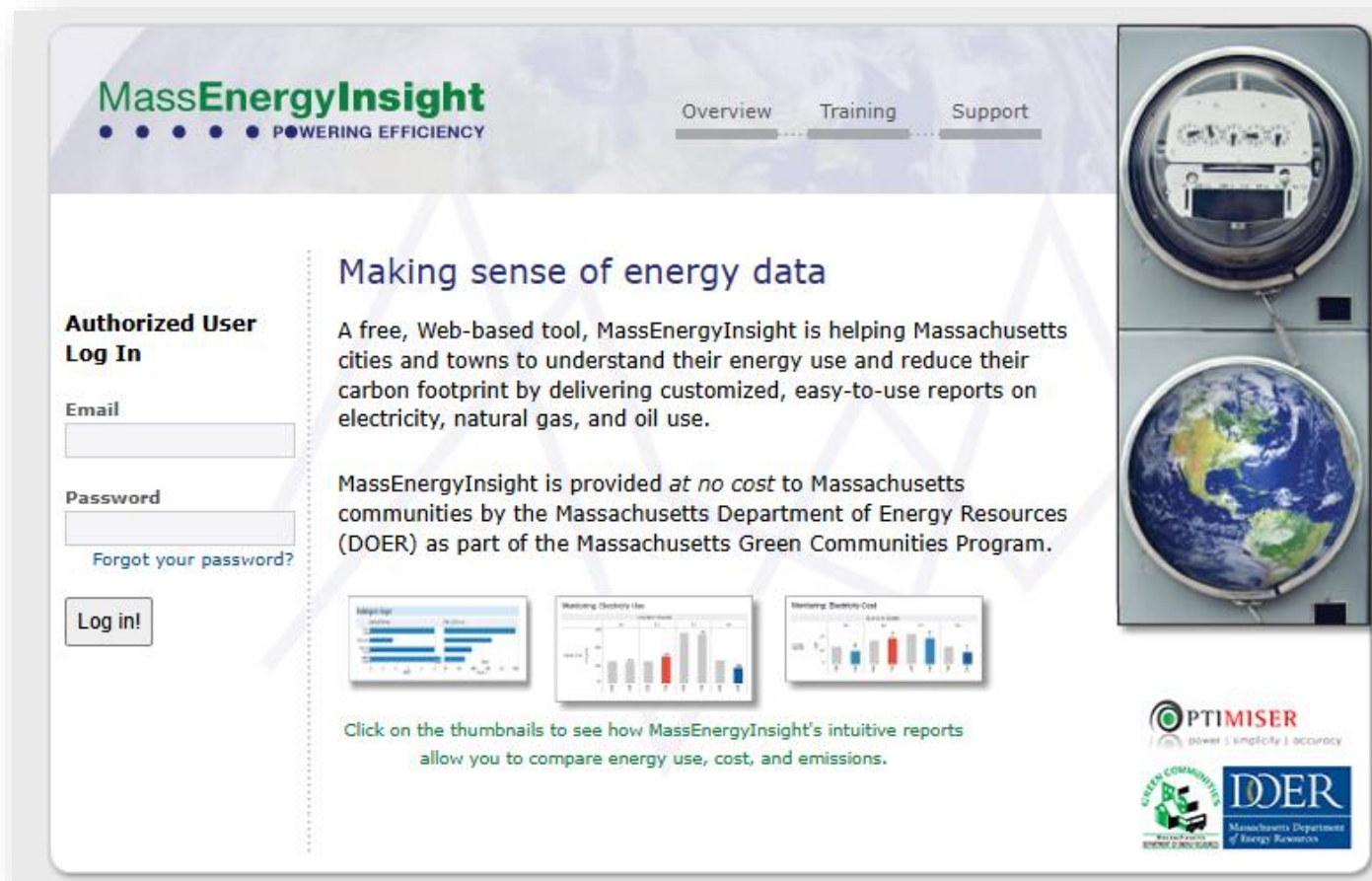


Tools of the Trade: MassEnergyInsight (MEI)

Mark Rabinsky, Deputy Director, DOER Green Communities Division

What is MassEnergyInsight (MEI)?

MassEnergyInsight is a free, web-based tool for all Massachusetts cities, towns, and state entities to understand their energy use and reduce their carbon footprint.



What is MassEnergyInsight (MEI)? Setup

- **Data Setup and Collecting**

MassEnergyIntelligence
POWERING EFFICIENCY

Organize Data Upload Spreadsheet View Reports Annual Reports AR Reviews Climate Leader

Organize data

This "Tree" shows your municipality, departments, complexes, buildings or facilities, and units.
Click the plus sign (+) to expand the tree and the minus sign (-) to collapse it.

Click **Show accounts within tree** to integrate your accounts into the tree, then drag-and-drop them to new locations in the tree.

Click **Search** to search the entire tree for text containing your search phrase

Search Phrase

☐ Show accounts within the tree

Ames(City, Town, or Reg. Entity)	ACCOUNTS	CREATE NEW
Ames Elementary(Facility)	ACCOUNTS	CREATE NEW
Ames High School(Facility)	ACCOUNTS	CREATE NEW
Ames Middle School(Facility)	ACCOUNTS	CREATE NEW
Animal Shelter(Facility)	ACCOUNTS	CREATE NEW
Cemetery Building(Facility)	ACCOUNTS	CREATE NEW
Community Center(Facility)	ACCOUNTS	CREATE NEW
DPW(Facility)	ACCOUNTS	CREATE NEW
Fire Station(Facility)	ACCOUNTS	CREATE NEW
Historic Museum(Facility)	ACCOUNTS	CREATE NEW
Parks & Rec Department Building(Facility)	ACCOUNTS	CREATE NEW
Public Library(Facility)	ACCOUNTS	CREATE NEW
Public Safety(Facility)	ACCOUNTS	CREATE NEW
Senior Center(Facility)	ACCOUNTS	CREATE NEW
Street Lights(Facility)	ACCOUNTS	CREATE NEW
Town Hall(Facility)	ACCOUNTS	CREATE NEW
Vehicles(Facility)	ACCOUNTS	CREATE NEW
Wastewater Treatment Plant(Facility)	ACCOUNTS	CREATE NEW
Water Treatment Plant(Facility)	ACCOUNTS	CREATE NEW

What is MassEnergyInsight (MEI)? Setup 2

- Data Setup and Collecting

MassEnergyInsight
POWERING EFFICIENCY

HELLO mark.rabinsky@mass.gov | Home

Organize Data

Upload Spreadsheet

View Reports

Annual Reports

AR Reviews

Climate Leaders

CL Reviews

Roadmap Beta

Users

Client Config

Providers

ESPM

Overview

Buildings to Target

Facility Dashboard

Organization View Table

Category View Table

Data Loaded Table

Legacy Reports

Other Reports

Data Loaded Table

Use this report to check for gaps in your utility data. Filter by department or use the search boxes on the right to find specific facilities or account numbers.

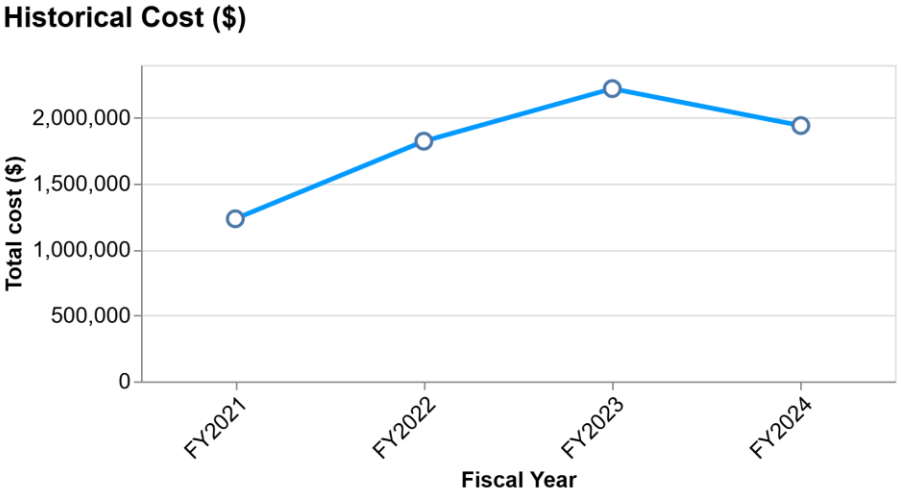
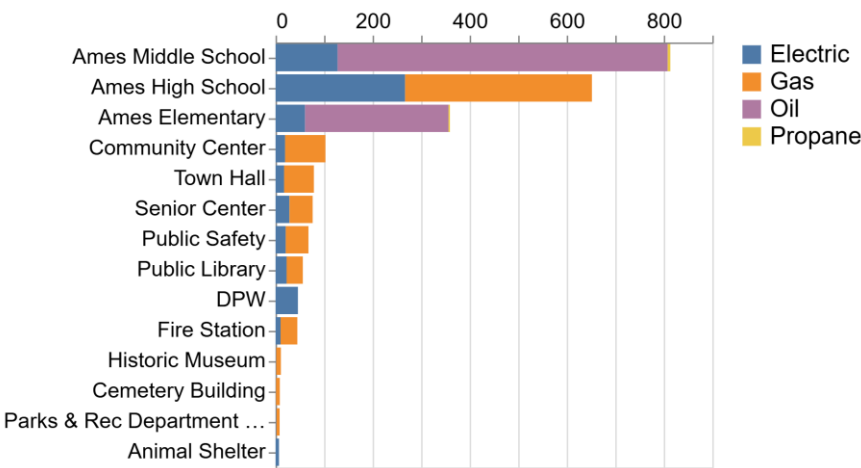
Date level: Month

Export

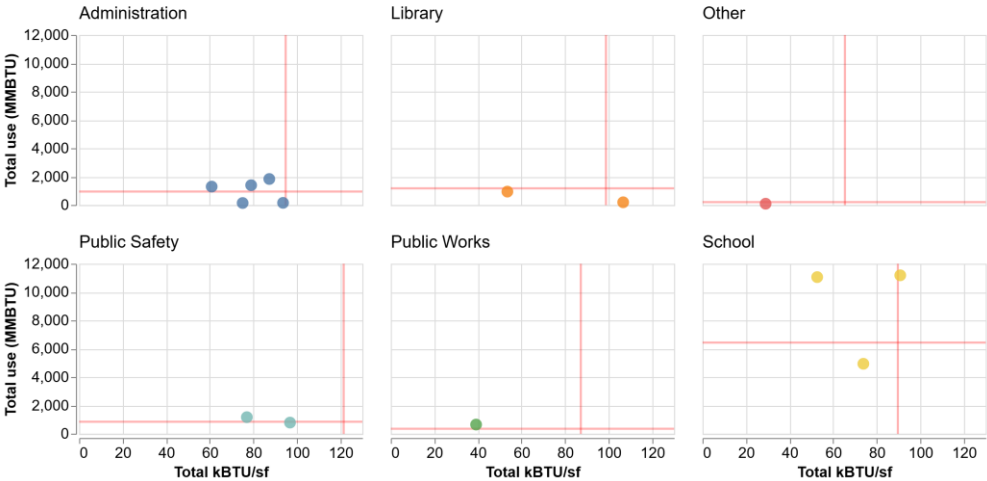
Department	Complex	Facility	Provider	Fuel Type	Acct #	FY2021												FY2022								
						Q1			Q2			Q3			Q4			Q1			Q2			Q3		
						Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Null	Null	Ames Elementary	Other	Electric (kWh)	ElementaryE	-	14971	12445	15424	17706	22454	23773	26305	24659	25760	25733	22511	16607	16172	13020	14537	18770	21245	26019	26044	26106
				Oil (gallons)	ElementaryO	0	0	0	3724	4256	4655	5320	5054	3990	3325	0	0	0	0	0	3591	3990	4522	5187	4788	3192
				Propane (gallons)	ElementaryP	20	19	31	57	52	55	51	52	58	51	35	28	22	18	32	52	51	50	50	57	54
		Ames High School	Other	Electric (kWh)	HighSchoolE	-	66867	59155	67694	80998	82726	110231	105150	114462	103105	106009	90838	85212	67877	57532	61696	72432	85102	114871	114418	101338
				Gas (therms)	HighSchoolG	-	452	273	767	9880	9083	10455	12229	16496	11096	7384	4246	1425	714	764	2007	6532	9773	12675	10037	11070
		Ames Middle Sc...	Other	Electric (kWh)	MiddleSchoolE	-	32448	26743	34382	36850	44894	52913	53551	48974	53897	53908	48522	36961	37874	28779	29554	34105	46287	51967	60244	51090
				Oil (gallons)	MiddleO	0	0	0	8647	10202	10632	9824	10362	8180	7599	0	0	0	0	0	9079	9897	9994	10218	10154	8261
				Propane (gallons)	MiddleP	65	55	75	80	85	90	95	90	85	80	65	65	62	53	80	87	78	91	93	86	86
		Animal Shelter	Other	Electric (kWh)	AnimalE	-	3821	3201	2216	1950	2175	2245	2293	1951	1993	2180	2590	2904	3737	3179	2276	2117	2288	2133	2077	1958
		Cemetery Building	Other	Electric (kWh)	CemeteryE	-	393	358	252	216	264	274	261	234	226	251	287	338	417	352	280	208	266	277	225	237
				Gas (therms)	CemeteryG	-	0	0	12	209	180	222	261	305	223	167	79	35	0	0	41	141	215	235	223	237
		Community Center	Other	Electric (kWh)	CommunityCent...	-	9856	9546	7249	5355	6065	6587	6520	6451	5185	5172	7434	9075	10411	8192	7134	5377	6936	6408	6218	6577
				Gas (therms)	CommunityCent...	-	20	15	184	2196	1764	2233	2766	3682	2608	1806	903	25	25	15	160	1564	1999	2879	2624	2458
		DPW	Other	Electric (kWh)	DPWE	-	22570	20841	15370	14053	15796	16486	14651	14182	13623	13058	15840	17614	25130	23178	15322	14196	13597	14405	13633	15049
		Fire Station	Other	Electric (kWh)	FireE	-	5245	4184	3429	2697	3327	3000	3410	2947	2596	2717	3621	4170	5694	4545	3823	2706	3050	3575	3285	2941
				Gas (therms)	FireG	-	38	28	72	864	715	956	1029	1346	1040	676	339	145	75	65	181	575	841	1159	977	1050
		Historic Museum	Other	Electric (kWh)	HistoricE	-	583	577	380	200	403	385	375	377	322	322	443	481	601	402	303	322	373	341	387	388

What is MassEnergyInsight (MEI)? Analysis

- Data Setup and Collecting
- Analyzing Data



Buildings EUI vs MMBtu by subcategory



What is MassEnergyInsight (MEI)? Forecasting

- Data Setup and Collecting

- Analyzing Data

- Forecasting

Ames

Facility
Ames Elementary

☒ CO2 Emissions (MTCO2e)
☐ Energy Use (MMBtu)

2022 to 2050

Scenario
2024 Decarb

ECMs in Scenario

#	Name	Year	Drop
1	Geothermal	2030	<input checked="" type="checkbox"/>

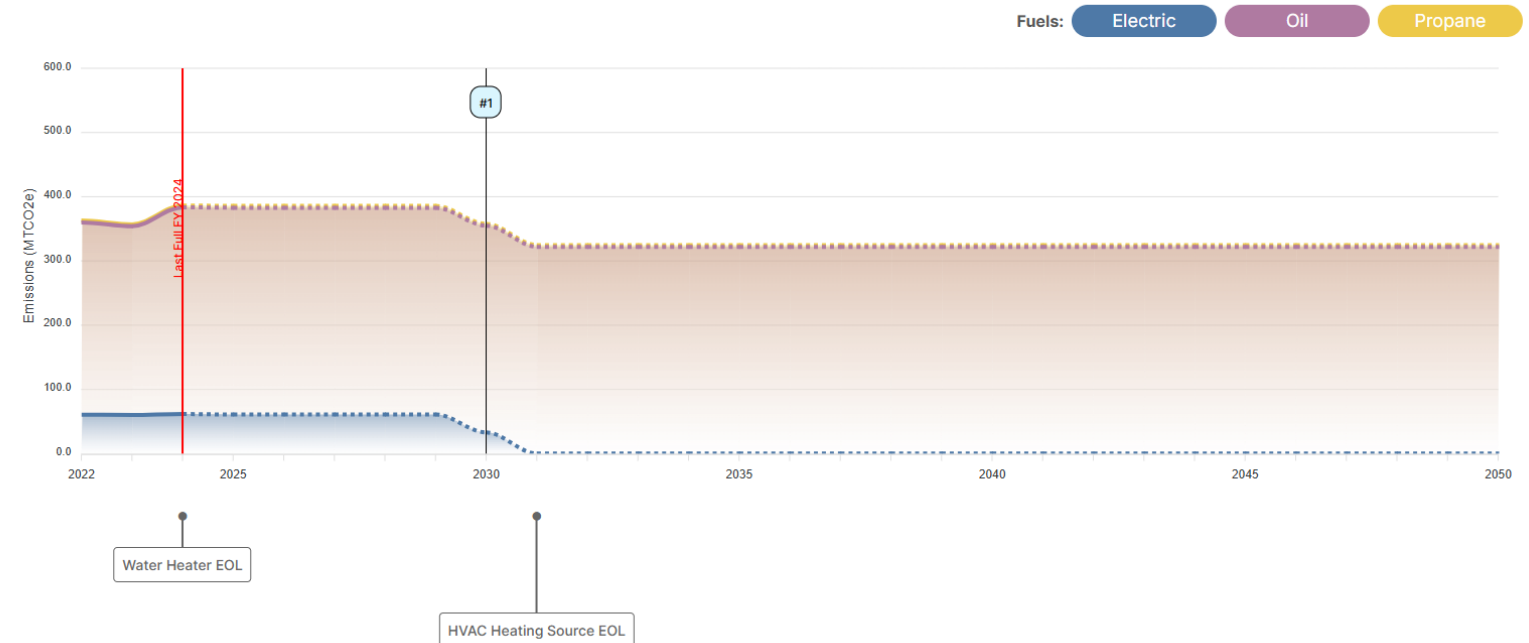
ECMs not in Scenario

Name	Add
Geothermal Heat Pump P...	<input type="checkbox"/>

Create New ECM

Detailed View

Ames Elementary Emissions 2022 to 2050 (MTCO2e)
2024 Decarb




What is MassEnergyInsight (MEI)? Upcoming Features

- Data Setup and Collecting
- Analyzing Data
- Forecasting
- Upcoming Features

What we are working on for future releases:

- User alert system / Data notifications (e.g., missing utility bills, data gaps, unusual energy increases or declines)
- Energy Star Portfolio Manager Integration (ESPM)
- Vehicle Fleet Page
- EV Charging Station Disaggregation
- Solar Production Integration
- ECM Measurement and Verification



Digitizing Data to Decarbonize DCR

Ryan Kingston

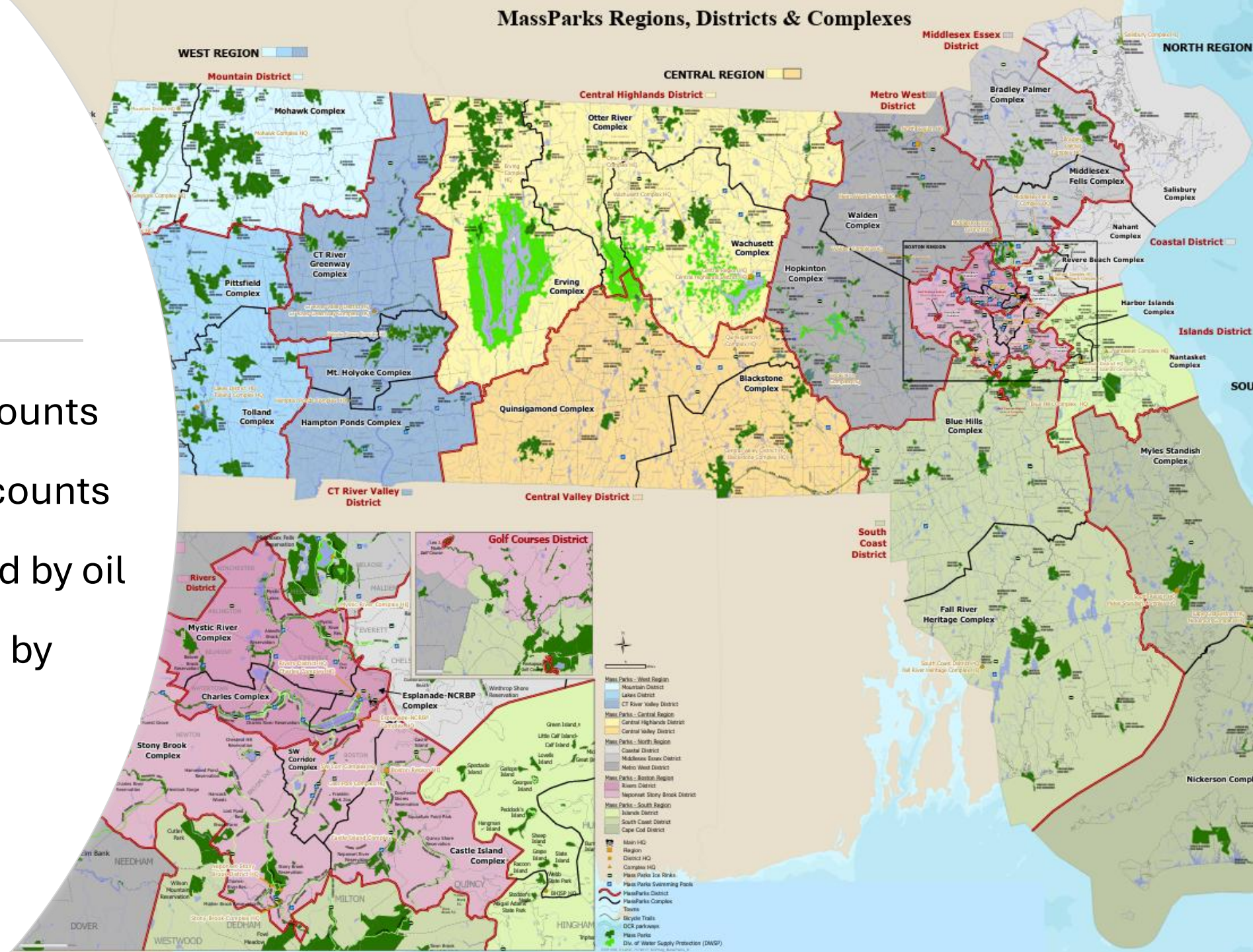
Decarbonization Planning Manager

Department of Conservation and Recreation

MassParks Regions, Districts & Complexes

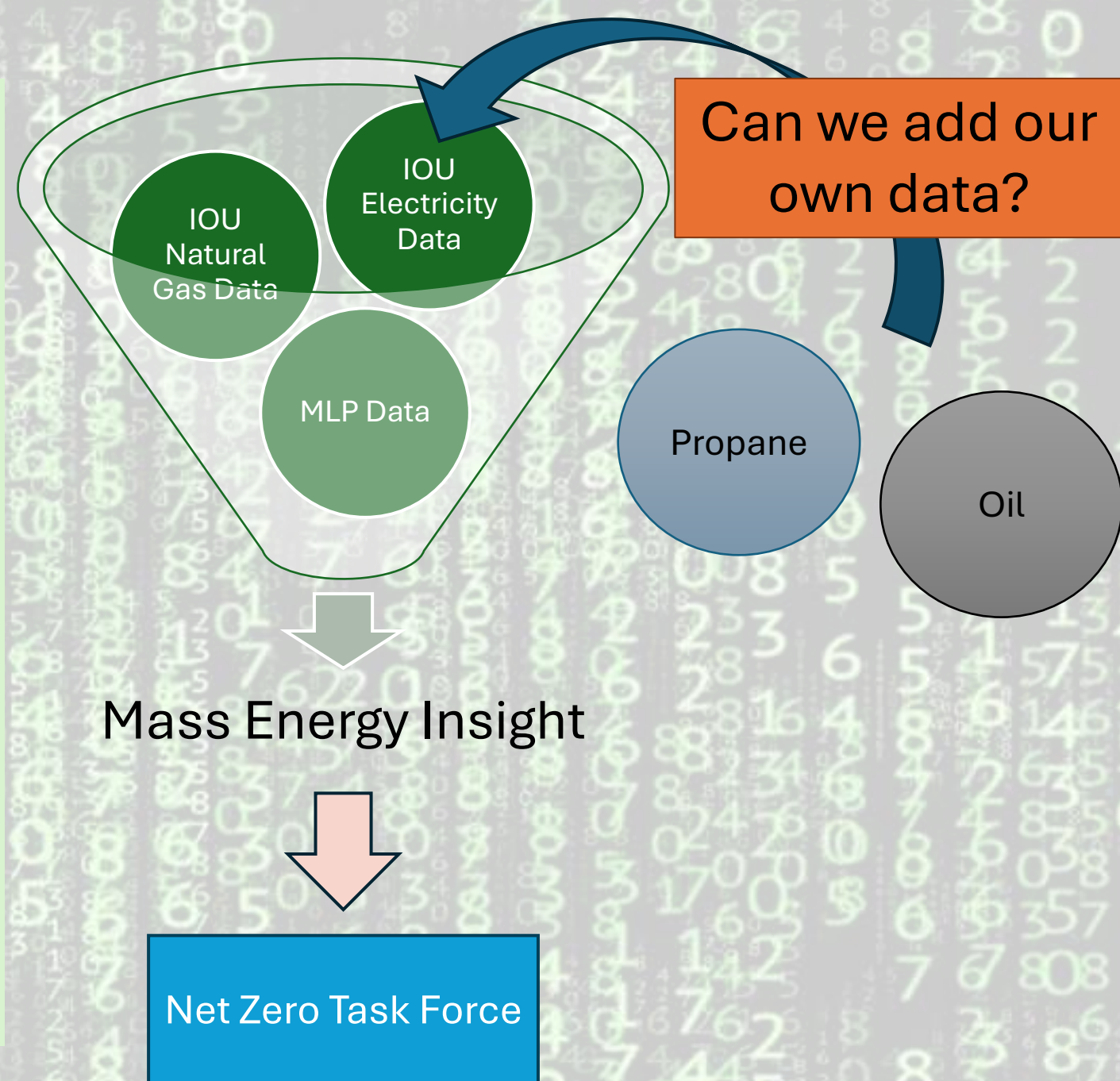
The DCR Portfolio

- 111 natural gas accounts
- ~850 electricity accounts
- 118 buildings heated by oil
- 35 locations heated by propane

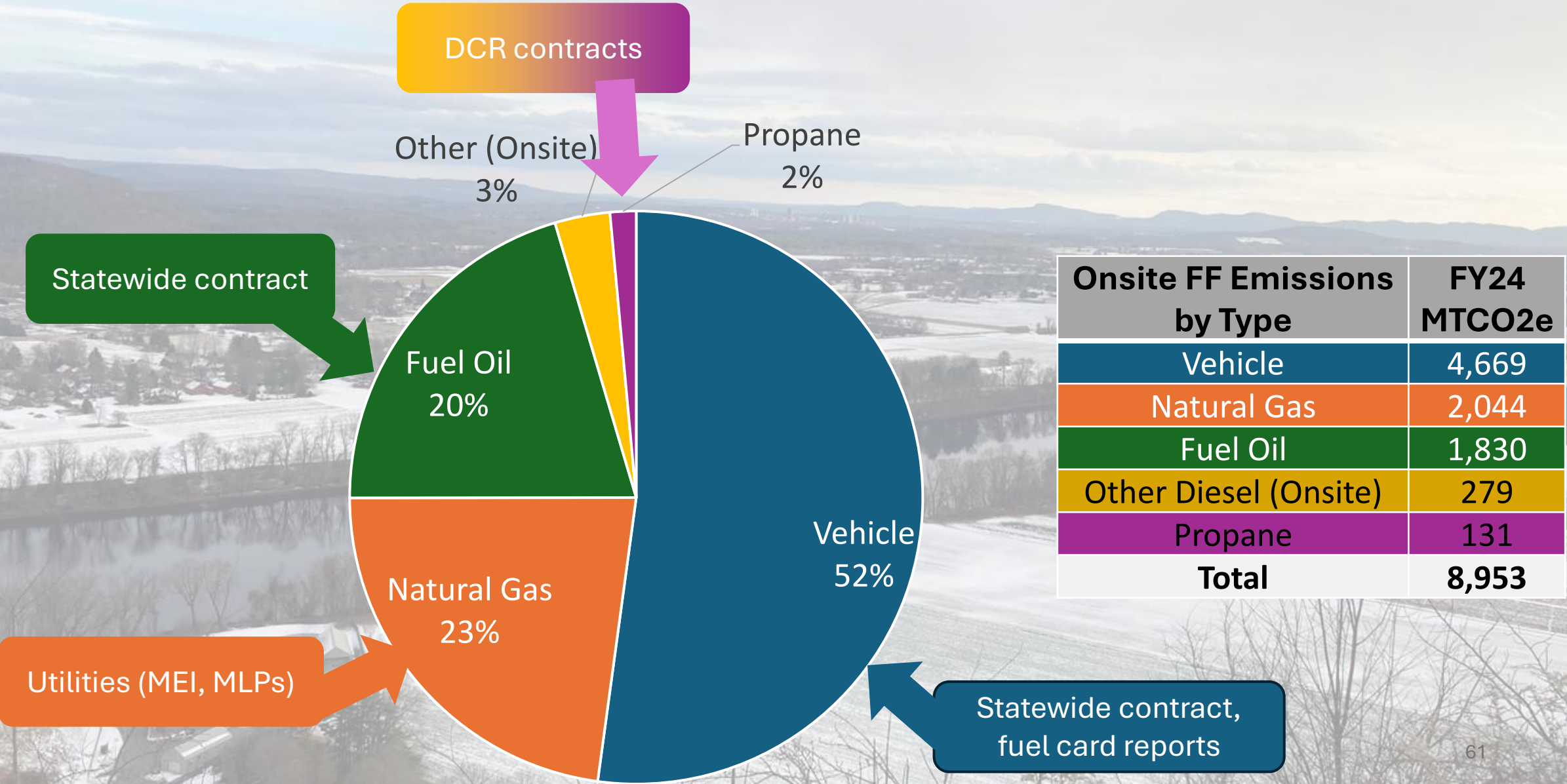


MEI as a Data Hub

- One stop shop for electricity and natural gas data
- Support strategic planning
 - Identify highest energy users
 - Track changes in use over time
 - Compare/contrast sites, regions
- Data for project-specific needs
 - Identify seasonal trends
 - Confirm usage rates prior to projects (e.g. charging stations)
- What's missing?
 - Other fossil fuels!



FY24 Onsite Fossil Fuel Emissions



OSD CONTRACT DATA – HEATING OIL

Business Name	MMARS ID	Product Description	Total Quantity	Unit Price	Amount Paid	Delivery Date	Delivery Street	Delivery City
Peterson's Oil Servi	DCR	Massachusetts Aps Eligible Liqui	145.8	2.8854	\$420.69	5/31/2023	20 scusset beach rd	south carver
Peterson's Oil Servi	DCR	Massachusetts Aps Eligible Liqui	191	3.25	\$620.75	4/18/2023	20 scusset beach rd	south carver
Global Montello Gr	DCR	Ulsho Dyed	112	2.6512	\$296.93	45048	1361 middleboro ave	taunton
Global Montello Gr	DCR	Ulsho Dyed	178.9	2.9746	\$532.16	45005	1361 middleboro ave	taunton
Global Montello Gr	DCR	Ulsho Dyed	151.9	3.1086	\$472.20	2/9/2023	1361 middleboro ave	taunton
Global Montello Gr	DCR	Ulsho Dyed	153.3	3.2038	\$491.14	12/14/2022	1361 middleboro ave	taunton
Global Montello Gr	DCR	Ulsho Dyed	142.4	3.4082	\$485.33	1/11/2023	1361 middleboro ave	taunton
Global Montello Gr	DCR	Ulsho Dyed	158.9	4.9682	\$789.45	10/31/2022	1361 middleboro ave	taunton
Peterson's Oil Servi	DCR	No. 2 Heating Oil	145.2	3.9035	\$566.79	8/7/2022	180 old kings highway	wellfleet
Peterson's Oil Servi	DCR	No. 2 Heating Oil	145.2	3.9035	\$566.79	8/7/2022	180 old kings highway	wellfleet
Global Montello Gr	DCR	Ulsho Dyed	159.8	2.9634	\$473.55	3/22/2023	370 river rd	weymouth
Global Montello Gr	DCR	Ulsho Dyed	160.8	3.0129	\$484.47	2/27/2023	370 river rd	weymouth
Global Montello Gr	DCR	Ulsho Dyed	118.8	3.1187	\$370.50	2/3/2023	370 river rd	weymouth
Global Montello Gr	DCR	Ulsho Dyed	103.3	3.3897	\$350.16	11/30/2022	370 river rd	weymouth
Global Montello Gr	DCR	Ulsho Dyed	115.5	3.4675	\$400.50	1/13/2023	370 river rd	weymouth
Global Montello Gr	DCR	Ulsho Dyed	120.1	4.7399	\$569.26	10/12/2022	370 river rd	weymouth
Global Montello Gr	DCR	Ulsho Dyed	113	2.7114	\$306.39	4/28/2023	251 blue meadow rd	belchertown
Global Montello Gr	DCR	Ulsho Dyed				9/2023	251 blue meadow rd	belchertown
Global Montello Gr	DCR	Ulsho Dyed				7/2023	251 blue meadow rd	belchertown
Global Montello Gr	DCR	Ulsho Dyed				9/2022	251 blue meadow rd	belchertown

Need to manually assign to related
MEI account

AGENCY DATA

Organize Data

Upload Spreadsheet

View Reports

Annual Reports

↶ ↷ ↺ ↻ 📄 ↺ | 📊 View: Original

Use Table

Sites to Target

Use Trends

Data Loaded - Overview

Emissions over Time

Usage Variance

Use Table

This table shows use in native units by fiscal year for a chosen fuel or fuels. To expand or collapse the table, hover over the words Agency, Site, Account, etc., then click the plus (+) or minus (-) symbols. You can do the same for years, quarters and months.

Agency	Fuel	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Dept. of Conservation and Recreation	Electric (kWh)	39,280,966	38,872,181	38,818,869	37,277,118	36,620,580	35,051,972	33,046,156	31,289,564	31,510,517	34,501,800
	Gas (Therms)	546,113	552,089	501,991	550,888	529,160	533,505	427,299	363,550	381,163	351,295
	Oil (Gallons)	28,098		20,920		15,171	22,524	19,387	18,370	24,298	32,759

REGIONAL DATA

Use Table Sites to Target Use Trends Data Loaded - Overview Emissions over Time Usage Variance

Use Table

This table shows use in native units by fiscal year for a chosen fuel or fuels. To expand or collapse the table, hover over the words Agency, Site, Account, etc., then click the plus (+) or minus (-) symbols. You can do the same for years, quarters and months.

Agency	Region	Site	Fuel	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Dept. of Conservation and Recreation	South Region	Abigail Adams State Park	Electric (kWh)	249	251	1,970	2,438	1,766	2,203	2,335	2,200	2,197	2,214
		Ames Nowell State Park	Electric (kWh)	1,091	8,291	4,713	27,207	20,664	24,706	3,830	1,066	3,998	2,999
		Blue Hills Reservation MCD79	Electric (kWh)	169,127	166,725	146,376	135,641	134,488	139,806	129,478	114,863	122,935	148,049
			Oil (Gallons)	28,098		20,920		15,171	22,524	19,387	18,370	24,298	17,704
		Borderland State Park	Electric (kWh)	48,098	42,923	44,204	48,271	45,595	47,398	44,717	43,087	42,196	43,564
		Boston Harbor Islands	Gas (Therms)	9,045	6,887	5,754	5,949	8,343	8,682	9,189	8,585	7,659	3,992
			Oil (Gallons)										15,006
		Scusset Beach State Reserva..	Electric (kWh)	342,400	251,800	317,600	313,400	326,000	402,400	293,200	111,600	97,400	253,000
		Shea Rink	Electric (kWh)	1,200	1,200	1,200	1,200	565,000	509,800	182,600	547,900	565,200	509,000

PARK LEVEL DATA

Site	Facility	Fuel	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Blue Hills Reservation MCD79	840 HILLSIDE ST CNTR	Electric (kWh)	6,957	6,526	6,698	6,791	5,363	6,431
	1904 CANTON AVE	Electric (kWh)	70,160	70,200	69,720	71,160	69,400	70,280
	BLUE HILLS HEADQUARTERS/CAPTAIN'..	Electric (kWh)	16,108	16,798	15,468	11,278	10,106	11,332
		Oil (Gallons)	1,840		1,353		1,285	1,511
	Blue Hills Ski Area	Oil (Gallons)	3,404					
	Brookwood Farm	Electric (kWh)	50,805	48,176	31,695	22,988	21,714	27,122
		Oil (Gallons)	2,694		1,825			
	Canton Ave, Milton	Electric (kWh)	5,922	5,922	5,922	5,922	5,922	5,922
	DCR Chickatawbut Hill Ed Ce..	Oil (Gallons)	3,950		4,532			
	Houghton's Pond	Oil (Gallons)	790		758			
	Maintenance Facility	Oil (Gallons)	7,621		6,178		7,603	8,324
	Mdc Park Rangers Division H..	Electric (kWh)	19,175	19,103	16,873	17,502	21,983	18,719
	Mounted Unit Office	Oil (Gallons)	1,851		1,357		1,460	1,755
	State Police Barracks	Oil (Gallons)						4,931
	Trailside Museum	Oil (Gallons)	5,948		4,917		4,823	6,003

With These Data Combined...



Identify highest fossil fuel users/emitters



Compare and verify changes in use patterns (e.g., conversion from oil to electricity use)

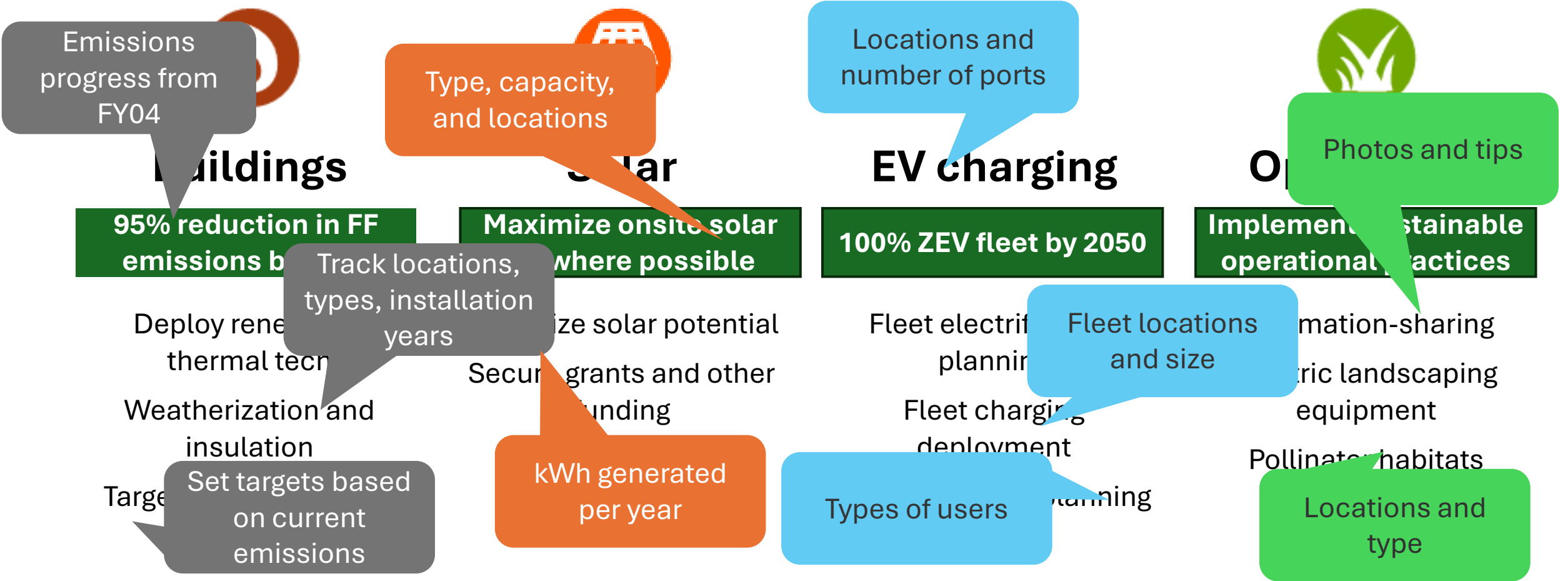


Help identify heating demand need for ASHP design

DCR Net Zero Task Force



Interdepartmental team working to implement Net Zero Goals adopted by DCR in April 2022 aimed at eliminating use of onsite fossil fuels from DCR operations



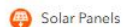
Decarbonization Dashboard: Interactive Map



Legend

Search Data

Solar Panels



Solar Lighting



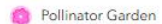
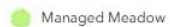
Modern Wood Heat



Electric Vehicle Charging Stations



Managed Pollinator Habitats



Green Buildings

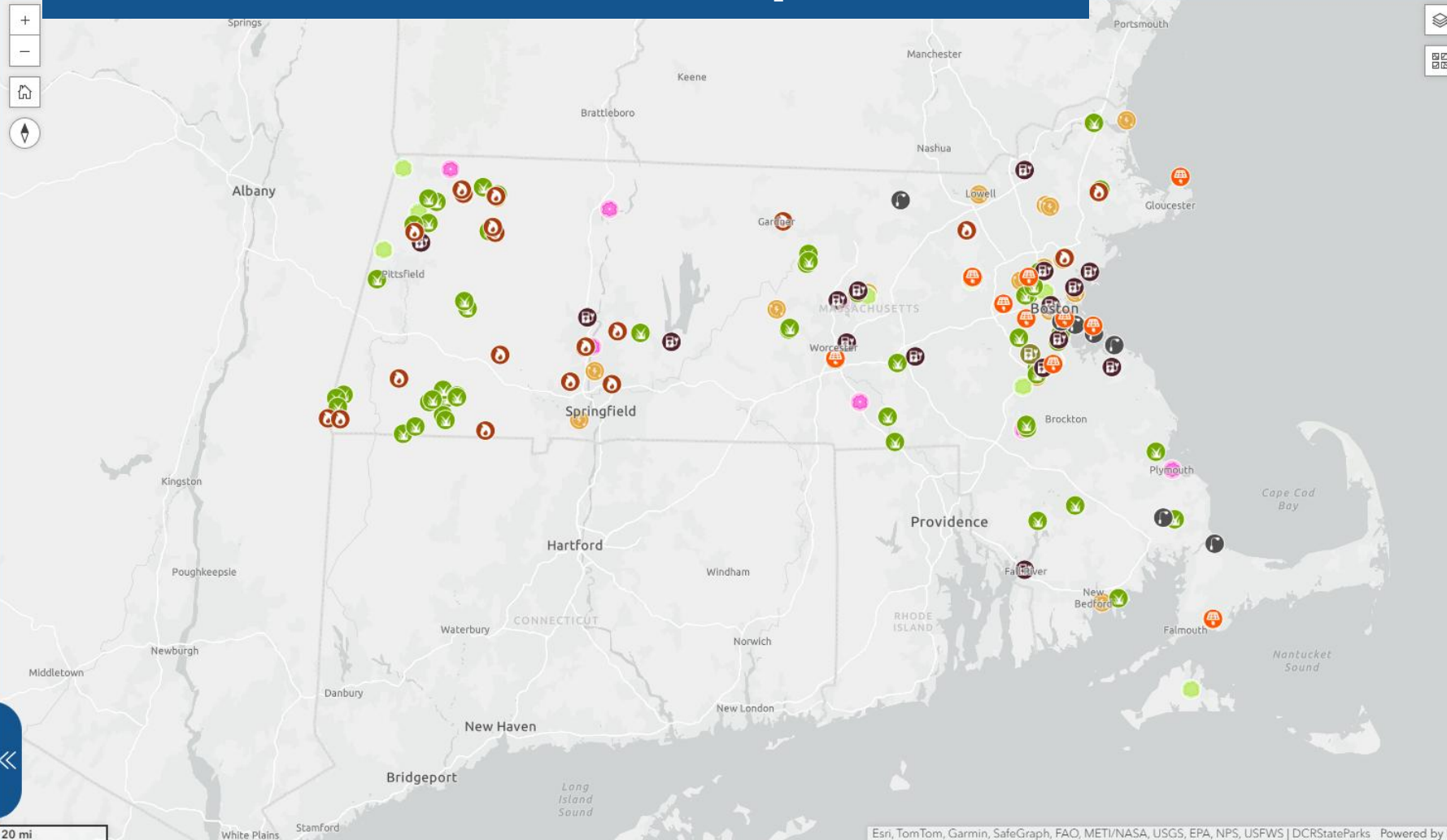


Air Source Heat Pumps



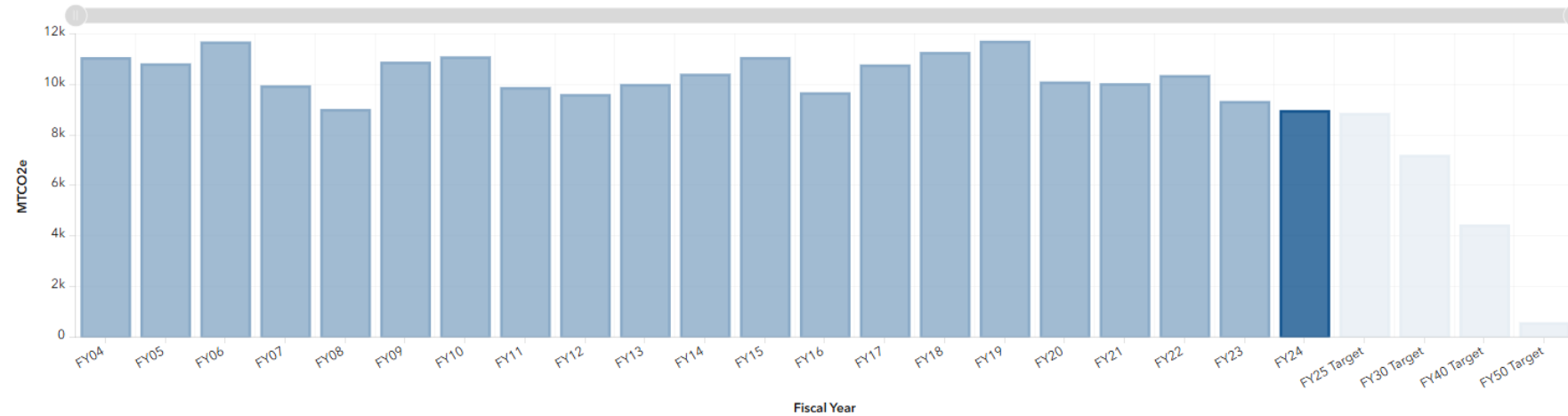
Learn More

Updates

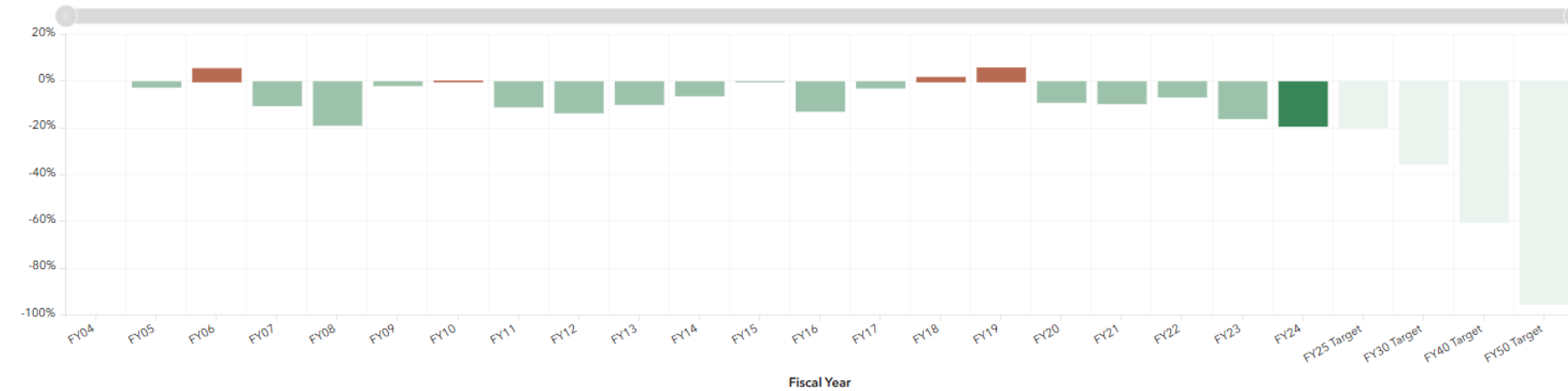


Decarbonization Dashboard: GHG Emissions

DCR Emissions | Onsite MTCO₂e



Percent Change | Onsite MTCO₂e



Fiscal Year	Emissions (MTCO ₂ e)	Percent Change
FY50 Target	552.5	-95%
FY40 Target	4,420.4	-60%
FY30 Target	7,183.1	-35%
FY25 Target	8,840.8	-20%
FY24	8,953.3	-18.98%
FY23	9,314.3	-15.72%
FY22	10,338.9	-6.44%
FY21	10,017.5	-9.35%
FY20	10,084.6	-8.74%
FY19	11,699.4	5.87%
FY18	11,255	1.85%
FY17	10,758.8	-2.64%
FY16	9,658.6	-12.6%
FY15	11,055.4	0.04%
FY14	10,393	-5.95%
FY13	9,987.5	-9.62%
FY12	9,587.9	-13.24%
FY11	9,864.4	-10.74%
FY10	11,078.2	0.25%
FY09	10,870.2	-1.64%
FY08	8,999.1	-18.57%

Last update: 49 seconds ago

Decarbonization Dashboard: Green Buildings



Air Source Water Heaters

9

Last update: now

Air Source Heat Pumps

37

Last update: now

Modern Wood Heating Units

28

Last update: now

Green Buildings

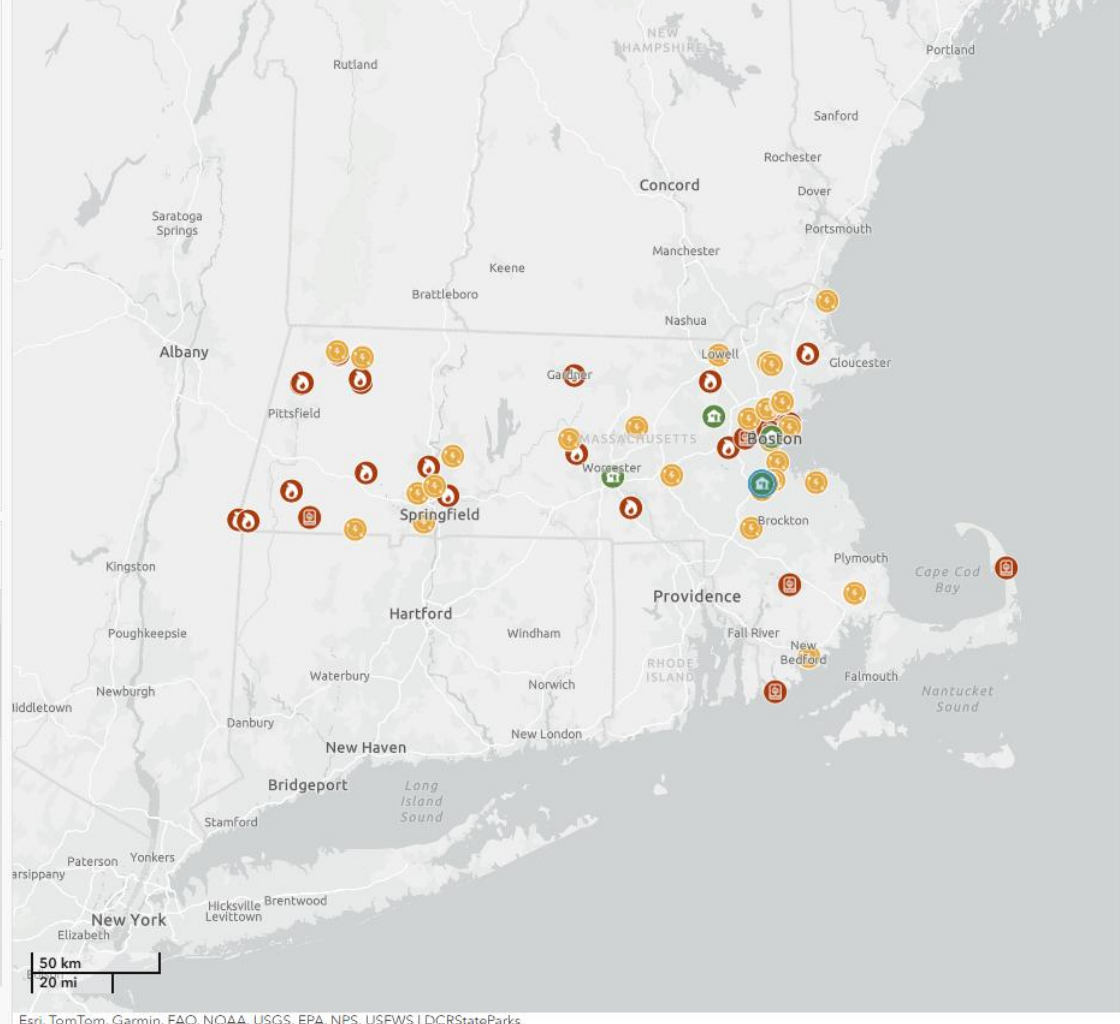
4

Last update: now

Search...

- Ponkapoag Golf Course Clubhouse
- Mystic River Reservation Turkey Hill Relay Tower Control
- Revere Beach Reservation Eliot House
- Ponkapoag Golf Course Clubhouse
- Stoneham Engineering & Maintenance Facility The Dugout
- Blue Hills Reservation Blue Hill Observatory
- Savoy Mountain State Forest Headquarters Administration Building and Garage
- Rutland State Park

Air Source Heat Pump List



Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS | DCRStateParks

Blue Hill Observatory

Zoom to Pan



Air Source Heat Pump

Install Status

Planned

Complete

Install Status Complete

Site Name Blue Hills Reservation

Building Name Blue Hill Observatory

Install Date 9/30/2022

Decarbonization Dashboard: Solar PV

Total Solar Generation Capacity

570.6 kW

Last update: 6 seconds ago

Solar Panel Systems

11







Last update: 6 seconds ago

Solar Lighting Systems



72

Last update: 6 seconds ago

Solar Panel System Inventory

-  **Blackstone Visitor Center and Central Region HQ**
Visitor Center Solar Canopy
-  **Blue Hills Reservation**
Chickatawbut Education Center
-  **Connors Pool**
Bathhouse and Maintenance Building
-  **Francis L. Murphy Memorial Ice Skating Rink**
DCR Murphy Memorial Rink
-  **Georges Island**
Operations Garage
-  **Halibut Point State Park**
Photovoltaic System

Lt. James F. Reilly Recreation Rink/Pool Complex

 Zoom to  Pan



Solar Panel System

DCR Reilly Memorial Rink

[mass.gov](https://www.mass.gov) | [Google Maps](#)

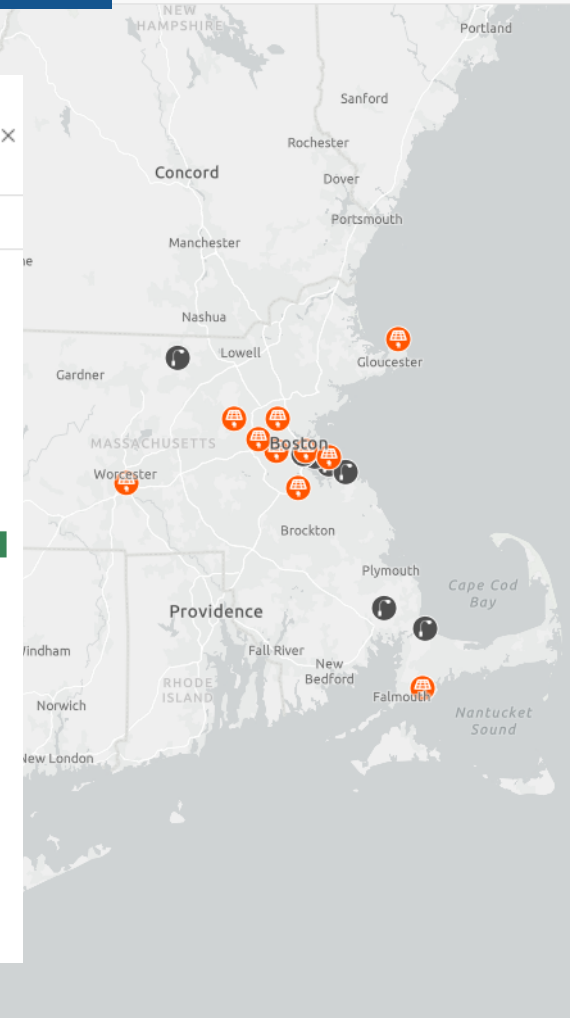
Status

Planned

Active

Details

Status	Active
Year Installed	2022
Solar Capacity (kW)	112.5
Power Generation History	View



Decarbonization Dashboard: EV Charging Stations



DCR Electric Vehicles

23

Last update: 2024

Public EV Chargers

3

Last update: 5 seconds ago

DCR Fleet EV Chargers

23

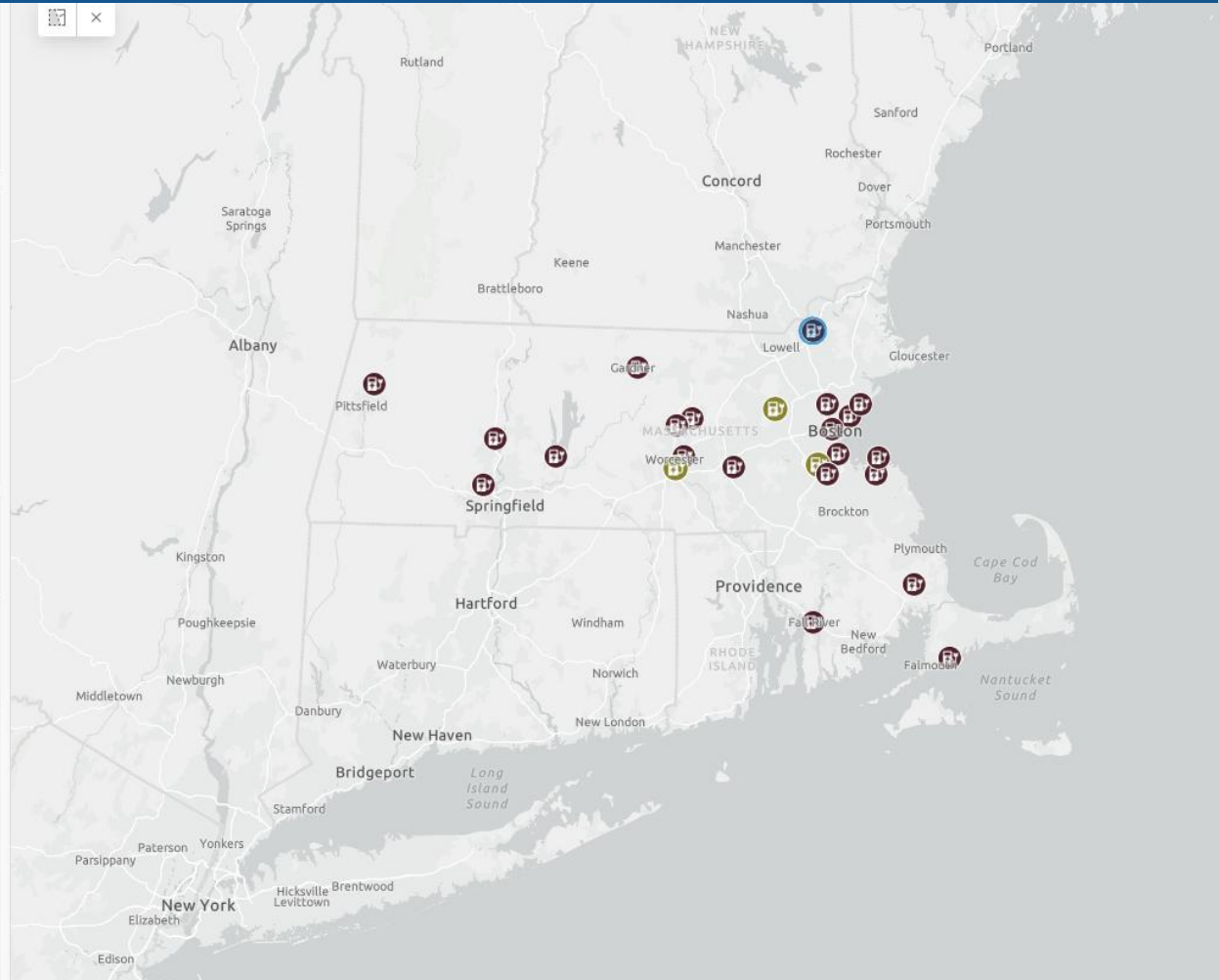
Last update: 5 seconds ago

DCR Charging Station Inventory

Search...

- DCR Fleet** | Lawrence, MA
Visitor Center And Museum
- DCR Fleet** | Nahant, MA
Nahant Division Maintenance Facility
- DCR Fleet** | Carver, MA
Fire Station And Garage
- DCR Fleet** | Hopkinton, MA
Headquarters and Garage
- DCR Fleet** | Cheshire, MA
Headquarters Garage
- DCR Fleet** | Belchertown, MA
West Garage
- Public** | Boston, MA
DCR Bajko Memorial Rink

Last update: 49 seconds ago



Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS | DCRStateParks

Visitor Center And Museum

Zoom to Pan



DCR Fleet
Charging Station

	Level 1	Level 2
Charging Ports	0	1
Receptacles	1	1

Click the image to open in a new tab or [click here](#).



Attributes

No. of Level 1 Charging Ports	0
No. of Level 1 Receptacles	1
No. of Level 2 Charging Ports	1
No. of Level 2 Receptacles	1
CAMIS Building or Improvement Name	Visitor Center And Museum
DCR Division w/ Station Maintenance Contract:	DCR Electrical Engineering
DCR Region	North Region
EV Station Access	DCR Fleet
EV Station Name	
EV Station Status	Installed
Town	Lawrence

Decarbonization Dashboard: Pollinator Habitats

Managed Pollinator Habitats

91

Last update: 4 seconds ago



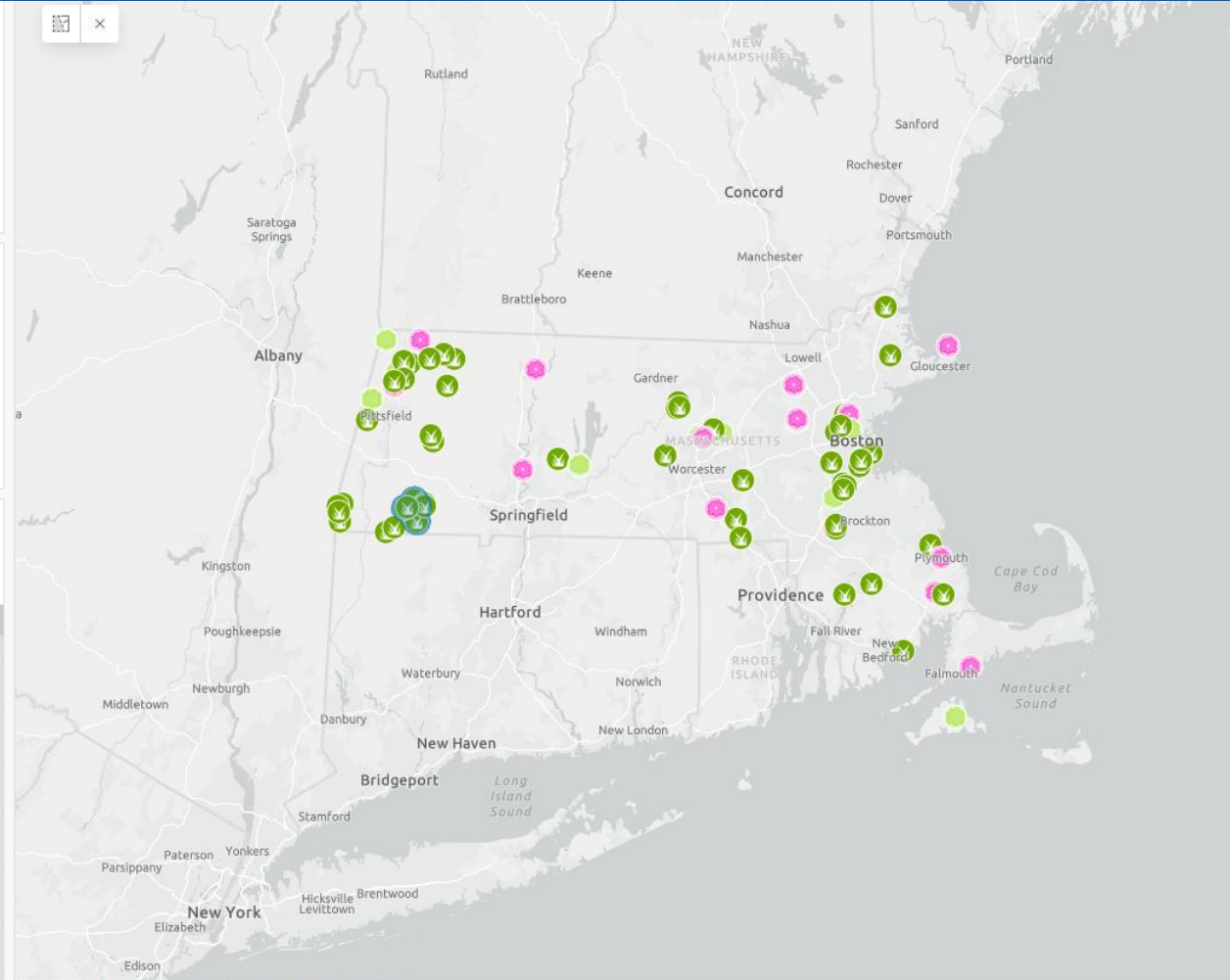
Low Mow Zone 67.03%
Pollinator Garden 19.78%
Managed Meadow 13.19%

Last update: 4 seconds ago

Search...

- Alewife Brook Reservation
- Alewife Brook Reservation
Blair Pond
- Bay Farm Conservation Area
- Blackberry River Flood Control Site
Blackberry River/Whiting River Flood Control Site
- Blackstone River and Canal Heritage State Park
River Bend Farm
- Blackstone River and Canal Heritage State Park
- Blue Hills Reservation
Blue Hills Trailside Museum, MassAudubon

Last update: 18 seconds ago



Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS | DCRStateParks



West Lake And Abbey Pond Flood Control Site

Zoom to Pan



Low Mow Zone

Abbey Lake Low Mow Zone

mass.gov | [Google Maps](#)

Status

Planned Active Maintenance Retired

Details

Status Active

Dike and adjacent field are mowed once per year, allowing native grasses and wildflowers to grow throughout the growing season. Size: 2.8 acres

GIS Note: Copied from Leading By Example Website:
<https://www.mass.gov/info-details/sustainability-at-state-facilities-projects-and-headlines#sustainability-projects-interactive-map>

1 of 6



CEI: Commonwealth Energy Intelligence

May 13th, 2025



DIVISION OF
CAPITAL ASSET
MANAGEMENT &
MAINTENANCE

Executive Order 594

Decarbonizing and Minimizing Environmental Impacts of State Government

- Requires 95% reduction in CO2 emissions by 2050

“[...] track the energy performance of existing buildings or sites and take concrete steps to reduce building energy use through operational efficiencies.”

“[...] manage and expand an energy metering and monitoring program that ensures access to utility and real-time energy data. This program shall be targeted at buildings larger than 20,000 square feet or where it is deemed cost-effective.”



THE COMMONWEALTH
OF MASSACHUSETTS
WAS RECOGNIZED BY
LAWRENCE
BERKELEY NATIONAL
LABORATORY AND THE
U.S. DEPT. OF ENERGY
IN MAY 2019 FOR THEIR
EXEMPLARY WORK TO
SAVE ENERGY USING
AN ENERGY
INFORMATION SYSTEM.

Commonwealth Energy Intelligence (CEI)

What is CEI?

Centralized metering and utility bill information-

Web-based Energy Information System (EIS) tracks energy and water consumption at the building level for building over 20,00 sq ft.

Program Basics:

- Meters: Tracks and records 15-minute interval data for electricity, natural gas, steam, water, and oil usage
- Utility Bills: Tracks and records utility bill data and images for all sites
- All commonwealth facilities over 20,000 sq ft are eligible
- Data upload to Energy Star Portfolio Manager
- Managed by DCAMM

Benefits:

- Track progress toward statewide efficiency and carbon reduction goals
- Compare energy/water performance between buildings
- See how a building is using energy/and water in real time before the bills are due
- See how changes to equipment operation affect energy use
- Collect utility bills in one place
- Improve building energy management practices
- Drive operational efficiencies
- Identify maintenance or equipment issues to lower energy consumption and costs
- Identify potential capital projects for energy-using equipment and/or systems



How to Use CEI – Optimization

The screenshot shows the CEI Building Optimization interface. The top navigation bar includes 'Dashboard', 'Utility Management', 'Metering', 'Building Optimization' (highlighted with a red circle), 'Documents', 'Work Orders', and 'More'. The user is logged in as 'timothy.spencer@state.ma.us'. The left sidebar shows the 'Commonwealth of Massachusetts' organization tree, with 'McCormack State Office Building' highlighted by a red circle. The main content area displays the 'McCormack State Office Building' dashboard for 'Boston, MA, 02108'. It features a 'Dashboard' tab and a 'KPIs for LAST 12 MONTHS' filter. The dashboard includes a map of the building, a 'Total Energy Consumption' summary (78,495,531.61 kBTU, EUI: 98.12 kBTU/SqFt), and breakdowns for 'Electric' (15,141,795.84 kWh, EUI: 18.93 kWh/SqFt) and 'Natural Gas' (26,829,580 kBTU, EUI: 34 kBTU/SqFt). A 'Basic Information' section shows 'Square Footage: 800,000' and 'Facility Type: Office'. A 'Number of Utility Accounts' section lists 'Electric: Direct Energy: 1, Eversource: 1' and 'Natural Gas: National Grid: 1, NRG: 1'. A 'Latest ENERGY STAR Score' section shows a score of 41 (highlighted with a red circle). A 'Meters' section lists 'Electric: 1 Meter' and 'Natural Gas: 1 Meter'. A 'Utility vs. Meter in kWh (For the last 12 months)' bar chart compares utility and meter consumption for each month from Nov 2023 to Oct 2024. A tooltip for July 2024 shows 'Utility consumption: 1,644,307 kWh' and 'Meter consumption: 1,708,648 kWh'.

Select “Building Optimization” and an individual building to compare utility bills to meter data and see the building’s Energy Star score.

How to Use CEI – Utility Bills

The screenshot displays the CEI (Commonwealth Energy Information) system interface. The top navigation bar includes 'Dashboard', 'Utility Management' (highlighted with a red circle), 'Metering', 'Building Optimization', 'Documents', 'Work Orders', and 'More'. The user profile 'timothy.spencer@state.ma.us' is visible in the top right. On the left sidebar, the 'Administration and Finance' folder is selected (highlighted with a red circle). The main content area shows the 'UTILITY PORTFOLIO' section with the 'Utility Invoices' tab selected (highlighted with a red circle). The date range is set to '11/2022 – 11/2024'. Below the tabs, there are buttons for 'DOWNLOAD ALL IMAGES', 'SAVED VIEWS', and 'EXPORT'. A table lists utility bills with columns for Account Info, Vendor, Utility Type, Address, Dates, Consumption, and Charges. The table contains 10 rows of data for various buildings and utility providers.

Account Inf...	Vendor	Utility Ty...	Address	Dates	Consumption	Charges	Account ...	Images					
Account...			Street 1	Billing M...	Billing Ye...	Service P...	Service P...	Consum...	Total Co...	Total Cost	Cost / Unit		
79405496	National Grid	Natural Gas	1 Ashburton Plz	October	2024	10/02/2024	11/01/2024	Therms	12,672	\$5,319.52	\$0.419785	McCormack Stz	1
79285680	National Grid	Natural Gas	19 Staniford Str	October	2024	10/02/2024	11/01/2024	Therms	771	\$1,053.99	\$1.367042	Hurley Building	1
91723640	National Grid	Natural Gas	19 Staniford Str	October	2024	10/02/2024	11/01/2024	Therms	0	\$587.67	\$0.00	Hurley Building	1
29445600	National Grid	Natural Gas	24 BEACON ST	October	2024	10/02/2024	11/01/2024	Therms	6,907	\$2,873.56	\$0.416035	State House	1
70829913	NRG	Natural Gas	19 Staniford Str	October	2024	10/03/2024	11/01/2024	MMBTU	0	\$0.00	\$0.00	Hurley Building	1
70829913	NRG	Natural Gas	1 Ashburton Plz	October	2024	10/03/2024	11/01/2024	MMBTU	1,315.93	\$12,864.53	\$9.775998	McCormack Stz	1
70829913	NRG	Natural Gas	19 Staniford Str	October	2024	10/03/2024	11/01/2024	MMBTU	80.06	\$782.67	\$9.776042	Hurley Building	1
70829913	NRG	Natural Gas	24 BEACON ST	October	2024	10/03/2024	11/01/2024	MMBTU	717.26	\$7,011.93	\$9.775994	State House	1
1055045	Direct Energy	Electric	19 Staniford Str	October	2024	10/01/2024	10/30/2024	kWh	125,280	\$14,115.01	\$0.112427	Hurley Building	1
1055062	Direct Energy	Electric	24 BEACON ST	October	2024	10/01/2024	10/30/2024	kWh	157,400	\$17,711.27	\$0.112515	State House	1

Select “Utility Invoices” to view a list of all utility bills for your site or building.



How to Use CEI – Utility Bills (PDFs)

DIVISION OF CAPITAL ASSET & MAINTENANCE

Dashboard

Utility Management

Metering

Building Optimization

Documents

Work Orders

More

timothy.spencer@state.ma.us

Commonwealth of Massachusetts

Utility Portfolio

Administration and Finance

SPM Field Headquarters

Hurley Building

Lindemann Center

MA State Archive

Massachusetts Information Techn

McCormack State Office Building

Pittsfield Administration Building

Senator William X Wall Laborator

State House

State Office Building - Dwight Str

State Transportation Building

Community Colleges

Health and Human Services

Public Safety - DOC

Sheriffs

State Universities

Trial Courts

University of Massachusetts Lowell

Optimization

Budgeting

COMMONWEALTH OF MASSACHUSETTS

UTILITY PORTFOLIO

ADMINISTRATION AND FINANCE

Overview

Utility Account

Utility Invoices

Budgets

Reports

Invoice Audits

Account Audits

Date Range

11/2022 – 11/2024

DOWNLOAD ALL IMAGES

Account Inf...	Vendor
Account...	Vendor
7940549	Nation
7928568	Nation
91723640	Nation
2944560	Nation
70829913	NRG
70829913	NRG
70829913	NRG
70829913	NRG
1055045	Direct
1055062	Direct

nationalgrid

www.nationalgridus.com

CUSTOMER SERVICE

1-800-333-6329

Monday-Friday: 7AM-7PM

GAS EMERGENCIES

1-800-233-5329

24 Hours/Day - 7 Days/Week

(Does not replace 911 emergency medical services)

PARA ESPAÑOL

1-800-233-5329

CORRESPONDENCE ADDRESS

PO Box 1040

Northborough, MA 01532

PAYMENT ADDRESS

PO BOX 371338

PITTSBURGH, PA 15259-7338

DATE BILL ISSUED

Nov 1, 2024

Service for

HURLEY STATE OFFICE BLDG

19 STANFORD ST, GAS

BOSTON MA 02114

BILLING PERIOD

Oct 2, 2024 to Nov 1, 2024

ACCOUNT NUMBER

91723-64009

PLEASE PAY BY

Dec 26, 2024

AMOUNT DUE

\$ 1,108.14

PAGE 1 of 3

ACCOUNT BALANCE

Previous Balance	841.30
Payment Received on OCT 10 (ACH)	- 120.83
Balance Forward	520.47
Current Charges	+ 587.67
Amount Due	\$ 1,108.14

To avoid late payment charges of 1.14%, \$ 1,108.14 must be received by Dec 26 2024.

Payment concerns? We are here to help. To learn about solutions to help you take control of your energy use and bills, visit www.ngrid.com/billhelp.

SUMMARY OF CURRENT CHARGES

	DELIVERY SERVICES	SUPPLY SERVICES	TOTAL
Gas Service	587.67 Filled by supplier		587.67
Total Current Charges	\$ 587.67		\$ 587.67

Save time and money! Sign up for paperless billing and receive a \$ 0.38 credit on your monthly bill. Visit our website to enroll today!

Utility Worker Safety Reminder: State laws are in place to help protect utility workers while they are performing their job duties. Causing physical injury to, or assaulting, a utility worker is punishable by law, and penalties include potential jail time.

Gas Usage History

Month	Therms	Month	Therms
Nov 23	00	Jun 24	00
Dec 23	1264	Jul 24	00
Jan 24	1601	Aug 24	00
Feb 24	2061	Sep 24	00
Mar 24	2060	Oct 24	00
Apr 24	575	Nov 24	00
May 24	00		

Consumption

Charges

Account ...

Images

Consum...	Total Co...	Total Cost	Cost / Unit	Account ...	Images
Terms	12,672	\$5,319.52	\$0.419785	McCormack Sta	1
Terms	771	\$1,053.99	\$1.367042	Hurley Building	1
Terms	0	\$587.67	\$0.00	Hurley Building	1
Terms	6,907	\$2,873.56	\$0.416035	State House	1
MBTU	0	\$0.00	\$0.00	Hurley Building	1
MBTU	1,315.93	\$12,864.53	\$9.775998	McCormack Sta	1
MBTU	80.06	\$782.67	\$9.776042	Hurley Building	1
MBTU	717.26	\$7,011.93	\$9.775994	State House	1
Vh	125,280	\$14,115.01	\$0.112427	Hurley Building	1
Vh	157,400	\$17,711.27	\$0.112515	State House	1

1 to 100 of 1,054

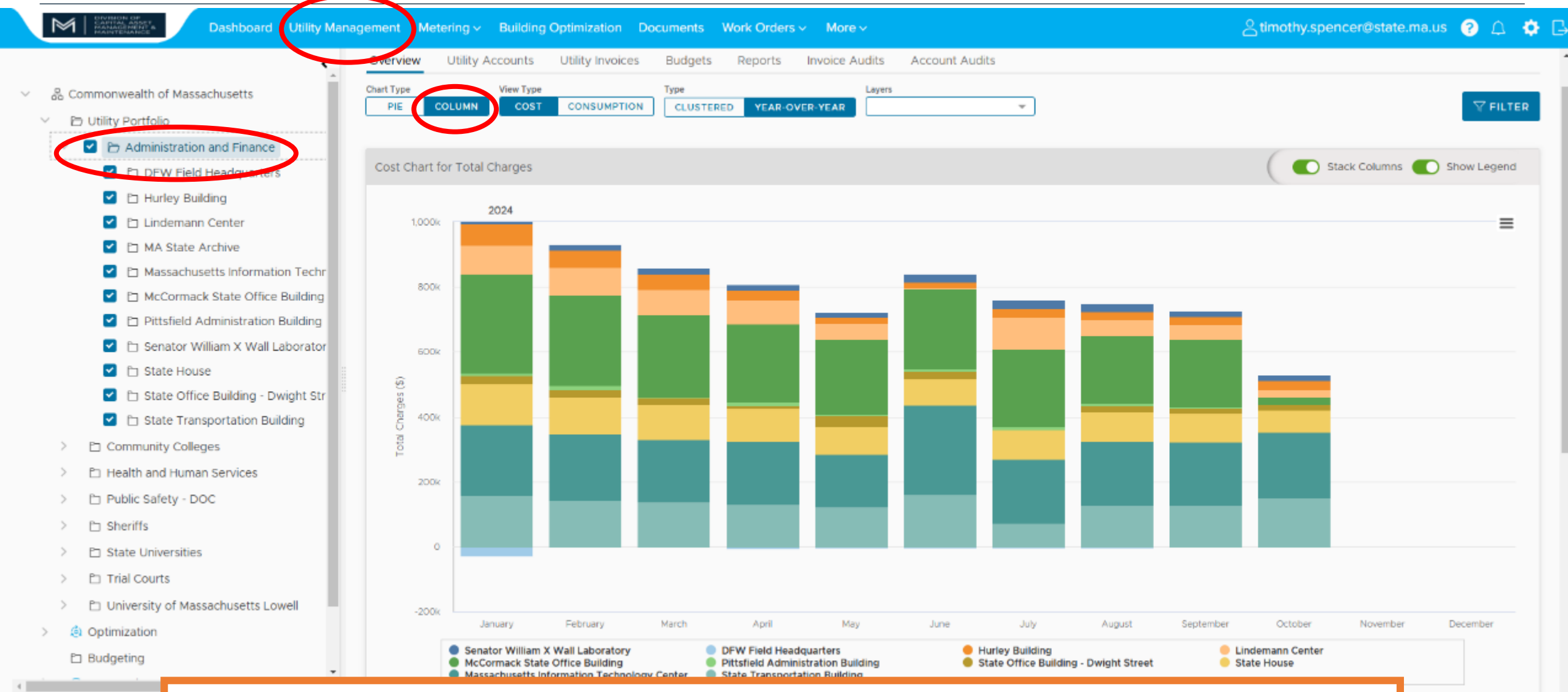
Page 1 of 11

Select the paper clip icon to view a PDF of the actual bill.

How to Use CEI

May 13th, 2025

How to Use CEI – Utility Bills (Costs over time)



Select "Column" to view a bar graph of utility costs at your facility over time

How to Use CEI – Interval Meters

DIVISION OF CAPITAL ASSET MANAGEMENT & MAINTENANCE

Dashboard

Utility Management

Metering

Building Optimization

Documents

Work Orders

More

timothy.spencer@state.ma.us

< Saved Reports

Untitled

SAVE AS

Group by

Location/Customer

Meter Group

Choose how meters should be organized in the tree below.

MORE FILTERS

Portfolio

Commonwealth of Ma

Filter Meters

Search text fields

Energy Type

Electric

UNSELECT ALL

COLLAPSE ALL

EXPAND ALL

Admin and Finance

DFW Field Headquarters

Lindemann Building

Massachusetts Information Technology Center

McCormack State Office Building

Main Electric

Submeter Electric

Pittsfield - Administration Building

Senator William X Wall Laboratory

State House

15 Minute usage for Thursday, October 31, 2024 12:00 AM through Thursday, November 7, 2024 1:41 PM

24H

WTD

1W

1M

3M

6M

YTD

1Y

2Y

5Y

INTERVAL 15MIN

UNSTACK

EXPORT

Usage (kWh)

Consumption

On-Peak Usage

125,517 kwh

Off-Peak Usage

161,138 kwh

Total Usage

286,656 kwh

Load Factor

85%

On-Peak Demand

1,855 kw

Mon, 11/4/24, 11:10 AM

Off-Peak Demand

1,734 kw

Mon, 11/4/24, 8:00 AM

Total Peak Demand

1,855 kw

Mon, 11/4/24, 11:10 AM

Minimum Demand

0 kw

Sat, 11/2/24, 8:38 AM

Days

7 days

Heating Degree Days

69.3

Cooling Degree Days

4.2

Weather Station

Boston, Logan International Airport, MA

Select "Usage Profiles" to view real-time meter data.

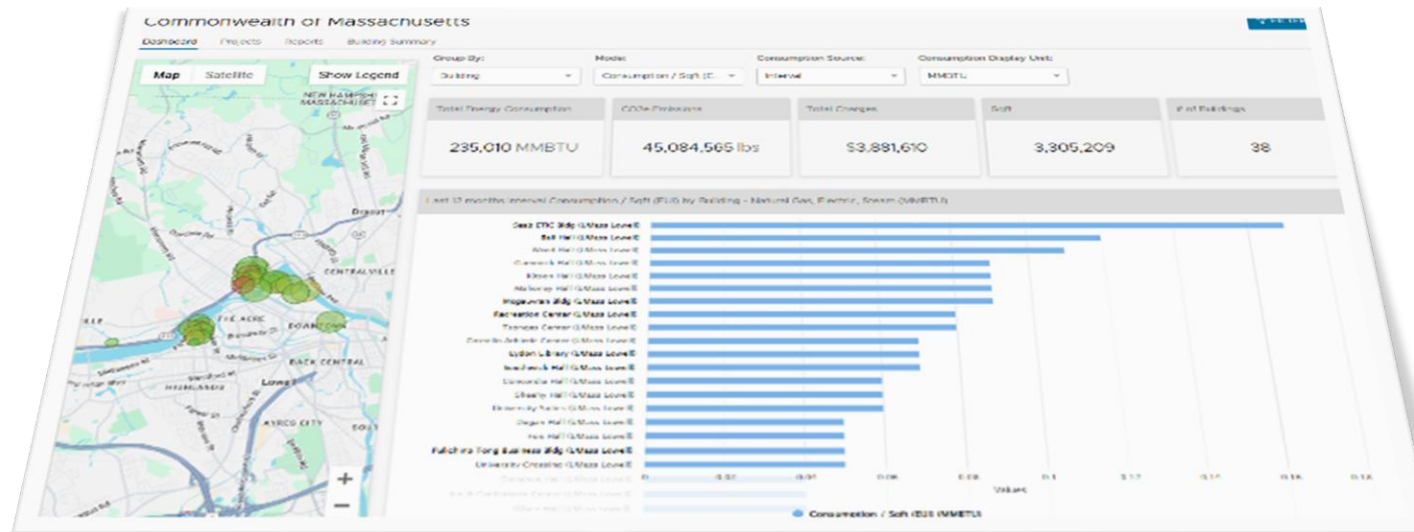
How to Use CEI

81

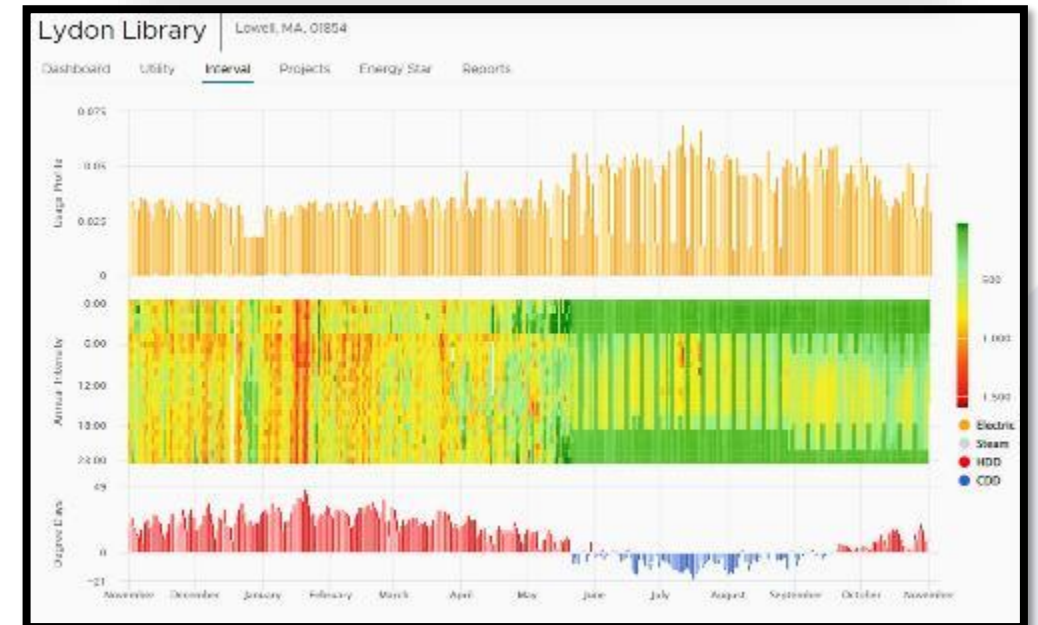
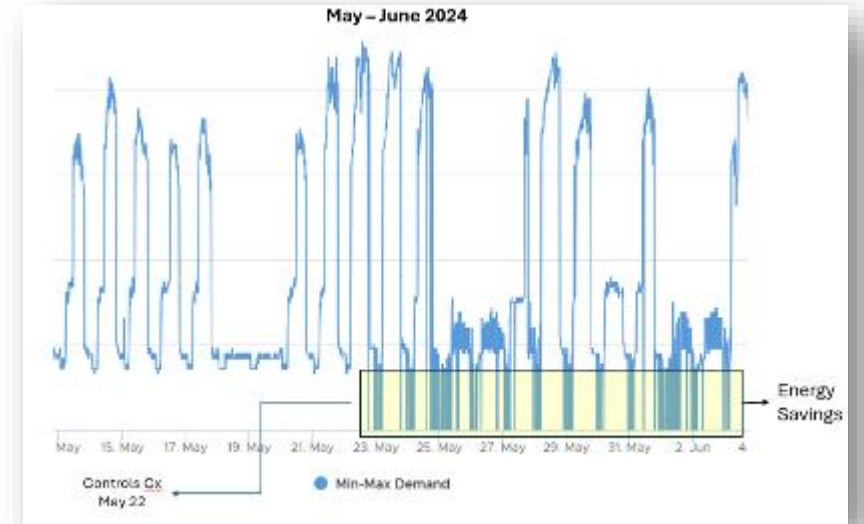
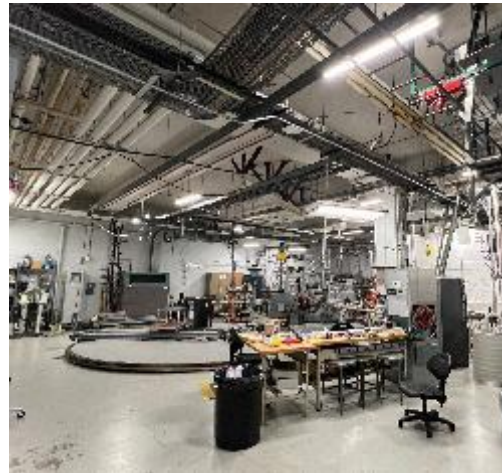
May 13th, 2025

ENERGY INTELLIGENCE IN ACTION

IDENTIFY AREAS OF ENERGY WASTE



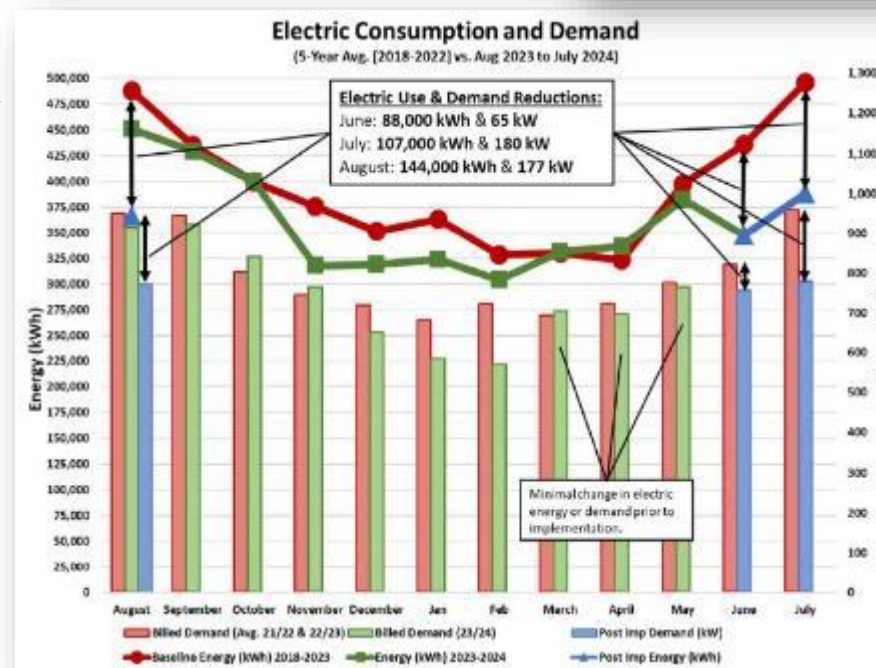
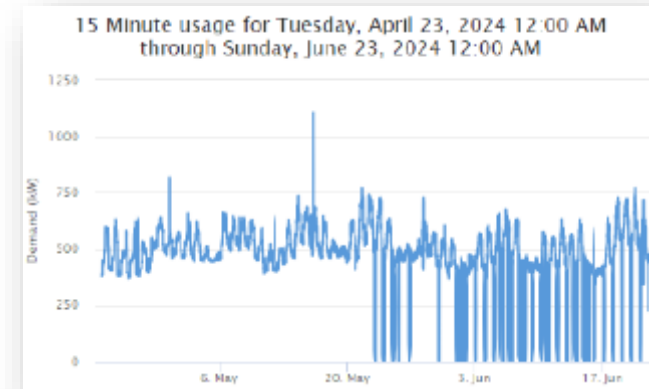
ENERGY WASTE | LIGHTING SCHEDULES



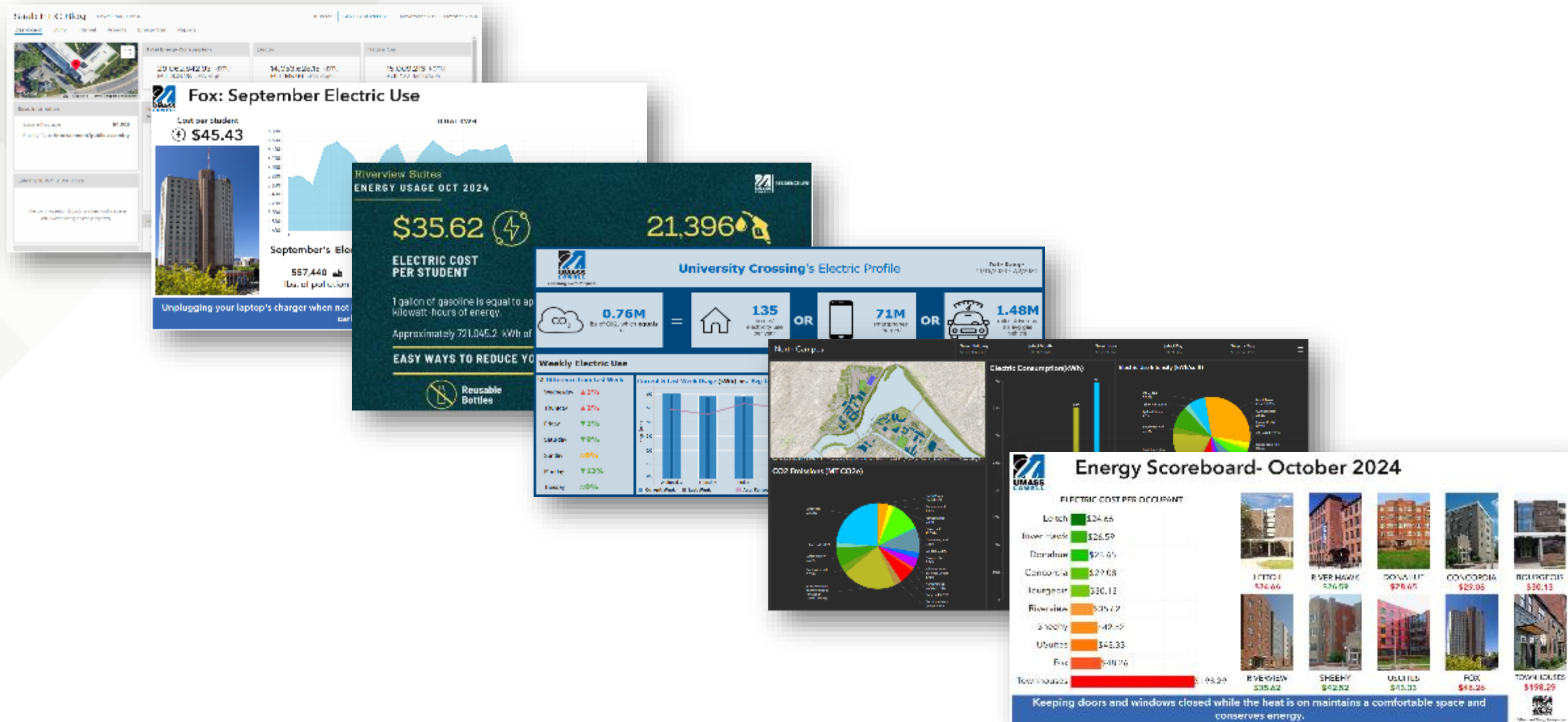
ENERGY WASTE | RESULTS-DRIVEN COMMISSIONING

- Airflow & Exhaust Optimization
- Static Pressure Resets
- Occupancy Sensor Repairs
- Heat Recovery Optimization
- Outdoor Air Control Limits
- Sensible Heat Wheel Optimization
- Condenser Water Pump Optimization
- Condenser Water Temperature Resets
- Hot Water Flow & Temperature Resets

Item	
RCx Costs	\$475,893
Cost Savings, FY25	\$311,518
LDC Incentives	\$395,901
Payback Months	6
3-Yr NPV	\$768,349
EUI Redux	-23%
\$13m Budget Impact	-6%
Emissions MTCO2e	-922



DASHBOARDS, DASHBOARDS, DASHBOARDS



<https://emsys1.com/a/dashboard>

Questions?

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It's Time To Hear From You!

Slido Activity

Energy Data Discussion 2

Please scan this QR code or go to slido.com and enter the following code to participate in this activity:

2665762





MASSACHUSETTS
**DEPARTMENT OF
ENERGY RESOURCES**

Thank You!