



MASSACHUSETTS
CLEAN ENERGY
CENTER®

Grid Modernization for Net Zero: Using Data to Plan and Manage Growth

Presented By

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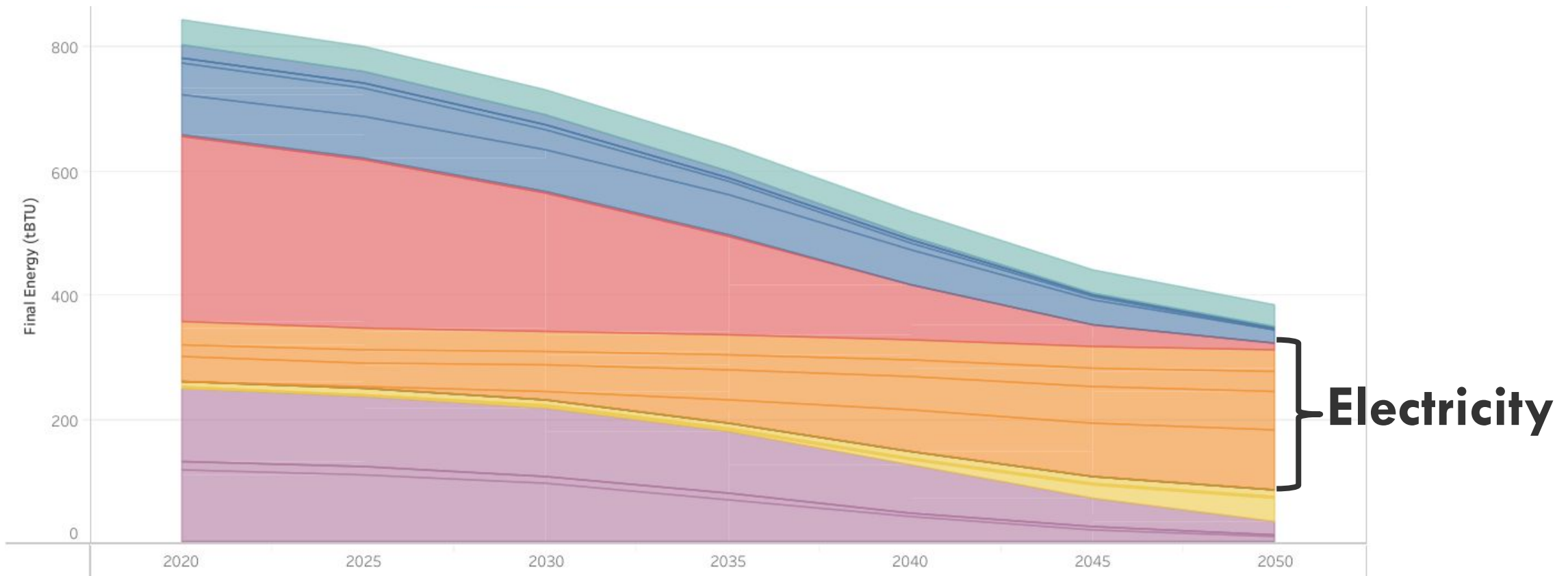
Senior Director

OUR MISSION

Accelerate the clean energy and climate solution in critical to meeting the Commonwealth's climate goals. Massachusetts' position as an international climate leader is growing the state's clean energy economy.



MASSACHUSETTS IS PURSUING AN "ELECTRIFY EVERYTHING" STRATEGY TO GET TO 2050



ELECTRIFICATION MAKES SMALL C&I INTO A LARGE USER OF ELECTRICITY

Transportation

Massachusetts has over **32,000** firms with more than **500,000** commercial vehicles registered in the Commonwealth. EEA estimates expect that these vehicles will require **approximately 1 DCFC port each**.

In addition, the Commonwealth will install over **200,000** Level 2 ports at workplaces.

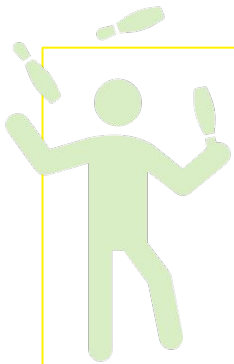
Building Energy Usage

Massachusetts has over **1.3 billion** square feet of commercial building space, most of which was **constructed before 1980**.

In addition, there is approximately **700 million** square feet of large multifamily housing.

Fossil fuels account for **85% of space heating** in commercial buildings.

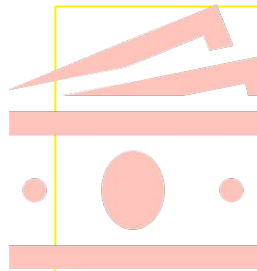
CUSTOMERS AREN'T READY



Electrification projects can be complex and expensive without considering service upgrades.



Whether an electrification project will entail a service upgrade or local capacity upgrade is an “unknown unknown” for many customers – so the utility may not be contacted until late in project development.



Utilities need to know how much load customers need to generate cost estimates, but customers may want to adjust project design based on utility-side costs.

NET ZERO IS ON A TIMELINE

The Clean Energy and Climate Plan for 2030 calls for:

☐ **50,000** medium- and heavy-duty EVs on the road in Massachusetts

☐ = **Electrification projects of ~10,000 fleets!**

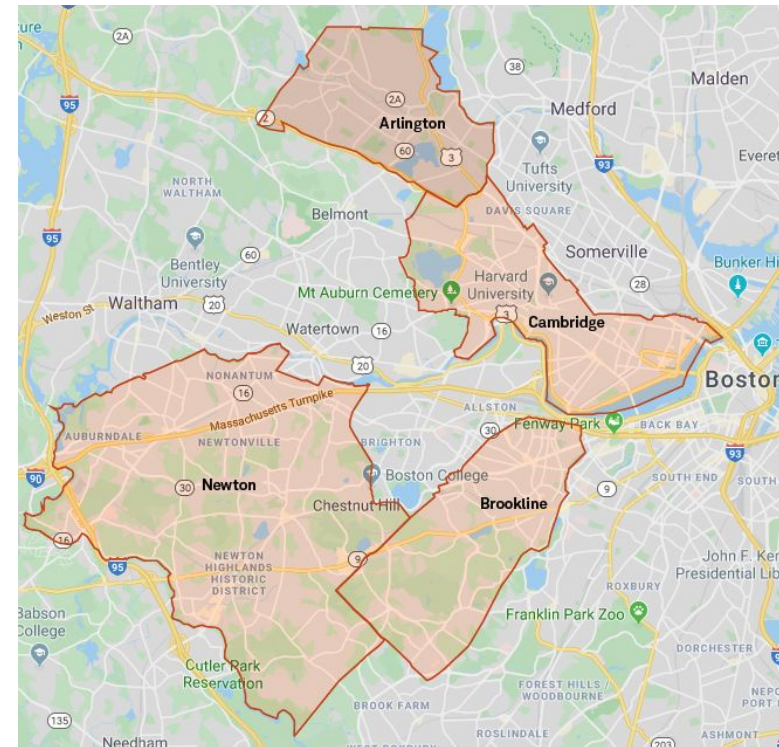
☐ Weatherization and electrification of **300-400 million** square feet of commercial building space in Massachusetts

☐ = **Electrification of ~10,000 office buildings!**

☐ **Right now, projects are measured in single- or double-digits and take hours of staff time to navigate for both customers *and* EDCs.**

TEN COMMUNITIES IN MA WILL BAN FOSSIL FUEL HOOKUPS IN NEW CONSTRUCTION

- As of August 11, up to ten municipalities in Massachusetts may qualify to ban fossil fuels in new construction and major renovations.
- 10 communities have filed “home rule petitions” for permission to implement law.
- Participation in this pilot program would remove some of the uncertainty of forecasting “step loads” as almost all new construction would be all-electric



Regarding Grid Modernization, to achieve Boston's Climate, Health & Equity goals, a critical obstacle to collectively overcome in 12 months is _____.

Making the utility side of how customers electrify easy, starting with a clear process for all-electric projects in the 10 all-electric new-construction communities.

THANK YOU!

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