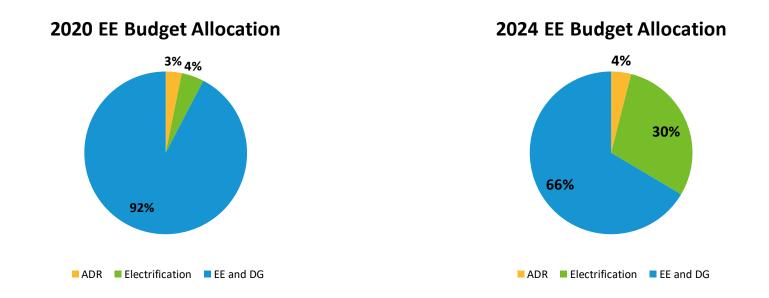
## Overview

- Each year, accounting in the EE Forecast becomes more complex
  - EE programs may consist of EE, Distributed Generation (DG), Active Demand Response Resources (ADR), electrification, etc.
  - The EE forecast is a forecast of measures participating in the FCM
  - Measures not participating in the market are captured as load reductions in the gross load forecast
- The EE Forecast has been decreasing with each successive forecast
  - EE budgets have remained consistent, while production costs have increased
  - The pace of measure expiration has recently surpassed the pace of new capacity supply obligations (CSOs)
- The EE Forecast works in tandem with the accounting for passive demand resources (PDR) used in the gross load forecast to yield an accurate net of EE forecast

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• EE "counterfactuals" are used in the development of net energy and demand forecasts

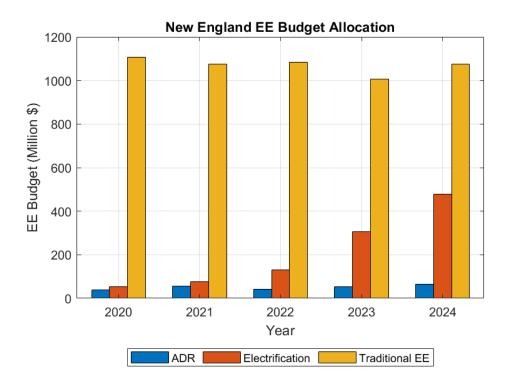
# **Electrification Accounts for an Increasingly Large Share of State EE Budgets**



Note: The budgets used to develop the EE forecast are exclusive of ADR and Electrification funding

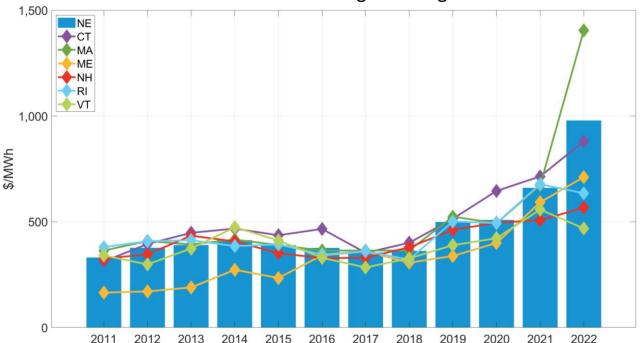
#### **Breakdown of EE Budgets**

- Since 2020, New England's electrification budget has steadily increased.
- The budget for traditional EE has remained mostly consistent over that same time period.



#### **Annual EE Production Costs Are Increasing**

- The production costs displayed in this figure represent the amount of budget required by a program to achieve a MWh of annual energy reduction
- Increasing production costs result from baseline efficiency increases, inflation, a decreased emphasis on lighting, etc.
- Programs with higher production costs produce fewer load reductions when their budgets are held constant

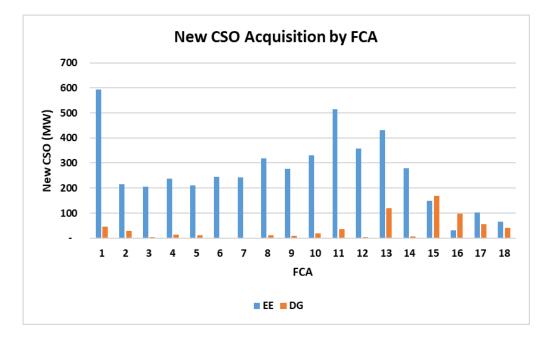


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#### Production Costs Across New England Program Administrators

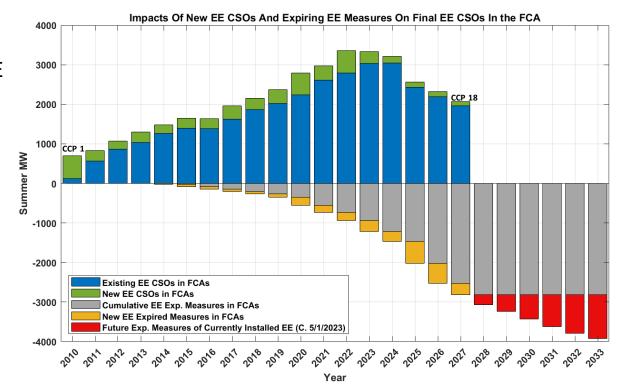
# **Trends Have Shifted**

- Trends in the amounts of PDR participation has shifted in recent Forward Capacity Auctions (FCA):
  - 1. Significantly less EE has participated
  - More passive DG that is not funded by program administrator (PA) programs



## **Expiring Measures Outpace New CSOs**

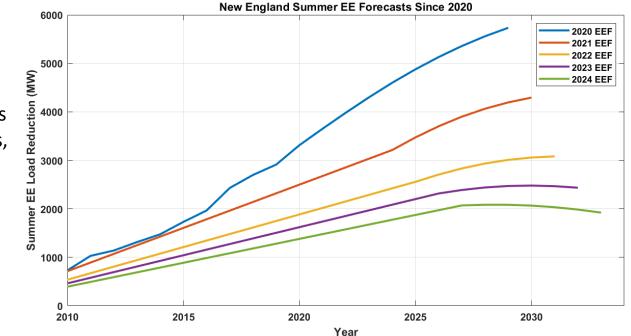
- Since FCA 14, the magnitude of expiring EE measures exceeds the magnitude of newly acquired EE CSOs
- The interplay between these two results in a decrease in the final EE CSOs



#### **Successive Forecasts Predict Fewer Market Facing MWs of EE**

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Diminishing EE Forecasts result from a myriad of factors including EE measures obtaining fewer CSOs in FCAs, higher production costs, and measures increasingly expiring out of the FCM

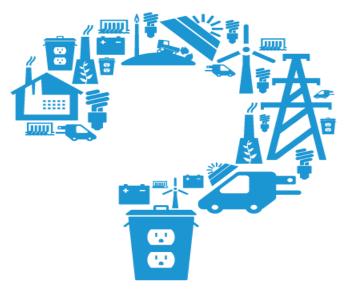


## Takeaways

- The scope of the EE forecast has significantly decreased in recent years, while the accounting required has become more complex
  - The amount of EE that participates in FCM has significantly decreased due to rising production costs and increasing EE measure expiration
- EE programs are also pivoting towards heating electrification and other out-ofmarket programs (e.g., ADR), which are beyond the scope of the EE forecast, but are accounted for in other pieces of the load forecast framework
- Given these changes, the ISO will be re-examining the future role of the EE forecast in the context of the significant changes that are needed to the overall load forecast methodology as the region's grid evolves
  - The current method of using projections of EE counterfactuals to develop an accurate net energy and demand forecast has proven challenging, and may introduce more uncertainty to the forecast than forecasting net of EE load directly

# Questions

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9