

2022 Q3 RESULTS

▶ **December 21, 2022**

INTRODUCTION

▶ **C-Team Quarterly Reviews:**

- Highlight KPIs
- Prioritize discussion about those that most impact progress toward PA goals

▶ **KPI and Equity Targets Data**

- Rich source of near real-time program information
- Support analysis and assessment of PA progress in achieving Plan goals and Council's priorities

▶ **The data indicate mixed results in Q3**

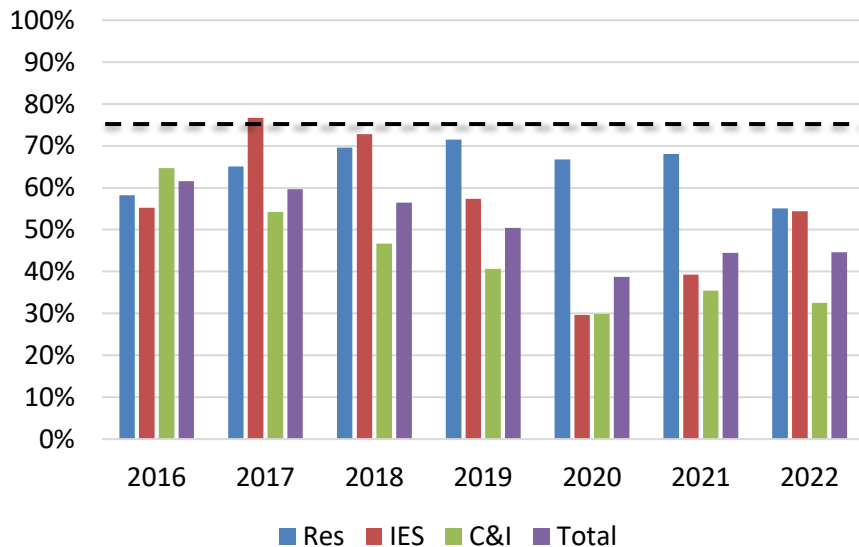
- Progress in some areas such as residential heat pumps and other electrification efforts
- Others lagging such as Moderate Income and later in year launch of three key new C&I offerings

Q3 BENEFITS ACHIEVEMENT

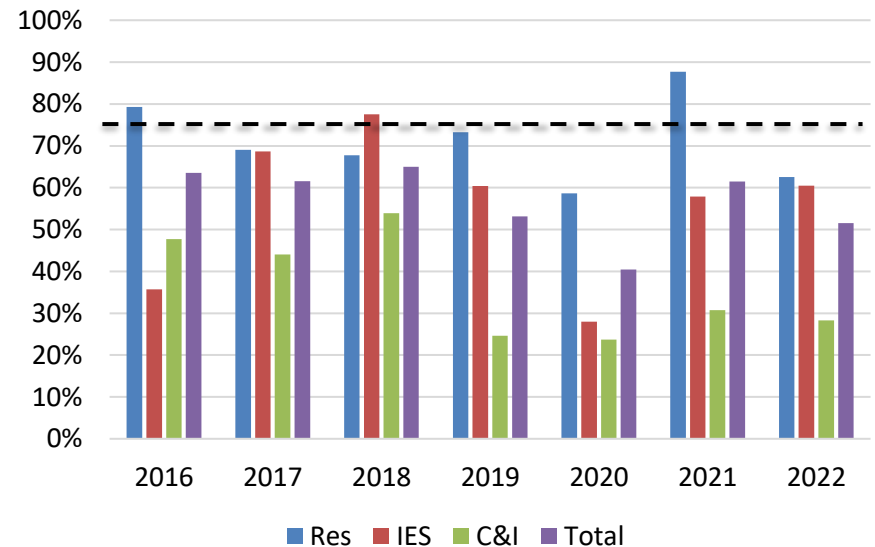
► Q3 data not always a clear indicator of year-end results

- “Hockey stick effect” is the pattern of savings in which a large portion of savings occur in the final months of the year

Q3 Electric Program Benefits Achievement



Q3 Gas Program Benefits Achievement





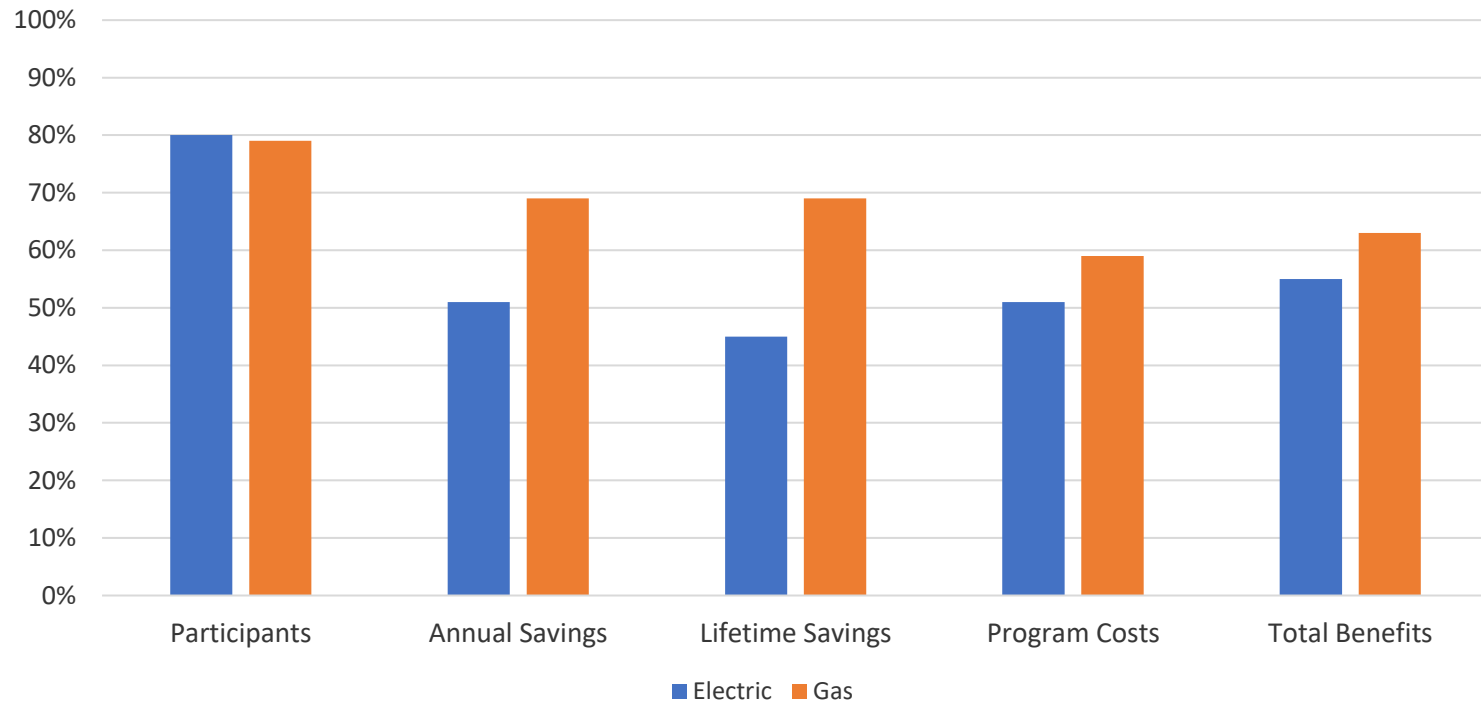
Q3 RESIDENTIAL & INCOME ELIGIBLE

RES AND INCOME ELIGIBLE SUMMARY AND TAKEAWAYS

- ▶ **Results through Q3 are mixed and are likely reflective of ramp up of new efforts in new Term**
- ▶ **Heat pump activity is very strong in res sector**
 - Increased attention to weatherization needed for partial displacements
- ▶ **Fossil fuel heating system installations remain the norm in the Income Eligible sector**
- ▶ **New construction activity showing initial positive signs of transition to electrification**
- ▶ **Moderate income results continue to be poor**

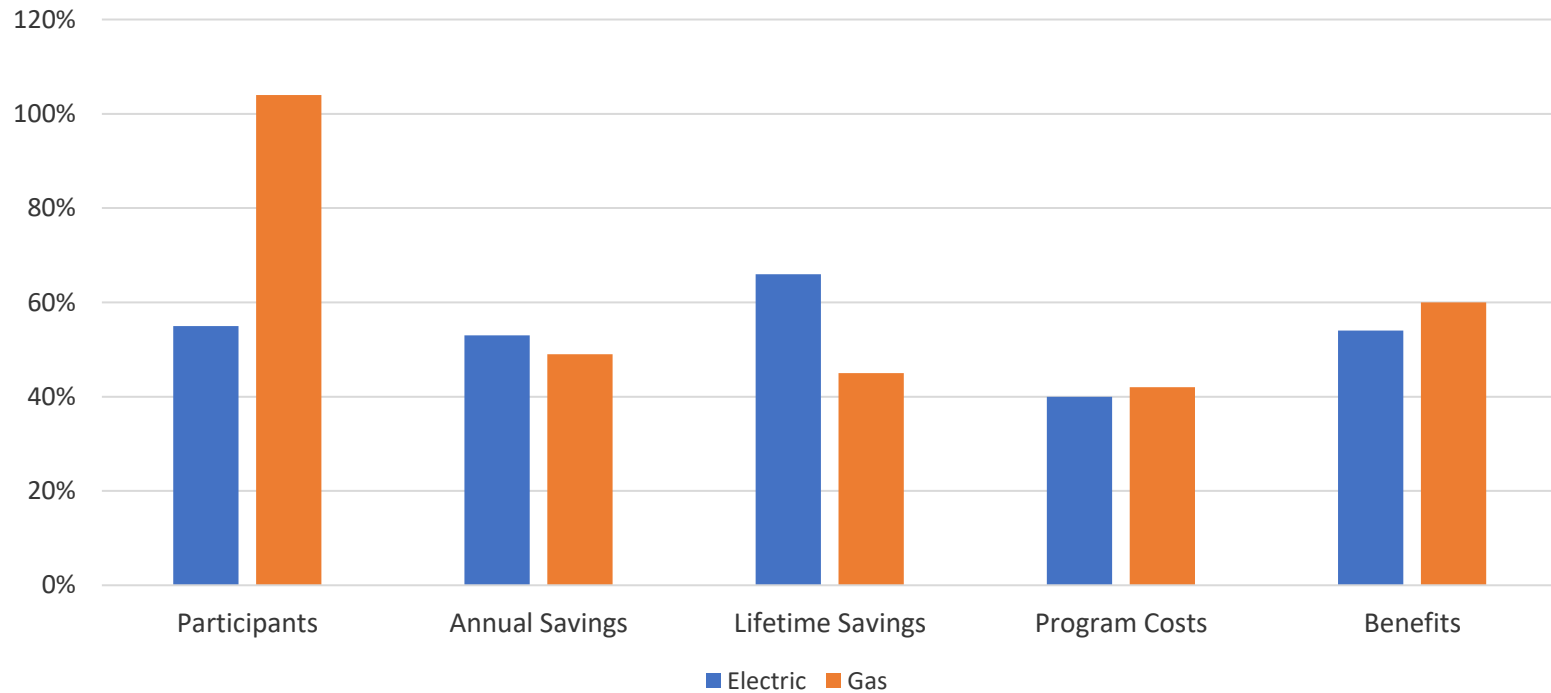
RES RESULTS OVERVIEW

Achievements as % of 2022 Plan Values
75% of Year Complete



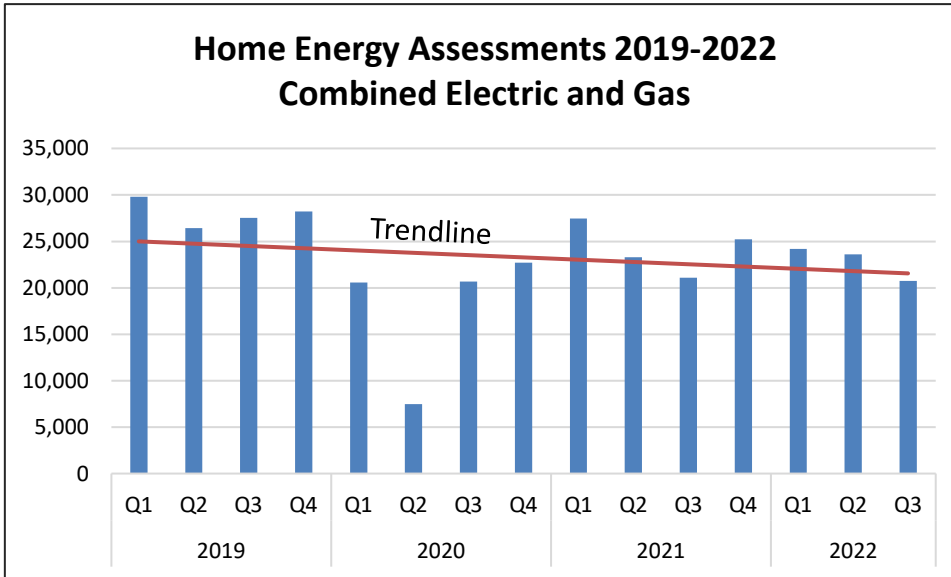
INCOME ELIGIBLE RESULTS OVERVIEW

Achievements as % of 2022 Plan Values
75% of Year Complete



HEAs AND CONVERSIONS

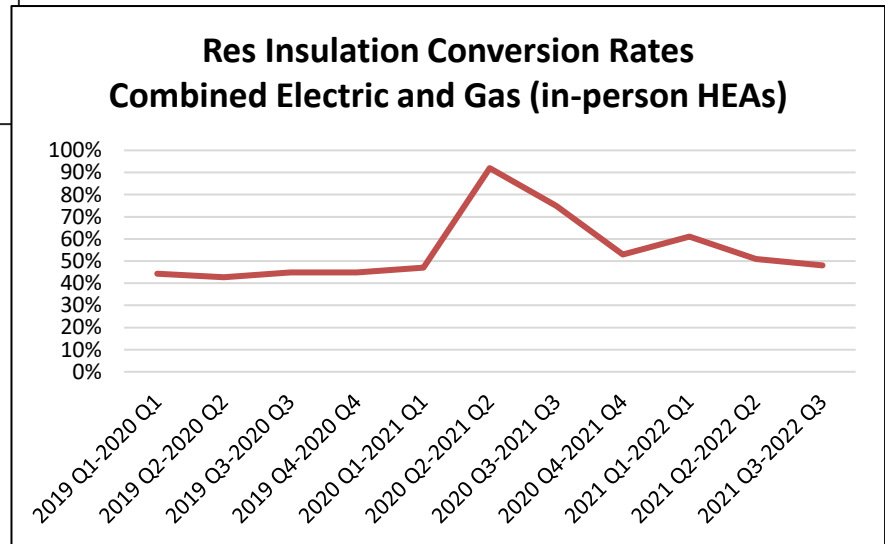
QUARTERLY KPI #1



- Home Energy Assessments (HEAs) have not returned to pre-pandemic levels
- Q3 2022 HEA volume is 75% of Q3 2019
- In-person HEAs are 95% of all HEAs

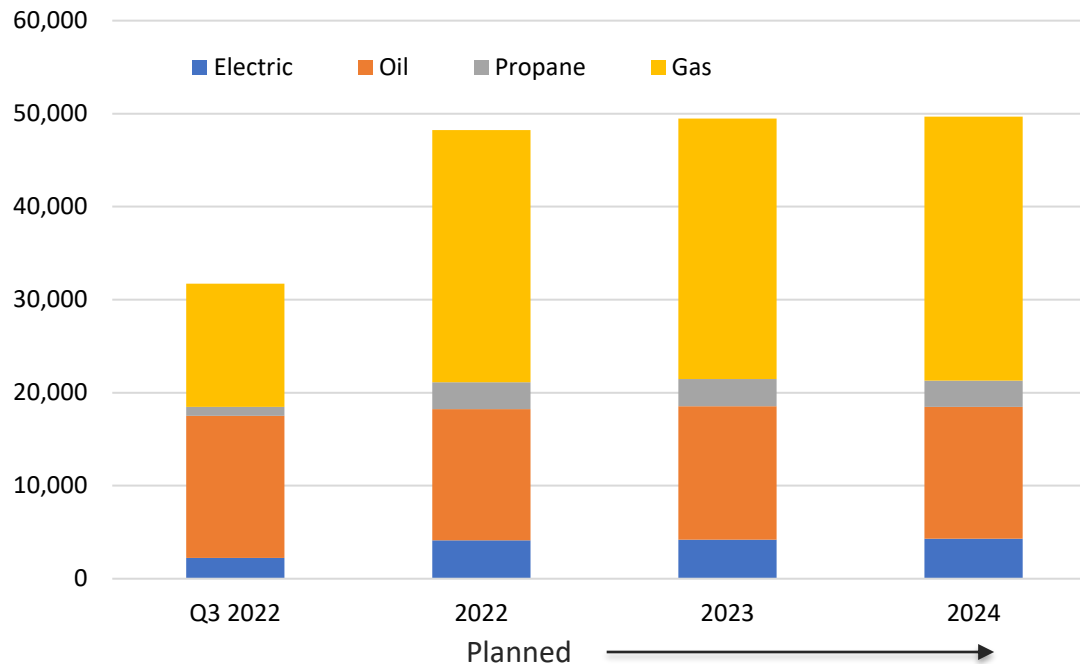


After a spike resulting from a temporary 100% incentive to fill the pipeline during the Covid peak, insulation conversion rates have largely returned to pre-pandemic levels



RESIDENTIAL INSULATION

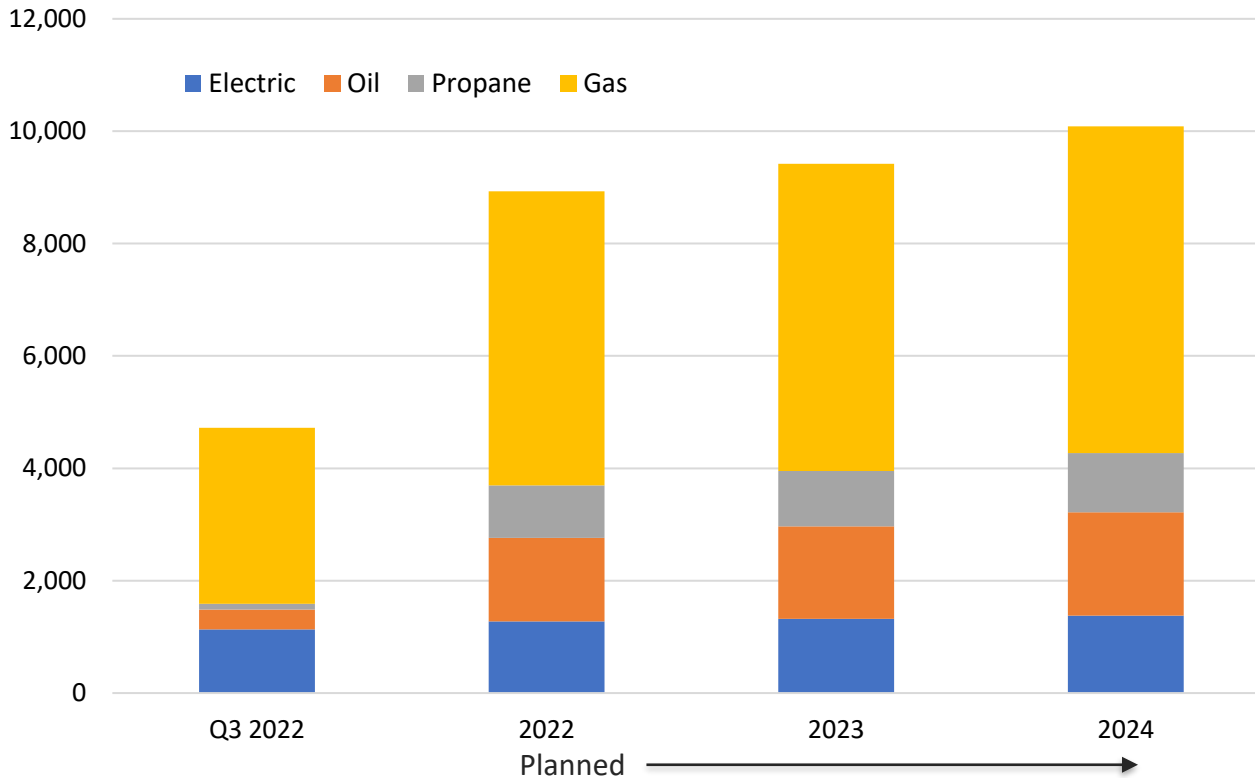
**Residential Insulation Jobs
Minus Moderate Income**



- ▶ **YTD insulation measures in gas homes are 49% of 2022 planned value**
- ▶ **Measures in oil homes are already over planned #s for the year**

INCOME ELIGIBLE WEATHERIZATION

Income Eligible Weatherization Jobs

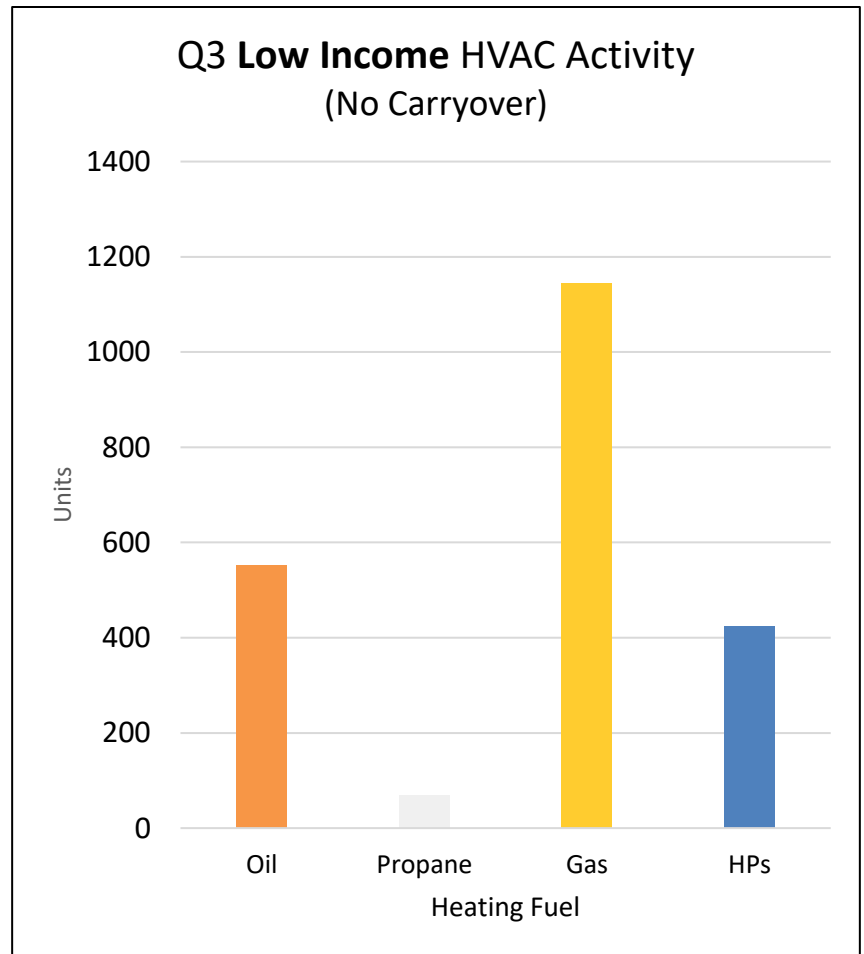
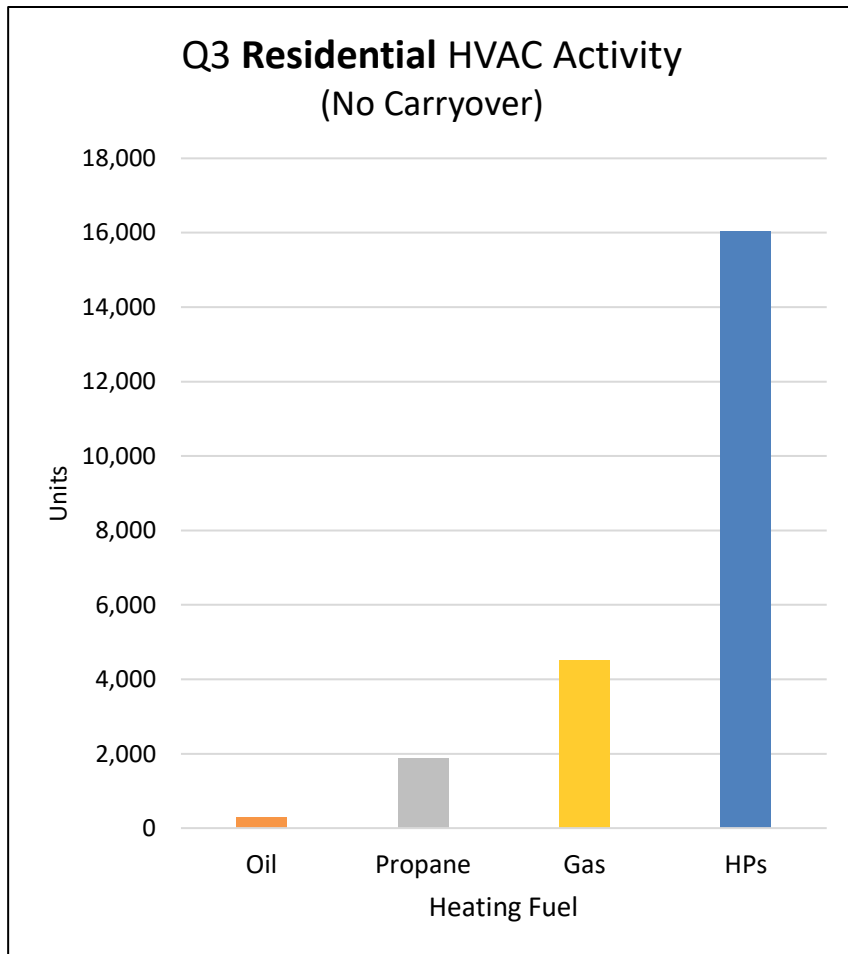


▶ **YTD insulation measures are close to planned value for the year**

- Measures in gas homes are 60% of 2022 planned value
- Oil: 24%
- Propane: 11%

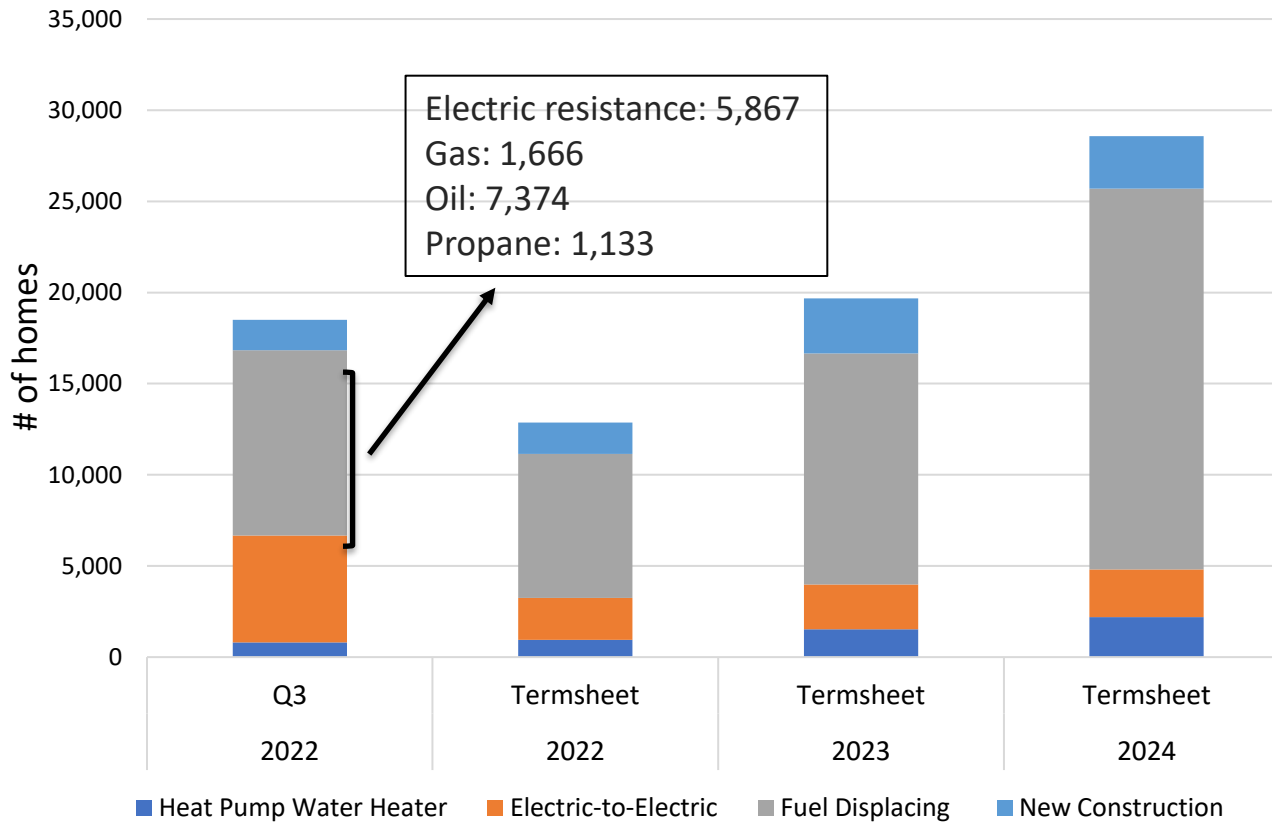
▶ **There is often a hockey stick effect with IES multifamily projects**

HVAC ACTIVITY COMPARED



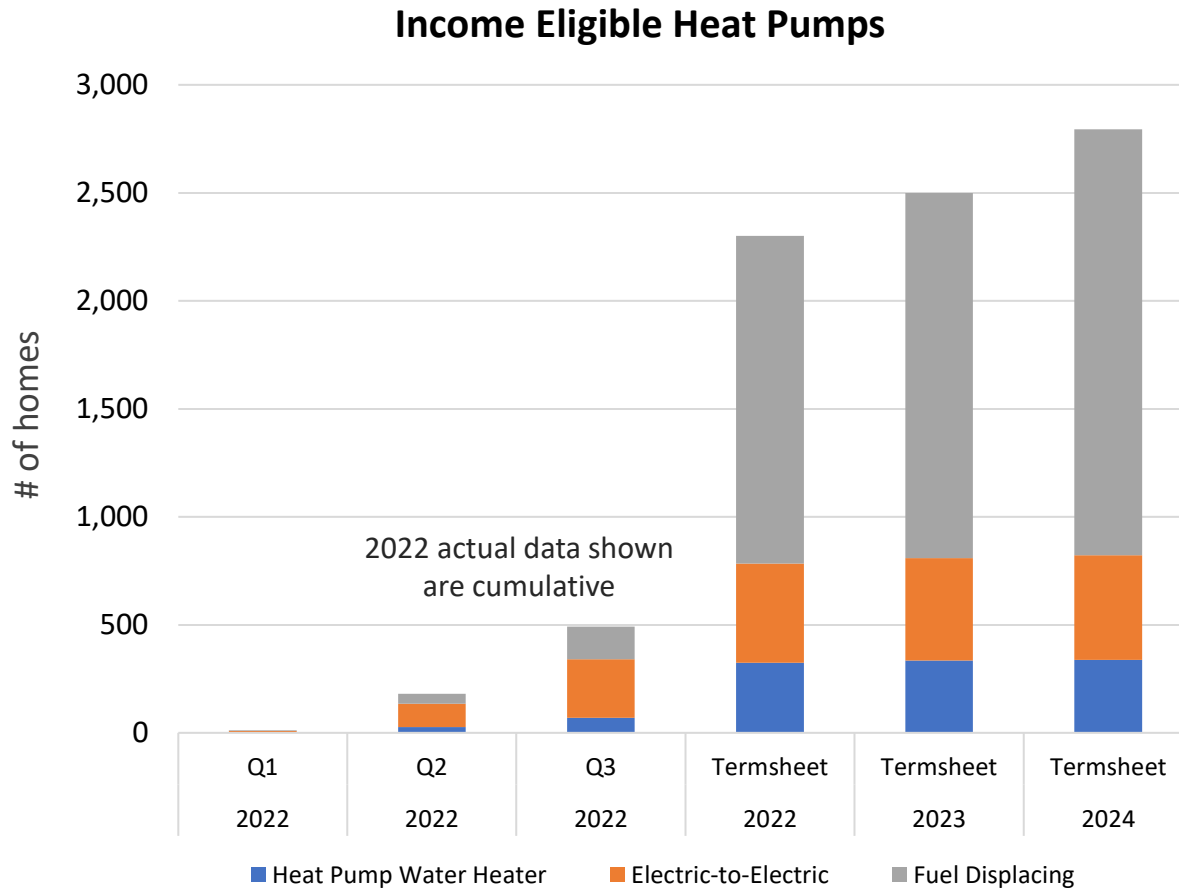
RESIDENTIAL HEAT PUMPS

Residential Heat Pumps



- ▶ **Overall activity very high**
 - Big drivers are electric resistance and oil
- ▶ **More gas activity than expected**
- ▶ **Success for Res market rate not reaching moderate income customers**

INCOME ELIGIBLE HEAT PUMPS



- ▶ Good progress from Q2 to Q3, but still far short of Term Sheet commitment for year
- ▶ Term sheet goal for electric to HP replacements almost met
- ▶ Heat pump water heater and fossil fuel displacement numbers are behind

HEAT PUMPS+WEATHERIZATION

- ▶ **DPU order approving Plan included finding that Three-Year Plans should be designed to ensure weatherization is completed prior to electrification to the extent possible**
- ▶ **Programmatically, weatherization is required for whole house HP incentive and for moderate income enhanced incentives**
 - Weatherization is not required for partial displacement heat pumps; PAs offering \$500 bonus to customers who install a heat pump after weatherizing
 - Zero bonuses reported in Q3
- ▶ **PAs tracking weatherization as a requirement for higher electrification performance incentive payout rates**
 - in Q3 Eversource reported that 47% of its 6,900 heat pumps installed in the electric program had verified weatherization

RES NEW CONSTRUCTION BY HEATING FUEL

	Fuel	Q2 Units	Q3 Units
New residential construction heating system installations	Electric	309	1,234
	Gas	2,558	5,270
	Oil	7	16
	Propane	364	1,057
	Other	-	-

Quarterly data are cumulative

- ▶ PAs' all-electric new construction offer launched in Q1 of 2022
- ▶ Most significant increase is in new electric units
- ▶ Large number of new gas and propane units show large additional electrification opportunity



EQUITY TARGETS

MODERATE INCOME

Weatherization	2019 (Baseline)	2022 Reported			2022 Target
		Q1	Q2	Q3	
Electric PAs					
National Grid	234	-	-	66	468
Eversource	63	-	8	9	126
Cape Light Compact	139	-	-	28	278
Unitil	1	-	-	-	2
Gas PAs					
National Grid	129	-	40	14	258
Eversource	26	-	-	-	52
EGMA	86	-	9	5	172
Unitil	4	-	-	-	8
Liberty	11	-	3	-	22
Berkshire	6	-	1	1	12
STATEWIDE TOTAL	699	-	61	123	1,398

► Moderate income heating system replacements

- PAs launched this offer at the beginning of Q3
- Eversource is the only PA reporting activity—3 gas units
- **Statewide planned moderate income heating units are 1,521 for 2022 and 7,582 for the 2022-2024 Term**

► Pre-weatherization barriers

- 8 jobs reported

2022 Reported data are displayed incrementally

► Planned statewide moderate income weatherization units are 2,829 for 2022, 14,851 for 2022-2024 Term

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WATCHING IN Q4

- ▶ **Moderate income progress**
- ▶ **Lead time for Home Energy Assessments**
- ▶ **Res heat pump activity, especially gas-to-electric heat pumps**
 - If trends continue may impact budgets
- ▶ **Weatherization+heat pumps**
- ▶ **Low income electrification**



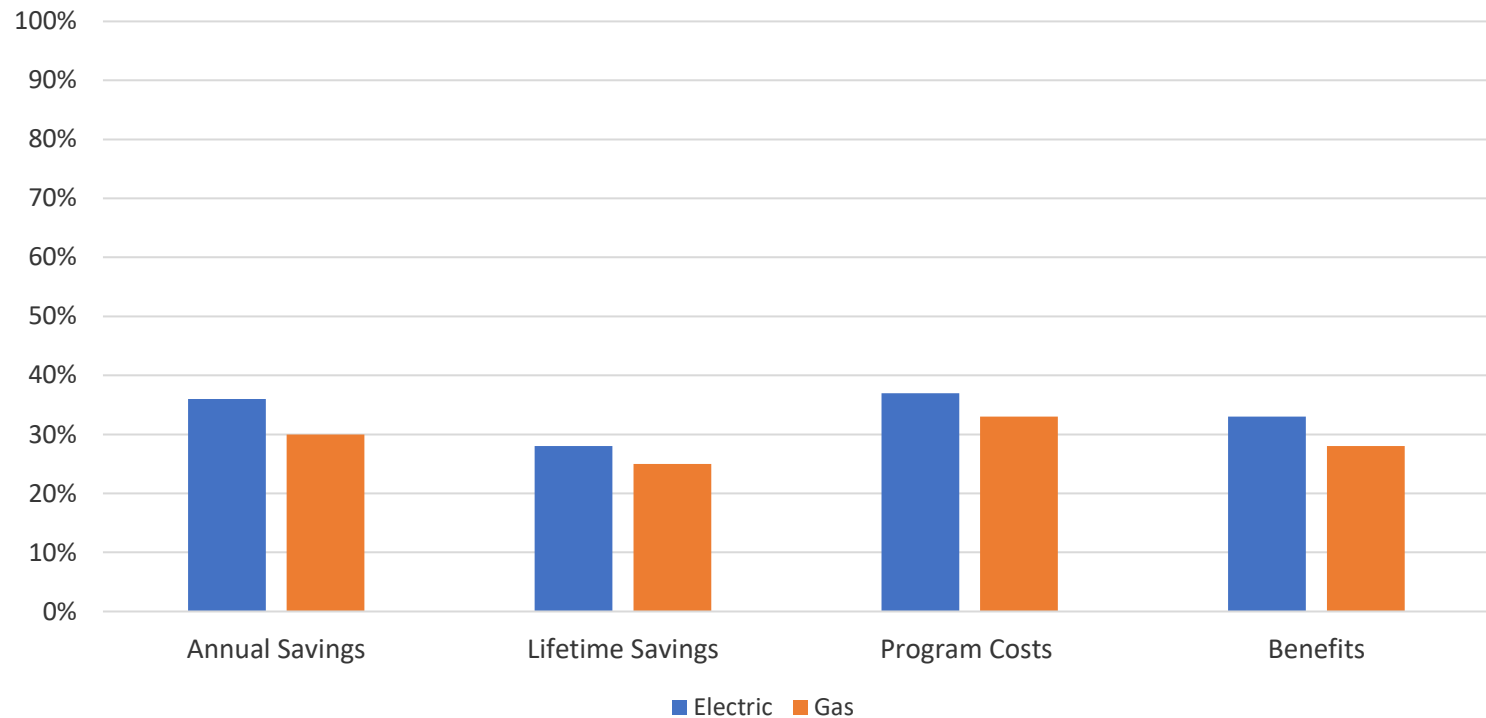
Q3 COMMERCIAL & INDUSTRIAL KPIS

C&I SUMMARY AND TAKEAWAYS

- ▶ **Results through Q3 are mixed and are likely reflective of ramp up of new efforts in new Term**
 - New Term and Council priorities
 - Focus on electrification
 - Later in year launch of three key new C&I offerings
- ▶ **Extensive engagement with Environmental Justice (EJ) communities and Small Business (SMB) customers through Main Streets events**
 - Too early to estimate impact
 - No quarterly reporting requirements for results or progress toward SMB weatherization equity performance target
 - Working toward a process to link engagements with any resulting projects
- ▶ **New C&I launches offer potential for deeper energy savings measures that could start to show results in Q4 2022 and Q1 2023 reporting**

C&I RESULTS OVERVIEW

Achievements as % of 2022 Plan Values
75% of Year Complete



KPI #4 PROPORTION OF C&I LIGHTING PROJECTS WITH CONTROLS - STATEWIDE

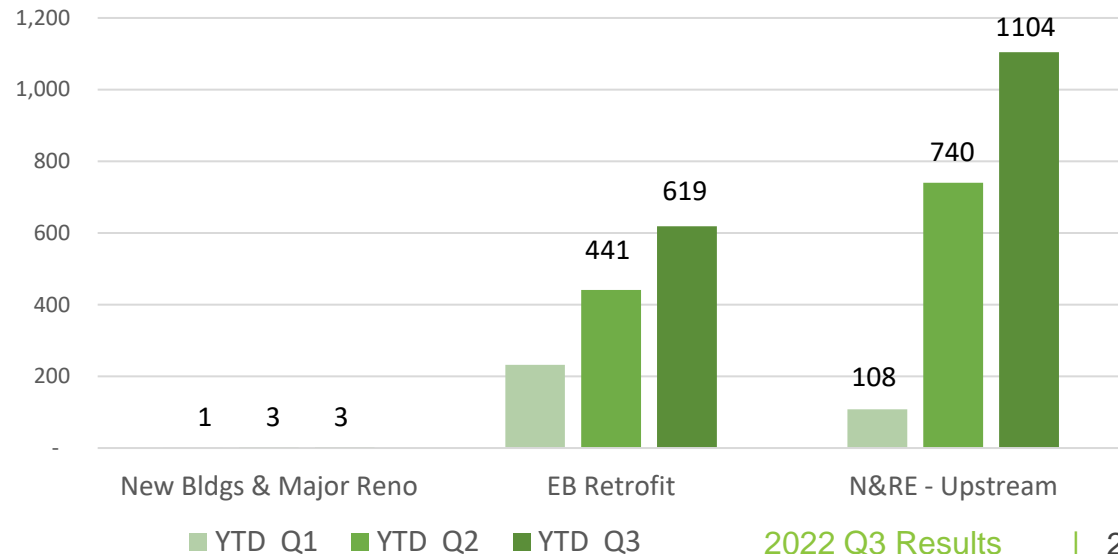
2022 Q3 Statewide

C&I Program/Initiative	YTD Lighting Projects	YTD Projects with Controls	YTD % projects w/ controls
New Buildings & Major Renovations	37	3	8.1%
Existing Building Retrofit	2,164	619	28.6%
N&RE - Upstream Lighting	17,952	1,104	6.1%
Statewide	20,153	1,726	8.6%

► **Q3 results following 2022 trends, showing highest % uptake in EB Retrofit**

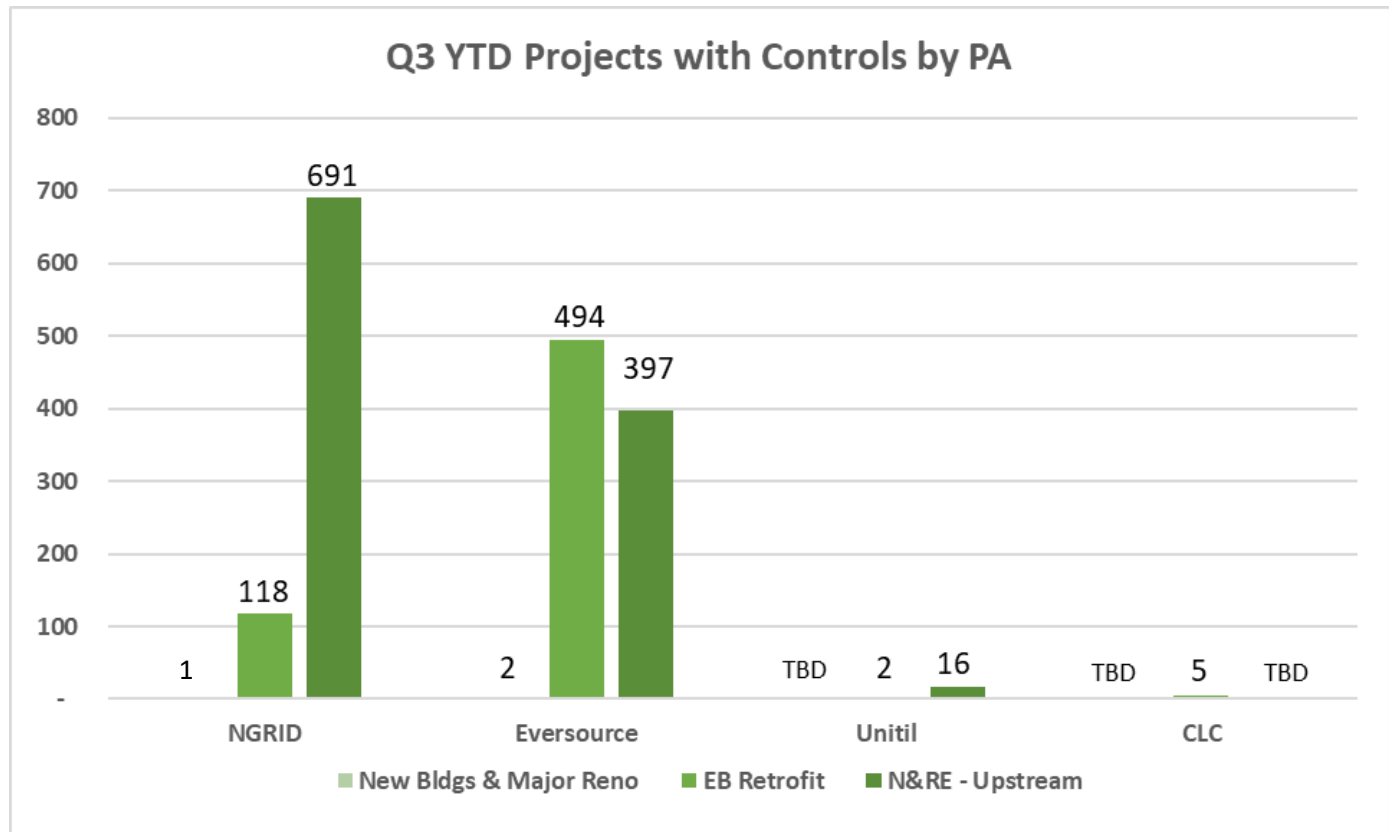
► **Seeing few controls – beyond those required by code - in New Construction**

Lighting Projects with Controls



KPI #4 PROPORTION OF C&I LIGHTING PROJECTS WITH CONTROLS – BY PA

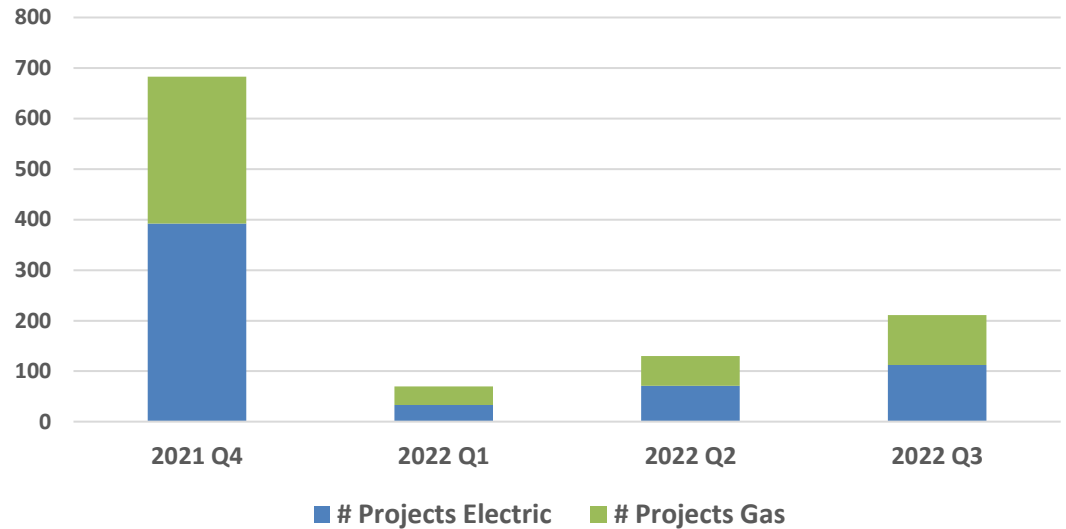
► Q3 2022 mix of lighting controls project types vary across PAs



KPI #5: NET LIFETIME SAVINGS FROM CUSTOM HVAC PROJECTS

- ▶ Goal to understand performance through a key HVAC delivery pathway
- ▶ Projects and Lifetime Savings by Energy Source
- ▶ Seeking more large HVAC projects

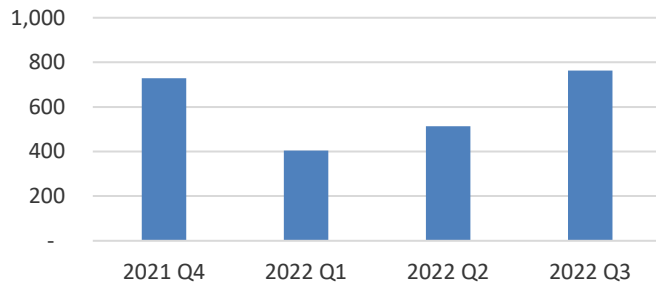
C&I Custom HVAC Projects - Statewide



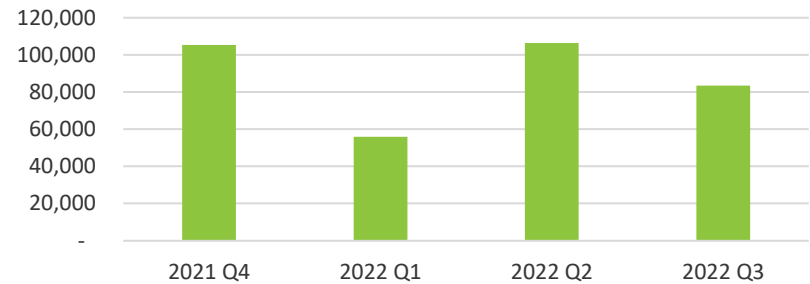
Included Measures in KPI #5	
Electric	Natural Gas
HVAC "Custom"	Controls, Gas "Custom"
Energy Management Systems	Heat Recovery, Gas
RetroCommissioning	Heating, Gas
	RetroCommissioning

KPI #5: NET LIFETIME SAVINGS FROM CUSTOM HVAC PROJECTS

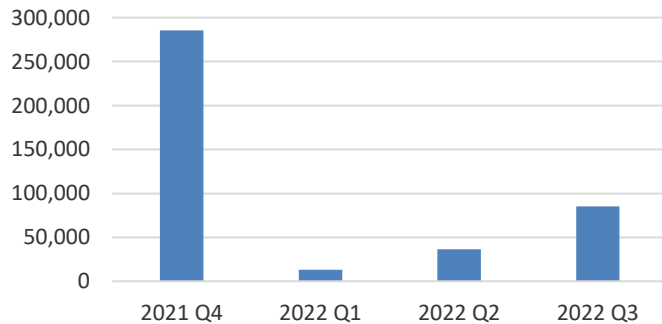
Custom HVAC Average Size Electric (MWh)



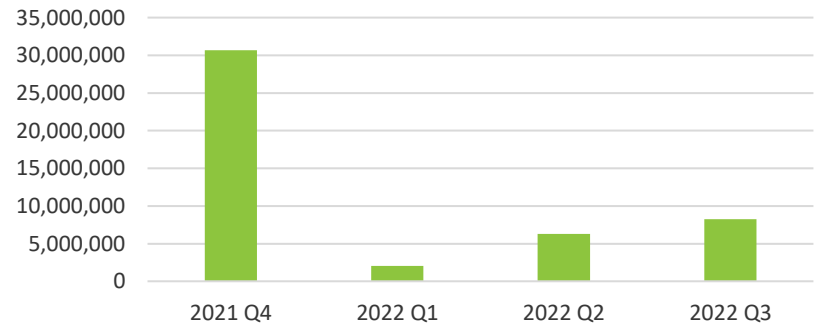
Custom HVAC Average Size-Gas (Therms)



Custom HVAC Net Lifetime Savings (MWh)

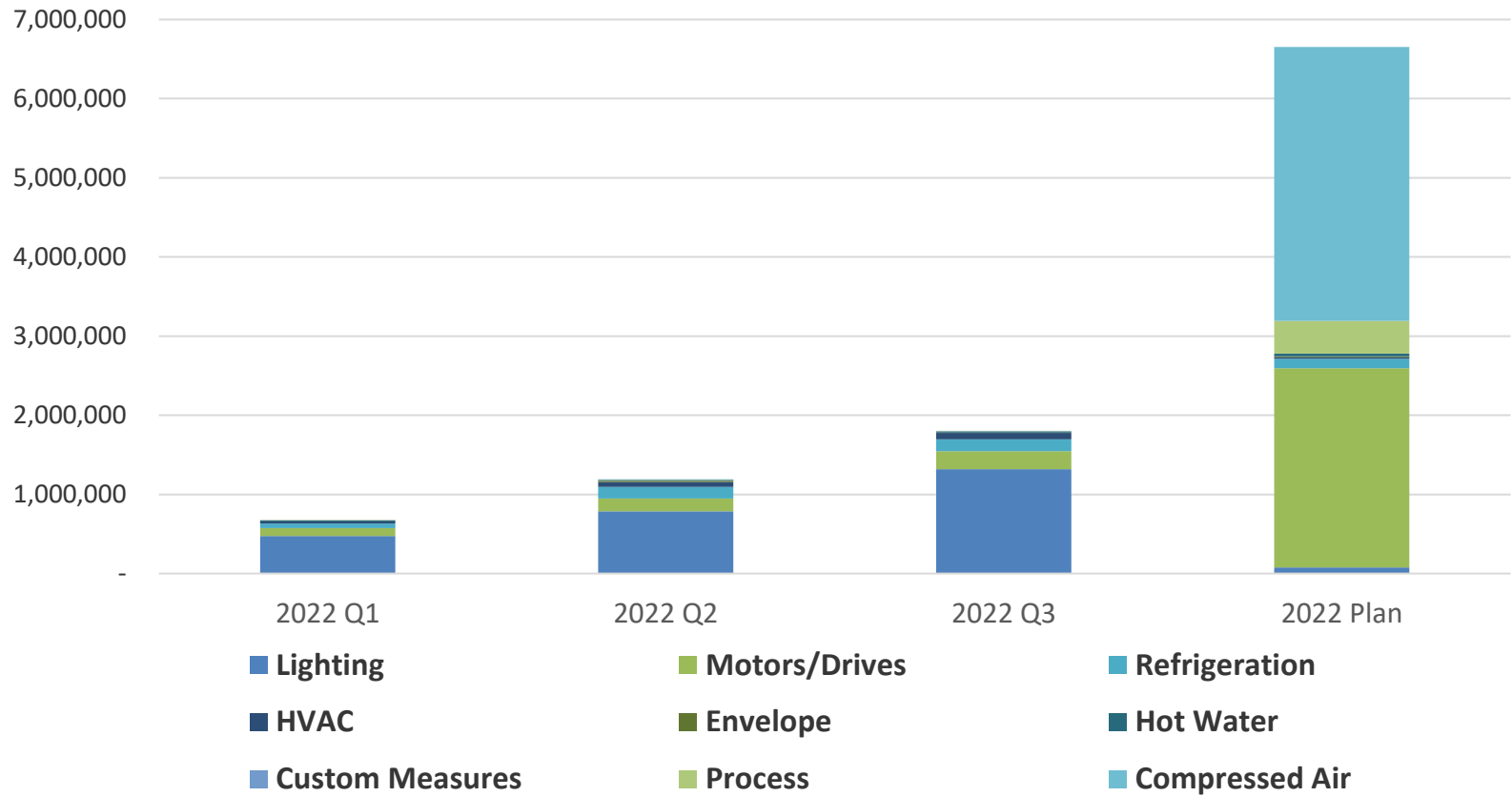


Custom HVAC Net Lifetime Savings (Therms)



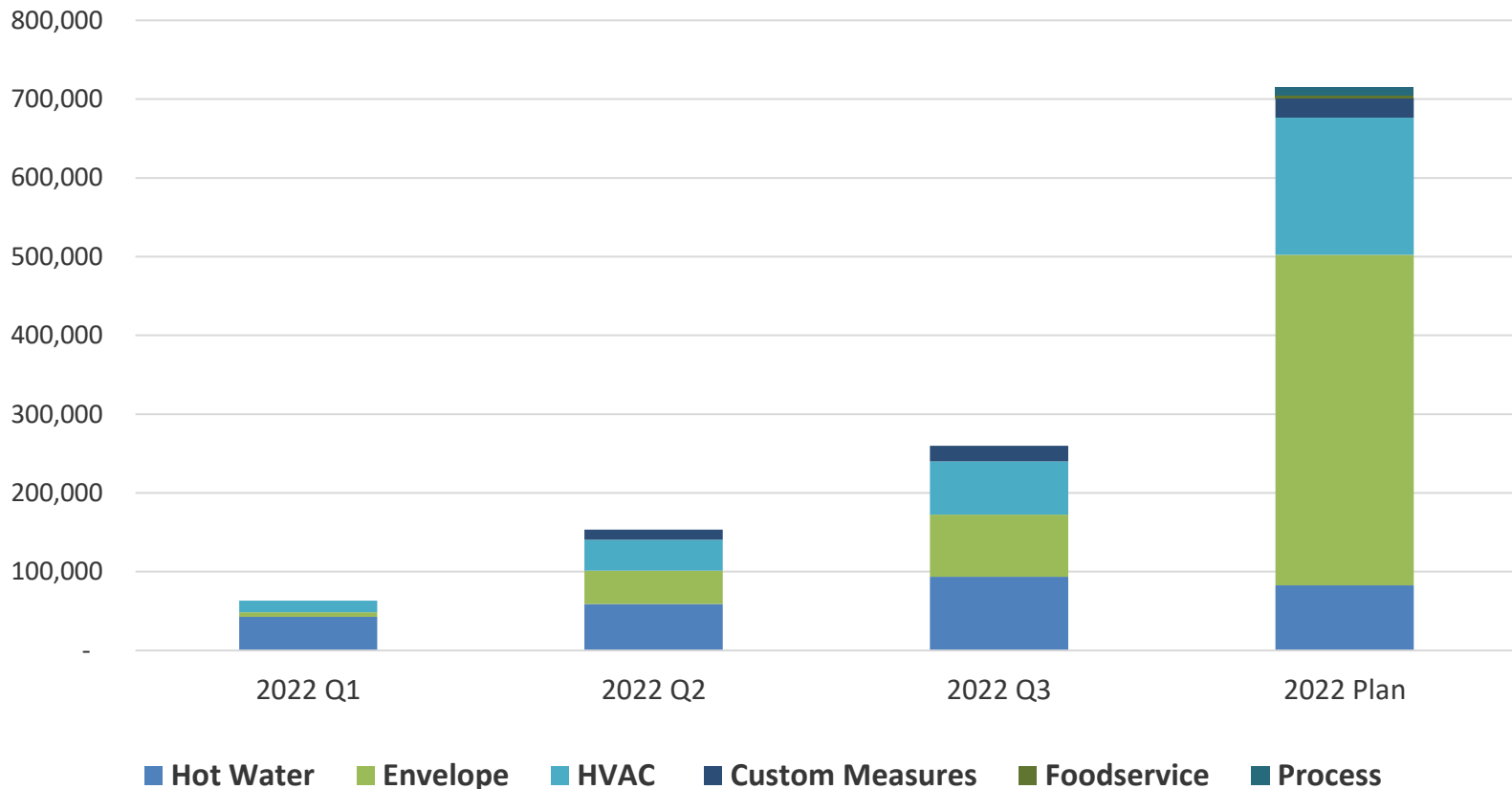
KPI #6 C&I SMALL BUSINESS TURNKEY STATEWIDE ELECTRIC SAVINGS

**Electric SMB Turnkey Savings
Net Lifetime MMBTU**



KPI #6 C&I SMALL BUSINESS TURNKEY STATEWIDE NATURAL GAS SAVINGS

Natural Gas SMB Turnkey Savings
Net Lifetime MMBTU



WATCHING IN Q4

- ▶ **More information on pipelines and early results for new offerings**

New Offering	Update	Date
C&I New Construction	Consolidated Pathways	Summer 2022
C&I Prescriptive Weatherization	Soft Launch	September 2022
C&I Deep Energy Retrofit	Launch	November 2022

- ▶ **National Grid updates to Small Business Turnkey reporting to capture refrigeration measures in that pathway**
- ▶ **Weatherization measures through this winter**

THANK YOU

Questions?

▶ **December 21, 2022**

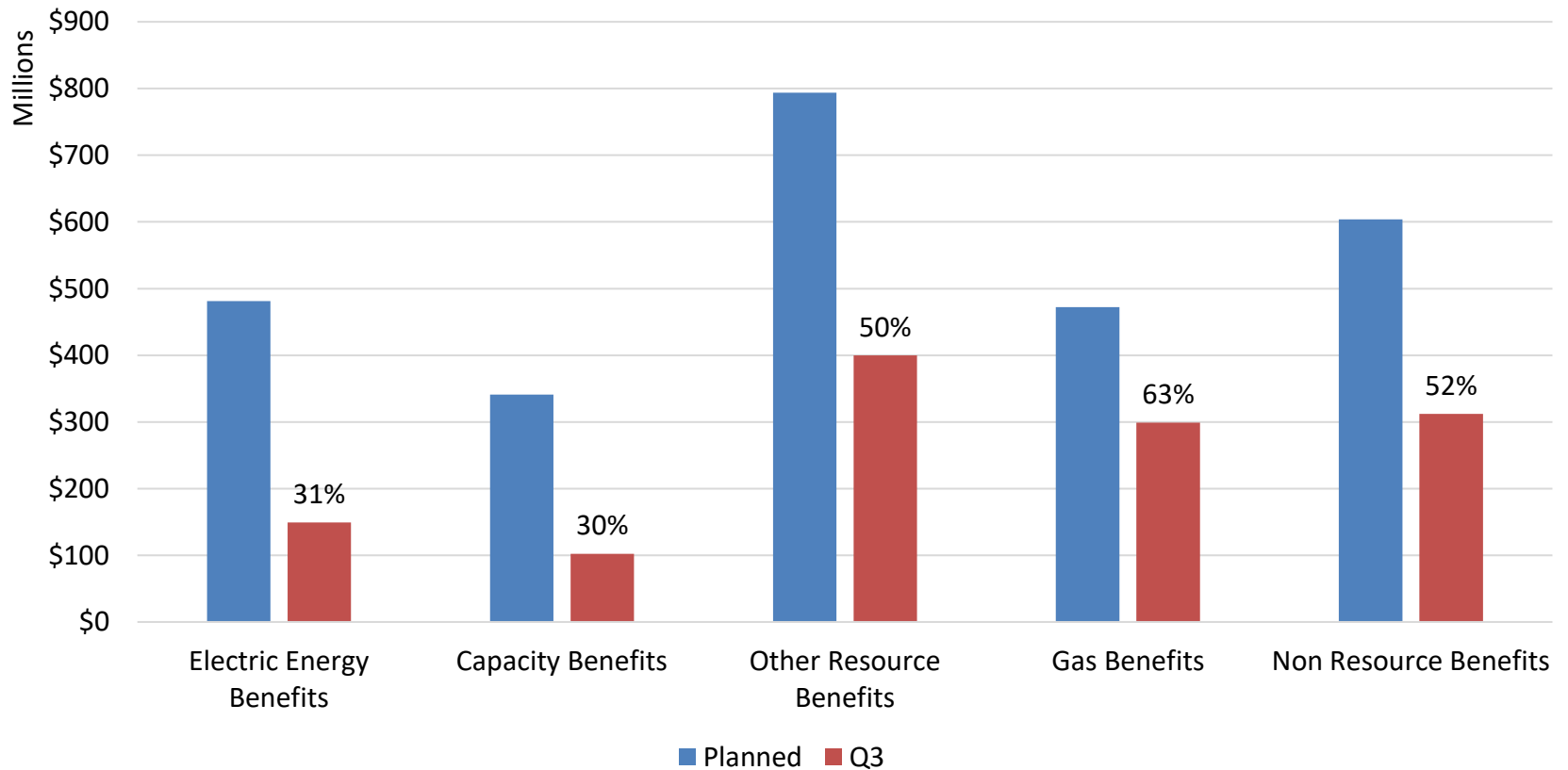
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APPENDIX

Q3 2022 BENEFITS ACHIEVEMENT BY TYPE

Q3 2022 Total Portfolio Benefits by Benefits Type



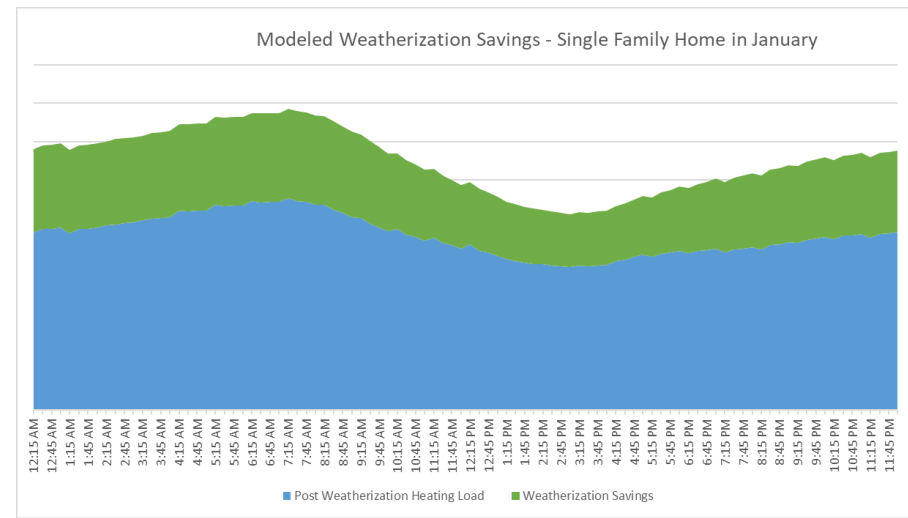
HEAT PUMPS+WEATHERIZATION

► Weatherization can lead to heating load reductions of 10-15%

- Leads to reduction of heating bills, reductions in peak demand, and can result in smaller installations – reducing capital costs programmatically

► Heat pumps without proper weatherization will lead to higher winter demand

- In aggregate this could lead to higher grid costs associated with electrification



C&I EQUITY TARGETS: SMALL BUSINESS WEATHERIZATION

- ▶ Working toward completing 2100 SB weatherization projects during the 3-Year Term (targets set at 600 in 2022, 700 in 2023, 800 in 2024)
- ▶ Prescriptive Wx and 100% Wx for SMB renters both launched in fall
- ▶ Still exploring ways to link Main Street events in EJ neighborhoods with any resulting projects



- ▶ First events launched in March (late Q1)
- ▶ Started with plans for 31 events; held many more
- ▶ Tracking Community First Partnerships as well