

# CONSULTANT TEAM PRESENTATION ON Q2 2020

▶ **Sept 16, 2020**

# INTRODUCTION

- ▶ **Presentation takes a closer look at Q2 progress, in particular findings from KPI data**
- ▶ **High level takeaways**
  - Despite challenges of COVID, Q2 program participation as a percent of plan was strong
  - Midway through the year overall savings tracking lower as a % of annual planned savings compared to 2019
    - Oil and propane savings were higher as a % of annual planned savings
    - Q2 Residential savings are lagging behind Q1 2020 and Q2 2019, but not by a huge amount.
    - C&I and Income eligible particularly behind

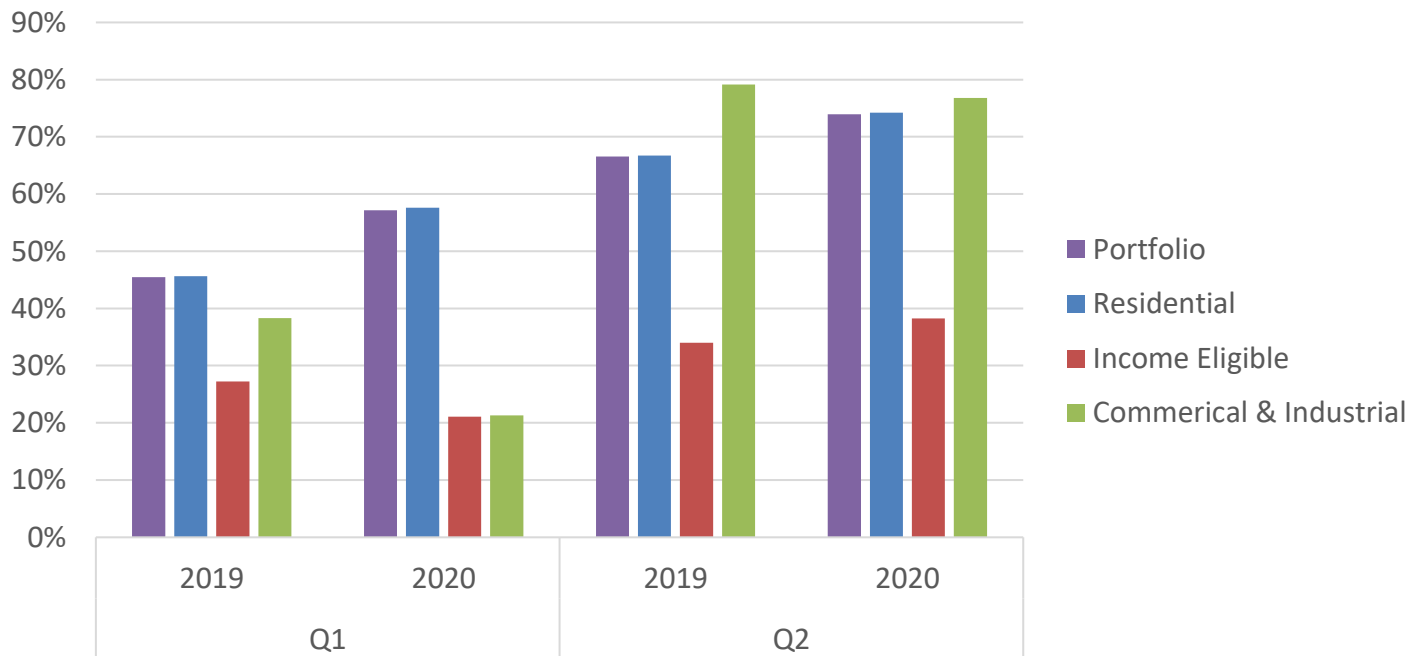


# PORTFOLIO

# PORTFOLIO PARTICIPATION

- ▶ Overall participation in Q2 2020 higher as a % of annual planned savings compared to Q2 2019

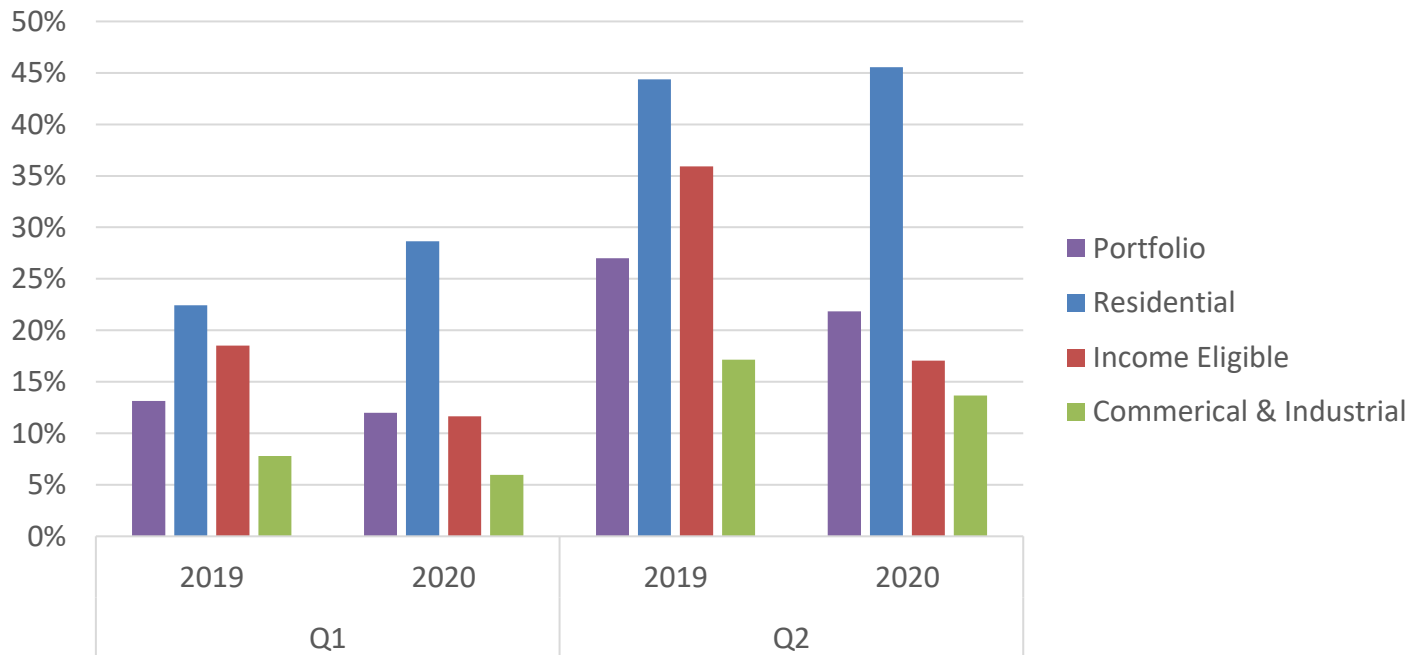
Total Portfolio Participants - % of Annual Plan



# LIFETIME SAVINGS – PORTFOLIO WIDE (ALL FUEL SITE MMBTU)

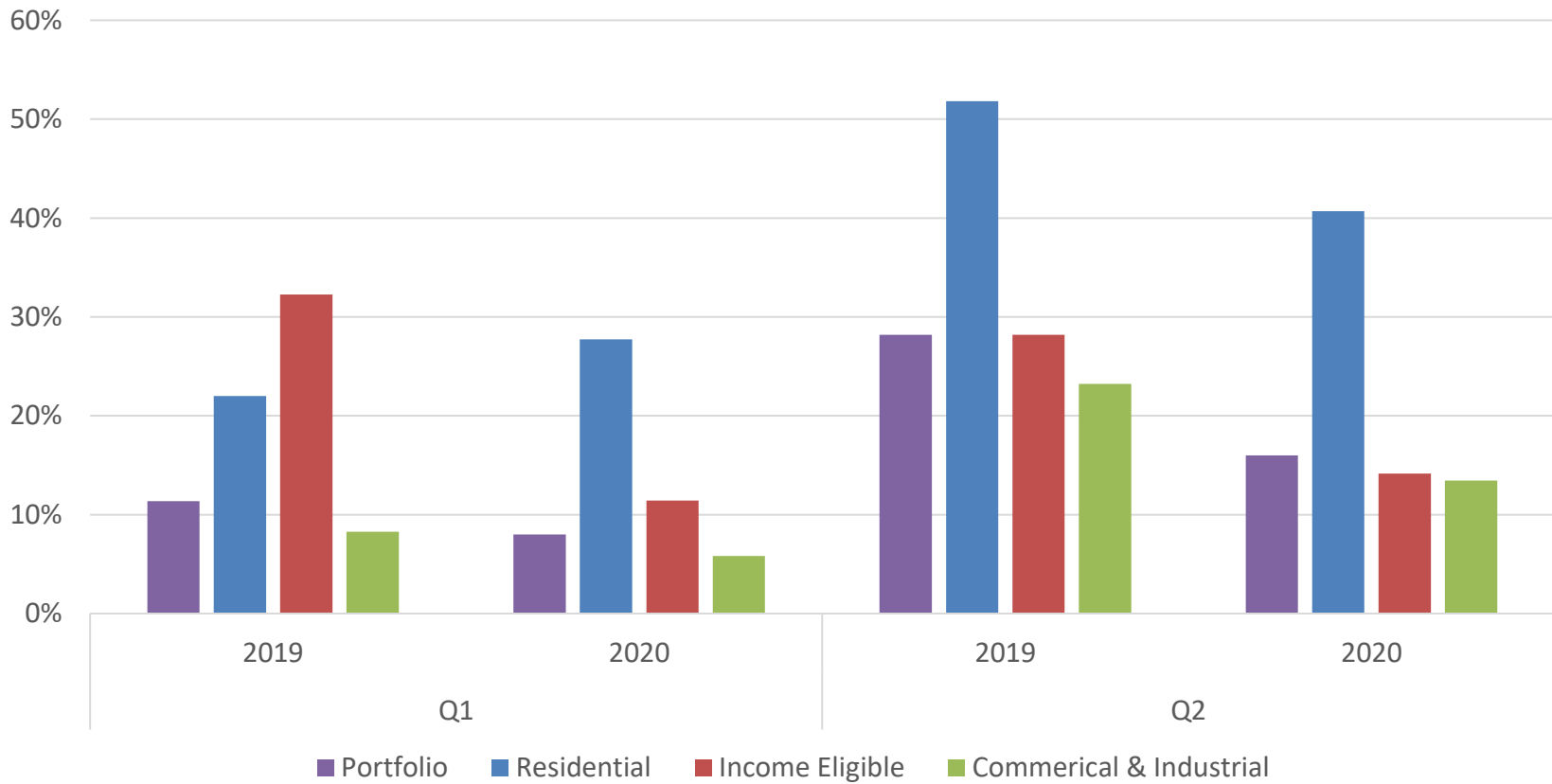
- ▶ All fuels portfolio savings in Q2 2020 lower as a % of annual planned savings compared to Q2 2019
  - Residential slightly higher in Q2 2020 compared to 2019

Total Portfolio Lifetime Savings - % of Annual Plan



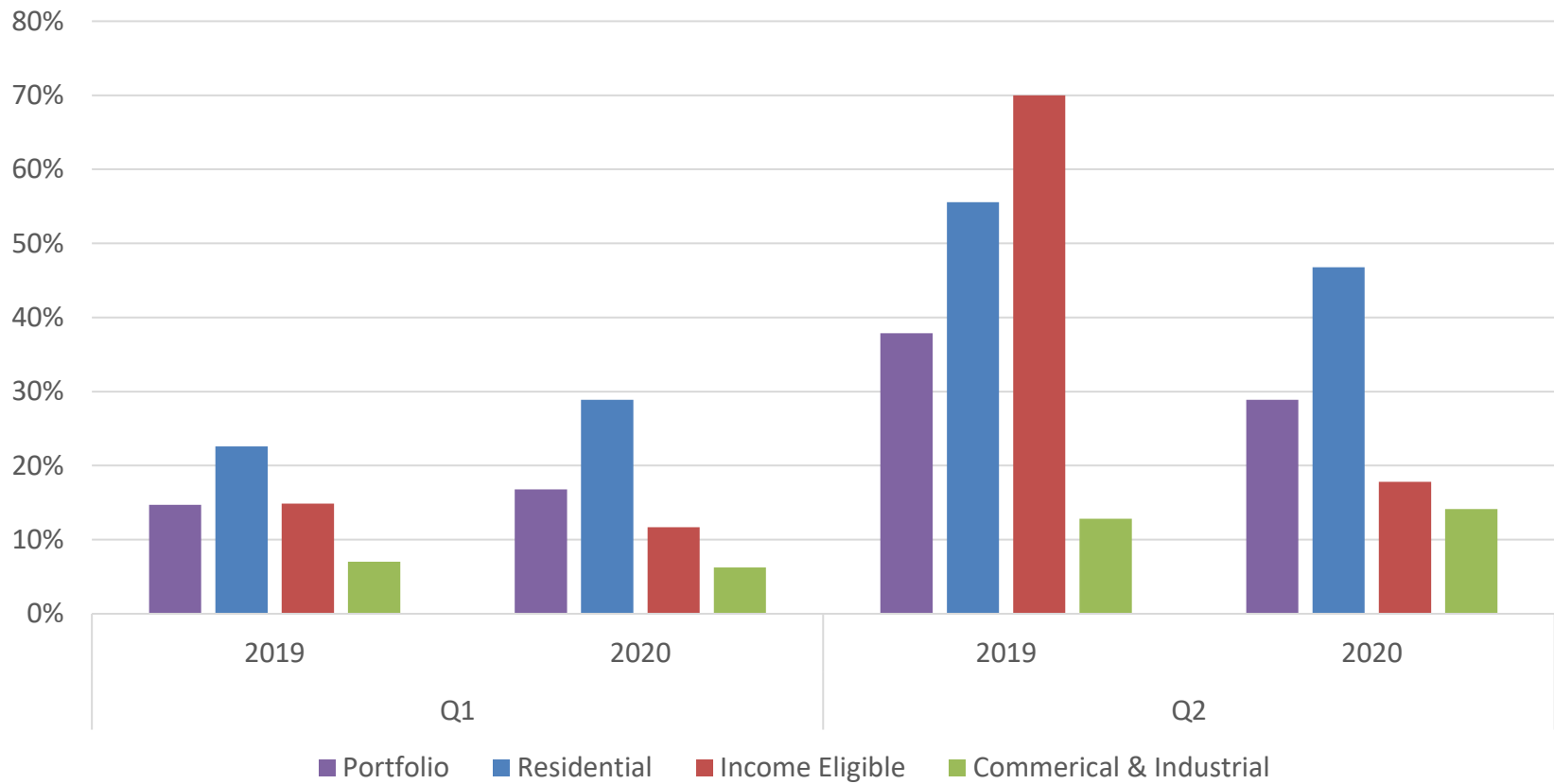
# LIFETIME SAVINGS – ELECTRIC (MWH)

Electric Portfolio Lifetime Savings - % of Annual Plan



# LIFETIME SAVINGS – GAS (THERMS)

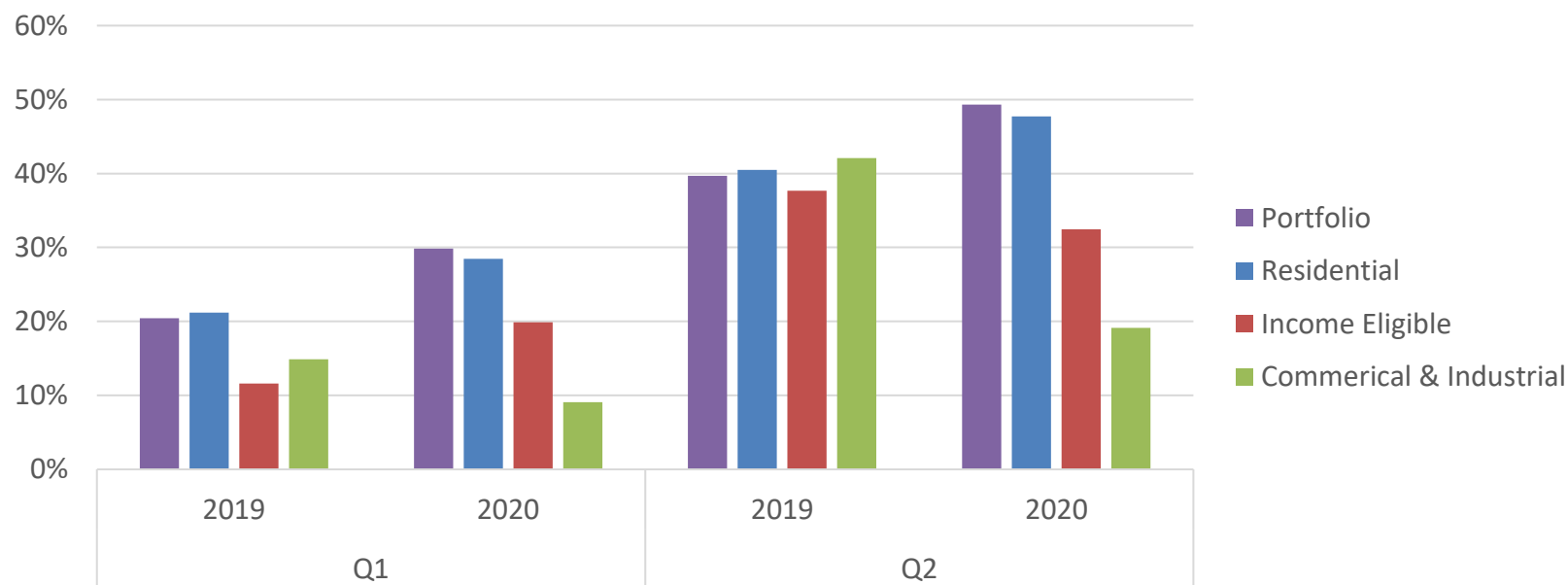
Gas Portfolio Lifetime Savings - % of Annual Plan



# LIFETIME SAVINGS – OIL AND PROPANE MMBTU

- ▶ Oil and propane savings in Q2 2020 higher as a % of annual planned savings compared to Q2 2019
  - Driven by residential savings

Total Portfolio Oil and Propane Savings - % of Annual Plan





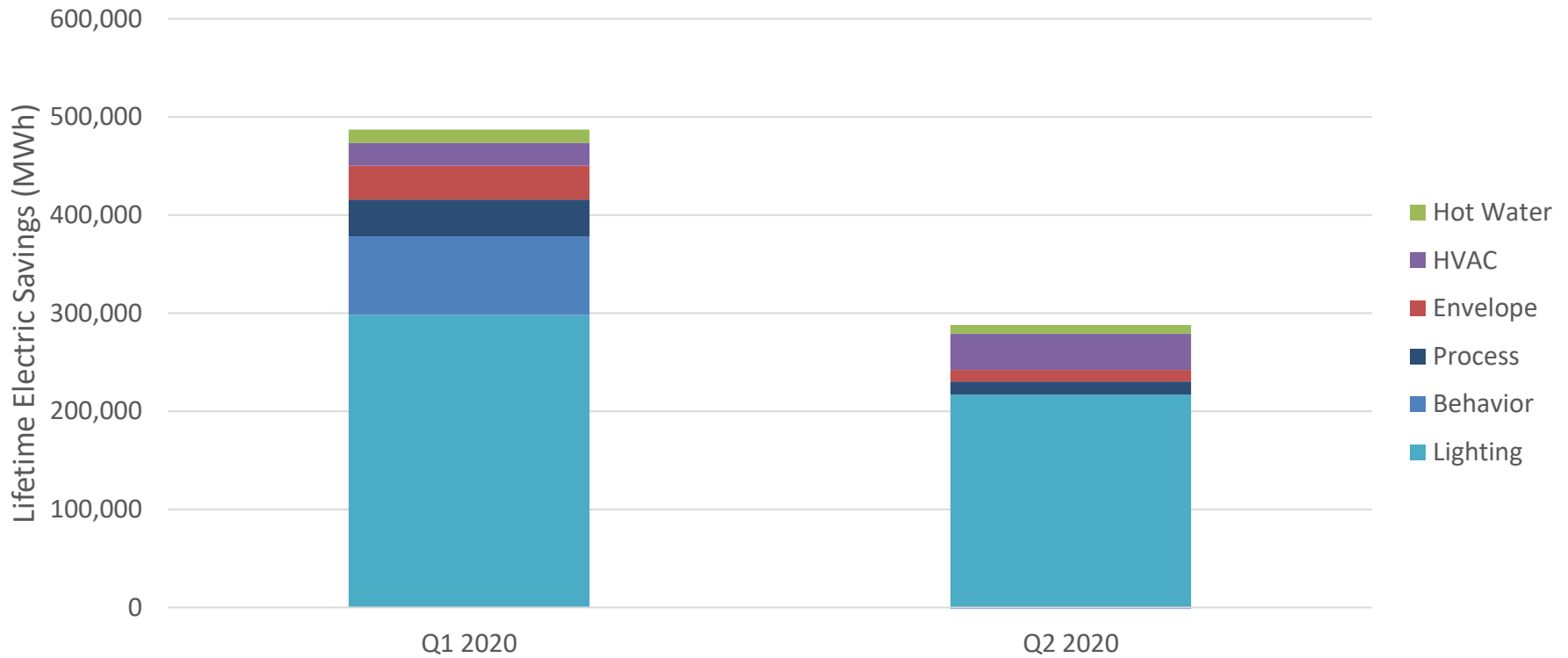


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# RESIDENTIAL AND INCOME ELIGIBLE

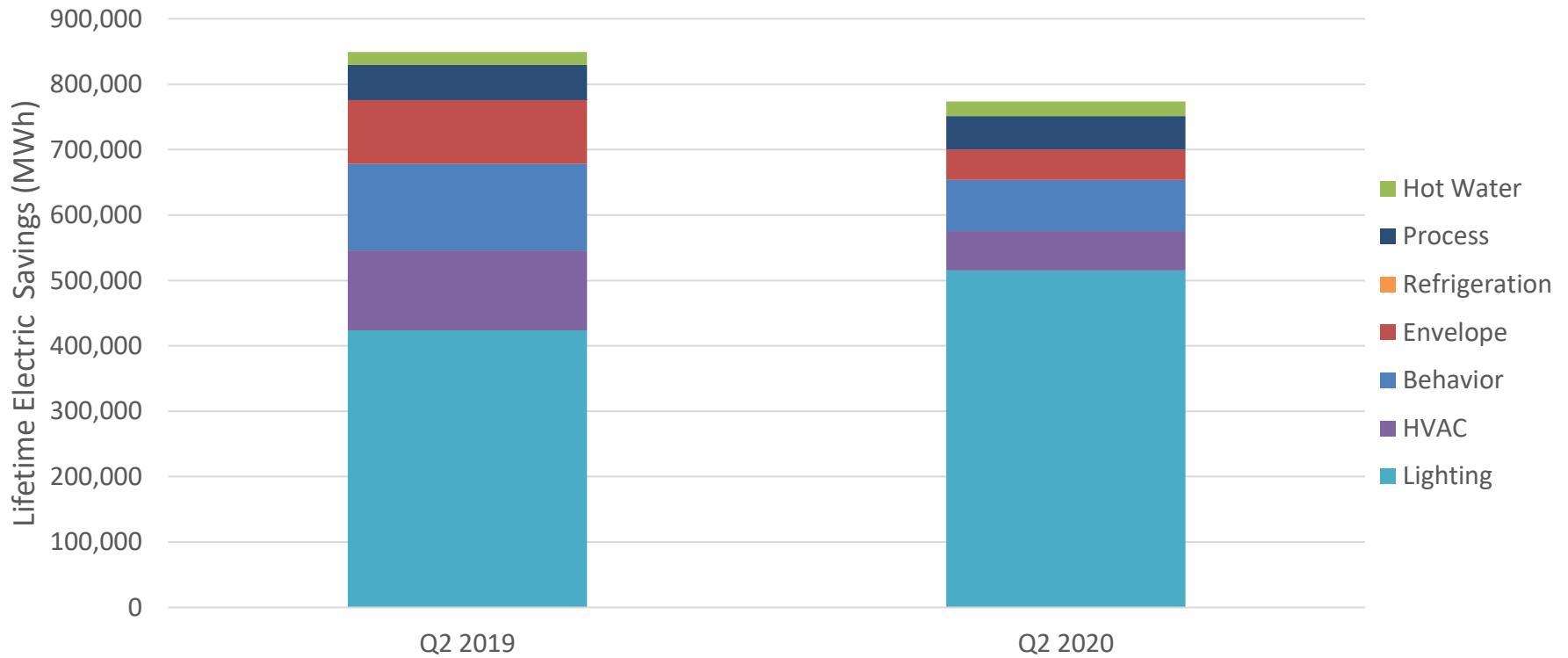
# RES ELECTRIC SAVINGS BY END USE Q1 VS Q2 2020

Lifetime Residential Electric Savings



# RES ELECTRIC SAVINGS BY END USE 2019 YTD VS 2020 YTD

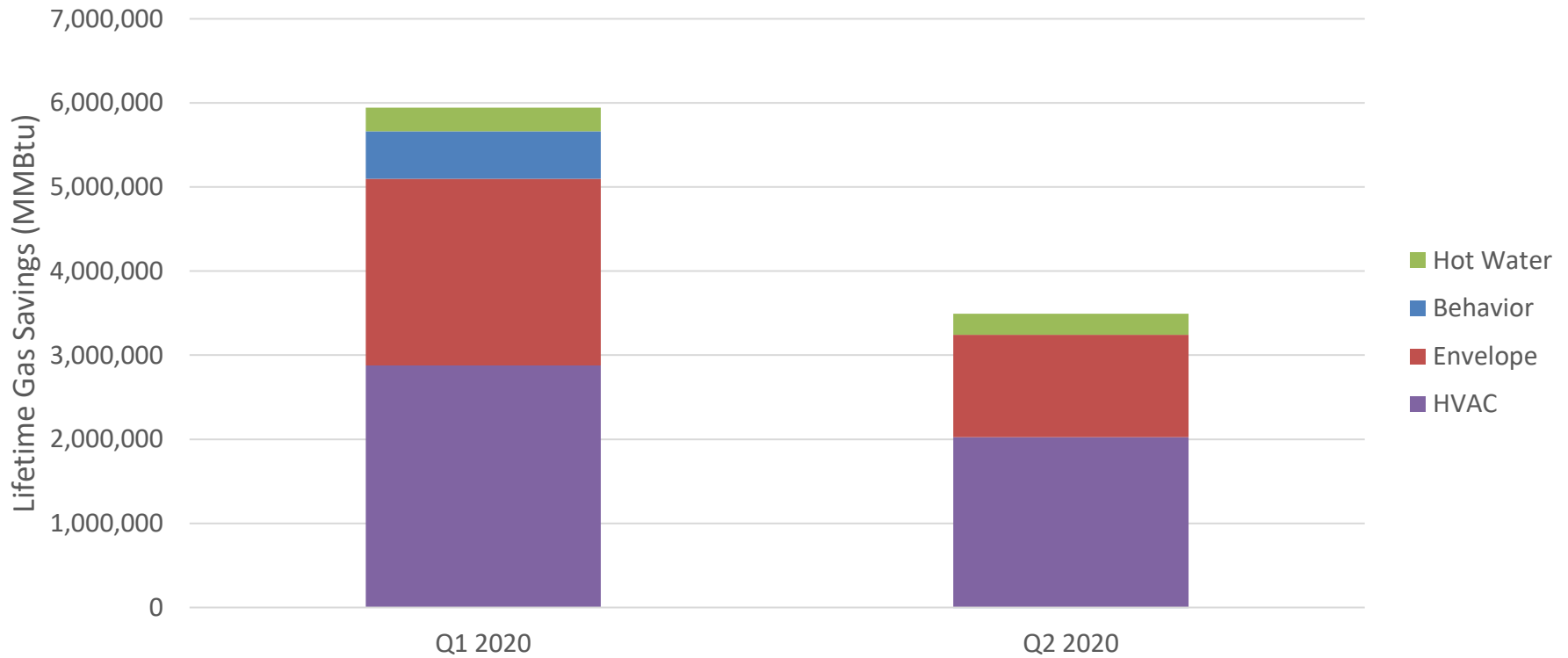
## Q2 YTD Lifetime Residential Electric Savings



# RES GAS SAVINGS BY END USE

## Q1 VS Q2 2020

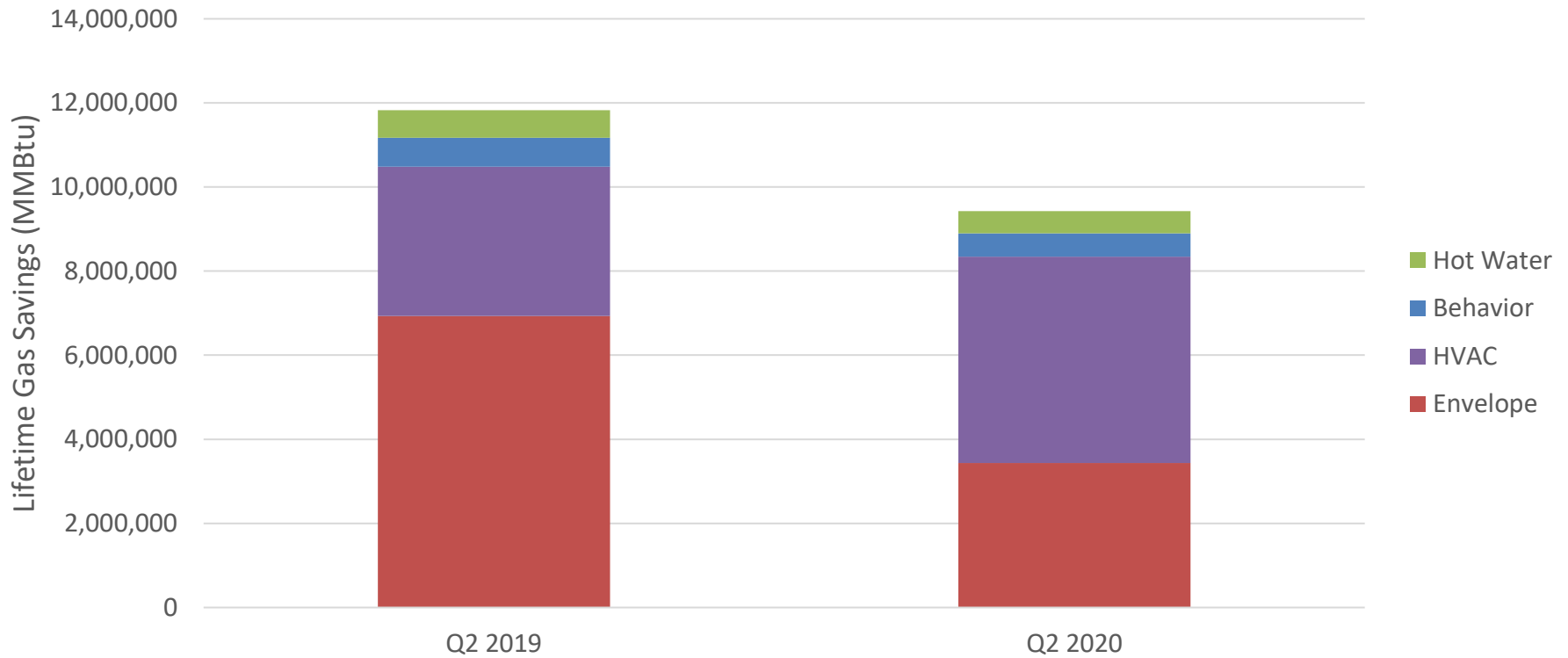
Lifetime Residential Gas Savings



# RES GAS SAVINGS BY END USE

## 2019 YTD VS 2020 YTD

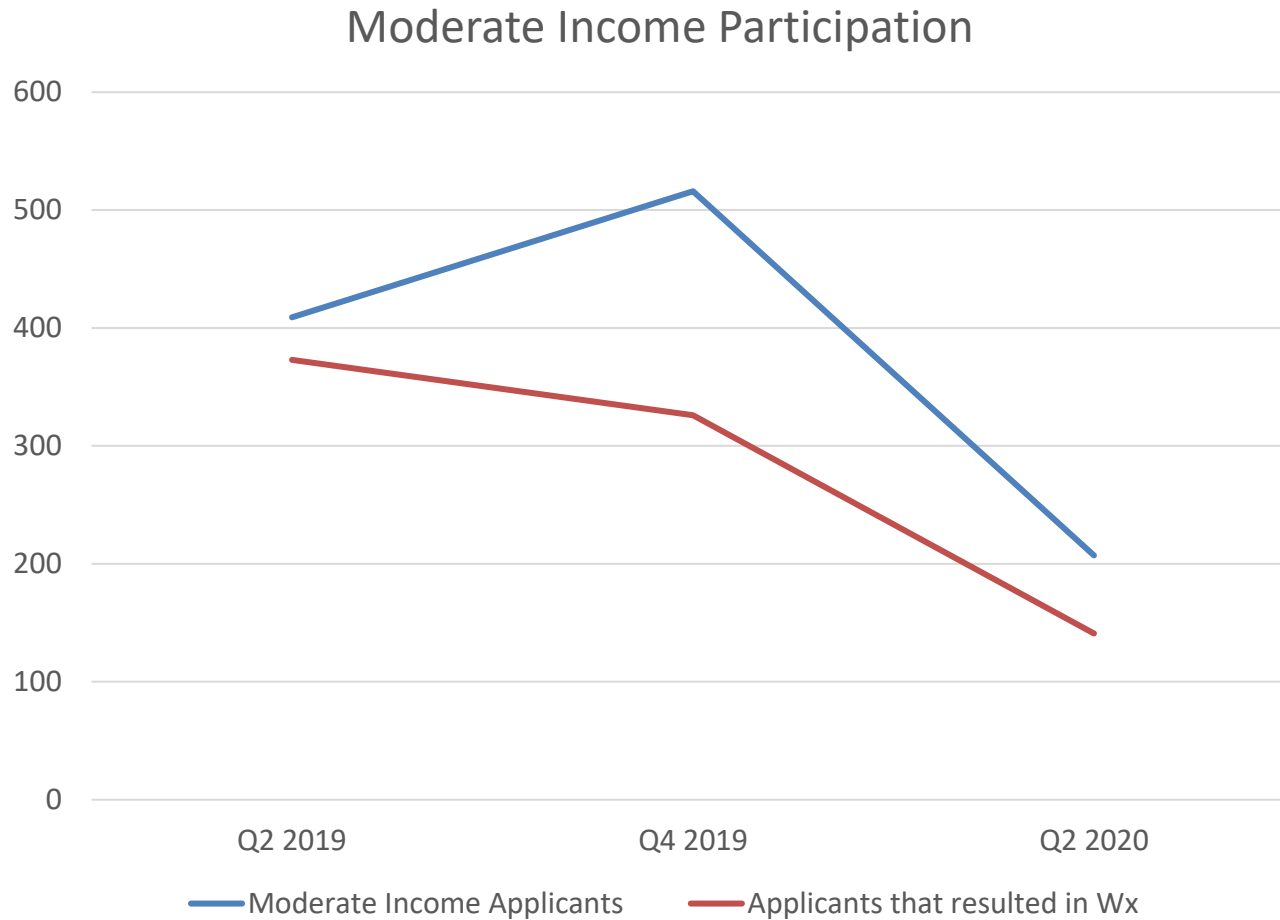
Q2 YTD Residential Gas Savings



# RESIDENTIAL AND INCOME ELIGIBLE HEAT PUMPS

Heat Pump Unit Type	Description	2019 Evaluated	2020 YTD
<b>Residential</b>			
Lost Opportunity	Efficiency upgrade of assumed baseline heat pump	8,276	2,346
Energy Optimization	Displacement of electric resistance space heat	1,001	581
Fuel Switching	Displacement of oil or propane	2,372	1,380
<b>Total</b>		<b>11,649</b>	<b>4,307</b>
<b>Income Eligible</b>			
Lost Opportunity	Efficiency upgrade of assumed baseline heat pump	0	0
Energy Optimization	Displacement of electric resistance space heat	658	42
Fuel Switching	Displacement of oil or propane	2	1
<b>Total</b>		<b>660</b>	<b>43</b>

# MODERATE INCOME PARTICIPATION



Unique Home Energy Assessments (all res, electric and gas)

Q2 2019	56,250
Q4 2019	55,541
Q2 2020	30,836

# RESIDENTIAL & INCOME ELIGIBLE TAKEAWAYS

- ▶ Residential savings have decreased significantly in Q2 this year as compared to Q1; the decrease in savings is proportionately lower when viewed YTD 2020 vs. 2019
- ▶ The decrease in residential electric savings in 2020 has been mitigated by a large increase in lighting savings
- ▶ An increase in gas HVAC savings in Q2 has made up for some of the reduction in gas envelope savings
- ▶ Heat pump results in 2020 vary by measure type and sector—Low Income Sector activity is down most dramatically
- ▶ Already low moderate income participation numbers are even lower in 2020

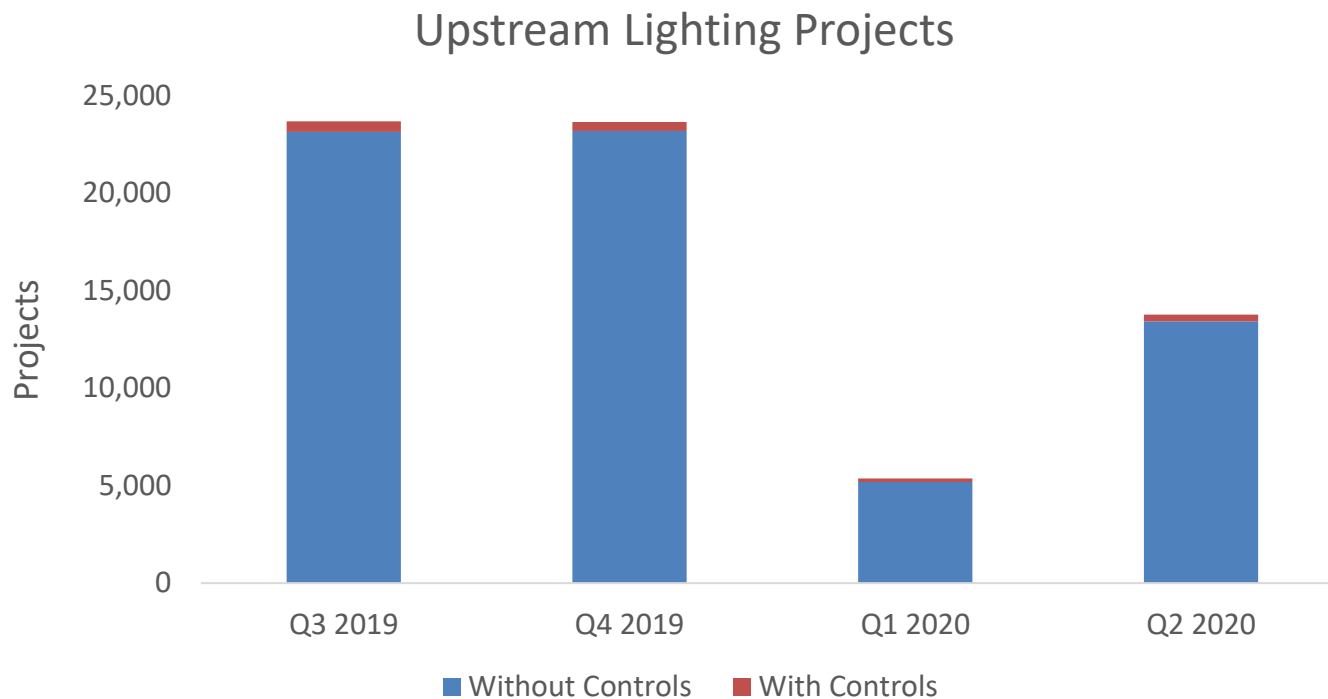




# COMMERCIAL & INDUSTRIAL

# KPI #4 PROPORTION OF LIGHTING PROJECTS WITH CONTROLS

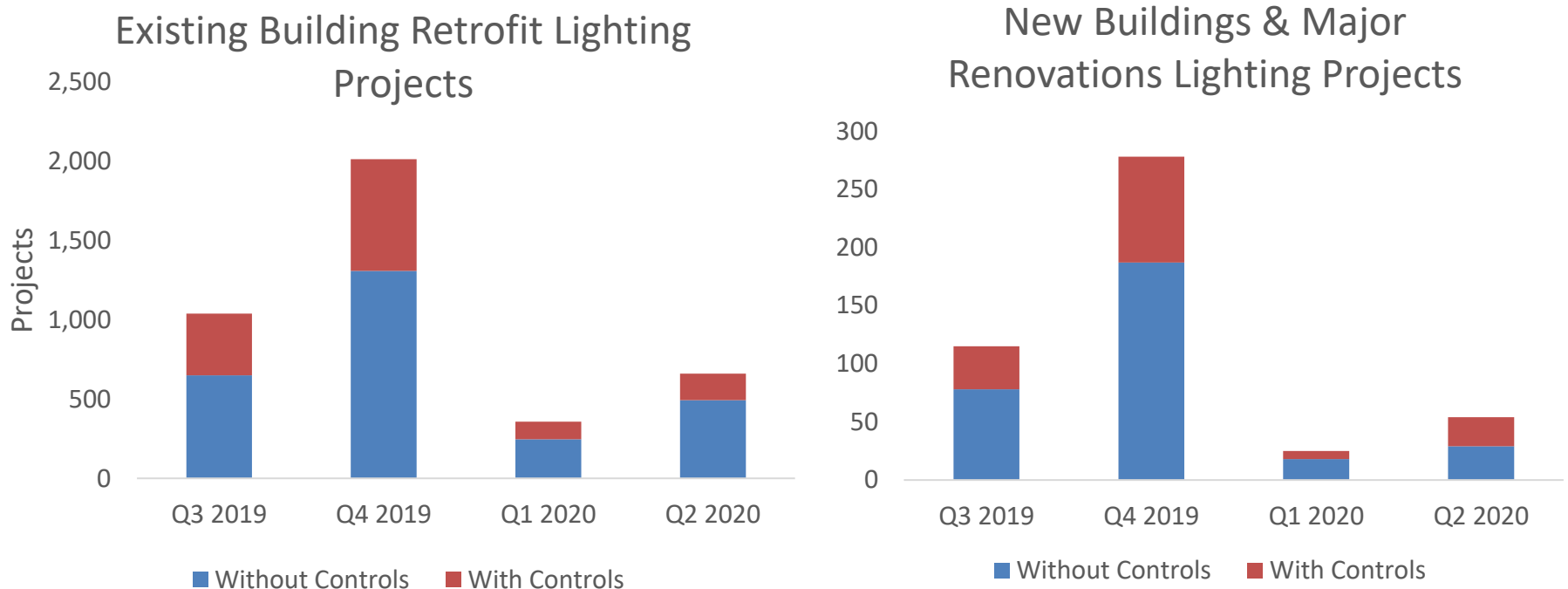
- ▶ Largest volume of projects go through Upstream, which delivers least amount of controls



*Note: before Q3 2019, data was not reported by pathway by PAs*

# KPI #4 PROPORTION OF LIGHTING PROJECTS WITH CONTROLS

► Custom retrofit and new construction deliver more controls, but for far fewer projects than Upstream



*Note: before Q3 2019, data was not reported by pathway by PAs*

# KPI #5 CUSTOM HVAC SAVINGS

- ▶ **Less Custom HVAC savings than planned for both electric and gas**
- ▶ **HVAC is most important area of savings in post-lighting world**

## Electric

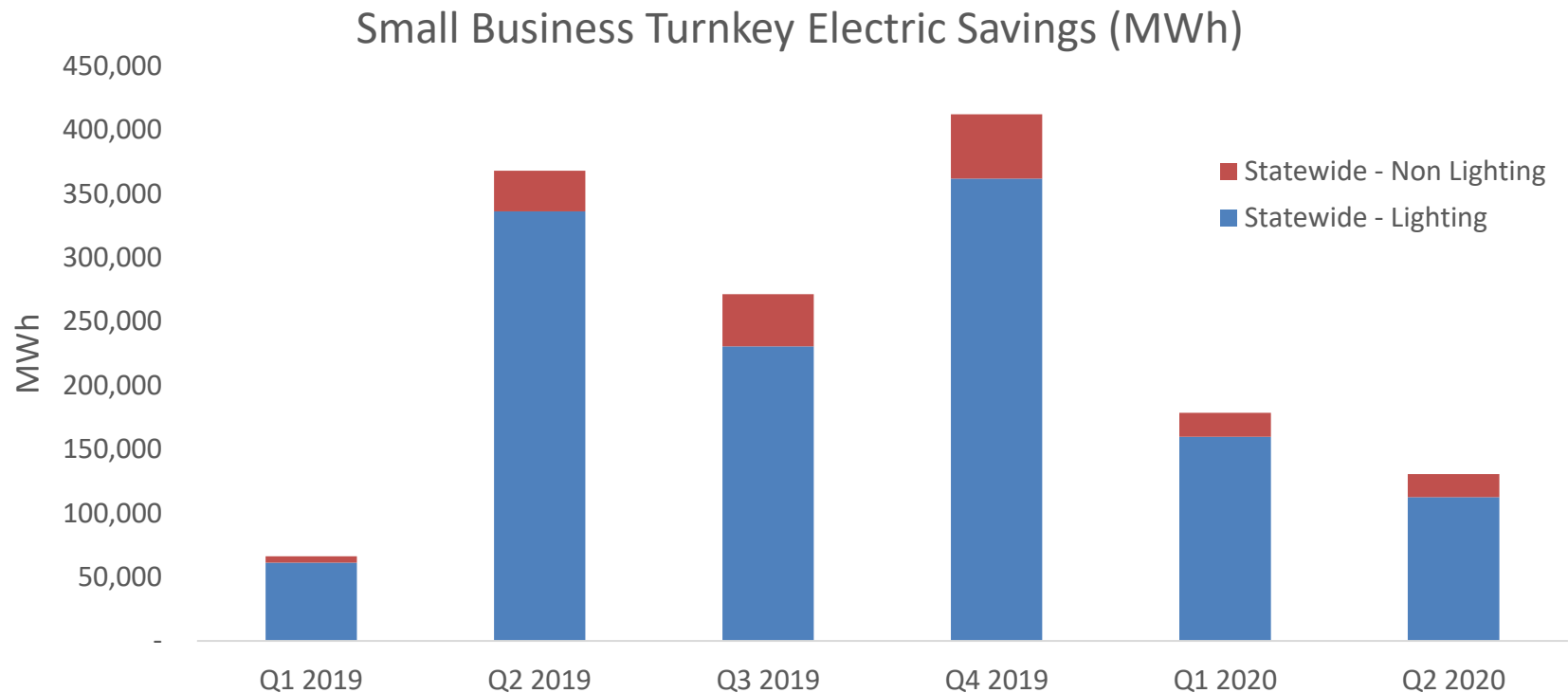
PA	2020 Q2 YTD Custom HVAC Savings (MWh)	2020 Plan Custom HVAC Savings (MWh)	YTD % Achieved
CLC	764	7,932	10%
Eversource	44,500	507,791	9%
National Grid	12,148	177,314	7%
Unitil	-	5,808	0%

## Gas

PA	2020 Q2 YTD Custom HVAC Savings (Therms)	2020 Plan Custom HVAC Savings (Therms)	YTD % Achieved
Berkshire	226,345	596,680	38%
CMA	1,134,487	20,472,219	6%
Eversource	782,836	25,620,702	3%
Liberty	-	648,084	0%
National Grid	4,088,771	16,630,901	25%
Unitil	-	558,952	0%

# KPI #6 SMALL BUSINESS TURNKEY COMPREHENSIVENESS

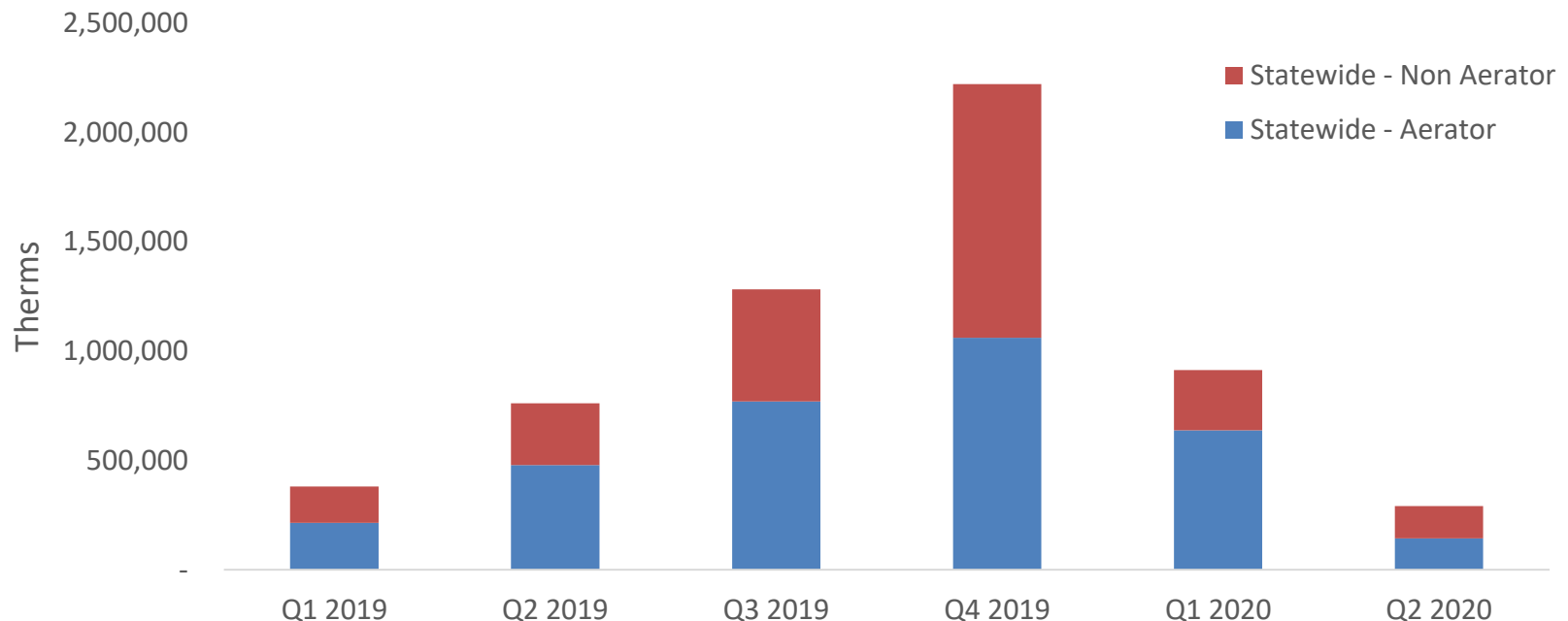
- ▶ **89% of electric savings delivered through the Small Business Turnkey program during this planning cycle has come from lighting**
  - This program technically also offers HVAC, refrigeration and motors/drives measures



# KPI #6 SMALL BUSINESS TURNKEY COMPREHENSIVENESS

- ▶ **56% of gas savings delivered through the Small Business Turnkey program during this planning cycle has come from aerators**
  - Gas side is more promising: opportunity for air sealing, pipe insulation, steam traps, etc.

Small Business Turnkey Gas Savings (Therms)



# STREETLIGHTING LED CONVERSIONS

- ▶ **63% of streetlights converted to LED statewide**
- ▶ **Big opportunity for remaining lamps, but not without challenges**

Lamp Type	Company Owned		Customer Owned	
	Number of Lamps	% of Total Lamps	Number of Lamps	% of Total Lamps
High Pressure Sodium	48,305	58%	77,624	24%
Incandescent / Other	1,369	2%	4,151	1%
<b>LED</b>	<b>17,670</b>	<b>21%</b>	<b>236,306</b>	<b>74%</b>
Mercury Vapor / Metal Halide	16,135	19%	3,322	1%

# C&I HEAT PUMP PROGRESS TOWARDS TERM SHEET GOAL

- ▶ **Roughly 10% achievement of term sheet goal for C&I heat pumps at 50% through the 3-year plan**
  - Incomplete info on custom retrofit, new construction and newly launched prescriptive EO offer (may be included in Q4 2020)

System Type	# of Units to Date (2019 + Q1&2 2020)	2019-2021 Term Sheet Goal
Mini Split HP - Upstream	388	
Central HP - Upstream	1,488	
Fuel Switching - Retrofit	4	
<b>Total</b>	<b>1,880</b>	<b>17,980</b>



# C&I TAKEAWAYS

- ▶ **Still low lighting controls adoption, especially for largest volume pathway (Upstream)**
- ▶ **Custom HVAC savings not delivering as planned**
  - Gas doing marginally better than electric
- ▶ **Small business program still dominated by lighting despite other measures being offered**
- ▶ **Streetlight LED conversion opportunities still out there for 2020/2021**
- ▶ **C&I far behind on heat pump goal committed to in term sheet**
  - Possible under-reporting but unlikely enough to fill gap

# THANK YOU

## Questions?

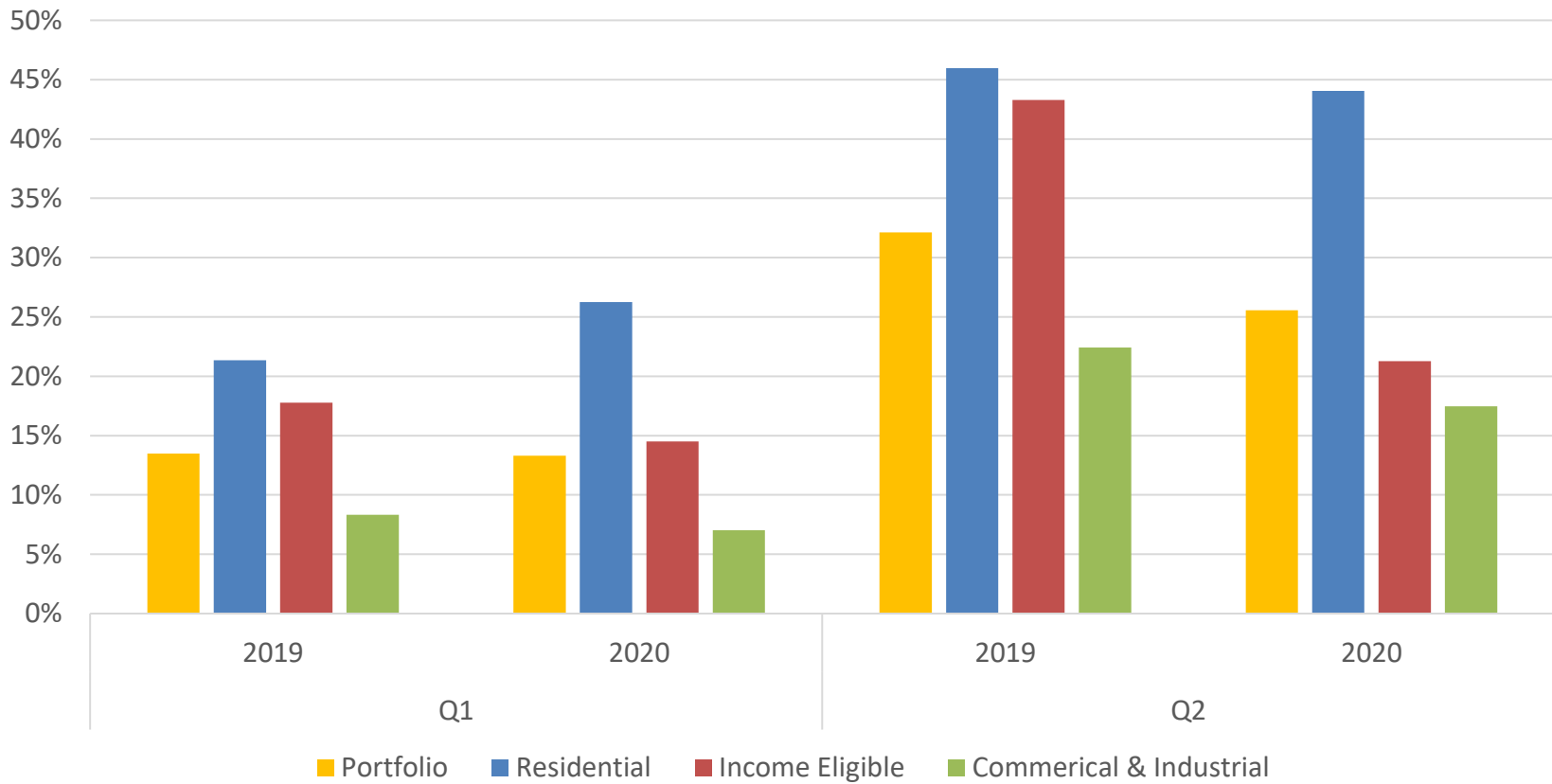
▶ June 17, 2020



# APPENDIX

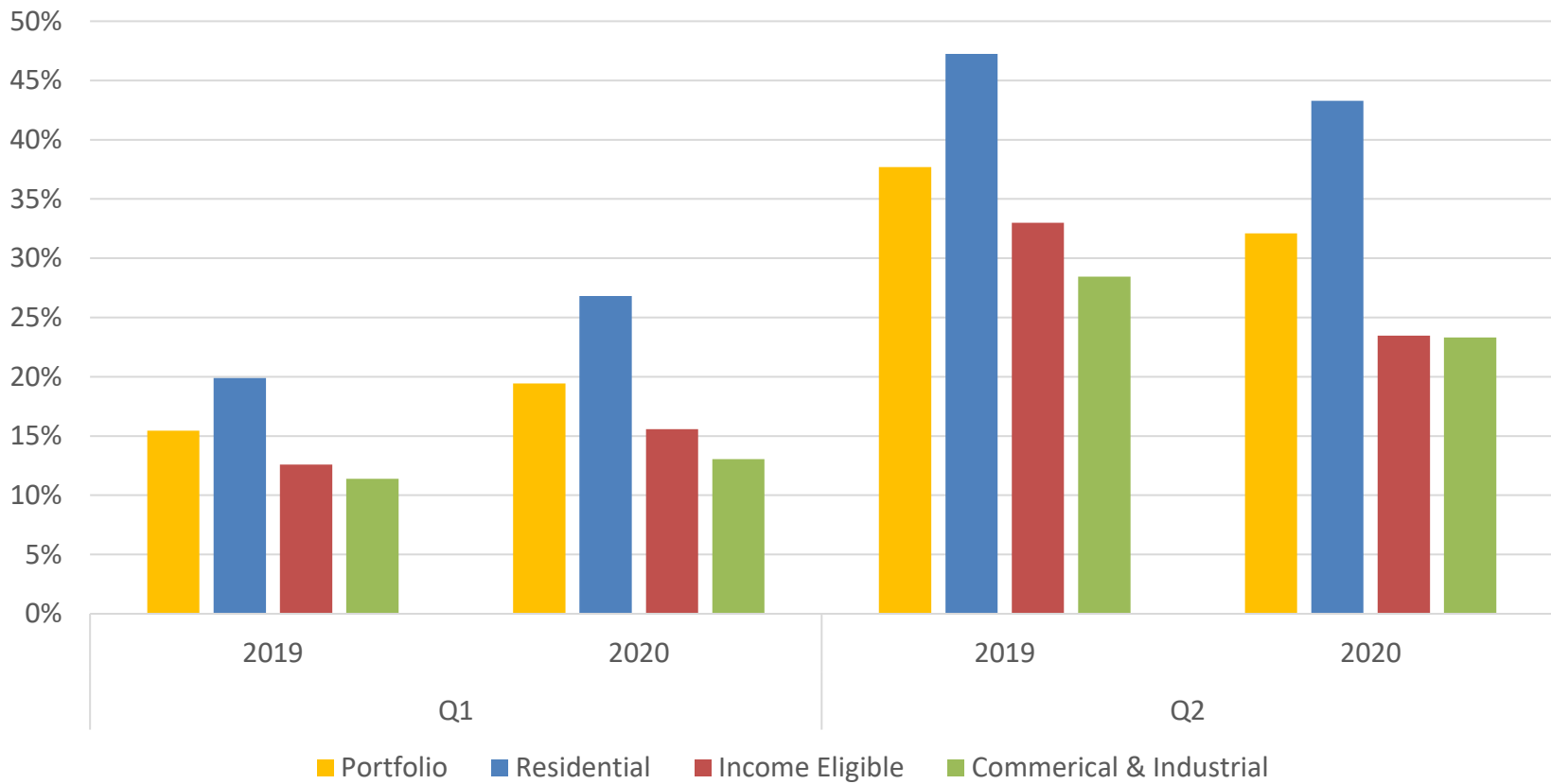
# BENEFITS – PORTFOLIO WIDE

Total Portfolio Benefits - % of Annual Plan



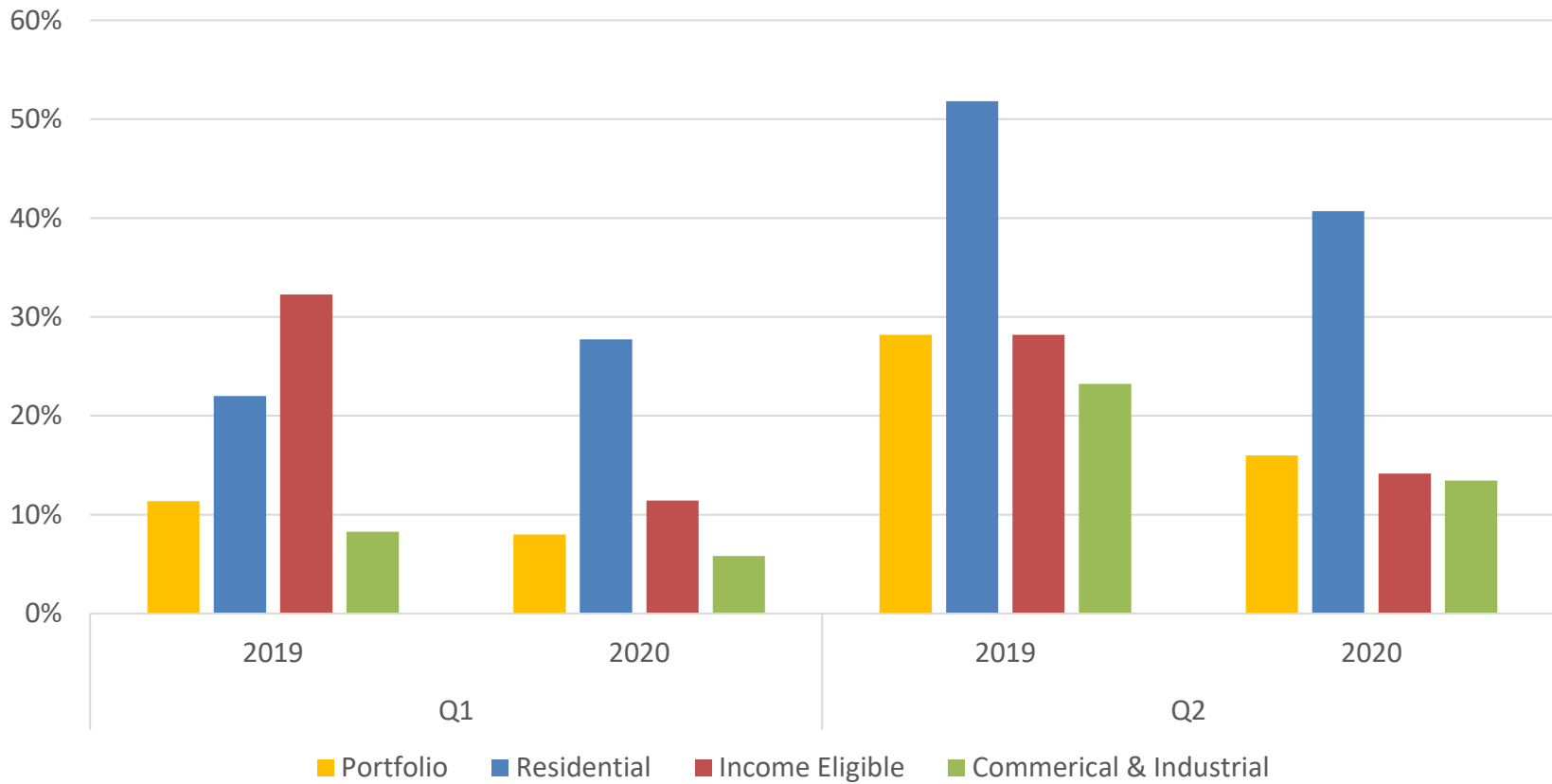
# SPENDING – PORTFOLIO WIDE

Total Portfolio Spending - % of Annual Plan



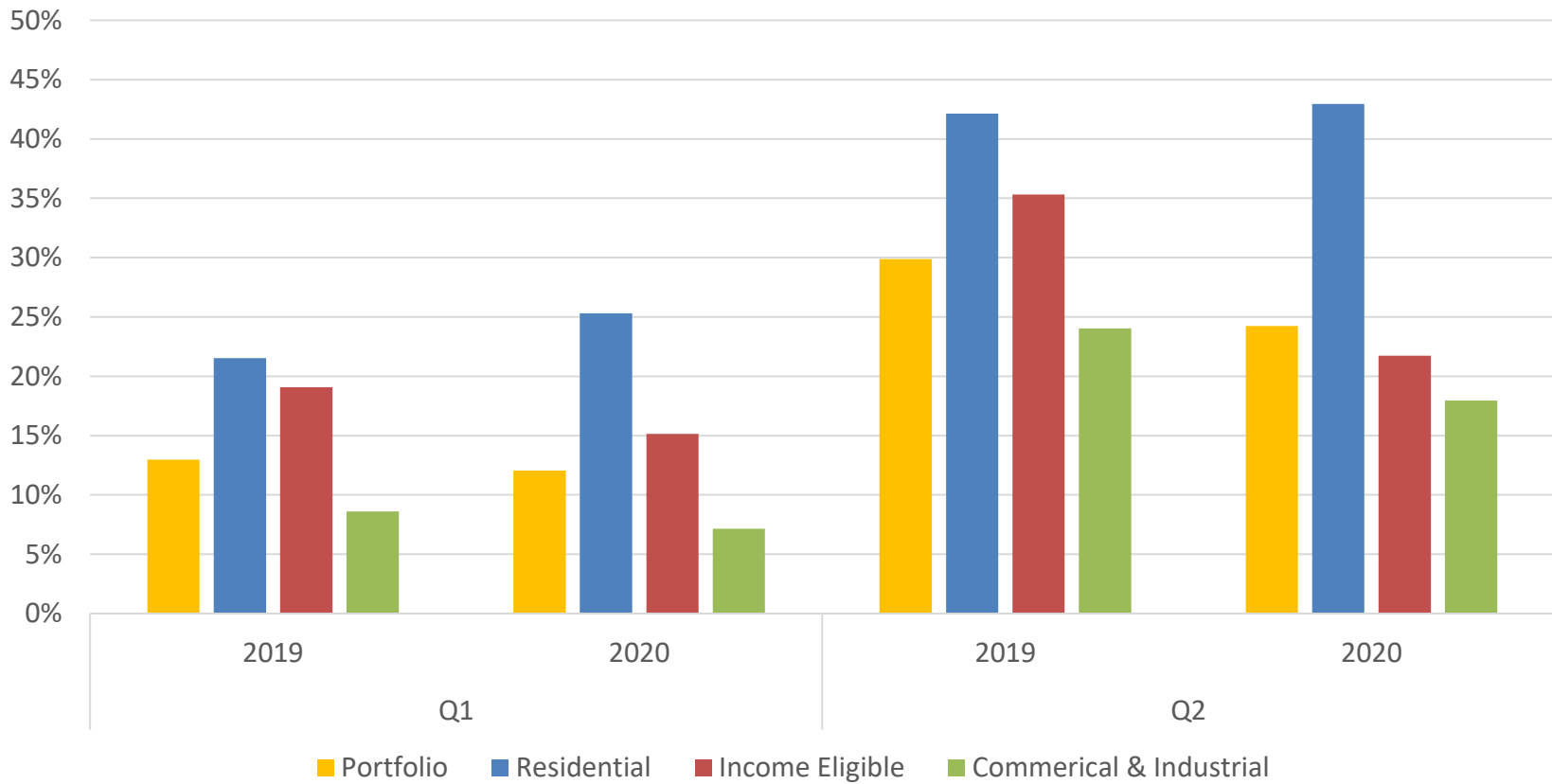
# LIFETIME SAVINGS – ELECTRIC PROGRAMS

Electric Portfolio Lifetime Savings - % of Annual Plan



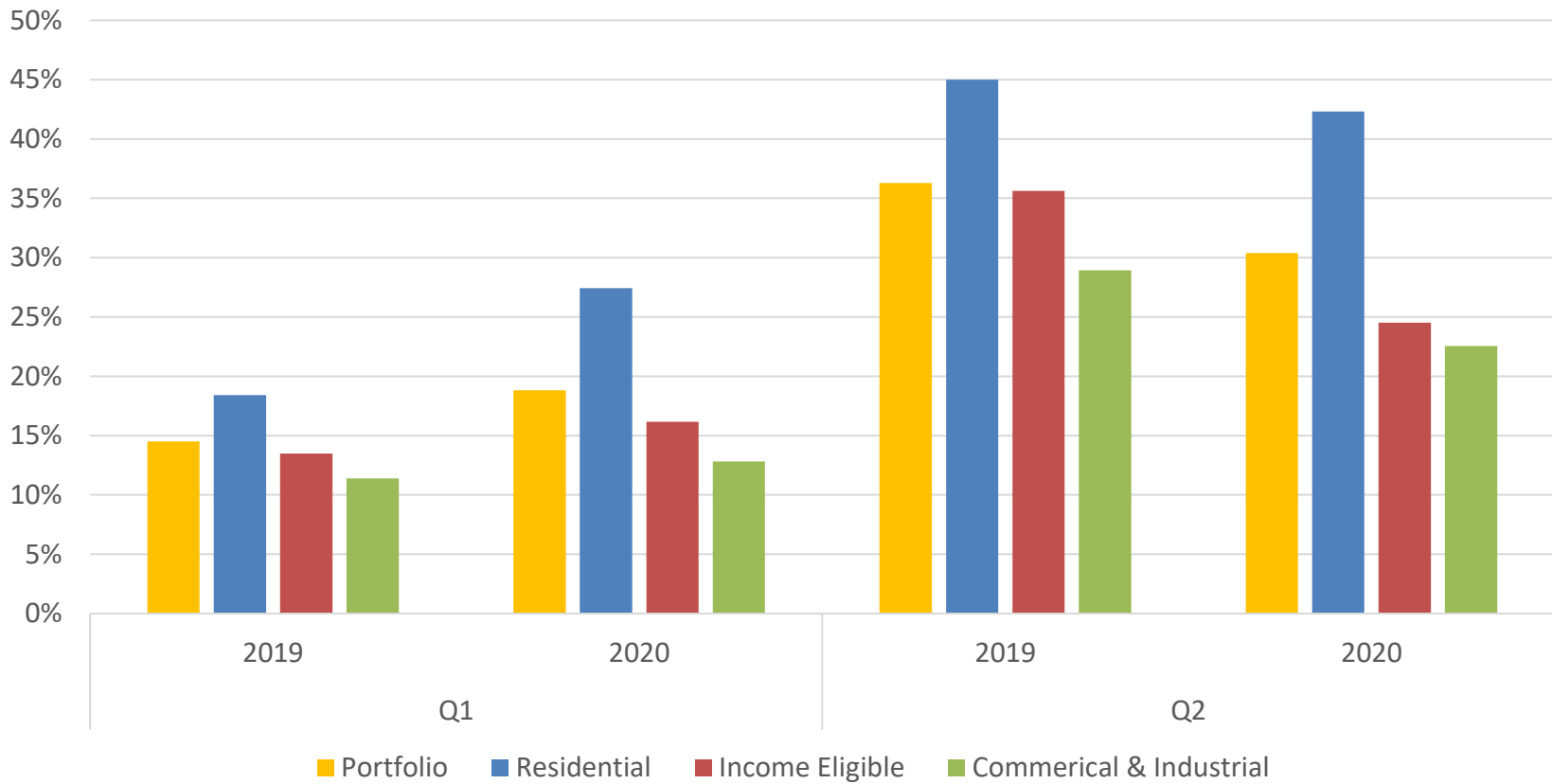
# BENEFITS – ELECTRIC PROGRAMS

Electric Portfolio Benefits - % of Annual Plan



# SPENDING – ELECTRIC PROGRAMS

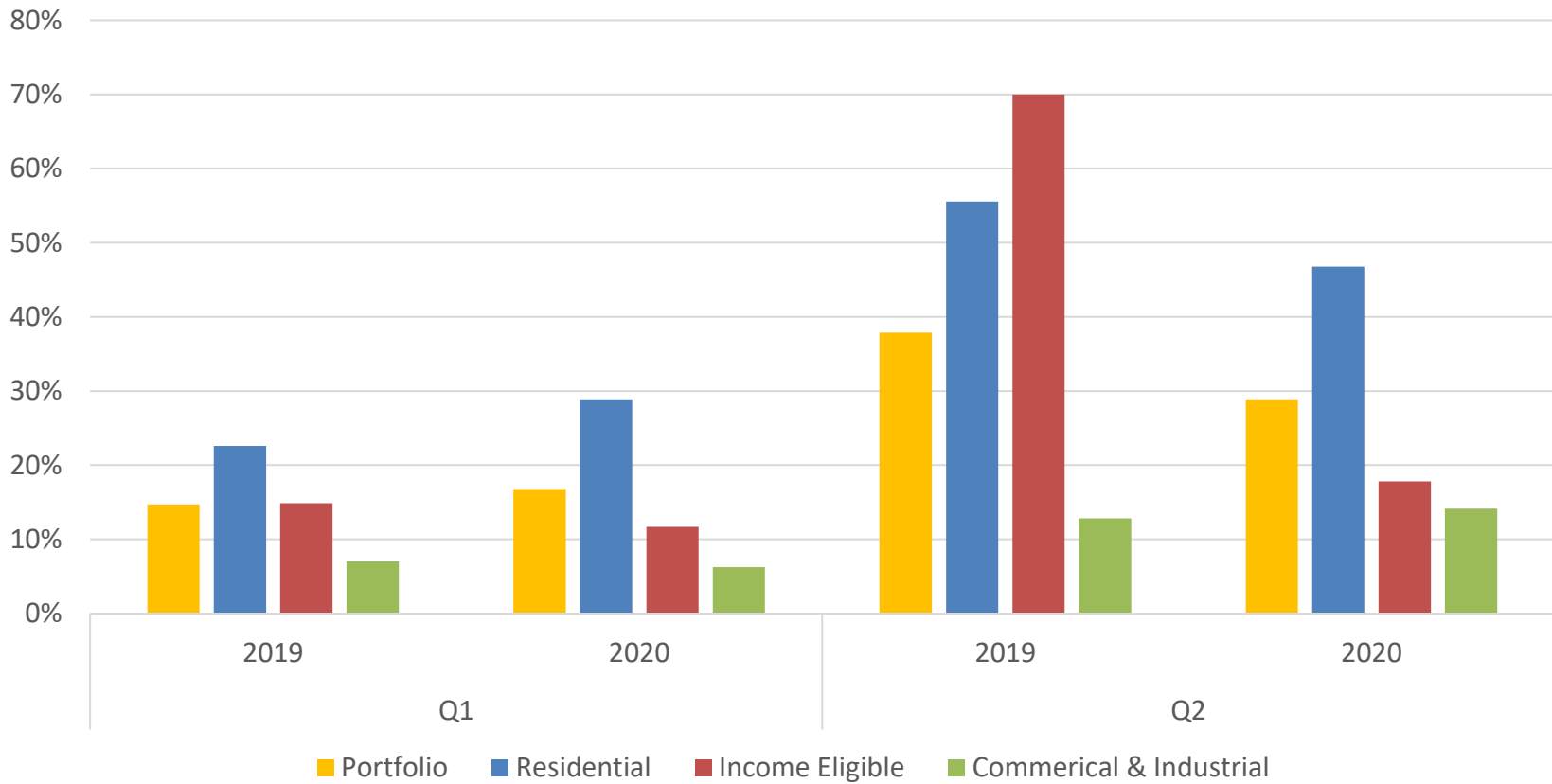
## Electric Portfolio Spending - % of Annual Plan





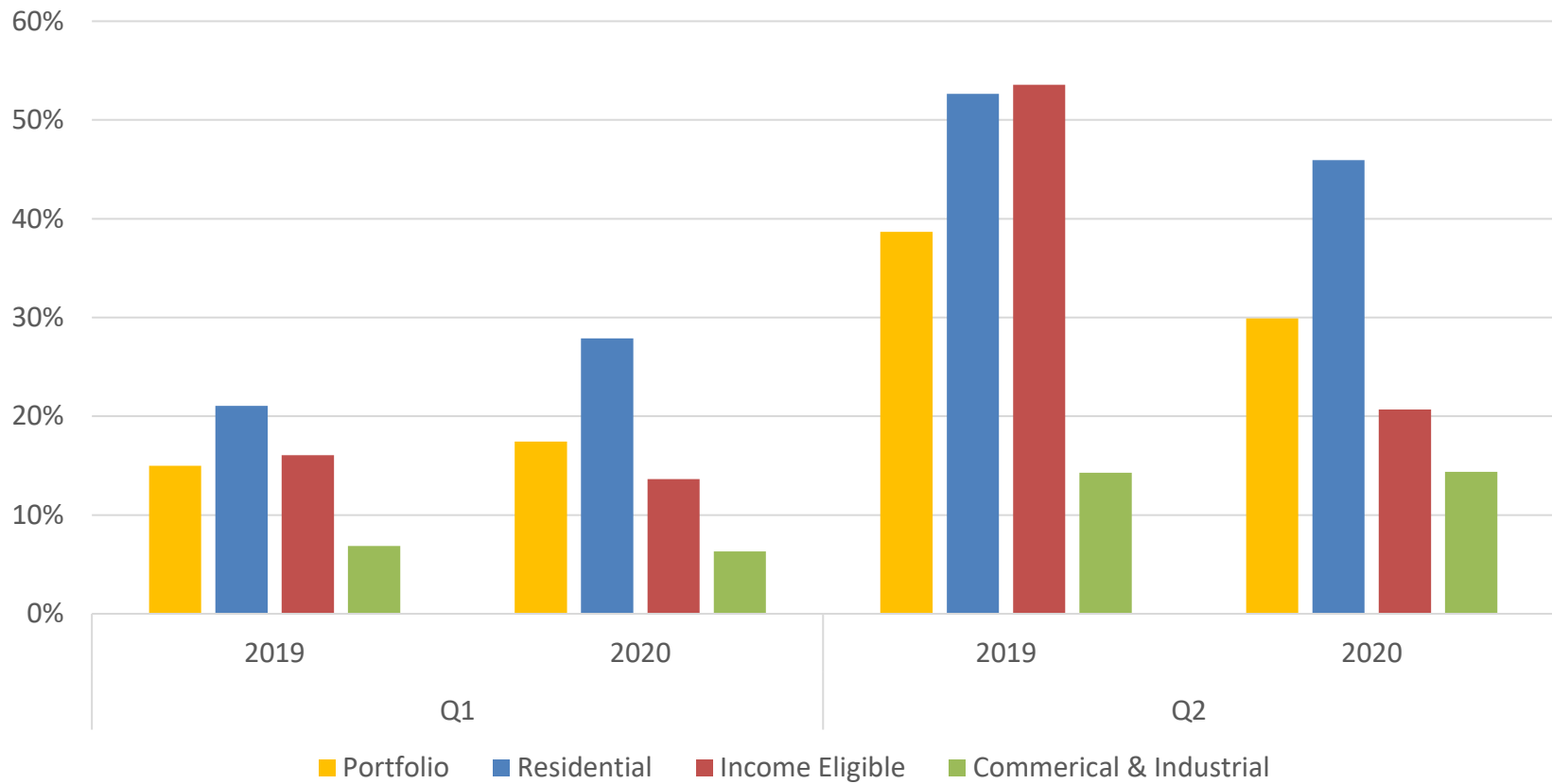
# LIFETIME SAVINGS – GAS PROGRAMS

Gas Portfolio Lifetime Savings - % of Annual Plan



# BENEFITS – GAS PROGRAMS

Gas Portfolio Benefits - % of Annual Plan



# SPENDING – GAS PROGRAMS

Gas Portfolio Spending - % of Annual Plan

