

# 2023 Fourth Quarter Results Update

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Consultant Team Presentation

**Date:** March 14, 2023

# Outline



Portfolio Performance

Consultant Team Program Highlights

Rhode Island Energy Sector Highlights

Council Discussion



# Portfolio Performance

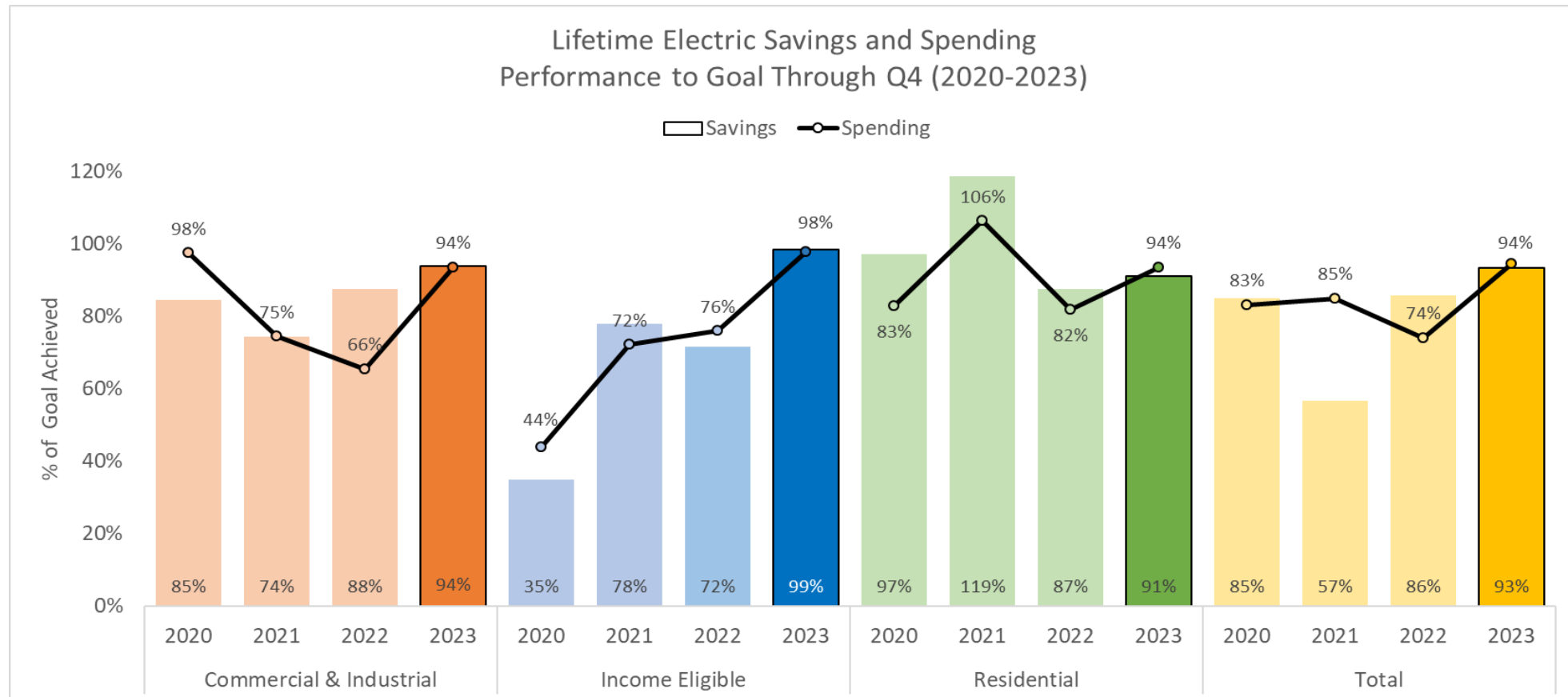
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Overview of Electric and Gas Portfolio

# Electric Performance

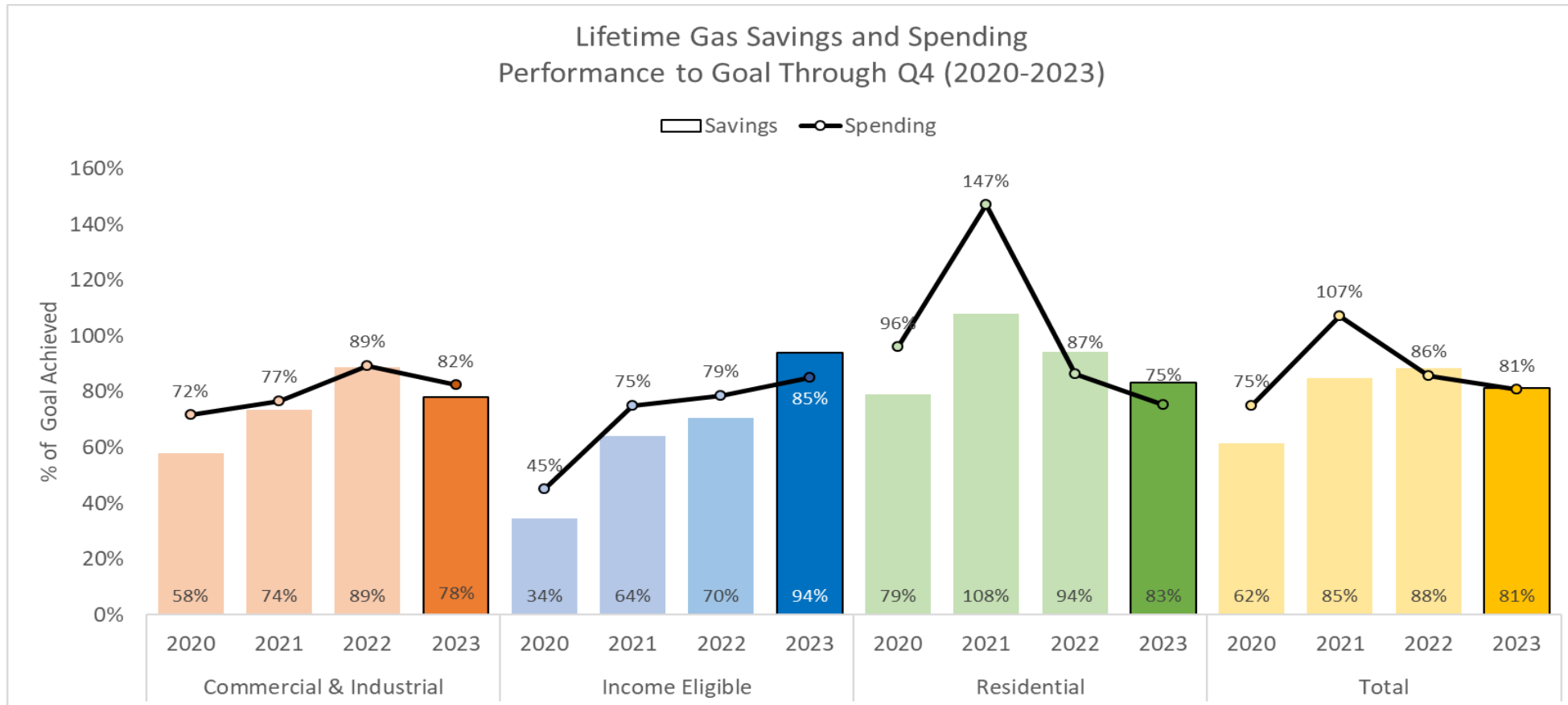


Higher percent of lifetime savings and spending achieved in 2023 compared to 2022



# Gas Performance

Decrease in lifetime savings and spending achieved in 2023 compared to 2022, except for Income-Eligible Sector





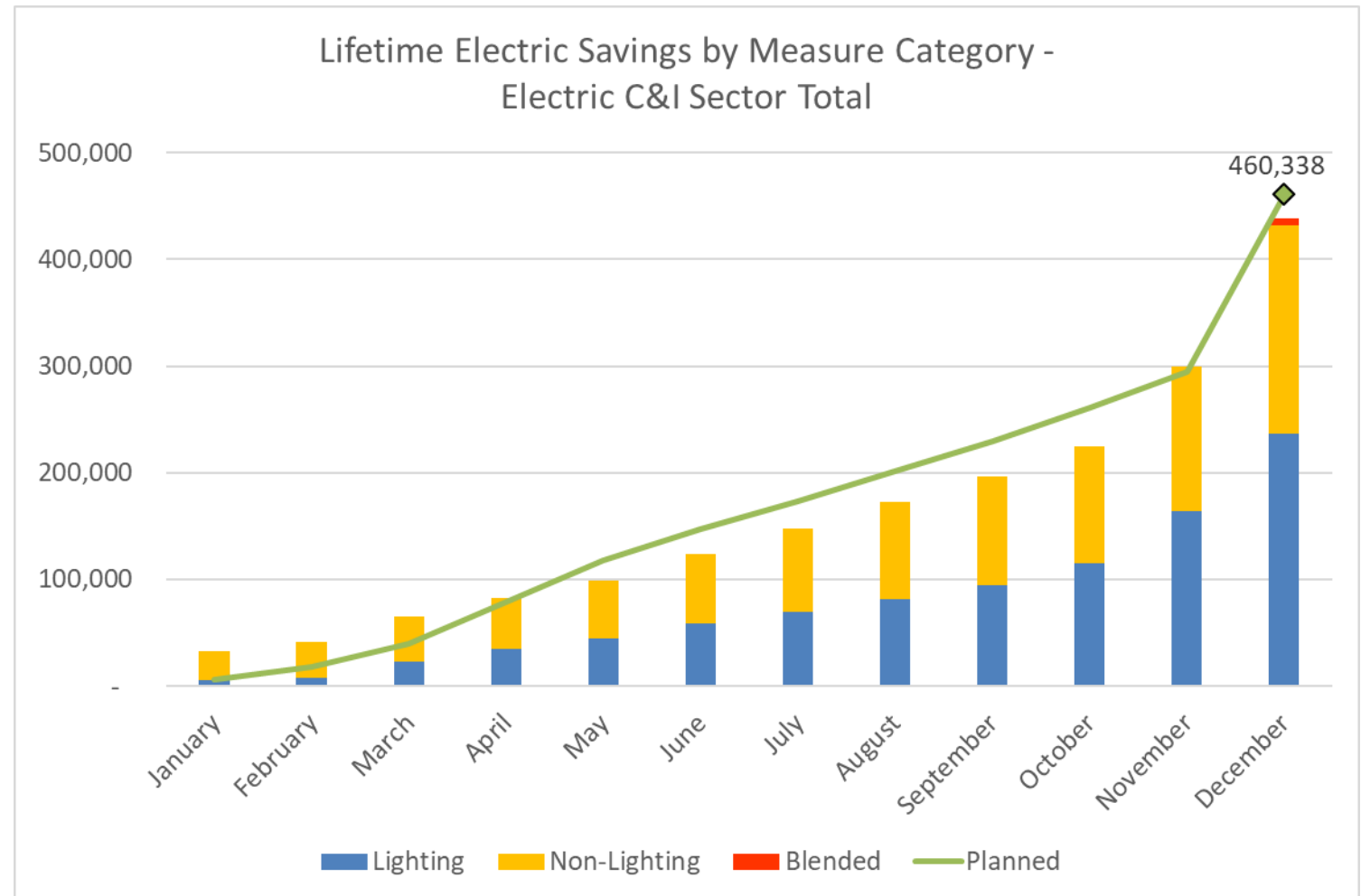
# Commercial & Industrial Sector Highlights

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# 2023 C&I Lifetime Electric Savings

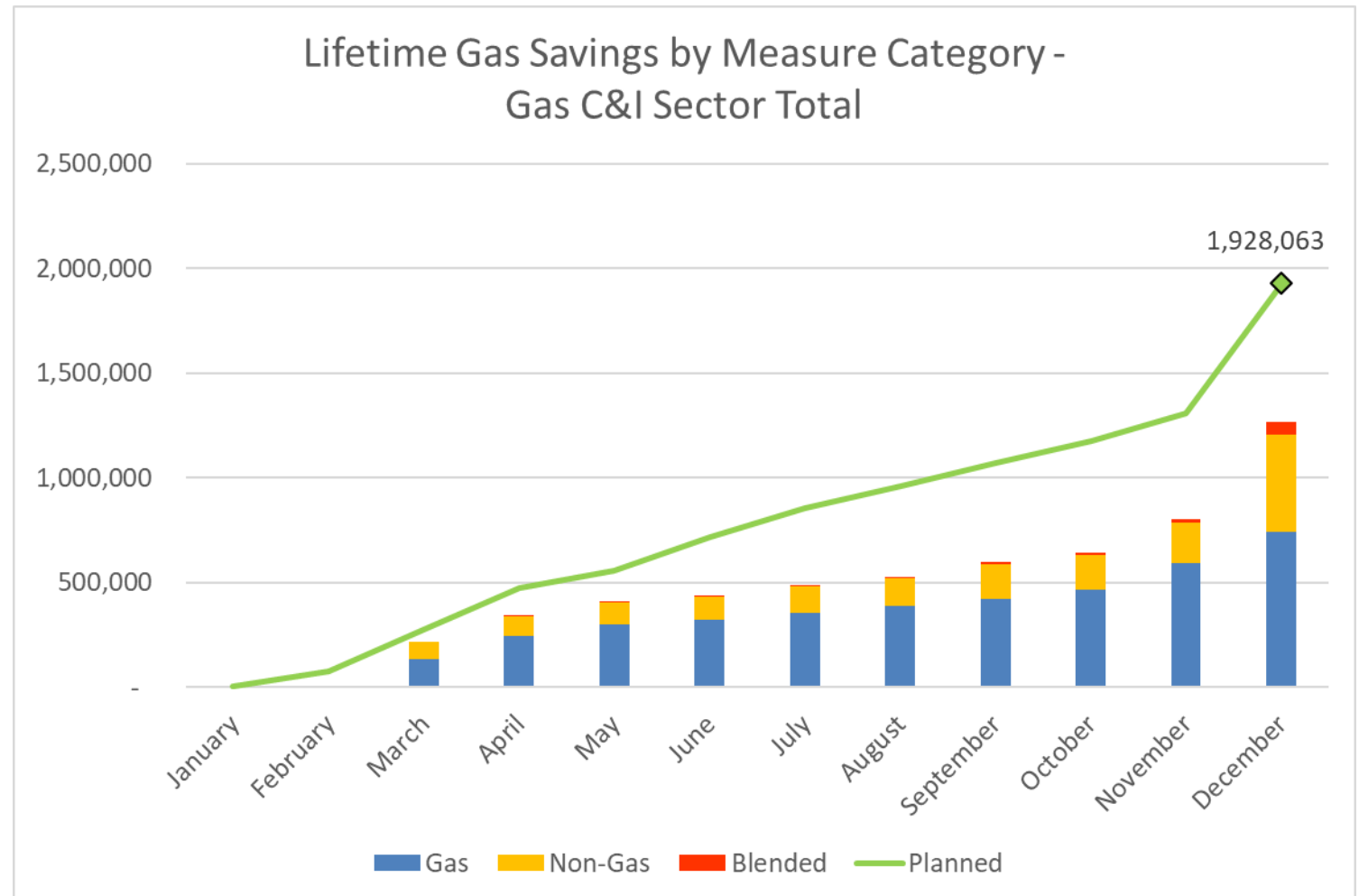


- 94% of lifetime C&I savings goal achieved in 2023
- 54% of total lifetime savings produced by lighting measures



# 2023 C&I Lifetime Gas Savings

- 78% of lifetime C&I savings goal achieved in 2023.
- 59% of total lifetime savings produced by gas-fired measures (e.g., boilers)

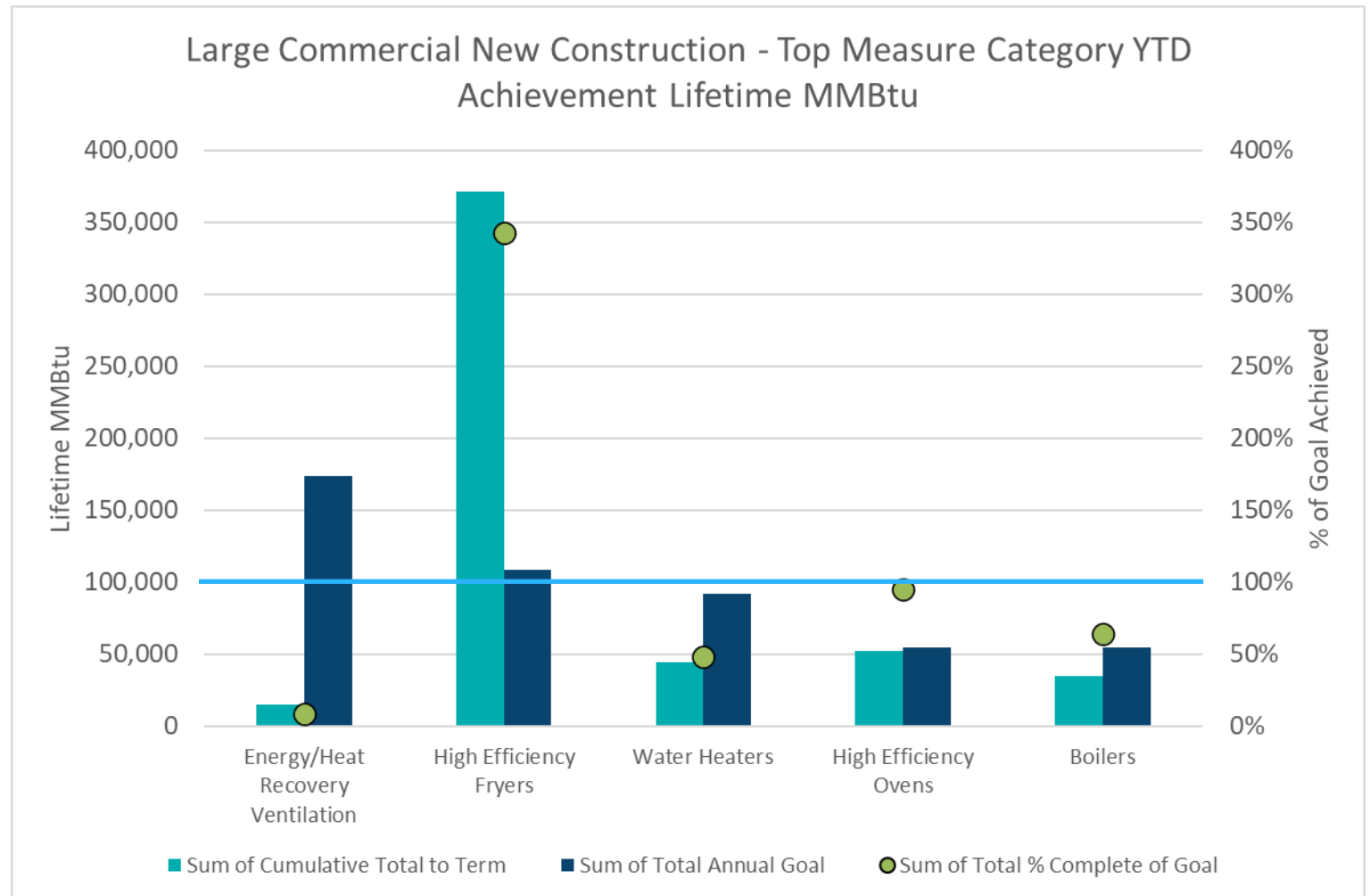




# 2023 C&I Gas New Construction



- High performance from upstream food service measures propelled program performance
- Ongoing consideration of how to reconcile program goals with statewide policy objectives





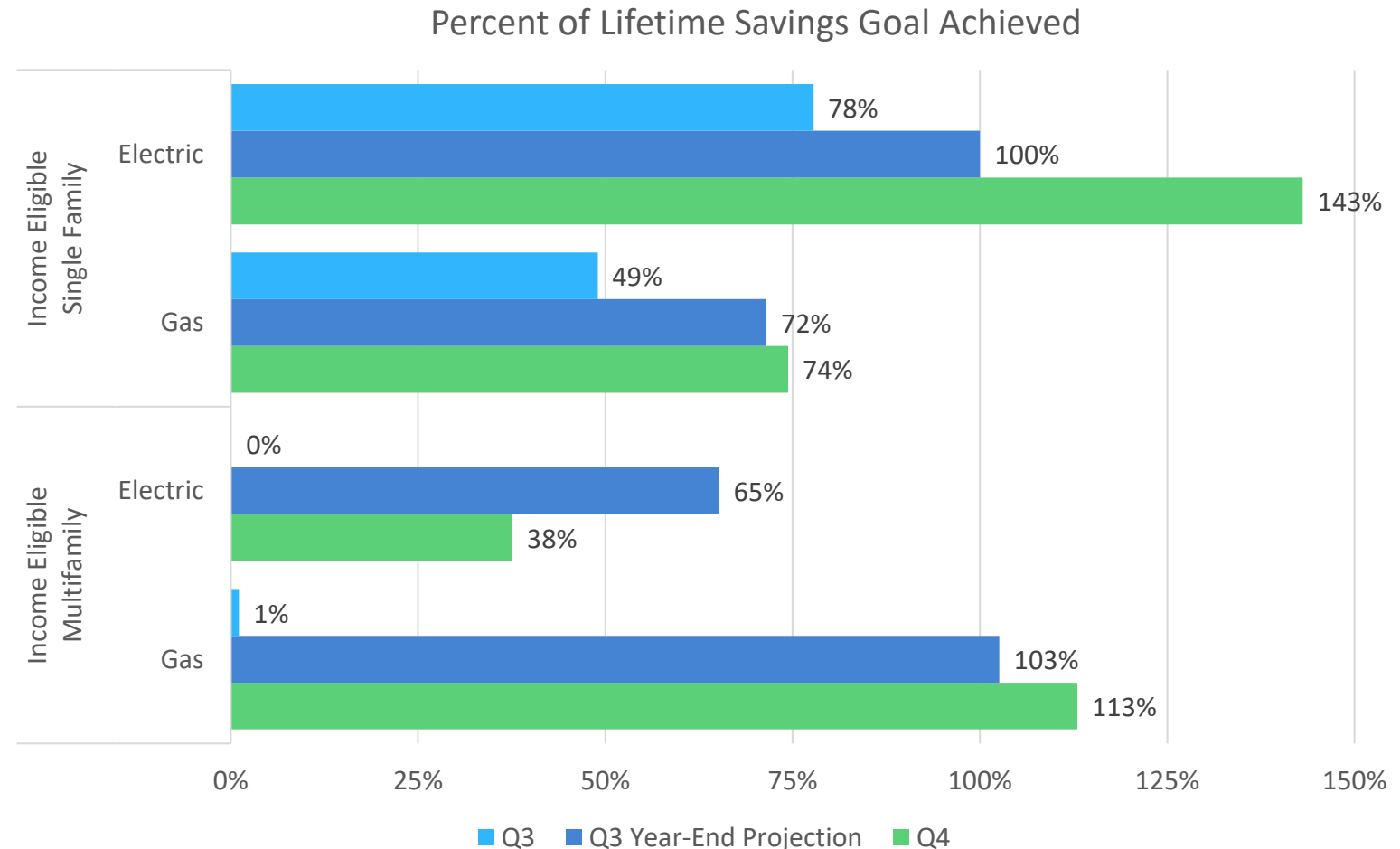
# Residential & Income Eligible Sector Highlights

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# 2023 Income Eligible Programs

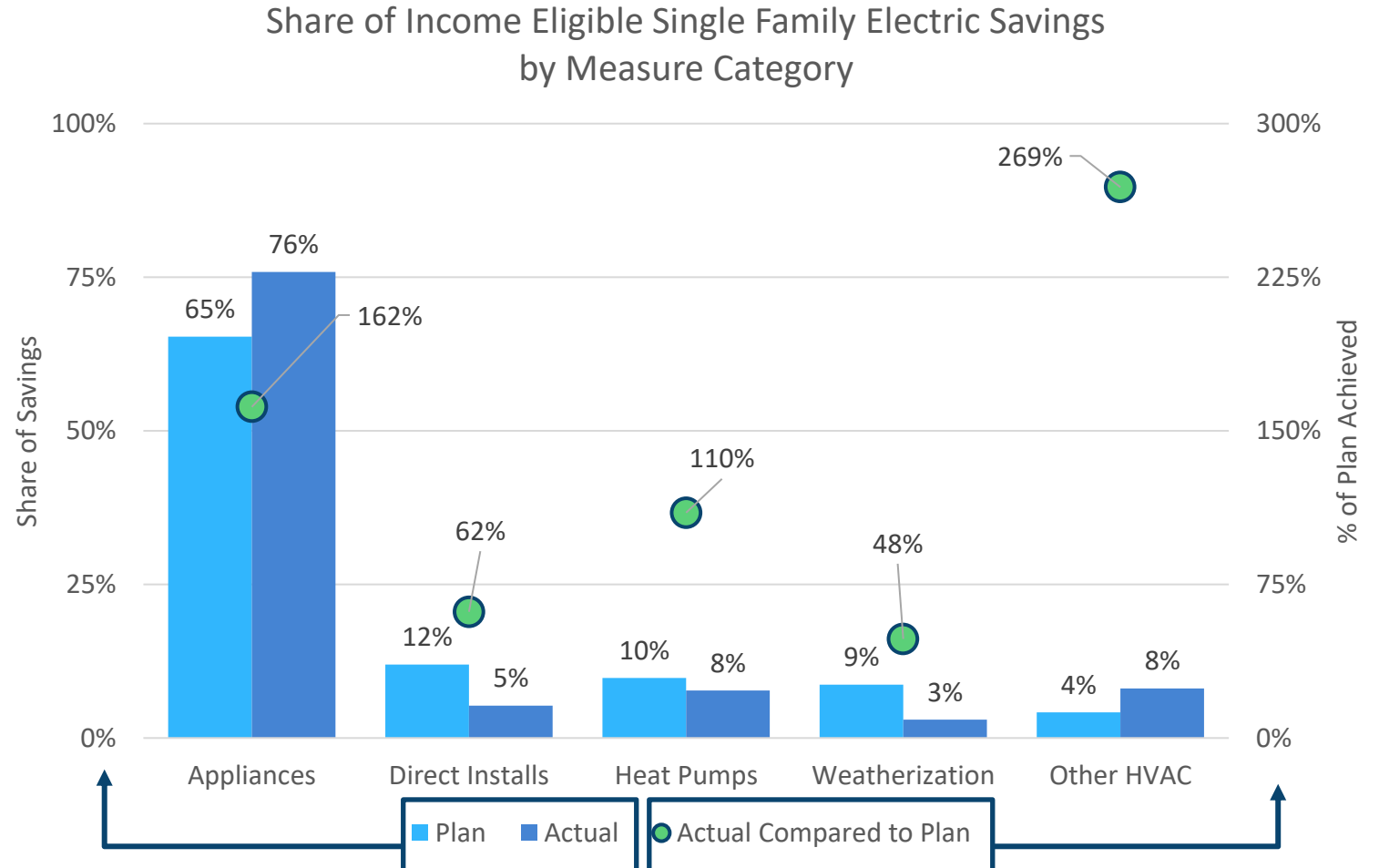


- **Strong performance** relative to goal for Income Eligible Single Family Electric
- 2/4 programs surpassed goal represents **improvement over 2022** when none of the programs met goal
- 3/4 programs **exceeded** Q3 year-end forecast



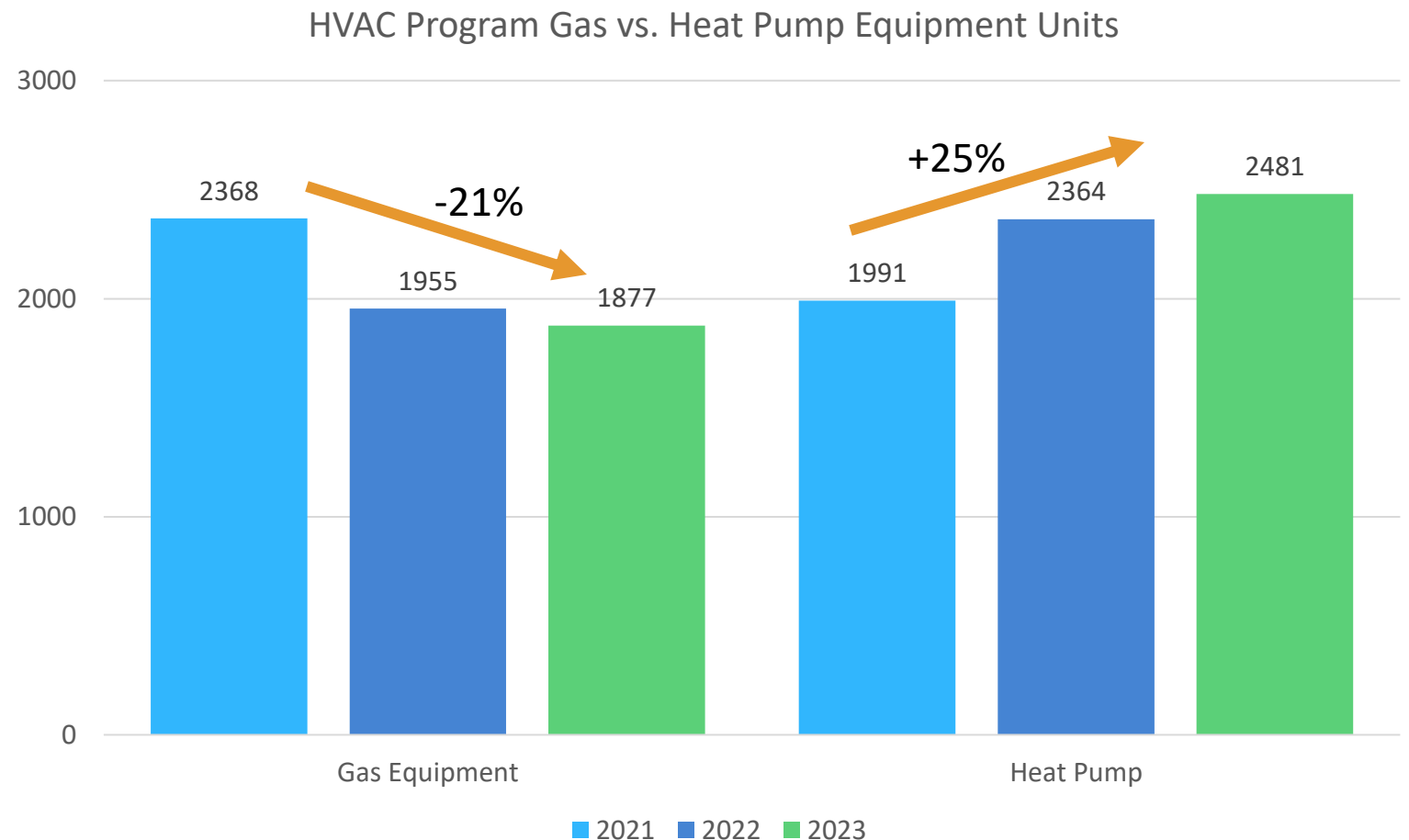
# 2023 Income Eligible SF Electric

- Success largely driven by appliances
- Heat Pumps and other HVAC outpaced goals
- Direct Install and Weatherization fell well short of plan



# Heat Pump vs. Gas Equipment in HVAC Program

- Continued shift of gas vs. heat pump equipment in HVAC Program
- Heat pump equipment incentivized through program increasing at about same rate that gas equipment has been decreasing





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a PPL company

# RI Energy Sector Highlights

# Residential Highlights



- Residential New Construction (RNC)
  - In Q4, 233 housing units were built to RNC program standards, bringing the total completed in 2023 to 470 units. This represents a 9% increase from 2022 year-end totals.
  - 9 newly planned housing units enrolled in the RNC program in Q4 contributing to a total of 798 newly planned housing units enrolled in 2023.
  - The RNC Program Vendor continued to provide technical support for Zero Energy homes across the state, including 114 seeking Passive House certification and 240 seeking DOE Zero Energy Ready certification. The number of Zero Energy Homes in the pipeline has increased by 100% since 2022 and most homes in the pipeline are income eligible.
- EnergyStar HVAC
  - Throughout 2023, the EnergyStar HVAC Program has been working to adapt to the introduction of new DOE heat pump equipment ratings and standards.
    - The program accepted old and new ratings for rebates in 2023 and will continue to allow this for qualifying systems in 2024 as existing systems are tested and re-rated.

# Residential Highlights



- EnergyStar HVAC (contd.)
  - Energy Star 6.1 Cold Climate certifications are now available for heat pumps and the HVAC Program plans to include this as a rebate-eligible option in 2024.
  - Rhode Island Energy has supported Clean Heat RI since its launch in the Fall by actively encouraging contractors and customers to apply for rebates from both programs. The HVAC Program sends weekly newsletters and pushes related updates to the website and rebate portal, which all include links to Clean Heat RI.
- EnergyWise
  - Overall demand for Home Energy Assessments remained lower in the fourth quarter than historic program averages, but improved uptake of electric saving measures in Q4 resulted in an improvement in the percent of electric savings to goal. The uptake of gas saving measures was strong in the fourth quarter and the program will exceed the gas savings goal. The program continued to offer enhanced incentives including increasing the standard incentive from 50% to 75% and a 100% incentive for electrically heated homes.



# Income Eligible & Codes Highlights



- **Income Eligible Services (IES)**
  - In 2023, Rhode Island Energy hired an IES Program Manager and moved to a comprehensive full house audit for weatherization.
  - There was an increased focus on the appliance replacement process through the end of 2023. Rhode Island Energy worked with the appliance oversight vendor to ensure that customers were adequately served, and that invoicing was completed, which led to an increase in overall productivity.
  - Rhode Island Department of Human Services (DHS) completed an audit of all energy specialists participating in the Weatherization Assistance Program (WAP)/IES program commissioned by the US Department of Energy. DHS used this opportunity to identify training needs. Most of the training needs were related to heating systems (combustion appliance zone & gas leak testing). DHS has arranged with the Combined Heat and Power Program (CHP) to bring each Auditor to the Baltimore training facility for additional training.
- **Energy Codes**
  - A total of 61 training events were held in 2023, with 990 attendees
    - 53 residential trainings with 743 attendees
    - 9 commercial trainings with 247 attendees

# Commercial & Industrial Highlights



- **Large Commercial New Construction**
  - As of Q4 2023, there were 95 active projects with 55 of those projects representing nearly six million square feet of building space. 40 projects were awaiting building size or more project details.
- **Large Commercial Retrofit**
  - **Project spotlight:** A large grocery chain proceeded with retro-commissioning measures through Rhode Island Energy’s Equipment & Systems Performance Optimization (“ESPO”) program. The rooftop unit and condenser coils across the customer’s 26 stores in Rhode Island were cleaned, resulting in approximately 700,000 kWh of energy savings and \$16,000 in rebates.
- **Small Business Direct Install**
  - There were 5 gas weatherization projects in Q4 2023 for a total of 23 in 2023.
  - Throughout 2023, there has been a consistent uptick in savings attributed to VFD (Variable Frequency Drives) controls and weatherization measures. Rhode Island Energy continues to seek additional staff experienced with weatherization measures and audits.



# Council Discussion

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# Council Member Discussion



- Did any of the content covered in this summary surprise you?
- Do you have any questions about program results that weren't covered today?
- Do you have any questions for the C-Team or Rhode Island Energy?



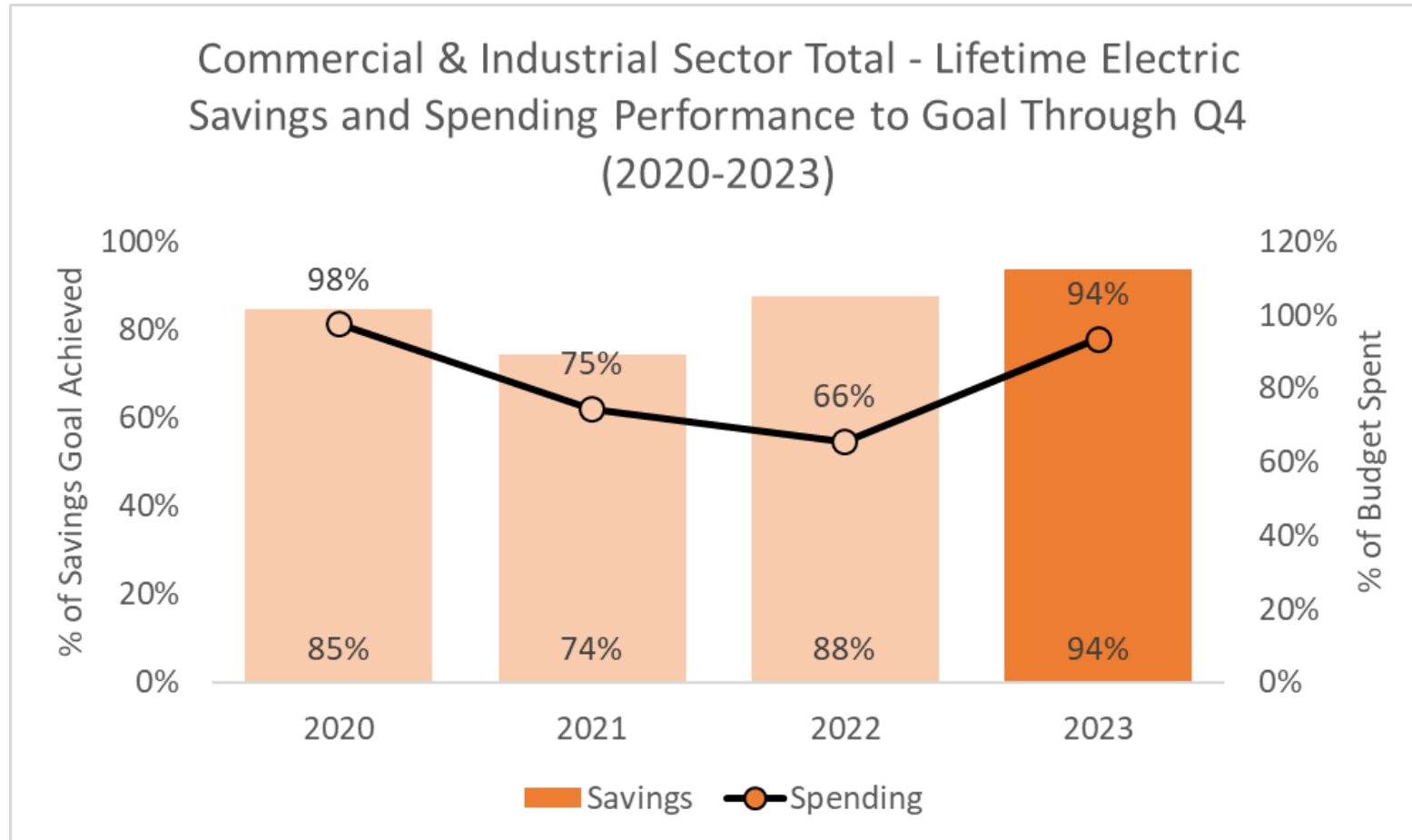
# Appendix

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# 2023 C&I Electric Performance



- Downward trend in sector-level spending since the onset of COVID-19 has finally been broken
- Large C&I Retrofit program (37% of total planned lifetime savings) exceeded goal by 8%



# 2023 C&I Electric Top-10 Measures



- Only one of the top-ten electric measure categories met or exceeded planned savings
- 26% of all electric measure categories with planned quantities met or exceeded goals

Electric Program	Measure Category	Planned Lifetime Savings	Actual Lifetime Savings	Lifetime Savings Achieved (%)
Large C&I Retrofit	Interior LEDs	53,685	121,284	226%
Small Business Direct Install	Interior LEDs	41,577	18,682	45%
Large C&I Retrofit	Interior LEDs – Upstream	39,080	759	2%
Large C&I Retrofit	Custom Lighting Systems	24,419	0	0%
Large C&I New Construction	Custom Compressed Air	22,145	0	0%
Large C&I Retrofit	Interior LEDs - w/Controls, Upstream	21,282	230	1%
Large C&I Retrofit	Energy Management Systems	17,752	15,882	89%
Large C&I New Construction	Energy Management Systems	12,551	325	3%

# 2023 C&I Gas Top-10 Measures



- Only two of the top-ten gas measure categories met or exceeded planned savings
- 19% of all gas measures with planned quantities met or exceeded goals

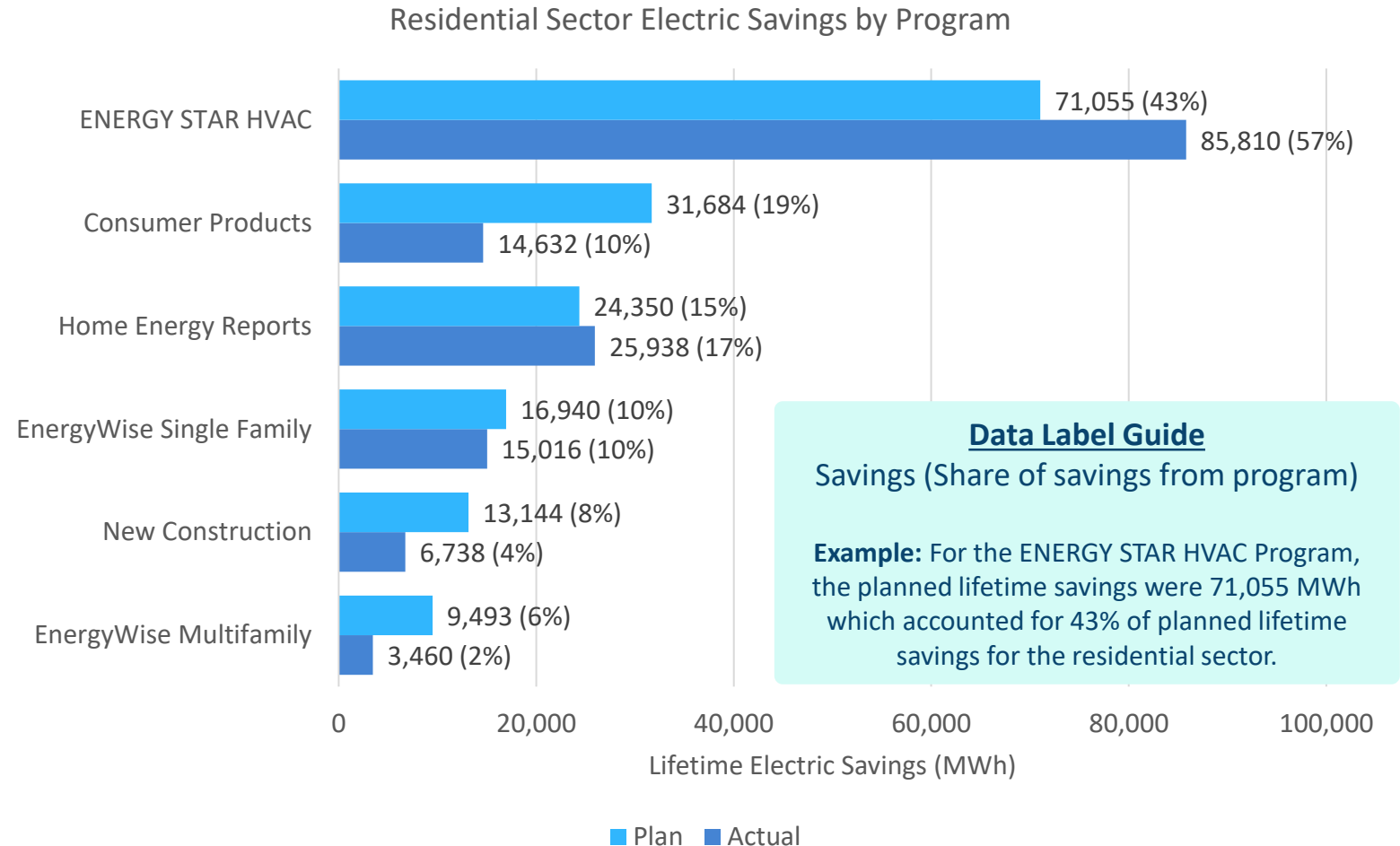
Gas Program	Measure Category	Planned Lifetime Savings	Actual Lifetime Savings	Lifetime Savings Achieved (%)
Large C&I New Construction	Energy/Heat Recovery Ventilation	173,848	14,705	8%
Large C&I Retrofit	<b>Custom - Other</b>	<b>163,039</b>	<b>218,403</b>	<b>134%</b>
Large C&I Retrofit	Energy/Heat Recovery Ventilation	147,715	27,694	19%
Large C&I Retrofit	Wi-Fi Thermostats	132,143	1,293	1%
Large C&I Retrofit	Operation & Maintenance	112,880	52,747	47%
Large C&I Retrofit	Custom - HVAC	111,548	36,020	32%
Large C&I New Construction	<b>High Efficiency Fryers</b>	<b>108,242</b>	<b>371,270</b>	<b>343%</b>
Large C&I New Construction	Water Heaters	92,205	44,146	48%



# Residential Electric Savings by Program



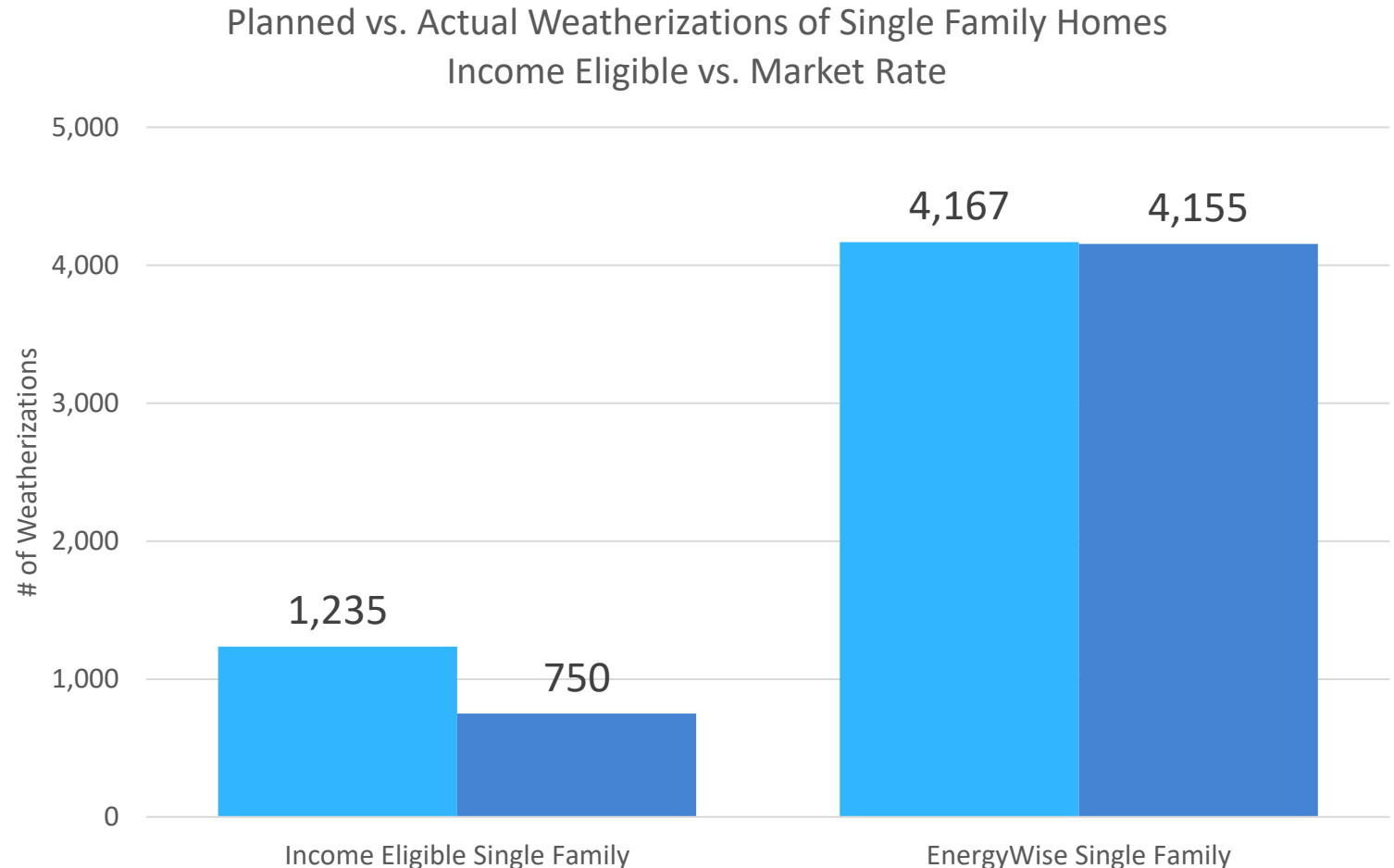
- HVAC Program overperformance helped carry underperformance elsewhere
- Only 2 out of 6 programs met or exceeded savings goal
- Half of the programs met ~50% or less of their savings goals



# Single Family Home Weatherizations



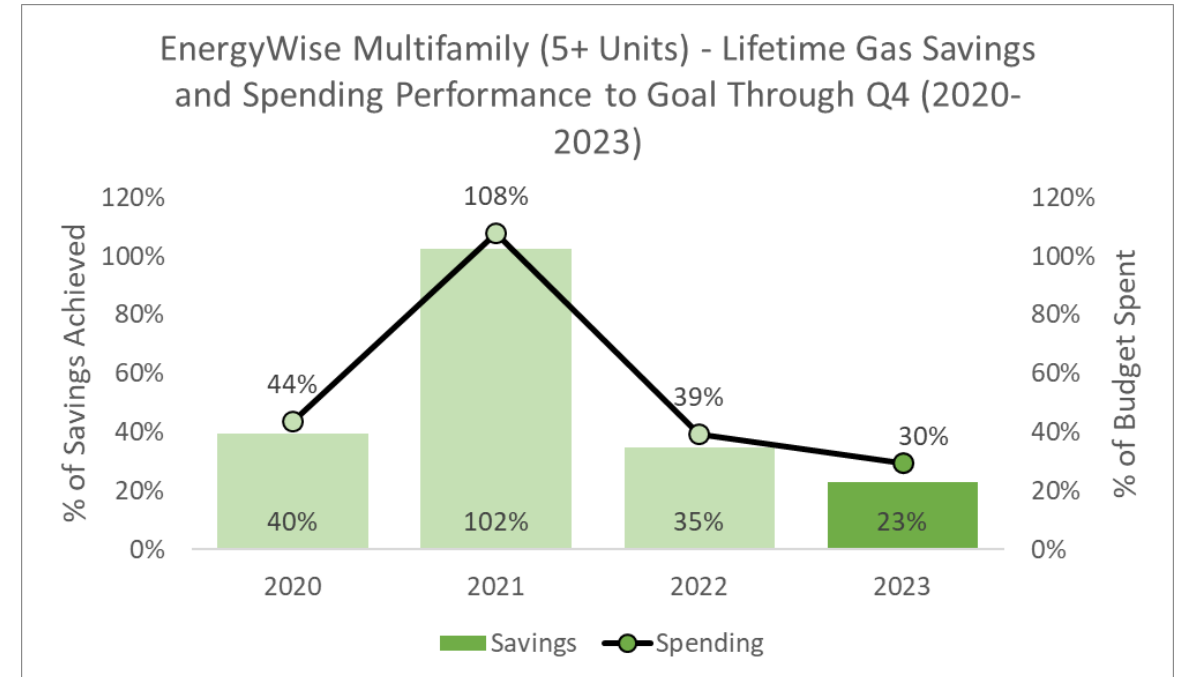
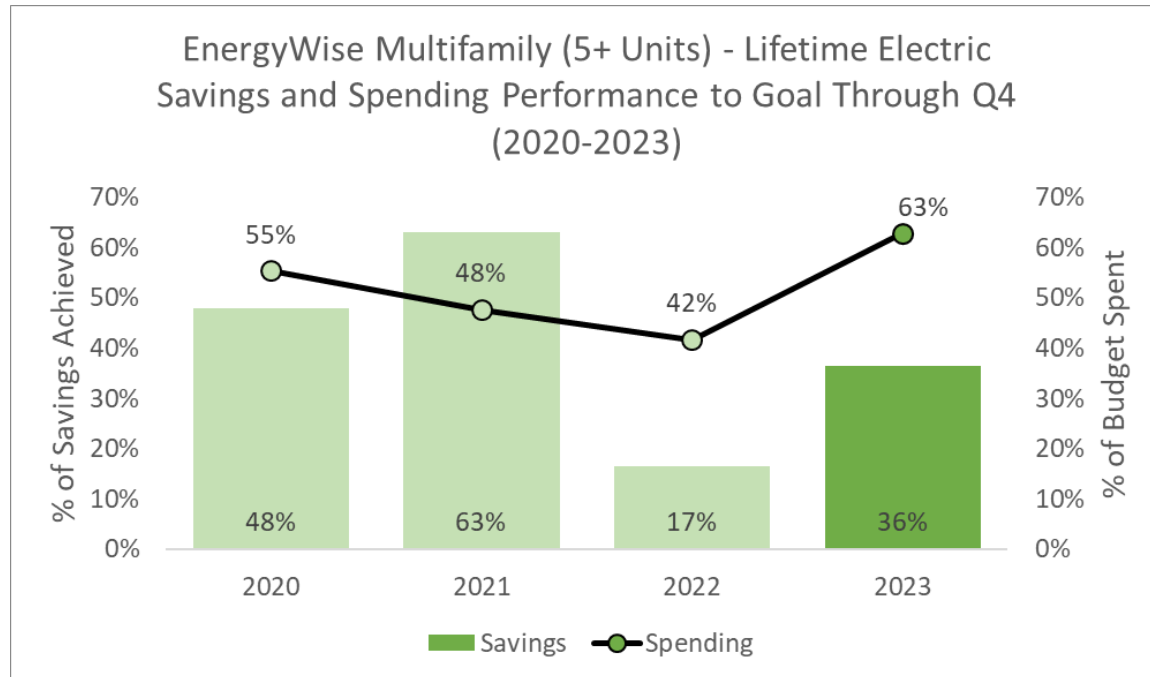
- Achievement of weatherization goals varied significantly between Income Eligible and Market Rate programs
- Income Eligible
  - 60.7% of goal
- Market Rate
  - 99.7% of goal



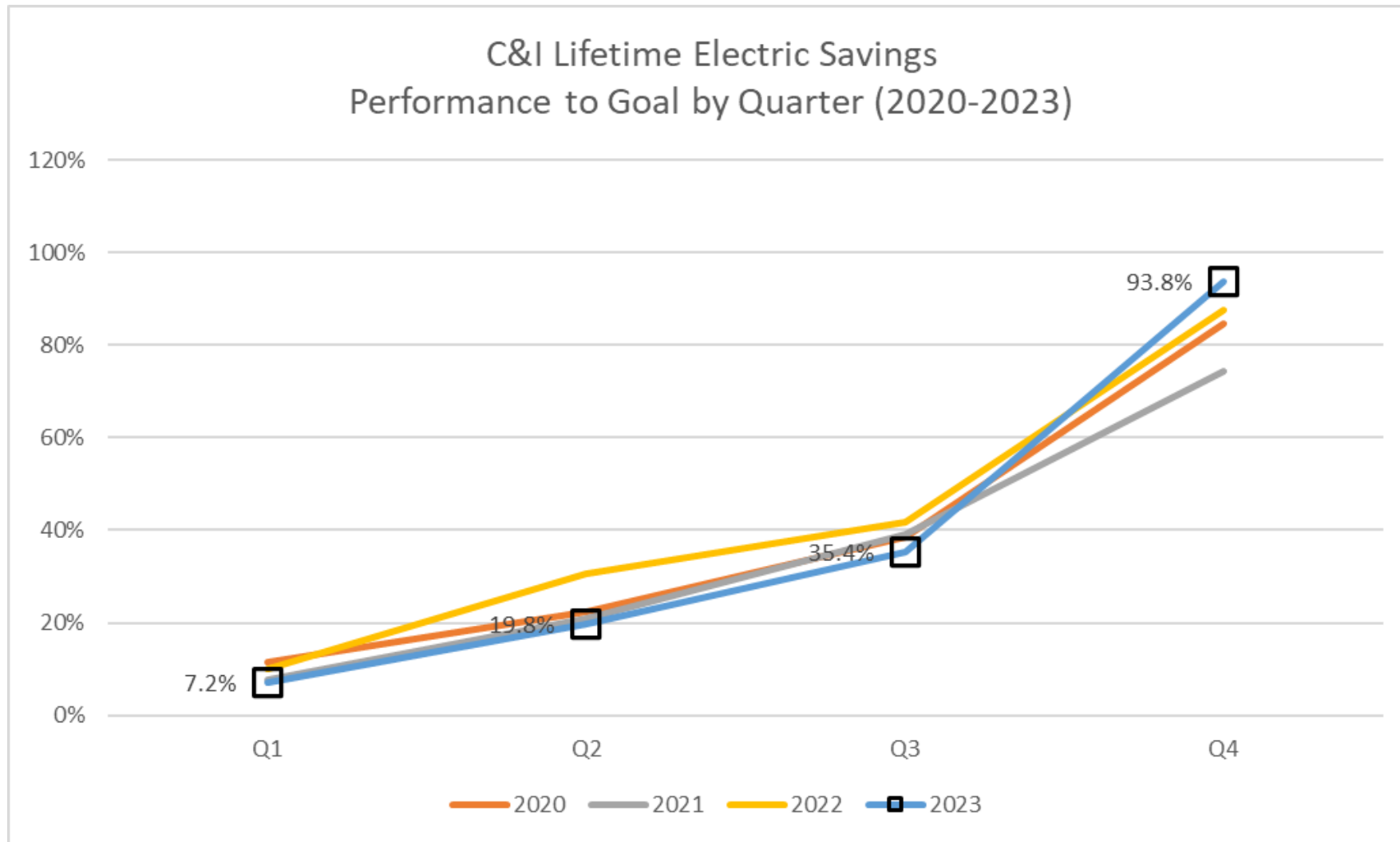
# Market Rate Multifamily



Market rate multifamily programs continue trend of falling well below goal



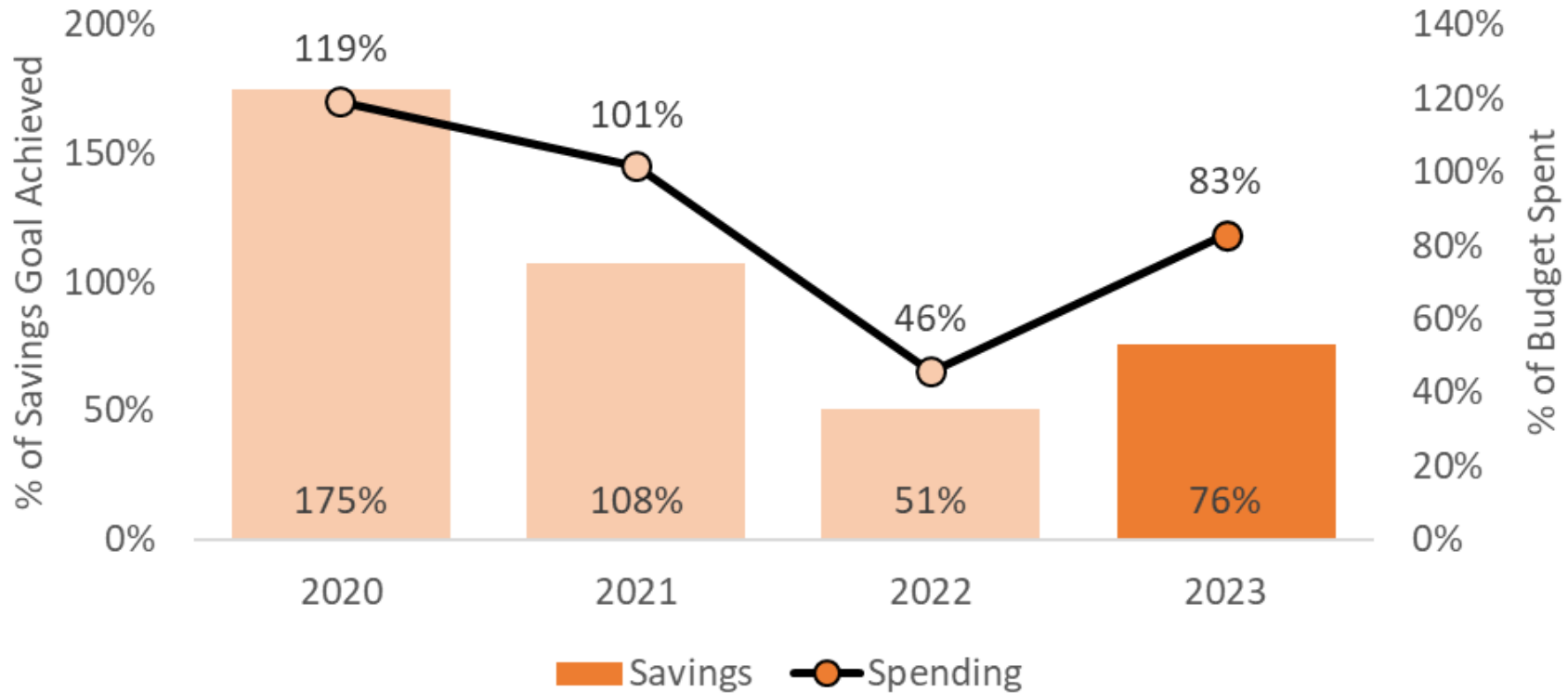
# Electric C&I Performance



# Electric C&I Programs



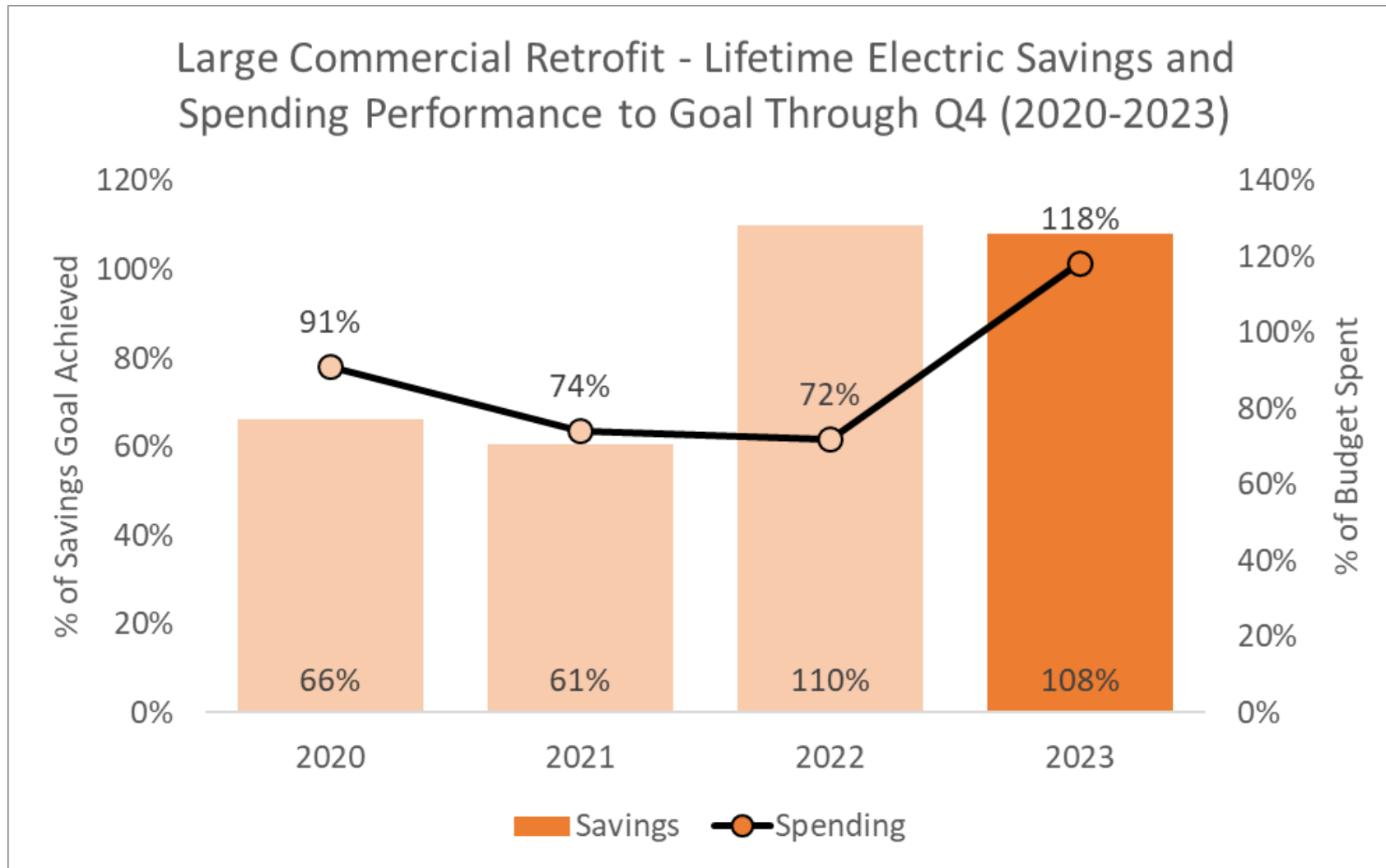
Large Commercial New Construction - Lifetime Electric Savings and Spending Performance to Goal Through Q4(2020-2023)



# Electric C&I Programs



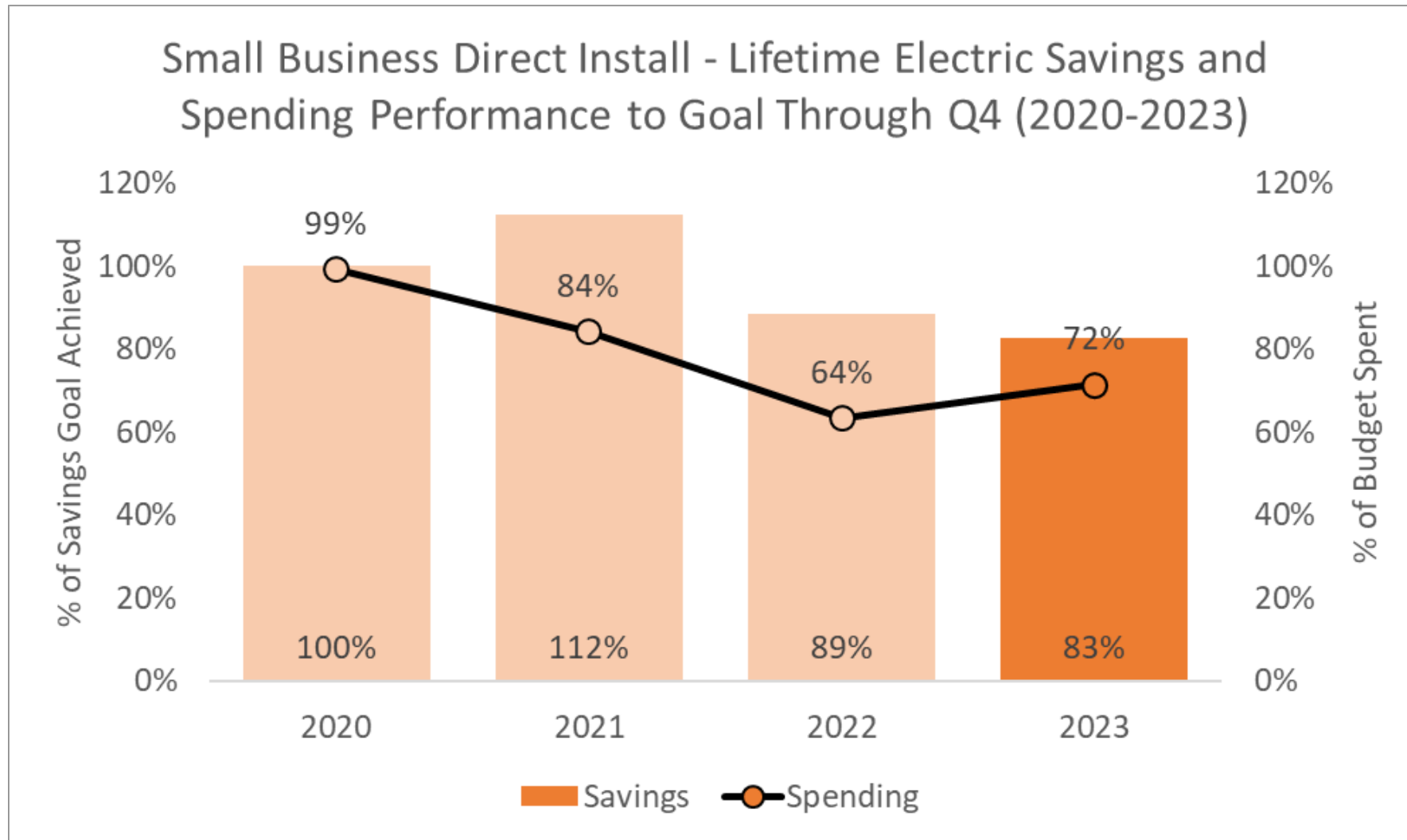
Large Commercial Retrofit - Lifetime Electric Savings and Spending Performance to Goal Through Q4 (2020-2023)



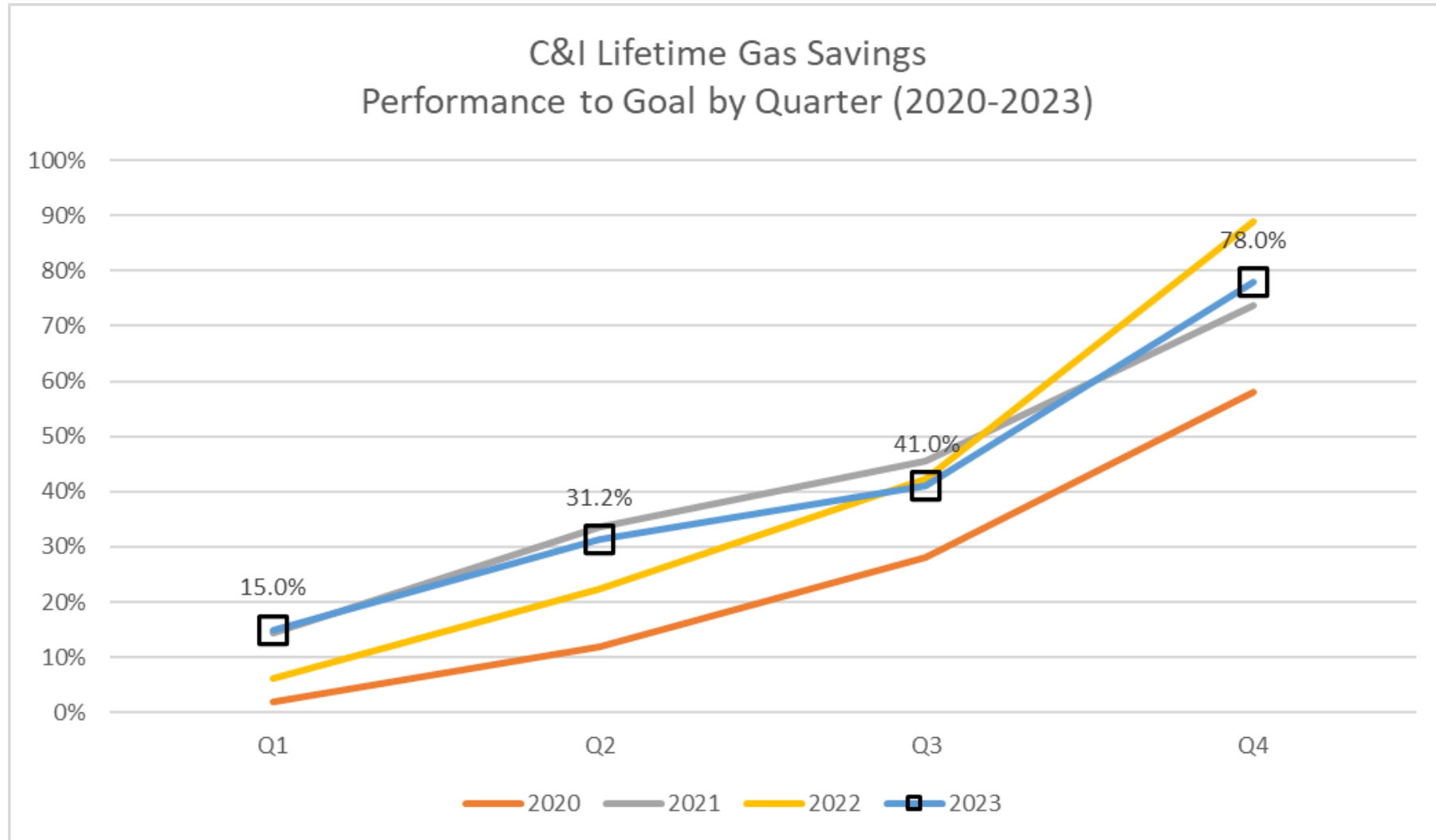
# Electric C&I Programs



Small Business Direct Install - Lifetime Electric Savings and Spending Performance to Goal Through Q4 (2020-2023)



# Gas C&I Performance

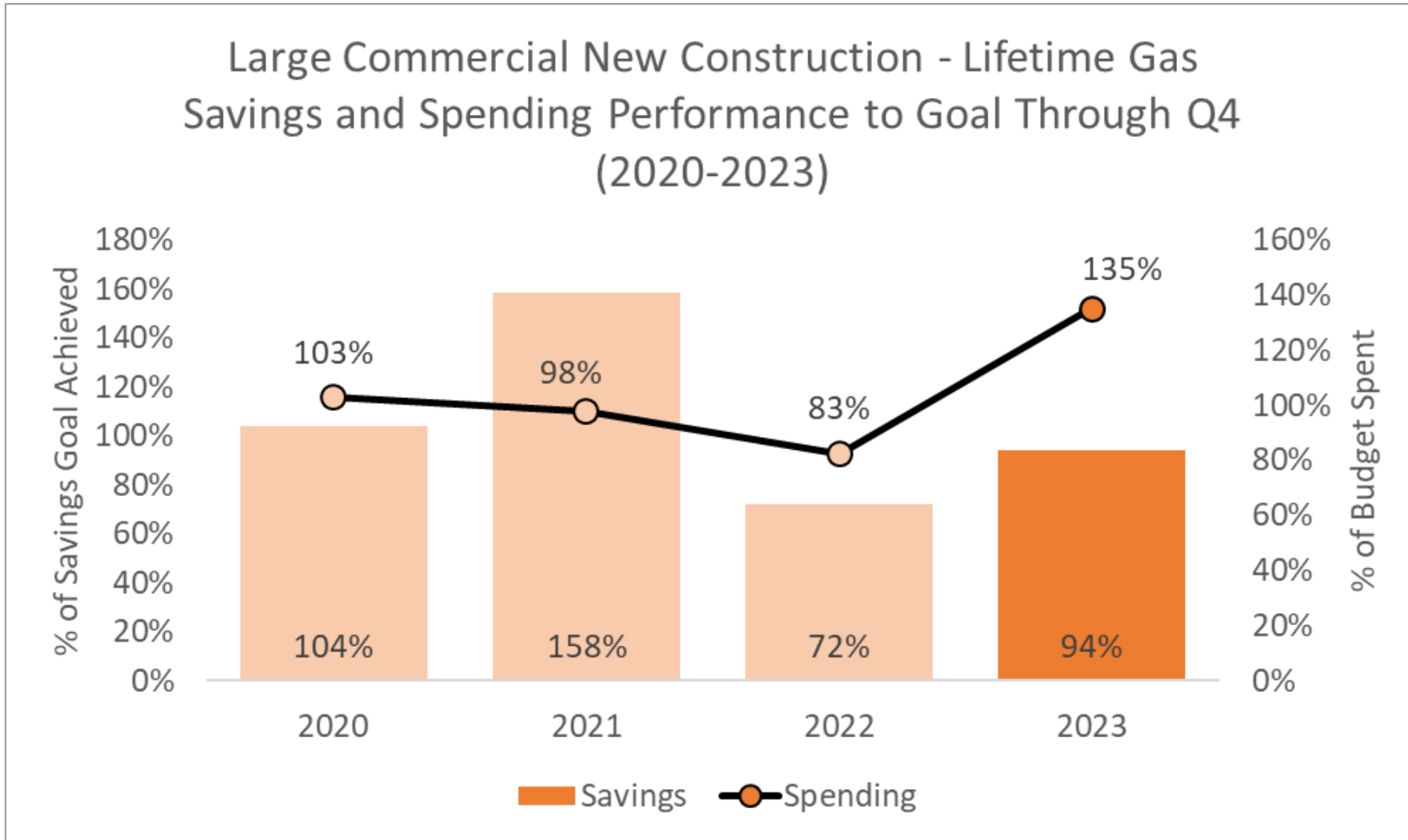




# Gas C&I Programs



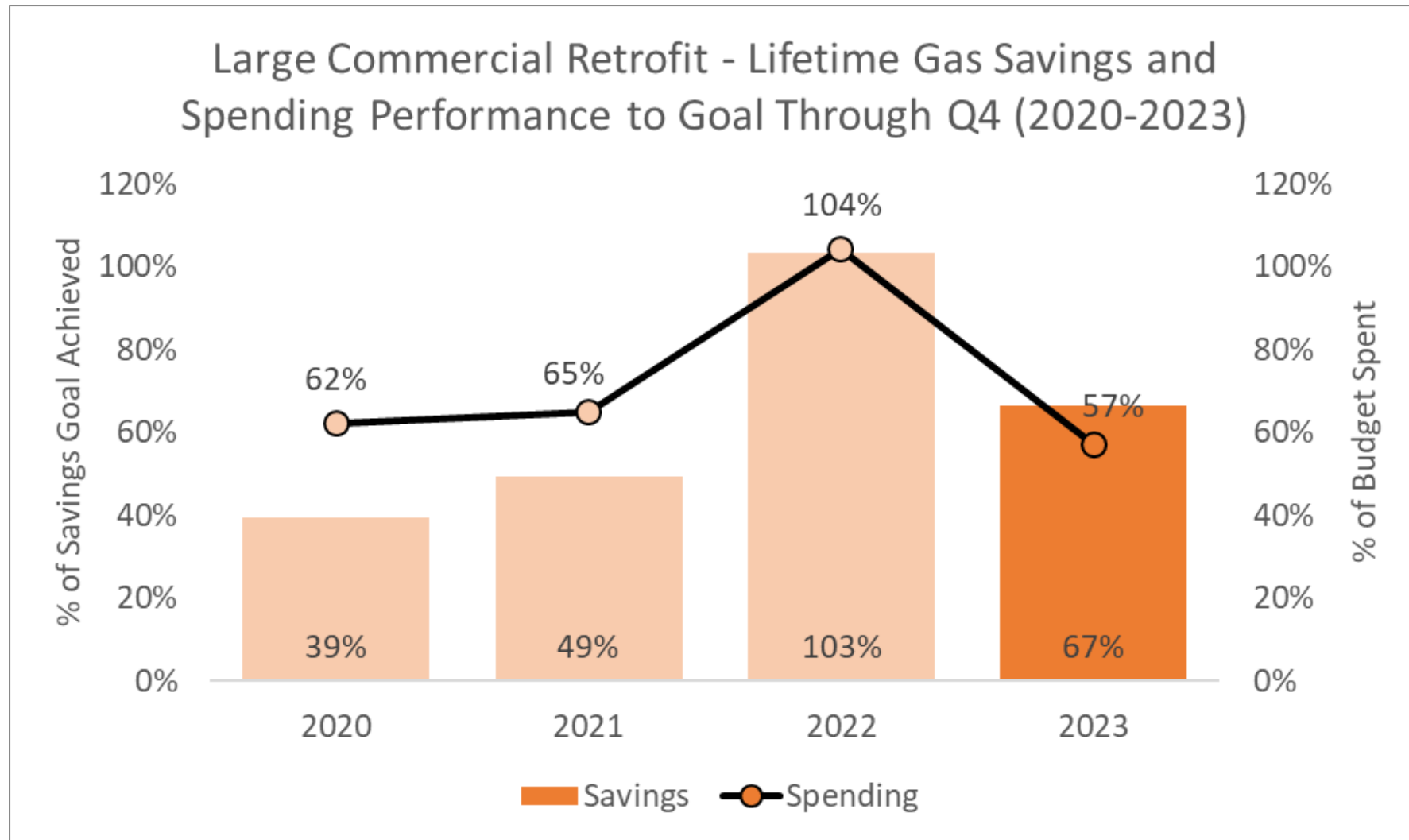
Large Commercial New Construction - Lifetime Gas Savings and Spending Performance to Goal Through Q4 (2020-2023)



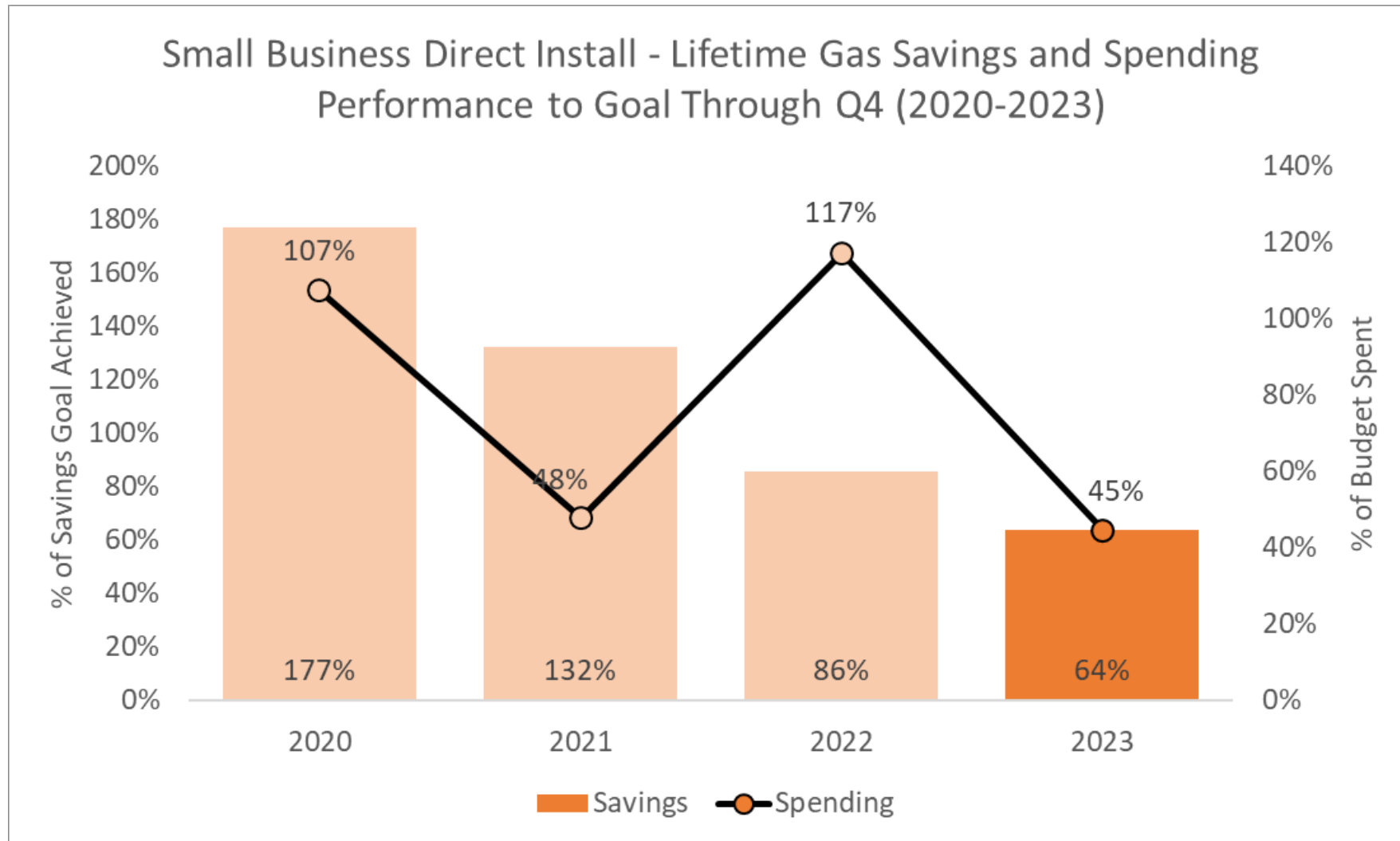
# Gas C&I Programs



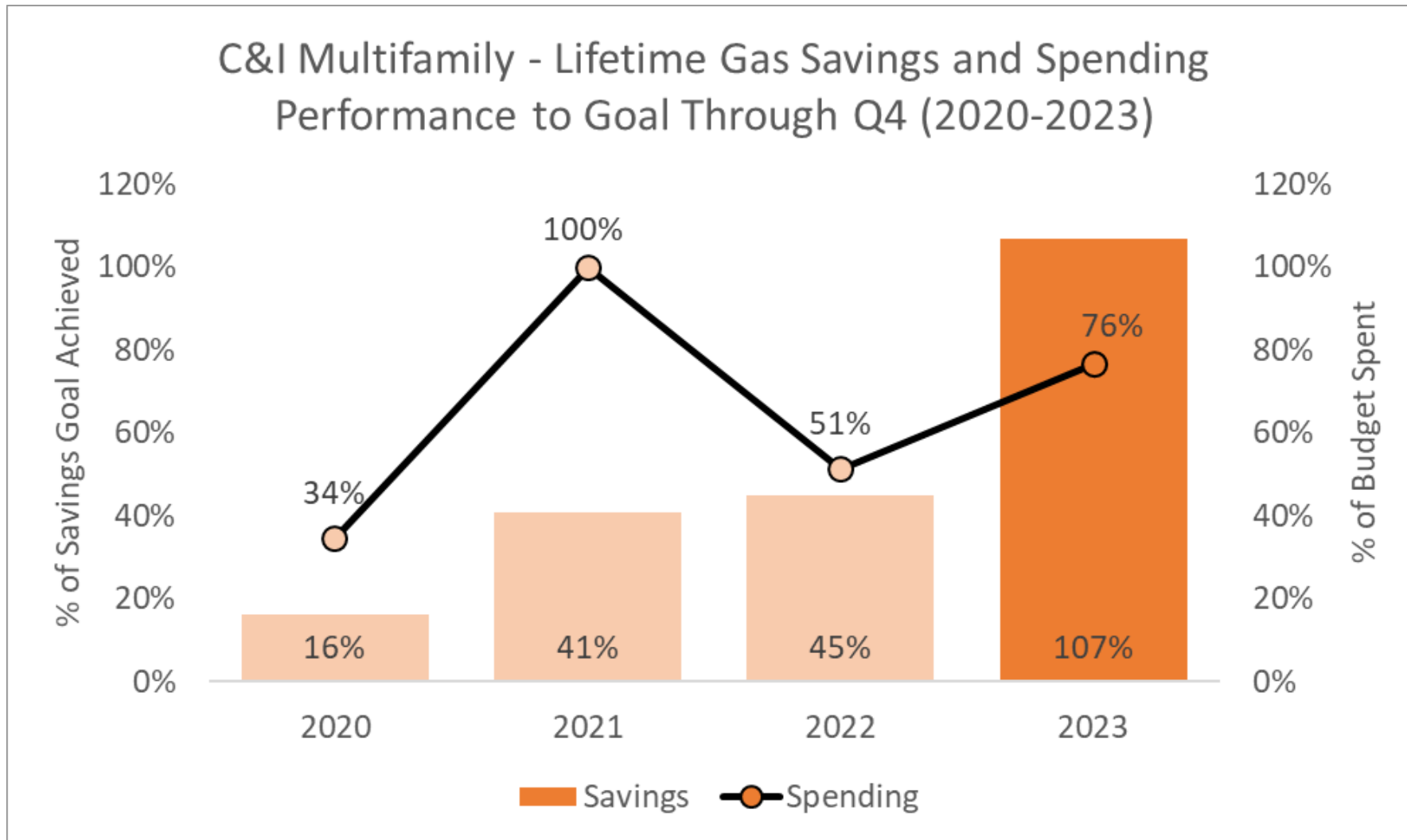
### Large Commercial Retrofit - Lifetime Gas Savings and Spending Performance to Goal Through Q4 (2020-2023)



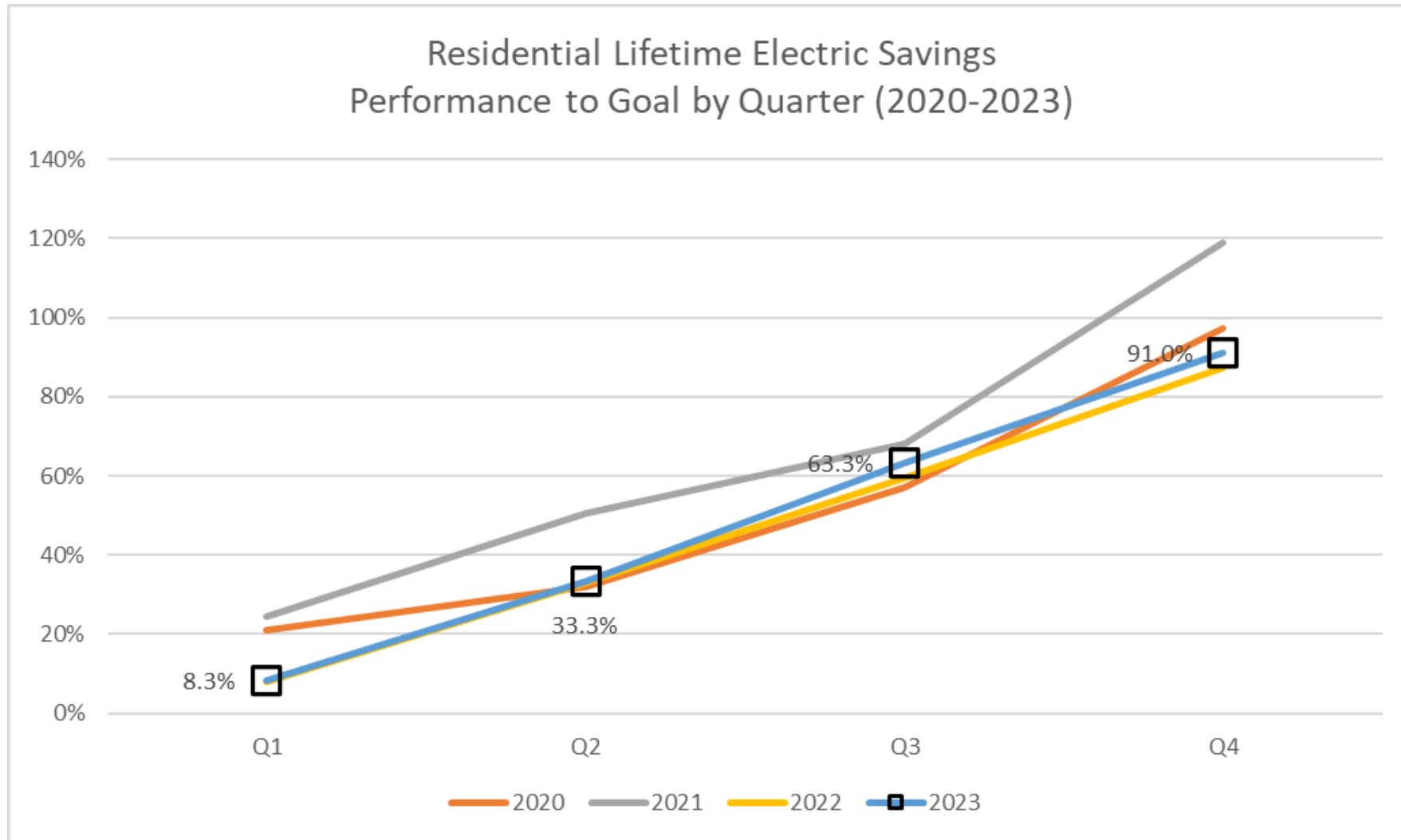
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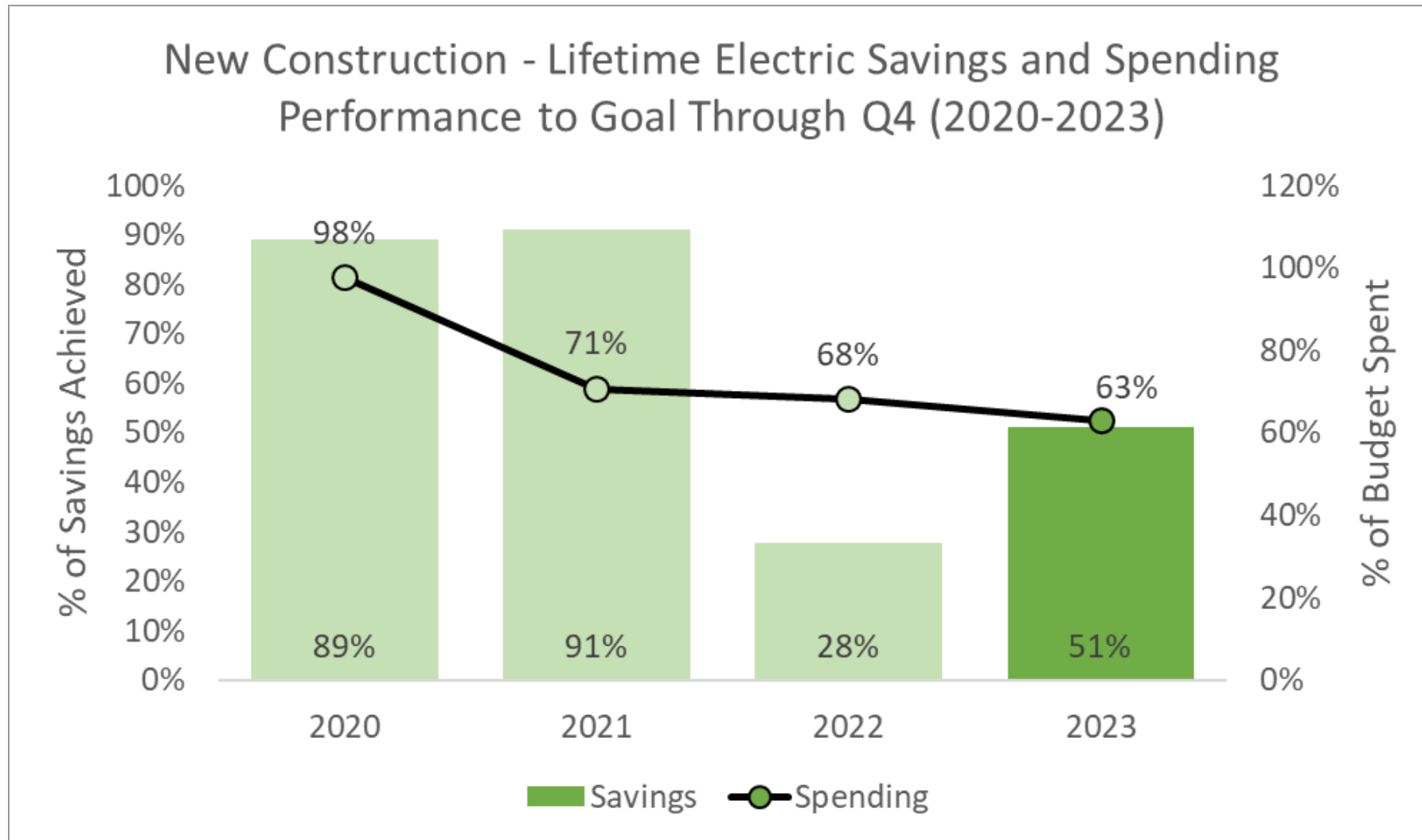
# Electric Res Performance



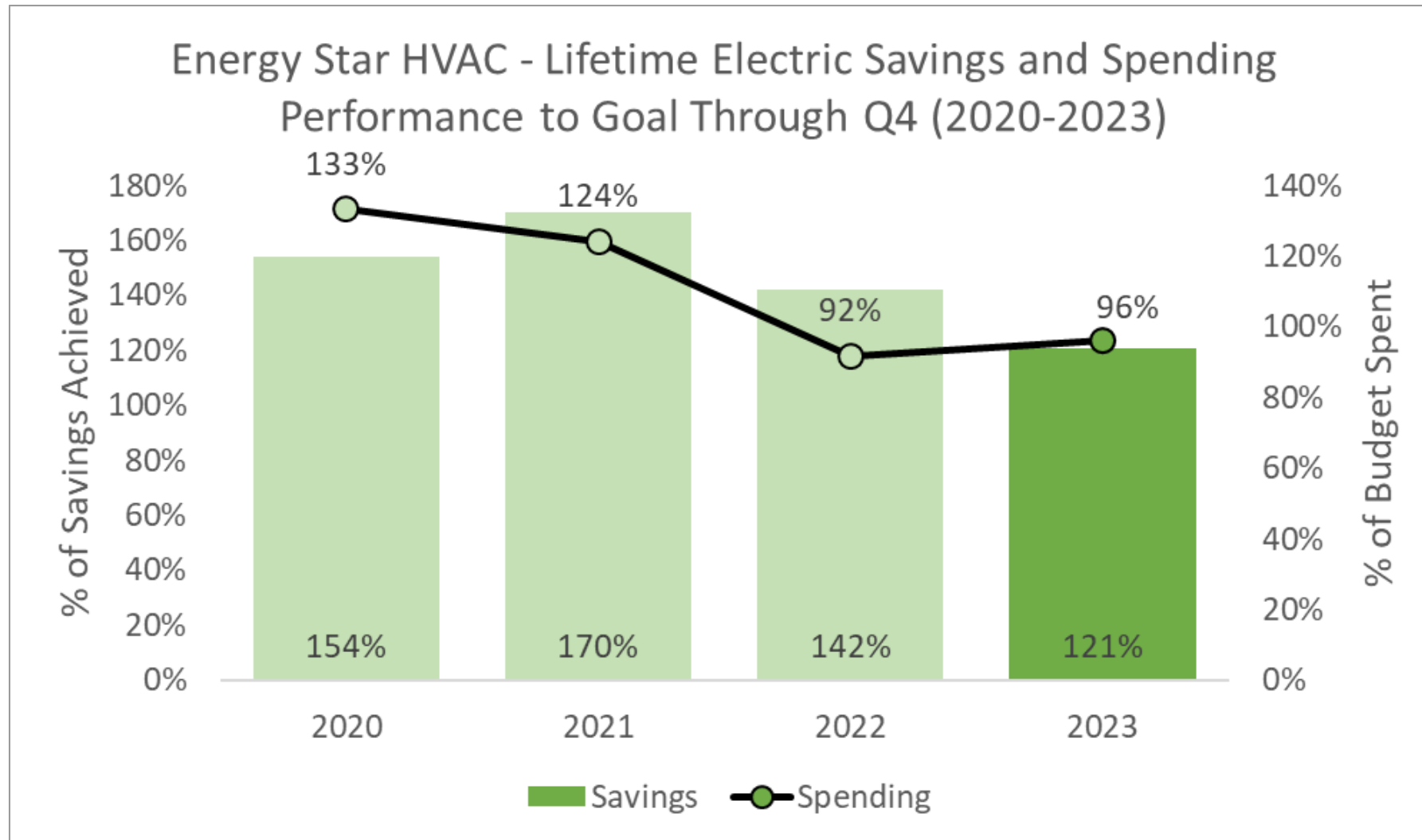
# Electric Res Programs



New Construction - Lifetime Electric Savings and Spending Performance to Goal Through Q4 (2020-2023)



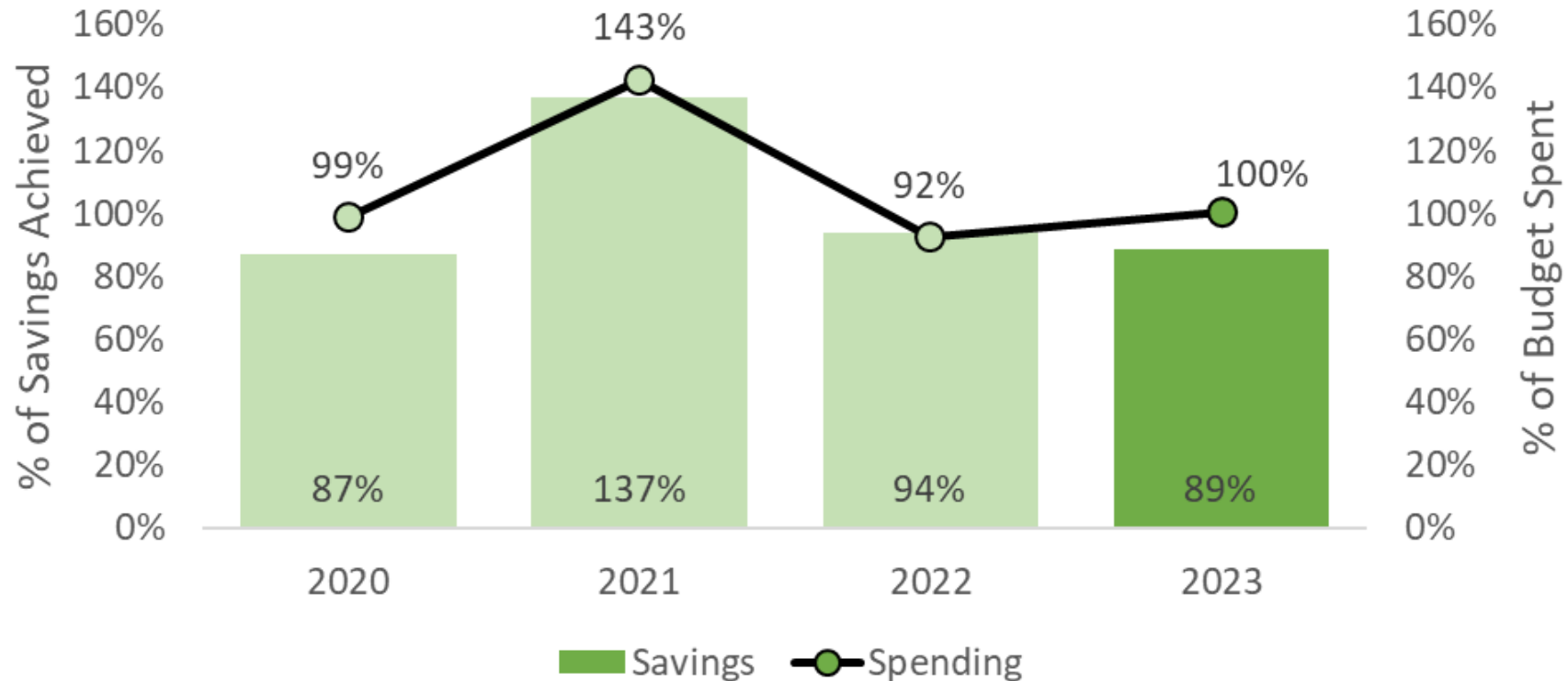
# Electric Res Programs



# Electric Res Programs



EnergyWise Single Family (1-4 Units) - Lifetime Electric Savings and Spending Performance to Goal Through Q4 (2020-2023)

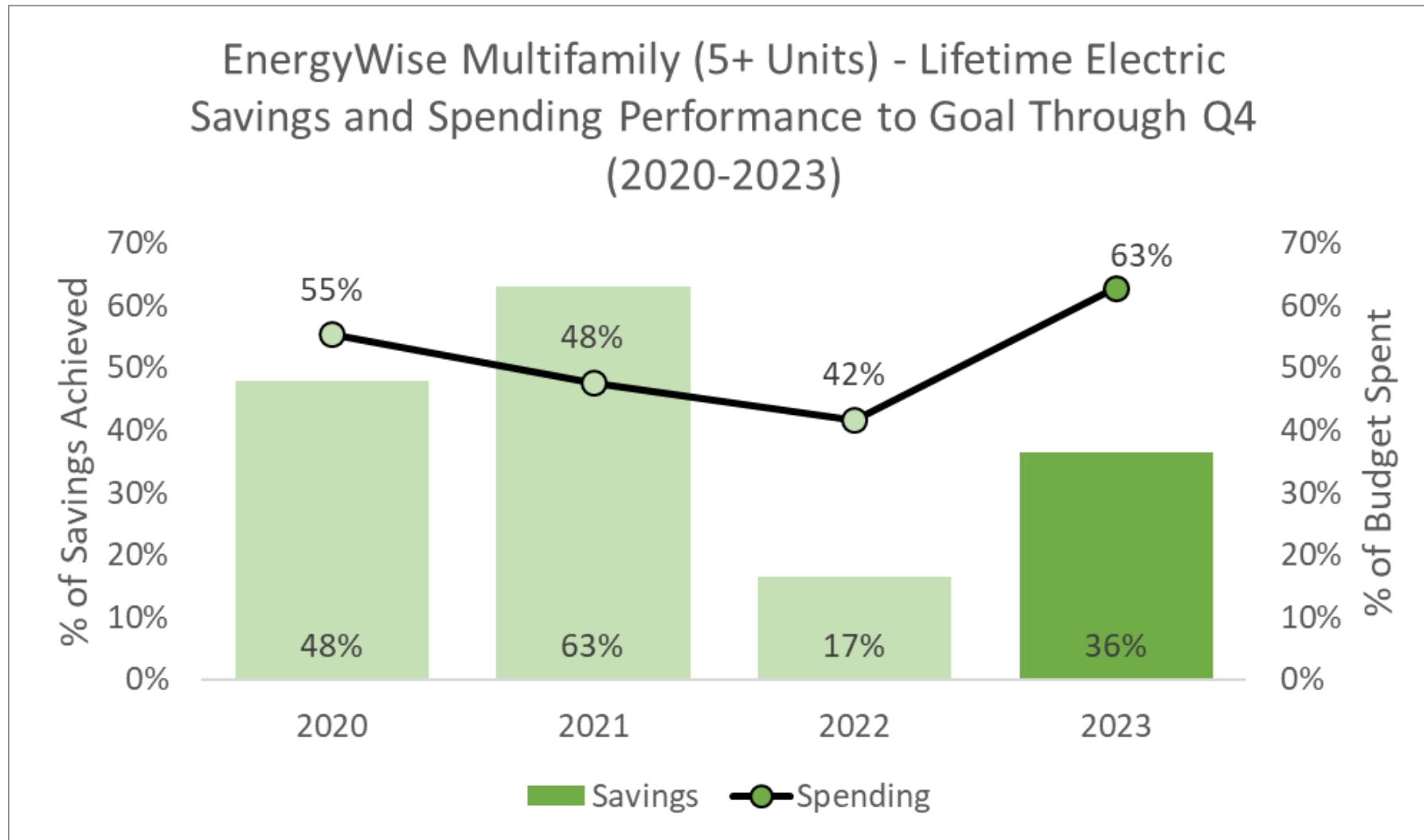




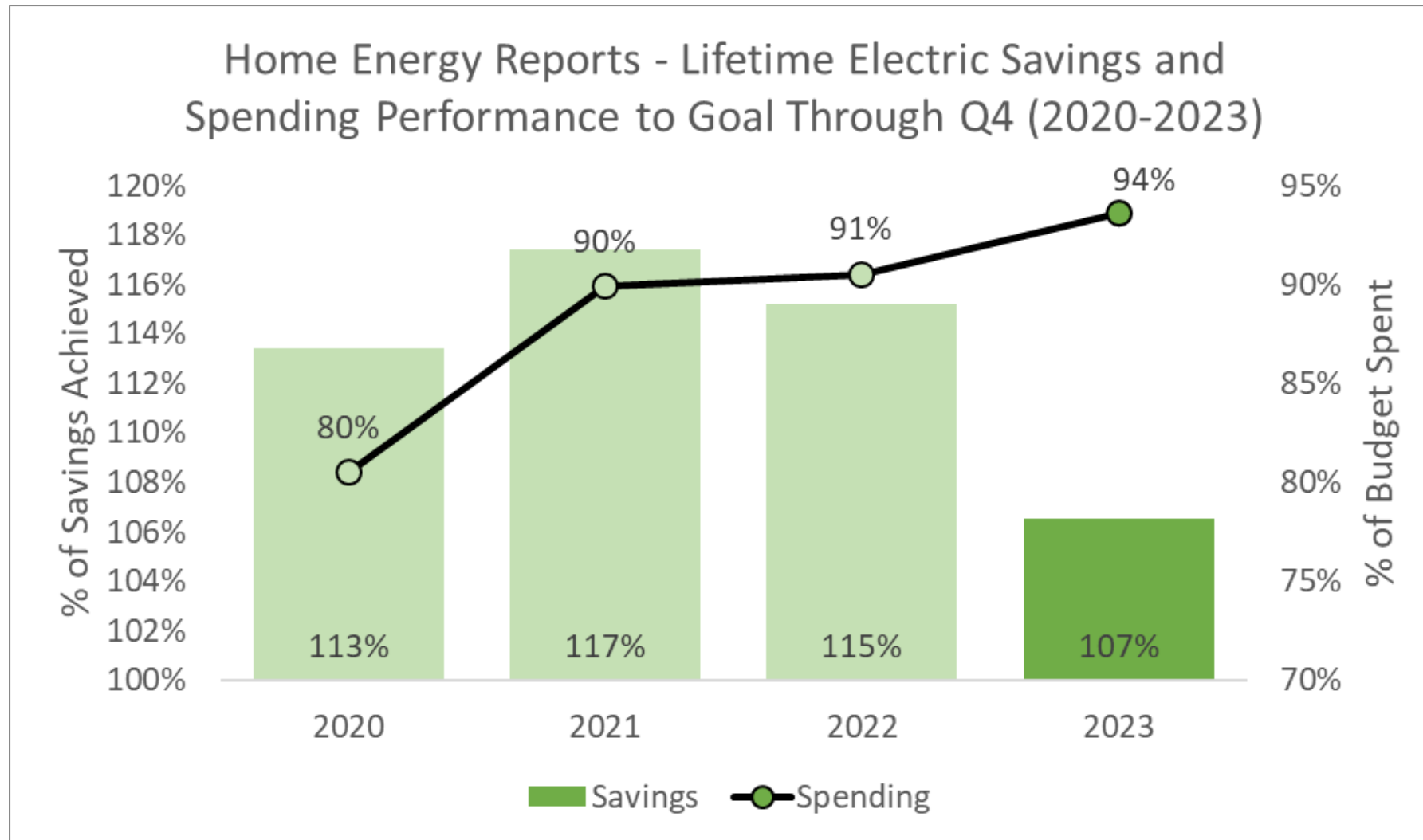
# Electric Res Programs



EnergyWise Multifamily (5+ Units) - Lifetime Electric Savings and Spending Performance to Goal Through Q4 (2020-2023)



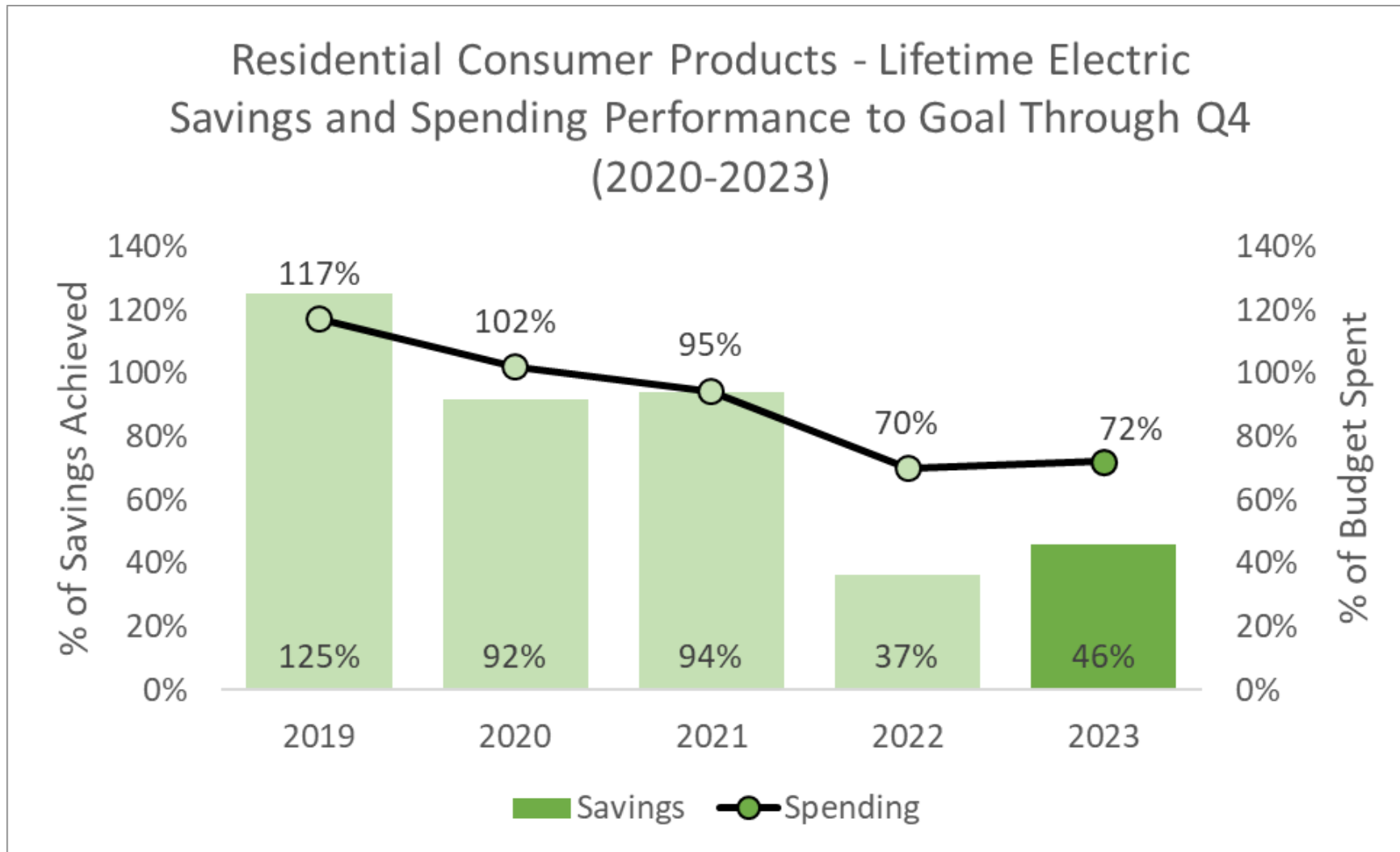
# Electric Res Programs



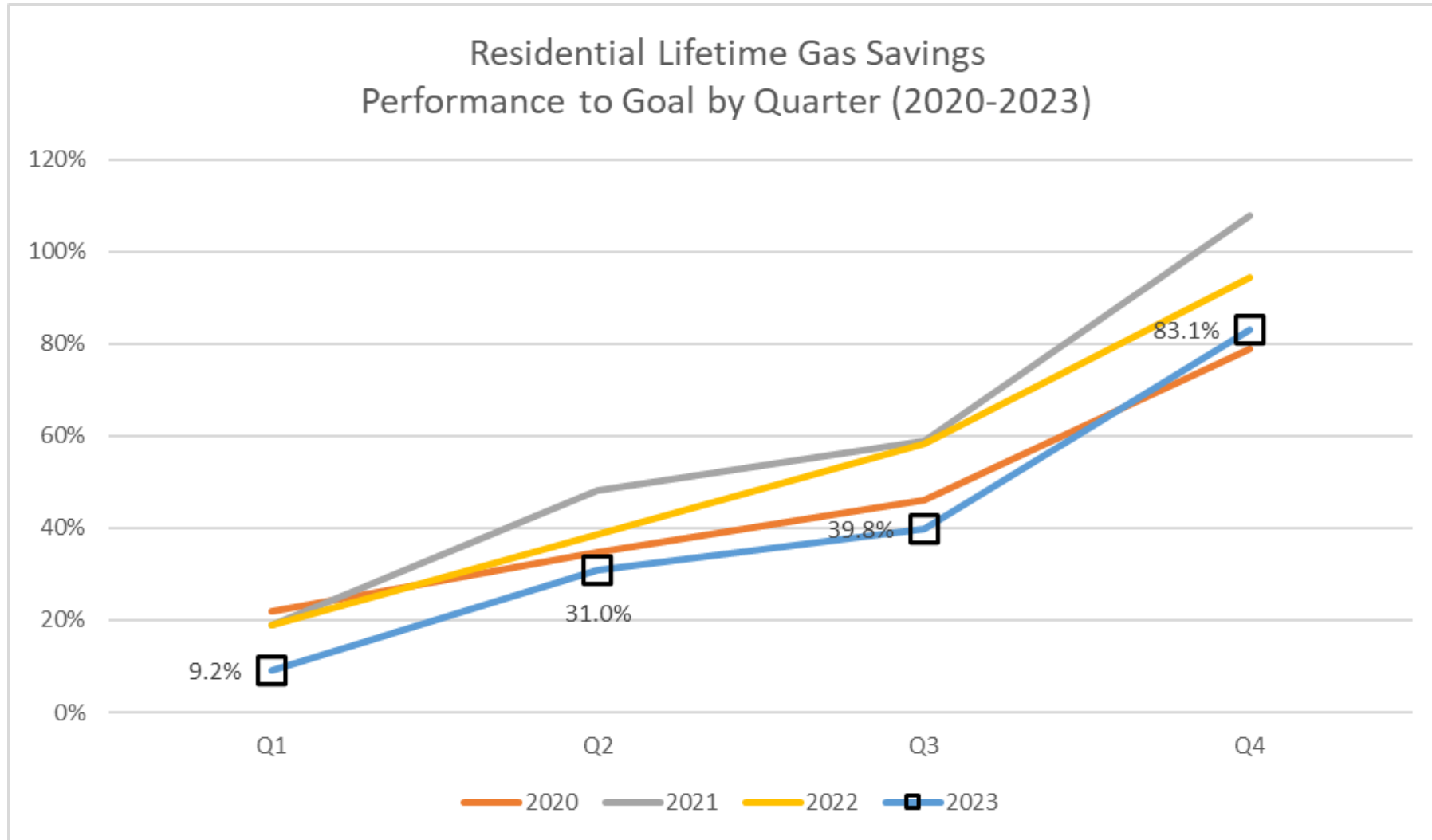
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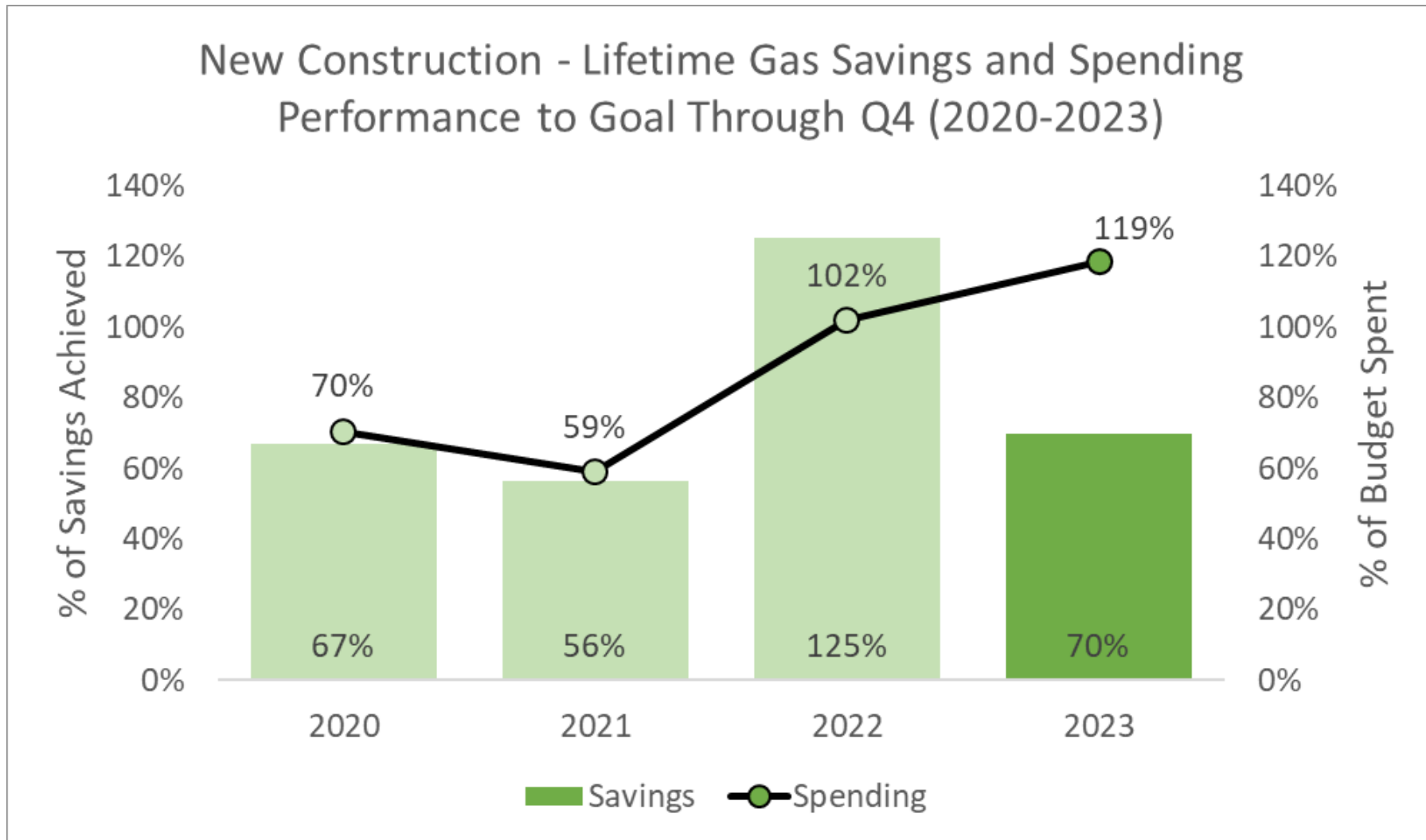
Residential Consumer Products - Lifetime Electric Savings and Spending Performance to Goal Through Q4 (2020-2023)



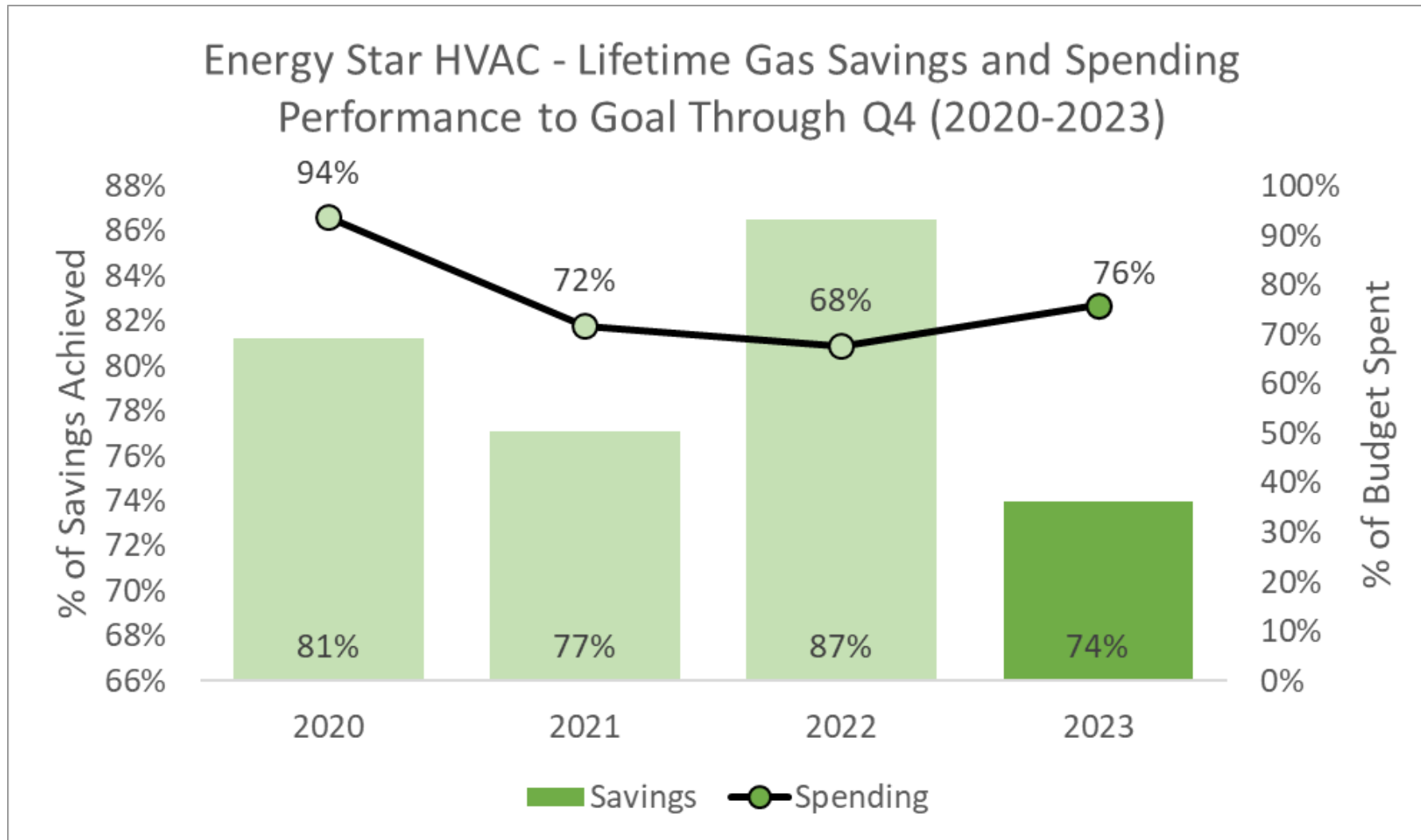
# Gas Res Performance



# Gas Res Programs



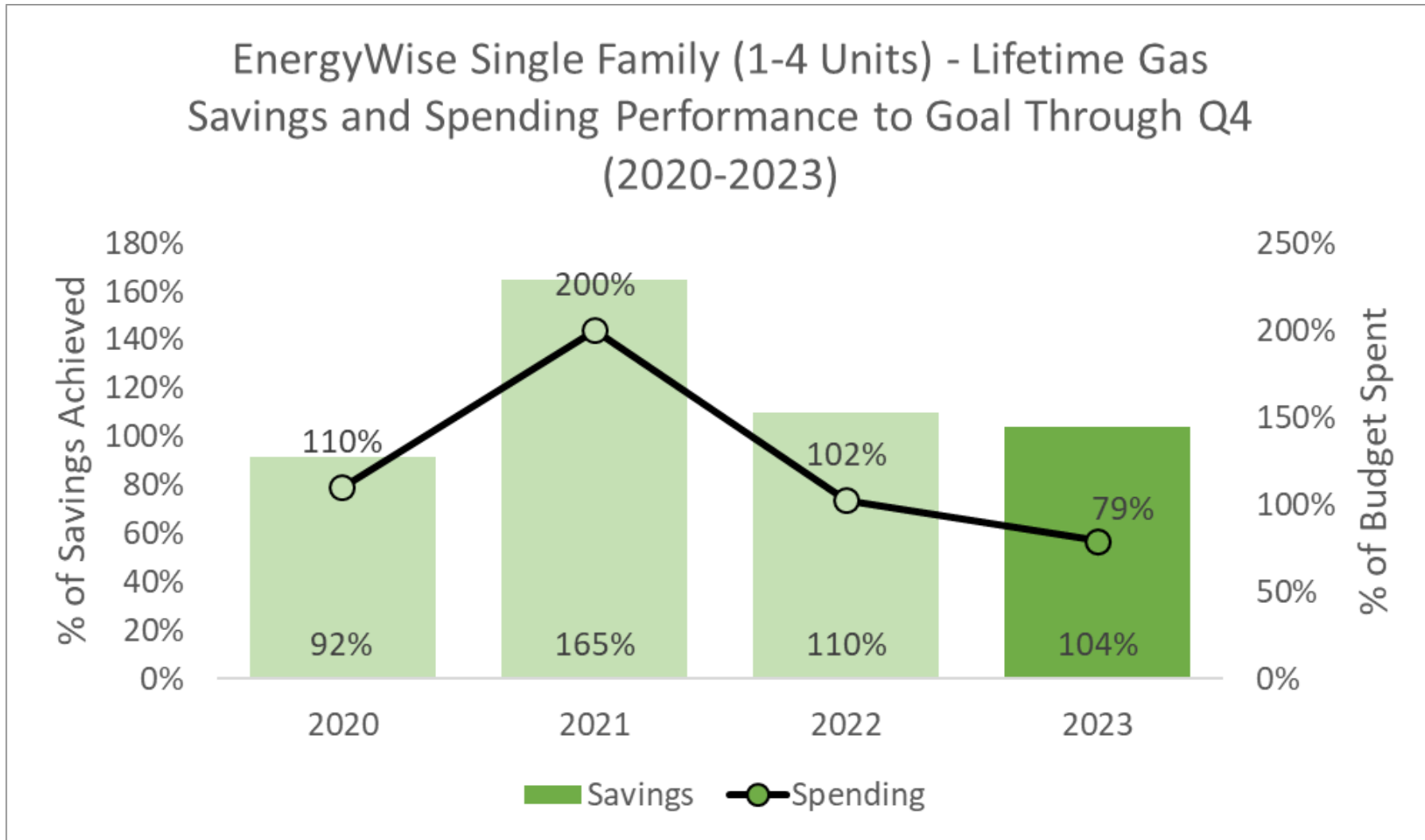
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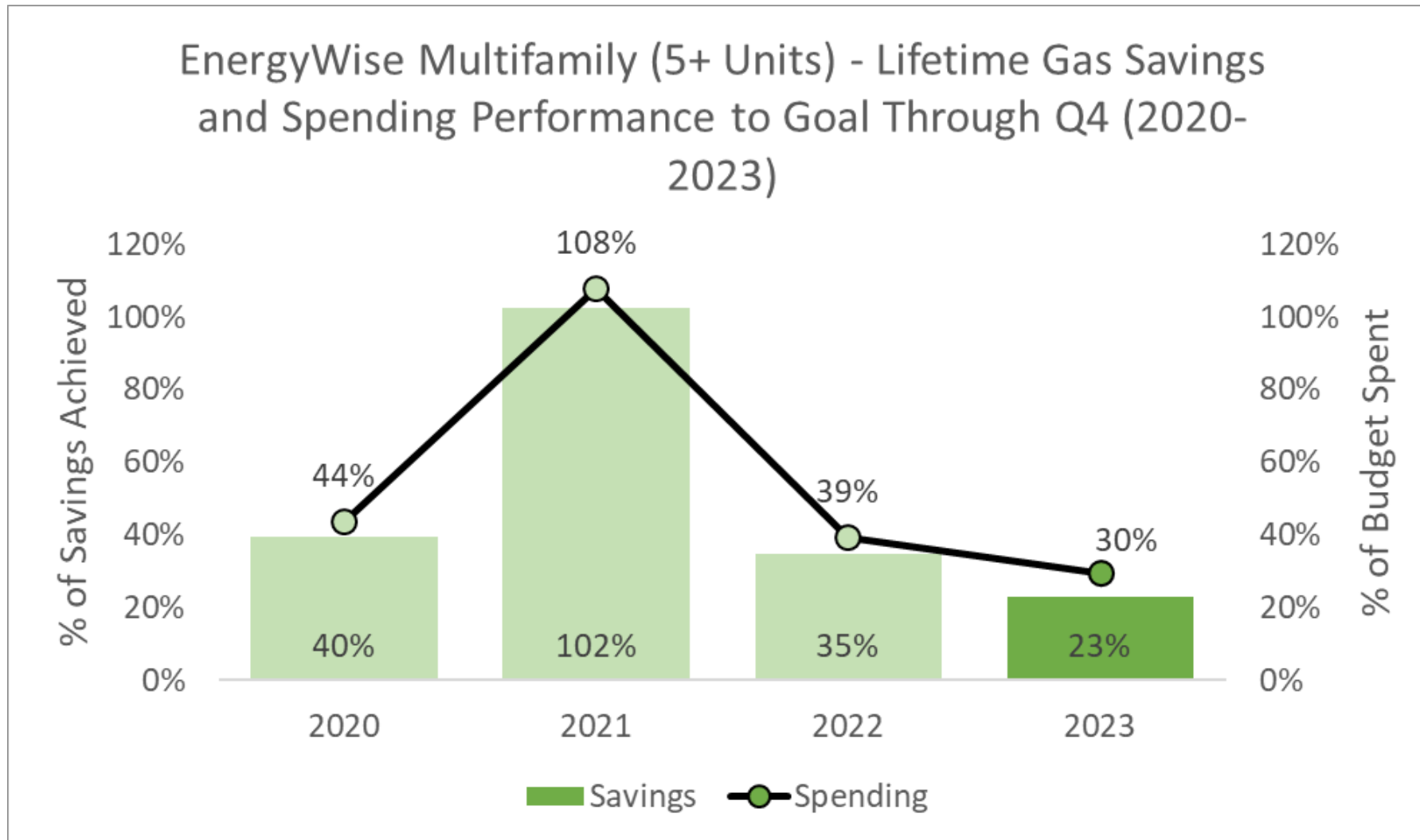
EnergyWise Single Family (1-4 Units) - Lifetime Gas Savings and Spending Performance to Goal Through Q4 (2020-2023)



# Gas Res Programs

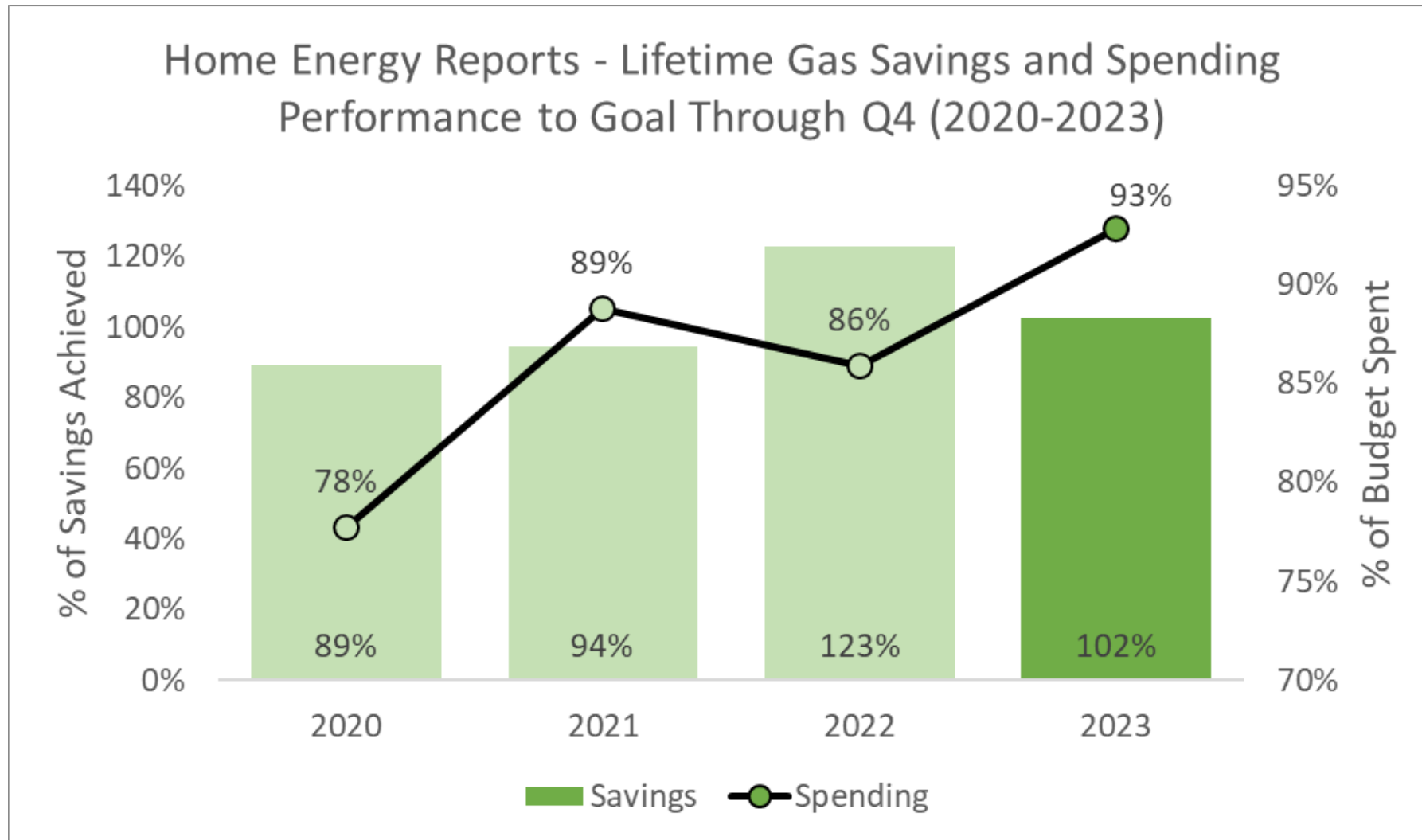


EnergyWise Multifamily (5+ Units) - Lifetime Gas Savings and Spending Performance to Goal Through Q4 (2020-2023)

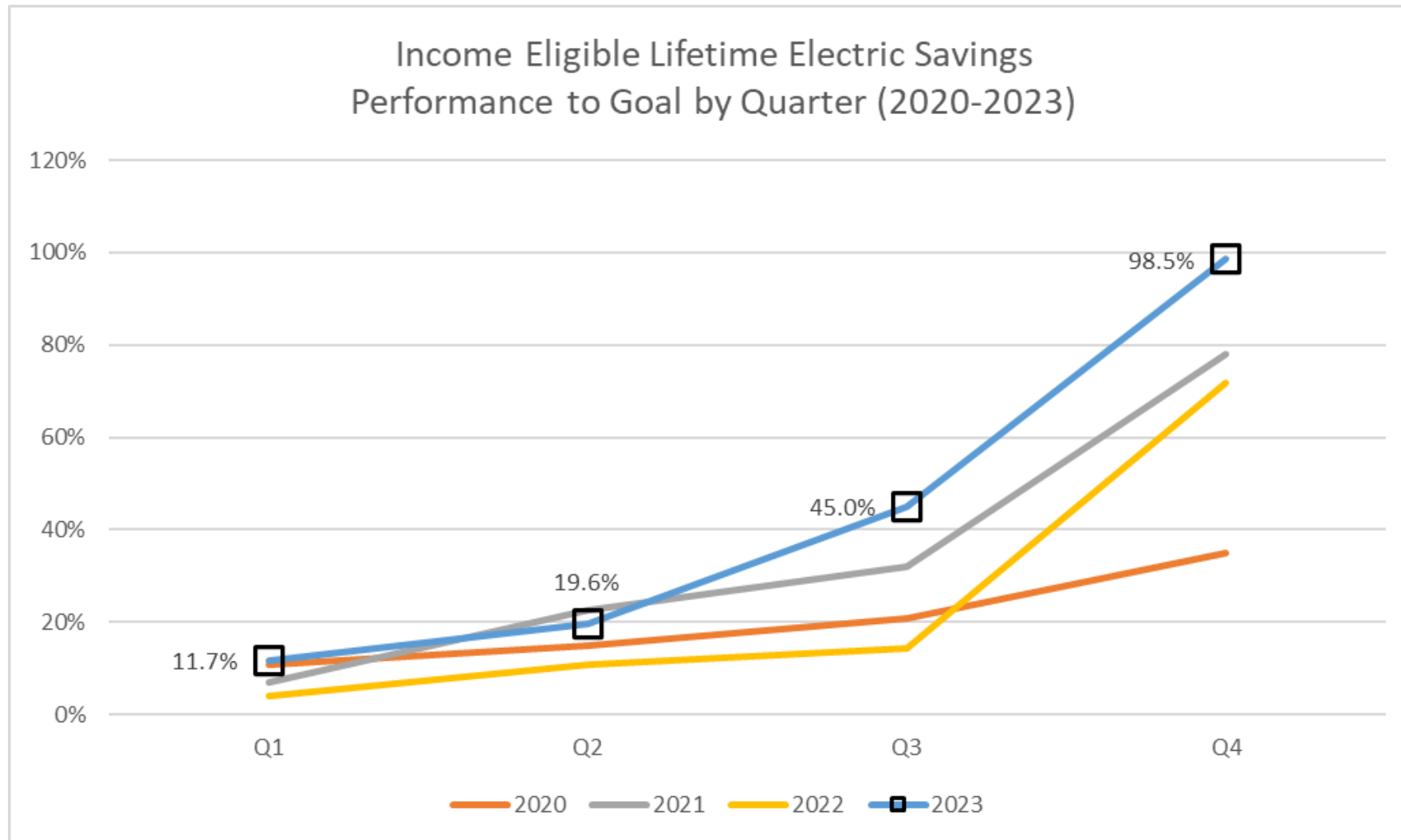




# Gas Res Programs



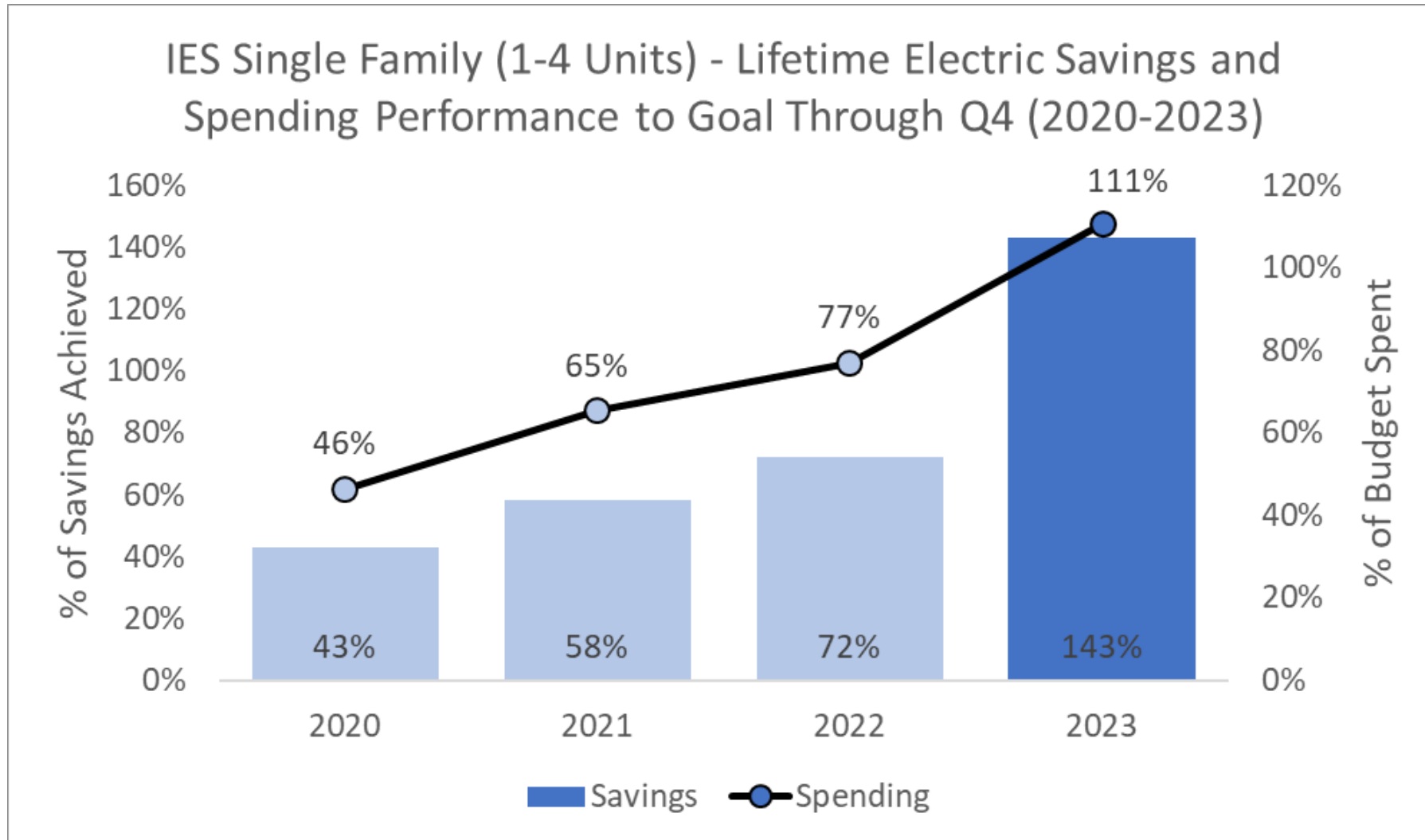
# Electric IE Performance



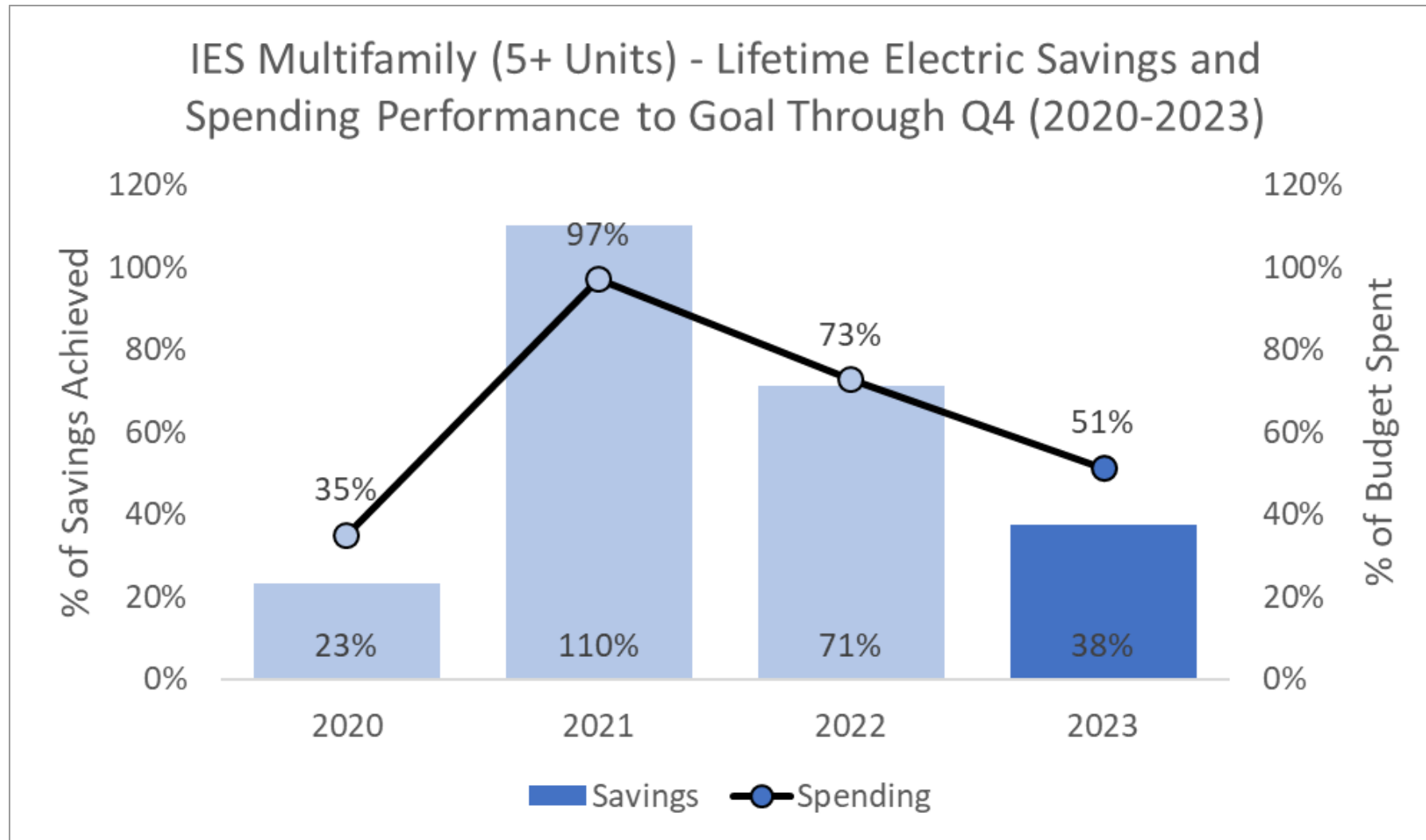
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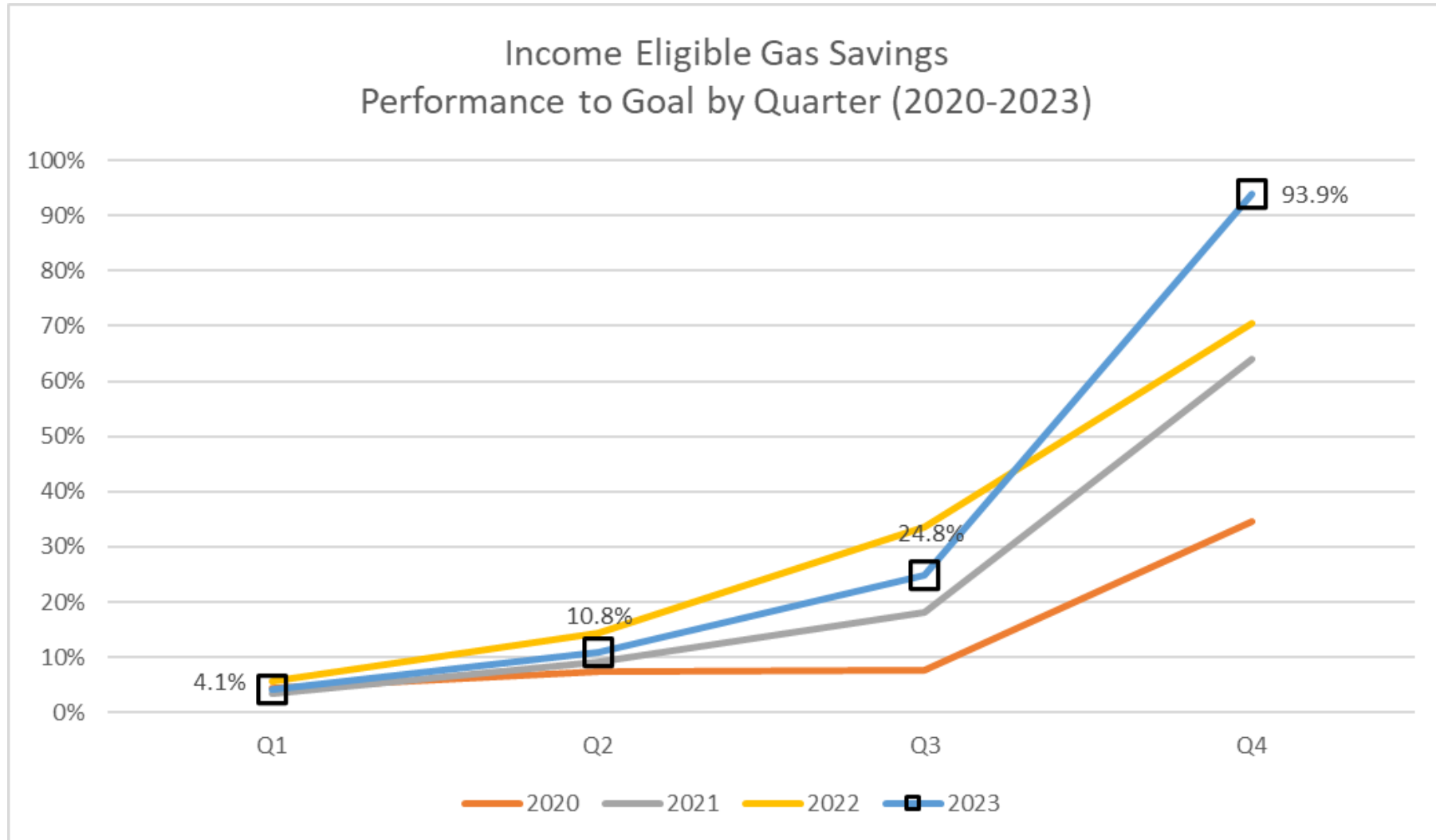
IES Single Family (1-4 Units) - Lifetime Electric Savings and Spending Performance to Goal Through Q4 (2020-2023)



# Electric IE Programs



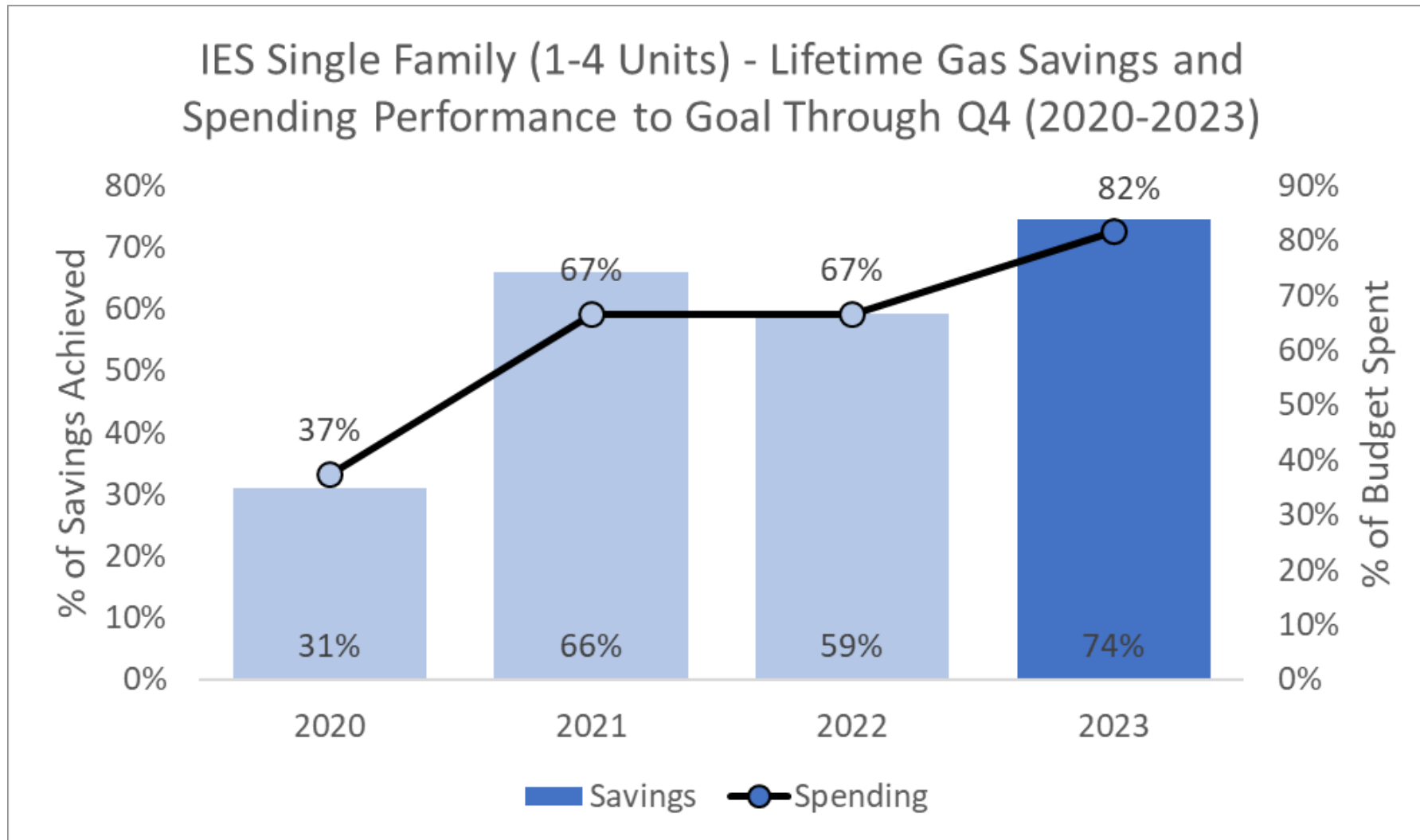
# Gas IE Performance



# Gas IE Programs



IES Single Family (1-4 Units) - Lifetime Gas Savings and Spending Performance to Goal Through Q4 (2020-2023)



# Gas IE Programs

