



STATE OF RHODE ISLAND

ENERGY EFFICIENCY & RESOURCE MANAGEMENT COUNCIL

CONSULTANT TEAM

Consultant Team Initial Review Second Draft of the 2023 Annual Plan

Presented By: EERMC Consultant Team

Date: September 22, 2022



Outline

Overview

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Residential & Income Eligible Review

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Key Updates

OVERVIEW





Review of 1st Draft Key Flags (1)

Large year-over-year cost increases are the focus of sector-level review and content later in this presentation

Equity section now has content, was blank in 1st draft

- 2023 commitments show modest change over 2022 and retain many of the concerns voiced in recent C-Team review of 2022 commitment updates. Those have not been addressed by RIE.
- “The sale of the Company had a direct impact on staffing to support the equity enhancements” – 2023 Plan Second Draft, p.38



Review of 1st Draft Key Flags (2)

The **2022 year-end fund balance forecast** has been discussed, with more detailed data shared by RIE. Some questions remain, but addressable outside Plan proceeding. May warrant faster return of future positive fund balances to ratepayers.

Non-incentive costs have come down by \$2.47M from the first draft, now show a more reasonable 4.8% annual increase for combined gas and electric non-incentive costs.



Portfolio Data

OVERVIEW



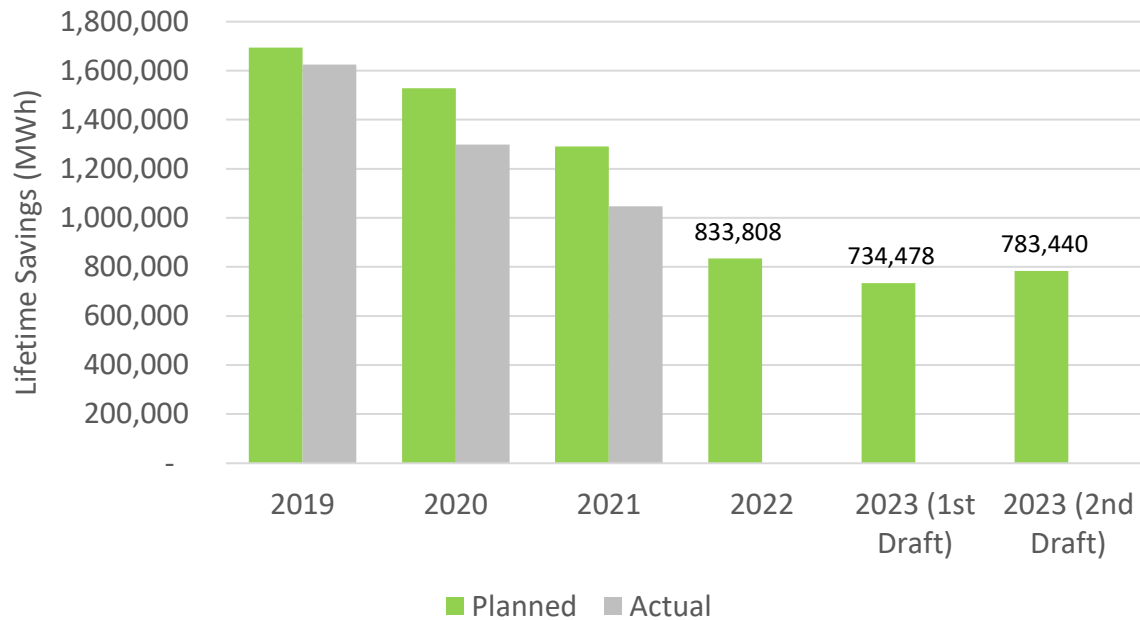


Portfolio Lifetime Savings

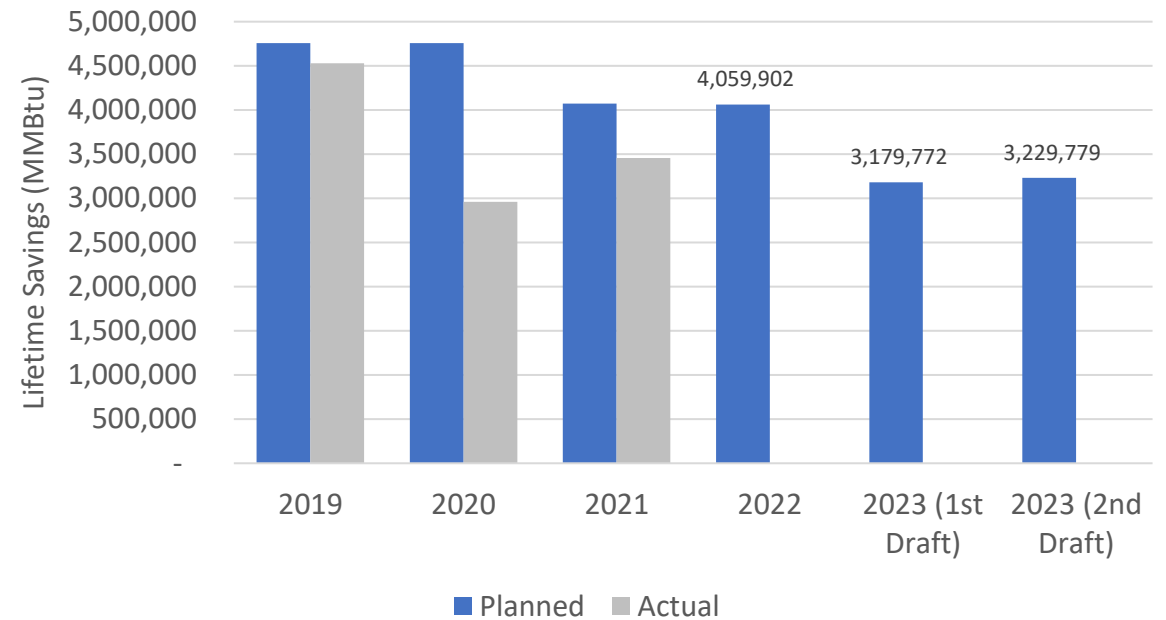
Key Takeaway

Increased lifetime electric (+7%) and gas (+2%) savings between 2023 Plan drafts

Electric Lifetime Savings (MWh) - Portfolio Total



Gas Lifetime Savings (MMBtu) - Portfolio Total

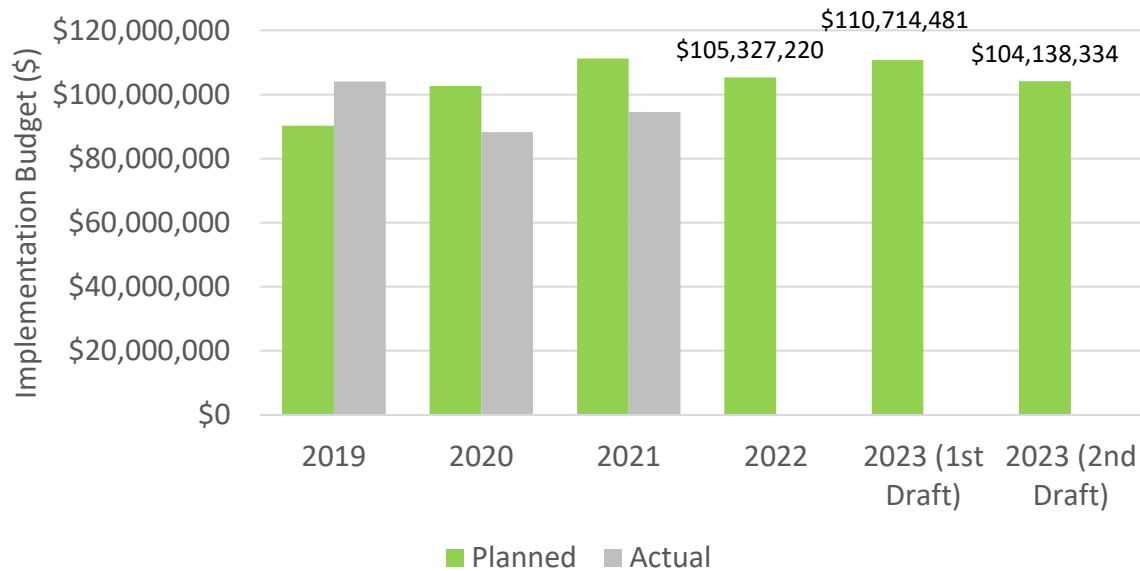




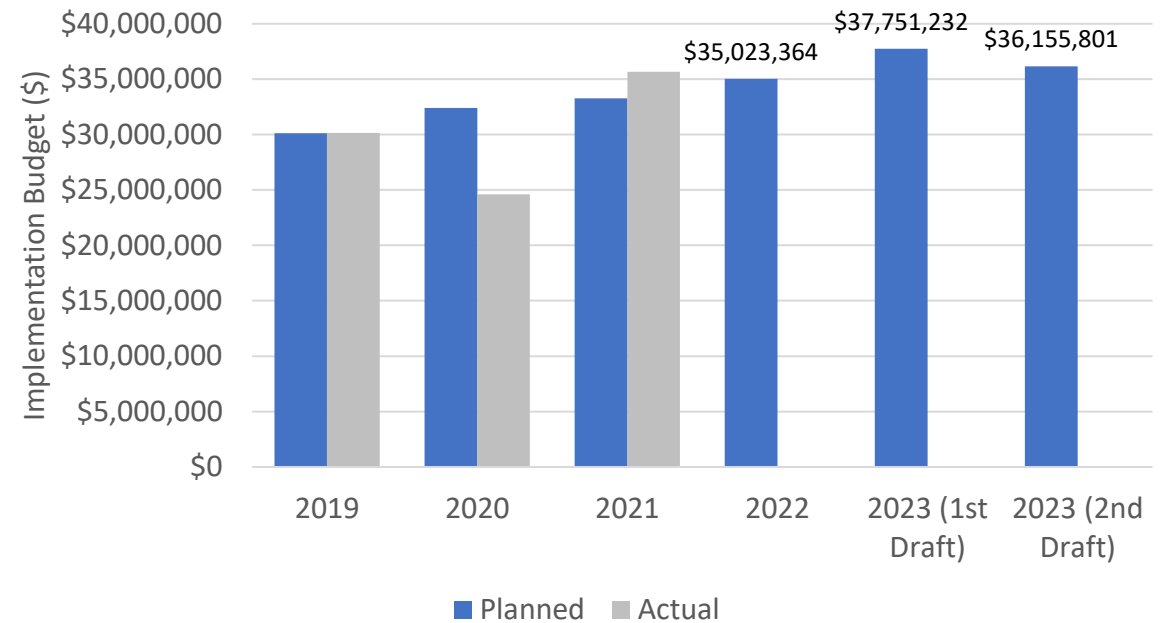
Implementation Budget

Key Takeaway Both electric and gas implementation budgets reduced between 2023 drafts

Electric Implementation Budget (\$) - Portfolio Total



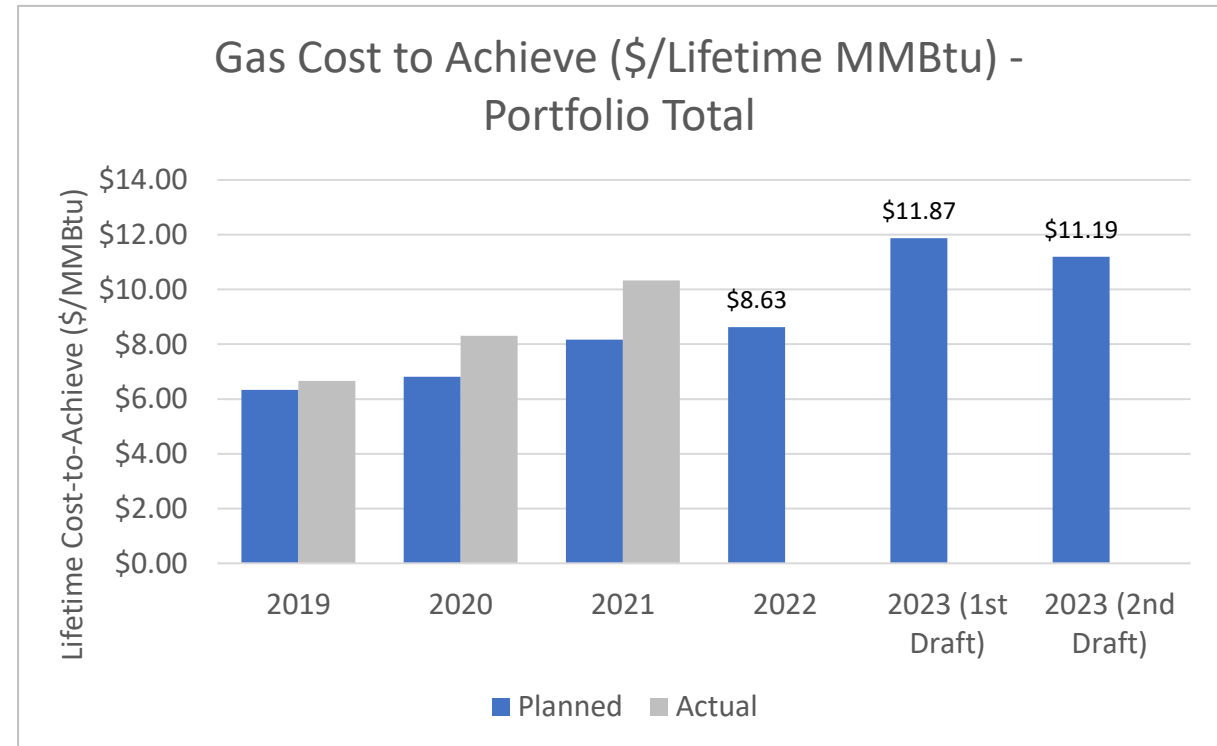
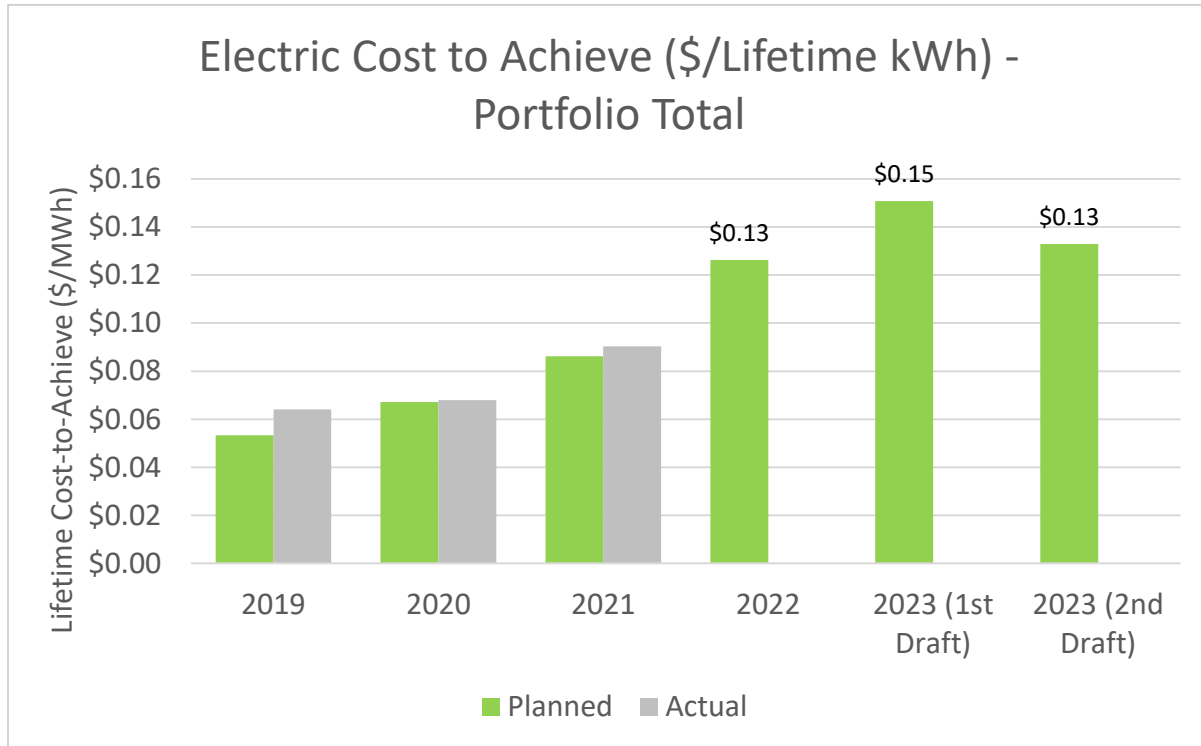
Gas Implementation Budget (\$) - Portfolio Total





Portfolio Cost to Achieve

Key Takeaway Electric cost to achieve 5% above 2022 Plan. Gas cost to achieve still substantially higher than 2022 Plan in 2023 Plan 2nd Draft (+30%)





Council Priorities

OVERVIEW





Six Council Priorities

Priority #1: Align with Three-Year Plan

Priority #2: Comply with LCP Standards

Priority #3: Incorporate Stakeholder Input

Priority #4: Support Equity & Access

Priority #5: Ensure Effective & Efficient Development & Review Process

Priority #6: Give Due Consideration to Act on Climate Mandates



2023 EE Plan Responsiveness to EERMC Priorities

Priorities	Quantitative	Qualitative
Priority #1: Align with Three-Year Plan	Partial – Plan makes reference to Base Case but savings levels below 3YP. Measure mix shifting in right direction.	Not Responsive – Limited specific content despite Council and Stakeholder emphasis. Cost efficiency priority from 3YP in question.
Priority #2: Comply with LCP Standards	TBD – See Cost-Effectiveness Report at next week’s Council meeting	Responsive – Though some opportunities for improvement exist
Priority #3: Incorporate Stakeholder Input	Partial – Collaborative review of costs appreciated; see qualitative assessment & Priority #1 assessment	Not Responsive – Limited specific content from stakeholders incorporated during plan development.
Priority #4: Support Equity & Access	Not Responsive – E.g., lack of quantified commitment metrics and target levels; IES reduced savings & participants	Partial – Equity improved long-term plan content; annual commitments similar. IES CAP referral an improvement, but net impacts unclear & propensity targeting could be reconsidered
Priority #5: Ensure Effective & Efficient Development & Review Process	Not Applicable	Partial – Overall improvement with some items late for 2 nd draft review; degree of responsiveness to 1 st draft feedback a consideration. Councilor perspective?
Priority #6: Give Due Consideration to Act on Climate Mandates	Partial – RIE has included estimate and indicated openness to expanding quantitative GHG metrics in future	TBD – Specific requirements still in development – plan speaks to GHG impacts & references Act on Climate



COMMERCIAL AND INDUSTRIAL SECTOR REVIEW





Key Second Draft Findings

Substantial changes made to electric cost assumptions, primarily Large C&I Retrofit

- Some continued revisions anticipated before filing to resolve remaining measure-level cost increases

Gas acquisition costs remain very high relative to 2022 Plan levels and 2021 actuals

- RIE has indicated intent to revisit and potentially revise gas costs downward

Some program areas lack sufficient context or justification for changes/strategies (e.g., measure costs, C&I Pricing Study)

- “how” and “why” behind program implementation efforts not fully fleshed out. Especially important to assess strategies for delivering non-lighting measures

The Company mentions barriers and supply chain issues without detailing mitigation efforts

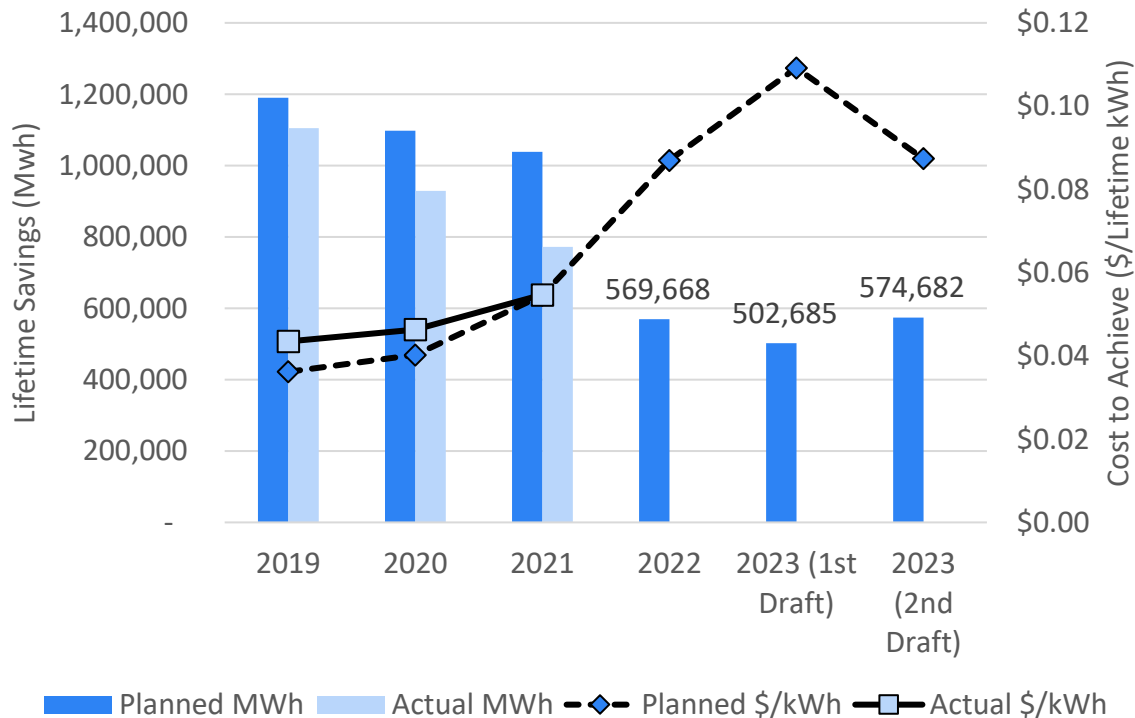
Workforce Needs Assessment delayed until at least end of year 2022



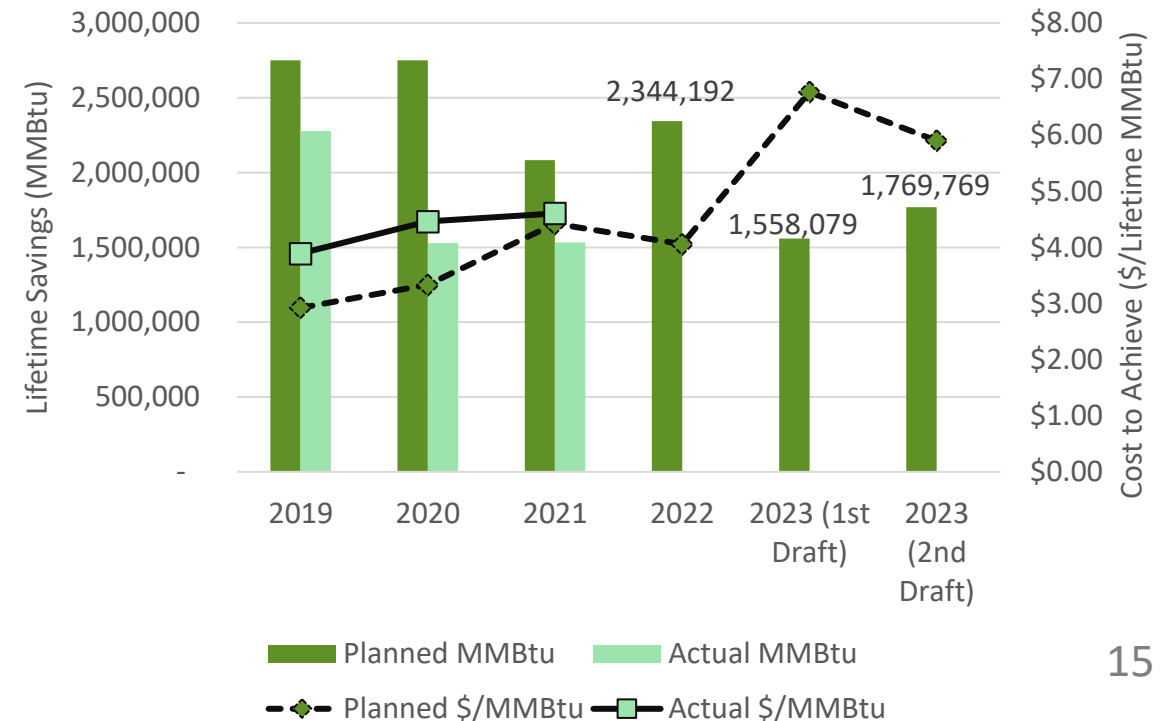
Quantitative Changes

Key Takeaway Electric cost to achieve now matches 2022 Plan for C&I electric sector. Gas cost to achieve still substantially higher than 2022 Plan in 2023 Plan 2nd Draft (+45%)

Lifetime Electric Savings and Cost to Achieve Trends – C&I Sector Total



Lifetime Gas Savings and Cost to Achieve Trends – C&I Sector Total

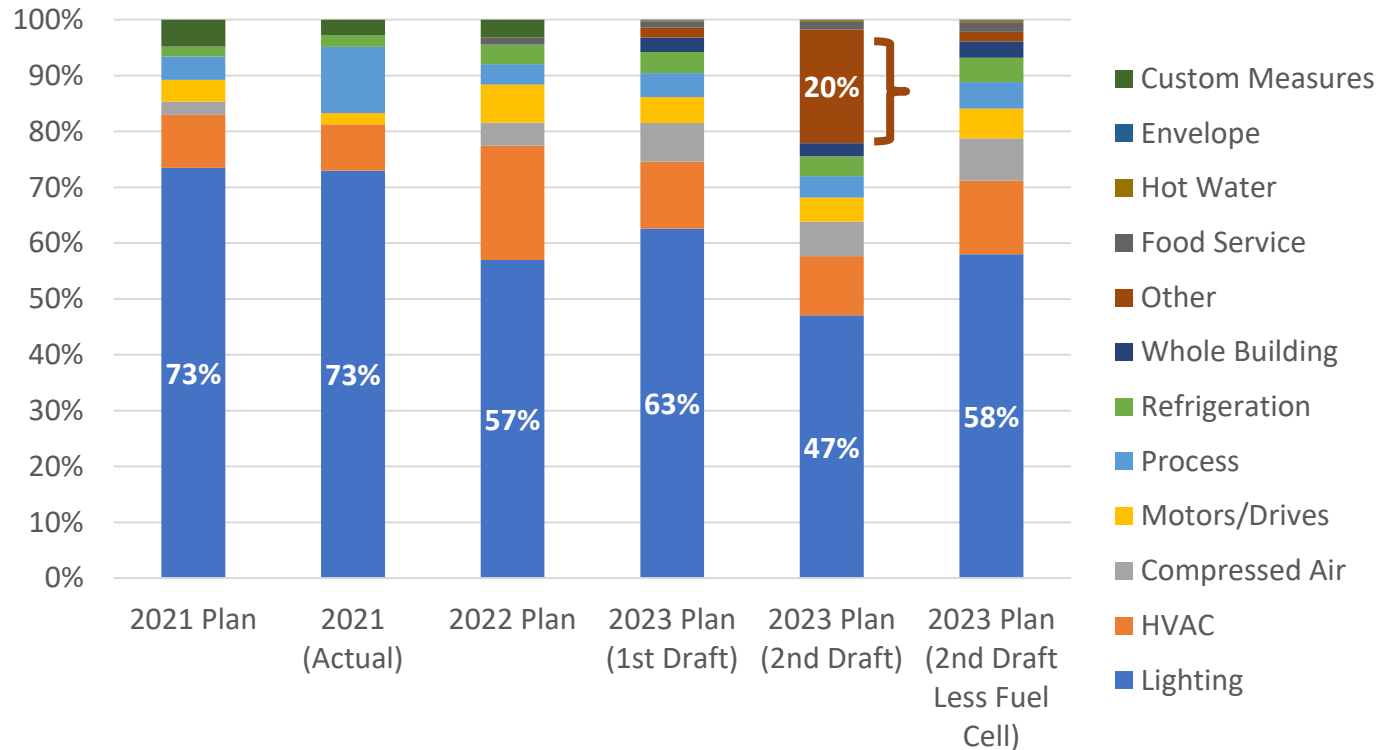




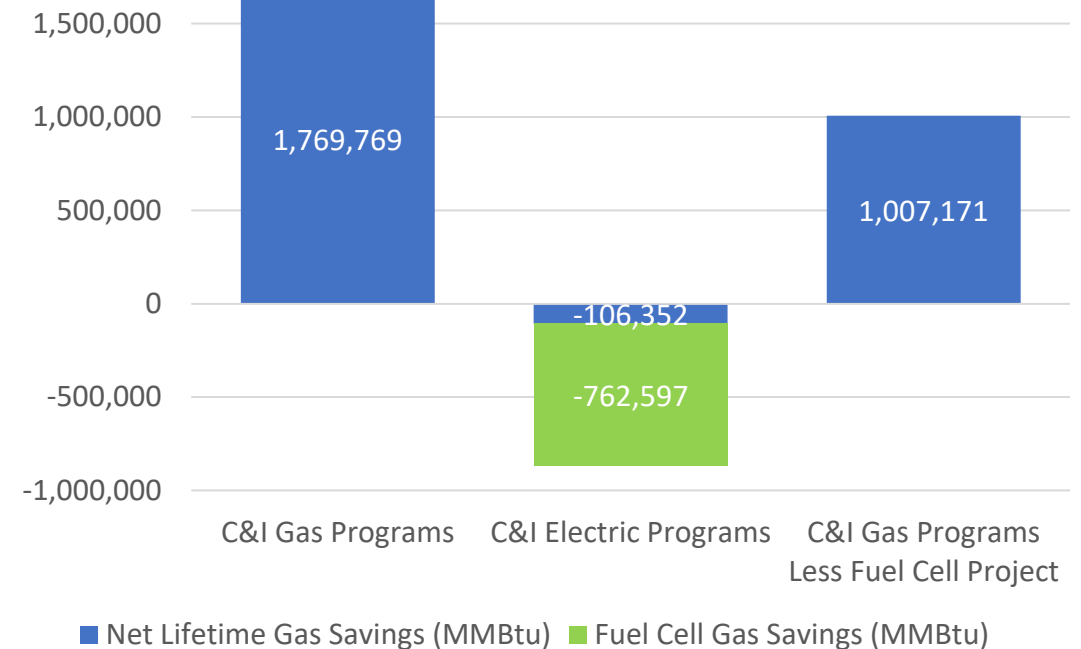
Fuel Cell Project

2 MW Fuel Cell project added in 2023 EE Plan Second Draft, which accounts for 19% of lifetime C&I electric savings, but offsets 43% of lifetime C&I gas savings

Lifetime Electric Savings by End Use, C&I Sector (2021-2023)



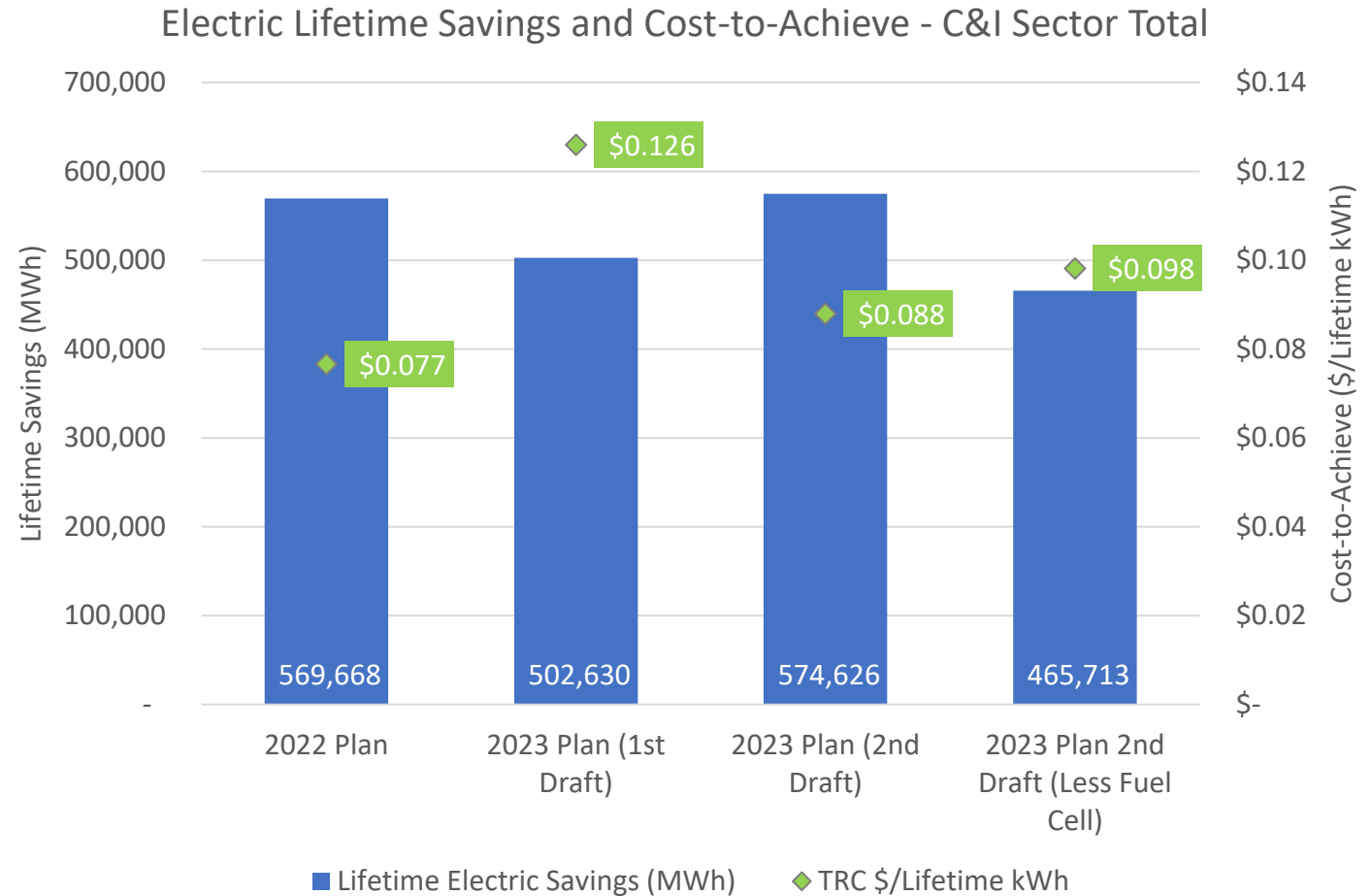
Net Lifetime Gas Savings (MMBtu) - C&I Sector Total





Fuel Cell Project

The project has not yet been analyzed in a Technical Assistance (TA) study nor screened for cost-effectiveness. This means that only preliminary savings and cost estimates are available.





Fuel Cell Project

In the event the Fuel Cell project is not implemented, planned C&I savings would decrease by 18% and cost-to-achieve would increase by 28% compared to the 2022 Plan

Plan Year	Lifetime Electric Savings (MWh)	TRC \$/Lifetime kWh
2022 Plan	569,668	\$0.077
2023 Plan 2 nd Draft	574,626	\$0.088
Fuel Cell Project	108,913	\$0.044
2023 Plan 2 nd Draft w/o Fuel Cell	465,713	\$0.098
2022 Plan to 2023 Plan 2nd Draft w/o Fuel Cell	-103,955 (-18%)	+0.022 (+28%)



C&I – Cost Trend Analysis

Key Takeaway Benchmarking of planned to actual costs only performed for electric Large C&I Retrofit, which is the only electric program that saw a notable decrease in project cost coverage

Incentive as a Share of Total Resource Cost

Electric Program	2022 Plan	2023 Plan (1 st Draft)	2023 Plan (2 nd Draft)
Large C&I New Construction	90%	92%	90%
Large C&I Retrofit	69%	74%	55%
Small Business Direct Install	80%	80%	80%
Electric C&I Sector Total	75%	78%	64%

Gas Program	2022 Plan	2023 Plan (1 st Draft)	2023 Plan (2 nd Draft)
Large C&I New Construction	87%	94%	113%
Large C&I Retrofit	47%	46%	46%
Small Business Direct Install	77%	78%	78%
C&I Multifamily	90%	60%	68%
Gas C&I Sector Total	61%	56%	62%



C&I – Cross-Jurisdictional Cost Comparison

Mapping to National Grid MA 2022-2024 Plan BCR Models to benchmark RI cost assumptions. Gas measure incentive costs significantly higher in RI – top ~40% saving Retrofit measures shown

Measure	Percent of Total RI C&I Lifetime Gas Savings	RI Incentive Cost per Gross Annual MMBtu	MA Incentive Cost per Gross Annual MMBtu	Multiple (RI Compared to MA)
Heat Recovery - All, Year Round, and Seasonal	8.3%	\$48.19	\$20.00	2.4x
Wi-Fi Thermostats	7.5%	\$30.00	\$14.34	2.1x
CUSTOM - OTHER	6.8%	\$44.67	\$19.80	2.3x
HVAC Equipment	6.3%	\$36.14	\$20.50	1.8
Thermostats	5.0%	\$30.00	\$19.32	1.6
Custom Steam Traps	2.9%	\$12.50	\$10.20	1.2
HVAC Controls and EMS	1.8%	\$36.14	\$24.00	1.5
Ventilation Reduction	1.7%	\$30.12	\$24.00	1.3
Prescriptive Steam Traps	0.4%	\$22.00	\$44.44	0.5



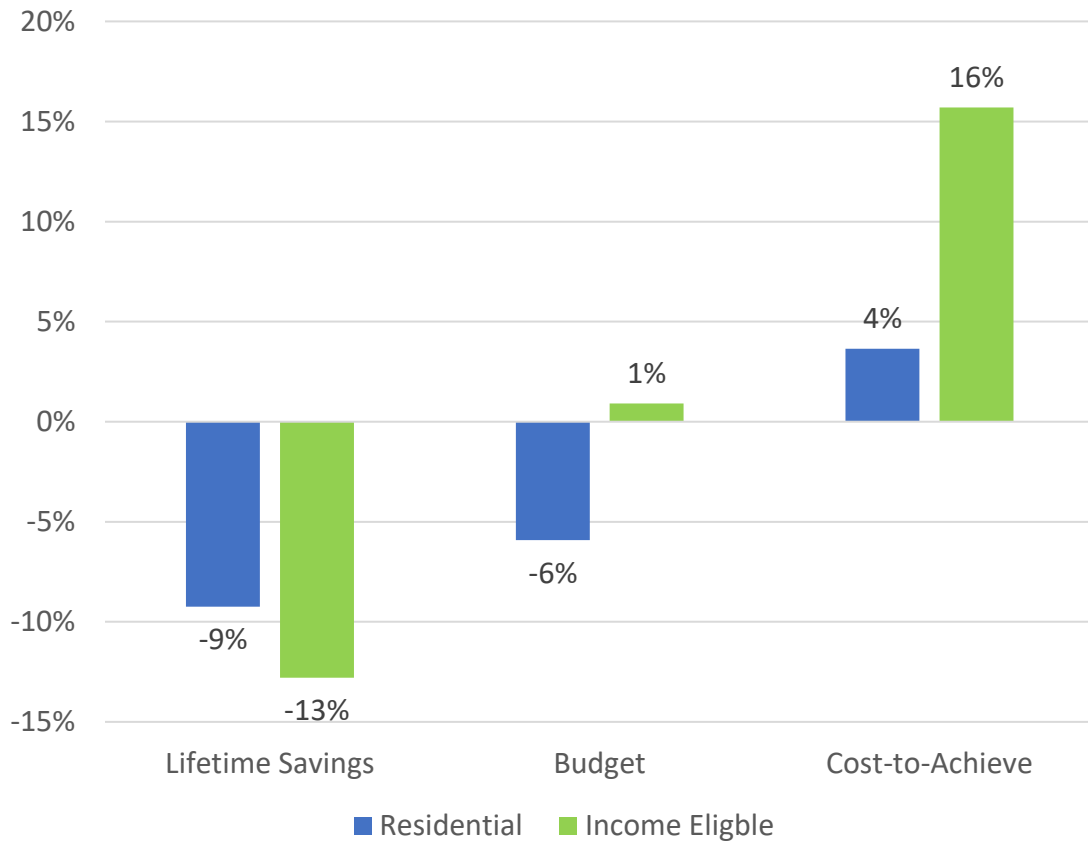
RESIDENTIAL SECTOR REVIEW



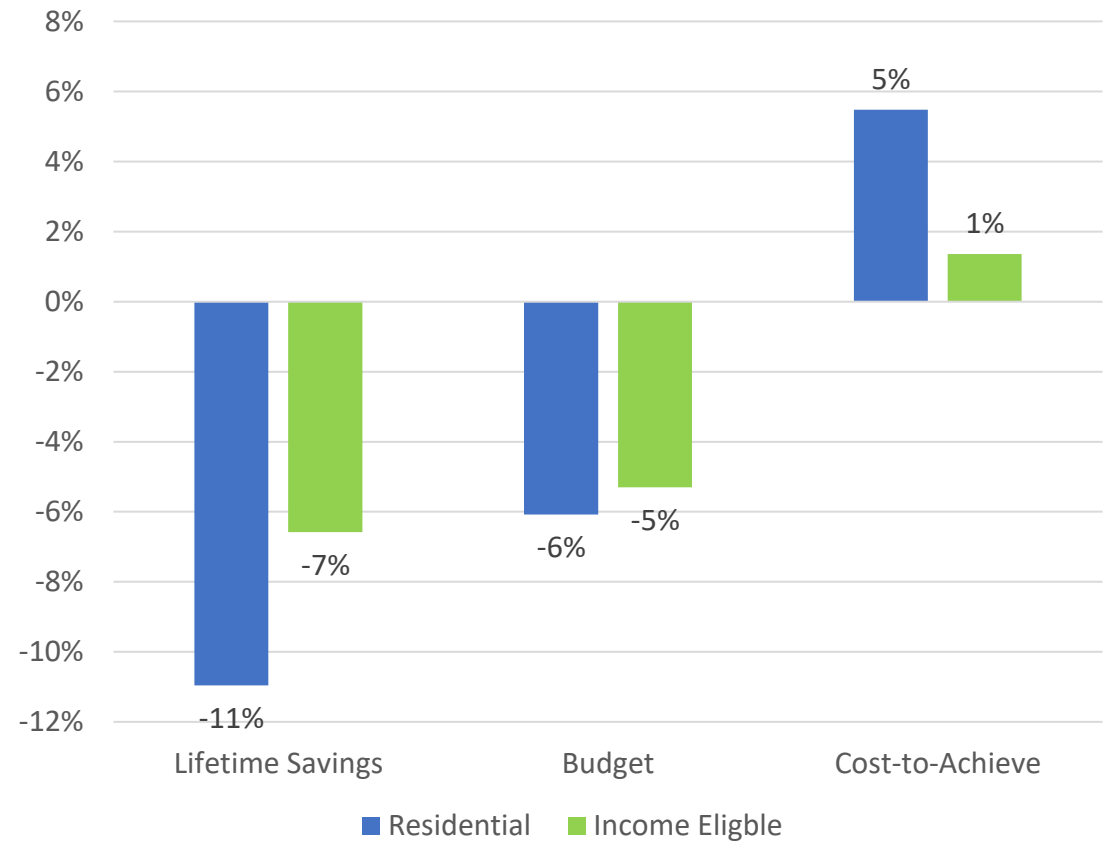


High Level Sector Overview

Electric Programs Compared to 2023 First Draft



Gas Programs Compared to 2023 First Draft





Key Qualitative Improvements

Specific detail on five communities that will be the focus of enhanced and targeted outreach

- Align with RI DEM list of Environmental Justice Focus Areas
- Initiative to allow non-participants in census tracts to participate in low- and moderate-income offerings without income verification

Addition of delivered fuel switching option for income-eligible properties with end-of-life heating systems

- Plan to work with supporting stakeholders to identify where funding can be leveraged to aid in this deployment

Commitment to align and coordinate with state heat pump program offerings



Outstanding Qualitative Concerns

Multifamily

- Addressing Multifamily customers with low-propensity scores in particular needs more attention to detail

Income Eligible

- Connection between key-performance indicator tracking and reporting with CAPs, and improving CAP performance not sufficiently justified
- Concerns raised about Inter-agency CAP referral process remain
- Comment response from RIE indicates plan to train staff to be able to provide both appliance and weatherization audits simultaneously, but no commitment in Plan to do so

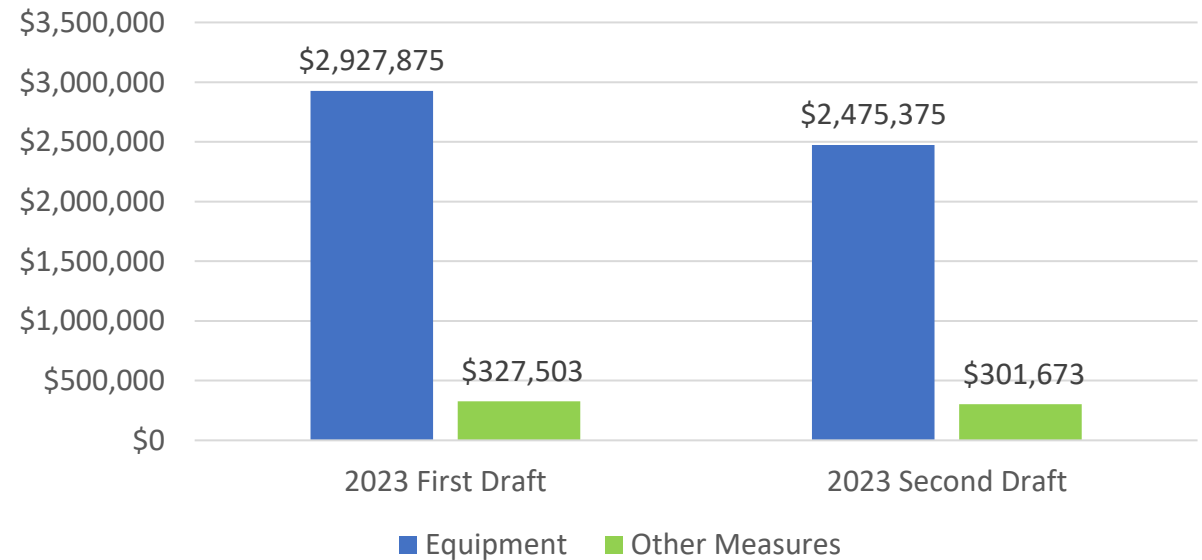


Outstanding Quantitative Concerns (1)

HVAC Measure Mix

- No clear plan for phasing out support for gas equipment despite being a key area of concern raised by multiple stakeholders
- Electric HVAC program will continue to support Central ACs; this support should be dropped in favor of central HPs

Gas HVAC Program Incentives - Equipment vs. Other Measures



Measure	2023 Plan First Draft	2023 Plan Second Draft
Central AC	220	220
Central Heat Pump	35	35



Outstanding Quantitative Concerns (2)

Company has provided sufficient justification for increases in weatherization costs, but other increases in Income Eligible SF Electric are best guess estimates

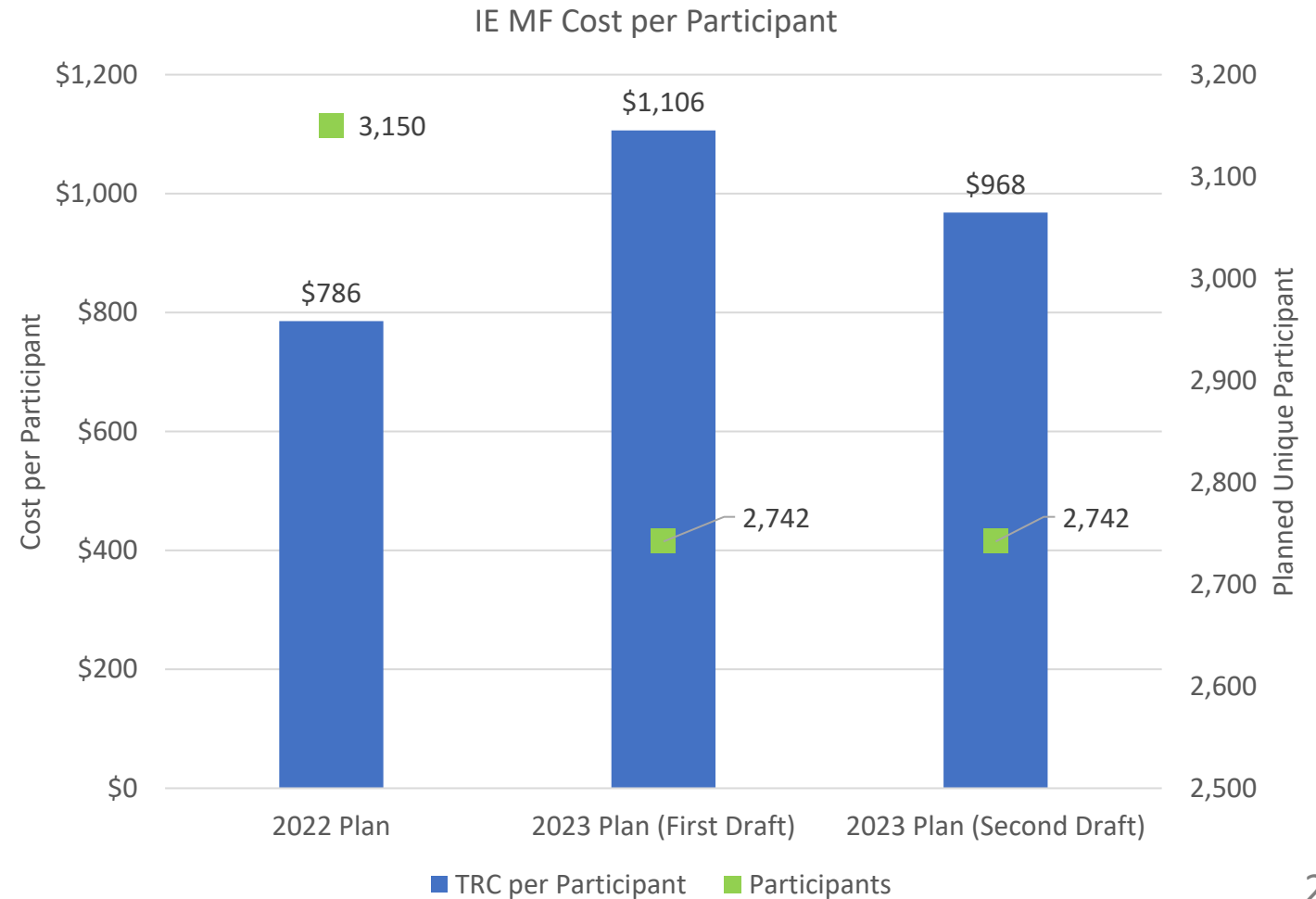
Measure	2022 Plan TRC	2023 Plan TRC	Delta	% Change
Clothes Washers	\$700	\$770	\$70	+10%
AC Replacement	\$350	\$385	\$35	+10%
Dehumidifier	\$250	\$275	\$25	+10%
Heating System Replacement	\$5,000	\$5,500	\$500	+10%
Freezer	\$550	\$600	\$50	+9%
Refrigerator	\$1,050	\$1,100	\$50	+5%



Outstanding Quantitative Concerns (3)

Average cost per Income Eligible Multifamily participant improved from first draft of plan...

...but remains over 20% higher compared to 2022 Plan





New Quantitative Concerns (1)

Cost and savings assumptions for Income Eligible Multifamily CHP based on projects completed in recent years

However, planning assumptions do not account for fuel utilization that would result in reduced benefits

Net benefits and carbon reductions for these project(s) are not fully represented in modeling



New Quantitative Concerns (2)

Rebates and Other Customer Incentives in Table E-2 appear to be under-represented for some programs

- RI Energy acknowledges this concern is working to resolve it

Program	Incentives in Table E-2	Sum of Incentives in BC Model	Difference
Income Eligible Single Family (Electric)	\$10,049,616	\$10,575,315	\$525,699
Income Eligible Multifamily (Electric)	\$2,602,065	\$3,502,065	\$900,000
EnergyWise Multifamily (Electric)	\$863,451	\$903,531	\$40,808
Residential New Construction (Gas)	\$357,710	\$358,460	\$750



PREVIEW OF COUNCIL VOTE





Council's Responsibility

EERMC role and responsibility in potentially endorsing the Plan as described in the LCP Standards:

“

The Council shall vote whether to endorse the Annual EE Plan prior to the prescribed filing date. If the Council does not endorse the Annual EE Plan, the Council shall document its reasons and submit comments on the Annual EE Plan to the PUC for its consideration in final review of the Annual Plan.

”

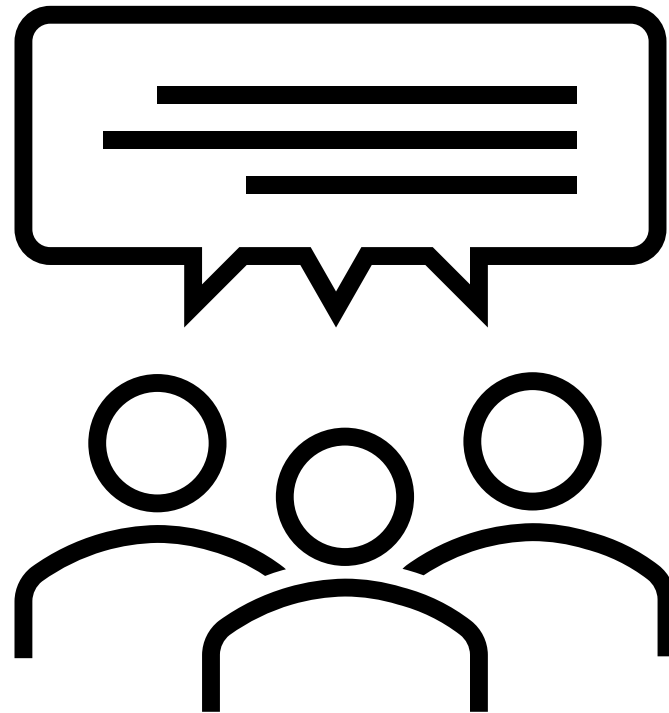


Summary of 2022 Plan Vote Options

1. **Endorse the EE Plan**, as has been the case in all previous years. Endorsement may also list Council's concerns that didn't prevent endorsement but warrant mentioning.
2. **Endorse the EE Plan**, but decline to join any Settlement of the Parties. Represents a strong statement of the EERMC's concerns.
3. **Not endorse the EE Plan**, but indicate that if specific condition(s) are met it would be endorsed.
4. **Not endorse the EE Plan**, and provide a list of reasons why it was not endorsed for PUC consideration in its final review of the EE Plan.



Council Member Discussion





APPENDICES





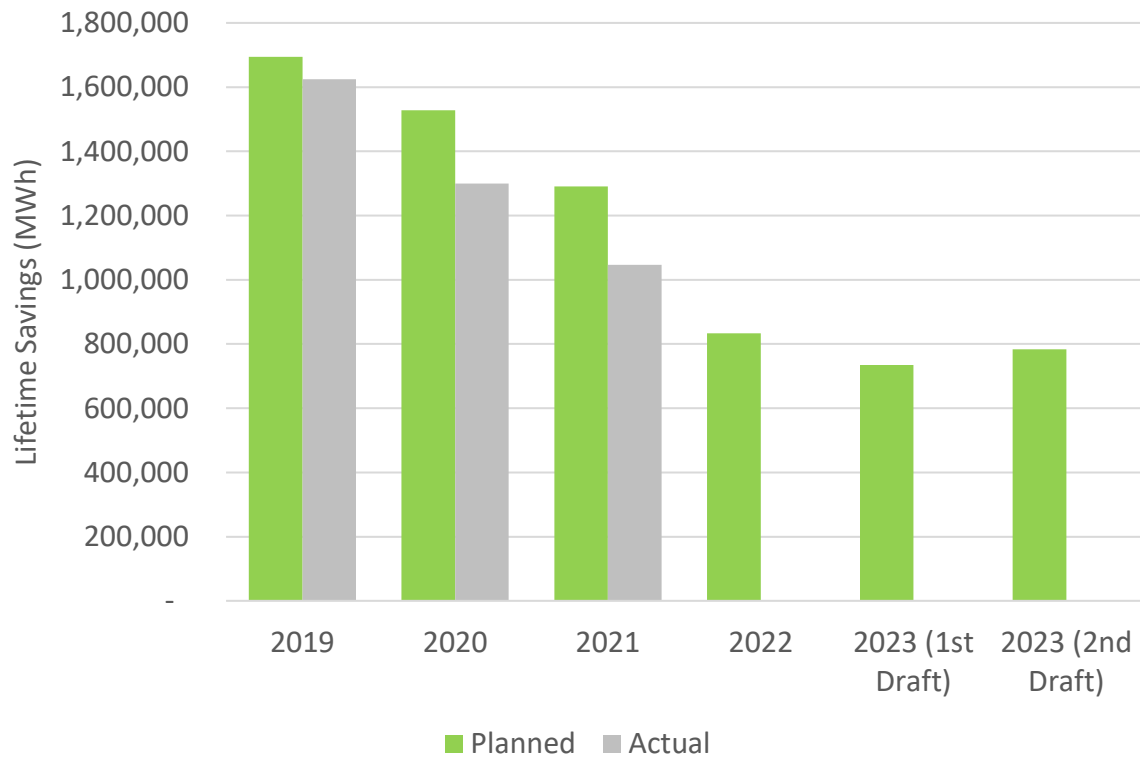
PORTFOLIO DATA



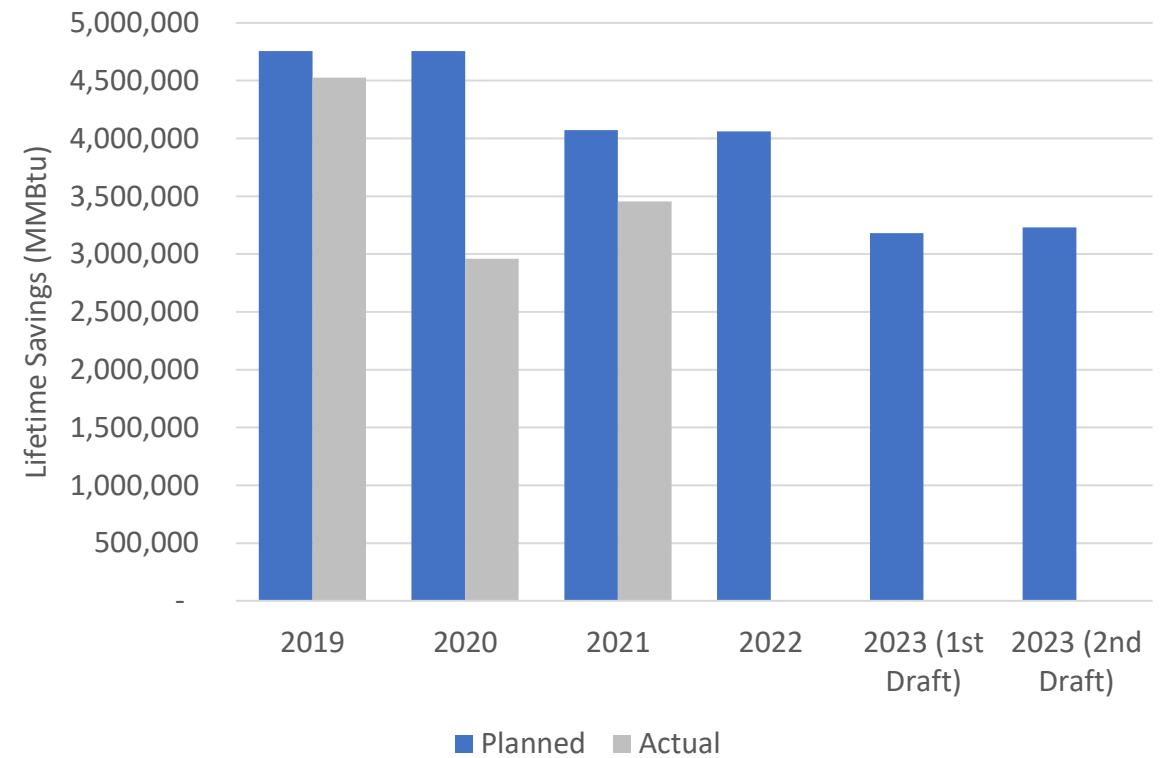


Portfolio Lifetime Savings

Electric Lifetime Savings (MWh) - Portfolio Total



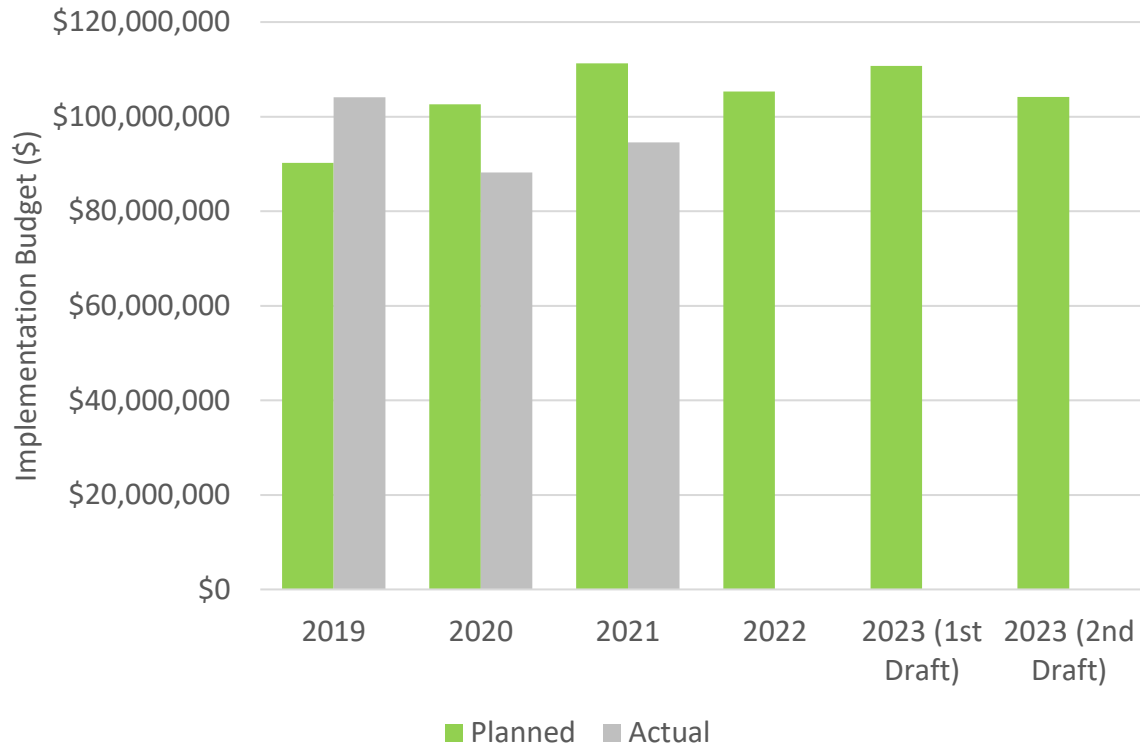
Gas Lifetime Savings (MMBtu) - Portfolio Total



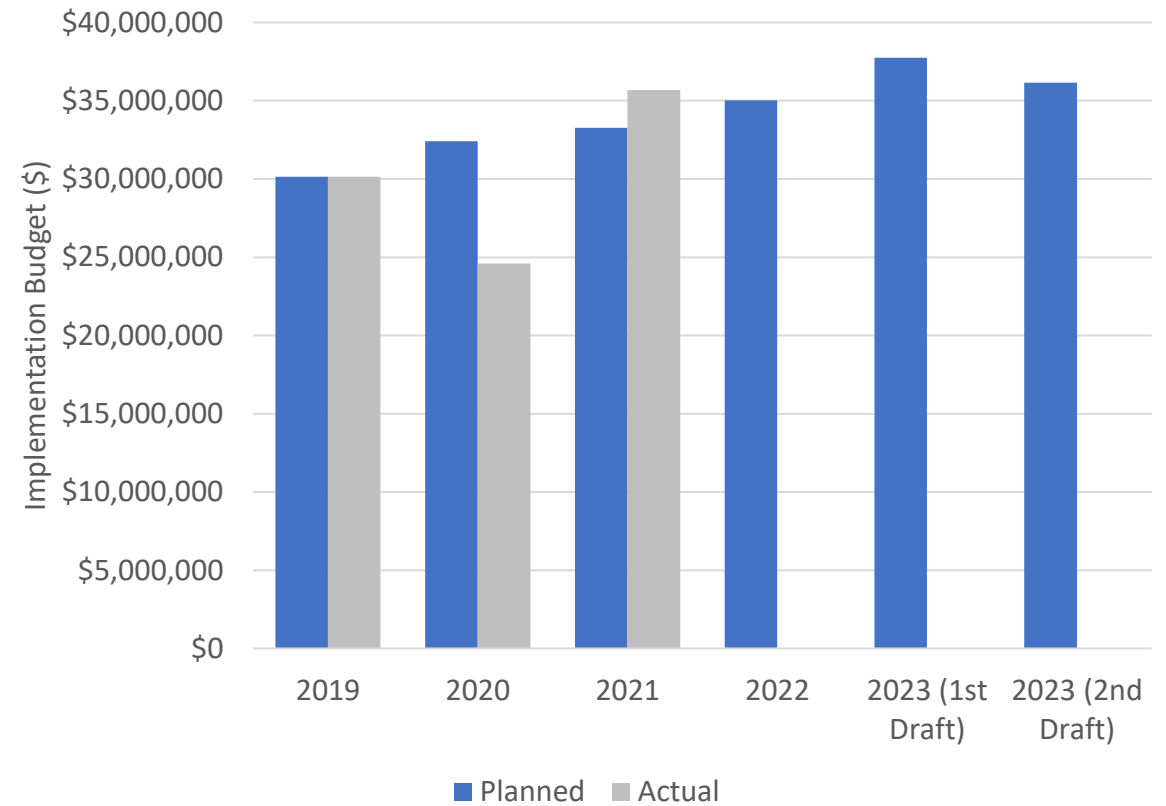


Portfolio Implementation Budget

Electric Implementation Budget (\$) - Portfolio Total



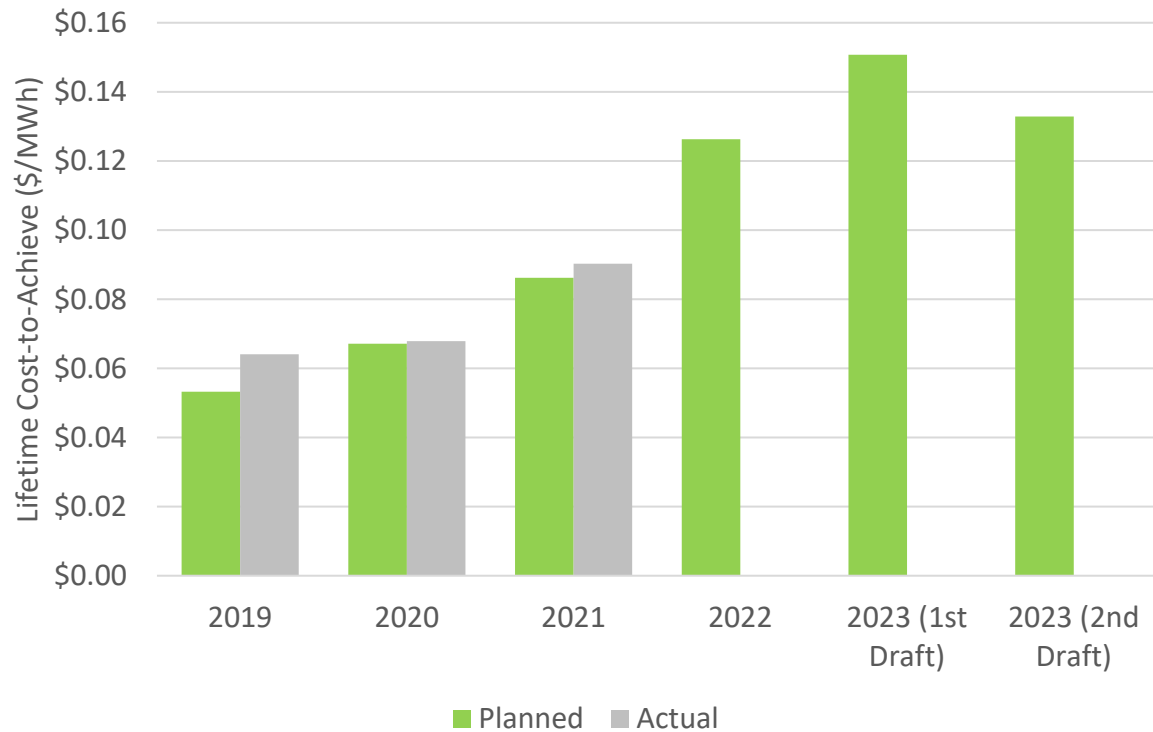
Gas Implementation Budget (\$) - Portfolio Total



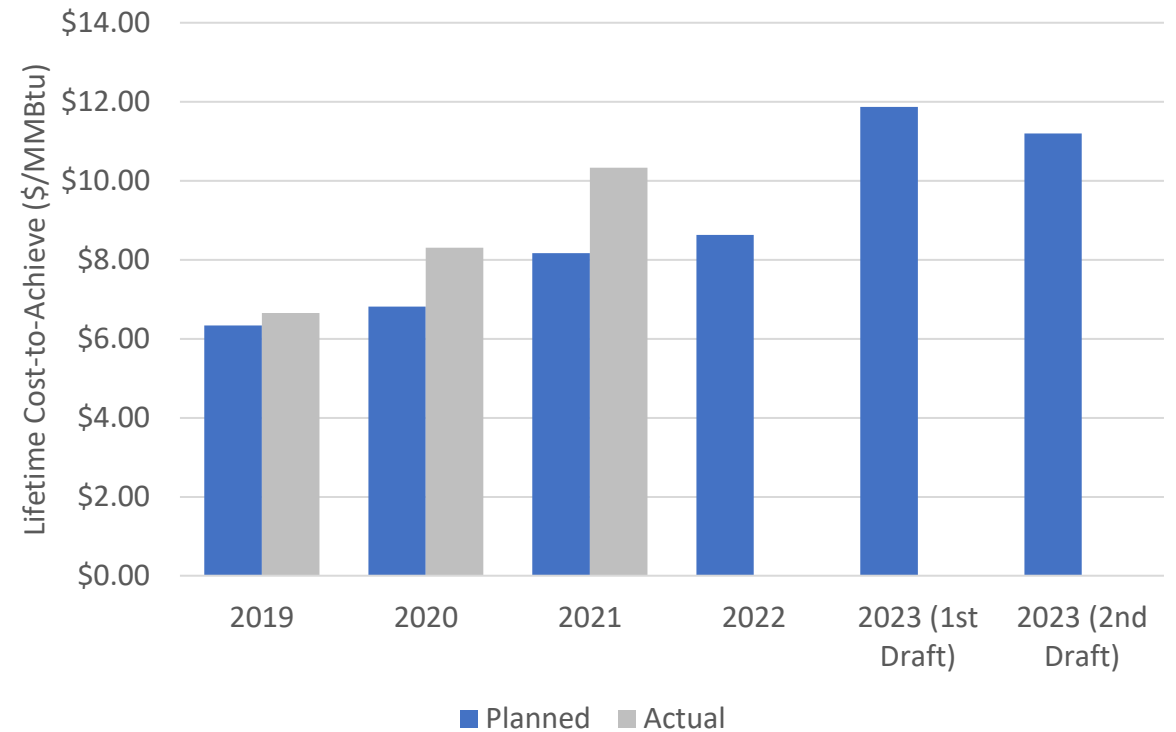


Portfolio Cost to Achieve

Electric Cost to Achieve (\$/Lifetime kWh) - Portfolio Total

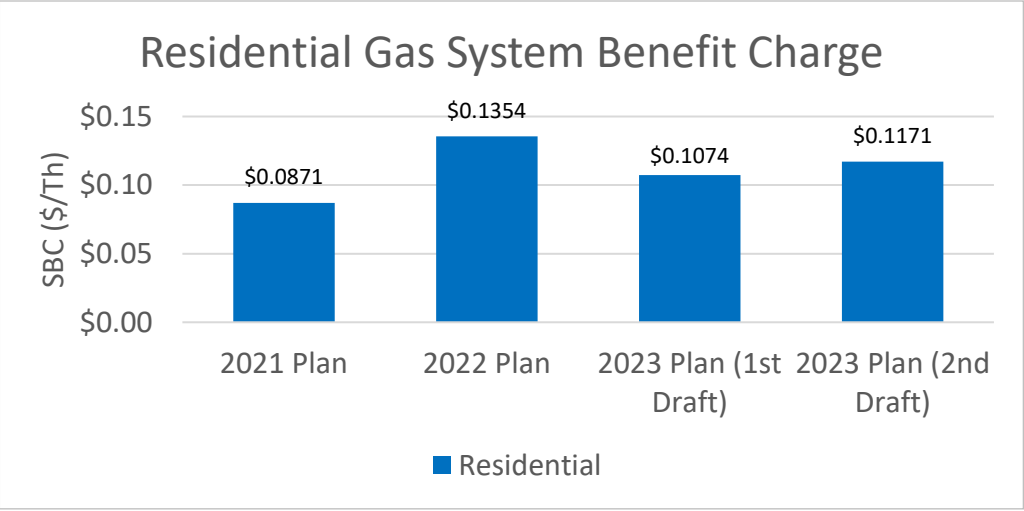
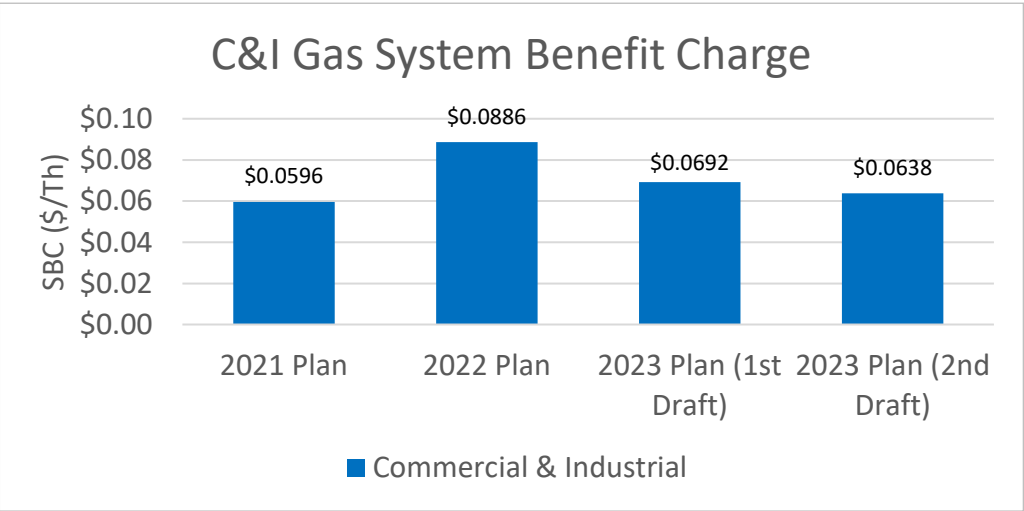
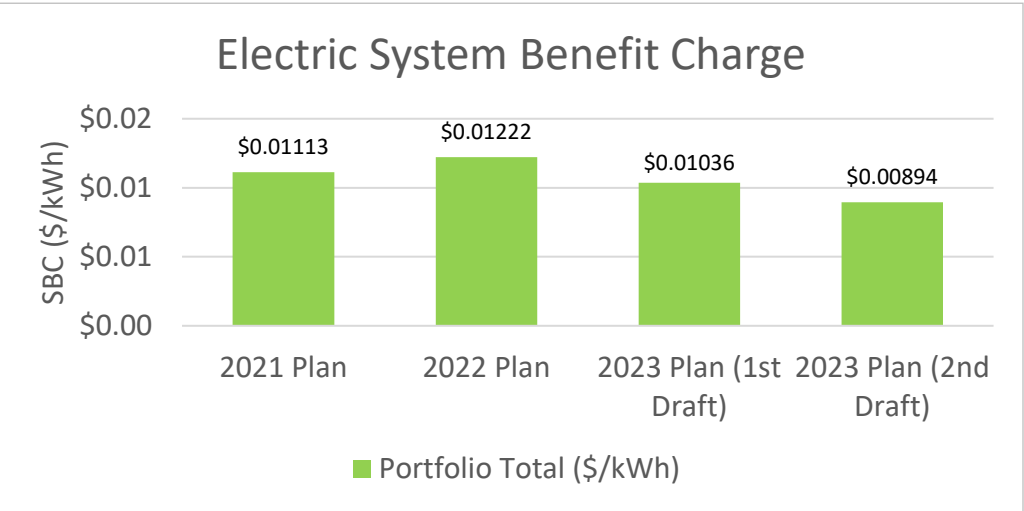


Gas Cost to Achieve (\$/Lifetime MMBtu) - Portfolio Total





System Benefit Charge



Decrease in System Benefit Charge (SBC) across both portfolio partially attributable to high forecasted underspending in 2022



Electric Lifetime MWhs

LIFETIME MWhs

% of 2023 Portfolio	Program	2023 (2nd Draft)	2023 (2nd Draft) Compared to 2022 Plan		2023 (2nd Draft) Compared to 2023 (1st Draft)	
			Value	% Change	Value	% Change
7%	Small Business Direct Install	57,778	-6,616	-10.3%	-5,834	-9.2%
20%	Large Commercial New Construction	157,598	-34,745	-18.1%	10,412	7.1%
46%	Large Commercial Retrofit	359,306	46,374	14.8%	67,418	23.1%
73%	C&I Total	574,682	5,014	0.9%	71,997	14.3%
3%	Single Family - Income Eligible Services	22,228	-16,278	-42.3%	-6,246	-21.9%
2%	Income Eligible Multifamily	17,632	-6,678	-27.5%	404	2.3%
5%	Income Eligible Total	39,860	-22,955	-36.5%	-5,843	-12.8%
2%	Residential New Construction	15,377	431	2.9%	0	0.0%
9%	ENERGY STAR® HVAC	71,055	-6,662	-8.6%	-3,150	-4.2%
2%	EnergyWise	16,940	3,468	25.7%	838	5.2%
1%	EnergyWise Multifamily	9,493	-11,290	-54.3%	49	0.5%
3%	Home Energy Reports	24,350	-2,503	-9.3%	-5,299	-17.9%
0%	ENERGY STAR® Lighting	0	0		0	
4%	Residential Consumer Products	31,684	-15,871	-33.4%	-9,630	-23.3%
22%	Residential Total	168,898	-32,427	-16.1%	-17,192	-9.2%
100%	Portfolio Total	783,440	-50,368	-6.0%	48,962	6.7%



Electric Annual MWhs

		ANNUAL MWhs					
% of 2023 Portfolio	Program	2023 (2nd Draft)	2023 (2nd Draft) Compared to 2022 Plan		2023 (2nd Draft) Compared to 2023 (1st Draft)		
9%	Small Business Direct Install	9,260	-716	-7%	-941	-9%	
10%	Large Commercial New Construction	10,481	-2,108	-17%	386	4%	
43%	Large Commercial Retrofit	46,640	5,508	13%	8,046	21%	
62%	C&I Total	66,381	2,684	4%	7,491	13%	
2%	Single Family - Income Eligible Services	2,436	-878	-26%	-380	-14%	
1%	Income Eligible Multifamily	1,298	-239	-16%	84	7%	
3%	Income Eligible Total	3,734	-1,117	-23%	-296	-7%	
1%	Residential New Construction	779	-88	-10%	0	0%	
4%	ENERGY STAR® HVAC	4,175	-445	-10%	-201	-5%	
3%	EnergyWise	3,147	359	13%	140	5%	
1%	EnergyWise Multifamily	680	-744	-52%	49	8%	
23%	Home Energy Reports	24,350	-2,503	-9%	-5,299	-18%	
0%	ENERGY STAR® Lighting	0	0		0		
4%	Residential Consumer Products	4,473	-2,412	-35%	-1,377	-24%	
35%	Residential Total	37,603	-5,832	-13%	-6,688	-15%	
100%	Portfolio Total	107,717	-4,266	-4%	507	0%	



Electric Budget

IMPLEMENTATION BUDGET

% of 2023 Portfolio	Program	2023 (2nd Draft)	2023 (2nd Draft) Compared to 2022 Plan		2023 (2nd Draft) Compared to 2023 (1st Draft)	
7%	Small Business Direct Install	\$7,764,876	-\$1,118,414	-13%	\$565,643	8%
8%	Large Commercial New Construction	\$8,469,282	-\$564,864	-6%	-\$1,784,980	-17%
25%	Large Commercial Retrofit	\$26,206,398	\$1,195,849	5%	-\$1,486,608	-5%
2%	C&I Financing	\$2,000,000	\$0	0%	\$0	0%
0%	Community Based Initiatives - C&I	\$93,461	\$8,496	10%	\$0	0%
0%	Commercial Pilots	\$0	\$0		\$0	
5%	Commercial ConnectedSolutions	\$5,544,066	\$1,150,454	26%	-\$1,959,264	-26%
0%	Commercial Workforce Development	\$157,500	\$0	0%	\$0	0%
48%	C&I Total	\$50,235,583	\$671,521	1%	-\$4,665,209	-8%
13%	Single Family - Income Eligible Services	\$13,731,995	\$456,671	3%	\$172,189	1%
3%	Income Eligible Multifamily	\$3,211,381	-\$327,568	-9%	-\$18,488	-1%
0%	Income Eligible Workforce Development	\$0	\$0		\$0	
16%	Income Eligible Total	\$16,943,376	\$129,102	1%	\$153,701	1%
2%	Residential New Construction	\$1,608,972	-\$8,006	0%	-\$77,302	-5%
5%	ENERGY STAR® HVAC	\$5,535,861	\$851,501	18%	-\$1,013,836	-15%
15%	EnergyWise	\$15,671,330	\$114,377	1%	\$651,523	4%
1%	EnergyWise Multifamily	\$1,206,151	-\$2,032,157	-63%	-\$676,601	-36%
2%	Home Energy Reports	\$2,147,183	-\$491,954	-19%	-\$511,128	-19%
0%	ENERGY STAR® Lighting	\$0	\$0		\$0	
2%	Residential Consumer Products	\$2,494,221	-\$301,812	-11%	-\$323,804	-11%
0%	Energy Efficiency Education	\$0	\$0		\$0	
0%	Comprehensive Marketing - Residential	\$310,484	\$62,541	25%	-\$246	0%
0%	Community Based Initiatives - Residential	\$280,564	\$25,490	10%	\$0	0%
2%	Residential ConnectedSolutions	\$1,971,037	\$148,444	8%	-\$14,383	-1%
0%	Residential Pilots	\$0	\$0		\$0	
0%	Residential Workforce Development	\$0	\$0		\$0	
30%	Residential Total	\$31,225,803	-\$1,631,576	-5%	-\$1,965,779	-6%
1%	EERMC	\$850,331	\$84,086	11%	\$84,086	11%
1%	OER	\$1,145,749	-\$444,511	-28%	-\$182,946	-14%
	Rhode Island Infrastructure Bank	\$3,737,491	\$2,491	0%	\$0	0%
6%	Regulatory Total	\$5,733,572	-\$357,934	-6%	-\$98,860	-2%
100%	Portfolio Total	\$104,138,334	-\$1,188,886	-1%	-\$6,576,146	-6%



Electric Lifetime Cost to Achieve (\$/kWh)

\$/LIFETIME kWh

Program	2023 (2nd Draft)	2023 (2nd Draft) Compared to 2022 Plan		2023 (2nd Draft) Compared to 2023 (1st Draft)	
		Value	%	Value	%
Small Business Direct Install	\$0.13	\$0.00	-3%	\$0.02	19%
Large Commercial New Construction	\$0.05	\$0.01	14%	-\$0.02	-23%
Large Commercial Retrofit	\$0.07	-\$0.01	-9%	-\$0.02	-23%
C&I Total	\$0.09	\$0.00	0%	-\$0.02	-20%
Single Family - Income Eligible Services	\$0.62	\$0.27	79%	\$0.14	30%
Income Eligible Multifamily	\$0.18	\$0.04	25%	-\$0.01	-3%
Income Eligible Total	\$0.43	\$0.16	59%	\$0.06	16%
Residential New Construction	\$0.10	\$0.00	-3%	-\$0.01	-5%
ENERGY STAR® HVAC	\$0.08	\$0.02	29%	-\$0.01	-12%
EnergyWise	\$0.93	-\$0.23	-20%	-\$0.01	-1%
EnergyWise Multifamily	\$0.13	-\$0.03	-18%	-\$0.07	-36%
Home Energy Reports	\$0.09	-\$0.01	-10%	\$0.00	-2%
ENERGY STAR® Lighting					
Residential Consumer Products	\$0.08	\$0.02	34%	\$0.01	15%
Residential Total	\$0.18	\$0.02	13%	\$0.01	4%
Portfolio Total	\$0.13	\$0.01	5%	-\$0.02	-12%



Electric Annual Cost to Achieve (\$/kWh)

\$/ANNUAL kWh

Program	2023 (2nd Draft)	2023 (2nd Draft) Compared to 2022 Plan		2023 (2nd Draft) Compared to 2023 (1st Draft)	
Small Business Direct Install	\$0.84	-\$0.05	-6%	\$0.13	19%
Large Commercial New Construction	\$0.81	\$0.09	13%	-\$0.21	-20%
Large Commercial Retrofit	\$0.56	-\$0.05	-8%	-\$0.16	-22%
C&I Total	\$0.76	-\$0.02	-3%	-\$0.18	-19%
Single Family - Income Eligible Services	\$5.64	\$1.63	41%	\$0.82	17%
Income Eligible Multifamily	\$2.47	\$0.17	7%	-\$0.19	-7%
Income Eligible Total	\$4.54	\$1.07	31%	\$0.37	9%
Residential New Construction	\$2.07	\$0.20	11%	-\$0.10	-5%
ENERGY STAR® HVAC	\$1.33	\$0.31	31%	-\$0.17	-11%
EnergyWise	\$4.98	-\$0.60	-11%	-\$0.02	0%
EnergyWise Multifamily	\$1.77	-\$0.50	-22%	-\$1.21	-41%
Home Energy Reports	\$0.09	-\$0.01	-10%	\$0.00	-2%
ENERGY STAR® Lighting					
Residential Consumer Products	\$0.56	\$0.15	37%	\$0.08	16%
Residential Total	\$0.83	\$0.07	10%	\$0.08	11%
Portfolio Total	\$0.97	\$0.03	3%	-\$0.07	-6%


















Electric Portfolio Net Benefits

Electric Total Benefits

% of 2022 Portfolio	Program	2023 (1st Draft) - Net Benefits	2023 (2nd Draft) - Net Benefits	2023 (2nd Draft) Compared to 2023 (1st Draft)	
				2023 (2nd Draft) Net Benefits	% Change
5%	Small Business Direct Install	\$2,983,230	\$10,900,035	\$7,916,805	265%
13%	Large Commercial New Construction	\$17,982,417	\$43,433,693	\$25,451,275	142%
33%	Large Commercial Retrofit	\$46,198,667	\$80,329,306	\$34,130,639	74%
6%	Commercial ConnectedSolutions	\$6,175,100	\$6,776,014	\$600,913	10%
56%	C&I Total	\$73,339,414	\$141,439,047	\$68,099,633	93%
10%	Single Family - Income Eligible Services	\$8,797,764	\$17,919,709	\$9,121,946	104%
2%	Income Eligible Multifamily	\$986,868	\$2,168,302	\$1,181,434	120%
12%	Income Eligible Total	\$9,784,632	\$20,088,011	\$10,303,380	105%
2%	Residential New Construction	\$3,700,101	\$6,622,109	\$2,922,008	79%
10%	ENERGY STAR® HVAC	\$16,170,307	\$22,219,528	\$6,049,221	37%
9%	EnergyWise	\$4,285,666	\$16,881,061	\$12,595,395	294%
1%	EnergyWise Multifamily	\$1,422,614	\$3,509,109	\$2,086,495	147%
3%	Home Energy Reports	\$4,418,293	\$5,059,171	\$640,878	15%
0%	ENERGY STAR® Lighting	\$0	\$0	\$0	
	Residential Consumer Products	\$6,380,034	\$8,158,982	\$1,778,949	28%
2%	Residential ConnectedSolutions	\$1,517,595	\$1,082,173	-\$435,422	-29%
32%	Residential Total	\$37,894,610	\$63,532,133	\$25,637,523	68%
100%	Portfolio Total	\$121,018,656	\$225,059,192	\$104,040,536	86%



Gas Lifetime MMBtus

		LIFETIME MMBtus					
% of 2023 Portfolio		Program	2023 (2nd Draft)	2023 (2nd Draft) Compared to 2022 Plan		2023 (2nd Draft) Compared to 2023 (1st Draft)	
	20%	Large Commercial New Construction	652,640	-136,123	-17%	144,679	28%
	29%	Large Commercial Retrofit	922,290	-410,219	-31%	-3,149	0%
	4%	Small Business Direct Install	130,193	38,494	42%	65,672	102%
	2%	Commercial & Industrial Multifamily	64,645	-66,575	-51%	4,487	7%
	55%	C&I Total	1,769,769	-574,423	-25%	211,690	14%
	5%	Single Family - Income Eligible Services	169,180	-49,667	-23%	0	0%
	5%	Income Eligible Multifamily	172,464	-100,621	-37%	-24,055	-12%
	11%	Income Eligible Total	341,644	-150,288	-31%	-24,055	-7%
	14%	Energy Star® HVAC	455,168	15,451	4%	-61,502	-12%
	12%	EnergyWise	402,653	-75,897	-16%	-64,702	-14%
	3%	EnergyWise Multifamily	110,428	-36,636	-25%	-24,296	-18%
	3%	Home Energy Reports	91,640	-1,907	-2%	17,395	23%
	2%	Residential New Construction	58,476	-6,423	-10%	-4,523	-7%
	35%	Residential Total	1,118,366	-105,413	-9%	-137,628	-11%
	100%	Portfolio Total	3,229,779	-830,123	-20%	50,007	2%



Gas Annual MMBtus

ANNUAL MMBtus

% of 2023 Portfolio	Program	2023 (2nd Draft)	2023 (2nd Draft) Compared to 2022 Plan		2023 (2nd Draft) Compared to 2023 (1st Draft)	
			Change	% Change	Change	% Change
15%	Large Commercial New Construction	45,619	-7,337	-14%	10,812	31%
27%	Large Commercial Retrofit	82,463	-60,425	-42%	2,049	3%
3%	Small Business Direct Install	9,723	3,610	59%	4,035	71%
1%	Commercial & Industrial Multifamily	4,249	-4,554	-52%	299	8%
46%	C&I Total	142,054	-68,706	-33%	17,195	14%
3%	Single Family - Income Eligible Services	8,230	-2,712	-25%	0	0%
4%	Income Eligible Multifamily	11,075	-3,625	-25%	-1,577	-12%
6%	Income Eligible Total	19,305	-6,337	-25%	-1,577	-8%
9%	Energy Star® HVAC	27,030	289	1%	-3,661	-12%
7%	EnergyWise	20,697	-152	-1%	972	5%
2%	EnergyWise Multifamily	5,358	-2,921	-35%	-1,107	-17%
30%	Home Energy Reports	91,640	-1,907	-2%	17,395	23%
1%	Residential New Construction	3,287	-323	-9%	-189	-5%
48%	Residential Total	148,013	-5,014	-3%	13,411	10%
100%	Portfolio Total	309,373	-80,057	-21%	29,028	10%



Gas Budget

IMPLEMENTATION BUDGET

% of 2023 Portfolio	Program	2023 (2nd Draft)	2023 (2nd Draft Compared to 2020 Actuals)		2023 (2nd Draft Compared to 2021 Actuals)		2023 (2nd Draft) Compared to 2022 Plan		2023 (2nd Draft) Compared to 2023 (1st Draft)	
8%	Large Commercial New Construction	\$2,738,478	\$12,478	0%	\$168,778	7%	-\$448,106	-14%	\$236,043	9%
13%	Large Commercial Retrofit	\$4,745,760	\$1,715,060	57%	\$1,467,660	45%	\$49,456	1%	-\$550,019	-10%
2%	Small Business Direct Install	\$691,708	\$557,608	416%	\$533,008	336%	\$335,823	94%	\$330,846	92%
2%	Commercial & Industrial Multifamily	\$893,316	\$559,816	168%	-\$58,084	-6%	-\$63,948	-7%	\$133,987	18%
0%	Comprehensive Marketing - Commercial and Industrial	\$0	\$0		\$0		\$0		\$0	
0%	Commercial Pilots	\$12,422	-\$84,478	-87%	-\$93,078	-88%	-\$203,358	-94%	-\$255,620	-95%
0%	Finance Costs	\$0	-\$500,000	-100%	\$0		\$0		\$0	
0%	Community Based Initiatives - C&I	\$31,154	\$31,154		\$31,154		\$2,832	10%	\$0	0%
3%	RIIB	\$1,262,509	\$1,262,509		\$1,262,509		\$1,262,509		\$0	0%
0%	Commercial Workforce Development	\$67,500	\$67,500		\$67,500		\$0	0%	\$0	0%
29%	C&I Total	\$10,442,847	\$3,621,647	53%	\$3,379,447	48%	\$935,208	10%	-\$104,763	-1%
15%	Single Family - Income Eligible Services	\$5,434,060	\$3,212,160	145%	\$1,477,660	37%	-\$937,705	-15%	-\$25,908	0%
9%	Income Eligible Multifamily	\$3,219,824	\$1,413,024	78%	\$455,224	16%	\$270,879	9%	-\$458,824	-12%
0%	Income Eligible Workforce Development	\$0	\$0		\$0		\$0		\$0	
24%	Income Eligible Total	\$8,653,884	\$4,625,184	115%	\$1,932,884	29%	-\$666,826	-7%	-\$484,732	-5%
10%	Energy Star® HVAC	\$3,591,050	-\$5,333,550	-60%	\$955,750	36%	-\$141,414	-4%	-\$583,601	-14%
27%	EnergyWise	\$9,941,590	\$7,420,490	294%	-\$6,285,610	-39%	\$1,295,660	15%	\$7,414	0%
4%	EnergyWise Multifamily	\$1,487,356	\$827,656	125%	-\$120,844	-8%	-\$1,799	0%	-\$40,007	-3%
1%	Home Energy Reports	\$359,189	-\$7,311	-2%	-\$41,111	-10%	-\$82,639	-19%	-\$86,378	-19%
2%	Residential New Construction	\$621,150	\$184,550	42%	\$223,550	56%	\$107,988	21%	-\$344,006	-36%
0%	Comprehensive Marketing - Residential	\$69,083	-\$14,317	-17%	-\$4,617	-6%	\$1,050	2%	-\$13	0%
0%	Residential Pilots	\$0	\$0		\$0		\$0		\$0	
0%	Community Based Initiatives - Residential	\$93,461	\$59,061	172%	\$55,261	145%	\$8,496	10%	\$0	0%
0%	Residential Workforce Development	\$0	\$0		\$0		\$0		\$0	
45%	Residential Total	\$16,162,880	\$3,136,580	24%	-\$5,217,620	-24%	\$1,187,344	8%	-\$1,046,592	-6%
1%	EERMC	\$283,444	-\$77,156	-21%	\$43,144	18%	-\$204,348	-42%	\$23,926	9%
2%	OER	\$612,746	\$251,546	70%	\$337,646	123%	-\$118,941	-16%	\$16,730	3%
2%	Regulatory Total	\$896,190	\$174,390	24%	\$380,790	74%	-\$323,289	-27%	\$40,656	5%
100%	Portfolio Total	\$36,155,801	\$11,557,801	47%	\$475,501	1%	\$1,132,437	3%	-\$1,595,431	-4%



Gas Lifetime Cost to Achieve (\$/MMBtu)

\$/LIFETIME MMBtu

Program	2023 (2nd Draft)	2023 (2nd Draft) Compared to 2022 Plan		2023 (2nd Draft) Compared to 2023 (1st Draft)	
Large Commercial New Construction	\$4.20	\$0.16	4%	-\$0.73	-15%
Large Commercial Retrofit	\$5.15	\$1.62	46%	-\$0.58	-10%
Small Business Direct Install	\$5.31	\$1.43	37%	-\$0.28	-5%
Commercial & Industrial Multifamily	\$13.82	\$6.52	89%	\$1.20	9%
C&I Total	\$5.90	\$1.84	45%	-\$0.87	-13%
Single Family - Income Eligible Services	\$32.12	\$3.00	10%	-\$0.15	0%
Income Eligible Multifamily	\$18.67	\$7.87	73%	-\$0.05	0%
Income Eligible Total	\$25.33	\$6.38	34%	\$0.34	1%
Energy Star® HVAC	\$7.89	-\$0.60	-7%	-\$0.19	-2%
EnergyWise	\$24.69	\$6.62	37%	\$3.43	16%
EnergyWise Multifamily	\$13.47	\$3.34	33%	\$2.13	19%
Home Energy Reports	\$3.92	-\$0.80	-17%	-\$2.08	-35%
Residential New Construction	\$10.62	\$2.72	34%	-\$4.70	-31%
Residential Total	\$14.45	\$2.22	18%	\$0.75	5%
Portfolio Total	\$11.19	\$2.57	30%	-\$0.68	-6%



Gas Annual Cost to Achieve (\$/MMBtu)

\$/ANNUAL MMBtu

Program	2023 (2nd Draft)	2023 (2nd Draft) Compared to 2022 Plan		2023 (2nd Draft) Compared to 2023 (1st Draft)	
Large Commercial New Construction	\$60.03	-\$0.15	0%	-\$11.86	-17%
Large Commercial Retrofit	\$57.55	\$24.68	75%	-\$8.31	-13%
Small Business Direct Install	\$71.14	\$12.93	22%	\$7.70	12%
Commercial & Industrial Multifamily	\$210.25	\$101.51	93%	\$18.00	9%
C&I Total	\$73.51	\$28.40	63%	-\$10.96	-13%
Single Family - Income Eligible Services	\$660.25	\$77.95	13%	-\$3.15	0%
Income Eligible Multifamily	\$290.73	\$90.12	45%	-\$0.03	0%
Income Eligible Total	\$448.26	\$84.77	23%	\$10.64	2%
Energy Star® HVAC	\$132.86	-\$6.73	-5%	-\$3.17	-2%
EnergyWise	\$480.33	\$65.65	16%	-\$23.30	-5%
EnergyWise Multifamily	\$277.58	\$97.71	54%	\$41.35	18%
Home Energy Reports	\$3.92	-\$0.80	-17%	-\$2.08	-35%
Residential New Construction	\$188.97	\$46.81	33%	-\$88.72	-32%
Residential Total	\$109.20	\$11.34	12%	-\$18.66	-15%
Portfolio Total	\$116.87	\$26.93	30%	-\$17.79	-13%



Gas Portfolio Net Benefits

Gas Total Benefits

% of 2022 Portfolio	Program	2023 (1st Draft) - Net Benefits	2023 (2nd Draft) - Net Benefits	2023 (2nd Draft) Compared to 2023 (1st Draft)	
				Amount	Percentage
13%	Large Commercial New Construction	\$8,617,498	\$18,658,402	\$10,040,904	117%
19%	Large Commercial Retrofit	\$11,056,504	\$21,538,960	\$10,482,456	95%
1%	Small Business Direct Install	\$915,919	\$3,015,368	\$2,099,449	229%
7%	Commercial & Industrial Multifamily	\$5,063,590	\$5,315,414	\$251,825	5%
40%	C&I Total	\$25,653,510	\$48,528,144	\$22,874,634	89%
12%	Single Family - Income Eligible Services	\$4,673,599	\$7,091,055	\$2,417,456	52%
12%	Income Eligible Multifamily	\$7,097,887	\$7,282,428	\$184,541	3%
24%	Income Eligible Total	\$11,771,485	\$14,373,482	\$2,601,997	22%
12%	Energy Star® HVAC	\$6,591,438	\$9,592,617	\$3,001,179	46%
13%	EnergyWise	\$1,004,115	\$7,508,763	\$6,504,647	648%
7%	EnergyWise Multifamily	\$4,726,636	\$5,594,860	\$868,224	18%
2%	Home Energy Reports	\$933,256	\$3,473,351	\$2,540,095	272%
2%	Residential New Construction	\$591,098	\$1,052,200	\$461,102	78%
36%	Residential Total	\$13,846,544	\$27,221,792	\$13,375,248	97%
100%	Portfolio Total	\$51,271,540	\$90,123,419	\$38,851,879	76%



Active Demand kW Savings

ConnectedSolutions (kW Active Demand)

Program	2023 (2nd Draft)	2023 (2nd Draft) Compared to 2022 Plan		2023 (2nd Draft) Compared to 2023 (1st Draft)	
		kW	%	kW	%
Commercial ConnectedSolutions	36,000	3,600.0	11%	-1,800.0	-5%
Residential ConnectedSolutions	7,900	534.9	7%	22.0	0%
Portfolio Total	43,900	4,134.9	10%	-1,778.0	-4%



Active Demand Cost to Achieve (\$/kW)

Connected Solutions (\$/kW)

Program	2023 (2nd Draft)	2023 (2nd Draft) Compared to 2022 Plan		2023 (2nd Draft) Compared to 2023 (1st Draft)	
		Value	%	Value	%
Commercial Connected Solutions	\$154.00	\$18.40	14%	-\$44.50	-22%
Residential Connected Solutions	\$249.50	\$2.03	1%	-\$2.52	-1%
Portfolio Total	\$171.19	\$14.86	10%	-\$36.54	-18%



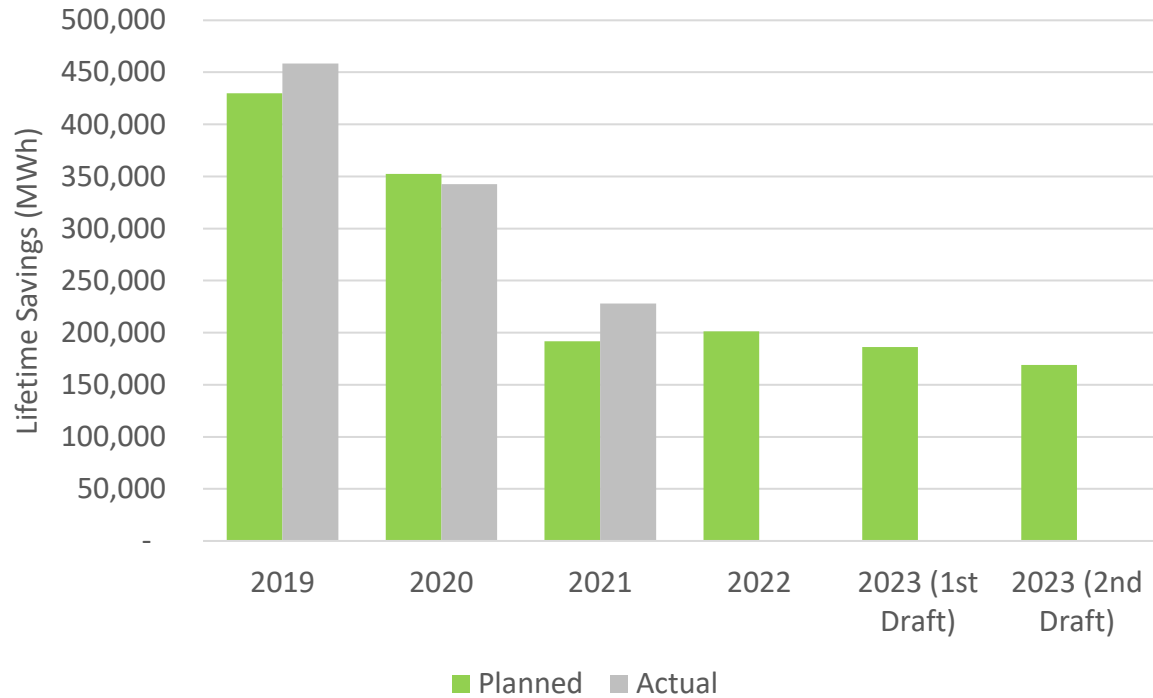
SECTOR-LEVEL DETAILS



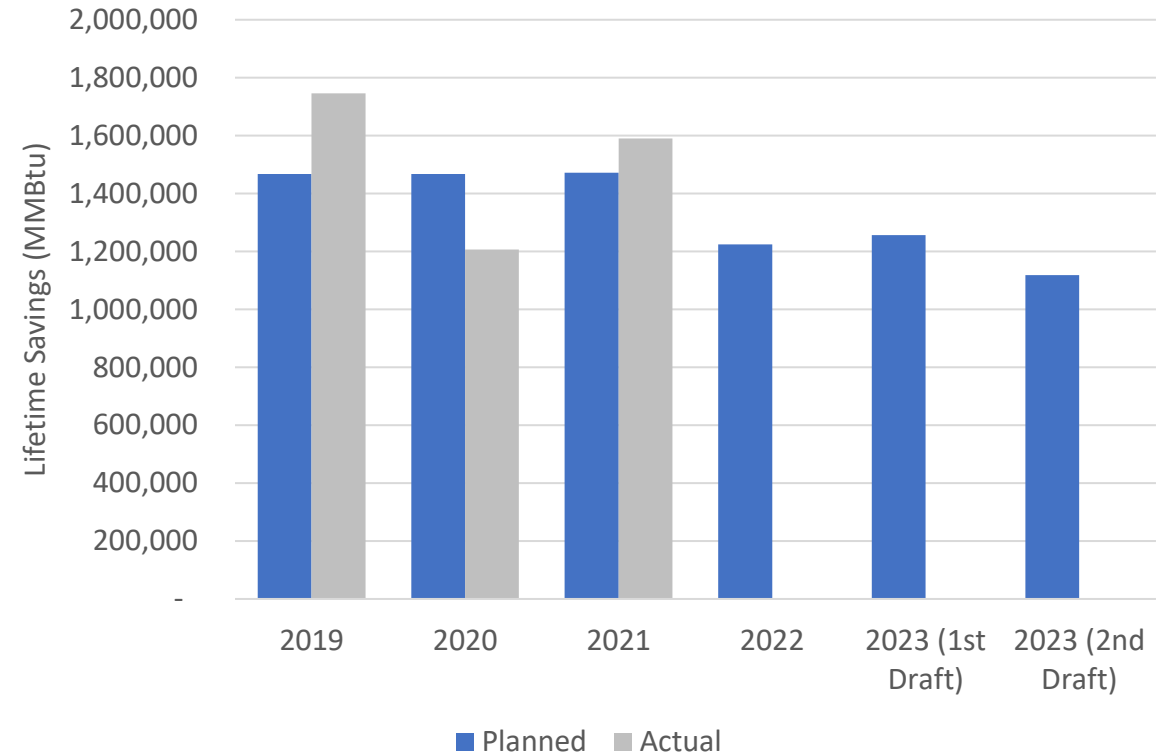


Residential Lifetime Savings

Electric Lifetime Savings (MWh) - Residential Total



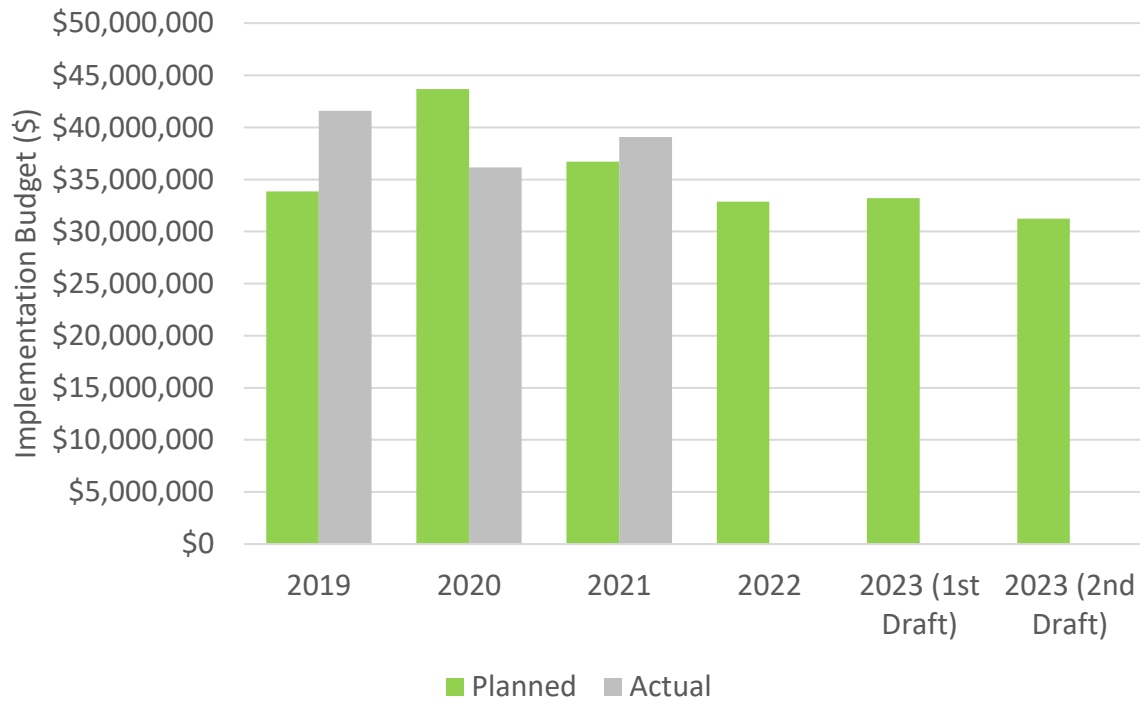
Gas Lifetime Savings (MMBtu) - Residential Total



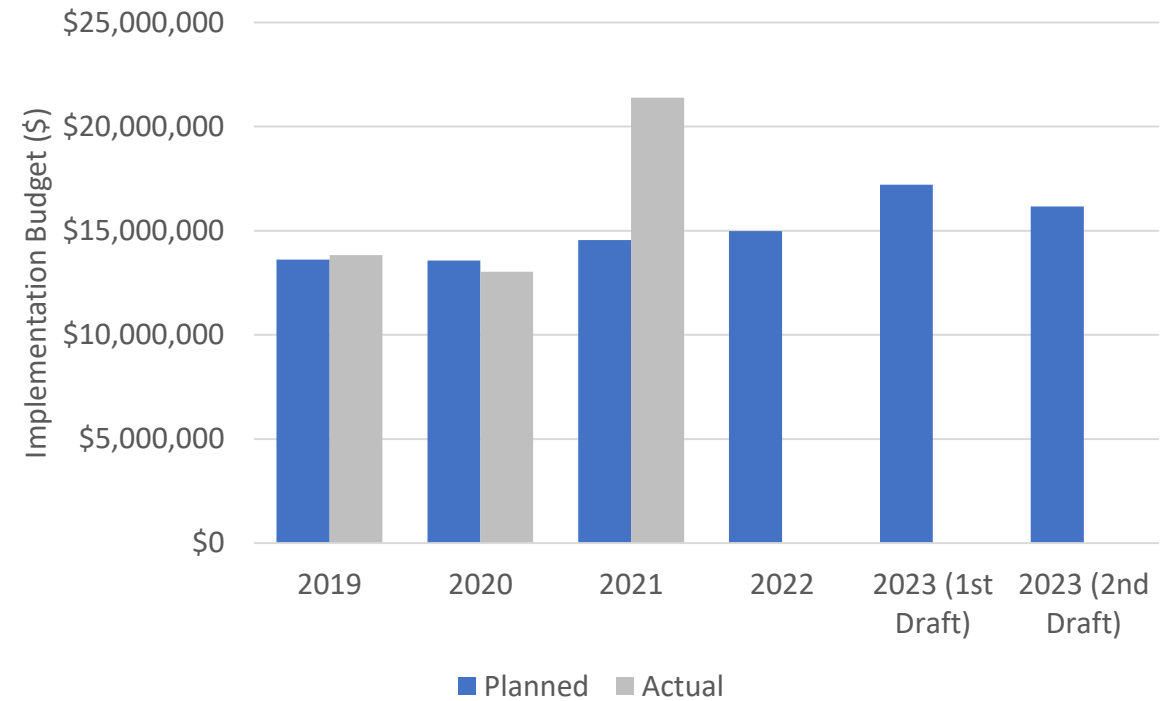


Residential Implementation Budget

Electric Implementation Budget (\$) - Residential Total



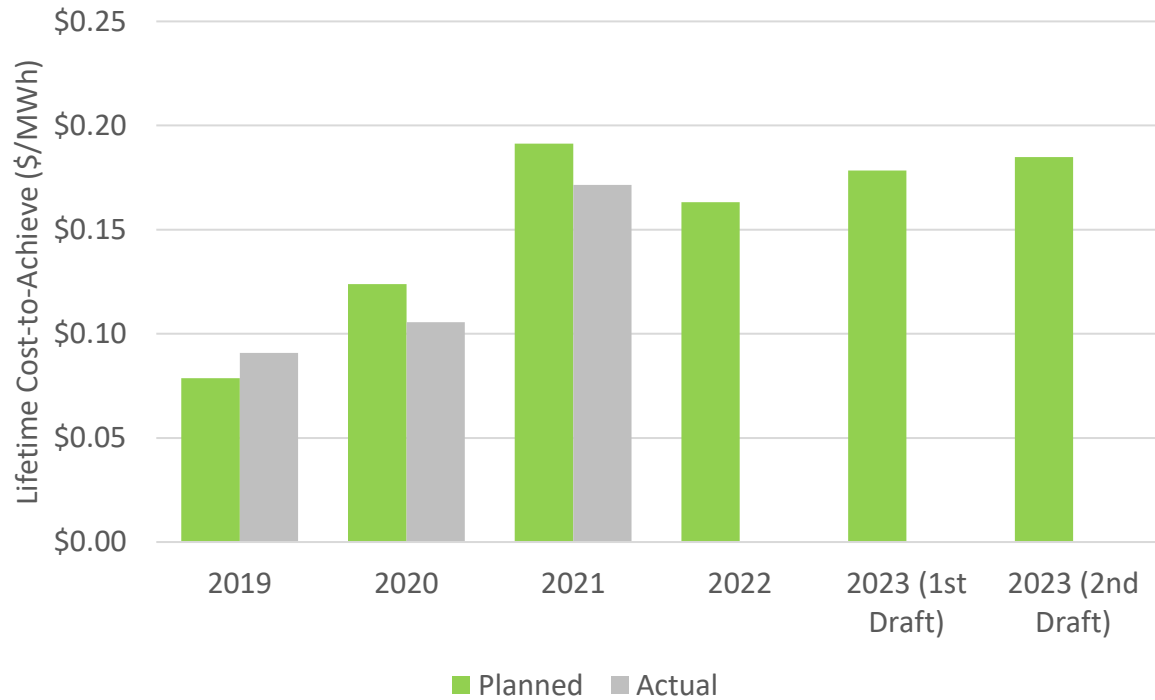
Gas Implementation Budget (\$) - Residential Total



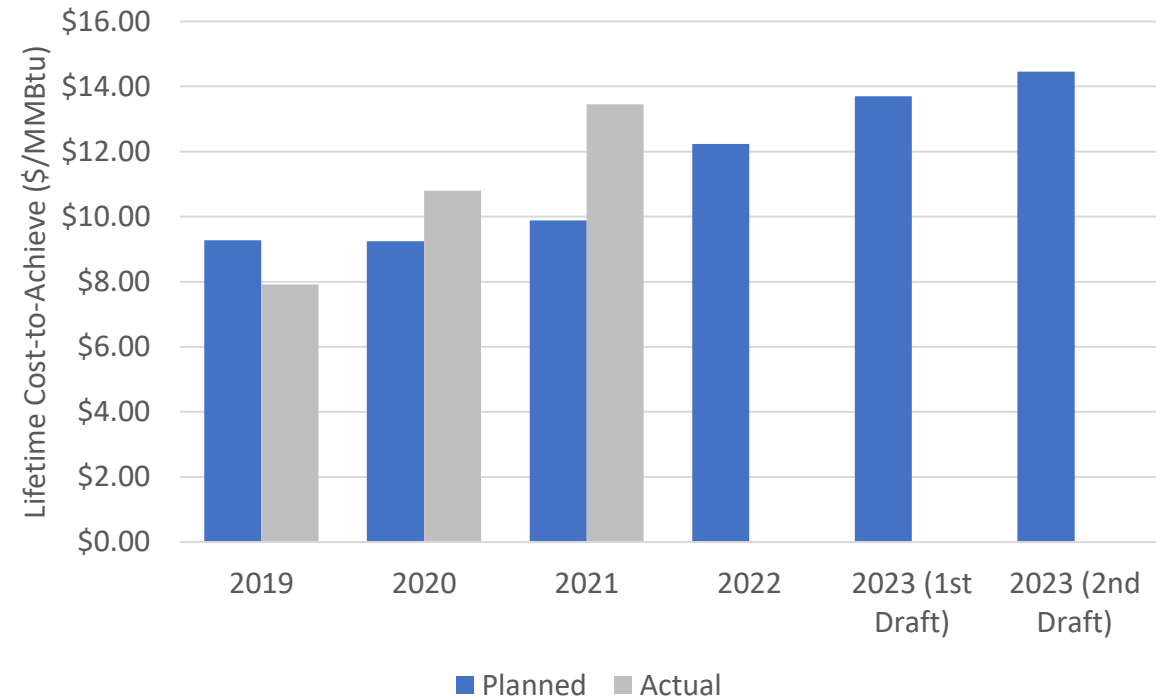


Residential Lifetime Cost-to-Achieve

Electric Cost to Achieve (\$/Lifetime kWh) - Residential Total



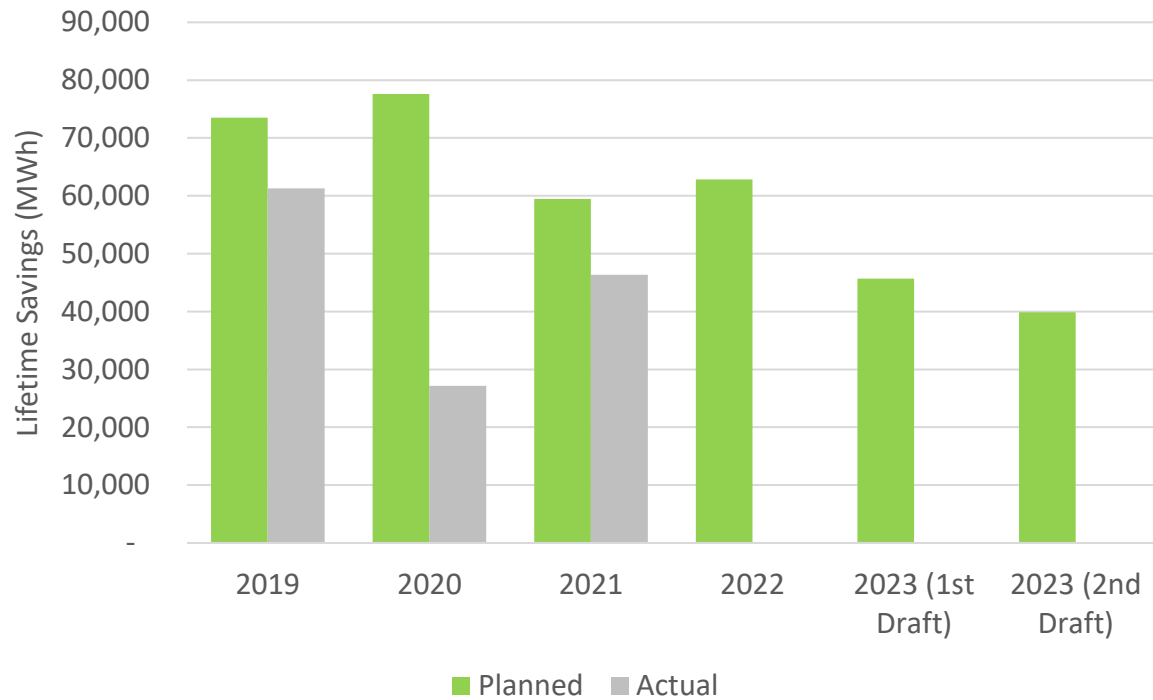
Gas Cost to Achieve (\$/Lifetime MMBtu) - Residential Total



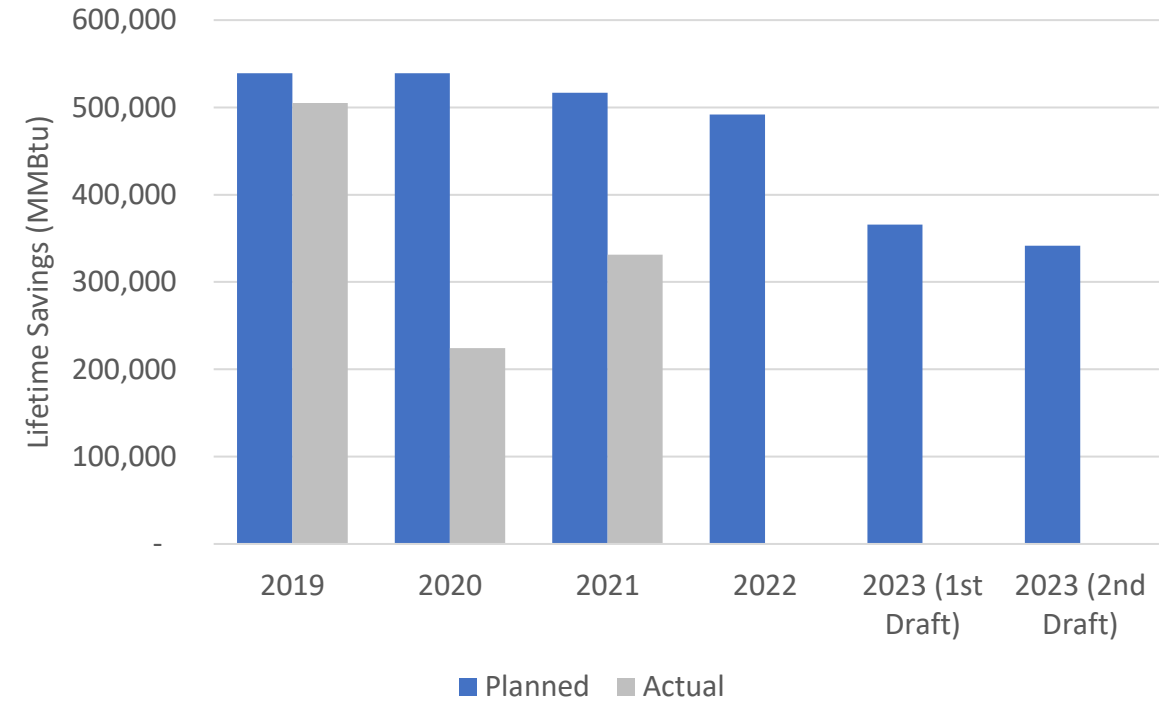


Income Eligible Lifetime Savings

Electric Lifetime Savings (MWh) - Income Eligible Total



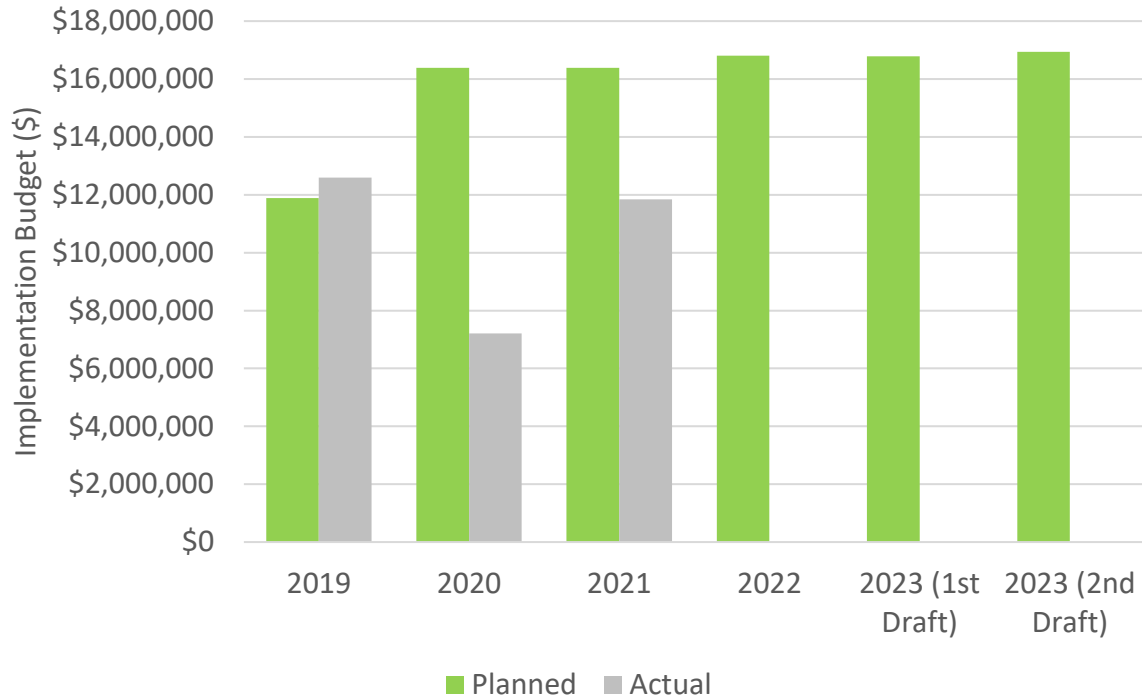
Gas Lifetime Savings (MMBtu) - Income Eligible Total



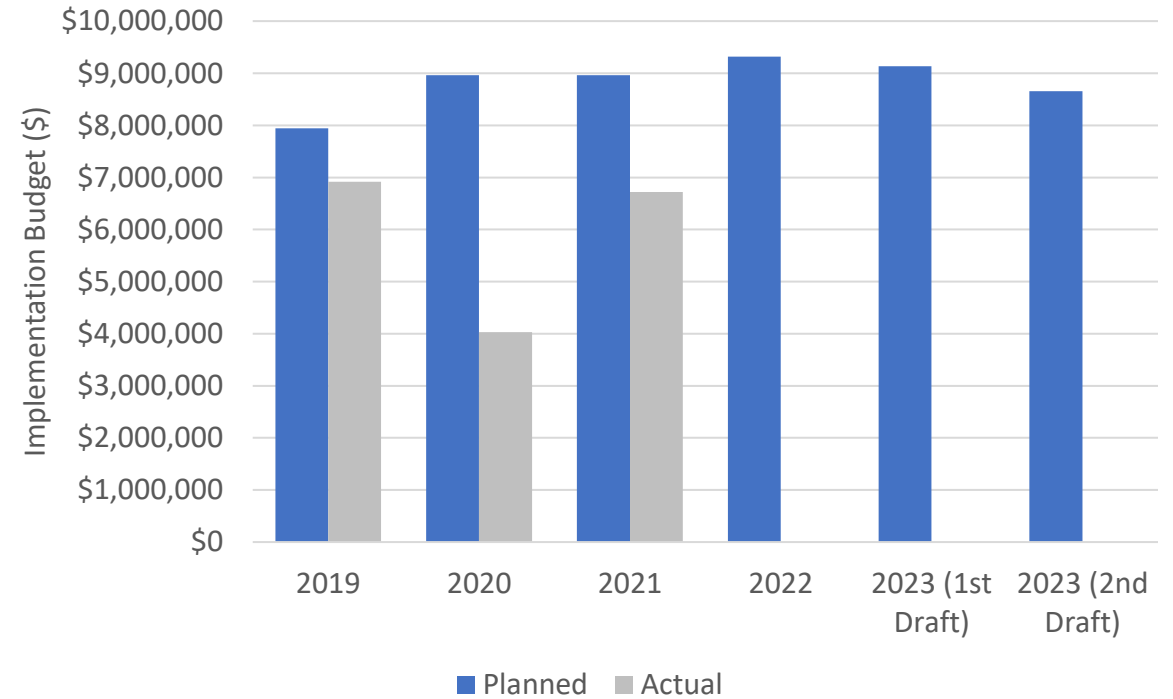


Income Eligible Implementation Budget

Electric Implementation Budget (\$) - Income Eligible Total



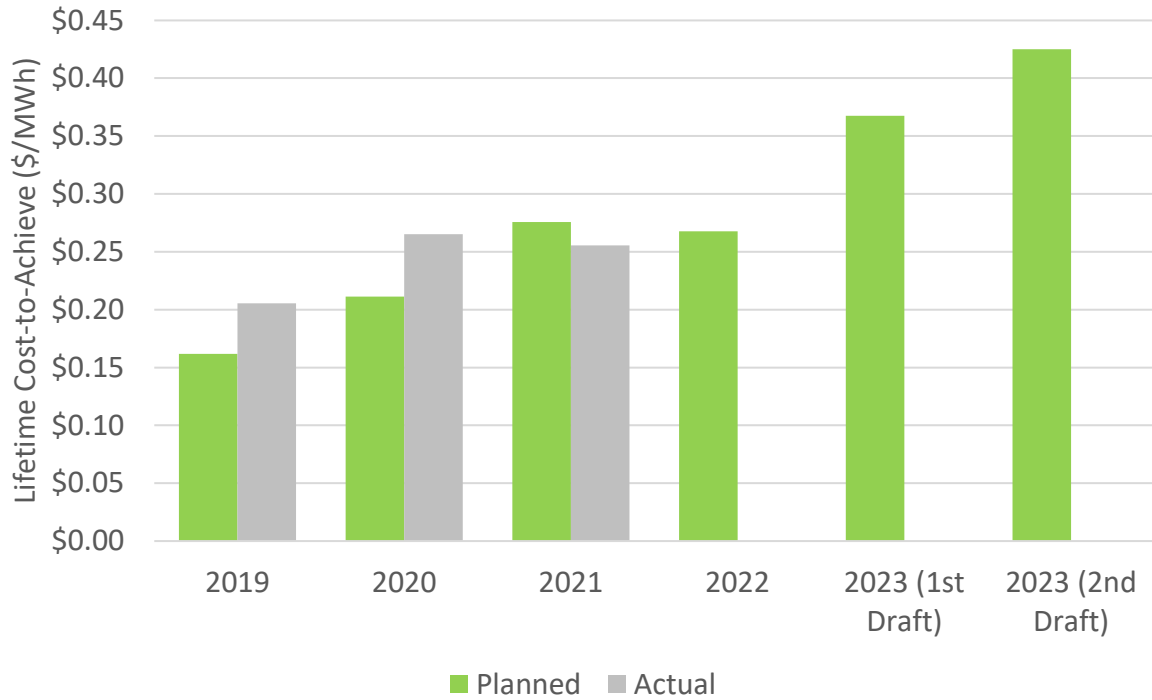
Gas Implementation Budget (\$) - Income Eligible Total



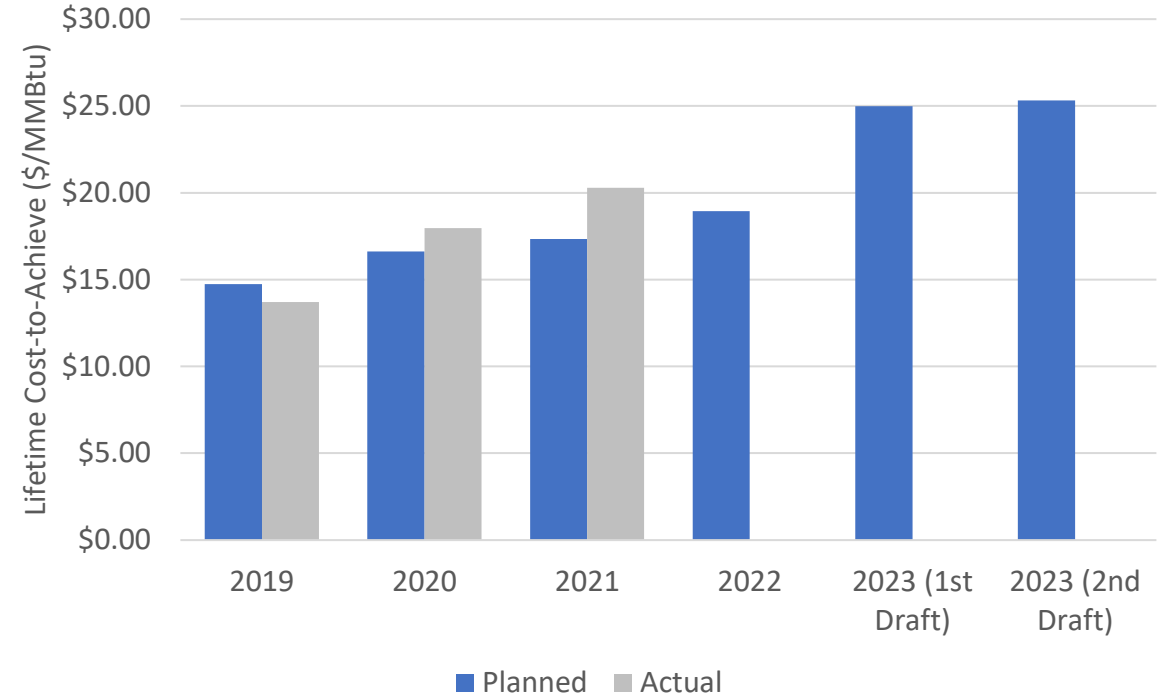


Income Eligible Lifetime Cost-to-Achieve

Electric Cost to Achieve (\$/Lifetime kWh) - Income Eligible Total



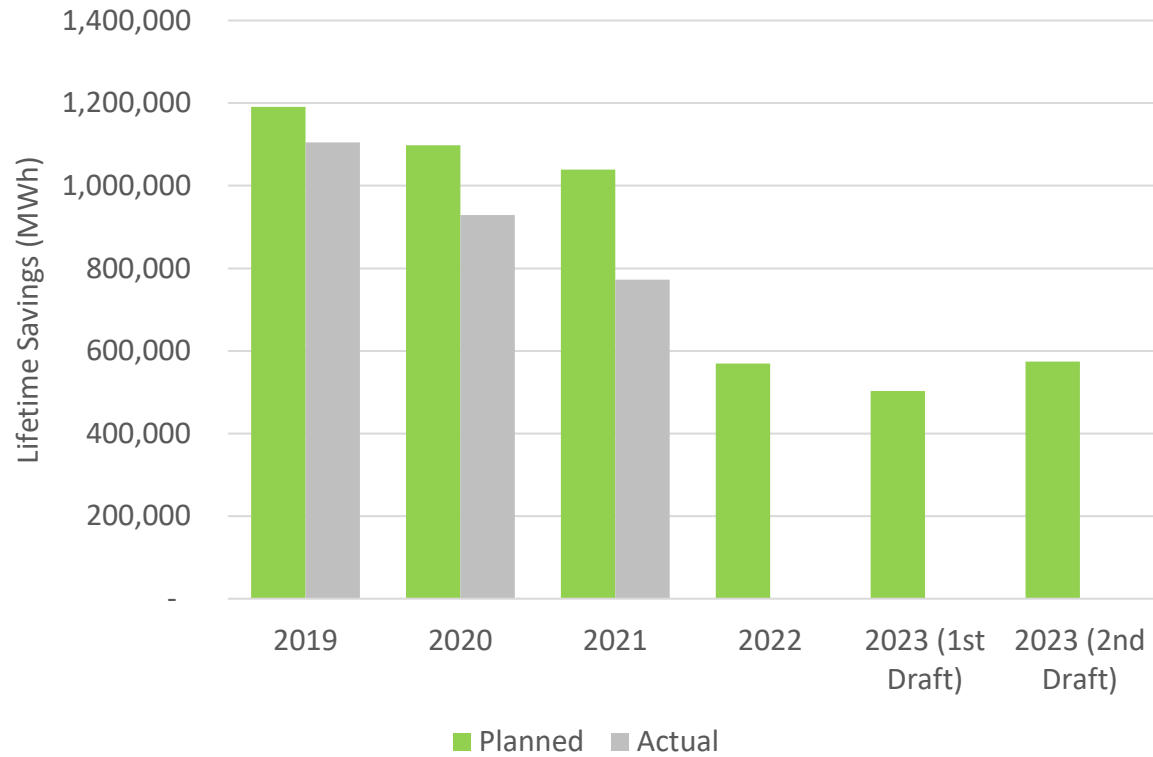
Gas Cost to Achieve (\$/Lifetime MMBtu) - Income Eligible Total



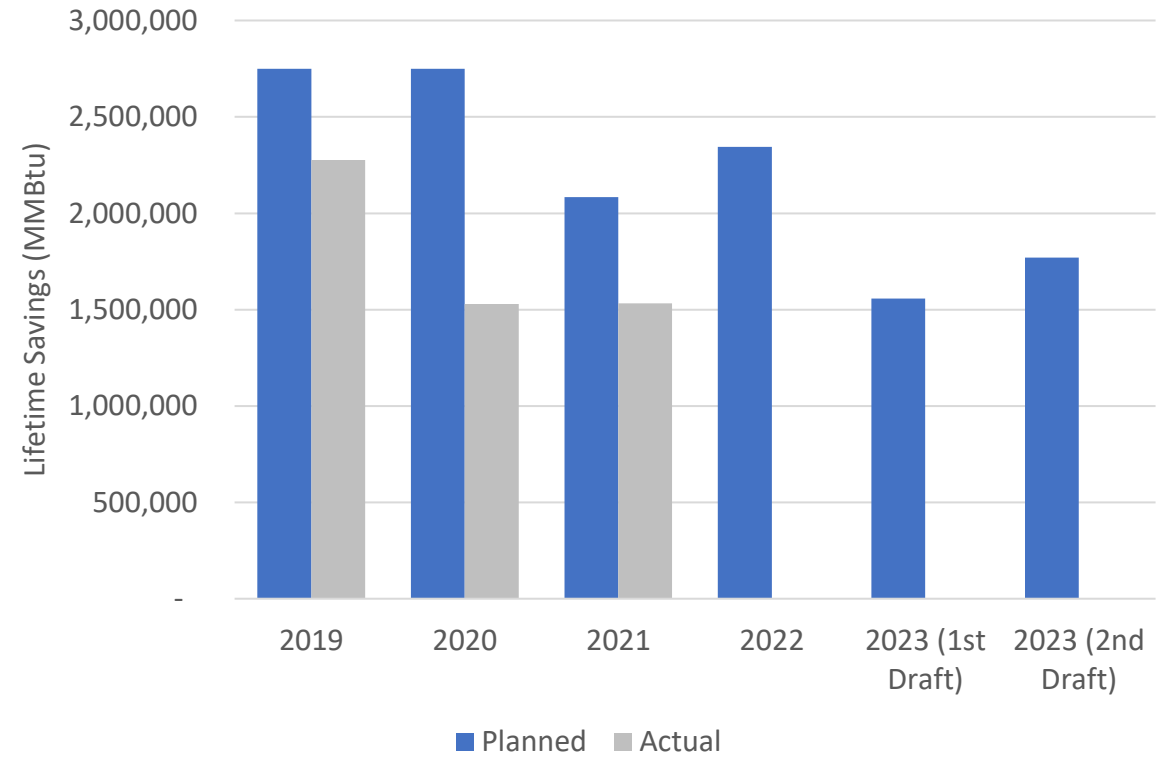


C&I Lifetime Savings

Electric Lifetime Savings (MWh) - C&I Total



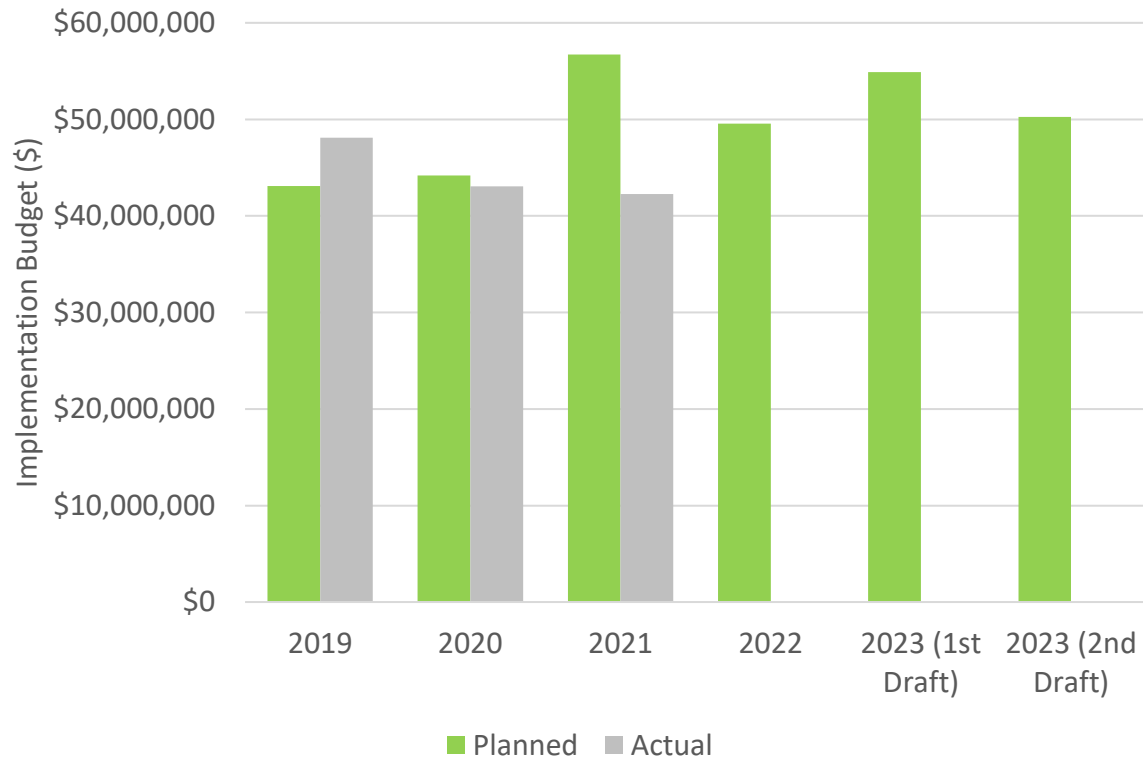
Gas Lifetime Savings (MMBtu) - C&I Total



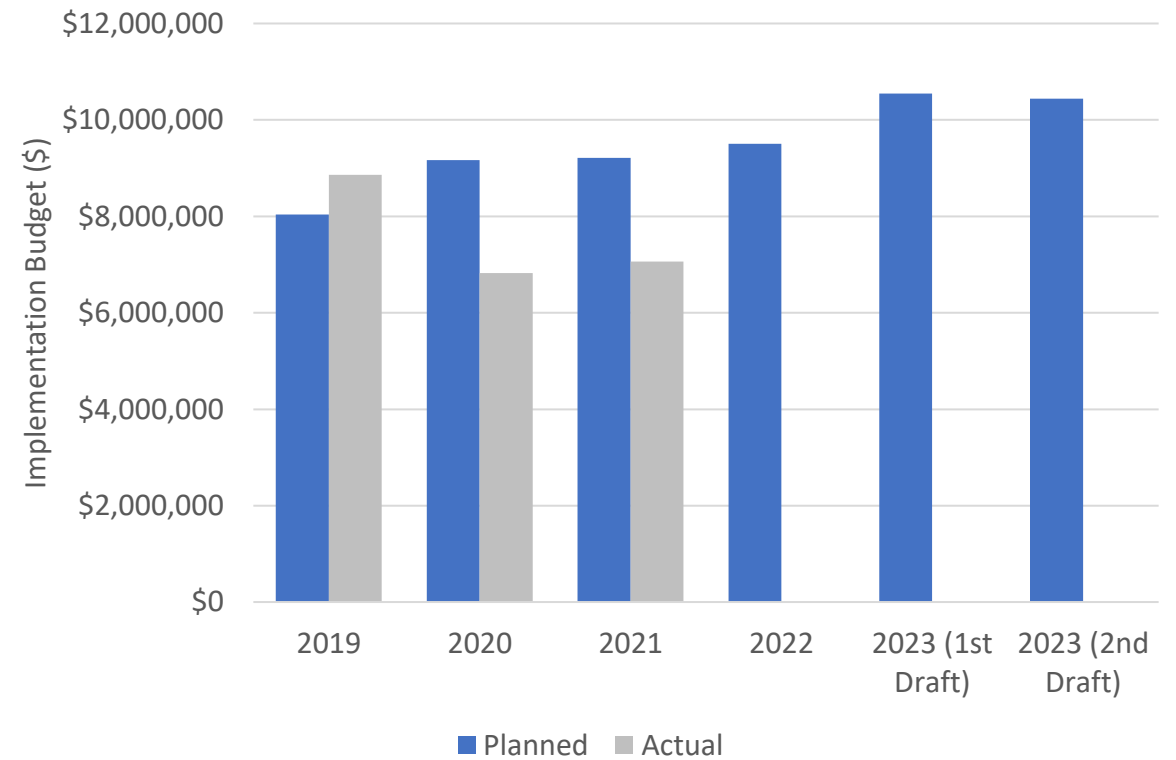


C&I Implementation Budget

Electric Implementation Budget (\$) - C&I Total



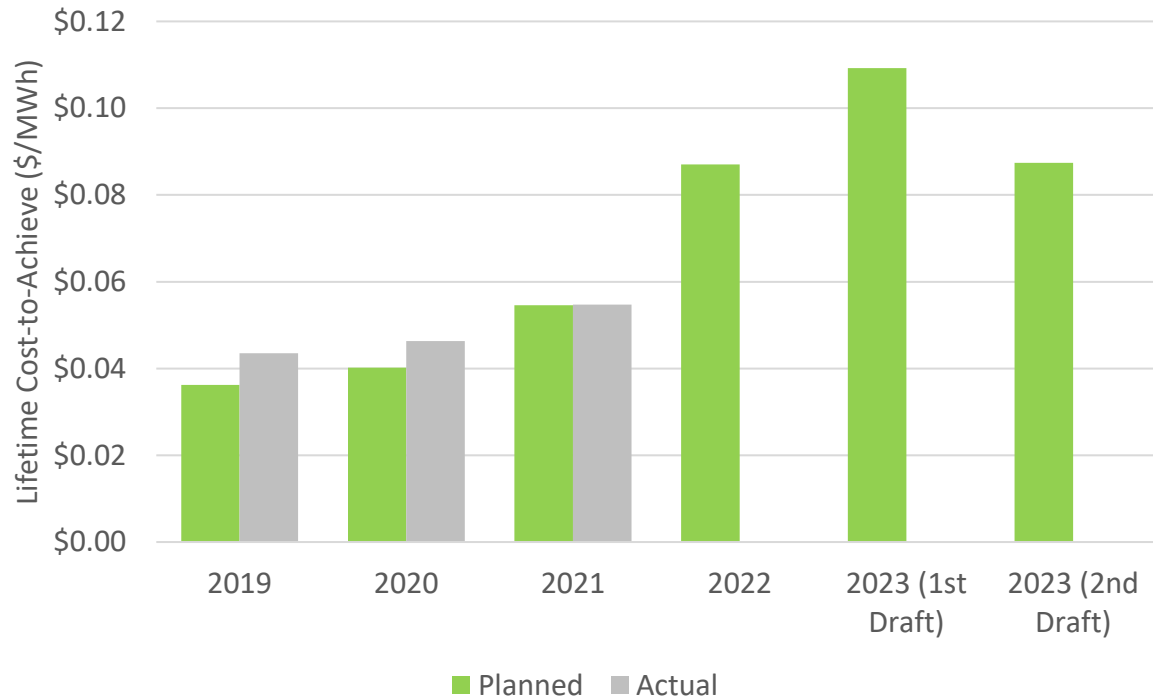
Gas Implementation Budget (\$) - C&I Total



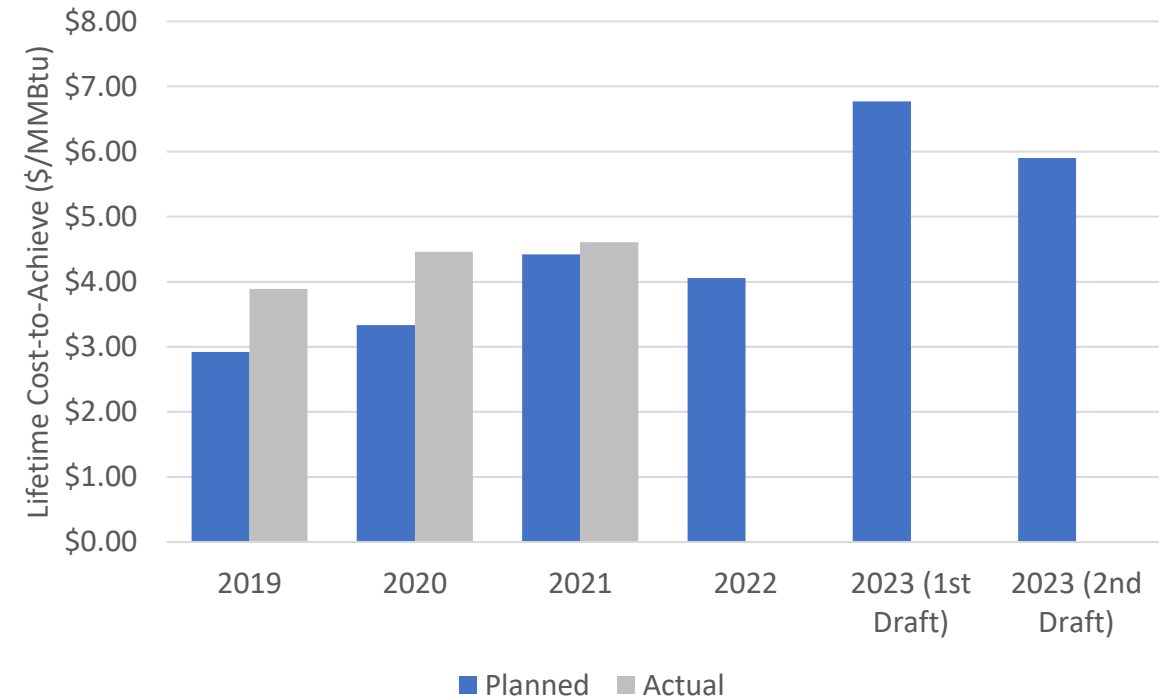


C&I Lifetime Cost-to-Achieve

Electric Cost to Achieve (\$/Lifetime kWh) - C&I Total



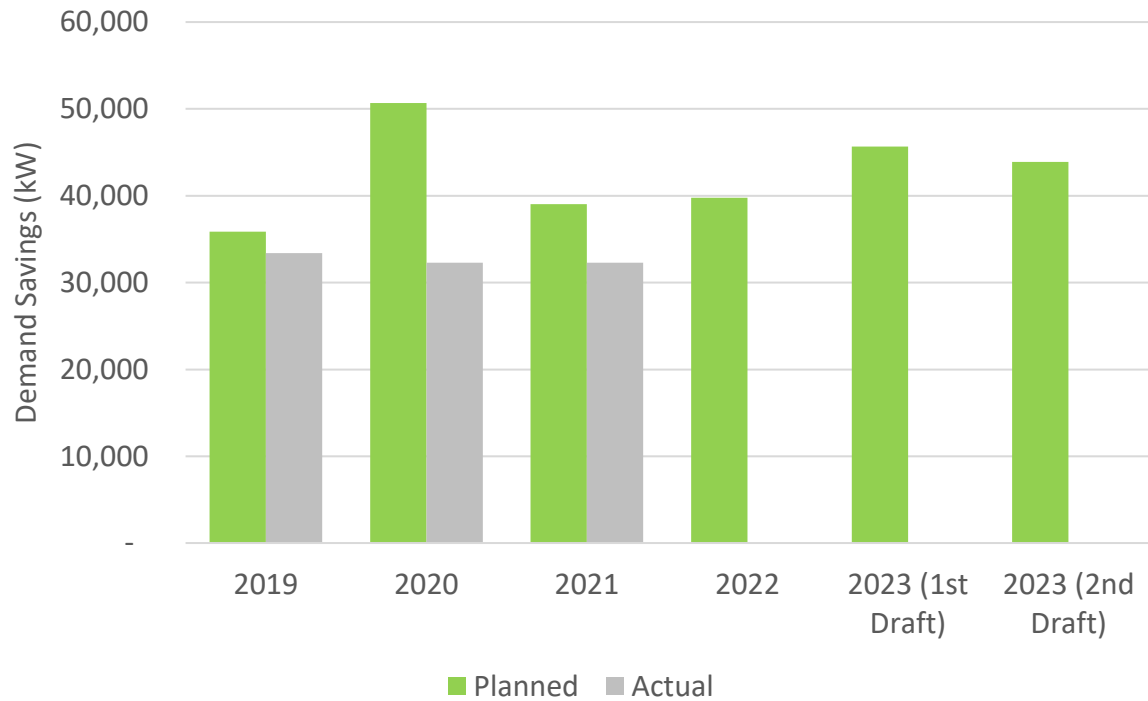
Gas Cost to Achieve (\$/Lifetime MMBtu) - C&I Total



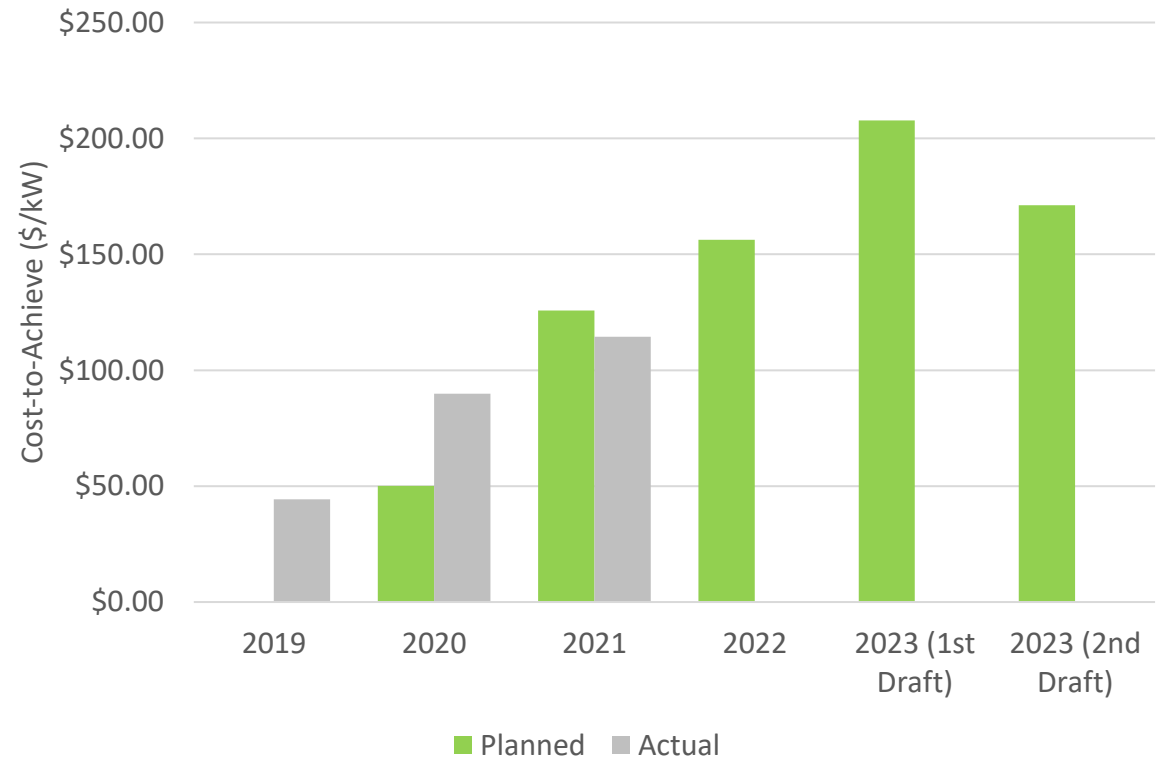


Active Demand – Electric Portfolio

Electric Demand Savings Savings (kW) - Portfolio Total



Electric Cost to Achieve (\$/kW) - Portfolio Total

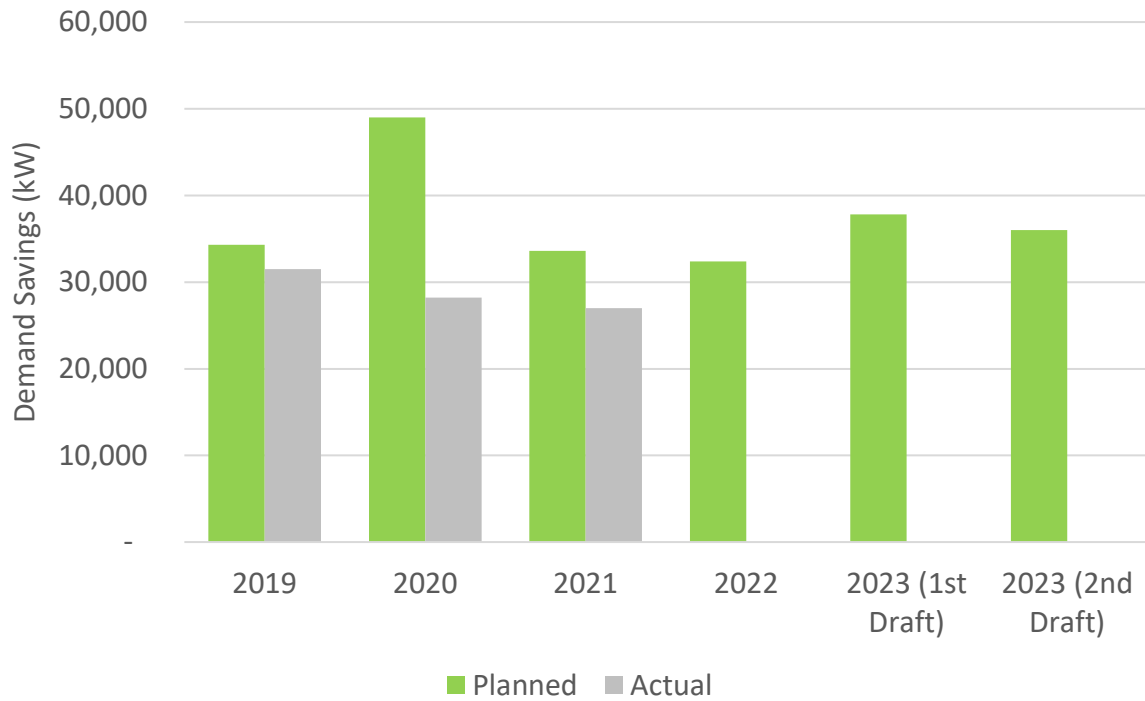




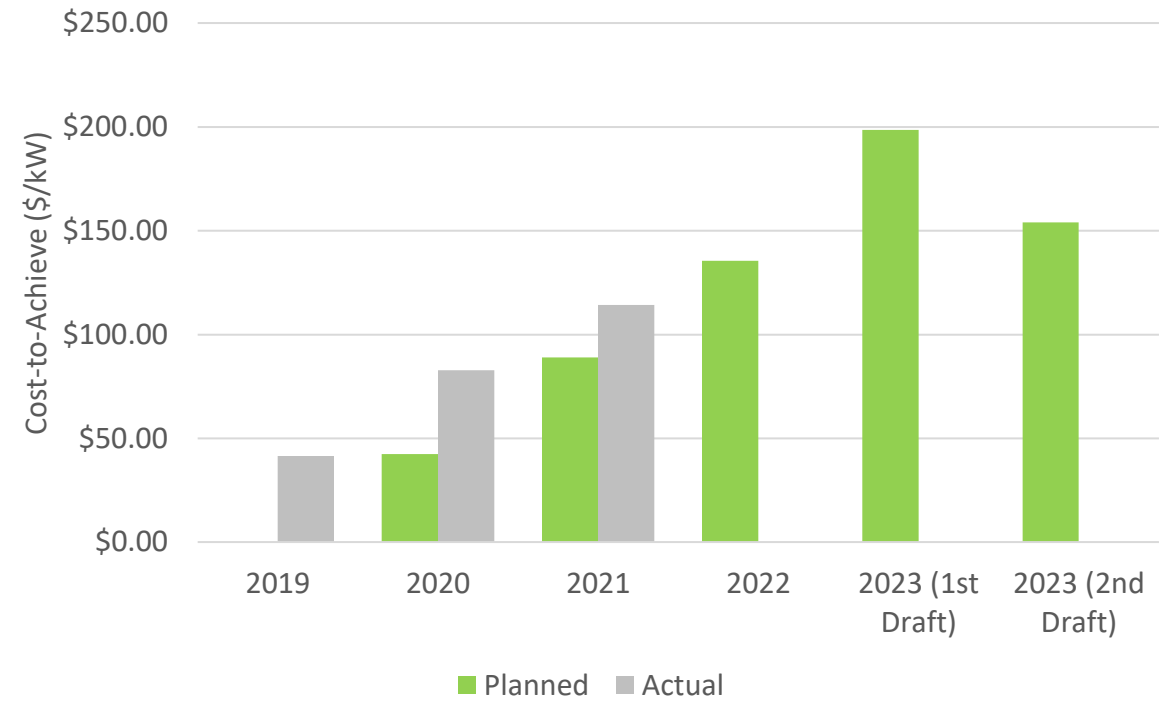
Active Demand – C&I Connected Solutions



Electric Demand Savings (kW) - Commercial Connected Solutions



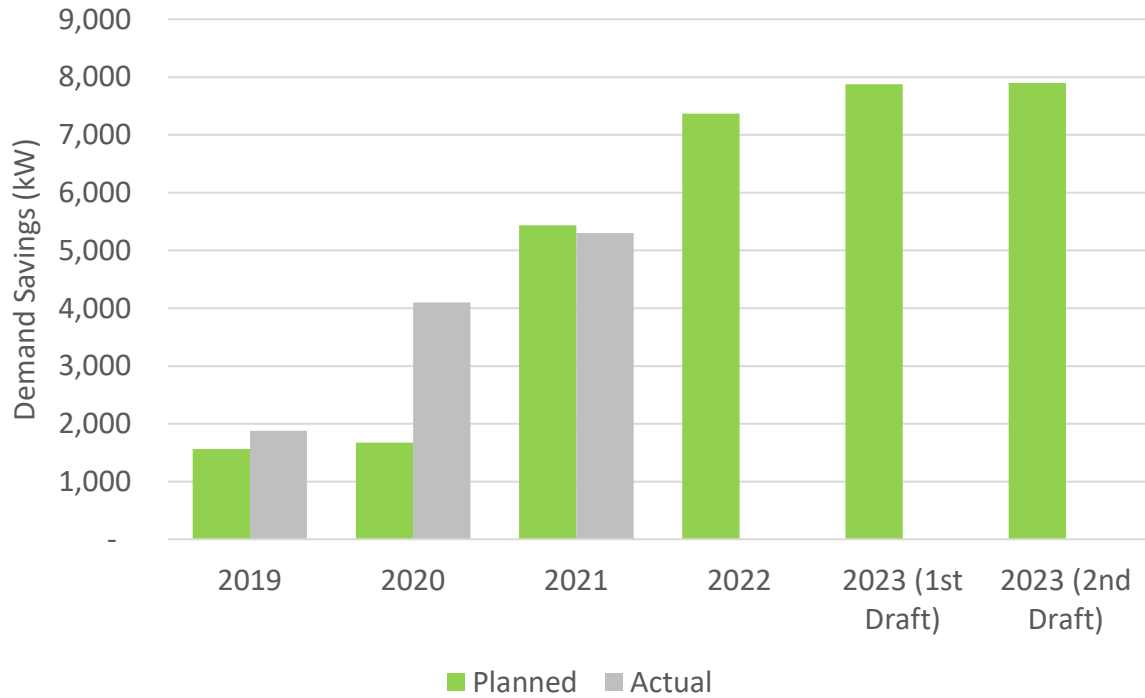
Electric Cost to Achieve (\$/kW) - Commercial Connected Solutions





Active Demand – Res Connected Solutions

Electric Demand Savings (kW) - Residential Connected Solutions



Electric Cost to Achieve (\$/kW) - Residential Connected Solutions

