



Rhode Island Energy™
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EERMC Presentation

Discussion of Second Draft Changes for 2023 Plan

September 22, 2022

Themes of Changes Since First Draft

Major Changes

1. Budgets
2. Total Resource Cost
3. Carbon Benefits

Major Additions

1. Equity section
2. Rate and bill impacts
3. Fuel switching proposal
4. Fuel cell project

Rhode Island Program Budget 2022-2023 Comparison



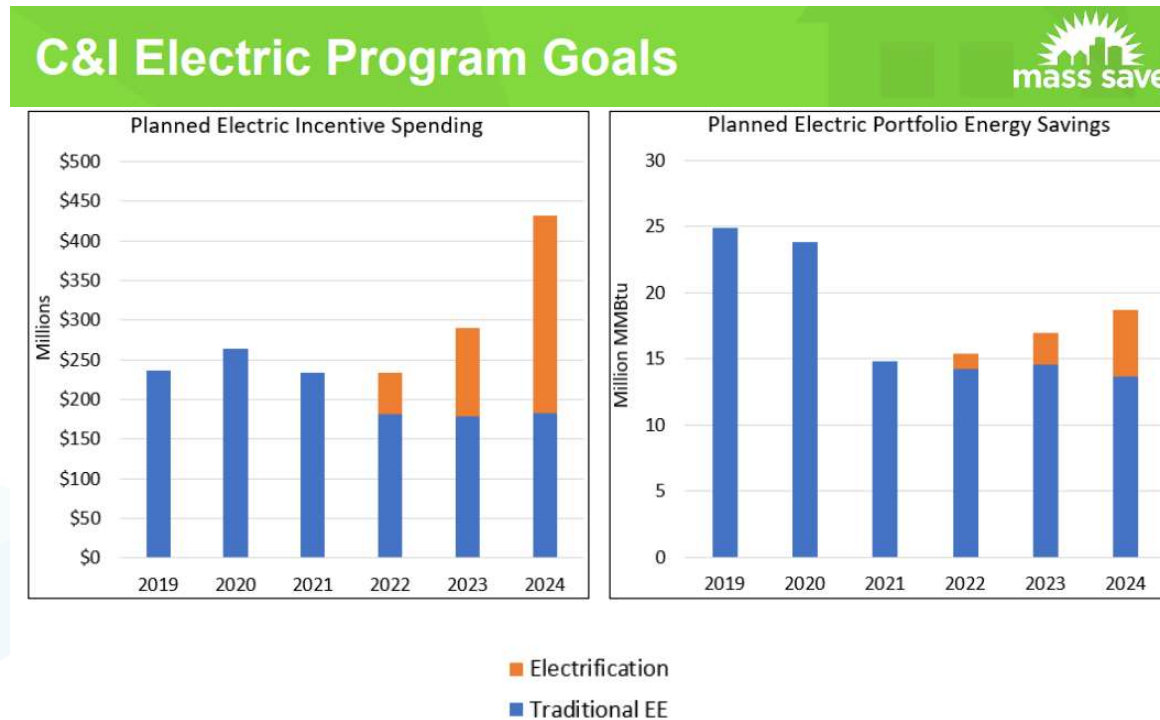
Electric	2022 (\$000)	2023 (\$000)	Difference (\$000)	Difference (%)
Non-Income Eligible Residential	\$32,857.4	\$31,225.8	-\$1,631.6	-5.0%
Income Eligible Residential	\$16,814.3	\$16,943.4	\$129.1	0.8%
Commercial & Industrial	\$49,564.1	\$50,235.6	\$671.5	1.4%
Regulatory	\$6,045.4	\$5,733.6	-\$311.8	-5.2%
Grand Total¹	\$105,281.1	\$104,138.3	-\$1,142.8	-1.1%

Gas	2022 (\$000)	2023 (\$000)	Difference (\$000)	Difference (%)
Non-Income Eligible Residential	\$14,875.0	\$16,162.9	\$1,287.8	8.7%
Income Eligible Residential	\$9,317.6	\$8,653.9	-\$663.7	-7.1%
Commercial & Industrial	\$9,435.7	\$9,180.3	-\$255.4	-2.7%
Regulatory	\$2,277.6	\$2,158.7	-\$118.9	-5.2%
Grand Total¹	\$35,906.0	\$36,155.8	\$249.8	0.7%

¹ Grand total does not include performance incentive

Massachusetts 2022-2024 EE Plan

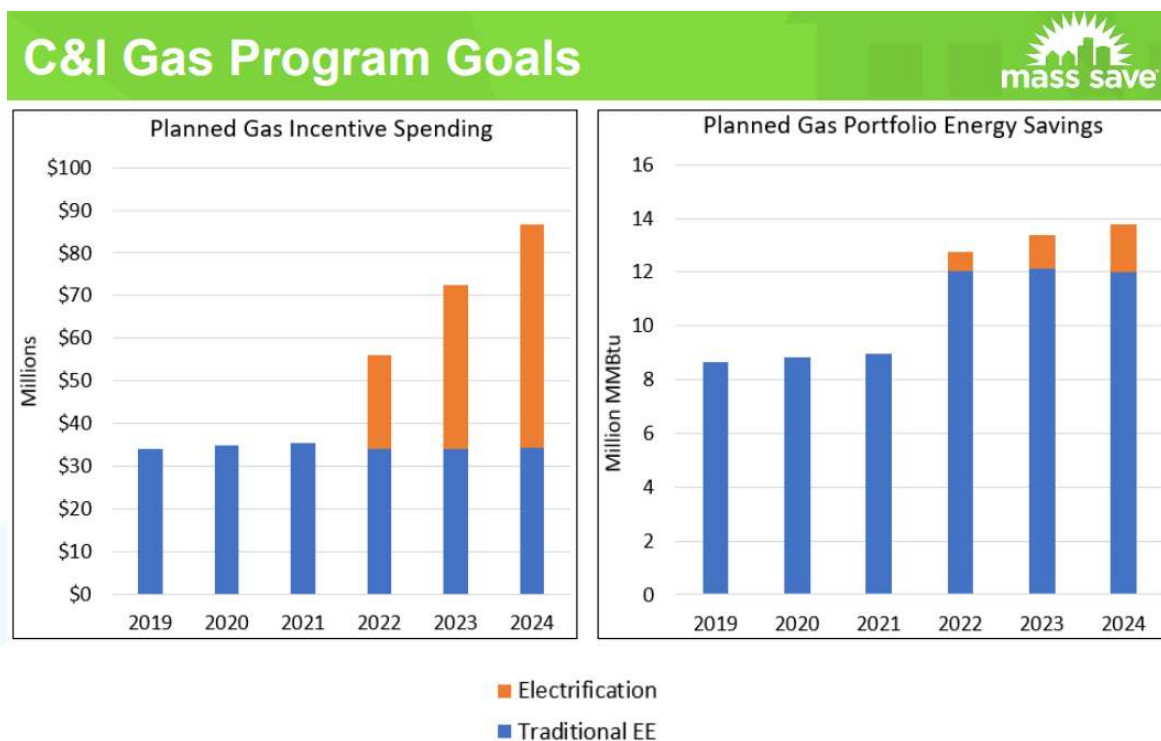
- C&I Electric “traditional EE” spending decreases from the 2019-2021 period and levels off
- Electrification represents the large growth in program spending
- Savings have decreased from the 2019-2021 plan and continue to decrease for “traditional EE”



https://aeenewengland.org/images/downloads/Past_Meeting_Presentations/mass_save_updates__september_2022.pdf

Massachusetts 2022-2024 EE Plan

- C&I Gas “traditional EE” spending decreases from the 2019-2021 period and levels off
- Electrification represents the large growth in program spending
- Savings increase from the 2019-2021 plan due to longer-life weatherization measures



https://aeenewengland.org/images/downloads/Past_Meeting_Presentations/mass_save_updates__september_2022.pdf

Connecticut 2022-2024 EE Plan



- In the recently-approved 3-year plan in CT, electric spending decreases each year while gas spending increases each year, leading to a total decrease each year

Year	Budgets (\$000)			Annual Savings							Lifetime Savings	
	Electric	Natural Gas	Total	Electric (GWh) *	Peak (MW) **	Natural Gas (MMcf)	Oil (gallons)	Propane (gallons)	Annual Savings (MMBtus) ***	CO ₂ Emissions (tons)	Lifetime Benefit (\$000)	Lifetime Savings (MMBtus) ***
2022	\$199,845	\$44,878	\$244,723	197	135	382	1,548,671	294,364	1.3	126,510	\$598,196	16.8
2023	\$178,385	\$55,179	\$233,564	170	133	521	1,363,908	258,488	1.3	123,802	\$563,900	17.2
2024	\$173,895	\$55,836	\$229,731	157	141	521	1,351,073	254,667	1.3	118,502	\$544,206	16.8
Total	\$552,124	\$155,893	\$708,017	524	409	1,424	4,263,652	807,519	3.9	368,814	\$1,706,301	50.8

*Abbreviation for Gigawatt hours.

**Savings include demand response programs.

***In millions of MMBtu (one million British Thermal Units). Figures listed are site MMBtus and address only the energy saved at the meter level.

https://www.utilitydive.com/news/connecticut-energy-efficiency-plan-equity/626840/?mc_cid=ab9965b9f7&mc_eid=cd813fd22c



Total Resource Costs (C&I)

- C&I Retrofit
 - Electric TRCs updated based on actual project costs in 2020-21; resulted in cost increase compared to 1st draft
 - Gas TRC data under review, but more difficult to capture
- C&I SMB
 - Continue to rely on existing modeling conventions
 - Potential adjustments for specific measures
- C&I NC
 - Exploring revision to modeling conventions

Total Resource Costs (C&I)

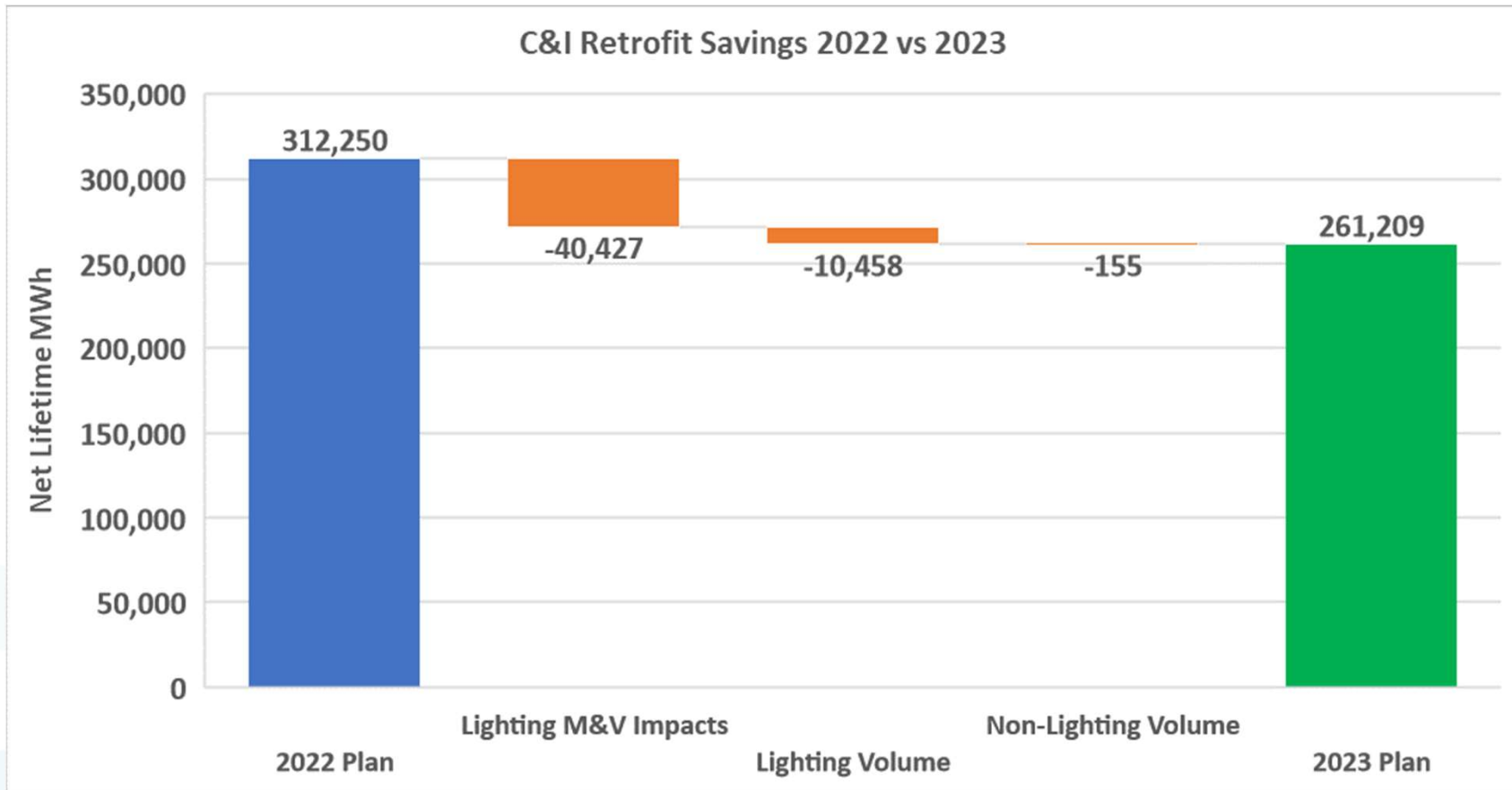


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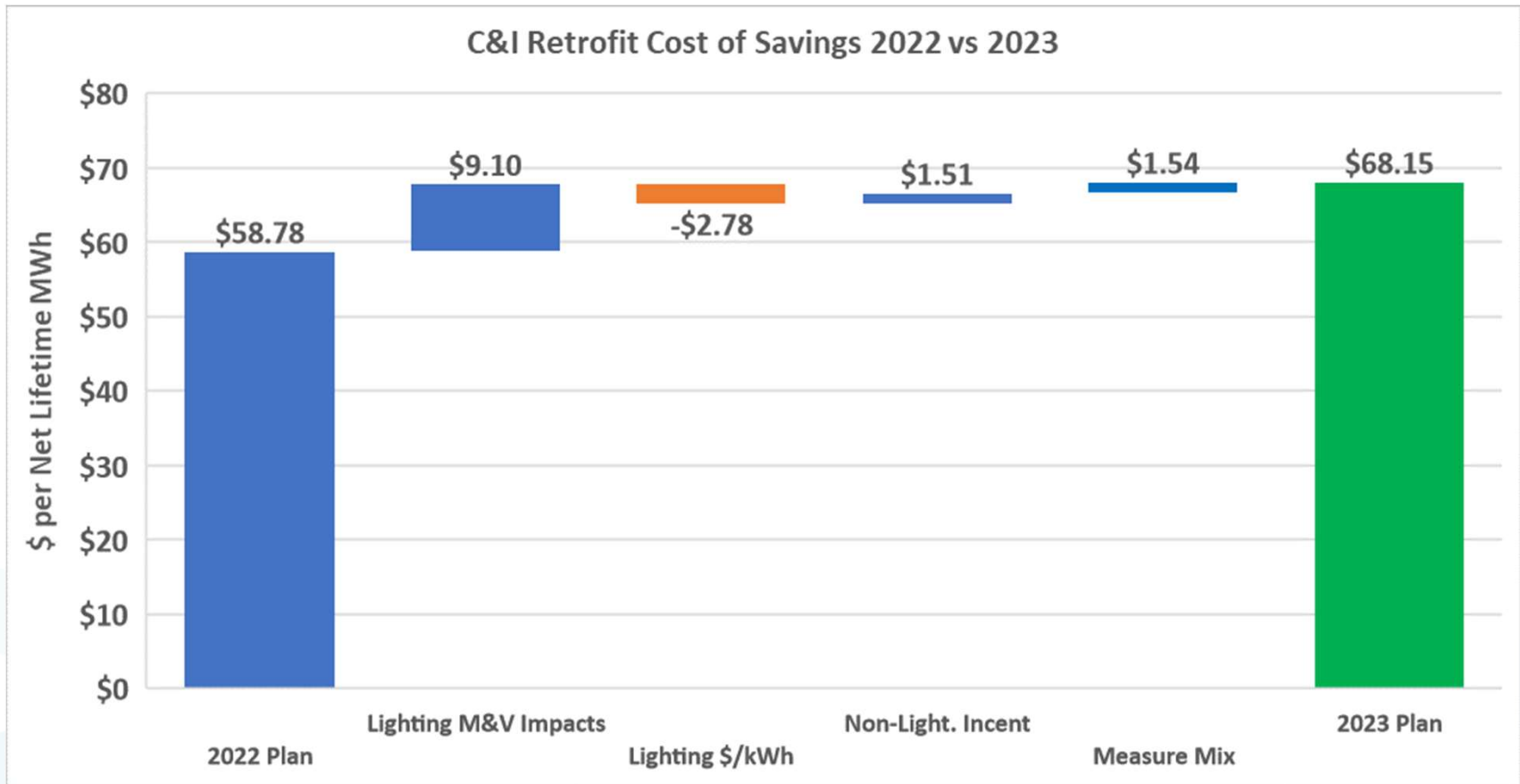
Electric TRC 2022 vs 2023						
	\$ / Gross AnkWh			\$ / Net LtMWh		
	2022	2023	Δ	2022	2023	Δ
NC	\$0.51	\$0.54	6%	\$56	\$56	-1%
Retrofit (With FC)	\$0.56	\$0.62	11%	\$112	\$133	19%
Retrofit (No FC)	\$0.56	\$0.67	19%	\$112	\$160	43%
SMB	\$1.00	\$0.96	-4%	\$176	\$170	-3%

Gas TRC 2022 vs 2023						
	\$ / Gross AnkWh			\$ / Net LtMMBTU		
	2022	2023	Δ	2022	2023	Δ
NC	\$32.51	\$27.57	-15%	\$3.97	\$3.69	-7%
Retrofit	\$33.73	\$43.42	29%	\$3.90	\$4.24	9%
SMB	\$51.73	\$69.66	35%	\$5.73	\$6.29	10%

C&I Retrofit Savings 2022 vs 2023



C&I Retrofit Costs 2022 vs 2023



Carbon Benefits



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- We are proposing to switch to use the Social Cost of Carbon
 - Consistent with the objectives of the Act on Climate
 - The supplement to AESC 2021 that documents support for use of the SCC was available (wasn't in 2022)
 - More accurately count the benefits and reflect that measures that do not incentivize new fossil fuel equipment contribute greater non-embedded carbon benefits
- We have removed the suggestion to include carbon benefits in the PIM calculation
 - Focus on approval to use Social Cost of Carbon in BC Model
 - Would not seek PIM increase by including carbon; just redistributing the benefit streams
 - May address issue further in future plan filings

Addition of Equity Section



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- The plan places emphasis on equity in the second draft
 - Inclusion of the Equity Working Group Recommendations and the corresponding RI Energy Equity Commitment
 - These include commitments to:
 - Promote energy efficiency at community events,
 - Promote outreach in underserved communities in both English and Spanish,
 - Partner with home visiting programs and other groups to expand outreach of the EE programs
 - Use the workforce development needs assessment as a basis for a cohesive workforce development strategy,
 - Allocate some of the EE budget to RIBA's Residential Construction Workforce Partnership

Addition of the Rate and Bill Impacts Section

- Updated rate and bill impacts were added to the main text and attachment 7
- Electric savings
 - High participation means that the lifetime savings for the average customer will range from 0.03% to 1.08%
- Gas savings
 - Average lifetime customer savings range from 0.01% to 24.5%
 - Slight long-term average rate increases between 0.26% and 0.56%
- Typical bill impacts for non-participants are less than a 1% increase across all programs

Other Changes



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- Inclusion of fuel switching to heat pumps
 - Proposal for income eligible program to provide funding for heating system replacements of oil/propane systems that are near end-of-life and ideal candidates for electric heat pumps
- Addition of a fuel cell project
 - The Company is aware of a 2 MW fuel cell project under development
 - Preliminary savings calculations became available in late summer of 2022
 - The project has not yet been analyzed in a Technical Assistance study nor screened for cost-effectiveness
 - The developer believes it is likely the project can be completed during 2023, provided it is financially viable
 - Funds for this project have been allocated in the budget and the Company will follow the appropriate notification procedures