



STATE OF RHODE ISLAND

**ENERGY EFFICIENCY &
RESOURCE MANAGEMENT COUNCIL**

CONSULTANT TEAM

Consultant Team Initial Review Second Draft of the Combined 2024-2026 EE Plan

Presented By: EERMC Consultant Team

Date: September 14, 2023



Outline

Overview

- High-Level Takeaways
- Council Priorities

Sector Highlights

- Commercial & Industrial
- Residential & Income Eligible

Preview of Council Vote

Council Discussion



High Level Takeaways

OVERVIEW





Overarching Takeaways

Second drafts of Annual and Three Year Plan distributed on 9/7 and 9/8

- C-Team has completed significant review, though several more days of extensive review anticipated as part of two-week review period

Significant number of substantive comments and suggestions ‘To Be Addressed’, ‘Noted’ or not incorporated

- Unclear if/when they will be addressed, if additional drafts are planned by RIE

2024 Lifetime Electric and Gas Savings

- Electric: 3% **higher** compared to 2022 achievement; 10% **higher** compared to 2023 Plan
- Gas: 11% **lower** compared to 2022 achievement; 7% **lower** compared to 2023 Plan

2024 Electric and Gas Budgets

- Electric: 14% **higher** compared to 2022 spend; 5% **lower** compared to 2023 Plan
- Gas: 13% **higher** compared to 2022 achievement; 6% **lower** compared to 2023 Plan



Three-Year Plan

Second draft of Three Year Plan was significantly expanded

- This is appreciated, and hopefully sets expectation for next cycle

Proposal to adopt a roadmap for development and inclusion of Equity Component of PIM was rejected

- This commitment was included in prior 3YP, though not completed
- More on Equity more broadly on following slide

Language suggests there are clear limits on EE budget growth in Rhode Island, but analysis shows robust cost-effectiveness, savings relative to supply, and customer bill savings – why aren't we doing more?

- 3YP is a good time to re-examine this topic, esp. given EE importance for Act on Climate goals
- Current 3YP budget growth below inflation (and falls well below PUC 5% guideline from prior 3YP)
- Plan should do more to raise ambition and build on momentum from IRA funds



Equity Update

Limited new actions that have ability to drive significant impact on equitable outcomes

- Continuation of some prior efforts (e.g. Main Street) and focus on marketing OK
- New pilot has very limited funding (\$40k for the year) and requires non-profits to apply to receive a portion of those funds (more details in appendix)

Appreciate commitment to develop equity metrics

- Strongly encourage RIE to conduct this work in Q4 of this year
- Critically important that the Council and other Plan stakeholders are included in the development, definition, measurement and reporting of these metrics



Council Priorities

OVERVIEW





Plan is Responsive to Council Priority



Plan is Partially Responsive to Council Priority



Plan is Not Responsive to Council Priority

Council EE Priorities

Council EE Priorities		Assessment
Priority #1	Comply with LCP Standards	■ ■ ■
Priority #2	Give Due Consideration to Act on Climate	■ ■ ■
Priority #3	Incorporate Stakeholder Input	■ ■ ■
Priority #4	Ensure an Effective & Efficient Development & Review Process	■ ■ ■
Priority #5	Set Ambitious Three-Year and Annual Plan Savings Goals	✗
Priority #6	Increase Participation in Underserved Communities	■ ■ ■
Priority #7	Conduct Targeted Workforce Development	✗

- 3YP Goals fall well below targets
- Qualitative comparison explaining gap helpful
- Presentation of quantitative assessment critical to understand

- Support for codes and standards training a bright spot
- Overall plan lacks targeted development and reduced budgets compared to early drafts
- A critical need to support achieving other goals and obligations in future

More Details in Appendix!



Commercial & Industrial

SECTOR HIGHLIGHTS





C&I – Plan Highlights

Updated narrative and attachments are generally **well-formatted, organized, and clear**

Previous concern regarding lack of references to the Market Potential Study Refresh in detailed C&I program content “to be addressed”

- Evidence-based approaches required to drive continued savings and refine program design
- New data tracking system will improve reporting capabilities and provide insights into customer trends beginning in 2024

Lack of **workforce diversification is raised as a long-term challenge**, but explicit solutions and desired outcomes are not discussed

- Community College of RI and Worcester Polytechnic Institute will launch hands-on industrial assessment training for students, which will adhere to Justice40 guidelines
- Additional code compliance trainings planned, but workforce development efforts appear to be “business-as-usual” without thoughtful attempts at **diversifying while upskilling**

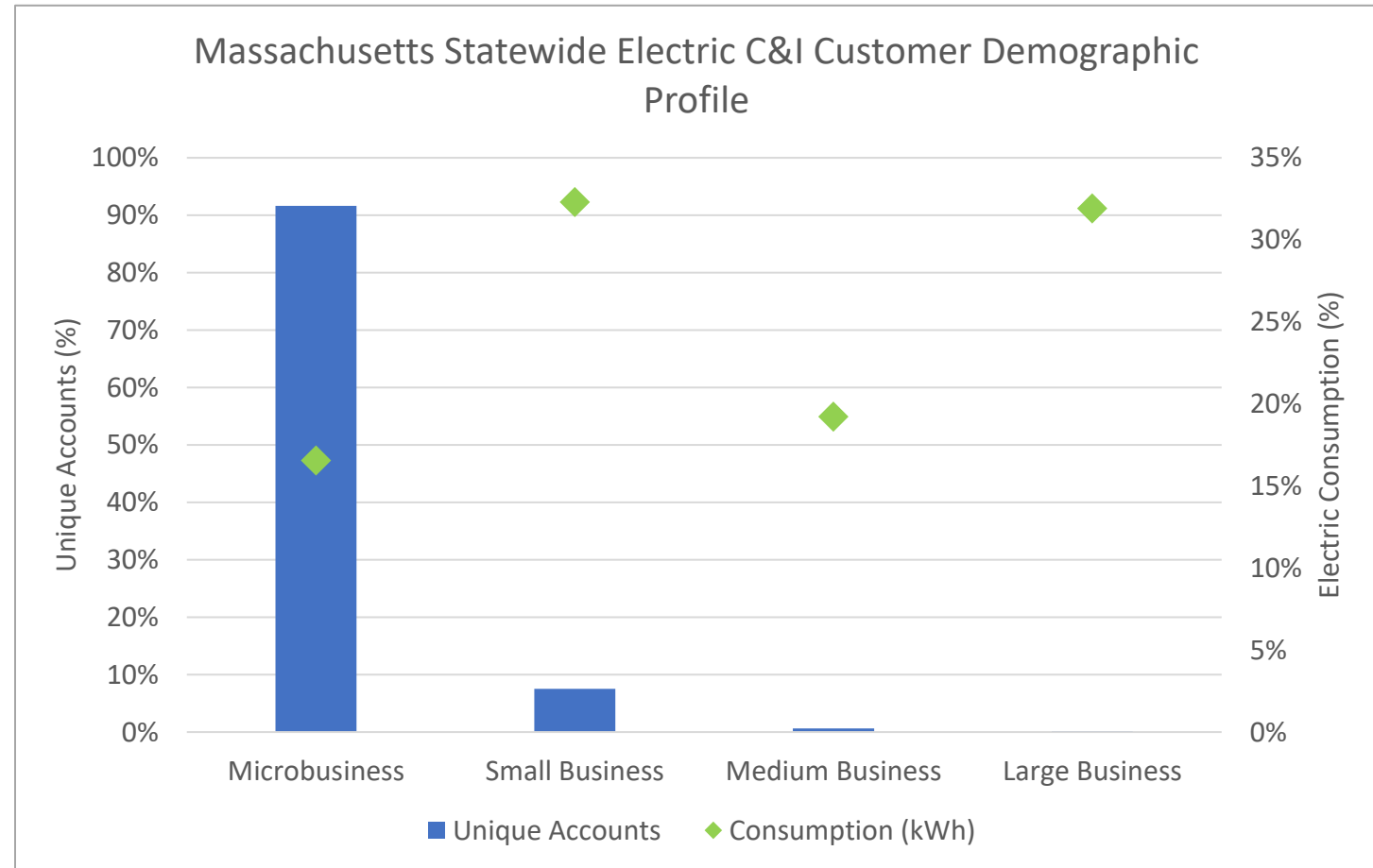


C&I – Plan Highlights

SBDI eligibility threshold expanded from 1.0 to 1.5 million kWh annual consumption.

This was not coupled with an increase in savings goals or specific target for participation by small/microbusinesses.

Requested RI customer demographic to help determine an appropriate goal and **avoid further inequity.**



Source: <https://viewer.dnv.com/macustomerprofile>



C&I – Plan Highlights

Great to see the planned **demonstration for C&I Weatherization**

- Targeting medium- to large-sized non-Residential buildings with potential envelope savings
- “Residential-style” small businesses have been targeted since late 2021 and provided insights into costs of delivering C&I weatherization services

Plan includes **summary of takeaways from C&I customer listening session**; C&I customer working group or recurring discussion forum might produce more useful insights

More detail required to understand **how state and federal offerings can supplement EE programs without creating confusion** for customers

- OER Clean Heat RI website describes heat pumps for small- to mid-sized businesses, but EE program website unclear about technologies offered through Small Business program
- Landscape is changing and programs must remain adaptable



C&I – Plan Highlights

RI Energy Small Business Direct Install program page only highlights lighting and refrigeration upgrades

- Customers can receive robust incentives for all end uses, not just lighting and refrigeration

Small Business Program

- Large Business Program
- Multifamily Program
- New Construction & Major Renovations
- Connect With Our Team
- Rebate Programs
- Heating
- Cooling
- Lighting
- EV Charging Stations
- Cogeneration/CHP
- Kitchen Equipment
- Special Equipment
- ConnectedSolutions
- Training

We can help build a better future for your small business.

Programs and assistance for lowering your energy costs and raising your profile.

During these times, it's important to know that we support small businesses of every kind. Every day we're helping establishments like yours get back to what they do best with energy-saving solutions that can improve ambiance, safety and customer confidence—while lowering your monthly overhead costs.

Featured programs for Rhode Island customers:

- LED Lighting**
We will cover up to 70% of the installation costs for indoor and outdoor LED upgrades at your small business.
- Custom Projects**
We can help make custom lighting and refrigeration energy upgrades at your small business possible with installation discounts on select projects.

How to get started.

When you're ready, schedule a no-cost energy assessment, and together we can determine what energy-saving solutions are best for your business.

[Schedule Online](#) or [Call 888-633-7947](tel:888-633-7947)

Small Business Program Brochure

Get details on programs, incentives, rebates and financing options for small businesses in Rhode Island.

[Download Brochure](#)



C&I – Plan Highlights

OER Clean Heat RI website describes incentives for upgrading heating and cooling systems

This program is targeted at heat pumps, but makes clearer the type of equipment that is incentivized

Governor McKee and the Rhode Island General Assembly enacted legislation to launch the Clean Heat RI program. Administered by the Rhode Island Office of Energy Resources, Clean Heat RI offers incentives to assist homeowners, non-profits, and small-to-mid-size business owners with the purchase and installation of high-efficiency electric heat pumps, with an emphasis on families in environmental justice communities, minority-owned businesses, and community organizations.

The Clean Heat Rhode Island Program is hosting a Customer Webinar on September 21 at 6:30PM.

[Register Now](#)

I'm an Installer

Installers can participate in Clean Heat Rhode Island by applying for the Heat Pump Installer Network. Learn more about the benefits of participating in the program, how to apply for incentives, and the requirements of the Clean Heat Rhode Island Heat Pump Installer Network.

[Learn More](#)

I'm a Homeowner

Homeowners can receive incentives for installing a clean heating and cooling system. Learn more about high-efficiency heat pumps by signing up for a consultation with a Heat Pump specialist and learn how to apply for the incentives available to you through Clean Heat Rhode Island.

[Learn More](#)

I'm an Organization

Small-to-mid-size businesses or nonprofits can receive incentives for installing a clean heating and cooling system. Learn more about whether your organization is eligible and whether a heat pump is right for your business by consulting with a Heat Pump specialist.

[Learn More](#)



Residential & Income Eligible

SECTOR HIGHLIGHTS





Income Eligible Combined Comprehensive Assessments

First Draft proposed a shift to combined Income Eligible Single-Family Assessments, but lacked detail on timing and targets

Positive Steps:

- Company noted that they are already working with CAP Agencies so combined audits can be offered “as early as possible”

Open Questions:

- Can Company commit in the Plan specific target dates for when this will begin to be offered and when it will become standard practice?
- Can the Company collect and report out on share of audits that are combined versus separate?



Multifamily

Multifamily Financing Assessment in First Draft required significantly more detail

- Significant details added in Demos, Pilots, and Assessments Attachment
- While a firm timeline does not exist, it is clear the Company has put a lot of thought into it

Beyond Financing Assessment, First Draft offered little innovation for addressing recent underperformance

- Commitment to incorporate performance metrics tied to goal achievement in upcoming contract extensions with Lead Vendor included
- Commitment to utilize Participant/Non-Participant data good, though would like to see more details of how it will be used
- Unclear whether Company will consider researching and designing dedicated program strategies for different Multifamily building types



Pre-Weatherization Barriers

No additional detail provided on consideration of using EE funds to address Pre-Weatherization barriers or Company's data collection efforts

Company cites low program BCRs as significant roadblock to dedicating program funds for barrier remediation

- Actual BCRs in 2020-'22 timeframe were ~15% higher than Plan
- We believe there is room to offer a non-insignificant amount of dedicated funds within program (see analysis in Appendix)
- Company could provide offering as a Pilot or Demonstration before moving into the Program



Gas HVAC Program Incentives

Over 85% of incentives in first draft were tied to heating and hot water equipment with BCR <1.0

Improvements:

- Program narrative now indicates there “will” be as opposed to there “may be a slight reduction” in gas equipment incentives
- Total incentives for Gas heating and hot water equipment reduced by over \$680k (~40%)

Open Question:

- Company states a shift to weatherization, though BC Models show no change in quantity of planned gas weatherization measures
- Want to better understand if and where these funds have been reallocated to



PREVIEW OF COUNCIL VOTE





Council's Responsibility

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

“

The Council shall vote whether to endorse the Three-Year and Annual EE Plans prior to the prescribed filing date. If the Council does not endorse the Three-Year and/or Annual EE Plans, the Council shall document its reasons and submit comments on the Plans it chose not to endorse to the PUC for its consideration in final review of the Plans.

”



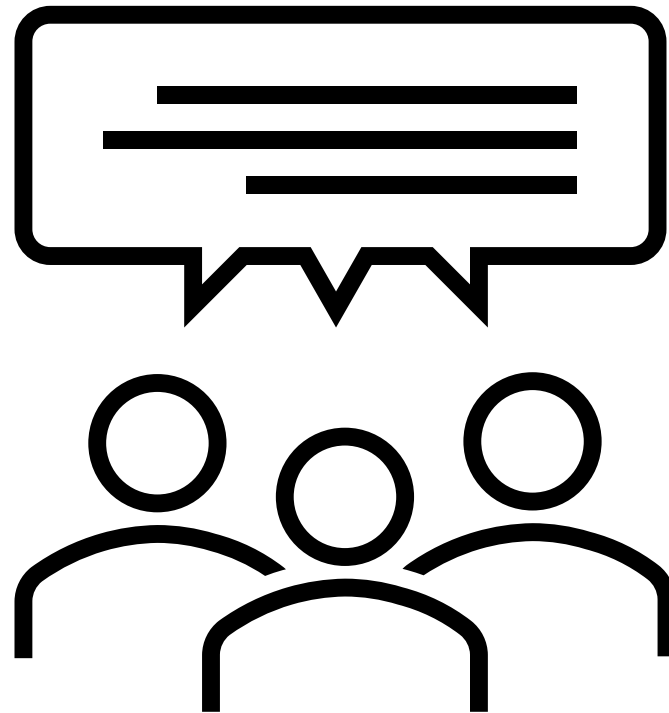
Summary of Plan Vote Options

These options apply to both the Three-Year and Annual EE Plans

1. **Endorse the EE Plan.** Endorsement may also list Council's concerns that didn't prevent endorsement but warrant mentioning in the Plan Docket.
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





APPENDICIES

Appendix A: Additional Portfolio and Program Savings and Spending Data

Appendix B: Responsiveness to Council Priorities

Appendix C: Additional Sector Highlights



Additional Portfolio and Program Savings and Spending Data

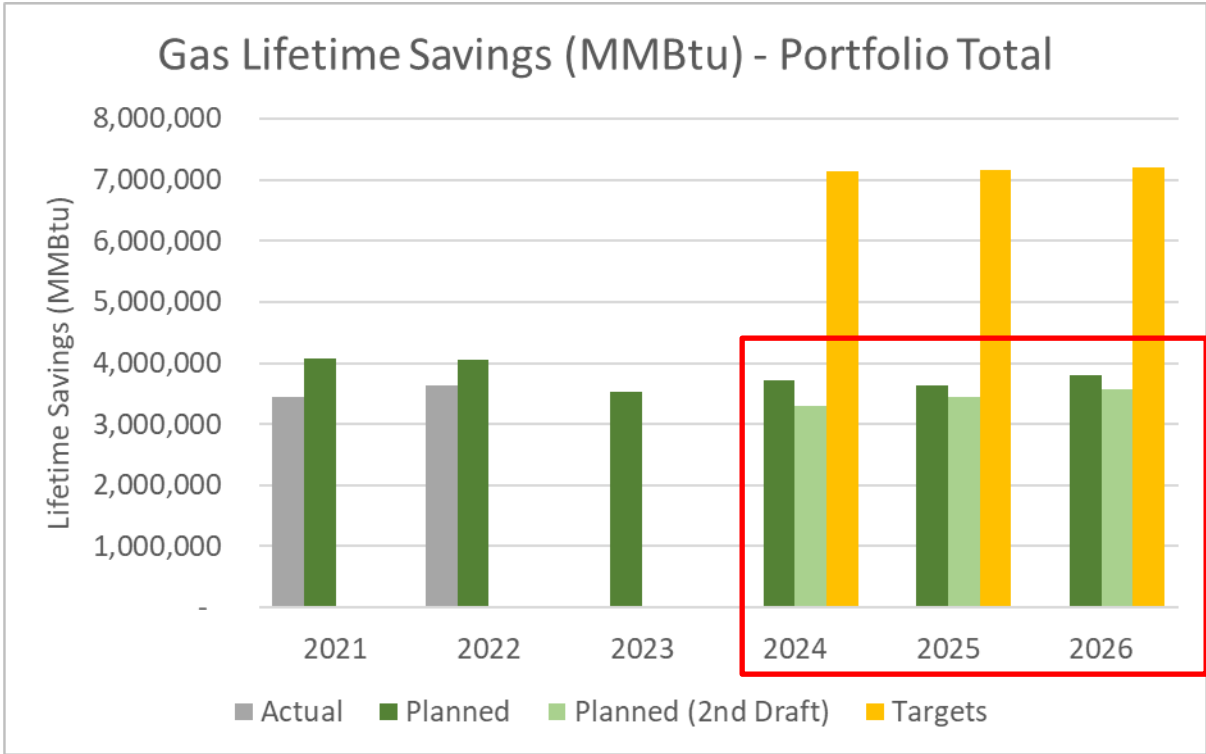
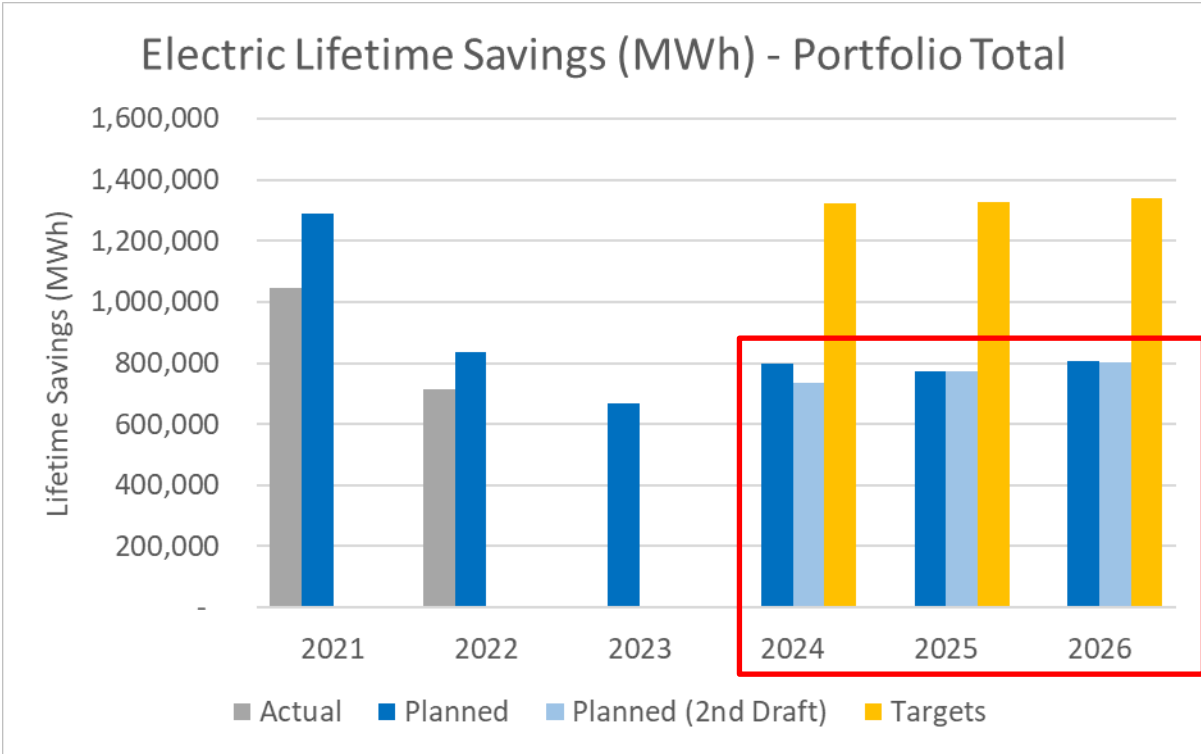
APPENDIX A





Portfolio Lifetime Savings

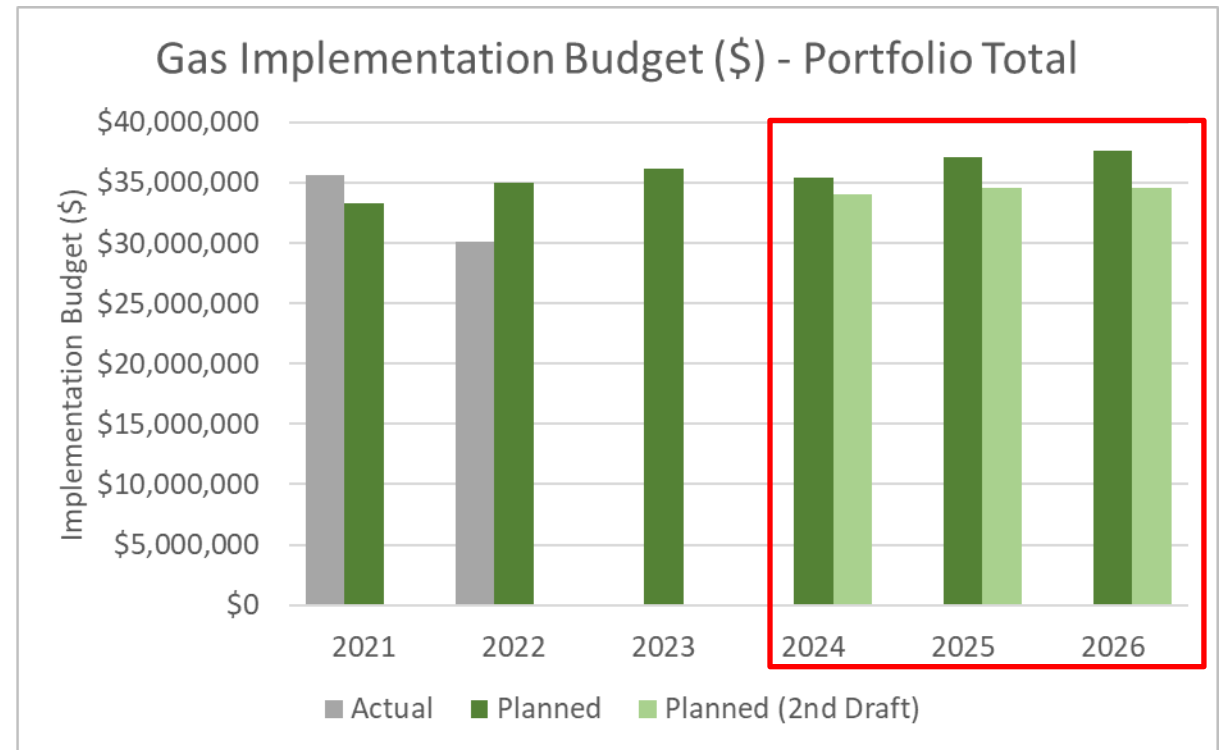
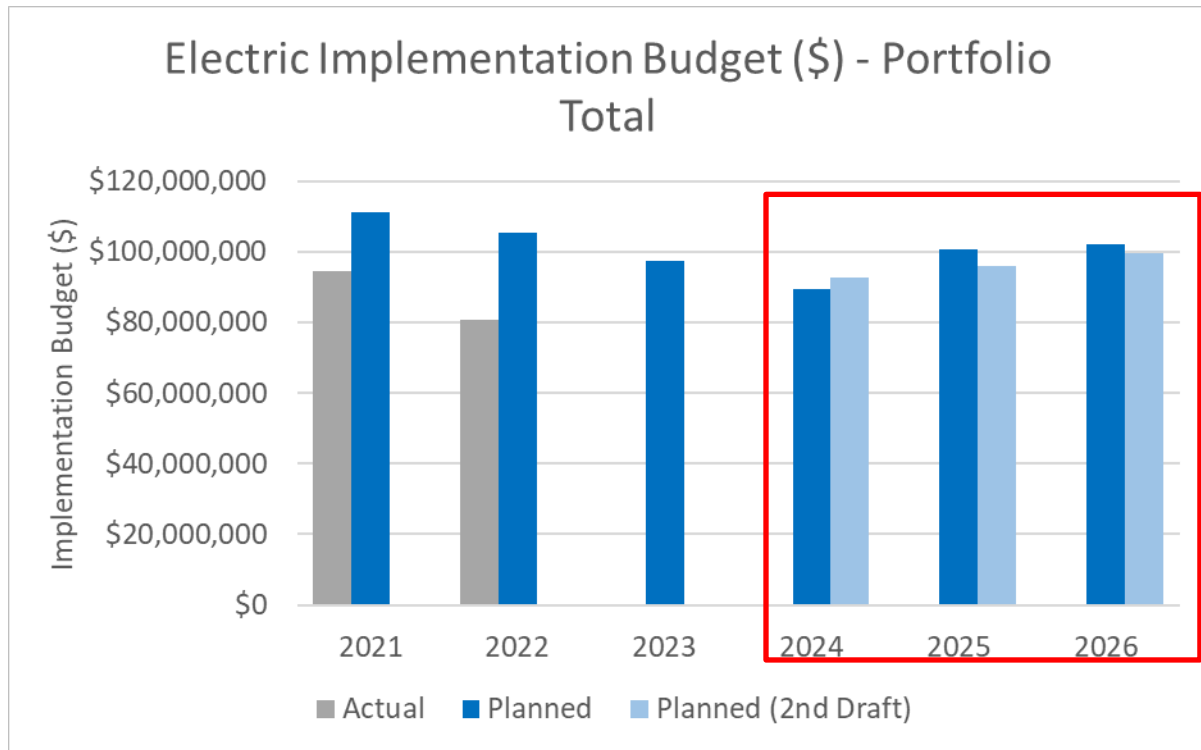
Key Takeaway 3% decrease in **total lifetime electric savings** and 8% decrease in **total lifetime gas savings** between 2024-2026 Plan drafts.





Implementation Budget

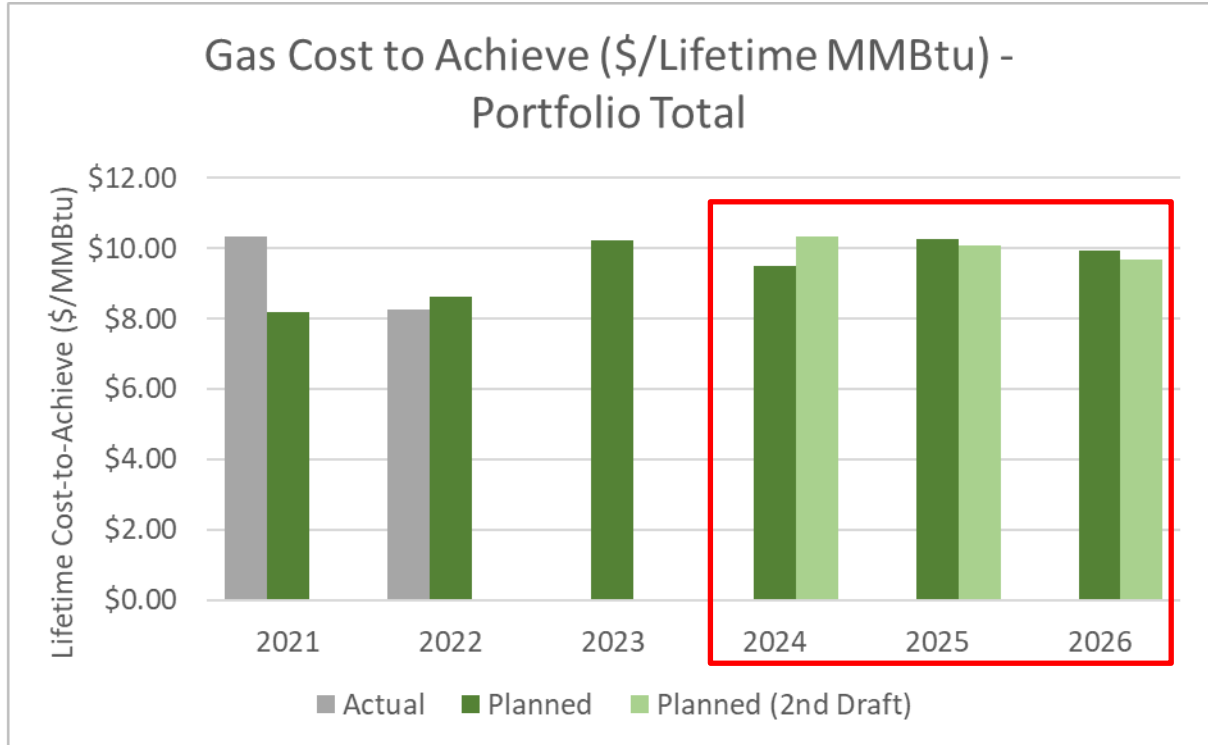
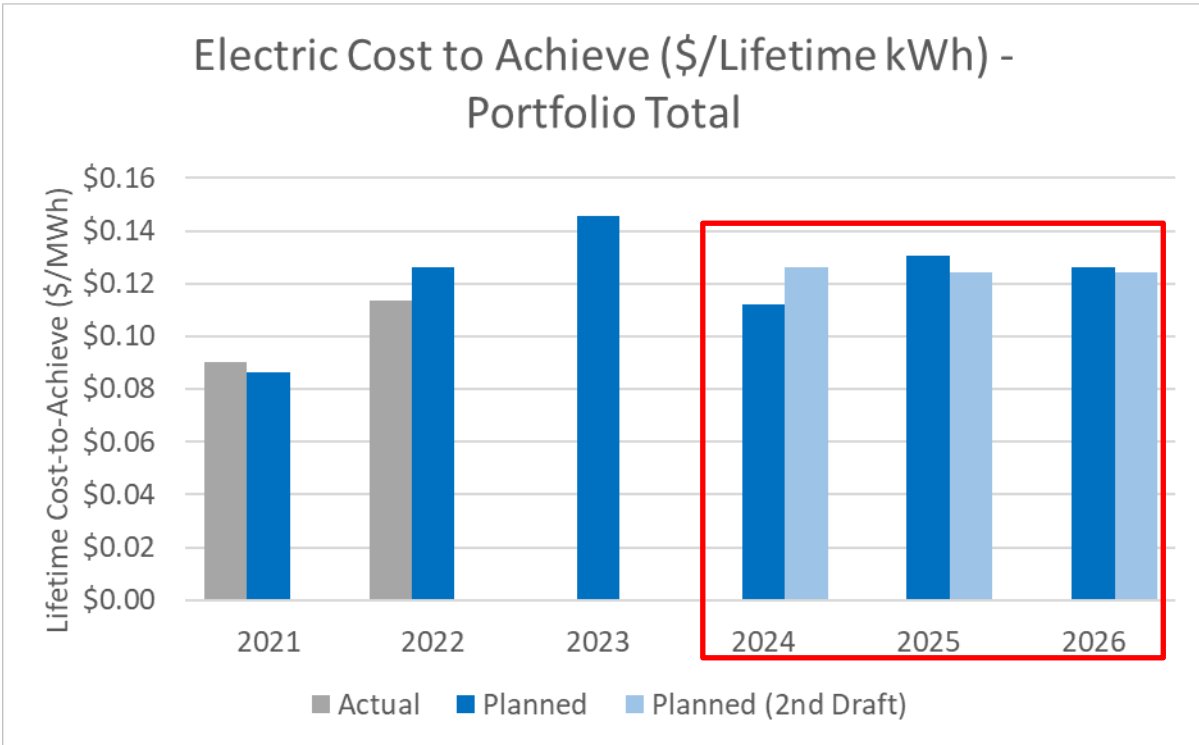
Key Takeaway 1% decrease in electric spending, 6% decrease in gas spending, and 3% decrease in total spending between 2024-2026 Plan drafts.





Portfolio Cost to Achieve

Key Takeaway 12% increase in electric cost-to-achieve and 9% increase in gas cost-to-achieve for 2024, but small decreases for 2025 and 2026.





Gas Portfolio Comparisons

Gas Portfolio Total	2024 Annual Plan (First Draft)	2024 Three-Year Plan (Second Draft)	2025 Three-Year Plan (First Draft)	2025 Three-Year Plan (Second Draft)	2026 Three-Year Plan (First Draft)	2026 Three-Year Plan (Second Draft)
Lifetime Gas Savings (MMBtu)	3,727,336	3,289,038	3,624,115	3,434,447	3,797,251	3,571,470
Implementation Budget	\$35,384,409	\$34,054,990	\$37,178,844	\$34,617,036	\$37,667,444	\$34,583,656
Cost-to-Achieve (\$/Lifetime MMBtu)	\$9.49	\$10.35	\$10.26	\$10.08	\$9.92	\$9.68
Gas Portfolio Plan Draft Comparisons	2024 Three-Year Plan (Second Draft) Compared to 2024 Annual Plan (First Draft)		2025 Three-Year Plan (Second Draft) Compared to 2025 Three-Year Plan (First Draft)		2026 Three-Year Plan (Second Draft) Compared to 2026 Three-Year Plan (First Draft)	
Lifetime Gas Savings (MMBtu)	-438,297	-12%	-189,669	-5%	-225,781	-6%
Implementation Budget	-\$1,329,419	-4%	-\$2,561,807	-7%	-\$3,083,788	-8%
Cost-to-Achieve (\$/Lifetime MMBtu)	\$0.86	9%	-\$0.18	-2%	-\$0.24	-2%



Responsiveness to Council Priorities

APPENDIX B





Responsiveness to Council Priorities

Priority	Assessment
Priority #1: Comply with LCP Standards	Partial <ul style="list-style-type: none"> Annual Plan provides detailed review, though there are some elements where we do not agree with the characterizations (e.g. Efficacy, whether 'all cost-effective' is being fully pursued). Three Year Plan does not adequately address required compliance in document, likely warrants revision to comply. Assessment of Cost-Effectiveness portion of LCP Standards Compliance still to be assessed in form of Cost-Effectiveness memo at future Council Meeting
Priority #2: Give Due Consideration to Act on Climate	Partial <ul style="list-style-type: none"> Stakeholders have repeatedly requested RIE provide an interim view of emissions contributions from EE that would align with Act on Climate in lieu of the 2025 Climate Strategy, since that document will not be available in time to inform this 3YP cycle. RIE continues to point to presence of any emissions reductions as evidence of alignment which does not comport with fact of quantitative targets. In current drafts, this was supplemented with specifics from 2022 Climate Update which are appreciated. Plan does include notable decreases of incentives for new gas equipment.



Responsiveness to Council Priorities

Priority	Assessment
Priority #3: Incorporate Stakeholder Input	<p>Partial</p> <ul style="list-style-type: none"> • RIE provided redlined text and written responses to all comments. However, several substantive comments ‘To Be Addressed’ and several key suggestions not incorporated. • Some requests to provide background data in plan met but many others still pending (e.g. total “SEMP-eligible” customers, C&I participants by consumption class, SBDI participation reporting) • Adjustment of gas incentives a key area of responsiveness to input, as is the description of gaps between targets and goals
Priority #4: Ensure an Effective & Efficiency Development & Review Process	<p>Partial</p> <ul style="list-style-type: none"> • Considering the disconnects with the expectations around the first draft Three Year Plan, this year’s review process could have been better. • RIE was responsive to this feedback and significantly expanded second draft of Three-Year Plan • Later than expected delivery of some components (e.g. BCR and Rate and Bill Impact Models) has impacted review • Lack of clarity around comments ‘To Be Addressed’ leaves path forward less clear than it could be



Responsiveness to Council Priorities

Priority	Assessment
<p>Priority #5: Set Ambitious Three-Year and Annual Plan Savings Goals</p>	<p>Not Responsive</p> <ul style="list-style-type: none"> • Ramp up of savings during 3YP, but still substantially below Targets. • New section that specifically seeks to identify and describe reasons the goals fall below the Targets is appreciated, but could offer more quantitative information on specific drivers. • Disconnect regarding continued opportunity for more savings paired with declining budget
<p>Priority #6: Increase Participation in Underserved Communities</p>	<p>Partial</p> <ul style="list-style-type: none"> • Commitment made to develop equity metrics in Q1 2024, but important to ensure that Plan stakeholders and their feedback are actively involved in that process. No reason this process could not continue in Q4 of this year & avoid EWG ‘stop and start’ • Council and others should play more significant role in EWG oversight if that will be venue for finalizing metrics • No commitment to develop an equity component to the PIM despite openness to this in past conversations
<p>Priority #7: Conduct Targeted Workforce Development</p>	<p>Not Responsive</p> <ul style="list-style-type: none"> • Specifics were added for code compliance training but little else in the way of additional details. • WFD seems to be more business as usual • Shifting burden more towards other state entities • WFD spending cut in half from the first draft 3YP/Annual Plan with no clear description of how they will support other entities doing WFD



Additional Sector Highlights

APPENDIX C





Income Eligible Community-Based Organization Assessment

Income Eligible Community-Based Organization Assessment in First Draft required significantly more detail

Positive Steps:

- Plan shifts from “considering” to “committing” to this assessment
- Details added in Demos, Pilots, and Assessments Attachment

Open Questions:

- Final details TBD based on input and guidance from further Equity Working Group activities
- Timeline remains unclear
- Current proposal puts significant onus on CBOs to apply for funding
- Total of \$40,000 being made available may be insufficient



HVAC and Products

First Draft unclear on plan for updating heat pump standards to ENERGY STAR v6.1

- Comment response indicates that Company will use 2024 as a transition year...
- ...but no description of transition referenced in Plan narrative

Induction Cooktops

- Company plans to hold off on inclusion, but committed to in communication (not in Plan) to evaluate in 2024 and add during program year if it makes sense
- Complicating factors:
 - Unable to provide incentives for customers to switch from gas
 - Induction cooktops will be eligible for IRA rebates when those become available

Enhanced Low-Moderate Income Incentives

- Company does not plan to develop offering, but is open to learning more about how OER has handled income qualification



New Construction

First Draft did not provide sufficient detail about its plan for consideration of a transition to all-electric new construction

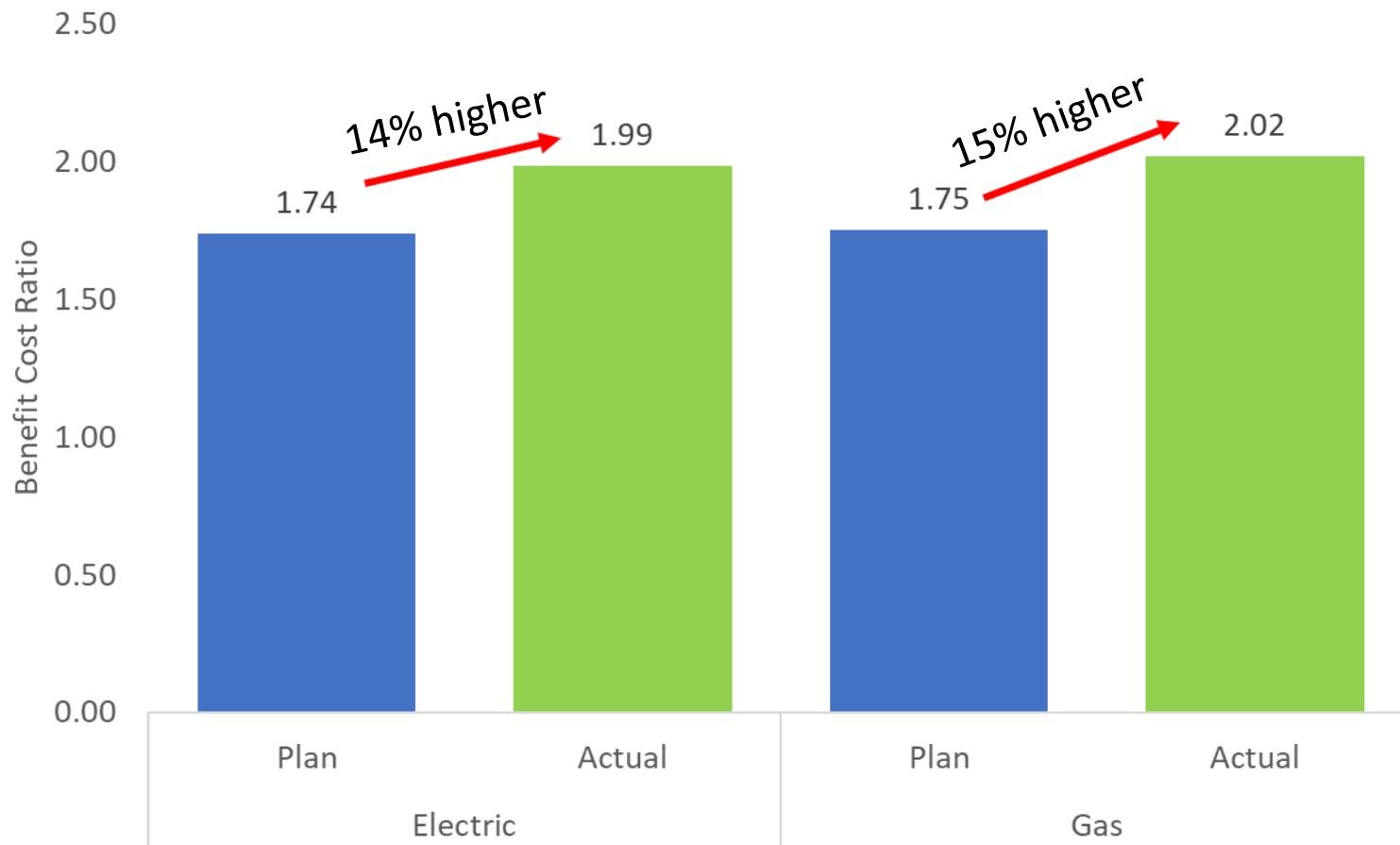
Improvements still needed:

- No specifics offered on timing, which leaves this process too open ended
- Specific targets or goals for the timing of transition should be committed to



Pre-Wx Barrier Analysis

EnergyWise Single Family Plan vs. Actual BCRs (2020-2022)





Pre-Wx Barrier Analysis

Conducted scenario analysis where we applied variance in costs and benefits over 2020-2022 period to the Planned costs and benefits in the 2024 Plan to identify how much room there is likely to be for a dedicated Pre-Weatherization Barrier Remediation effort within the EnergyWise Single Family Programs

Scenario	Dedicated Incentives (Electric Program)		Dedicated Incentives (Gas Program)	
Least Conservative	\$10,464,522	1.00 BCR	\$3,625,154	1.00 BCR
Most Conservative	\$1,758,295	1.25 BCR	\$375,278	1.08 BCR



Pre-Wx Barrier Analysis

Scenarios first apply % of average variance in costs and benefits over 2020-2022 period to planned costs and benefits in the 2024 Plan to generate estimates of year-end costs and benefits for 2024

We then apply a % of the total gap between those estimated costs and benefits to determine how much funding is available in each scenario to dedicate towards Pre-Wx Barrier remediation assistances, with the goal of keeping the programs at or above a BCR of 1.0

% of Average Variance in Costs and Benefits Over 2020-2022 Period Applied to 2024 Planned Costs and Benefits	% of Delta Between Costs and Benefits Allocated to Pre-Wx Barrier Remediation Assistance	Dedicated Incentives (Electric Program)		Dedicated Incentives (Gas Program)	
		Costs	BCR	Costs	BCR
100%	100%	\$10,464,522	1.00 BCR	\$3,625,154	1.00 BCR
	75%	\$7,848,392	1.09 BCR	\$2,718,866	1.05 BCR
	50%	\$5,232,261	1.20 BCR	\$1,812,577	1.10 BCR
	25%	\$2,616,131	1.33 BCR	\$906,289	1.16 BCR
50%	100%	\$8,176,961	1.00 BCR	\$2,209,127	1.00 BCR
	75%	\$6,132,721	1.08 BCR	\$1,656,845	1.04 BCR
	50%	\$4,088,481	1.17 BCR	\$1,104,564	1.07 BCR
	25%	\$2,044,240	1.28 BCR	\$552,282	1.11 BCR
25%	100%	\$7,033,181	1.00 BCR	\$1,501,114	1.00 BCR
	75%	\$5,274,885	1.07 BCR	\$1,125,835	1.03 BCR
	50%	\$3,216,590	1.15 BCR	\$750,557	1.05 BCR
	25%	\$1,758,295	1.25 BCR	\$375,278	1.08 BCR