

#### Rhode Island Energy<sup>™</sup>

a PPL company

## EERMC Presentation 2023 Draft Energy Efficiency Plan

July 28, 2022

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- Background and Dates
- Topline Summary of Plan
- Summary of Key Areas of Focus in the Plan
  - C&I Sector
  - Residential Sector
- Key Updates on 2023 Plan
  - Budgets
  - Savings
  - Equity
- Cost of Supply/Performance Incentive Mechanism

### **Background and Dates**



- Plan draft released on July 12<sup>th</sup>
  - Planning process is ongoing with further discussions and input from stakeholders
  - EM&V Updates to come through the next month+
  - Further assessment of opportunities by sector teams
  - Additional analyses: rate and bill impacts (Attachment 7) to come interim and final
- Key Upcoming Dates to note:
  - July 29: Comments due from EERMC and Stakeholders on 1st Draft
  - September 8: Final Version of Annual Plan sent to EERMC and TWG
  - September 30: Annual Plan filed with PUC

## 2023 Plan Highlights





#### Budget increase of 5%



Leveraging completed studies to improve outreach to nonparticipants



## Continued focus on equity



Some strategic program modifications in the 3<sup>rd</sup> year of the 3-year plan

## Summary of 2023 Draft EE Plan



- Electric EE and DR:
  - Annual savings: 107,223 MWh, lifetime savings: 734,658 MWh, DR: 45.7 MW
- Gas EE:
  - Annual Savings: 280,344 MMBtu, lifetime savings: 3,179,772 MMBtu
- \$309M present value of lifetime benefits from gas EE, electric EE, and active demand response
- \$304M added to Rhode Island's gross state product
- 6,422,781 MMBtu lifetime reduction in all fuel consumption (electric, gas, oil, propane)
- 78,217 annual short tons of carbon avoided in 2023, contributing 1.2% toward Rhode Island's Act on Climate GHG emission gross reduction requirements of 45% below 1990 levels by 2030.
- 2021 Year-End Report found 1,011 FTE associated with National Grid programs, across over 1,000 companies





## Sector Highlights

### Key Areas of Focus for Commercial and Industrial Programs

#### **Building Analytics Program**

- Pre-qualified vendors
- Incentives for both system start-up and savings achievement
- Specialized implementer

#### **Operations**

- Streamline technical processes (calculators, data collection)
- Considering additional sales staff
- Revisit incentive levels

#### Training and Trade Ally Engagement

- Trainings on HVAC, controls, weatherization, energy management, etc.
- Engage trade allies (contractors) to increase EE participation

#### Pilots, Demonstrations, Assessments, New Measures

- Gas leak survey
- Air curtains
- Ventilation (DCV, ERV, HRV)
- Sunset efforts several efforts



#### **Small Business Program**

- Equity (full section of Att. 2):
  - Bilingual auditors and marketing collateral
  - Marketing & outreach to WME's with community groups
- Weatherization:
  - RGGI fund availability?
  - Long payback period
  - Revisit targeting
- Electric BCR = 1.03
  - M&V impacts expected soon
  - Revisiting incentives/financing

Lighting market transformation is forcing us to diversify. Supply chain and economic factors present challenges.

## Key Areas of Focus for Residential Programs



#### Marketing & outreach

- All programs: Utilize Non-participant Study and Multifamily Census studies to drive customers – particularly nonparticipants – to implement comprehensive energy efficient measures.
- Target customers with the highest propensity to participate
- Identify five nonparticipant communities for enhanced outreach

#### Equity Working Group Input for 2023 Outreach and Engagement

- Cross training of EE with other in-home services
- Enhanced promotion and education
- Participation in community events

#### **Workforce Development & Training**

- Support existing training programs such as RIBA's
- Concrete goals for minority/women owned business hiring
- Coordinate with community-based organizations
- Partner and leverage existing internship programs
- Marketing tools and strategies to develop career pathways
- Connect with other training/resilience hubs

#### Pre-weatherization Barriers

Pre-weatherization
specific information by
type of barrier. Outline
steps and resources
available to address
barriers.

#### Improving Program Efficiencies

IE: Increase the number of customers reached in IE by implementing the interagency referral program







## Electric EE – Changes between 2023 in the 3YP Compliance Filing and 2023 Draft Annual Plan



Electric Portfolio	2023 in 3YP Compliance Filing	2023 Annual Plan	% Change
Net Annual Savings (MWh)	131,873	107,221	-18.7%
Net Lifetime Savings (MWh)	1,333,218	734,658	-44.9%
Total Benefits (RI Test)	\$ 646,450,249	\$223,091,936	-65.5%
Total Budget	\$ 128,755,600	\$114,104,646	-11.4%
Benefit Cost Ratio (RI Test)	4.29	1.71	-60.1%
Cost/Lifetime kWh	\$ 0.109	\$0.203	86.2%
EE Program Charge per kWh	\$ 0.01726	\$0.01036	-40.0%

- Lifetime MWh reductions driven mainly by evaluation results for C&I lighting measure lives
- Total Benefit and Benefit Cost Ratio reductions are primarily driven by lifetime MWh reductions (and associated benefits)
- Cost/Lifetime kWh increase is mainly driven by the decline in lifetime MWh savings
- Another major driver for the decrease in benefits is inflation, resulting in less savings achieved for every dollar spent

## Gas EE – Changes between 2023 in the 3YP Compliance Filing and 2023 Draft Annual Plan



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Gas Portfolio	2023 in 3YP Compliance Filing	2023 Annual Plan	% Change
Net Annual Savings (MMBtu)	440,421	280,344	-36.3%
Net Lifetime Savings (MMBtu)	4,447,108	3,179,772	-28.5%
Total Benefits (RI Test)	\$151,000,725	\$86,375,476	-42.8%
Total Budget	\$38,558,829	\$38,751,232	0.5%
Benefit Cost Ratio (RI Test)	3.08	1.82	-40.9%
Cost/Lifetime MMBtu	\$10.63	\$14.61	37.4%
C&I EE Program Charge per Dth	\$0.787	\$0.692	-12.1%
Residential EE Program Charge per Dth	\$1.131	\$1.074	-5.0%

- Total Benefit and Benefit Cost Ratio increases are driven by Cost/Lifetime MMBtu increase is
  primarily driven by the C&I sector and updated 2021 AESC results.
- Another major driver for the decrease in benefits is inflation, resulting in less savings achieved for every dollar spent

Note: 2023 3YP Compliance Filing Total Benefits and Benefits Cost Ratios remove economic benefits for an apples-to-apples comparison to the compliance filing.

## Factors Influencing EE Surcharge in the 2023 Annual Plan

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- 2023 Annual Plan 1<sup>st</sup> Draft Highlights
- 2022 EE Year End Fund Balance
- 2022 Actual and forecasted EE expenses and revenues from the current EE surcharge contribute to the 2022 year end fund balance. A positive fund balance lowers the 2023 surcharge, a negative fund balance increases it. The 1<sup>st</sup> draft incorporate program expense forecasts.
- Annual Plan First Draft 2022 Fund Balance: Electric \$28.1M, Gas \$4.8M
- Change in Energy Sales Forecasts
- The 2023 EE Surcharges are also impacted by electric sales and gas volume forecasts for 2023. Lower electric sales and gas volume forecasts lead to higher EE surcharges. The 2022 gas volume decreased modestly (6.5%) from the compliance filing forecast. 2022 Electric sales forecast will be updated in late September.
- 2023 Total Budget Level
  - 2023 Budget levels also impact the 2023 surcharge.
- 2023 Annual Plan First Draft Budgets Compared to 2022: Electric \$5.43M and Gas \$1.85M

#### 2023 Annual Plan – Final Plan Updates

 The Company will provide a final plan that updates EE surcharge estimates

#### 2022 EE Year End Fund Balance

For the final plan the 2022 EE expenses forecast will be updated based on the most recent data available at that time.

#### **Energy Sales Forecasts**

 The 2023 electric sales forecast will be updated in late September. If this update is not incorporated into the Oct 1<sup>st</sup> filing, the Company will refile the proposed rates with the PUC based on the update.

## Total Budget Trend – Implementation Costs

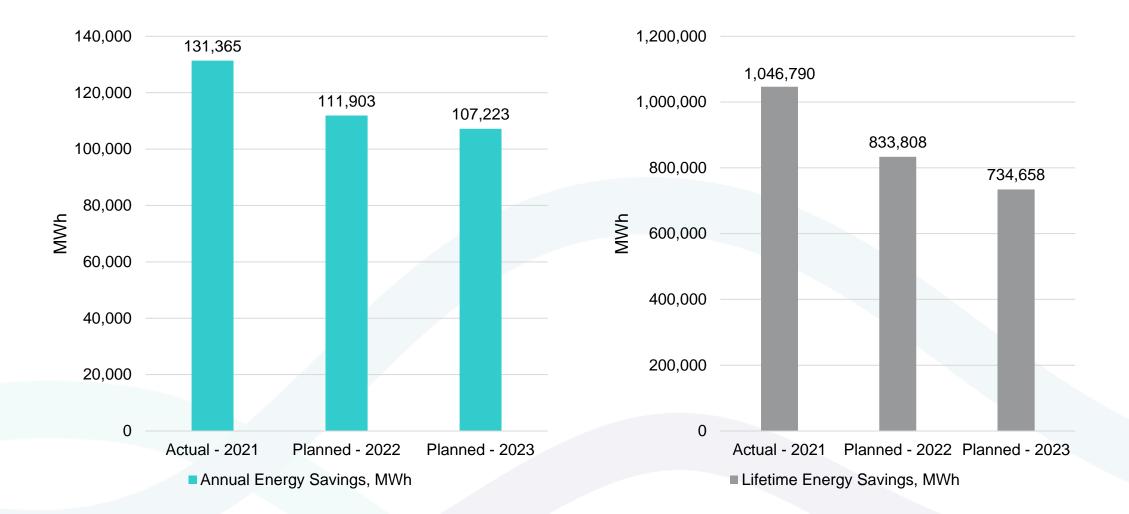




2023 approximately 5% YoY growth from 2022 compliance budget.

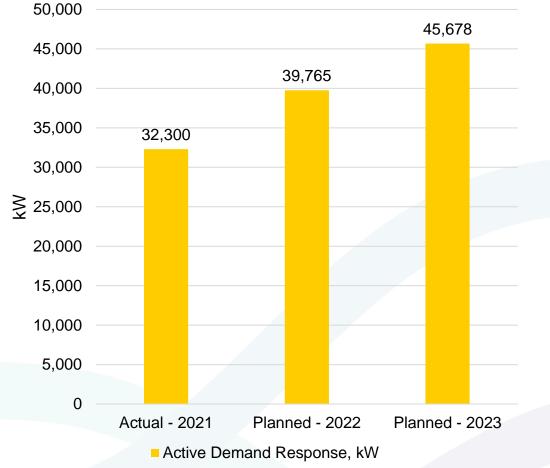
## Portfolio Savings Trend - Electric





### Active Demand Response Trend

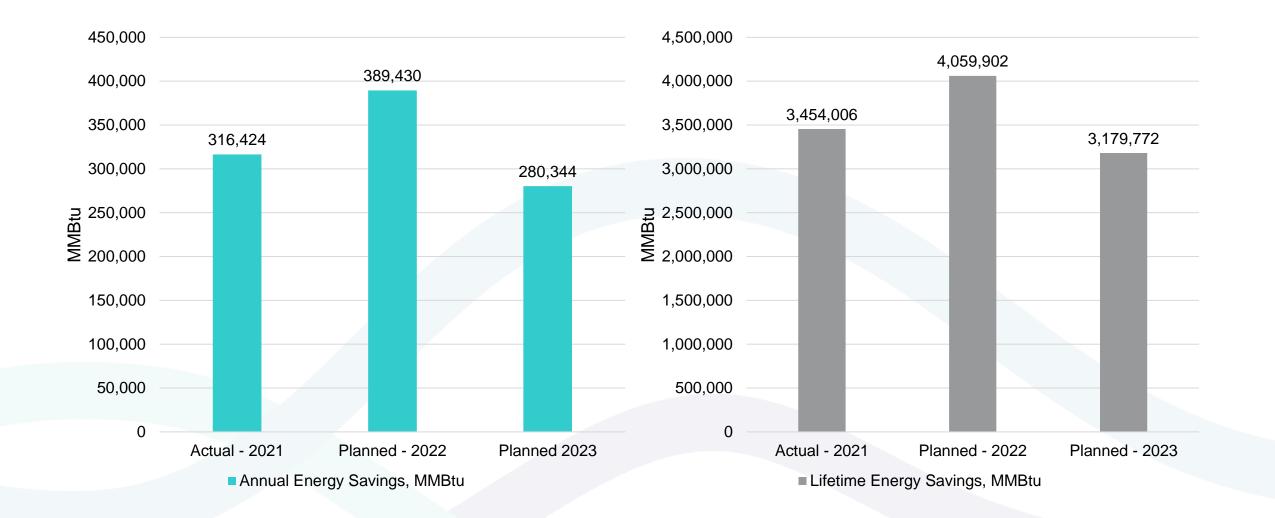




 Increases attributable to potential C&I battery storage deployments

### Portfolio Savings Trend - Gas





## **Equity Commitments**

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- Increasing outreach to underserved communities to encourage participation
- Targeting outreach for landlords to increase participation among renters
- Tracking minority and women owned businesses that are providing services to the Energy *Wise* program
- Continuing to identify and encourage customers eligible for the discount rate to move to the discount rate
- Encouraging participation in Residential Income Eligible Services (IES) for new customers enrolled on the discount rate via a "welcome package"
- Targeting woman and minority-owned businesses through marketing efforts, partnerships with local community organizations, bilingual facility auditors, and making marketing materials available in other languages
- Utilizing the Company's new codes and standards advancement support service to target nonparticipant markets across all sectors. While the program is in its infancy, this approach overcomes traditional barriers of access by ensuring that efficiency levels are rising for all.





## Cost of Supply, PIM

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## **Cost of Supply Results**



- Applied methodology for cost of supply calculations at the portfolio level, for each fuel
- Both portfolios are less than the cost of alternative supply
- Electric results:
  - Cost of EE: \$130.4M
  - Cost of Alternative Supply: \$197.3M
  - Difference: \$66.9M
- Gas results:
  - Cost of EE: \$47.5M
  - Cost of Alternative Supply: \$52.8M
  - Difference: \$5.3M

## Performance Incentive Mechanism Considerations in the Draft Plan



- PIM in the 2023 draft plan applies the PIM approved by the PUC for the 2021 – 2023 term. No changes to mechanism proposed.
  - Tracking and learning in 2022 with a significantly revised structure. Further clarity with expected PUC staff guidance document.
- Inputs to the PIM changed with application of new benefits calculations, EM&V results, and planning inputs
  - OER and RIIB cost allocations removed from the calculation of PIM costs since they are regulatory mandates and do not drive EE program investments; EERMC costs continue to be included.
  - Section 10 of the main text describes the EE PIM. Intent is to incorporate references to the PUC guidance document if it is finalized and released prior to filing.
  - Tables E-8A-C and G-8A-C summarize the inputs and calculations for the PIM in 2023.



July 29: EERMC and Stakeholder comments due on Draft Plan August 25: EE TWG Discussion focused on finalization of plan September 8: 2023 Annual Plan Final sent to EERMC and TWG September 15/29: EERMC Meeting + 2023 Annual Plan Vote September 30: File 2023 Annual Plan with PUC

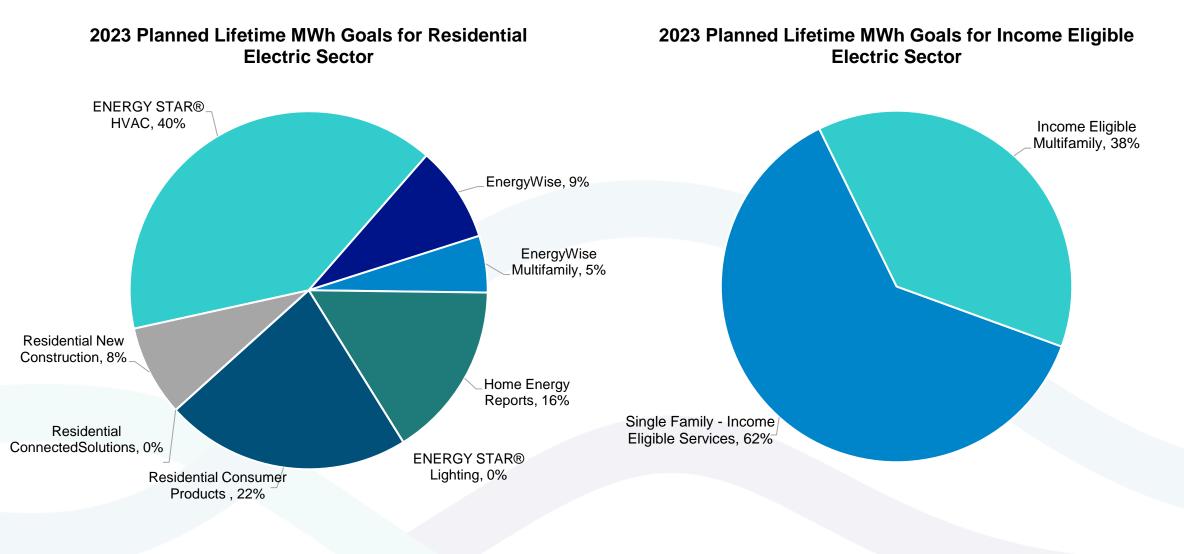






## Sector Composition – Electric Residential and Income Eligible

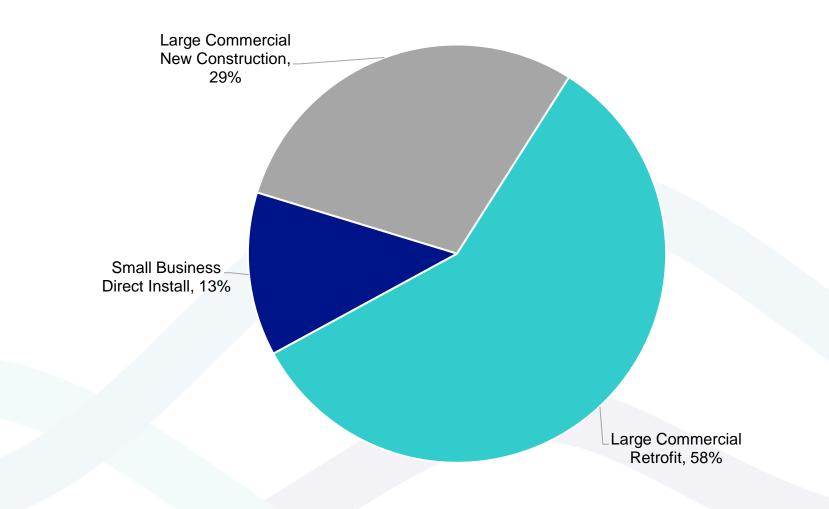




### Sector Composition – Electric C&I

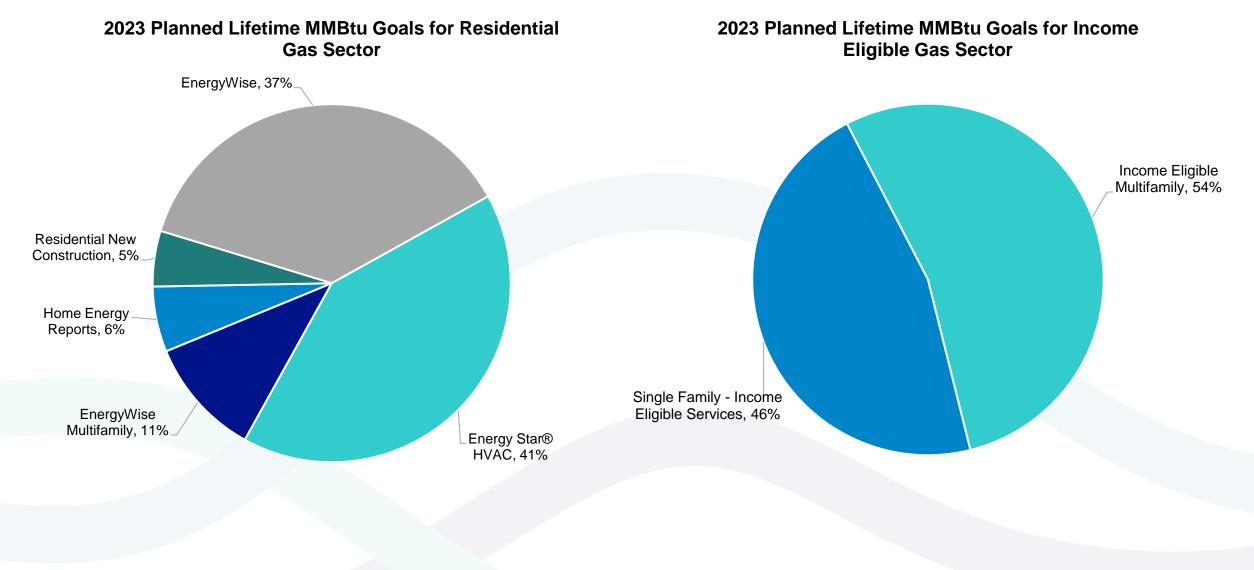


#### 2023 Planned Lifetime MWh Savings for Electric C&I



## Sector Composition – Gas Residential and Income Eligible





### Sector Composition – Gas C&I



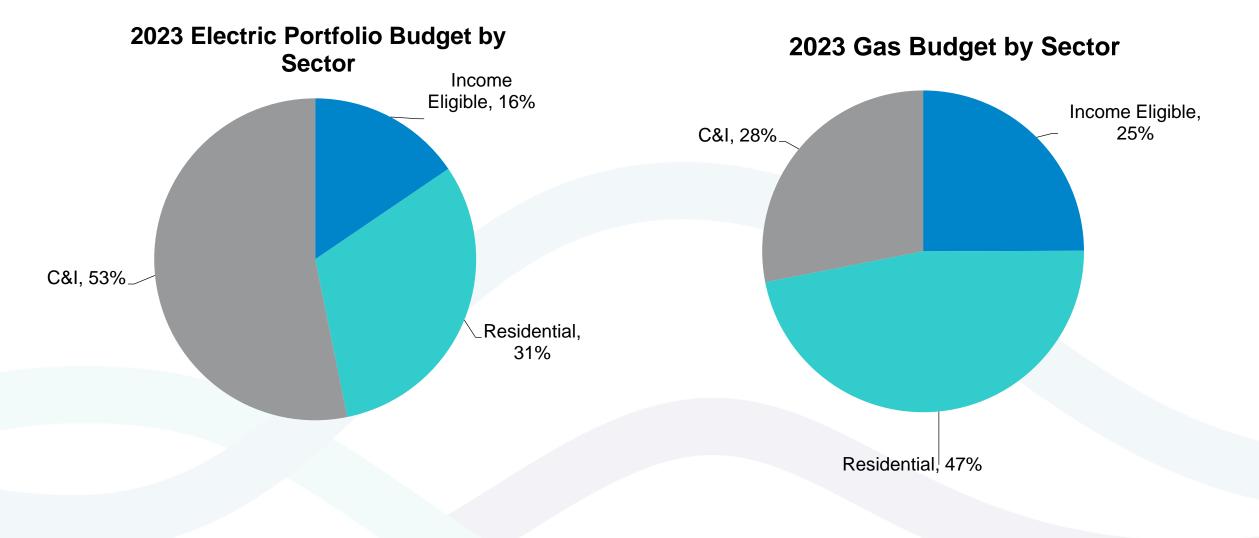
## Large Commercial New **Commercial & Industrial** Construction, 33% Multifamily, 4% Small Business Direct Install, 4% Large Commercial Retrofit, 59%

#### 2023 Planned Lifetime MMBtu Goals for C&I Gas Sector

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**Budget Distribution by Sector** 

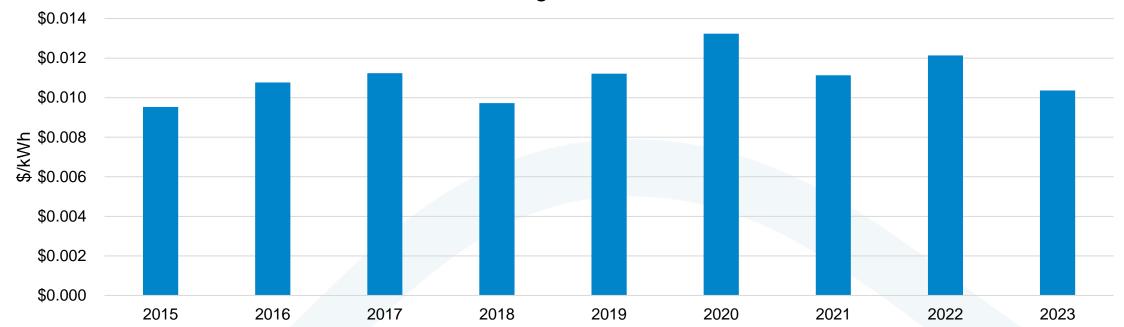




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## Electric EE Charge History





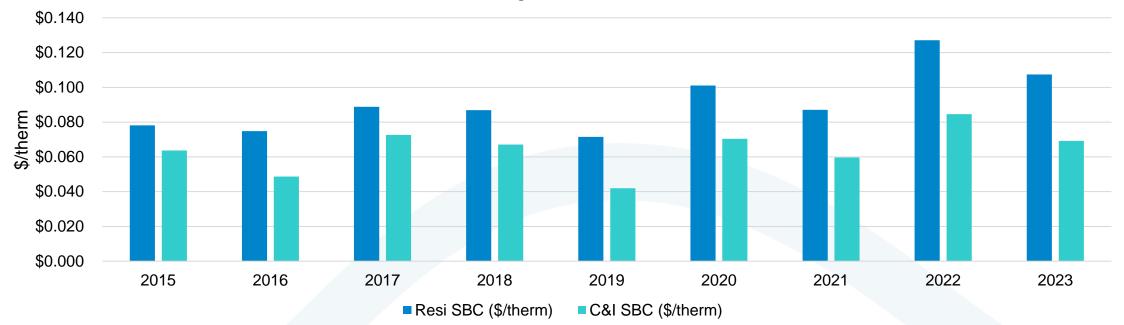
#### Electric EE Charge Trend 2015 - 2023

Year	Electric EE Charge (\$/kWh)
2022	0.01213
2023	0.01036
2022 - 2023 Growth	-14.6%

### Gas EE Charge History



#### Gas EE Charge Trend 2015 - 2023



	Gas Residential SBC (\$/therm)	Gas C&I SBC (\$/therm)
2022	0.1271	0.0846
2023	0.1074	0.0692
2022 - 2023 Growth	15.5%	-18.2%

# Additional Considerations for Plan Draft Budgets and Surcharges



- Budgeting process targeted 5% year-over-year total budget growth from 2022 to 2023. 2023 in the 3YP Compliance filing is at this level.
- As noted, while the total budget levels are comparable, the rates change from 3YP to Annual Plan due to the changes in inputs to the charges.
  - An updated gas forecast based on the June 2022 release has been incorporated and an updated electric forecast based on the September 2021 release has been incorporated
- 2021 to 2022 saw the programs carry over a large fund balance, which helped keep the rate flat for 2022. Such a fund balance is likely to occur between 2022-2023.

## Sector Composition for Planned Savings and Budget



#### Electric



- Savings
  - Residential: HVAC provides the most lifetime savings, followed by consumer products
  - C&I: Large retrofits provide the most lifetime savings
- Budget
  - C&I has the highest budget at 53% of total

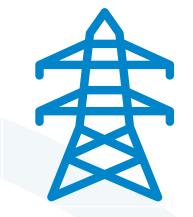


- Savings
  - Residential: HVAC provides the most lifetime savings, followed by EnergyWise
  - **C&I**: Large retrofits provide the most lifetime savings
- Budget
  - Residential has the highest budget at 47% of total

Cost-Effectiveness Updates from 2022 to 2023







Economic impacts are not included in costeffectiveness calculations Small benefit for non-pool transmission facility (PTF) capacity included

## Performance Incentive Mechanism Summary in the Draft Plan



- Total PIM earning opportunity proposed is constant from 2022 level: \$4.4M (18.2% of total PIM-eligible net benefits); \$3.4M electric (11.2% of electric PIM-eligible net benefits), \$1.0M gas (21 basis points).
- PIM is assessed at the sector level, by portfolio (fuel).
- Calculation of PIM-prioritized net benefits results in positive results for the C&I gas, C&I electric, and residential electric sectors only. Therefore, earning opportunity for each portfolio is aligned with those sectors.
- Residential gas and both income-eligible sectors are subject to Service Quality Adjustments (SQAs) that can reduce any earnings in the C&I sector.