

# 2022 Annual Energy Efficiency Plan

EERMC

September 23, 2021

**nationalgrid**



## Background and Context

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- Key Upcoming Dates to note:
  - September 24 (Friday): TWG
  - October 1: Annual Plan filed with PUC
- 2022 Annual Plan is a binding plan document, builds off the planning done for 2022 in the Three-Year plan and incorporates new information, priorities, and study results
- Final plan satisfies legislative and regulatory requirements for energy efficiency
- The Plan moves key priorities forward to make advances for customers in 2022, building from the 3YP priorities

**Note:** While this Plan is final, pre-filed testimony will be included with the filing on October 1st. Any vote on this Plan will be on the materials provided and not the pre-filed testimony. Further, any minor errors identified between now and the submission to the PUC will be corrected.

# Council Focus Areas Incorporated



Delivered Fuels



Weatherization incentives



Low-income Users



Landlord outreach



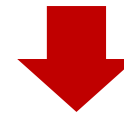
Environmental Issues



Avoid 608,736 tons of carbon



Energy Design & Codes



R&D to improve RI's next energy code



EE Workforce



Workforce Development Needs Assessment, Upskilling



Energy Policy Landscape



Responds to revised LCP law and Act on Climate



RIIB



LCP Law Codified \$5M transfer



Municipal Institutions



RI Schools

# Focus on Equity

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Main Text, Section 2.5.1 – Equity Enhancements

**Of the 14 recommendations from the EWG, 10 have been incorporated into the 2022 with success metrics** (Table 7 in 2022 Annual Plan, Main Text).

- Multilingual communications
- Community group incentives
- Rebuilding CAP capacity
- Market compatible communications (social media, home visiting, municipal partners, health outcomes)
- Workforce development needs assessment, community organization training

# Considerations of the Components of Least Cost Procurement

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The 2022 Annual Plan seeks a balance among the several components of LCP:

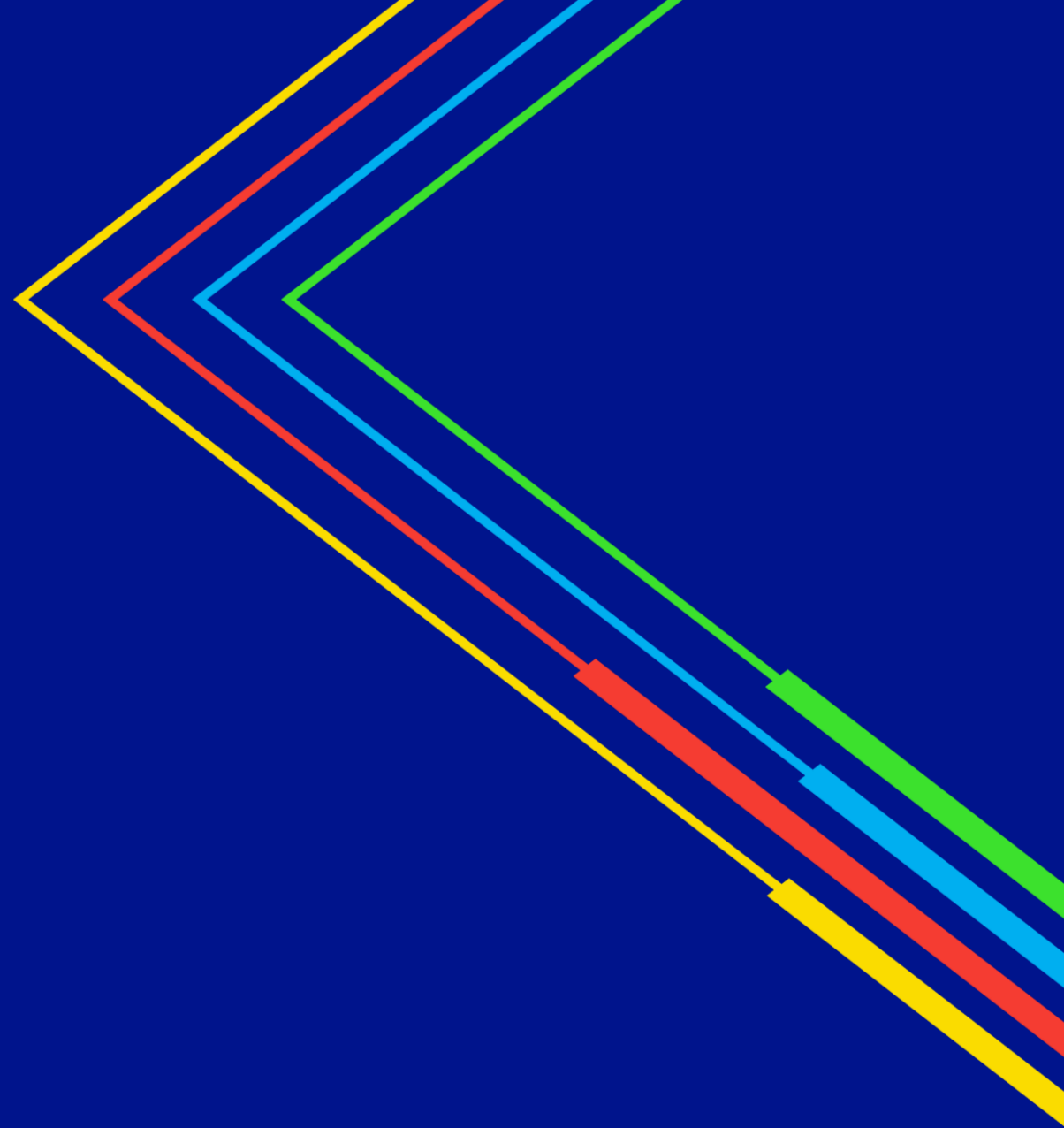
- Implement all **cost-effective** energy efficiency that is **less than the cost of supply** while also accounting for **Prudence, Reliability, Environmental Responsibility**
- We have accounted for these components by considering, among others:
  - 2021-2023 Three-Year Plan and the PUC's rulings,
  - Recent program history,
  - EM&V and market studies

# 2022 Annual Plan – Top Line Numbers

Fuel	Annual Savings	Lifetime Savings	Primary RI Test BC Ratio	Savings over the Cost of Supply
Electric EE and DR Portfolio	127,561 MWh, 39.7MW (active DR)	1,145,371 MWh	1.64	\$62.1M
Gas EE Portfolio	389,430 MMBtu	4,059,902 MMBtu	2.74	\$18.9M

- All programs cost effective (Primary RI Test BC Ratio > 1.0)
- \$359M present value of lifetime monetized RI Test benefits from gas EE, electric EE, and active demand response
- 6,545,548 MMBtu lifetime reduction in all fuel consumption (electric, gas, oil, propane)
- 608,736 lifetime tons of carbon emissions avoided
  - Equivalent of removing 121,100 passenger vehicles from the road for one year
- 827 FTE and over 1,000 companies associated with National Grid programs in year 2020; calculated macroeconomic impact of \$359M added to RI state gross domestic product

# Sector Highlights in the 2022 Annual Plan



# Commercial and Industrial Enhancements & Highlights

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## Small Business

- Scale up gas weatherization, leveraging RGGI funds provided by OER
- Recruit customers with WiFi thermostats to participate in Demand Response program
- Equity: Deploy bilingual auditors (Spanish/Portuguese speakers)
- Equity: Market program to woman & minority-owned enterprises

## Retro-Commissioning & Controls

- Streamline processes for site audits and calculating savings, starting with schools
- Fund set-up costs to encourage monitoring-based commissioning systems



# Commercial and Industrial Enhancements & Highlights

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## Workforce Development

- Drive nearly 300 workers to participate in trainings and certifications focused on HVAC, controls, and retro-commissioning workforce (in addition to current trainings).

## Whole Buildings New Construction

- Launched Q1 2021. No savings planned in 2022, but 26 projects in Sept. Pipeline

## New Measures

- Develop new product offerings, including RTU controls and refrigerant leak detection survey
- Implement recommendations from market barriers & opportunities study, including ramping up high-potential measures such as DCV's and ERV's

# Commercial and Industrial Enhancements & Highlights

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## Active Demand Response

- 23% increase in targets vs. 2021
- Customers shifting enrollment from Targeted Dispatch to Daily Dispatch. Positive trend! Daily Dispatch (e.g., batteries) generates more system benefits per MW.

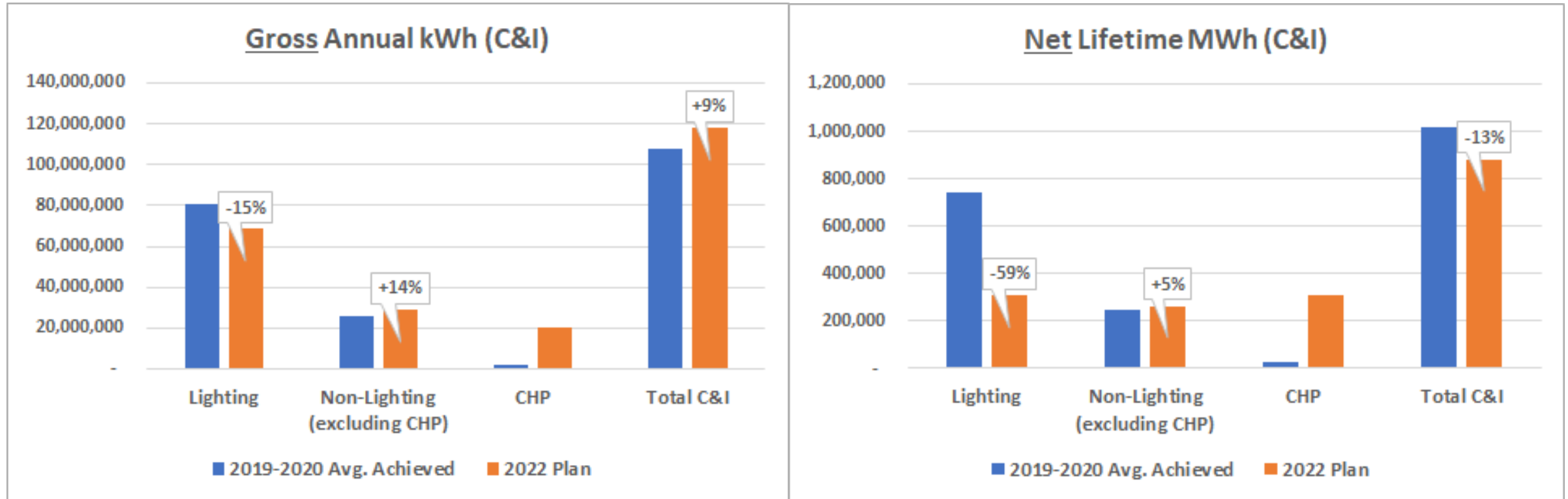
## Upstream Food Service and HVAC

- Upstream food service (gas) and HVAC (electric) targets increased more than 100% vs 2021

# Commercial and Industrial – Clarification

Intervention	Rationale for Exclusion / Limited Activity	2022 Activities
Commercial Real Estate Initiative	Office space consolidation; still streamlining RCx	Exploring peer group strategy
Lodging Initiative	Cost	New prescriptive measures, targeted marketing
HVAC Early Retirement Program	Cost	Seeking cost reductions
Non-Lighting Incentive	Cost	Reallocated lighting funds; strategic planning

# C&I Electric Savings: 2019/2020 Actuals vs. 2022 Plan



# Residential and Income Eligible - Enhancements & Highlights

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## Equity

- 100% Moderate Income Offering for weatherization
- Multicultural energy efficiency education campaign
- New Consumer Advocate solely focused on energy efficiency
- Workforce development needs assessment

## Optimize Deeper Savings

- Pair weatherization at time of gas heating system upgrades to encourage downsizing of equipment, when possible. Continue incentives research.
- Concierge service for electric heat customers to transition to heat pumps
- RNC /HAC Consulting Services on high performance projects

# Residential and Income Eligible - Enhancements & Highlights

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## Program initiatives:

- Most efficient clothes washer and refrigerators added to portfolio of +
- Reporting on renter participation as available
- Multifamily marketing segmentation approaches to create personalized experiences for customers
- Training focused on offering landlords more comprehensive measures for Multifamily properties

# Residential and Income Eligible – Clarification

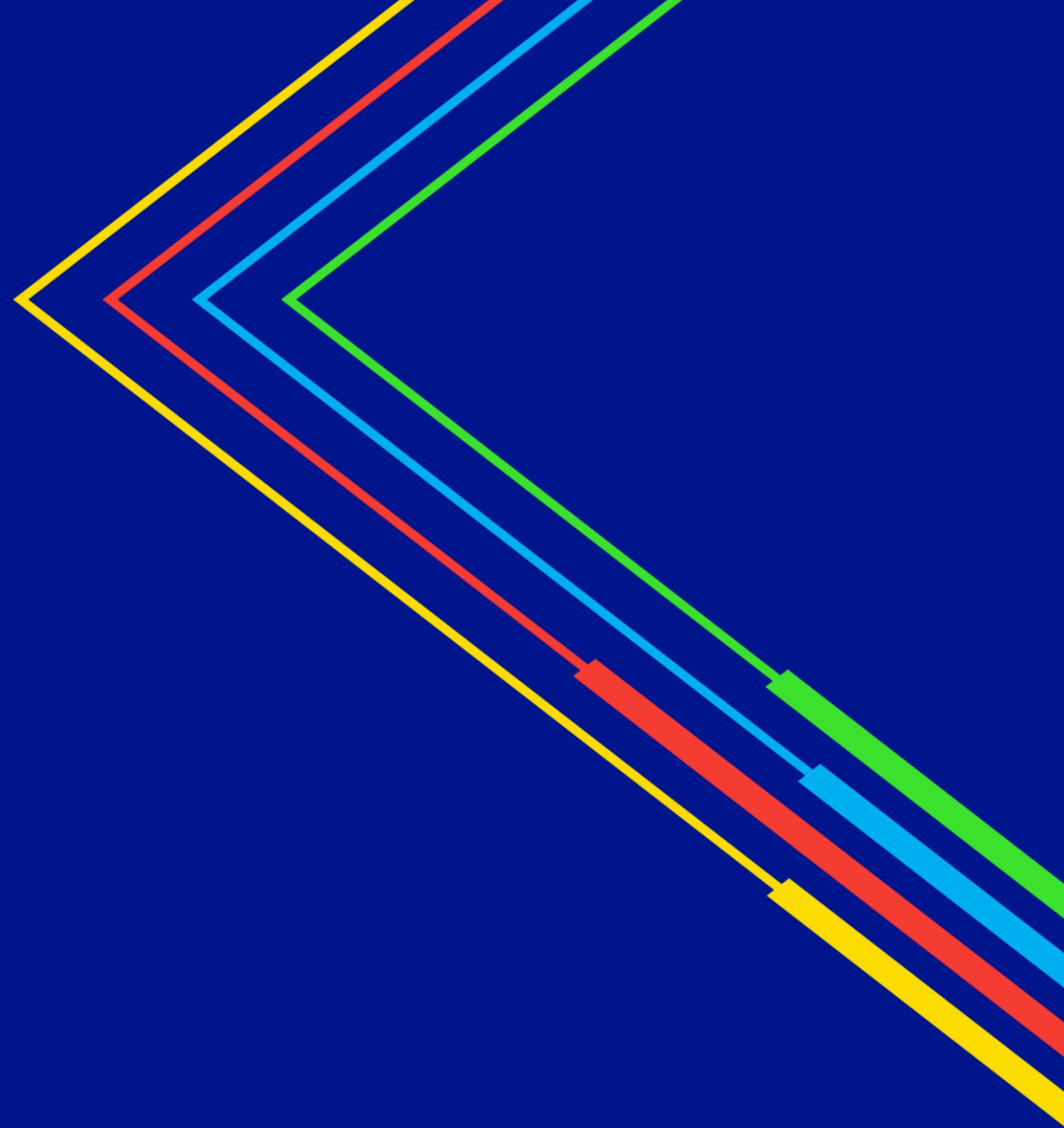
Intervention	Rationale for Exclusion / Limited Activity	2022 Activities
<p><b>Explore Virtual Assessment Models</b></p> <p>Alternative comprehensive approach</p> <p>Virtual pre-assessments</p> <p>“on the fly” virtual assessment</p>	<p><b>Cost/savings</b></p>	<p>OER fielding RFI which will provide additional information on cost. Will evaluate cost/savings of other software based on responses</p> <p>Virtual pre-assessment offered in another state. Used as reason to not provide in person services. Company still supports comprehensive approach that all customers pay into EE funds and warrant visit for education and to document equipment in the homes for future outreach</p> <p>Current virtual assessment uses small comprehensive approach as in-person assessments so that same information and education provided</p>
<p><b>Moderate Income Verification “fell short of describing who the vendor would be...”</b></p>	<p><b>Process, Pricing</b></p>	<p>Until plan is approved, would not enter contract with vendor and do not want to inhibit pricing options</p> <p>Generally, do not name vendors in Plans since vendors can change</p>

# Residential and Income Eligible – Clarification

Intervention	Rationale for Exclusion / Limited Activity	2022 Activities
3 <sup>rd</sup> Party Support for CAP Agencies	Timing	Rolled out 3 <sup>rd</sup> party process for referrals in 2021 Still working with CAP executives to finalize metrics at end of 2021 for implementation in 2022
Equity commitments	Timing, EWG Concept	EWG focused on incorporating equity into all programs, not to drive specific Income Eligible or Moderate Income program changes

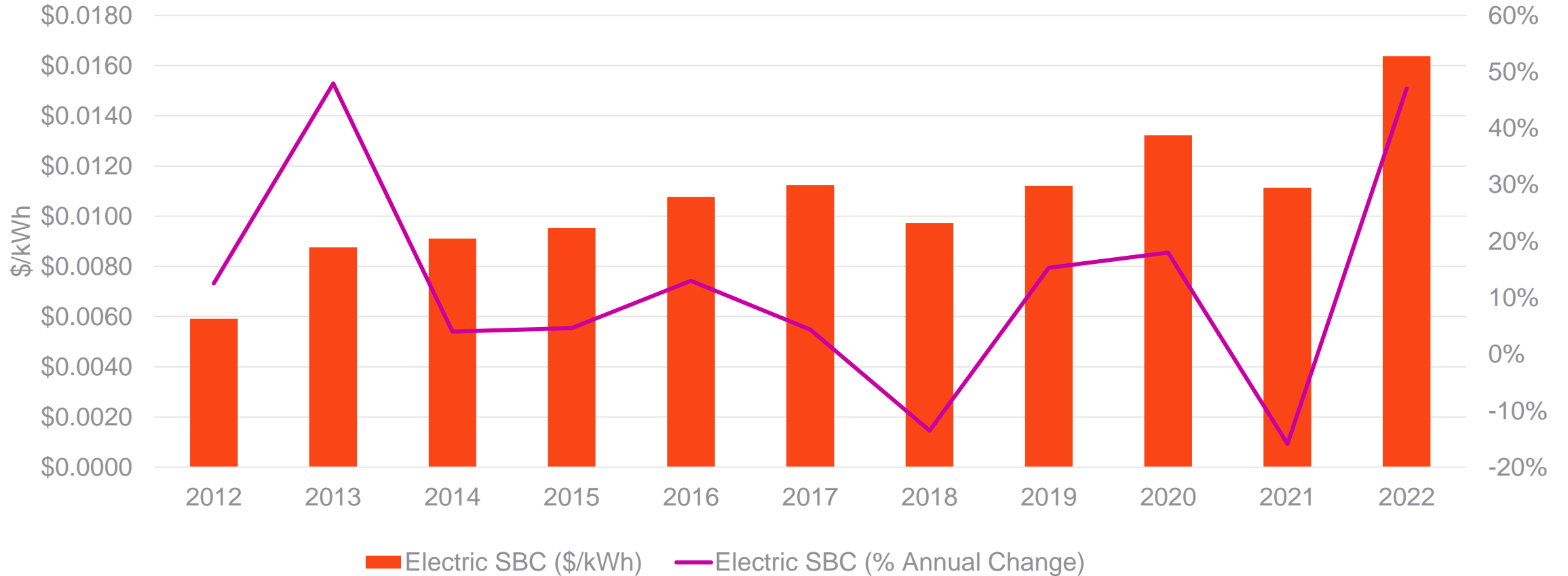


# Plan Surcharge and Rate and Bill Impacts



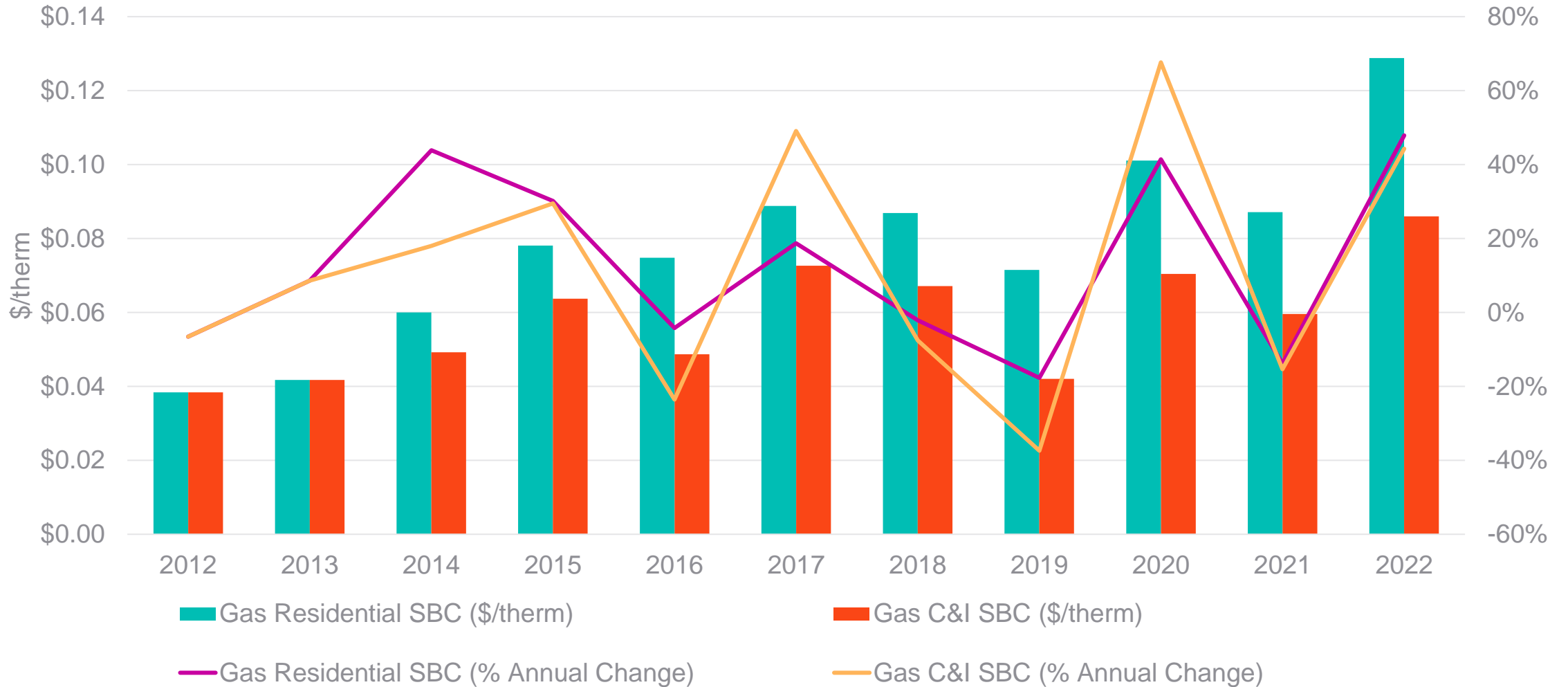
# Electric EE Charge History

Electric EE Surcharge Trend 2012 - 2022



# Gas EE Charge History

Gas EE Surcharge Trend 2012 - 2022



# Rate and Bill Impacts

- Analyses assess the long-term impact to rates and average bills due to the 2022 draft plan compared to a counterfactual of no EE programs.
- Electric:** Impact of reductions in lighting savings in the portfolio seen in bill changes. Electric analysis doesn't account for delivered fuel savings. HERs to be split out.
- Gas:** average participants save on bills, with all customer groups seeing increase in rates, reflecting year-over-year change in surcharge

\*Bill Impact Models are under review by consultants and final totals may change for final filing to PUC.

Electric Sector	Long-term change in rates due to 2022 Programs	Long-Term Average Change in Bills		
		Non-Participants	Average Customer	Average Participant
Residential (Model 1: HERs only)	0.01%	0.01%	-0.03%	-0.05%
Residential (Model 2: All Programs Ex. HERs)	0.32%	0.32%	0.05%	-5.60%
Residential (Model 3: All Programs)	0.32%	0.32%	0.00%	-5.47%
Income Eligible (Model 1: HERs only)	0.01%	0.01%	-0.04%	-0.05%
Income Eligible (Model 2: All Programs Ex. HERs)	0.54%	0.54%	-0.96%	-7.17%
Income Eligible (Model 3: All Programs)	0.59%	0.59%	-0.97%	-6.74%
Small C&I	0.41%	0.41%	-0.42%	-8.57%
Medium C&I	0.28%	0.28%	-0.53%	-5.01%
Large C&I	0.21%	0.21%	-1.00%	-2.57%
Natural Gas Sector	Long-term change in rates due to 2022 Programs	Long-Term Average Change in Bills		
		Non-Participants	Average Customer	Average Participant
Residential (Model 1: HERs only)	0.02%	0.02%	0.00%	-0.01%
Residential (Model 2: All Programs Ex. HERs)	0.47%	0.46%	0.26%	-4.72%
Residential (Model 3: All Programs)	0.49%	0.48%	0.25%	0.15%
Income eligible	0.77%	0.77%	-0.17%	-4.28%
Small C&I	0.33%	0.32%	0.19%	-23.55%
Large C&I	0.48%	0.47%	0.02%	-2.61%

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