



Future of Gas Update

Consultant Team Presentation

March 21, 2024

Outline



Docket Proceedings To Date

Summary of Goals & Scenarios

Next Steps

Council Discussion



Docket Proceedings

Docket Activity So Far



9 Stakeholder Committee Meetings

- C-Team attended, representing Chairperson Oakley
- Meetings began in May 2023

8 Technical Working Group Meetings

- C-Team selected as TWG Member
- Meetings began in September 2023

Several opportunities for written comments, as well as sharing data to inform analysis

- C-Team provided written comments as well as quantitative input based on EEC Market Potential Study and historical EE data



Summary of Goals & Scenarios

Future of Gas Docket Goals



Define options for reducing gas system emissions

Develop a reference “Business As Usual” scenario

Define scenarios to explore in technical analysis

Explore quantitative results, tradeoffs among options, and policy questions

Discussed during today's Council Meeting

Discussed during a future Council Meeting

Future of Gas Docket Goals

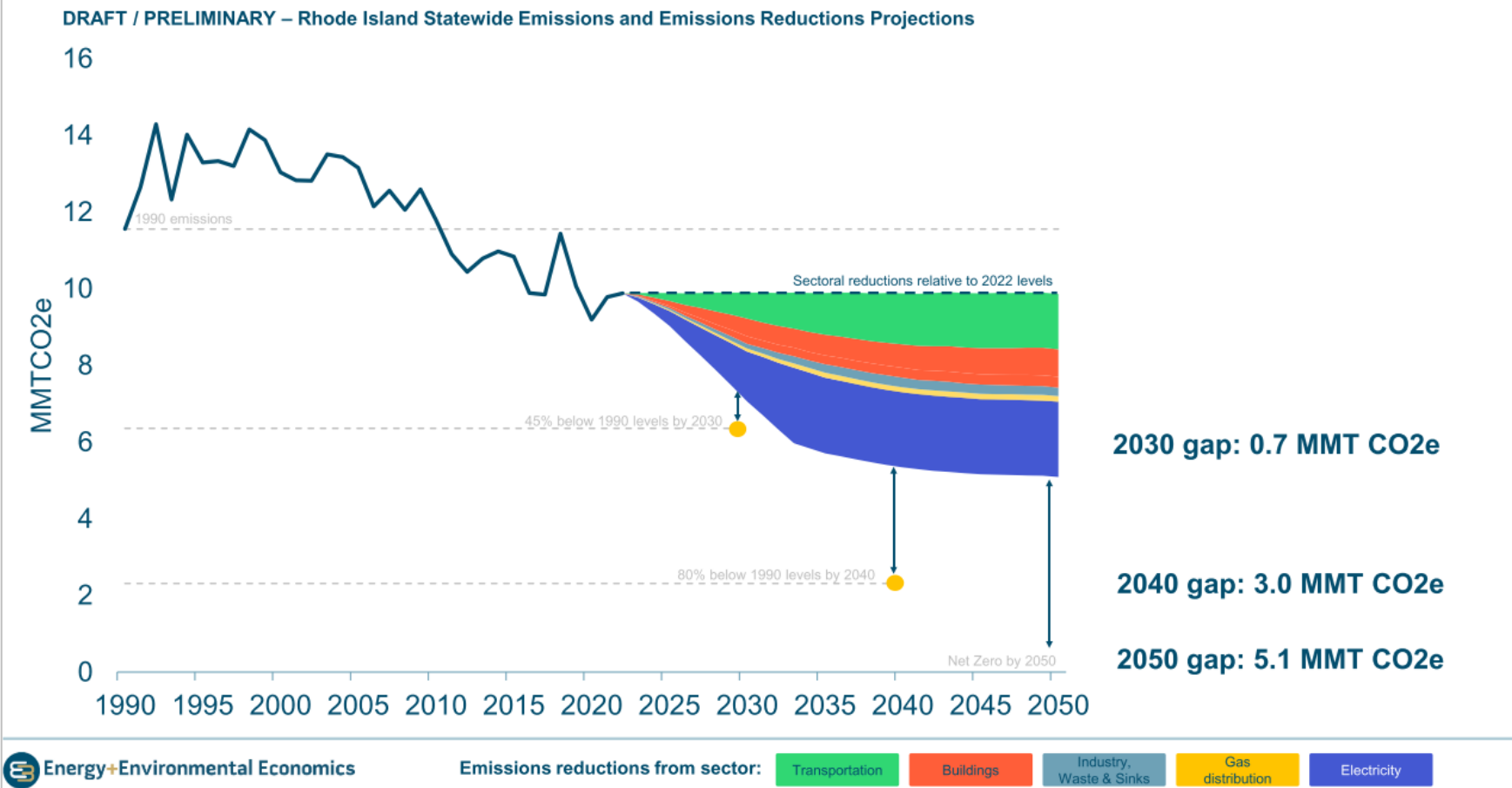


This Analysis Does NOT:

- Minimize cost within or among scenarios
- Directly determine which technologies or policies can (or can't) achieve Act on Climate goals
- Model specific alternative policy proposals
- Look beyond RI GHG Accounting Framework

The Reference Scenario

Additional measures are required to achieve the State's Act on Climate mandate by 2030, 2040 and 2050



Existing policies and market trends drive a portion of needed emissions reductions, including:

- *Clean Vehicles*
- *Biofuel blending for delivered fuels*
- *100% Renewable Electricity by 2033*

Six Compliance Scenarios



E3 modeled six scenarios for the Technical Analysis that present distinct pathways to achieving RI's Act on Climate

Variation in scenarios is primarily captured in the type of heating sector (residential, commercial & industrial) transformation achieved, keeping the level of action across other sectors similar across scenarios.

Scenario	Scenario focus	Research question
High Electrification	Emissions targets reached primarily through electrification.	What is the impact of pursuing a full-electrification decarbonization pathway that transitions Rhode Island away from gas infrastructure?
Hybrid Electrification + Delivered Fuels Backup	Emissions targets reached through combination of electrification and delivered fuels used as backup.	What is the impact of hybrid electrification (using backup heat in winter periods) on the energy system? What is the net benefit of avoiding gas infrastructure/decommissioning?
Hybrid Electrification + Gas Backup	Emissions targets reached through combination of electrification and gas used as backup.	What is the impact of hybrid electrification (using backup heat in winter periods) on the energy system? How can existing gas infrastructure be leveraged to reduce electric sector build outs?
Staged Electrification	Staged transition starting with a ramp up of hybrid heat pump conversion in the near-term (both gas and delivered fuels).	How can Rhode Island leverage existing infrastructure and mitigate customer impacts in the near-term, while allowing for a managed transition and achieving long-term electrification?
Alternative Heat Infrastructure	Decarbonization driven by a mix of networked geothermal where possible, all-electric heating, and hybrid heating.	How can highly-efficient heating systems (e.g., network geothermal) support decarbonization in Rhode Island? What is their net impact? Can they provide an alternative to gas investments?
Continued Use of Gas	Decarbonization achieved using a mix of electrification and supply of low-carbon gas.	How can existing gas infrastructure support decarbonization? What is the effect of and potential limit to low-carbon fuels such as biomethane and hydrogen?

Six scenarios explore possible ways to address remaining emissions reductions needed above and beyond the reference scenario

All pathways methodologically defined to hit all Act on Climate targets



Next Steps

Next Steps



PUC Docket

- Finalize Analytical Results
- Issue **Technical Analysis Report**
- Initiate Policy Development Discussions in **March 2024**
- Issue Policy Development Report

Energy Efficiency Council

- Continued Docket Engagement
 - Councilor AnderBois, Chairperson Oakley, & C-Team
- Review Final Docket Results
- Review Policy Discussion
 - Incorporate into Council activities as appropriate



Council Discussion

Council Member Discussion



- Are there anticipated conflicts with the anticipated Council schedule?
- What additional meeting topics would be beneficial in 2024?
- What special meetings with other entities might the Council want to host?
- Are there any other stakeholders or subject-matter experts that the Council should encourage to attend specific meetings or Council meetings in general?