RI 2025 Climate Action Strategy and CCAP

EC4 Meeting

May 12th, 2025





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Project Overview and Status



Project Goals

The overarching goal of this project is to create the RI Comprehensive Climate Action Plan (CCAP) for the Climate Pollution Reduction Grant (CPRG) program and the RI 2025 Climate Action Strategy as part of RI's Act on Climate

+ The RI CCAP and RI 2025 Climate Action Strategy will consist of:

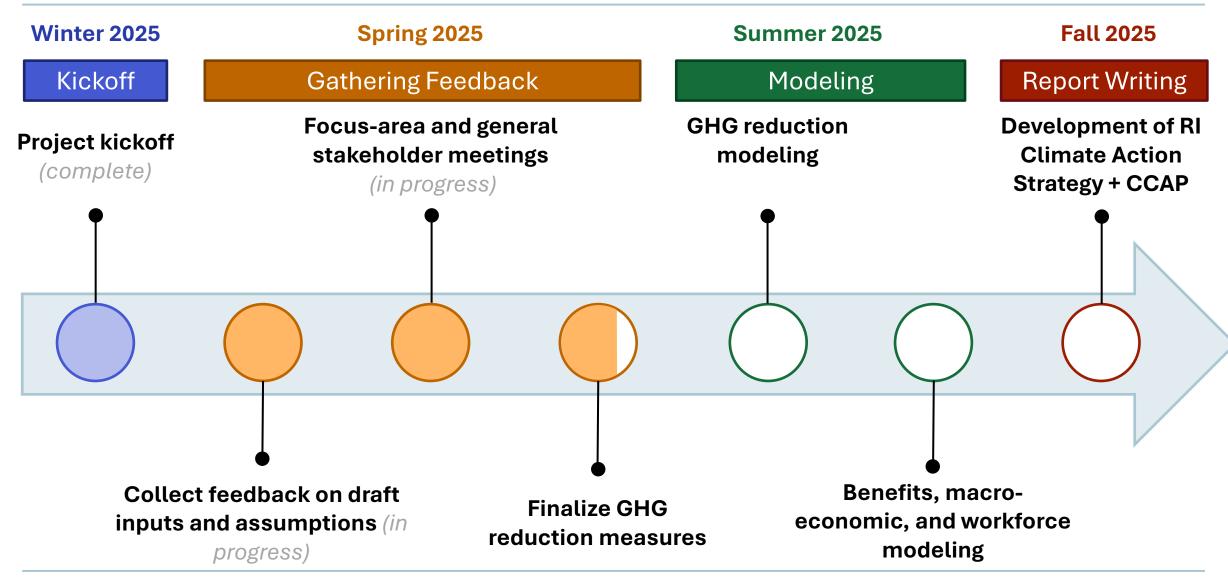
- Robust stakeholder engagement
- GHG reduction measures modeling and sector-specific GHG target development
- Policy, technology and cost analyses
- Macroeconomic, workforce, climate resilience, and benefits analysis

+ Key elements of each plan will include:

- Energy efficiency in buildings and transportation
- Transition away from fossil fuel
- Transition to renewable electric power
- The removal of carbon from the air through land use and forest conservation
- A just transition for workers
- Considerations for energy affordability
- Benefits to environmental justice and low-income and disadvantaged communities (LIDAC)



Project Status and Timeline



Project Team Roles and Responsibilities

| Lead organization >> | E 3 | BW Research | Lighthouse Consulting |
|---|------------|-------------|--------------------------|
| Task 1: Define Model Inputs and Project Kickoff | | | |
| Task 2: Public Engagement and Interagency Coordination | | | |
| Task 3: Deep Decarbonization Planning Analysis | | | |
| Task 4: Macro-Economic, Workforce, and Benefits Analysis | | | |
| Task 5 & 6: Plan development and rollout | | | |

Recently completed research



1. Feedback on Modeling Inputs and Assumptions

- + E3 released inputs and assumptions for the GHG emissions modeling in March
- + We received numerous comments and adjusted where necessary
- + Outputs include an updated inputs and assumptions workbook, a response to comments document, and updated PATHWAYS methodology
 - These documents will be uploaded to https://climatechange.ri.gov/ soon

Major Greenhouse Gas (GHG) Modeling Inputs and Assumptions in the Buildings Sector*

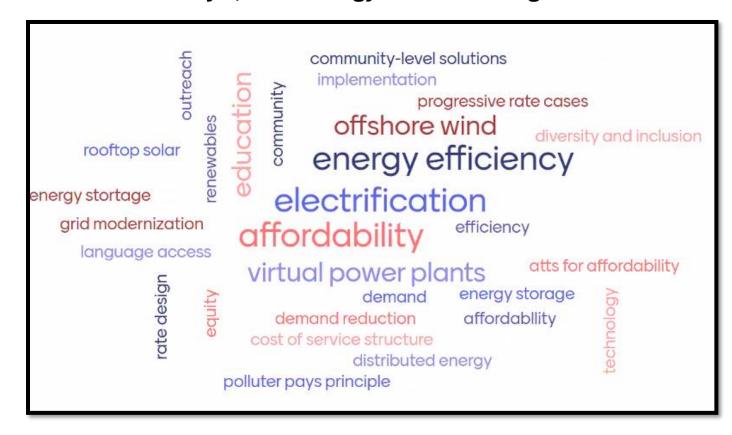
| Input | Updated Source | | |
|----------|--|--|--|
| | Housing Stock Characterization in Rhode Island | NREL ResStock Building Simulation for Rhode Island | |
| <u></u> | Growth of Housing Stock in RI | RI Division of Statewide Planning | |
| \$ | Device Costs and Efficiencies | Clean Heat RI Program (for heat pump costs) NREL ResStock (for heat pump efficiency) NESCAUM 2024 HVAC market report for the Northeast and Mid-Atlantic (for other space heating costs) Energy Information Administration (EIA) Updated Buildings Sector Appliance and Equipment Costs and Efficiency Appendix C (for costs and efficiencies of most devices) EnergyWise Program data (for building shell cost and efficiency) | |
| 4 | Annual Energy Used per Household | EIA National Energy Modeling System (NEMS) and EIA Residential Energy Consumption Survey (RECS) | |
| 曲 | Commercial Square Footage | EIA Commercial Buildings Energy Consumption Survey (CBECS) and EIA State Energy Data System (SEDS) | |

2. Stakeholder Engagement for Climate Action Strategy "Plan Development Phase"

- + Six "Focus Area" meetings to date:
 - Workforce, Equitable Transition, Energy, Transportation, Buildings, and Energy
- + Four general public meetings- Three in person (Woonsocket, Providence and Newport) and one virtual
- One educational session on climate change
- Over 600 participants across all events

What energy system strategies are most important to you?

May 8, 2025 Energy Focus Meeting



High-Level Summary of Stakeholder Points

| Topic Area | Synthesis Point | Mentions |
|------------------------------|--------------------------|----------|
| Transportation | EV infrastructure | 82 |
| Buildings | Decarbonization Barriers | 68 |
| Workforce | Training & Upskilling | 50 |
| Municipalities | Capacity Building | 24 |
| Workforce | Job Quality | 23 |
| Transportation | Equity & access | 22 |
| Environmental Justice | Pollution Burden | 20 |
| Environmental Justice | Equitable Funding | 17 |
| Buildings | Incentives & Education | 17 |
| Crosscutting | Resilience | 15 |
| Environmental Justice | Community Engagement | 9 |
| Crosscutting | Funding Access | 9 |
| Transportation | Coordination | 4 |
| Crosscutting | Holistic Planning | 3 |
| Crosscutting | Trust & Transparency | 3 |
| Buildings | Code Updates | 1 |
| Workforce | Inclusion | 1 |

3. Workforce-Focused Research

Workstreams

- Dedicated workforce listening session (added), plus focus area at each general meeting
- Launching two surveys this week or next 1) business community and 2) workers (added)
- Ongoing interviews (10 so far, 3 scheduled)
- RI specific case-studies (added) 1) previous transitions, 2) HVAC/heat pump training, 3) collaboration between labor and community/social justice, 4) existing workforce development efforts
- Launching data analysis employment projections, key occupations, training capacity, gap analyses (supply/demand)

+ Learnings from interviews

- Lack of visibility into clean energy employment opportunities, with both demand side (worker) and supply side (training) implications
- Importance of integrating range of perspectives into the workforce strategy, with strong foundation already in place)
- Many entities exploring solutions to K-12, CTE, adult education, involving outreach, training, and partnerships
- Deep value placed on worker involvement and focus on their integration and needs, using data, outreach, resources
- Clear-eyed perspective on transition challenges ahead, with a good understanding of the occupations at potential risk, need for specific policies and programs, alongside some emerging partnerships.

Next Steps in the Climate Actions Strategy Process



Next Steps

- + The project team is compiling feedback from all stakeholder engagement meetings during the Action Plan Development stage
 - We will use the feedback to determine carbon reduction strategies to prioritize for the CCAP and Climate Action Strategy
 - We will also use feedback to help prioritize supporting qualitative research efforts

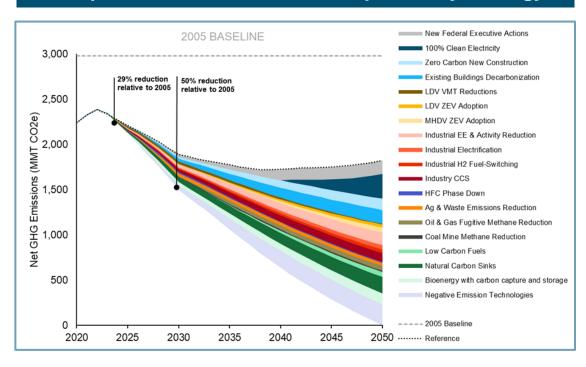
+ Upcoming qualitative studies:

- Funding strategies report will look for solutions for funding decarbonization efforts
- Determine authority to implement to determine the process and authority to implement the various GHG reduction strategies
- +E3 and BW will begin modeling in the next couple of weeks

Modeling Next Steps

- 1. Choose strategies, programs, and actions to meet RI's economywide emissions reduction targets across all sectors, sources, and sinks
- 2. Estimate GHG reductions from specific strategies
- 3. Project short-term and long-term emissions reductions and sectoral targets that meet RI's net zero goal
- 4. Determine clean electricity portfolio resources and costs
- 5. Analyze of decarbonization benefits, including benefits for low-income and disadvantaged communities (LIDAC), such as improved air quality and job creation
- 6. Analyze workforce impacts
- 7. Project customer bills

Example Emissions Reduction Projection by Strategy*



* GHG reduction strategies refer to discrete actions that reduce emissions, such as electric vehicle adoption, building electrification, etc.

Thank You

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