RIEC4

2022 Update to the 2016 Greenhouse Gas Emissions Reduction Plan

2021 Act on Climate

The Act on Climate establishes economy-wide emissions reduction targets of:

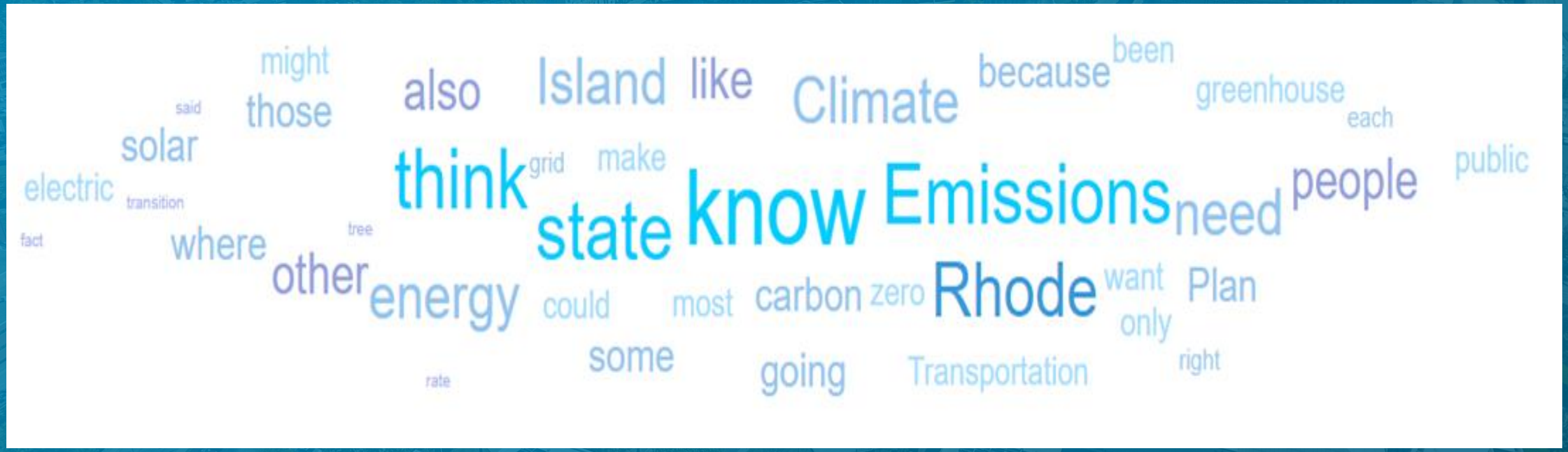
- 10% below 1990 levels by 2020
- 45% below 1990 levels by 2030
- 80% below 1990 levels by 2040
- **Net-zero emissions by 2050**

- By 12-31-2022, the EC4 shall submit an update to the **2016 GHG Reduction Plan** to Governor & General Assembly
- By 12-31-2025 (and every 5 years), the EC4 must submit an updated **Climate Change Strategic Plan**, following public comment, that includes strategies/programs/actions to meet economy-wide targets for GHG reductions
- Develop **public metrics and an online public dashboard** tracking both emissions reductions and sources of energy consumed by the state
- Each agency has authority to **promulgate rules and regulations** necessary to meet the GHG reduction mandates

Update – 2016 GHG Reduction Plan

- 6 years since our last significant comprehensive climate report
- Additional research/analysis since 2016 has altered our focus and direction
- RI needs to leverage lessons learned and chart an updated course of action
- Federal disengagement between 2016-2020; drove the need for state leadership

Engagement Key to Success



20+ listening sessions & workshops

+

Nearly 400 written sets of comments

Consensus on Scope

- Be responsive to the 2021 Act on Climate
- Center equity and public participation
- Leverage lessons learned since 2016
- Focus on near-term actions
- Build a strong foundation for the larger 2025 Climate Strategy

Rhode Island Greenhouse Gas Emissions Inventory
2021 Act on Climate Mandates

Profile of RI's GHG Sources

Quick Facts

1990-2019

Rhode Island Greenhouse Gas (GHG) Emissions Inventory

DEM RHODE ISLAND

Gross GHG Emissions by Economic Sector in 2019

Transportation
4.29 $MMTCO_2e$
39.7%

Residential Heating
2.09 $MMTCO_2e$
19.3%

Electricity Consumption
2.05 $MMTCO_2e$
18.9%

Industry
1.03 $MMTCO_2e$
9.5%

Commercial Heating
0.94 $MMTCO_2e$
8.7%

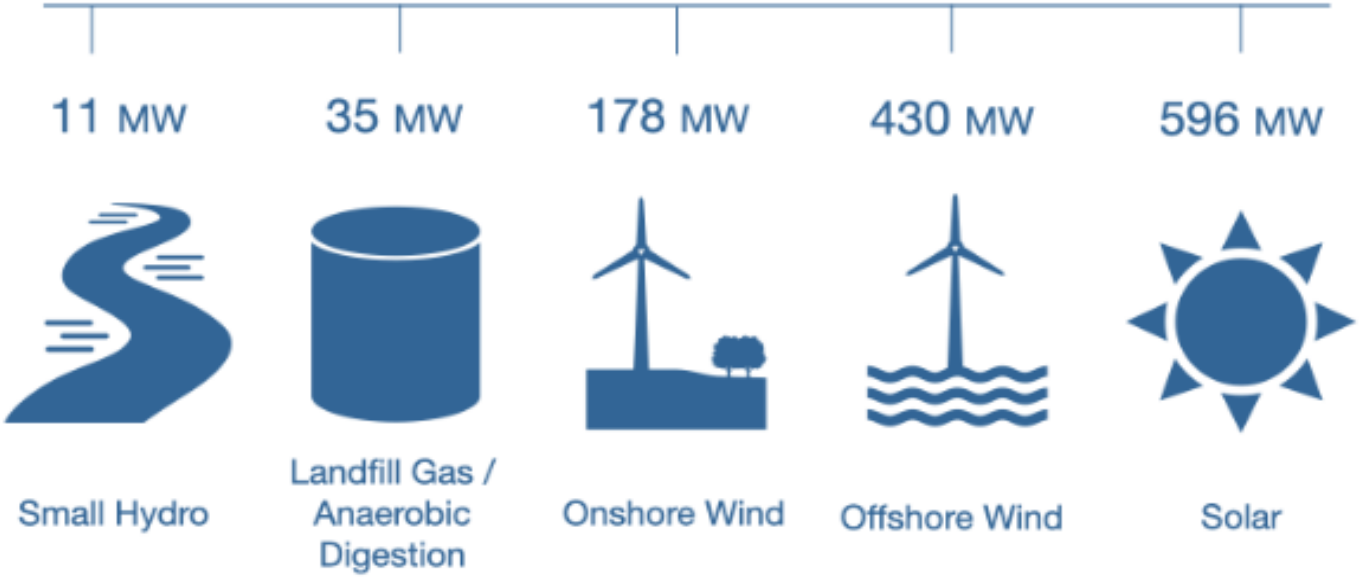
Waste
0.23 $MMTCO_2e$
2.1%

Natural Gas Distribution
0.14 $MMTCO_2e$
1.3%

Agriculture
0.05 $MMTCO_2e$
0.5%

2022 Q3 Rhode Island Clean Energy Portfolio

1,250 Megawatts



Includes both current electricity production and future production under contract.

Key Legislation & Studies

2021-2022 Enacted Legislation:

- 2021 Act on Climate
- Extension of Least Cost Procurement and State Energy Efficiency Programs through 2028
- Extension of the Renewable Energy Fund through 2028
- Updates to Energy Efficiency Appliance Standards
- 100% Renewable Energy Standard by 2033
- 600 to 1,000 MW Offshore Wind Procurement RFP
- $25M High-Efficient Heat Pump Program (Budget)
- $23 million EV Charging Station Infrastructure Program Implementation Process (Budget)
- EJ representative on EC4 Advisory Board

Studies:

- 100% Renewable Energy
- Heating Sector Transformation
- Solar Siting Opportunities

Electric Sector Priorities

- Implement the 100% RES
- Modernize the electric grid
- Deploy advanced meters
- Procure offshore wind
- Continue deep investments in energy efficiency
- Complete RGGI program review

Transportation Sector Priorities

- Target 10% EV registrations by 2030
- Align future transportation funding with Transit Master Plan & Bicycle Mobility Plan
- Continue RIPTA electrification
- Adopt Advanced Clean Trucks (ACT) rule
- Continue EV/E-Bike incentives
- Model climate impacts of transportation projects
- Develop 'Complete Streets' plan

Thermal Sector Priorities

- Target 15% penetration of electric heat pumps by 2030
- Scale up heat pump incentives
- Adhere to biodiesel blending
- Explore gas system transformation (Future of Gas Docket)
- Continue energy efficiency & weatherization
- Begin developing 100% Renewable Thermal Standard

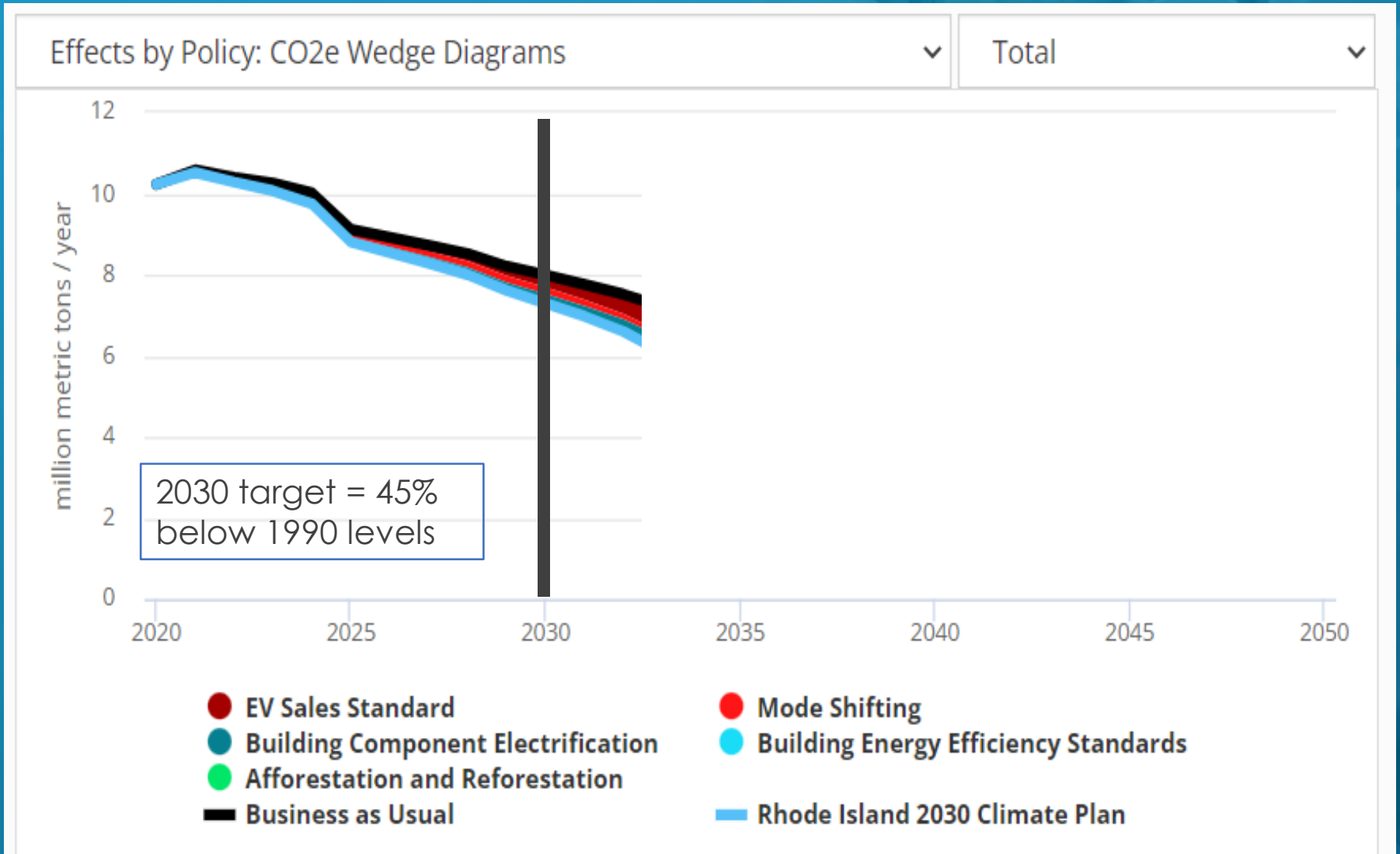
Climate Justice Priorities

- Better align work of the EC4 with Health Equity Zones (HEZ) priorities/communities
- Create space for meaningful conversation (e.g. climate justice advisory group)
- Better coordinate state & local investments for urban trees
- Provide technical assistance to communities
- Promote research into the impacts of climate change in overburdened and underserved communities

Land Use Priorities

- Explore improvements to siting guidance and incentives that push solar development away from forests and agricultural lands towards previously disturbed sites
- Identify a more stable and predictable funding stream for land conservation
- Coordinate state and local investments in urban tree programs
- Expand existing programs that promote local agriculture
- Promote research and policies that invest in regenerative agriculture practices

A Peek at the Future – Acadia Center Modeling



- Electrifying the transportation sector & installing efficient electric appliances for space and water heating (e.g. heat pumps) combined have the most significant impact on GHG reductions in RI between 2020 and 2030

- Adoption of all the scenarios modeled results in a **40.8%** reduction in GHG emissions by 2030

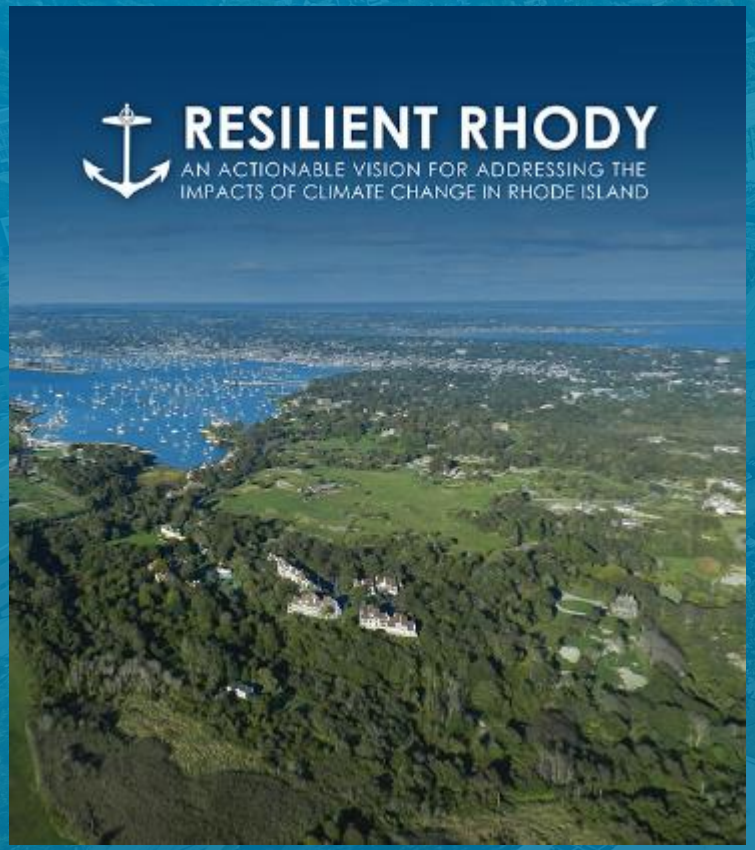
Highlights for 2023

- Funding to support the EC4
- Implementation & deployment of federal energy funds (infrastructure and inflation laws) for EV charging infrastructure and electrification of households
- Rolling out RI's $25 Million (Federal Stimulus Funds) High-Efficiency Heat Pump Program
- 600 to 1,000 MW Offshore Wind RFP Procurement Results
- Significant PUC dockets (Future of Gas, Grid Modernization and Smart Meters)
- Center climate and energy justice
- Regulatory actions on clean cars
- Further electrification of transit & school buses
- New climate dashboard
- Investments in urban trees

Looking Ahead to 2025

- Build off public involvement success to date
- Engagement of disadvantaged/underserved communities
- Engagement of municipalities & businesses
- Harness the expertise of EC4 STAB & Advisory Board
- More refined modeling/more scenarios
- Invest in ports/workforce/just transition
- Resources & budget
- Metrics & dashboard

Resilience Remains Critical



(2018)

- Continued implementation of Municipal Resilience Program (MRP)
- Implementation of Ocean State Climate Adaptation and Resilience (OSCAR) Fund