

Climate Action Plan

Global Warming Solutions Act passed

September 2020

Vermont
Climate Council
established

November 2020

Subcommittees first meet

February 2021

Initial Climate Action Plan adopted

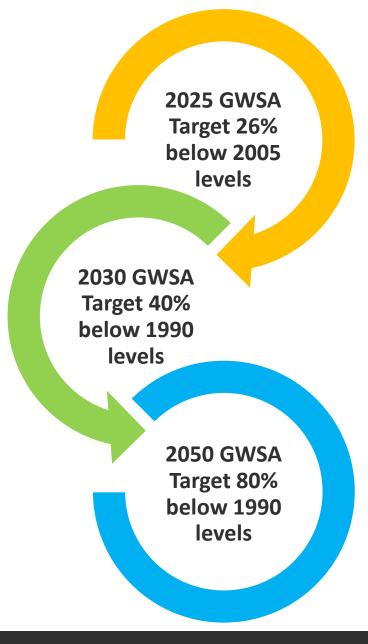
December 2021

Implementation and must be updated every four years

Next update due July 1, 2025







GWSA Statutory Objectives

- Reduce greenhouse gas emissions
- Encourage smart growth and related strategies
- Achieve long-term sequestration and storage of carbon
- Achieve net zero emissions by 2050 across all sectors
- Reduce energy burdens for rural and marginalized communities
- Limit the use of chemicals, substances, or products that contribute to climate change
- 7. Build and encourage climate adaptation and resilience

Energy Plan & Climate Plan

Climate Action Plan

- Climate Adaptation
- Non-Energy GHG
 Emissions: Agriculture,
 Waste, etc.
 - Sequestration
- GHG Inventory Review

Overlap

- GHG Reduction Requirements
- Energy Sector Analysis incl.policy & technology scenarios& pathways
 - Public Engagement & Modeling Efforts
 - Equitable Transitions

Comprehensive Energy Plan

- Cost Effectiveness
- Renewable Energy Development
- Electric Plan including Reliability, IRP guidance
- Energy System Planning:
 Adequacy, security,
 sustainability, Affordability,
 Economic vitality
- Standards for Local Planning (Act 174)

*2025 CAP update will speak to State Hazard Mitigation Plan and Resilience Implementation Strategy as well



The Plan shall include specific initiatives, programs, and strategies that will:

- 1. Prioritize the most cost-effective, technologically feasible, and equitable GHG emissions reduction pathways, adaptation and preparedness;
- 2. Provide for GHG emissions reductions that reflect the relative contribution of each source of emissions;
- 3. Minimize negative impacts on marginalized and rural communities and individuals with low and moderate incomes;
- 4. Ensure that all regions of the State benefit from GHG emissions reductions;



The Plan shall include specific initiatives, programs, and strategies that will:

- 5. Support economic sectors and regions of the State that face the greatest barriers to emissions reductions (rural and economically distressed regions and industries);
- Support industries, technology, and training that will allow workers and businesses in the State to benefit from GHG reduction solutions;
- 7. Support the use of natural solutions (inc. working lands) to reduce GHG, sequester carbon and increase resilience; and
- Maximize the State's involvement in interstate and regional initiatives and programs designed to reduce regional GHG emissions and build upon state, national, and international partnerships and programs.

Equity Lens: Guiding Principles for a Just Transition

A framework for the Climate Council and subcommittees to evaluate, adjust and prioritize recommendations based on how they will impact Vermont's impacted and frontline communities.

01

Ensuring inclusive, transparent, and innovative engagement

02

Creating accountable & restorative recommendations

03

Moving at the speed of trust

04

Incorporating solidarity to create inclusionary spaces

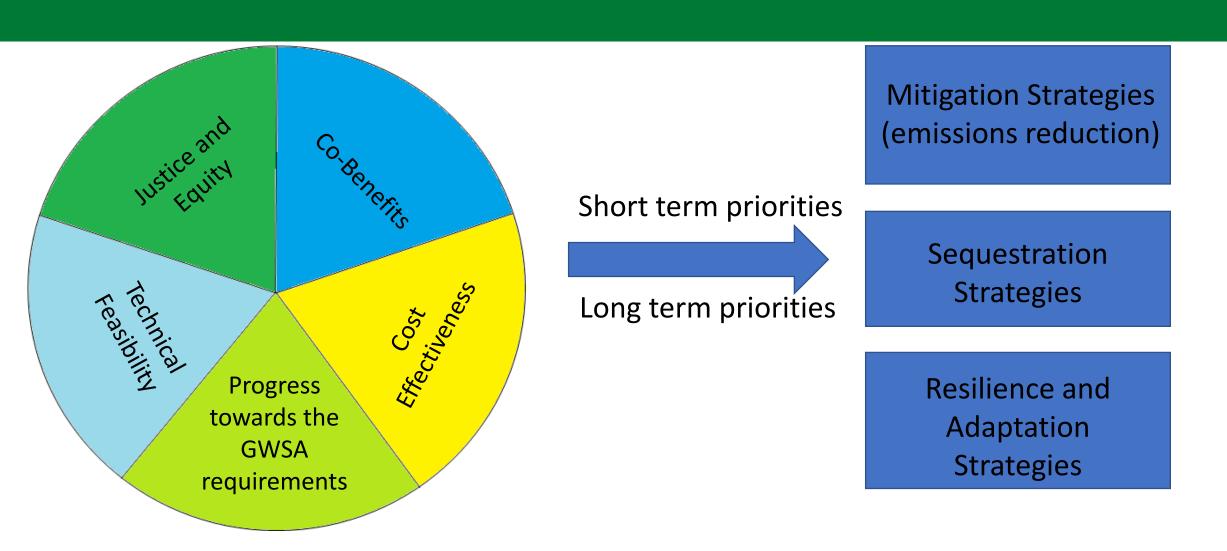
05

Prioritizing the most impacted first

06

Developing supports for workers, families, and communities

Climate Action Plan Prioritization



ACTION PLAN

DECEMBER 2021

- Aims to cut climate pollution inline with GWSA Targets
- Includes 24 Pathways, 64 Strategies, and 234 actions
- Implementation section to inform decision-making
- Framework for measuring progress
- Noted additional work needed for both transportation and biomass
- Identifies areas of opportunity for climate action – not an implementation plan

Climate Action Plan Addendums

- Two Transportation Addendums:
 - November 2022 Addendum
 - January 2024 Addendum
- Biomass Addendum
 - December 2023



Progress Since CAP Adopted

Annual Progress Reports to General Assembly:

2022 Climate Council Report to the General Assembly 2023 Climate Council Report to the General Assembly 2024 Climate Council Report to the General Assembly 2025 Climate Council Report to the General Assembly



Key Policy Priorities Initial CAP



Rural Resilience & Adaptation

- 1. Housing Bill
- 2. Act 250 Reform
- 3. Flood Safety Act



Agriculture & Ecosystems

- 1. Conservation Bill
- Changes to Current Use Program
- 3. Agricultural Sector analysis



Cross-Sector Mitigation

- 1. Clean Car Rules
- Advance a Clean Heat Standard
- 3. Join the
 Transportation
 and Climate
 Initiative
 Program

- Many recommendations built off work already underway
- After first tranche which the CAP bolstered attention to it is a less actionable list of items to move forward



Rulemaking

<u>593 Section</u> of Statute details Rulemaking Requirements but in summary:

- ANR must adopt rules consistent with CAP within one-year of CAP being adopted;
- When undertaking rulemaking, ANR must conduct enhanced engagement focused on frontline/impacted communities.



Clean Car Rules in Initial Climate Action Plan

1996: Vermont first adopts Motor Vehicle Emission Standards for new cars & light-duty trucks 2005: Vermont adopts Greenhouse Gas Emission Standards for Motor Vehicles

2022: Vermont adopts updates to Advanced Clean Cars and Advanced Clean Trucks













2000: Vermont adopts the Zero-Emission Vehicle Sales Requirement Rules and adds medium-duty vehicles

2012: Vermont adopts Advanced Clean Cars Program 2026: Advanced Clean Cars II and Advanced Clean Trucks go into effect

To date, 17 states have adopted California's stricter motor vehicle emissions rules



Technical Analyses in Support of Climate Action Plan

Technical Study	Summary	Date
<u>Final Pathways Analysis</u>	Development of BAU model and scenarios to close the gap to meet GWSA emissions reduction targets	Originally completed in 2/22; currently being updated
Marginal Abatement Cost Curve	Cost-effectiveness of mitigation recommendations	Spring 2022
Building/Thermal Decarbonization	Analysis of different options to meet the thermal sector proportional emission reductions required for 2030	November 2023
<u>Life-Cycle Analysis of</u> <u>Vermont's Energy</u>	Development LCA factors and analysis for Vermont's energy use	June 2024
Agricultural Emissions Analysis	Review of agricultural accounting in Vermont's GHG inventory and recommendations to improve upon	Fall 2023
Assessment of a Cap-and- Invest Program for Vermont	Review of cap and invest policies to evaluate effectiveness of meeting 2030 GWSA target and beyond	February 2025

*Policy Proposals to meet 2030 which analyses ran down and deemed not viable to meet 2030



Key Questions and Outcomes from Technical Analyses

- Both Building/Thermal Decarbonization Report and the Assessment of a Cap-and-Invest Program for Vermont looked at policies to meet 2030 emissions reductions
- Most recently, Cap-and-Invest Study concluded no available program would meet 2030 emissions reduction requirements
 - Time to ramp up
 - Cost very high at this point and no available program provides a cost high enough
- Treasurer's report identified specific issues that should be addressed in advance
 - How to insulate low-income Vermonters in real time from increased costs
 - How revenues would be invested
 - When to establish a reporting-only program



Ongoing Contractual Support

Contract	Summary
Facilitation and Engagement	Contract supported in the Climate Action Office's base budget to support facilitation of the Climate Council and engagement in the form of public meetings and meeting people where they (community events, focus groups, and partnerships with Community-based organizations)
Modeling Capacity	Four-year contract to provide ongoing support for our use of the Low Emissions Analysis Platform (LEAP) model and targeted updates to the BAU and scenario planning



Implementation Contracts for CAP Actions

Technical Study	Summary	Amount
Refrigerant Management	Grant to VEIC to support leak detection of high GWP refrigerants	\$700,000
Energy Navigators	Grant to Capstone Community Action to support 2-5 energy navigators in CAP agencies	\$261,000
Municipal Vulnerability Indicators Tool	Contract to develop a tool that looks at municipality's vulnerabilities to climate change	\$225,000
Measuring and Assessing Progress Tool	Phase 1 of developing a spatially- explicit tool to illustrate Vermont's climate progress.	\$300,000



Vermont Climate Action Plan Update

Vermont Climate Council & Subcommittees

Spring and Summer 2024

Council orients update and subcommittees begin work

Fall 2024

Subcommittees draft updates to Pathways, Strategies, and Actions.

Subcommittees submit recommendations to Council in December

Winter 2024

Council compiles a draft updated plan

Spring 2025

Council revises and finalizes plan based on public input.

Plan delivered by July 1, 2025

Engagement and Outreach







Community engagement throughout!

Meeting Vermonters where they are; partnering with community-based orgs; focus groups, etc.

Magnitude of Effort

- 23 Councilors
 - Currently three vacancies (manufacturing, youth, and rural communities' reps)
- 45 Additional Subcommittee Members
- 7 ANR staff
 - Climate Action Office and Legal
- 11 additional state staff from other agencies
- Update kicked off in January 2024
- \$200k contract supporting Facilitation and Engagement Services
- \$400k contract supporting modeling
- Additional grant to RPCs to support public meetings



Contact Us

Learn about future engagement opportunities:

- Sign up for the Climate Action Office's newsletter
- www.climatechange.vermont.gov/calendar

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