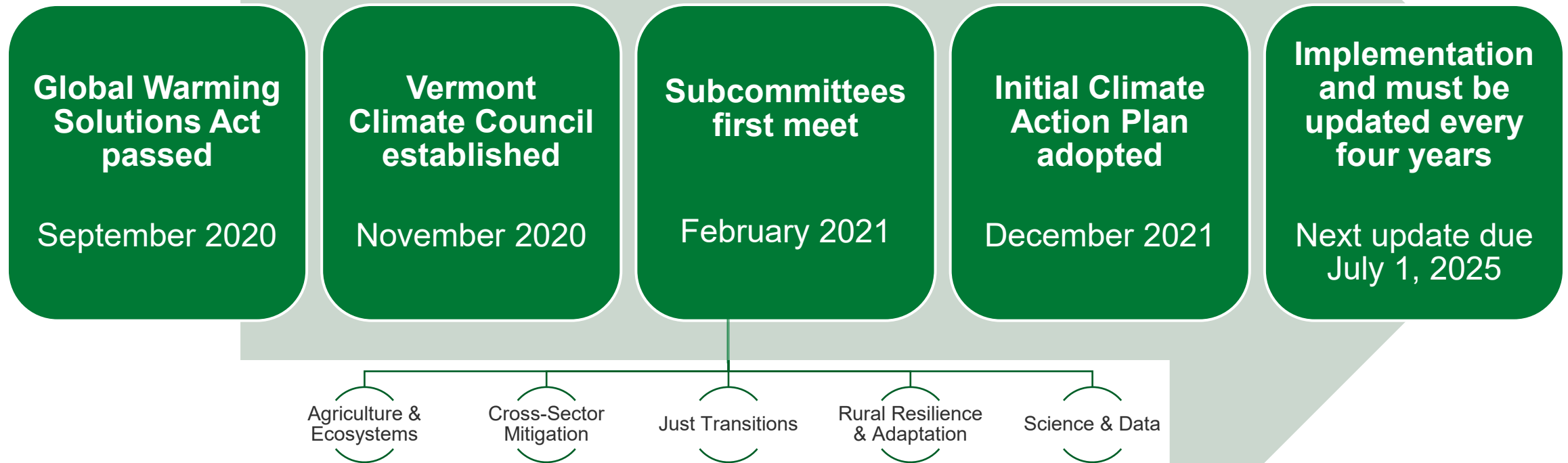


# **Global Warming Solutions Act: The Climate Action Plan**

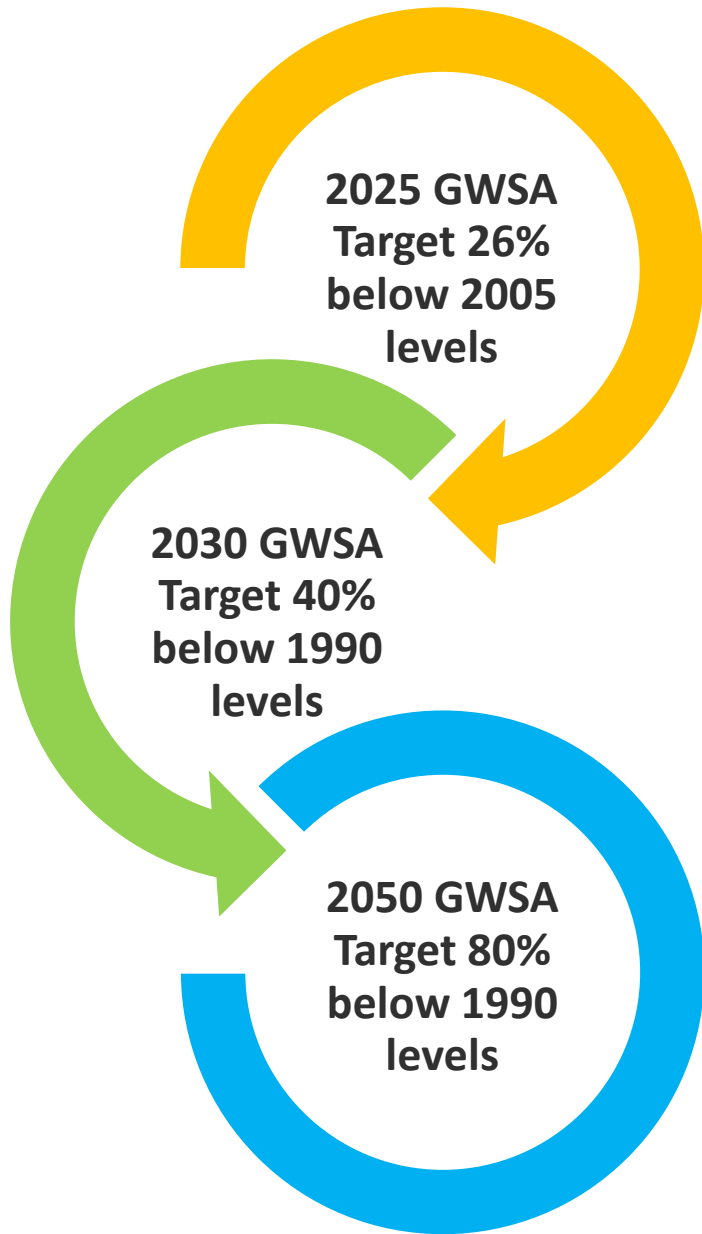
**Jane Lazorchak, Climate Action Office  
House Energy and Digital Infrastructure, March 19, 2025**

# Climate Action Plan

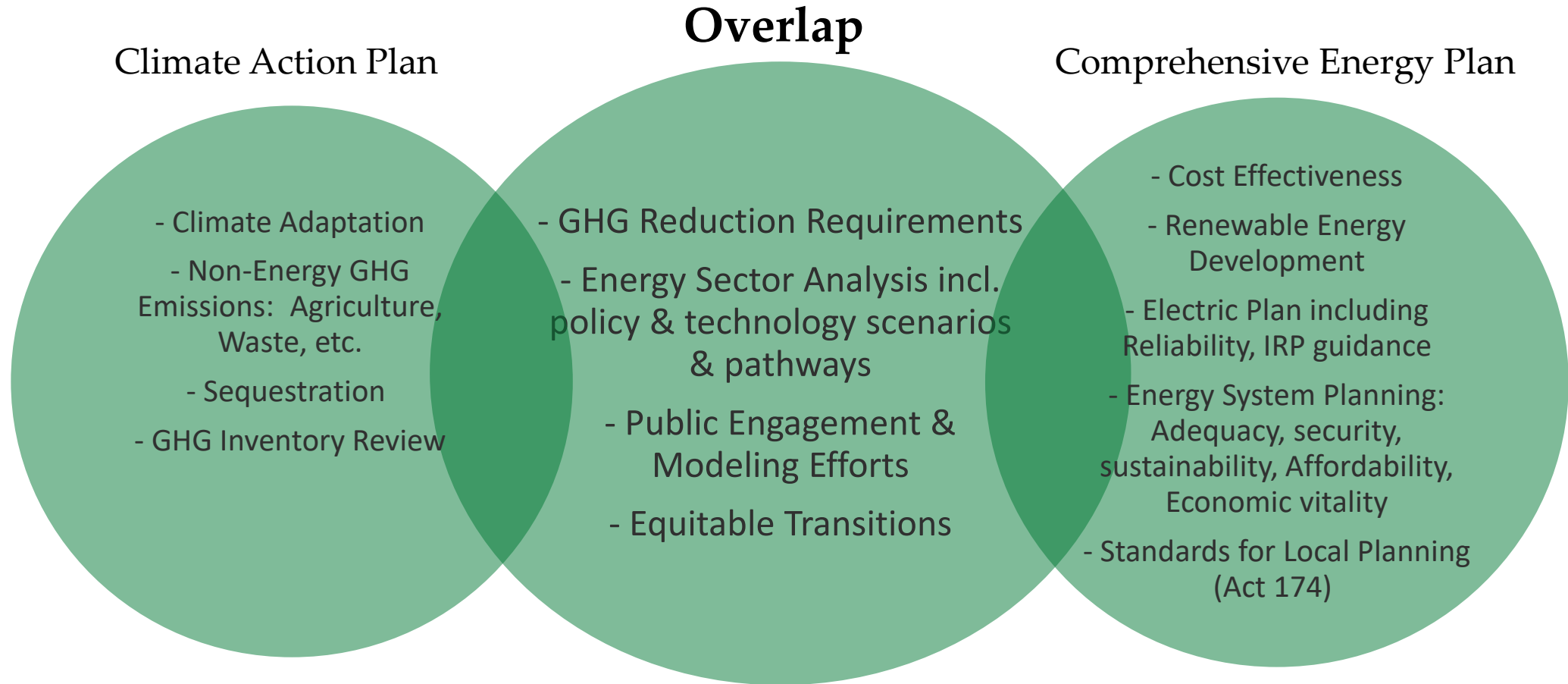


# GWSA Statutory Objectives

1. Reduce greenhouse gas emissions
2. Encourage smart growth and related strategies
3. Achieve long-term sequestration and storage of carbon
4. Achieve net zero emissions by 2050 across all sectors
5. Reduce energy burdens for rural and marginalized communities
6. 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



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

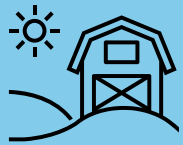
# The Plan shall include specific initiatives, programs, and strategies that will:

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);
6. 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
8. 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.

# Climate Council Subcommittees



## Rural Resilience & Adaptation

- Pressures climate change will place on Vermont's housing, emergency services, public health, and communications infrastructure.
- Challenges faced by rural communities.



## Agriculture & Ecosystems

- Role Vermont's natural and working lands play in carbon sequestration and storage, climate adaptation, and ecosystem and community resilience.
- Initiatives in the agricultural and forestry sectors and the businesses that depend on them.



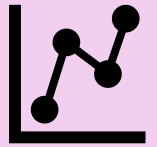
## Cross-Sector Mitigation

- Identifying the most scientifically and technologically feasible strategies and programs to achieve the GHG emissions reduction requirements of the GWSA. This includes Transportation, Electricity, and Buildings and Thermal.



## Just Transitions

- Develop principles to guide and evaluate the work of the other Subcommittees to ensure that the initiatives, programs and strategies proposed support all residents of the State fairly and equitably.



## Science & Data

- Incorporation of data and information available about climate change, mitigation, adaptation, and resilience.

# 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  
recommend-  
ations

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



# Sequence of Work Outlined in GWSA

1. Inventory existing programs to reduce GHG emissions
2. Identify, analyze and evaluate new strategies/programs needed to meet GHG targets
  - Evaluate cost effectiveness
3. Develop financing strategies
4. Inventory existing programs to build resilience
5. Identify, analyze and evaluate new strategies/programs needed to improve resilience
6. Develop monitoring strategy for assessing:
  - GHG emissions
  - Program effectiveness
  - Impacts of climate change on Vermont's climate, wildlife and natural resources
  - Community resilience
7. Identify rules (to be adopted by ANR) and necessary legislation to support implementation
8. Adopt the Vermont Climate Action Plan by Dec 1, 2021, and update the Plan every four years thereafter.

The image shows the front cover of a document titled "INITIAL VERMONT CLIMATE ACTION PLAN". The cover has a white background with a large blue rectangular area at the top and a smaller blue rectangular area at the bottom. The title is centered in blue text. At the bottom of the blue area, it says "Vermont Climate Council" and "DECEMBER 2021".

## INITIAL VERMONT CLIMATE ACTION PLAN

Vermont Climate Council  
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](#)

# Rulemaking

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

# 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



Public kick-off meetings



Eight input sessions



Public consultation on draft plan

### 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](http://www.climatechange.vermont.gov/calendar)

Jane.Lazorchak@vermont.gov