

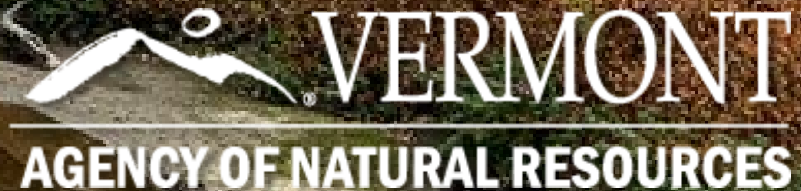


# **Vermont Climate Update**

## **Citizens Advisory Committee**

### **Lake Champlain Basin Program**

**Evan Horne**  
**Resilient Lands Coordinator**  
**Climate Action Office**



# Agenda



- Overview of the Climate Action Office (CAO)
- 2025 Climate Action Plan Update
- Resilience Implementation Strategy (RIS)
- Questions and Discussion



# Overview of the Climate Action Office

- Provides expertise and coordination for climate mitigation, adaptation, and resilience across Vermont.
- Supports implementation of the Global Warming Solutions Act (GWSA) through policy, tracking, and assessment.
- Works across ANR, other state agencies, and with the State Climatologist to align efforts.
- Centers frontline and impacted communities in climate solutions.



# Inter-Agency Advisory Board (IAAB)

## Objectives of the IAAB

1. Provide a space for proactive coordination on climate action across state government.
2. Articulate where policy and financial implications overlap around climate action to maximize resources.
3. Support the monitoring of progress over time in meeting the state's climate goals.
4. Identification and framing up of gaps where the climate action office might prioritize support.
5. Development of state positions on issues related to climate change.

Include the following governmental agencies:

- PSD
- AOT
- ANR
- VEM
- AAFM
- BGS
- AHS (DCF and VDH)
- ACCD
- State Climatologist

# Vermont 2025 Climate Action Plan Update



**What's the first word that comes to mind  
when you hear “*climate action*”?**

## Counties with Highest Disaster Count

COUNTY	TOTAL DISASTERS
Washington, VT	22
Merrimack, NH	19
Lamoille, VT	17
Franklin, KY	16
Johnson, KY	16
Essex, VT	16
Orleans, VT	16
Clay, KY	15
Lawrence, KY	15
Lee, KY	15

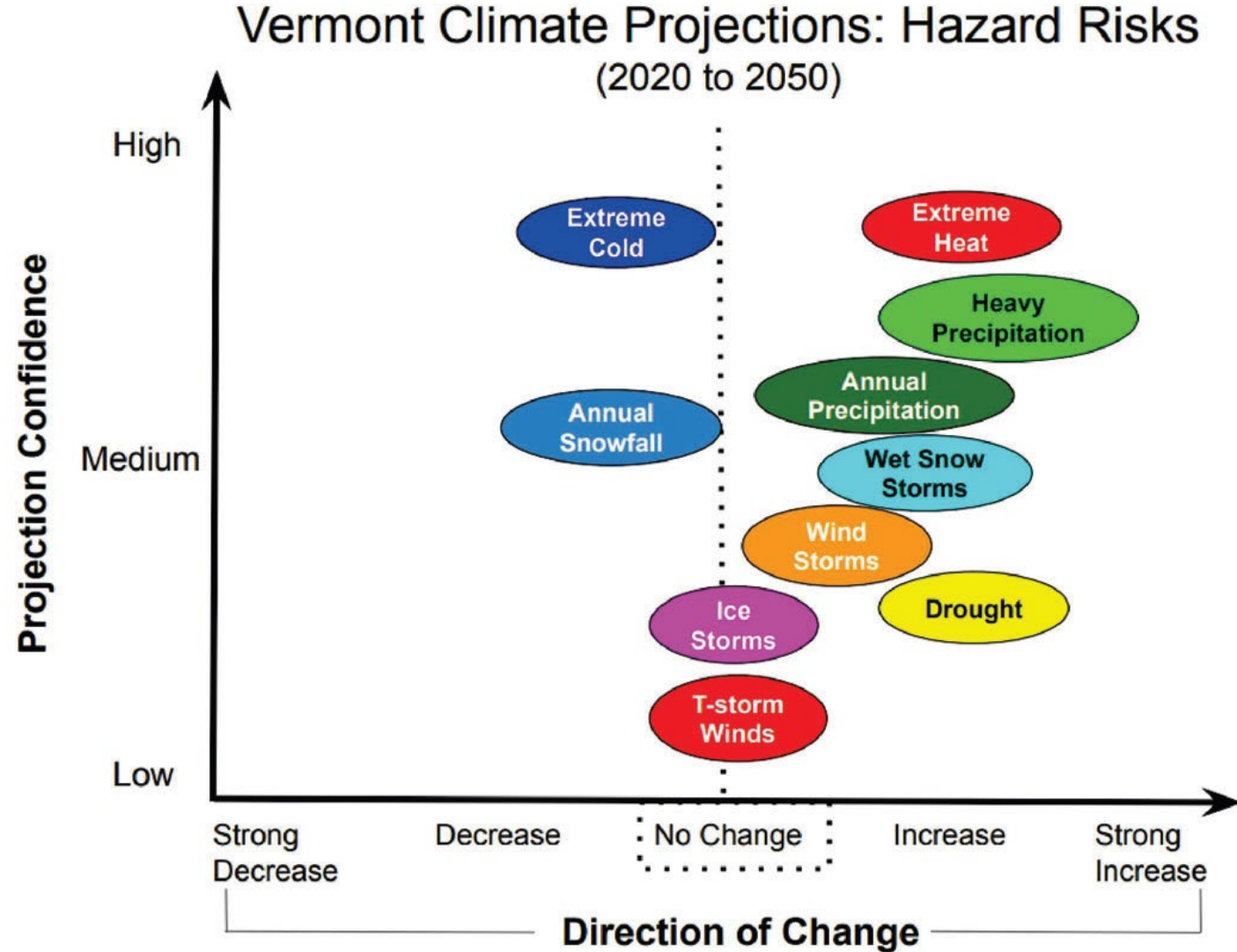
# How is climate change impacting Vermont?

7<sup>th</sup>

highest number of federally declared disasters of all states

4<sup>th</sup>

highest per capita disaster assistance of all states



Source: Shafer and Cronin 2021

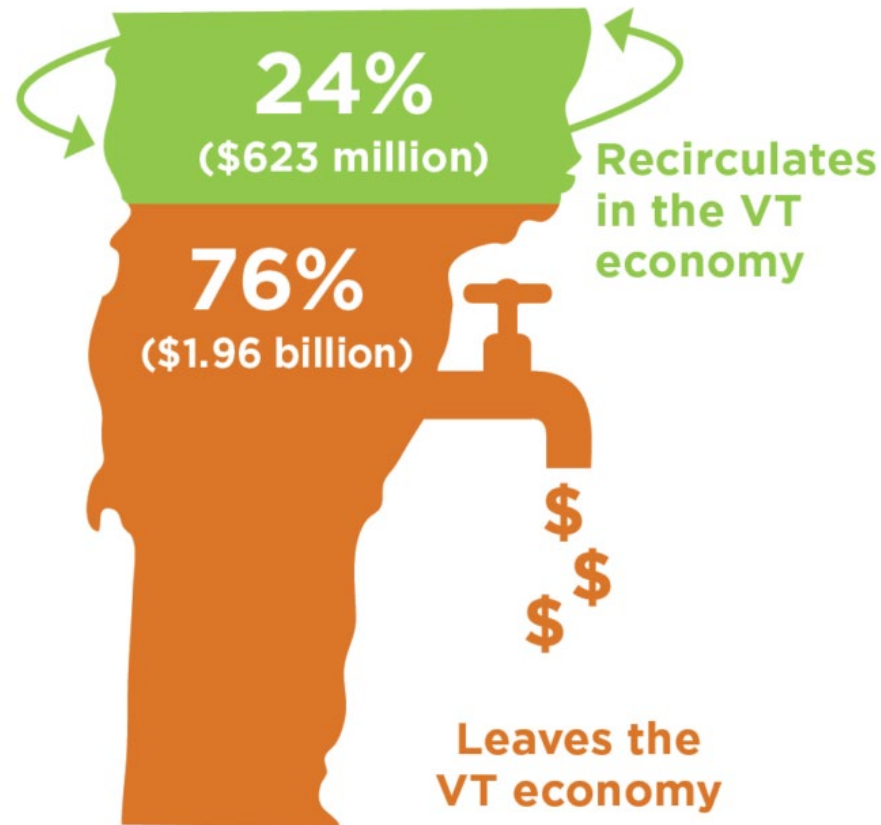
## How is climate change impacting Vermont?

- ***Increased precipitation***
- ***Warmer winters***
- ***Drought***
- ***Hotter summers***



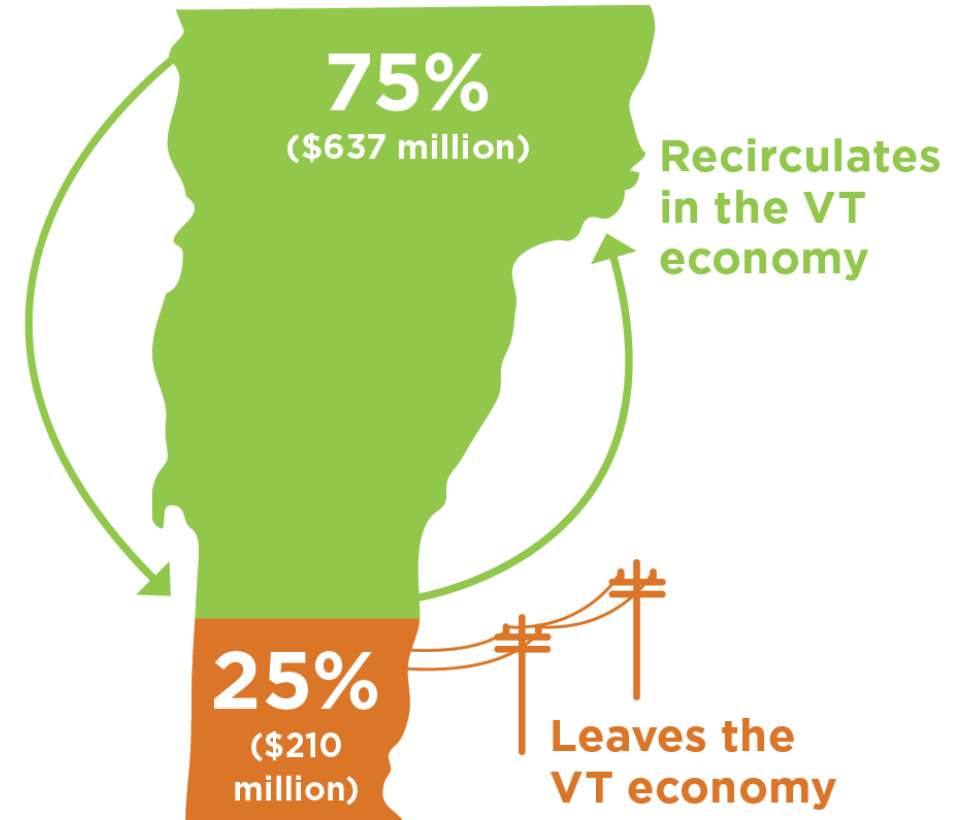
# Where does Vermont's energy come from?

## Vermont fossil fuel spending, 2022



**Sources:** Fossil fuel spending: Vermont Department of Taxes, 2023; VGS, 2023. Dollar recirculation share: EAN Senior Fellow for Economic Analysis, Ken Jones, 2023. **Note:** This graph includes spending on thermal and transportation fuels only.

## Vermont electricity spending, 2021



**Sources:** Electricity spending: Vermont Department of Public Service, 2021 Electric Utility Resource Survey; Dollar recirculation share: EAN Senior Fellow for Economic Analysis, Ken Jones, 2023.



# Vermont 2025 Climate Action Plan Update

**Global Warming  
Solutions Act  
passed**

September 2020

**Vermont Climate  
Council established**

November 2020

**Initial Climate  
Action Plan adopted**

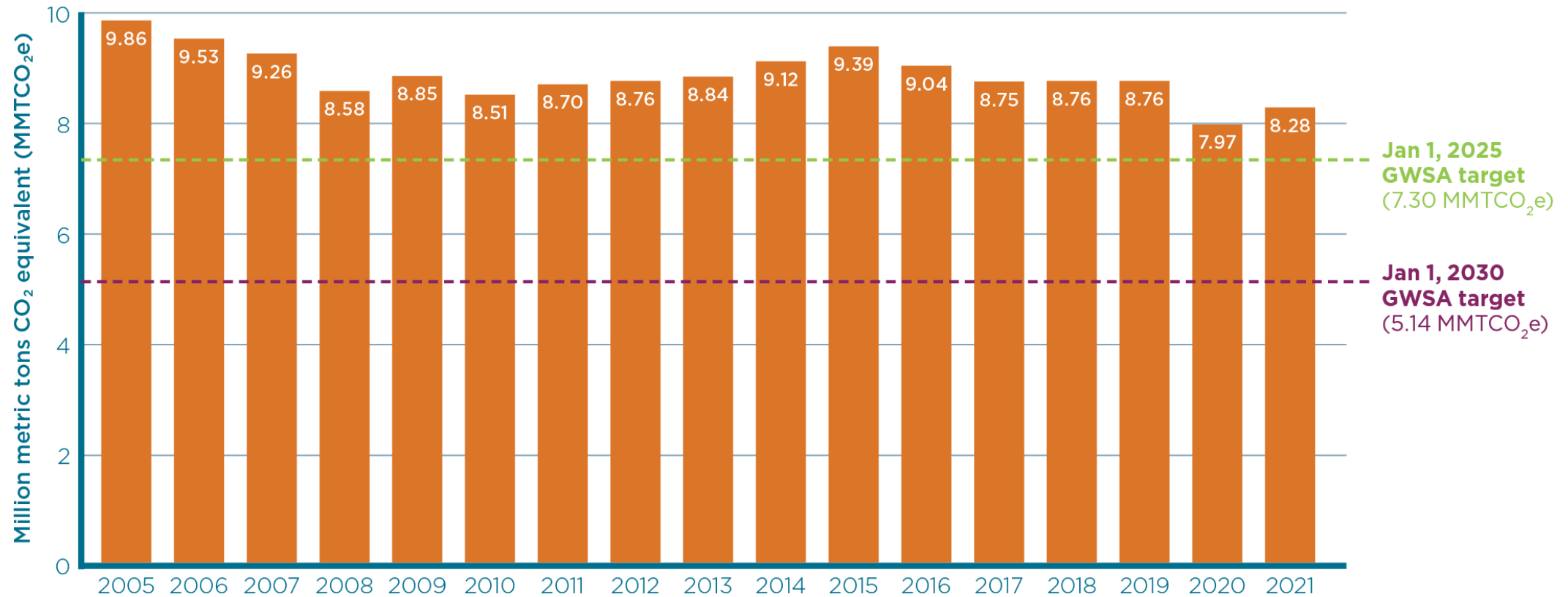
December 2021

**Implementation  
and update every  
four years**

Next update due July  
1, 2025

# Vermont 2025 Climate Action Plan Update

## Vermont GHG emissions (2005–2021) and GWSA targets



Source: Vermont Agency of Natural Resources, Vermont GHG Emissions Inventory and Forecast: 1990-2021, 2024.

# Vermont 2025 Climate Action Plan Update

## Spring and Summer 2024

Update begins



Public kick-off meetings

## Fall 2024

Subcommittees draft recommended actions and submit them to



Eight input sessions

## Winter 2025

Council drafts an updated plan



Public engagement on draft plan

## Spring 2025

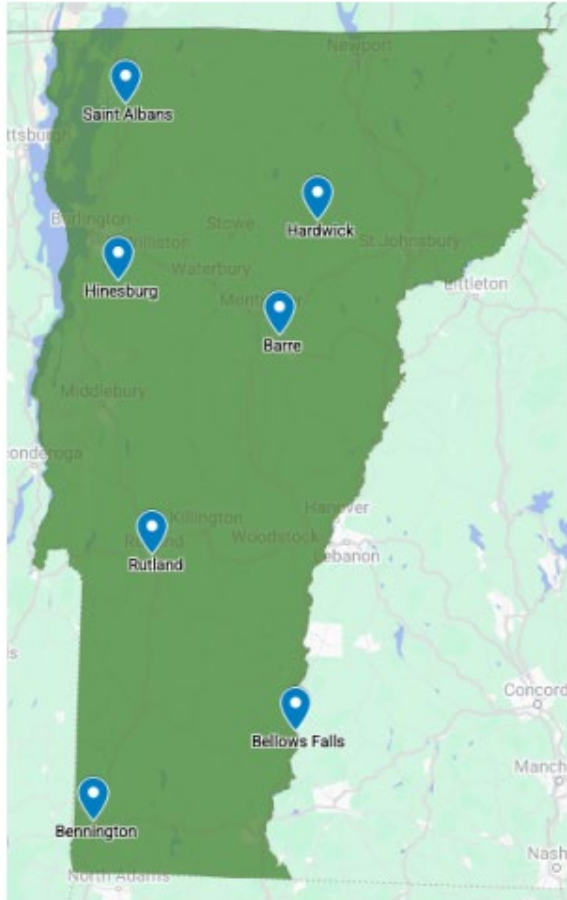
Council revises and finalizes the plan based on public input



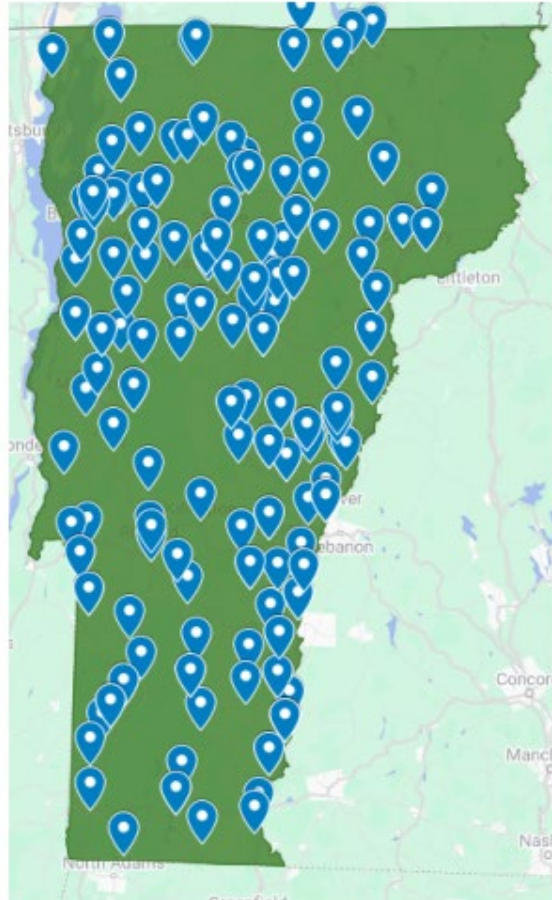
**Community engagement throughout!**

# Vermont 2025 Climate Action Plan Update

## In-Person Meeting Locations



## Virtual Meeting Registrations



## Meeting Details:

- April 10, via Zoom (112 attendees)
- April 10, Barton (18 attendees)
- April 14, Hardwick, (28 attendees)
- April 15, Hinesburg (60 attendees)
- April 16, St. Albans (24 attendees)
- April 17, Bennington (16 attendees)
- April 21, Burlington (15 attendees)
- April 23, Bellows Falls (25 attendees)
- April 28, Barre (40 attendees)
- April 30, Rutland (19 attendees)
- May 1, via Zoom (73 attendees)



**Cross-Sector Mitigation**

Transportation

Electricity

Buildings & Thermal

**Cross-Cutting**

Workforce

Education

Compact Settlement

**Rural Resilience & Adaptation**

Capacity & Planning

Built Environment

Public Health

**Agriculture & Ecosystems**

Reduce & Sequester

Support Adaptation

Climate-Resilient Land

## Rural Resilience and Adaptation **Community Capacity and Planning**

- 3) Secure sustainable, long-term funding to expand and maintain a permanent Flood Resilient Communities Fund (Community Resilience and Disaster Mitigation Fund) for the design and implementation of local and regional climate change adaptation projects and community resilience. Funding may be used as local match for federally funded hazard mitigation programs as well as non-FEMA eligible hazard mitigation activities.**

The Council continues to debate this potential action and seeks public input prior to making decisions on it. These draft ideas do not yet reflect a final decision by Councilors, who have a range of views on them.

## Ag and Eco Climate-Resilient Land

- 12) State agencies and the legislature should promote healthy, connected river corridors, floodplains, and wetlands, prioritize restoration and conservation, and incentivize water storage in headwaters and natural areas to promote flood resilience and biodiversity through expansion of wetland, floodplain, riparian forest and/or river corridor easements that better compensate land and water caretakers for restoring, managing and conserving these natural water storage areas (including opportunities presented by Act 121).**

The Council continues to debate this potential action and seeks public input prior to making decisions on it. These draft ideas do not yet reflect a final decision by Councilors, who have a range of views on them.

## Ag and Eco Technical Assistance

**14) Enhance education, outreach, research, and technical assistance programming to encourage farmers, foresters, and other land and water caretakers to adopt strategies that increase climate mitigation, adaptation, and resilience. State agencies should work with and fund partners and higher education, such as University of Vermont (UVM) Extension and Natural Resource Conservation Districts (NRCDs).**

- These efforts should be incorporated into current programs, braiding Traditional Ecological Knowledge (TEK) and Indigenous Knowledge (IK), recognizing the value these bring to better understanding and taking care of the land. Initiatives should be designed to represent diverse perspectives while addressing a diversity of audiences and age groups. Simplify and assist with application processes for funding and support programs.

**The Council continues to debate this potential action and seeks public input prior to making decisions on it. These draft ideas do not yet reflect a final decision by Councilors, who have a range of views on them.**



# Key Themes

## Actions that resonated

- A lot of enthusiasm around actions to cut emissions, including weatherization and electrification of heating and transportation.
- Participants called out Cap and Invest as an important program that could reduce emissions and raise revenue to support weatherization and other activities.
  - Participants also raised concerns about the cost and complexity of it
- Actions that sought to benefit, not harm, low- and moderate-income Vermonters.
- Public transportation.
- Workforce development.
- Education actions.
- Actions to support community resilience.

# Key Themes

## What is missing

- Many participants raised concerns about the cost of the actions and how Vermont would fund them.
- More focus on today's hazards, such as flooding, and recovery from disasters in 2023 and 2024.
- The plan should prioritize geothermal networks.
- Actions that focus more on conserving forests and limiting/ending the burning of biomass.
- Actions that protect outdoor workers.
- More emphasis on resilience hubs and mutual aid networks.
- Vermont should enforce building codes.

# Key Themes

## Focus & Clarity

- Many participants asked the Council to further prioritize and simplify the plan.
- The plan should emphasize just a handful of the highest priority measures.
- Many participants also urged the Council to use plain language to better communicate the actions.
- Be more specific about the actions requested.

- **May** | Climate Council discusses feedback, edits, and revises draft
- **June** | Final revisions
- **July 1, 2025** | Climate Action Plan complete!
- **Summer and Fall 2025** | Events to share new Climate Action Plan with Vermonters

**For more information:**

<https://climatechange.vermont.gov/climate-action-plan-2025-update>

## Next steps





# Resilience Implementation Strategy (RIS)

- Joint initiative led by the Governor and Treasurer; announced on January 3, 2024.
- Build on work done to date across the state government to identify and prioritize climate resilience needs.
- Complements existing State plans and the development of the Climate Action Plan.
- Will evaluate funding, recommend criteria for allocating state support for resilience projects, and prioritize approaches for funding implementation efforts on an ongoing basis.







# Defining Climate Resilience

**Climate resilience:** The ability of interconnected ecological, social, and economic systems to anticipate, adapt, withstand, respond, and thrive in the face of current and future conditions and disasters made worse by climate change.

These complementary systems form the foundation for thriving communities where ecosystems, economies, and societies support and reinforce one another.

**Ecological resilience:** A natural community's ability to absorb shocks and recover from disturbances. Ecosystems can maintain their pieces, patterns, and processes, which allow plants, animals, and fungi to thrive, migrate, and move.

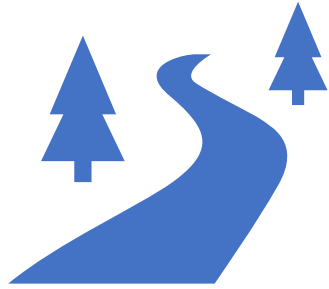
**Community resilience:** A human community's ability to anticipate, withstand, and adapt to climate-exacerbated disasters and learn from past events to improve response and recovery. Resilient communities rely on systems that support human health and well-being, social and economic equity, sustainable infrastructure, and coordinated communication and planning.

**Economic resilience:** An economic region's ability to endure and sustain stability when faced with economic disruptions or pressures. Resilient economies support essential services, enable diverse livelihoods, and foster equitable and sustainable access to resources that respect environmental limits.

# Core Components



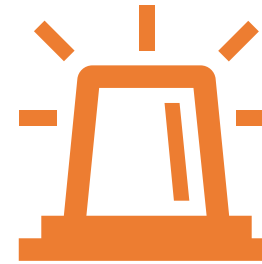
**Community-  
Centric Approach**



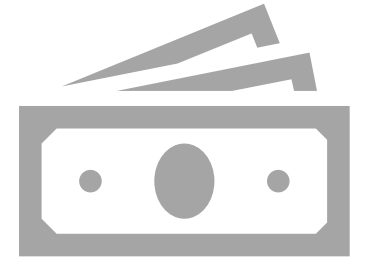
**Nature-Based  
Solutions**



**Infrastructure  
Design &  
Reinforcement**



**Early Warning  
Systems &  
Emergency  
Response**



**Economic &  
Environmental  
Sustainability**

# Timeline

## Phase 1

April – November 2024

Inventoried existing initiatives, plans, programs, policies, and funding

Wrote a statewide climate resilience vision informed by Vermonters

Identified opportunities based on the Vision and existing initiatives

## Phase 2

September 2024 – May 2025

Categorized and prioritize opportunities

Work with stakeholders to identify actions to meet opportunities

## Phase 3

May – September 2025

Understand the costs & prioritize funding approach

Finalize Resilience Implementation Strategy



# State Initiative Inventory

and

# Opportunity Assessment

## 330 Initiatives across 30 State Organizations

### Reviewed through the following lenses:

- Whether all major **climate hazards** were addressed by State initiatives
- Whether **phases of resilience** are addressed: reduce vulnerability; increase ability to withstand; increase ability to anticipate; facilitate short-term recovery (0-6 months); facilitate long-term recovery (6 months – 3 years); facilitate the ability of flora/fauna to access new habitats
- Whether all **initiative types** are used: plans, policies, procedures, conservation and land management, funding, regulatory and incentives, technical assistance and education, tools and datasets.
- At which **scale** initiatives are implemented: Individual, Municipal, Watershed, State, Other
- Whether **funding or capacity gaps** or **other opportunities** were noted in the State Initiatives Inventory

# Action Development



- What specific, concrete actions can we take to begin addressing challenges and leveraging identified opportunities?
- Are there existing State government initiatives that could be expanded in scope or scaled up to meet this need?
- Has this opportunity been identified in other plans or ongoing conversations?

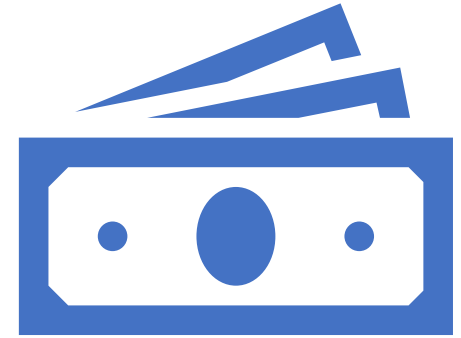
# RIS Next Steps



**Finalizing  
Opportunities and  
Actions**



**Prioritization of  
Opportunities and  
Actions**



**Costing and Available  
Funding**

# Questions?



Evan Horne  
[Evan.Horne@vermont.gov](mailto:Evan.Horne@vermont.gov)