

Vermont Climate Council 2025 Update to Vermont's Climate Action Plan

**Cross Sector Mitigation Subcommittee
Priority Recommendations
December 16, 2024**



Cross Sector Mitigation

Core Focus Areas

Transportation Task Group

Electricity Task Group

Buildings and Thermal Task Group

Overview of Transportation Pathways and Strategies

Pathway 1: Adopt a cap-and-invest policy to reduce emissions, including but not limited to transportation, focused on achieving Global Warming Solutions Act (GWSA) requirements and creating a sustainable revenue source to fund necessary carbon-reducing transportation programs.

- **1 strategy under this pathway**
- **1 action under this pathway**

Pathway 2: Reduce greenhouse gas (GHG) emissions from vehicles.

- **5 strategies under this pathway**
- **17 actions under this pathway**

Overview of Transportation Pathways and Strategies

Pathway 3: Lower the carbon intensity of fuels.

- **1 strategy under this pathway**
- **0 actions under this pathway**

Pathway 4: Reduction in Vehicle Miles Traveled (VMT).

- **5 strategies under this pathway**
- **18 actions under this pathway**



Transportation Priority Actions

- Via Legislation and Rulemaking, adopt a **cap-and-invest policy** to reduce emissions, including but not limited to transportation, focused on achieving Global Warming Solutions Act requirements and creating a sustainable revenue source to fund necessary carbon-reducing transportation programs. (study underway)
 - In conjunction with other states/regional collaboration
 - And complementary policies such as clean fuels standard
- Continue transportation **electrification** by supporting the availability, accessibility, and affordability of electric vehicles (EVs) and reliable EV charging options for all, including by ensuring core, long-term funding for EV purchase incentives.



Transportation Priority Actions *(continued)*

- Continue to participate in and defend **Advanced Clean Cars II**, explore **Advanced Clean Trucks**.
- Plan for and develop local and regional investment priorities for a **multi-modal transportation system**.
 - Including through land use planning strategies and investments that support compact community settlements.

Overview of Thermal Pathways and Strategies

Pathway 1: Adopt one broad, sector-wide mechanism to flexibly reduce thermal sector emissions through a range of end use actions across buildings, fuels, and equipment

- **1 strategy under this pathway**
- **2 options for an action under this pathway**

Pathway 2: Reduce GHG emissions from buildings through weatherization and efficiency improvements as well as the implementation of energy and electrical standards and codes.

- **4 strategies under this pathway**
- **13 actions under this pathway**

Overview of Thermal Pathways and Strategies

Pathway 3: Reduce GHG emissions through appropriate use of emissions-based equipment standards.

- **3 strategies under this pathway**
- **5 actions under this pathway**

Pathway 4: Reduce GHG emissions by ensuring beneficial electrification of building space and water heating, with a focus on ensuring equitable access to cost-effective, and affordable electrification by low- and moderate-income households.

- **3 strategies under this pathway**
- **4 actions under this pathway**

Pathway 5: Reduce greenhouse gas emissions by reducing the greenhouse gas intensity of fuels used for thermal Residential, Commercial, and Industrial (RCI) purposes.

- **1 strategy under this pathway**
- **1 action under this pathway**



Buildings and Thermal Priority Actions

Adopt a broad sector-wide mechanism, to flexibly reduce thermal sector emissions through a range of end-use actions across buildings, fuels and equipment. Two options:

- Through legislation and administrative action, adopt a **modified Clean Heat Standard**, designed for:
 - **Gradual implementation** (implies that the mechanism would get as close as possible to GWSA targets and that complementary policies will necessarily need to carry a larger proportion of RCI emissions reductions to meet GWSA targets) and
 - Containing a **price cap** provision with an explicitly-stated **starting price**.

OR

- Through legislation and administrative action, **join a cap-and-invest program** – either New York Cap and Invest (NYCI) or Western Climate Initiative
 - Study underway in the Transportation Sector



Buildings and Thermal Priority Actions

Equipment standards

- Conduct a study that considers the technological options and market feasibility for **emissions-based equipment standards** for various types of heating.
 - The purpose is to better understand the feasibility and considerations of Vermont adopting thermal equipment emissions standard(s), either for oxides of nitrogen or, more broadly for GHGs.
 - Led by Agency of Natural Resources, in consultation with the Department of Public Service
 - Start by September 1, 2025 and file a report with the Vermont Climate Council by June 30, 2027
 - The study shall consider:
 - adoption by other states,
 - the means by which equipment standards can influence market activity,
 - the most equitable approaches, and
 - how to secure the greatest emissions reductions.



Buildings and Thermal Priority Actions

Weatherization and heating systems

- Secure the funding needed to achieve comprehensive weatherization at the scale and pace necessary to meet GWSA requirements with a priority on low- and moderate-income households.
 - Recommended funding source is fuel gross receipts tax or a Thermal Energy Benefits Charge.
- Secure funding to enable expanded outreach, consumer support, funding, and financing for the beneficial electrification of low- and moderate-income households, including home repairs and electrical wiring and panel upgrades needed in order to be “heat pump ready”.

Clean fuels

- Adopt a performance based Clean Fuels Standard that implements a declining carbon intensity (CI) score requirement for residential, commercial, and industrial fuels.

Overview of Electric Pathways and Strategies

Pathway: Keep the Electric System Strong & Affordable to Support Continued Emissions Reductions

- **Priority Action:** Support cost-effective load management, storage, grid hardening, and optimization, through continued Public Utilities Commission (PUC) oversight of utility programs, investments, and rate designs, and consideration of regulatory improvements for efficient generation and infrastructure siting approval.

Pathway: Enable All Vermonters To Choose Electrification

- **Priority Action:** Deploy programs that ensure the electric grid supports customer electrification necessary to meet GWSA goals, including service drops, transformers, smart panels, EV chargers, storage, etc. Continue PUC oversight of utility programs; seek state or federal sourced funding; strive for deployment across utility territories with ability to participate for all customers, including rural/low-income.

Pathway: Increase Access and Participation in Renewable Energy Programs

- **Priority Action:** With community and customer input, utilities and/or PUC should create procurement and customer enrollment programs to support community-based renewable energy projects in line with Act 179 study recommendations. Consider cost-containment actions, funding avenues that are not electric customer supported, and how approval for community-based project siting occurs.

Buildings and Thermal

- Adopt one **sector-wide policy** (modified Clean Heat Standard and/or cap-and-invest program)
- Secure funding for comprehensive **weatherization** focused on low- and moderate-income households
- Secure funding for electrification of **space & water heating for low- and moderate-income households**
- **Study on equipment performance standard** for new heating systems
- Implement **Clean Fuels Standard**. Phased

Transportation

- Adopt a **cap-and-invest policy** to reduce emissions in support of GWSA requirements and create a sustainable revenue source to fund necessary transportation programs.
- Continue transportation **electrification**—availability, accessibility, and affordability of EVs and reliable EV charging for all.
- Defend Advanced Clean Cars II, explore Advanced Clean Trucks.
- Plan for and develop local and regional investment priorities for a **multi-modal transportation system** (support compact community settlements)

Electricity

- Support cost-effective load management, storage, grid hardening, and optimization
- Deploy programs that ensure the electric grid supports customer electrification necessary to meet GWSA Goals, including service drops, transformers, smart panels, EV chargers, storage, etc.
- With community and customer input, utilities and/or Public Utilities Commission should create procurement and customer enrollment programs to support community-based renewable energy projects in line with Act 179 study recommendations.



Thank You