

Cross-Sector Mitigation Transportation

1) Adopt a cap and invest policy including but not limited to the transportation sector to achieve GWSA reductions and establish as sustainable revenue source for carbon- and cost-cutting transportation programs.

- **Establish the authority for ANR to collect proceeds for revenue generation.**

Cross-Sector Mitigation Transportation

2) Reducing greenhouse gas emissions from Vehicles

- **ACCI & ACI**
- **EV Incentives; EVSE**

Cross-Sector Mitigation Transportation

3) Lowering the carbon intensity of fuels

Cross-Sector Mitigation Transportation

4) Reducing Vehicle Miles Traveled through smart land use strategies and approaches

Host strategies: Transit, Micro, Bike Ped, Smart Growth

Cross-Sector Mitigation Transportation

5) In the event that EPA revokes California's waiver to enforce the aforementioned rules, urge the Vermont Attorney General to join and participate in any litigation defending California's authority under the Clean Air Act.

Cross-Sector Mitigation Transportation

6) If California's motor vehicle emissions standards are no longer enforceable in Vermont due to waiver revocation by the US EPA, the DEC shall explore Indirect Source Rules.

Cross-Sector Mitigation **Electricity**

7) Continued PUC oversight of utility load management programs, investments, and rate designs, and consideration of regulatory approval improvements for efficient generation and infrastructure siting.

Cross-Sector Mitigation **Electricity**

8) With community and customer input, utilities and/or PUC should create procurement and customer enrollment programs to support community-based renewable energy projects. Consider cost-containment actions, funding avenues that are not electric customer supported, and how approval for community-based project siting occurs.

Cross-Sector Mitigation

Electricity

9) Support continued 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.

Cross-Sector Mitigation Buildings and Thermal

10) Adopt one or more sector-wide policy

Option A:

Through legislation or administrative action, adopt a modified Clean Heat Standard, designed for gradual implementation,* and containing a cost cap provision with a starting price.**

The recommendation seeks to make progress now, within a program that is scalable over time, and that lives within a cost cap.

- 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.**

and/or

Option B:

- 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**

Implementation Lead: Legislature and selected state agencies

Cross-Sector Mitigation Buildings and Thermal

11) Secure funding for comprehensive weatherization focused on LMI households

Through legislation or administrative action, ensure X additional homes are comprehensively weatherized by 2030, and secure the funding needed to achieve the target with a priority on low- and moderate-income households. *The weatherization work should recognize energy efficiency broadly. It should include traditional energy efficiency measures, electrical, health, and safety measures needed to comply with codes, and needed infrastructure upgrades such as wiring and service panels to enable electric vehicle charging, the adoption of heat pumps for space and water heating, and other strategic electrification opportunities.*

- Secure a sustainable source of funding to be used specifically for eliminating barriers (e.g. required pre-requisite home repairs including, but not limited to, vermiculite removal, knob-and-tube mitigation, etc.) that prevent or delay weatherization activities from occurring in low- and moderate-income homes.

Implementation Lead: Legislature, Public Service Department

Cross-Sector Mitigation Buildings and Thermal

12) Through legislation or administrative action, ensure X additional commercial, industrial, municipal, and non-residential buildings are comprehensively weatherized by 2030, and secure the funding needed to achieve the target.

- Including “weatherization ready” project needs)
- With priority for supporting/expanding existing programs (i.e. the Municipal Energy Resilience Program, Municipal Technical Assistance Program, Building Communities, etc.).

Implementation Lead: Legislature, Public Service Department

Cross-Sector Mitigation Buildings and Thermal

13) Secure funding for electrification of space & water heating for LMI households

- **Develop programs for implementation regarding 200-amp service and related building upgrades, coordinated with weatherization, efficiency, and equipment incentive programs (EV chargers, HP, storage, etc.), and ensure that any potentially related statewide program (such as Clean Heat Standard, if adopted, or enhanced weatherization efforts) includes building electrical upgrades in their design and funding models in order to enable decarbonization.**

Lead Implementers: Legislature for funding initiatives; Utilities, private sector, non-profits

Cross-Sector Mitigation

Buildings and Thermal

14) 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.

• 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**

Study is contingent on securing funding. Implementation Lead: Agency of Natural Resources, in consultation with the Department of Public Service

****This action has been flagged as non-consensus. No agreement on making study contingent on securing funding.**

Buildings and Thermal

15) Through legislative and administrative action, adopt a performance-based Clean Fuels Standard that implements a declining carbon intensity (CI) score eligibility requirement for residential, commercial, and industrial (RCI) fuels and can be implemented gradually alongside other complementary policies that would be necessary.

- Alternate approach if recommended action is not deemed feasible (not performance based) : Through legislative and administrative action, institute a minimum percentage clean fuel blending requirement for all residential, commercial, and industrial liquid and gaseous fuels, utilizing an approved list of eligible clean fuels.**

Implementation Lead: Legislature and state agency

The following draft priority actions are still in progress and subject to change

DRAFT DRAFT DRAFT DRAFT DRAFT

The following draft priority actions are still in progress and subject to change

DRAFT DRAFT DRAFT DRAFT DRAFT

Cross-Cutting Issues Education

1) Seek funding source for a grant to create a Vermont climate curriculum for educators to develop, teach and deliver interdisciplinary curriculum that is open source and accessible and builds off of existing resources and programs (e.g. Shelburne Farms, Conservation Districts, Regeneration Corps, Climate Action Groups).

Cross-Cutting Issues Education

2) Amend the Vermont State Board of Education's Education Quality Standards to incorporate environmental and climate change education at all grade levels (consider folding under "Science" and "Social Studies" curricula).

Cross-Cutting Issues Education

3) Support educational programs that strengthen the workforce pipeline, including a range of accessible postsecondary educational models (e.g. apprenticeships, concurrent enrollment, and stackable credentials). Seek sustained funding sources as needed to maintain or strengthen Career and Technical Education Centers that support construction, energy, agriculture and conservation planning, renewable energy, and transportation.

Cross-Cutting Issues Education

4) Maintain funding to sustain energy Coaches and Navigator Program.

Cross-Cutting Issues

Compact Settlement

5) Increase investment in municipalities to improve, expand and build new drinking water and wastewater, stormwater, infrastructure to support compact development, including asset management tools to support long-term operation and maintenance.

Cross-Cutting Issues

Compact Settlement

6) Increase capacity for multimodal transportation planning and implementation in downtown and designated areas, such as making village centers permanently eligible for the downtown transportation fund that builds infrastructure needed to increase walking, biking and transit.

The following draft priority actions are still in progress and subject to change

Cross-Cutting Issues

Workforce Development

7) Create new avenues for businesses to access equipment and make other investments that will increase their capacity.

Cross-Cutting Issues

Workforce Development

8) Support workers already in Vermont to join the trades. Continue to support training programs and recruitment for diverse workers. Support workers who have additional needs to succeed in these careers by resourcing readiness and retention and wrap around services.

Cross-Cutting Issues

Workforce Development

9) Increase the number of students who can be supported in the Career and Tech Ed system in the state such as electrician, plumbing, building trades programs, agriculture and working land sectors

Cross-Cutting Issues

Workforce Development

10) Increase the number of registered apprenticeships that can be supported in the state by Vermont State University and the Department of Labor, especially in plumbing/HVAC, electrical, and weatherization.

Cross-Cutting Issues

Workforce Development

11) Support programs for people to start and build their own businesses in the trades (such as those offered by SBDC and VSJF).

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

1) Increase State capacity to manage funding programs and provide technical assistance for the development and implementation of climate resilience plans, with a focus on maximizing the efficacy of Local Hazard Mitigation Plans, and augmenting existing programs with the Municipal Planning and Resilience Grant Program, the Municipal Climate Planning Framework and Guide, and the Municipal Climate Toolkit.

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

2) Establish permanent, dedicated funding for Regional Planning Commissions to hire and retain staff for climate resilience planning work, hazard mitigation application development, and management of hazard mitigation grants on behalf of municipalities or other eligible grant recipients as well as cover overhead costs related to completing Local Hazard Mitigation Plans.

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.

Rural Resilience and Adaptation Community Capacity and Planning

4) Create and facilitate a business support network that connects and engages local economic development and small business support organizations for the purpose of developing and providing coordinated support for business and local economic resilience and disaster response.

Rural Resilience and Adaptation Community Capacity and Planning

5) Map areas that are suitable for new, climate safe housing, set regional targets for new housing units created, and increase funding mechanisms where communities are investing in development-ready infrastructure.

Rural Resilience and Adaptation Infrastructure and Built Environment

6) The state, through the Public Utility Commission and Public Service Department, should investigate resilience planning, including defining, valuing, measuring, and setting targets for grid resilience. Utilities should integrate resilience planning into their Integrated Resource Plans based on guidance resulting from this proceeding.

Rural Resilience and Adaptation Infrastructure and Built Environment

7) Expand upon the Municipal Vulnerability Indicators tool to create a Municipal Vulnerability Index that can be used by state agencies and others as a resource to assist in prioritizing infrastructure resilience investments across the state based on specific vulnerabilities or combinations of vulnerabilities. Ensure it includes currently missing data such as historic utility outage data, to the extent available, and ANR's Environmental Justice mapping tool, when complete.

Rural Resilience and Adaptation Infrastructure and Built Environment

8) In the absence of and/or in addition to dedicated federal funding, create a transportation flood resilience funding program to address identified transportation risks and vulnerabilities.

Rural Resilience and Adaptation Infrastructure and Built Environment

9) Replace aging electric and communication infrastructure with the most appropriate resilient alternative when cost effective. For example, during normal replacement schedules for aging and unreliable lines, evaluate and where cost effective and feasible, improve resilience by relocating lines underground or through other options.

Rural Resilience and Adaptation Infrastructure and Built Environment

10) Provide a sustainable funding source for addressing drinking water, stormwater, and wastewater infrastructure vulnerabilities identified and prioritized through asset management plan and vulnerability assessments development.

Rural Resilience and Adaptation Public Health

11) Explore and implement strategies to enhance local emergency preparedness, response, and recovery capacity (e.g., increase funding and expand authority of RPCs and/or county government; increase direct state funding, training, and technical assistance provided to municipalities).

Rural Resilience and Adaptation Public Health

12) Provide funding and technical assistance to local partners to develop community resilience hubs that can serve as places for learning, collaboration, resource access, and refuge in response to climate-related hazards and other community needs.

Rural Resilience and Adaptation Public Health

13) Provide funding and technical assistance to municipalities and local organizations to reduce health impacts of climate change for the disproportionately affected populations they serve, through preparedness, facility adaptation, and support for individuals and households.

Rural Resilience and Adaptation Public Health

14) Provide funding for resilience equipment, supplies, and services that help reduce the health impact of climate-related hazards for income-qualifying households needing extra assistance.

Rural Resilience and Adaptation Public Health

15) Increase funding for state-contracted community mental health services, to provide funded partners with more capacity to address anxiety, depression, distress, and trauma caused by climate change and climate-related disasters.

Ag and Eco Reduce and Sequester

1) Increase funding, enhance, and adapt existing State of Vermont programs that support GHG emissions reductions, soil carbon sequestration, and/or climate adaptation and resiliency on working lands. Enhance and adapt programs to better incorporate climate mitigation, adaptation, resilience, nature-based solutions, and TEK/IK. Example State programs include, but are not limited to: AAFM: Ag-CWIP, BMP, CEAP, CREP, FAP, GWFS, PSWF, VPFP, VFESP; land acquisition, river corridor easements, wetland conservation, County Forester Program, Maintaining and Creating Resilient Forests. Coordinate with USDA NRCS-VT programming to accelerate the implementation of federally funded climate mitigation and resilience practices in Vermont.

Ag and Eco Reduce and Sequester

2) Update the Vermont GHG Emission Inventory to account for both carbon sequestration and emission reduction benefits from agriculture.

Ag and Eco Reduce and Sequester

3) Protect farmland and managed forestlands from development through land conservation and protection programs so these land uses can continue to provide climate mitigation, adaptation, and resilience benefits. Enhance existing State land use protection programs, such as the Vermont Farmland Conservation Program and Forest Conservation Easements, to improve farmland access and protection of agricultural soils and working forests.

Ag and Eco Reduce and Sequester

4) Fund and implement Payment for Ecosystem Services (PES) program(s) for natural and working lands to encourage land owners and caretakers to implement practices that improve soil health, crop and forest resilience, increase carbon storage, increase stormwater storage capacity, and reduce runoff. Fund existing agricultural PES programs (AAFM VFESP and VPFP) and expand to include or develop new programs for forestry. (PES is payment/compensation for increasing ecosystem services/environmental stewardship achieved through better land management by farmers and loggers and does not include carbon trading or markets, which is not recommended by this subcommittee).

Ag and Eco Support Adaptation

5) Enhance and support dedicated funding for technical assistance to farmers, landowners, land and water caretakers, and municipalities through increased funding to existing programs, such as Vermont Natural Resources Conservation Districts, UVM Extension Climate and Agriculture program, FPR's Forests & Climate program, and fully implementing Act 171.

Ag and Eco Support Adaptation

6) Develop and fund climate adaptation planning and training for all land and water caretakers that braides traditional ecological, scientific, farmer, and forester knowledge.

Ag and Eco Support Adaptation

7) Leverage the power of peer learning to advance climate resilience by funding an RFP that provides funds to support Vermont Natural Resources Conservation Districts, farmer organizations, and non-profit organizations with the specific objective of allowing them to reach other farmers and do farmer-to-farmer education about improved soil and manure management strategies that enhance climate resilience.

Ag and Eco Support Adaptation

8) Create a dedicated climate impact emergency recovery fund for farms and forestry operations (or ensure the agriculture and forestry sectors are given specific considerations in general state climate impact recovery fund) to ensure that they can viably recover from climate induced disasters. The fund should be simple to access, deploy sufficient funds quickly following a disaster, be flexible, equitable, and proportional to meet the diverse needs of the farming and forestry community, and be sustained over time with predictable and consistent funding.

Ag and Eco Support Adaptation

9) Dedicate robust funding for farm and forest supply chain resilience and state food security, including significant investment in storage, processing, and distribution infrastructure. Prioritize investments in farm, food, and forestry businesses, cooperatives, non-profits, tribes, and community projects that have climate resilience, adaptation, and mitigation goals. Funding should include a minimum dedicated base funding of \$1.5 million for the Working Lands Enterprise Initiative, \$18 million over three years for the Agriculture Development Grant program, \$500,000 in base funding for Crop Cash Plus and Farm Share, dedicated appropriations for distribution and food hub operations and infrastructure, and appropriations for research, development, and market expansion opportunities for local wood products processing and manufacturing in Vermont.

Ag and Eco Support Adaptation

10) Improve funding opportunities and create equitable access for BIPOC farm, food, and forest organizations and businesses by developing multi-year unrestricted BIPOC-centered grants and loan programs. This includes uplifting and resourcing the work of the Vermont Abenaki and other Indigenous Peoples in the State, Vermont Environmental Justice Network, Liberation Ecosystem, Land Access and Opportunity Board, and other BIPOC peoples and organizations in Vermont.

Ag and Eco Support Adaptation

11) Promote and incentivize the use of agricultural and sustainably harvested wood-based construction materials (subject to existing certification criteria or procurement standards to be developed) over imported wood and/or non-wood materials with high carbon footprints (such as steel, concrete, etc.). This could include using state procurement standards to require that publicly funded building projects use chain-of-custody certified wood products (MASS timber, cellulose insulation, etc.) and prioritize locally sourced wood products when possible that have been harvested under sustainable procurement standards over materials with a higher carbon footprint (such as steel, concrete, etc.). Continue to research and develop the life-cycle accounting of these products for the greatest impact.

Ag and Eco Climate-Resilient Land

18) Biomass recommendation - TBD.

Most members of the Agriculture and Ecosystem Subcommittee felt represented by the following recommendation on biomass:

- Fund and undertake, as soon as possible, the study requested by the Climate Council in its biomass addendum.**

And in the meantime, enact a moratorium on approvals of new biomass utility-scale electric energy facilities.

Other subcommittee members felt more represented by one of these other recommendations, reflecting a diversity of views on the subcommittee:

- State agencies shall eliminate biomass as a utility-scale energy source and stop referring to it as renewable energy.**

The following draft priority actions are still in progress and subject to change

- **Fund and undertake the study as soon as possible, the study recommended by the Council, along with the guidance to the Public Utilities Commission contained in the Council biomass addendum.**

Ag and Eco Climate-Resilient Land

12) State agencies should work with and fund partners and higher education to develop climate adaptation education and outreach materials, planning, technical assistance, and training for all farmers, foresters, and other lands and waters caretakers to be incorporated into current programs, including forestry guidance specific for Vermont forest types and conditions based on braided western science and Traditional Ecological Knowledge (TEK) and Indigenous Knowledge (IK) representing diverse perspectives and intended for a diversity of audience and age groups.

Ag and Eco Climate-Resilient Land

13) State agencies should prioritize and incentivize (through various financial mechanisms) NbS and TEK/IK for addressing climate change impacts through state regulatory processes, assessments, planning, prioritization frameworks, and funding programs.

Ag and Eco Climate-Resilient Land

14) State land management agencies should adapt their management of lands using nature-based solutions to address climate impacts, increase ecosystem resilience, enhance biological diversity, improve water quality, and enhance resilience funds to support the financial capacity of other land and water caretakers to achieve these goals.

Ag and Eco Climate-Resilient Land

15) 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).

Ag and Eco Climate-Resilient Land

16) State agencies should work with partners to promote strategic and equitable statewide landscape connectivity and forest block conservation planning and implementation toward 30 x 30 goals in state program prioritization frameworks using the best available data and mapping including Vermont Conservation Design braiding in TEK/IK. This conservation planning and implementation will allow at least 9% of Vermont's forest to become (or be maintained as) old forest, specifically targeting 15% of the matrix forest within the highest priority forest blocks including National Forests to achieve this condition and ensure the protection of sacred sites.

Ag and Eco Climate-Resilient Land

17) State agencies should utilize financial incentives, siting policies, rules, and regulations to motivate solar and wind energy capacity on new buildings, parking lots (by installing solar roofs), in compact settlement areas (including renewable energy and charging facilities at rental housing) as well as in previously-disturbed/developed areas and using disincentives to avoid or minimize forest clearing and use of agricultural land (particularly prime agricultural land) for renewable development.