

Climate Action Plan 2025

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Cross Cutting Pathways

Workforce Development

- 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.
- Create new avenues for businesses to access equipment and make other investments that will increase their capacity.
- Support programs for people to start and build their own businesses in the trades (such as those offered by Small Business Development Center and Vermont Sustainable Jobs Fund.)
- 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
- 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.

Education

Feedback from Council: Interest in seeing the action of *“Maintain funding to sustain energy Coaches and Navigator Program”* raised as a priority, which is not included in the Education priorities below.

- 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 from existing resources and programs (e.g. Shelburne Farms, Conservation Districts, Regeneration Corps, Climate Action Groups).
- Redesign the state education funding model so that Career and Technical Education centers have independent funding streams and budgets, and create and fund legislation to support other 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.
- 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)

Compact Settlement

Feedback from Council: The Council's feedback emphasizes the need to better address the impact of recent flooding and to review planning requirements under Act 181. It highlights the challenge of prioritizing funding between emissions reductions and resilience efforts, the importance of aligning existing programs with current priorities, and the need to clarify the term 'support' in action plans. Additionally, there is an overlap with the work being done by the Building Energy Code Working Group.

- Increase investment in municipalities to improve, expand and build new drinking water and wastewater infrastructure to support compact development, including asset management tools to support long-term operation and maintenance.
- 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.
- Continue to implement Act 181 and monitor for progress. Increase investment in compact settlements as needed.

Agriculture and Ecosystems Subcommittee

Feedback from Council: The Council's feedback emphasizes the need for the Science and Data team to review inventory-related recommendations and consider whether the use of 'shalls' in the language is appropriate. It highlights the importance of aligning these recommendations with existing programs and suggests examining net emissions from sectors beyond agriculture. Additionally, the feedback questions why Act 181 is not specifically mentioned.

Reduce GHG Emissions and Sequester Carbon

- 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 traditional ecological knowledge/indigenous knowledge. Example State programs include, but are not limited to: Clean Water Initiative Program (CWIP), Best Management Practice Program (BMP), Capital Equipment Assistance Program (CEAP), Conservation Reserve Enhancement Program (CREP), Farm Agronomic Practices Program (FAP), Grassed Waterway and Filter Strip/Seeding and Filtering Strip, Pasture and Surface Water Fencing (PSWF), Vermont Pay for Performance Program (VPPF), Vermont Farmers Ecosystem Stewardship Program (VFESP); land acquisition, river corridor easements, wetland conservation, County Forester Program, Maintaining and Creating Resilient Forests. Coordinate with USDA Natural Resources Conservation Service-VT programming to accelerate implementation of federally funded climate mitigation and resilience practices in Vermont
- Update the Vermont Greenhouse Gas Emission Inventory to account for both carbon sequestration and emission reduction benefits from agriculture.
- 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.
- Invest in Vermont's land owners, managers, and caretakers to enhance farm and forest viability and to support their informed decisions to increase their operation's resilience and adaptation to climate change.
- Fund and implement Payment for Ecosystem Services (PES) program(s) for lands to encourage landowners/managers 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 (Agency of Agriculture, Food and Markets' VFESP and VPPF) 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).

Support adaptation, viability, recovery, economies, and workforce

- Develop & fund climate adaptation planning and training for all farmers and foresters.

- Dedicate funds to support Vermont Natural Resources Conservation Districts and farmer watershed organizations with the specific objective of allowing them to reach other farmers and do farmer-to-farmer education about improved soil and manure management.
- Investigate innovative funding mechanisms for assisting with the implementation of climate smart agriculture practices, crop insurance for diversified Vermont-scale farms, and emergency recovery following extreme weather events to better respond when climate change-related events occur.
- Support robust funding for supply chain resilience and state food security, including significant investment in storage, processing, distribution infrastructure, and food assistance programs. Prioritize investments in farm and food businesses that have climate resilience and mitigation goals. Funding would include minimum base funding for the Working Lands Enterprise Initiative of \$1.5 million and \$6 million for the Agriculture Development Grant program for the next three years (i.e., \$18 million over three years).
- Uplift and resource the work of the Vermont Abenaki and other Indigenous Peoples in the State, Vermont Environmental Justice Network, Vermont Releaf Collective, and other BIPOC peoples and organizations in Vermont
- Work to adopt state and regional level policies, procedures, and plans to ensure that the Vermont food supply is sufficient to withstand global or national food supply chain disruptions caused by climate change and other disasters (as written in the 2021-2030 F2P Strategic Plan pg. 3)

Incentivize Climate-Resilient Land Use Practices

- State agencies shall 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.
- 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.
 - 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.
- State agencies shall 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 traditional ecological knowledge/Indigenous

knowledge. 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 protection of sacred sites.

- State agencies shall prioritize and incentivize (through various financial mechanisms) nature-based solutions and traditional ecological knowledge/Indigenous knowledge for addressing climate change impacts through state regulatory processes, assessments, planning, prioritization frameworks, and funding programs.
- State land management agencies shall adapt their management of lands using nature-based solutions to address climate impacts, increase ecosystem resilience, enhance biological diversity, and improve water quality. State land management agencies shall enhance resilience funds to support the financial capacity of other land and water caretakers to achieve these goals.
- State agencies and the legislature shall 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).

Shared Priority Action

- Enhance education, outreach, research, and technical assistance programming to encourage the adoption of strategies that increase climate mitigation, adaptation, and resilience by farmers, foresters and other land and water caretakers. State agencies shall work with and fund partners and higher education, such as UVM Extension. These efforts should be incorporated into current programs, developed using braided Western science and Traditional Ecological Knowledge/Indigenous Knowledge (TEK/IK), and designed to represent diverse perspectives while addressing a diversity of audiences and age groups.

Rural Resilience & Adaptation Subcommittee

Feedback from Council: The Council's feedback underscores the need for technical assistance to towns, highlighting the potential role of the RIVERS program in providing direct support for Hazard Mitigation Grant Program proposals. It also calls for expanded education and outreach efforts to enhance understanding of resilience at the community level. Additionally, the feedback suggests exploring financing strategies for these initiatives.

Community Capacity and Planning

- 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.
- 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.
- 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.
- 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.
- 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.

Infrastructure

- 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.
- 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.
- Replace aging electric and communication infrastructure with the most appropriate resilient alternative when cost effective.

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

Public Health

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

Cross Sector Mitigation Subcommittee

Council Feedback: The Council's feedback focuses on weatherization and heating systems, questioning whether a thermal energy benefit charge could serve as an alternative to the clean heat standard. The committee faced challenges in making recommendations while the legislature debates the clean heat standard, with a key goal being the establishment of a dedicated funding stream. Additionally, a study by the Agency of Natural Resources (ANR) lacks funding for at least a year. A common theme in the feedback is the need to understand the fiscal impact and address funding challenges.

Transportation

- 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 (GWSA) 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
- 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.

Buildings and Thermal

- 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 Residential/Commercial/Industrial 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 or Western Climate Initiative
 - Study underway in the Transportation Sector
- 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 greenhouse gases.
 - 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
- 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”.
- Adopt a performance based Clean Fuels Standard that implements a declining carbon intensity score requirement for residential, commercial, and industrial fuels.

Electricity

- Support cost-effective load management, storage, grid hardening, and optimization, through continued Public Utilities Commission oversight of utility programs, investments, and rate designs, and consideration of regulatory improvements for efficient generation and infrastructure siting approval.
- 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 Public Utilities Commission 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.
- 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. Consider cost-containment actions, funding avenues that are not electric customer supported, and how approval for community-based project siting occurs.