1) Establish the authority for ANR to set a cap and collect proceeds for revenue generation.

Cross-Sector Mitigation Transportation

2) Continue to monitor and maintain Vermont's adoption of the California Advanced Clean Cars II (ACC II) and Advanced Clean Trucks, and Heavy Duty Omnibus regulation amending Vermont's existing Low and Zero Emission Vehicle Regulations as needed to maintain identicality.

# Cross-Sector Mitigation Transportation

3) Require the Agency of Natural Resources to fully evaluate California's Advanced Clean Fleets regulation and explore and advise on Vermont adopting Advanced Clean Fleets as a complementary program to other ZEV programs.

> Cross-Sector Mitigation Transportation

4) If California's waiver is revoked by EPA or if a judicial outcome otherwise voids CA authority, the Vermont Department of Environmental Conservation (DEC) shall continue to collaborate with proponents of California's authority and associated stringent motor vehicle emissions standards of ACC II, Advanced Clean Trucks (ACT), Heavy Duty Omnibus (HDO), and Greenhouse Gas Phase 2 rules. DEC shall continue engagement of multi-state discussions as well as provide input on potential agreements that accomplish significant reductions in GHG emissions from motor vehicles, impactful health benefits, acceleration of the EV market, support a just and equitable transition to EVs, and moves the State toward meeting required GHG emissions reduction targets. 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 communitybased 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) 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.

\*\* DDA payment or cap articulated explicitly

Implementation Lead: Legislature and selected State Agencies

11) Through legislation or administrative action, join a cap-and-invest program, either New York Cap and Invest (NYCI) or Western Climate Initiative covering (but not necessarily limited to) Vermont's RCI fuels sector.

Implementation Lead: Legislature and selected state agencies

Cross-Sector Mitigation Buildings and Thermal

12) 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.

Implementation Lead: Legislature, Public Service Department

13) 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.

Implementation Lead: Legislature, Public Service Department

Cross-Sector Mitigation Buildings and Thermal

14) Through legislation or administrative action, 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

15) 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

16) Through legislation or administration action, secure upfront funding to comprehensively weatherize all municipal buildings and public facilities (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

17) 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. mplementation 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.

# Cross-Sector Mitigation Buildings and Thermal

18) Through legislative and administrative action, adopt a performancebased 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.

Implementation Lead: Legislature and state agencies

19) Alternate approach if recommended action (5.1.1) 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 agencies

Cross-Sector Mitigation Buildings and Thermal

20) The Agency of Natural Resources shall initiate a rule to require annual reporting of monthly fossil fuel sales by fuel dealers, i.e., entities that would otherwise be obligated under a clean heat program or capand-trade program.

\*\* \*The subcommittee flags this action as non-consensus. A reporting rule requires accompanying legislative action to provide funding and resources.

21) The Public Utility Commission, in consultation with the Department of Public Service and State electric distribution utilities, shall file a written report with the House Committees on Energy & Digital Infrastructure Committee and the Senate Committees on Finance and Natural Resources and Energy, no later than March, 2026, that addresses the feasibility of Vermont adopting an appliance performance standard requiring new electric water heaters for sale in Vermont to be manufactured with a modular demand response communications port or the capability of responding to an open communications standard, ensuring that all new electric water heaters are capable of load management. Report is contingent on securing funding. Implementation Lead: PUC

\*\*\*The subcommittee flags this action as non-consensus. Needs neighboring states provision and there is not agreement on making report contingent on securing funding.

# Cross-Sector Mitigation Buildings and Thermal

22) Adopt legislation consistent with the provisions of Section 33 (Plug In Vehicle Electric Distribution Utility Rate Design) in Act 55 (2021) directing all Vermont distribution utilities to adopt propose demand response programs for electric water heaters, and to file electric water heating demand response tariffs with rates consistent with the criteria set out in Act 55 of 2021, Section 33, (c)(1)(A)-(D), (F), and (e) by July 1, 2027 for review by the Public Utility Commission pursuant to 30 V.S.A. § 225. Legislation needs to provide funding necessary to support state oversight.

The Public Utility Commission may grant a petitioning electric distribution utility an extension of the filing deadline. An extension may only be granted in response to a petition if the Public Utility Commission finds that the electric distribution utility's inability to meet the July 1, 2027, implementation deadline is due to a technical inability to implement demand response program, adverse economic impacts to ratepayers that would result from such implementation, or other good cause demonstrated. The length of the extension shall be directly related to the demonstrated need for the extension.

Implementation Lead: Legislature and the Distribution Utilities in consultation with the Public Service Department, for review and approval by the Public Utility Commission

\*\*The subcommittee flags this action as non-consensus. There is not agreement on requirement for funding program.

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). 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.

# 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).

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. 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).

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.

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.

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.

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 utilityscale 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.

#### 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 polices, 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.