**Agricultural and Ecosystems Subcommittee**

**PATHWAY G – Education: Create accessible, equitable research, partnerships, and education; promote shared understanding; and invest in sustainable workforce development for the natural and working lands sector**

Education and understanding, especially around our ecosystems and land in this state is a vital part of solving the climate crisis. This must include the the risks and changes that will follow inaction with regard to the climate crisisas well as the strategies to address this crisis, to ensure equitable access to opportunities and a shared knowledge that will build our transition to a better future. Education of people around the state about the actions to slow climate change as well as an enabling set of actions that will allow for creating capacity for the future is critical to all ages, but especially for intergenerational equity.

Education also strengthens the success of every other pathway towards resilient climate adaptation. Agricultural, forestry and natural resource landowners and managers need education to implement natural based practices that will mitigate and sequester greenhouse gases, that will positively affect their viability, and help them, and future land managers to adapt to a changing climate in a positive and vibrant manner.

**STRATEGIES AND ACTIONS**

1. **Invest in and expand climate-related education at all levels, outreach, research, and technical assistance programs**: Investment in climate related education through various programs will create the capacity our state needs to implement climate mitigation, resilience, and adaptation actions. Education to land owners, practitioners, students, and teachers about climate change, its impacts and steps that can be taken now, are necessary to influence personal and systemic action and build workforce capacity and general knowledge with regard to the impacts of climate change and the strategies necessary to prevent it.
2. Enhance education, outreach, and technical assistance programming to support farmer learning and adoption of climate smart agricultural practices and ensure equitable access through the creation of two full time UVM Extension staff and part time staff for each National Resource Conservation District
3. Establish and fund an educational program that explains the role that Vermont farmers and foragers and their high-quality, local food products play in maintaining a low climate impact
4. Create a climate curriculum teachers fellowship program to engage teachers in leading and sharing their climate curriculum ideas with other teachers
5. 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)
6. Redesign the state education funding model so that Career and Technical Education centers have independent funding streams and budgets. 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)
7. Support increased investment in healthy soil education through educational mini-grants for teachers to all audiences (including agriculture, homeowner, forestry, publications, K-12 schools and institutions of higher learning) and implementation of practices through funding of Best Management Practices challenges, technical assistance programs, and cost shares.
8. Develop and make available accessible outreach and educational materials that communicate the issue of climate change and local impacts to the general public, which include and highlight the role that Vermont's natural and working lands play in providing solutions to climate change.

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| *Preliminary Assessment of Strategy against Criteria* |
| *Impact Education of our current land managers is the most critical enabling action to create immediate and long-term impacts on greenhouse gas reduction or mitigation and adaptation. Additionally, the impact of the given strategies will result in a proactive approach to climate issues through increased education of future generations who will sustain these actions over time.* |
| *Equity: This strategy will advance equity by providing opportunities for all and increased opportunities. A focus on accessibility and funding will ensure that this strategy and these actions have the potential to create progress towards environmental justice and equity.* |
| *Cost-effectiveness*: This strategy is very cost effective given the many co-benefits and huge cost of inaction. Though there is not an ability to have cost per outcome at this time, investment in education, especially climate education is a no regrets policy. |
| *Co-Benefits: Educational strategies by design have many co-benifits simply by increasing the amount of climate mitigation practices, future management that will proactively address climate and a society with a better understanding of its role in climate action. These actions will have numerous co-benefits to the land and people, thereby improving the wellbeing of communities. Increased educ ation about the issues facing our community will develop understanding of additional ways to solve them.* |
| *Technical Feasibility*: Yes |

1. **Develop and promote climate-related educational materials for private landowners to empower them to make climate-informed decisions about their land:** The majority of Vermont land is privately owned. Therefore it is important that we are creating educational programs to encourage more climate friendly practices and learning. We will educate around the impacts of climate change so that everyone in the state can work towards common goals.
2. Create and deploy river corridor and floodplain buffer extension-type program, that provides educational material and technical assistance for private landowners
3. Identify and explain practices that create and enhance pollinator habit, wildlife habitat and biodiversity
4. Promote the values of planting future climate adapted tree species and crops in an effort to expand tree planting efforts on private land. Thereby promoting restoration efforts to reforest riparian areas, wetland buffers, and unhealthy soil.
5. Create infrastructure and educational programs around community and backyard composting and recycling
6. Minimize lawn mowing frequency, and amount of mowed lawns to increase biodiversity and ecosystem health, and ultimately reduce emissions.

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| *Preliminary Assessment of Strategy against Criteria* |
| *Impact: Although some of these actions may appear to some as having a low impact the suite of actions in this strategy is important. These enabling actions create capacity for future plans, build awareness and create collateral to harness the power of the majority of the state land.* |
| *Equity: Tbhere are extreme equity issues with regards to land ownership in this state. The state should create strategies and programs that decrease the barriers of impacted communities to access land. This recommendation promotes equity, through education that prioritizes engaging all citizens, and attempts to engage everyone in the necessary transition as to not to leave people behind. This strategy has a high propensity for unjust action and therefore should center equity in implementation* |
| *Cost-effectiveness*: Investment in education is extremely cost effective. These actions are small investments that go into creating materials and programs will have wide reaching impacts. They will increase mitigation adaptation and resilience around the state both immediate and long term. |
| *Co-Benefits: This strategy will have an extremely high number of co-benefits. Education in all capacities is important, but these actions will lead to increased climate resilience, healthier environments, increased cultural capital, more understanding and many other co-benefits.* |
| *Technical Feasibility*: Yes |