**Foundational Criteria**

To meet both the requirements and objectives laid out in the Global Warming Solutions Act (GWSA) and detailed above, the Council developed a prioritization framework utilizing five foundational criteria: impact, cost-effectiveness, co-benefits, equity, and technical feasibility. These criteria speak directly to the priorities put forward in the GWSA while building upon the specific work to develop the Climate Action Plan (CAP) to inform high priority actions. The definitions for these criteria are applied differently based on whether evaluating actions related to cutting emissions (mitigation) verses actions related to building resilience, adaptation, and sequestering and storing carbon. As a result, the definitions have been broken out below. Application of equity in the prioritization of actions is not discussed here as the following section focuses on building equity into the CAP and specifically speaks to the application of the equity scoring rubric in refining and prioritizing actions.

**Impact**

***Mitigation***

Impact is the consideration of actions’ contribution to achieving 2025, 2030, and 2050 emission reduction requirements. The gross GHG emissions reductions required by 2025 are 1.26 MMTCO2e below our most recent (2018) levels. 3.46 MMTCO2e of reductions are required by 2030.

* High impact recommendations are those that can reasonably be expected to get Vermont more than 10 percent of the way towards either our 2025 and/or 2030 emissions reduction requirements. High impact will also speak to enabling actions that are needed to advance actions that are high impact as defined here. A compelling case will need to be made that the enabling action is the only pathway to success of the high impact action.
* Moderate impact recommendations are those that can reasonably be expected to get Vermont between 2.5 percent and 10 percent of the way towards either our 2025 and/or 2030 emissions reduction requirements. Moderate impact will also speak to enabling actions that are needed to advance actions that are high impact as defined above. Rather than high enabling actions above, moderate enabling actions are supportive of the high impact action, rather than the only pathway.
* Low impact recommendations are those that can reasonably be expected to get Vermont less than 2.5 percent of the way towards our 2025 and/or 2030 emissions reduction requirements.

***Resilience, adaptation, and sequestering and storing carbon***

The assessment of impact for adaptation, resilience, and sequestration actions takes into consideration both the scale at which a particular action occurs and the effects (both short and long term) of that action.

* High impact actions are those actions that significantly improve the ability of [the built and/or natural environment and working lands OR people/vulnerable populations OR the economy] to adapt to or build resilience to climate change impacts. These actions may also significantly increase the ability to sequester and store carbon. High impact actions are actions that would affect broad scale change at the municipal, regional, or statewide level.
* Moderate impact actions are those actions that moderately improve the ability of [the built and/or natural environment and working lands OR people/vulnerable populations OR the economy] to adapt to or build resilience to climate change impacts. These actions may also moderately increase the ability to sequester and store carbon. Moderate impact actions are actions that would affect moderate scale change at the municipal, regional, or statewide level.
* Low impact actions are those actions that marginally improve the ability of [the built and/or natural environment and working lands OR people/vulnerable populations OR the economy] to adapt to or build resilience to climate change impacts. These actions may also slightly increase the ability to sequester and store carbon. Low impact actions are actions that would affect small scale change at the municipal, regional, or statewide level.

**Cost-Effectiveness**

To estimate costs and benefits in determining cost-effectiveness, the estimated benefits and costs are inclusive of direct and indirect benefits and costs to Vermont and Vermonters (i.e., “resource benefits and costs” for the State, including program implementation and management costs, not simply the “consumer costs and benefits”). Benefit-cost analysis estimated social and environmental “externalities”, including health costs and benefits and a Social Cost of Carbon, reflecting the global damage-based assessment of the cost of Vermont’s climate pollution, consistent with the Social Cost of Carbon report discussed in section INSERT. In many circumstances, additional benefit-cost tests are needed for further analyzing specific proposed policies and programs, including benefits and costs from a consumer and equity perspective or a public investment perspective.

***Mitigation***

Cost-effectiveness refers to the lifetime net cost per ton of GHG emissions avoided (acknowledging that some mitigation measures do not generate net costs and save money). Cost-effectiveness shall also be understood to account for lifetime or dynamic costs, not merely up-front or static costs. The following HIGH, MODERATE, and LOW definitions were used for prioritization:

* Highly cost-effective are actions that have a net savings per ton of GHG emissions reduced
* Moderately cost effective are actions that essentially break even per ton of GHG emissions reduced
* Least cost-effective actions are ones that will have a net cost per ton of GHG emissions reduced

***Resilience, adaptation and sequestering and storing carbon***

Cost-effectiveness for actions seeking to build resilience, further adaptation, and enhance sequestration and carbon storage refers to the relative lifetime net cost of the action compared to the desired outcome or impact. This definition only deals with the true cost to Vermonters and does not speak to the cost of avoided damages which we know is very important. By incorporating the actions impact into how we evaluate cost-effectiveness, the most impactful actions can still be considered cost-effective overall even if they present significant upfront investments, indirectly getting at the cost of inaction.

The action first received an impact ranking of high, medium, and low using the definition discussed above. From there, the action’s cost was considered as significant, moderate, or low. Significant was defined as an ongoing cost or a more than ten-year investment to Vermonters which needed to be raised from new revenues. Moderate was defined as on ongoing or more than ten-year investment from Vermonters that has an existing revenue source OR an action that needs a new revenue source for a short-term period (less than ten years). Low was defined as an action that has an existing revenue identified to utilize over a short-term period (less than ten years). Overall cost-effectiveness was compiled by considering the actions impact (high, medium, low) relative then to its cost (Significant, moderate, low). The cumulative summation of overall ranking will be as follows:

* High/Moderate, High/Low, Medium/low – HIGH
* High/Significant, Medium/Moderate, Low/Low – MEDIUM
* Medium/Significant, Low/Significant, Low/Moderate – LOW

**Co-Benefits**

Comprehensive climate policy will advance actions that work to mitigate climate pollution, while also building resilience, adaptation and storing and sequestering carbon. Actions must also seek to advance broader societal benefits such as public health, equity (specific focus on impacted communities), economic prosperity, biodiversity conservation, workforce opportunities and other benefits that improve the quality of life in Vermont broadly. Identifying actions that address co-benefits and elevating them is key to ensuring the collective plan is working for all Vermonters. Co-benefits was evaluated based on HIGH, MEDIUM, LOW RANKING using the following guidance:

* HIGH – an action that can easily be communicated with broad and varied benefits to Vermonters and Vermont itself.
* MEDIUM – an action that clearly addresses multiple climate action buckets (mitigation, resilience, adaptation, and sequestration/storage) but its broader societal benefits are harder to measure and speak to.
* LOW – an action that advances mitigation, resilience, adaptation, or sequestration/storage but does not clearly advance other benefits.

**Technical Feasibility**

This speaks to the degree to which the required technologies are developed and reasonably available. As this is called out in the GWSA, it is important to simply answer yes or no to ensure the action is implementable.

**Cumulative Priority Ranking**

The foundational criteria were used to develop an overall priority ranking for actions to be elevated in the CAP and to advance through an equity screening (detailed below). The definitions used for impact and cost-effectiveness were different for mitigation actions than resilience, adaptation and sequestration and storing carbon. As such, the overall prioritization across the actions should not be compared amongst them. In addition, the equity scoring rubric was used to further refine high priority actions by transparently considering equity in the implementation of the action. Actions were then reconsidered based on the overall consideration of how equitable the action was and what could be further considered to make it more equitable in practice.

Actions that did not have a clear implementing authority and those that involve personal choices were screened out before prioritization so that the CAP could speak to their collective impact in one section (see INSERT). A stepwise approach was used to focus analysis on impact, cost-effectiveness co-benefits and technical feasibility to elevate high and a subset of medium priority actions to advance. The remaining actions and details of the analyses are all shown in the appendix (See INSERT). The overall priority ranking was assimilated as follows for HIGH and MEDIUM priorities (all other combinations will be LOW priorities). It is important to note that because impact is included in the definition for cost-effectiveness for resilience, adaptation and sequestration actions, the possibility of a low cost-effectiveness ranking is impossible if the impact ranking is high. However, this outcome is possible for emission reduction actions and therefore is represented on the chart below.

All HIGH priorities moved forward with an equity screening and consensus at the subcommittee was reached to advance a MEDIUM or LOW priority action. When considering MEDIUM or LOW priorities to elevate, specific consideration should be given to actions that have a particular focus on equitable solutions. Since the equity screening is to come after priorities are set, it is important to not lose actions that would make a significant impact in this space.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IMPACT** | **COST-EFFECTIVENESS** | **CO-BENEFITS** | **TECHNICAL FEASIBILITY** | **OVERALL PRIORITIZATION** |
| HIGH | HIGH | HIGH | Yes | HIGH |
| HIGH | HIGH | MEDIUM | Yes | HIGH |
| HIGH | HIGH | LOW | Yes | MEDIUM |
| HIGH | MEDIUM | HIGH | Yes | HIGH |
| HIGH | MEDIUM | MEDIUM | Yes | HIGH |
| HIGH | LOW | MEDIUM | Yes | MEDIUM |
| MEDIUM | HIGH | HIGH | Yes | HIGH |
| MEDIUM | HIGH | MEDIUM | Yes | MEDIUM |
| MEDIUM | MEDIUM | HIGH | Yes | MEDIUM |
| MEDIUM | MEDIUM | MEDIUM | Yes | MEDIUM |

**Public Engagement**

To realize the transformative change that is needed to implement the Global Warming Solutions Act, ongoing engagement with Vermonters will be needed to consider solutions and understand the barriers to implementing them. The Council and the subcommittees must comply with Vermont’s open meeting law. Vermont’s open meeting law requires all meetings of public bodies to be open to the public at all times, unless a specific exception applies. The purpose of the law is to promote transparency, accountability, and better decision-making in government. Compliance with the open meeting law has been foundational in engaging with Vermonters in an ongoing basis through:

* Providing advance public notice of meeting and including meeting agendas;
* Discussing all business and taking all actions in open meeting, unless an exception in statute applies;
* Allowing members of the public to attend and participate in meetings; and
* Taking meeting minutes and make them available to the public.

This process, while beneficial, has allowed the participation of the relatively few Vermonters who had the time to engage this way. The Council also recognized the need early on to engage consultants to assist in laying the groundwork for a co-creation process with Vermonters in the development of the initial CAP. This was intended to build a framework for the continued and ongoing discussion with Vermonters around climate action in Vermont. Climate Access and RISE Consulting led that work and will continue to work with the Council as we roll out the initial Climate Action Plan. To do so, a public engagement plan was developed through discussion with the Council, subcommittees, three roundtables and stakeholder interviews. This plan, which can be found in the appendices, focused on three phases of targeted engagement, the first of completed in Fall of 2021 is discussed here.

This Fall, we engaged with a total of 1,602 Vermonters to discuss the development of the Climate Action Plan. Public events were held between September 21 and October 12, 2021 and an online survey was conducted between September 20 and October 15, 2021. Additionally, The Agency of Natural Resources (ANR) summarized public comments submitted from July 2 and October 7, 2021. Climate Access and Rise Consulting interviewed stakeholders from a broad range of stakeholder groups to inform the public engagement plan and share concerns related to climate impacts and solutions to include in the Climate Action Plan.

The breakdown of participation via channel is as follows:

* Interviews & Roundtables: 37 participants
* Public Engagement Events: 521 total attendees
* Public Opinion Survey: 679 responses
* Public Comment Form: 365 comments

Looking across all input gathered via the range of channels, there are a number of themes that stand out. They include:

* Vermonters who participated want bold action on climate change. At each event, participants expressed strong support for solutions on scale with the challenge.
* There is great hope the Climate Action Plan will live up to what it is intended to achieve and significant concern that it will not.
* Top priorities for community members include tackling climate change through transportation improvements that provide access to cleaner vehicles and public transit, scaling weatherization efforts and efficiency upgrades for buildings and affordable, local sources of clean energy.
* Equity is a core concern. This came through at all events, via the survey and public comment portal. In particular, the impact of climate change and energy transition on youth, low-income Vermonters and BIPOC community members was expressed.
* The mental health impacts of climate change were raised as a key concern, particularly for youth.
* Accessibility of climate solutions. Vermonters want bold action yet wonder how solutions will be paid for and who will be able to afford and have access to them.
* Many who participated in the in person and online events are very interested in staying engaged in the process and appreciated being connected to other community members who feel strongly about the issue.

Through these forums, Vermonters also engaged in formulating the actions for inclusion in the Climate Action Plan, helping the Council consider how we will advance climate action in Vermont. The discussions focused on priorities, barriers and what was missing and are included in the full public engagement findings included in the appendices. These considerations were used to further prioritize the suite of recommendations put forward.

We would be remised if we did not mention that public engagement was challenged due to both the timeline and the ongoing pandemic. The first of these gaps is the nature of the accelerated timeline for the release of the initial Climate Action Plan. The velocity of the process influenced the participation level of groups that are likely to be more highly impacted by climate change including low-income communities, BIPOC communities and disability advocacy groups in particular. The public engagement plan outlined additional opportunities for broader partner outreach and support that were not fully realized during this phase due to the lack of time to build trust and respectfully coordinate with multiple partners.

Additionally, there were public engagement challenges posed by the COVID-19 pandemic. The in-person events likely had lower attendance as a result of varying levels of physical access as well as comfort levels and public health concerns Vermonters may have had gathering in person during this time. Other accessibility gaps included the location of the in-person, which were held in open-air park settings in order to mitigate the risk of COVID transmission. This posed challenges for physical access, visibility, sound, weather conditions and transportation access to the meeting sites. In addition three of the meetings were held on weeknight evenings which posed barriers for people with work, community, or family obligations between 5-7 pm. The online meetings may also have posed challenges for those with limited computer or internet access.

The Council will be considering next steps for public engagement as the plan is rolled out to ensure it is easily communicable and discussed in the framing of an iterative process. This will include a social media strategy, online events, an education and engagement platform, partner events and an evaluation. This plan will be ongoing and further refined with the Council.