The Science and Data Sub-committee is responsible for incorporating the most recent and highest quality data and information available about climate change, mitigation, adaptation, and resilience into the Vermont Climate Action Plan. Our commitment is to be guided by evidence and peer-reviewed science, while employing credible, consistent, and transparent methods of assessment and analysis for Vermont. Additionally, because weather, climate, climate change and greenhouse gas emissions do not stop at state boundaries, a regional approach shall be used to complement the state-specific analysis of this subcommittee in order to address the full scope of data being explored and to set Vermont within the context of the climate change work taking place in neighboring states across the Northeast. The subcommittee will identify any critical scientific information, monitoring and/or evaluation gaps that currently exist. One of the main deliverables of this subcommittee will be establishing an energy use and emissions baseline, including reviewing the suitability of Vermont’s current GHG emissions inventory for assessing progress toward meeting the requirements of the GWSA.

Specifically, the Science and Data Sub-committee shall:

1. Work in partnership with the other sub-committees in an iterative manner to advise on the best available science on which to frame their work, and to learn from their analyses whether the perspectives of key sectors and populations have been omitted and should be included.

2. Establish an energy use and emissions baseline based on current state and regional policies, as well as an assessment of options for meeting Vermont’s energy needs through 2050, including appropriate allowances for efficiency and growth, while reducing greenhouse gas emissions in an economically viable and just manner.
   a. Review the State of Vermont’s approach to preparing the existing GHG emissions inventory and recommend modifications or adjustments, if needed, so that the inventory can serve as the basis for measuring progress toward meeting the GHG reductions requirements established in the GWSA.
   b. Identify critical gaps in availability of and/or access to data that would be ideally used to establish the energy use and emissions baselines and provide recommendations on how to develop the necessary datasets to support future modeling, monitoring, and/or evaluation work.

3. Build scenarios based on the work of the Cross-Sector Mitigation Sub-committee and in concert with the technical contractors as appropriate including:
   a. The cost to the State of doing nothing in response to climate change; an emissions analysis of draft greenhouse gas reductions strategies proposed by the Cross-Sector Mitigation Sub-committee; and an economic analysis of the draft emissions- and adaptation-related strategies proposed by the sub-committees.
   b. Description of the relative contribution of each sector or category of source of emissions.
4. With the other subcommittees, develop the most appropriate recommendations for evaluating, tracking, and monitoring the progress of the implemented Climate Action Plan in the areas of mitigation, adaptation, community and landscape resilience to climate change.

Major Milestones for Sub-Committees

The following are the major milestones for the work of the sub-committees. As the Just Transitions and Science and Data sub-committees are largely in service to the other sub-committees, an understanding of these milestones will be necessary to inform the scope and timing of their work in support of the Rural Resilience and Adaptation, Cross-Sector Mitigation and Agriculture and Ecosystems sub-committees.

1. Sub-committee composition will be finalized by the end of February.
2. Sub-committee workgroups, if deemed necessary for the cross-sector mitigation sub-committee, will be identified and staffed by mid-March.
3. Each sub-committee will present the full proposed scope of it work to the full Climate Council for consideration at the March VCC meeting, including contractor work needed to enable sub-committees to craft their recommendations.
4. Evaluates potential pathways for presentation to the Council at its April meeting. The pathways should be thought of as packages of strategies – An example of a pathway could be “50,000 EVs on the road by 2025” which you would also link to the specific reduction in emissions.
5. Draft framework and strategies for presentation to the Council at its May meeting, including policy options, and cost and equity considerations.
6. Participate in public engagement process around draft framework and strategies to be completed by end of June.
7. Revise framework and strategies and prepare recommendations, including financing options, based on public comment for presentation to the Council at its July meeting.
8. Work with your team to knit together the work of the sub-committees into the Climate Action Plan in August.
9. Council will review and revise the Climate Action Plan in September.
11. Finalize the Plan in November.