



Developing New Hampshire's Comprehensive Climate Action Plan

Technical Input Session 3: Electrical Generation and/or Use

Summary Report by NH Listens, March 2025

Purpose and Background

In August 2023, New Hampshire was granted federal funding to update New Hampshire's Climate Action Plan to reduce emissions of greenhouse gases. The four-year program runs from 2023–2027. Objectives of the plan are to:

- Reduce greenhouse gas emissions while supporting the creation of good jobs and lowering energy costs for families.
- Empower community-driven solutions in neighborhoods overburdened from pollution and impacts of climate change by directly seeking input from those communities.
- Deliver cleaner air by reducing harmful air pollution in places where people live, work, play, and go to school.

These plans are part of the Climate Pollution Reduction Grant (CPRG) funding from the U.S. Environmental Protection Agency. **They lead to additional implementation funding that will support community-engaged projects** with an effort to focus on investments in Low Income Disadvantaged Communities (LIDAC) across the economic sectors of air pollution and greenhouse gas reductions.

New Hampshire Listens is working on behalf of the NH Department of Environmental Services (NHDES) CPRG team to design and facilitate community engagement—an essential component of NH's Priority (PCAP) and Comprehensive Climate Action Plans (CCAP).

Between January 2025 and May 2025, NH Listens is hosting a series of conversations, or Technical Input Sessions, for people to learn, listen, and inform a CCAP for the state. The CCAP allows NHDES to identify strategies and measures to reduce greenhouse gas (GHG) emissions in the near- and long-term. The CCAP must touch on all significant GHG sources and sinks across economic sectors present in New Hampshire.

Technical Input Sessions provide opportunities for NH agencies, outside experts, stakeholders, and the public to discuss and vet potential GHG emission reduction measures for inclusion in the CCAP. The five Technical Input Session conversations are organized by these economic sectors defined by the Environmental Protection Agency (EPA):



- Transportation
- Commercial and Residential Buildings
- Electrical Generation and/or Use
- Agriculture and Natural/Working Lands
- Industry and Waste/Materials Management

Goals, Facilitation, and Participation

On March 12, 2025, NH Listens and NHDES held the second technical input session for the Electricity Generation and/or Use sectors. The purpose of this gathering was to:

- Provide context about New Hampshire's greenhouse gas inventory.
- Draft preliminary strategies to reduce GHG emissions in the sector.
- Share models for analyzing measures.

In addition, NHDES engaged participants in discussions about their experience in the sector regarding modeling, innovative practices, cross-collaboration, and barriers to implementation.

Participants engaged in a workshop that allowed them to review possible strategies that would reduce greenhouse gas emissions and increase efficiency. The potential strategies prepared were derived from previous meetings, including individual interviews with statewide providers, cross-sector stakeholder conversations, and community conversations.

During the workshops, NH Listens helped keep time, facilitated group discussion, and made sure everyone who attended had a chance to contribute. **10 people attended the session, 23 people registered.** Collectively, they named key considerations and priorities relevant to CCAP planning in the Electricity Generation and/or Use sectors.

Focus Areas

The focus areas for this session were:

- Streamline Distributed Energy Resources (DER) Integration with the Grid
- Expand Demand Response Participation for Residential and Commercial Customers
- Support Small- and Large- Scale Battery Storage Deployment
- Evaluate the Feasibility of Next-Generation Nuclear Reactors for Reliable, Low-Carbon Baseload Power
- Continue to Investigate and Pilot Microgrid Projects

NHDES provided relevant information through slides and corresponding guidance documents to inform participants on the measures' alignments with EPA's required elements. Participants reviewed these measures and provided feedback on their appropriateness; they also suggested additional actions to ensure a comprehensive and effective implementation approach ([find agendas and guidance documents on the NHDES CCAP landing page](#)). The potential measures prepared were derived from previous meetings, including individual interviews with statewide providers, cross-sector stakeholder conversations, and community conversations.



Themes and Key Points

During the technical input sessions, participants provided information and resources related to their experience in the sector. See **Resources** for the full list of organizations, programs, reports, and case studies shared by participants in this session.

Streamline Distributed Energy Resources (DER) Integration with the Grid

- Participants noted relevant programs that fit into this measure, including:
 - Green Mountain Power, which has a pilot for electric vehicle (EV) bidirectional charging program. Participating also mentioned that his program, based in Vermont, may have data on GHG reduction measures, cost savings, and other metrics on emissions and emission reductions.
- As more homes and businesses install solar photovoltaic (PV), battery storage, and other distributed energy technologies it is essential to ensure smooth interconnection and integration. A streamlined process reduces delays, enables customer participation, and enhances grid reliability while supporting GHG emissions reductions through decentralized clean energy production.
- Utility business model incentives often conflict with the need to enhance interconnection. A useful measure to include in future policy to address this issue would be a requirement for utilities to establish an internal champion to reduce interconnection queue.
 - Eversource utilized an internal champion in the past, who helped to successfully achieve connection within six months for households.
- DERs bring critical load flexibility that can help utilities defer investment. A participant remarked, *“One answer is to incentivize and expand DERs coupled with controls (demand response) to meet the peak demand. Curtailment of a relatively small amount of peak load makes a big difference.”*
- Existing RSAs enable towns to exempt solar from additional taxes:
 - Solar Energy Systems Exemption: RSA 72:62
 - Wind-powered Energy Systems Exemption: RSA 72:66
 - Woodheating Energy Systems Exemption: RSA 72:70
 - Municipal and Property Division Electric Energy Storage Systems: RSA 72:85
 - Renewable Generation Facilities and Electric Energy Systems: RSA 72:87
- NH Electric Co-op launched a Transaction Energy Pilot in 2023; they later discontinued the effort in May 2024 due to cost barriers.



Expand Demand Response Participation for Residential and Commercial Customers

- Participants noted demand response may require smart meters providing real-time electricity use information, which utilities may not have installed. There's a need for utilities to have smart meters. Without smart metering technologies, competitive electricity suppliers cannot offer net metering rates to consumers.

Support Small- and Large- Scale Battery Storage Deployment

- There are successful organizations, coalitions, and programs that have deployed battery storage like NH Clean Energy Fund, Granite Shores Power, NH Network, and local town energy committees.
- Participants discussed the importance of federal and state incentives to reduce project paybacks. Battery storage project financing often requires state or federal incentives to reduce paybacks. These incentives, like tax credits and grants, can be combined with other funding sources. One participant noted, *"In NH, state incentives are not available so federal financing is critical to accelerate deployment."*
- Small peaker plants with battery storage should be retired. These plants, like one in Tamworth that runs on kerosene, were built before air quality control measures.
 - Another participant mentioned that these plants are under the authority of private regulators and investors. These entities often make decisions based on market structures available. [Granite Shores Power](#) was mentioned as owning certain sites with statements about re-powering with clean energy.
- The NH Clean Energy Fund was mentioned as providing zero financing for heat pumps and battery storage.

Evaluate the Feasibility of Next-Generation Nuclear Reactors for Reliable, Low-Carbon Baseload Power

- Participants expressed concerns about including this measure in the plan due to concerns for public health, public safety, and high operational costs.
- New Hampshire has cheap, easily deployable energy resources in solar, wind, and batteries—all of which can address near- and mid-term energy needs. To heavily invest in technology that is unproven in its efficacy would be time-consuming and expensive. The approach to incentives and support should be technology neutral.
- The Seabrook Station Nuclear Power Plant is a high capital investment, and there is no place to put the waste. While participants would like to see the Seabrook plant continue, due to low-carbon emissions, it is a high-risk energy source. Some support was expressed for keeping Seabrook plant operating as long as it can be kept safe.



- Small modular reactors were described as far in the future, requiring high capital investment, with no viable waste disposal options.

Continue to Investigate and Pilot Microgrid Projects

- Participants questioned whether the state's Regional Planning Commissions are looking at microgrids.
- In the state, Tamworth is looking into joining a solar project in the southwest corner of the state to save 10% off the default Eversource rate.
- Other states were noted to have their own microgrid projects:
 - Massachusetts was cited as implementing geothermal microgrids as part of a statewide decarbonization plan.
 - In Vermont, Regional Development corporations have been key to identifying approximately 20 projects.

Climate Action in New Hampshire

Across the five technical input sessions hosted in February, participants identified the following programs and projects as being instances of great climate action work being done in New Hampshire and the greater New England Region.

Transportation	The Volkswagen Environmental Mitigation Trust Fund has committed and expended \$10 million to support emission reduction in the state.
Buildings	In New Hampshire, municipal energy has been decreasing since 2005 as the state has shifted to energy efficiency interventions.
Electricity Generation	The NH Network brings together energy committees that share resources, ideas, and information .
Agriculture and Natural & Working Lands	UNH is working with the NH Timberland Owners Association on identifying research needs for invasive species management .
Industry and Waste & Materials Management	The town of Atrim, NH was awarded \$5,000 for a new electric fork truck to assist in transporting bales of recyclables —without the need for gas.

Resources

Participant-Shared Resources

Case Study: Belle Haven Community Campus Microgrid. *U.S. Department of Energy Onsite Energy Technical Assistance Partnerships*.
<https://betterbuildingssolutioncenter.energy.gov/sites/default/files/attachments/Belle%20Haven%20Community%20Campus%20Case%20Study.pdf>



<https://nicholasinstitute.duke.edu/sites/default/files/publications/rethinking-load-growth.pdf>

Onsite Energy Program. *Better Buildings*. <https://betterbuildingssolutioncenter.energy.gov/onsite-energy/resources-and-tools>

NH Organizations & Programs

Clean Energy Fund. *CDFA*. <https://resources.nhcdfa.org/programs/clean-energy-fund/>

Energy Working Group. *New Hampshire Network*.
<https://www.newhampshirenetwork.org/working-groups/energy>

Granite Shore Power. <https://www.graniteshorepower.com/>

New Hampshire Clean Energy Fund. *Eversource*.
<https://www.eversource.com/content/residential/save-money-energy/clean-energy-options/new-hampshire-clean-energy-fund>

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