

Developing New Hampshire's Comprehensive Climate Action Plan

Technical Input Session 3: Industry & Waste/Materials Management *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 13, 2025, NH Listens and NHDES held the second technical input session for the Industry & Waste/Materials Management 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 (*find agendas and guidance documents on the NHDES CCAP landing page*). 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. **11 people attended the session, 20 people registered**. Collectively, they named key considerations and priorities relevant to CCAP planning in the Industry & Waste/Materials Management sectors.

Thank you to **Sharon Nall**, Program Manager for NHDES Water Infrastructure Energy Program, and **Sharon McMillin**, Environmental Program Administrator for NHDES Winnipesaukee River Basin Program, for participating as featured speakers in this session.

Focus Areas

The focus areas for this session were:

- Replace Outdated Equipment, Systems, and Controls
- Promote Installation of Renewable Energy On-Site
- Utilize Anaerobic Digesters to Capture and Utilize Biogas at WWTF
- Methane Capture and Reuse at Active Landfills
- Prevent Fugitive Hydrofluorocarbon (HFC) Emissions at Transfer Stations, Landfills and Recycling/Processing Facilities

NHDES provided relevant information through slides and corresponding guidance documents to inform participants on the measures' alignments with EPA's required elements. **Participants**

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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.

General Feedback on Focus Areas

- Participants noted that the opening presentations highlighted how energy reduction also saves on backup generator use.
- The importance of clear and consistent messaging was emphasized as a key approach for the state.
- Participants agreed that they would like to use the time discussing the replacement of outdated equipment systems.

Food Waste Management

- There are existing efforts to get more NH farms to accept food scraps for composting and animal feed. The <u>Composting Association of Vermont</u> is working directly on this initiative.
- Participants outlined a step-by-step process considerations for starting to compost, including:
 - o Defining your community and working with them.
 - o Clarifying how to accept compost from the community as a whole.
- A farm in Hopkinton was mentioned as an example of another composting project; the project aims to add three farms each year, with existing farms serving as models.
- Food waste was noted as one of the motivators for methane capture programs. Some food waste facilities primarily feed into anaerobic digestion. Regional addition of digesters was identified as a need.

Public-Private Partnerships

- <u>NH the Beautiful</u> offers grants to help replace outdated systems. In 2020, <u>the town of An-</u> <u>trim was awarded \$5,000 in 2020 to replace their electric fork truck</u>, as an example.
- Programs will often share success stories of public-private partnership, like the Working with Champions Program.
- NHSaves utility partners offer *Turn-in Events* for recycling old AC units and dehumidifiers. Resilient Buildings Group also runs a turn-in program, offering \$75/fridge and \$35/AC.



Infrastructure and Cost Considerations

- Prioritization was identified as the next step in asset management. Asset management plans now include a data layer that may allow replacements to be done sooner.
- Participants noted that battery recycling and replacement is not included in current asset management plans.
- NRRA provides services to municipalities for various recycling processes, including Freon. Participants noted that new heat pumps with refrigerant have been noted as challenging to work with.
- Funding was identified as a barrier to equipment replacement.

Data and Metrics

- Participants emphasized the need for education about metrics and reports. Many metrics use square footage, which doesn't equate with energy use or savings.
- Additionally, there is a need to translate data in a way that is comprehensible to the audience.
- Success stories are currently being collected for landfill and solar installations. <u>Alteration of</u> <u>Terrain Bureau</u> might have a list of these installations for further study.

Renewable Energy Implementation

• There are several new solar developments that participants highlighted. In Exeter, there is a proposal for a floating solar array. In Lancaster, they built a solar system in its transfer station. Hopkinton has been moving forward with a solar installation at the Hopkinton-Webster landfill, which is closed.

Waste Management Technology

- Participants discussed anaerobic digester basics and methane capture and reuse at active landfills (like in Nashua, Lebanon, and smaller landfills).
 - Older, closed landfills were identified as more challenging for methane capture. Major active landfills are already implementing methane capture measures.
 - Rochester and Bethlehem have turnkey landfills with programs in place.
- Participants expressed the importance of preventing fugitive hydrofluorocarbon (HFC) emissions at facilities. Information about bulbs and ballasts containing polychlorinated biphenyls (PCBs) was also shared.



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

Resources

Participant-Shared Resources

Disposal of Fluorescent Light Ballasts (FLB). U.S. Environmental Protection Agency. https://www.epa.gov/pcbs/disposal-fluorescent-light-ballasts-flb

Hybrid Hot Water Heaters: What You Should Know. Northeast Resource Recovery Association. https://www.nrrarecycles.org/news/hybrid-hot-water-heaters-what-you-should-know

New Hampshire the Beautiful, Inc. Awards Recycling Equipment Grants to Antrim, Greenfield, Littleton, Washington, and Waterville Valley, NH (2024). *NH the Beautiful.* <u>https://mailchi.mp/nrrarecycles/new-hampshire-the-beautiful-june-2024-grants</u>

Municipal Recycling and Storage Equipment Grants. *NH the Beautiful.* <u>https://nhthebeautiful.org/municipal-recycling-and-storage-equipment-grants/</u>

On-Farm Composting Toolkit. Composting Association of Vermont. <u>https://www.onfarmcomposting.org/</u>

Spec Sheet - Refrigerant Recovery. Northeast Resource Recovery Association. <u>https://www.nrrarecycles.org/cooperative-marketing/spec-sheet/spec-sheet-refrigerant-recovery</u>



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