

# Non-Energy

**Cross Sector Mitigation Subcommittee**



## Non-Energy Pathways

- **Wastewater Treatment Facilities**
- **Waste Prevention and Reduction**
- Refrigerants
- Semi Conductor Manufacturing

# Pathway: Reduce Fugitive Emissions from Wastewater Treatment Facilities

- **Strategy:** Ensure Flares are Operational at Existing Anaerobic Digesters at Wastewater Treatment Facilities
  - **Action:** Complete a survey of WWTFs with Anaerobic Digestors (ADs) and their operational status. 2. For ADs without current beneficial use, require an engineering evaluation (cost subsidized) to determine cost of capital investment and asset management to install beneficial use system. 3. Work with municipalities to discuss funding options for implementation of beneficial use systems 4. Provide subsidies to encourage the implementation of beneficial use or flaring of methane where beneficial use systems cannot be implemented. 4. Require all applicable facilities that are not implementing beneficial use to have functional flares installed by January 1, 2030.
  - *Status: No Action Taken*

Add

# Pathway: Waste Prevention and Reduction

## ➤ Strategy: General Waste Reduction

### ➤ Actions:

➤ 1A: Create Reduce, Reuse, Repair network

➤ *Status: Advancing*

➤ 1B: Host statewide reuse conference

➤ *Status: Advancing*

➤ 2: Promote waste reduction messaging on social media: VTRecycles Facebook page and TheVermontDEC Instagram and Facebook pages

➤ *Status: Being Implemented*

➤ 3: Conduct media and community-based social marketing (CBSM) campaign on waste reduction

➤ *Status: Advancing*

Add

# Pathway: Waste Prevention and Reduction

## ➤ Strategy: Reduce Wasted Food

### ➤ Actions:

- 1: Maintain related website [scrapfoodwaste.org](http://scrapfoodwaste.org)
  - *Status: Being Implemented*
- 2: Promote annual food waste reduction challenge.
  - *Status: Being Implemented*
- 3: Conduct outreach to businesses and schools on food waste reduction and management
  - *Status: Being Implemented*
- 4: Promote wasted food reduction and management messaging on social media through VTRecycles Facebook page and TheVermontDEC Instagram and Facebook pages
  - *Status: Being Implemented*

Add

## Pathway: Waste Prevention and Reduction

### Strategy: Promote General and Special Recycling

- **Actions:**
  - 1: Promote recycling messaging on social media through VTRecycles Facebook page and TheVermontDEC Instagram and Facebook pages
    - *Status: Being Implemented*
  - 2: Support special recycling media and outreach
    - *Status: Being Implemented*

# Pathway: Reduce Emissions of refrigerants in Vermont

## Strategy: Adopting a Refrigerant Management Program (RMP) and Related Actions

**Action:** Work with VEIC and additional stakeholders to better understand the number and type of entities that would be potentially subject to a refrigerant management program (RMP) and the associated costs and benefits. 2) Work with VEIC to perform additional outreach and education to help determine the scope and thresholds for such a program. 3) Consider whether to require permanent leak detection systems for entities using over a certain threshold of high GWP refrigerant and if a cost share should be provided, with additional outreach through work with VEIC and other stakeholders to better understand the number of applicable entities and the costs and benefits of such a requirement.

- Status: Partially Advancing
- Question: Combine with recommendation related to heat pump HFCs?

# Pathway: Reduce Emissions of refrigerants in Vermont

Strategy: Adopting a Refrigerant Management Program (RMP) and Related Actions

**Action:** Provide incentives for businesses to transition from high GWP refrigerants to lower GWP alternatives using data from outreach for RMP development to target appropriate facilities. This would be a voluntary program that would speed the transition to lower GWP refrigerants and supplement/compliment reductions achieved through the Act 65 rulemaking.

- Status: No Action Taken
- Recommendation: Keep as is



# Pathway: Reduce Process Emissions from Semiconductor Manufacturing in Vermont

**Strategy:** Continue to Explore and Alternatives to High GWP Fluorinated Gases in the Semiconductor Manufacturing Process Efficiencies

**Action:** Global Foundries has been pursuing several actions (use of technologies in the manufacturing process to destroy high GWP gases when emitted and chemical substitutions) already and discussions have been ongoing between Global Foundries, the Public Service Department (PSD), and the Agency of Natural Resources (ANR) through a pending Public Utilities Commission (PUC) proceeding considering Global Foundries' petition to become a Self-Managed Utility (SMU). The PUC proceeding may or may not result in emission reductions for Global Foundries consistent with the GWSA requirements. As of the date of this plan, the PUC proceeding has not been concluded. In the absence of sufficient and/or binding emissions reductions consistent with the GWSA requirements, ANR will promulgate rules in a timely manner necessary to ensure the 2025, 2030, and 2050 emissions reductions requirements are met. In the event that the PUC proceeding has not concluded by December 1, 2022, ANR will commence rulemaking.

➤ Revising recommendation and updating at upcoming Cross Sector Mitigation Meeting