

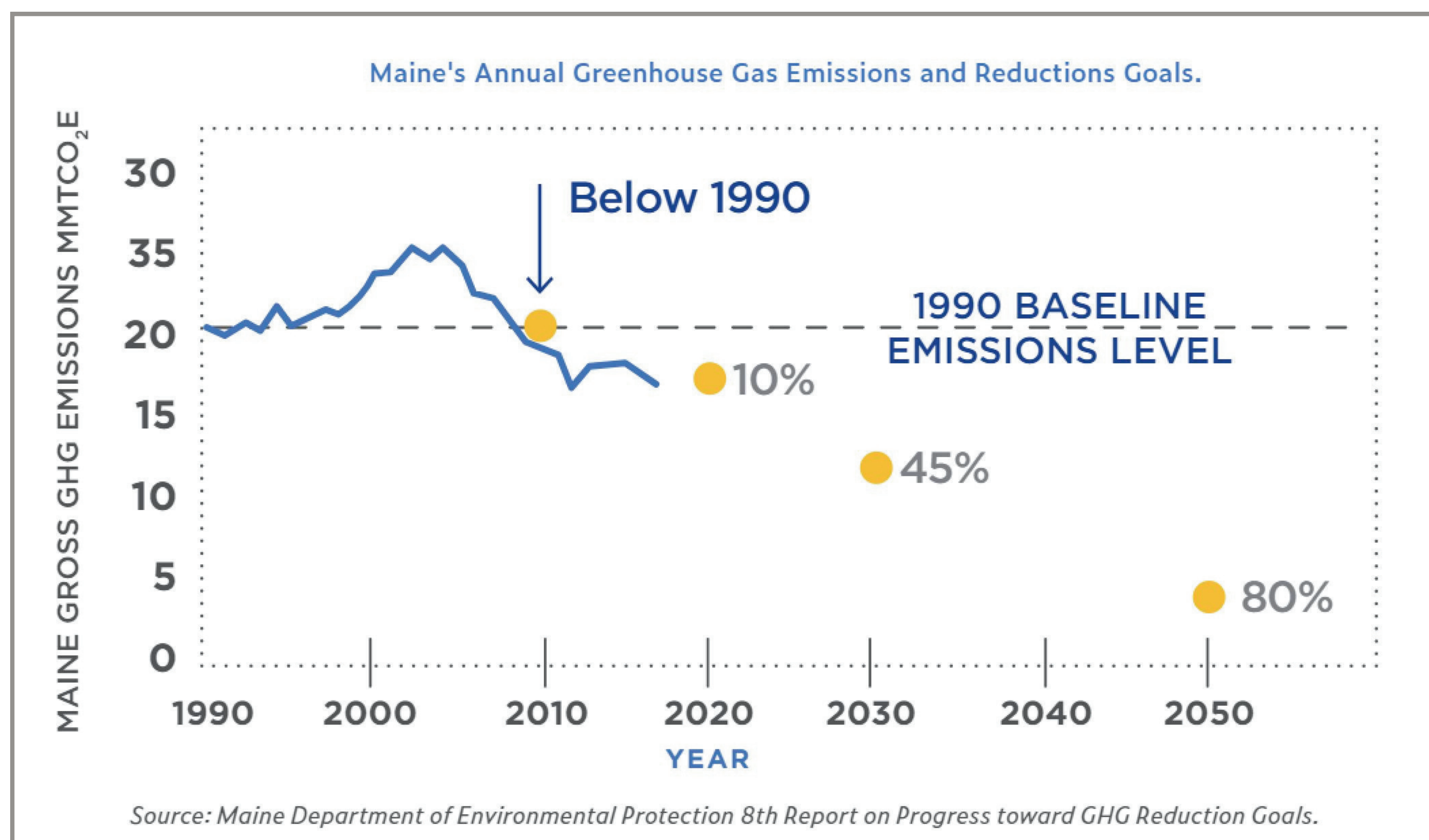
What is a Greenhouse Gas (GHG) Inventory?

A GHG Inventory is an accounting of greenhouse gas emissions. CCAT conducted this baseline inventory using data from 2021 in order to learn about the island's current GHG emissions and how we can best reduce emissions on Chebeague in the coming years. This GHG inventory uses the **Greenhouse Gas Inventory Protocol for Southern Maine Cities and Towns** (community protocol) developed by the Southern Maine Planning and Development Commission and the **Local Government Operations Protocol for Quantification and Reporting Greenhouse Gas Emission Inventories** (municipal protocol) developed by ICLEI. ICLEI's ClearPath tool was used to calculate emissions for both the community and municipal inventories. The inventory uses data from CIBY, CTC, CMP, EcoMaine, Vinal Energy, and the Town of Chebeague Island.

Chebeague Island GHG Inventory Key Takeaways

- 2021 community GHG emissions: **4,247 MT CO₂e** (metric tons of carbon dioxide equivalent)
- Emission contributions were distributed relatively evenly across transportation, waste, electricity, heating activities. (Unlike in the state overall.)
- Transportation was the greatest contributor to community emissions: 1,384 MT CO₂e, 33% of total emissions**

State of Maine Emissions Reduction Goals



Maine has committed to reducing GHG emissions 45% below 1990 emissions levels by 2030.

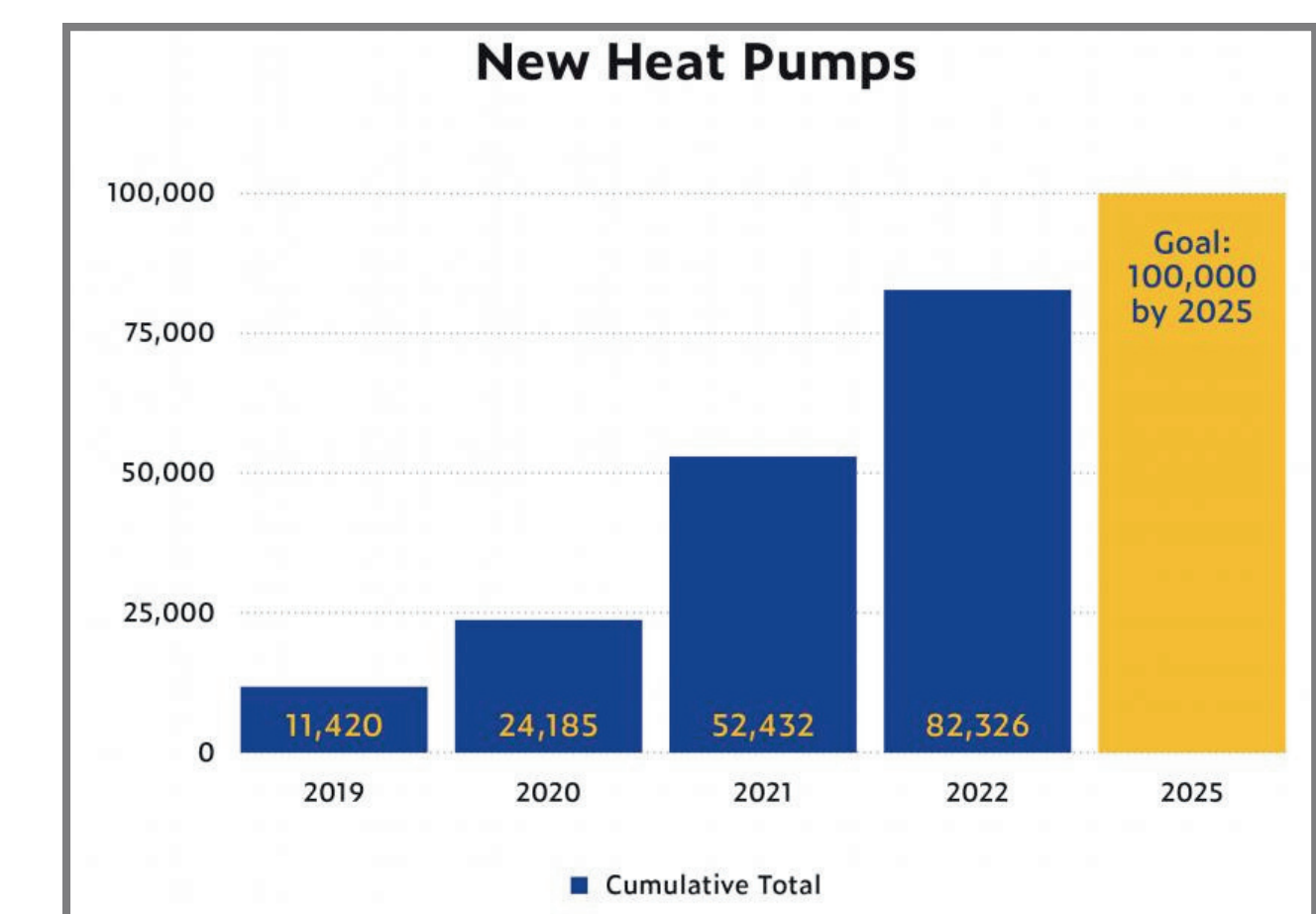
Credit: Maine Climate Council 2020, Maine Won't Wait December 2020 Four-Year Climate Action Plan p.29

What can you do?

There are many steps Chebeaguers can take to reduce emissions and get involved with climate work on the island. They include:

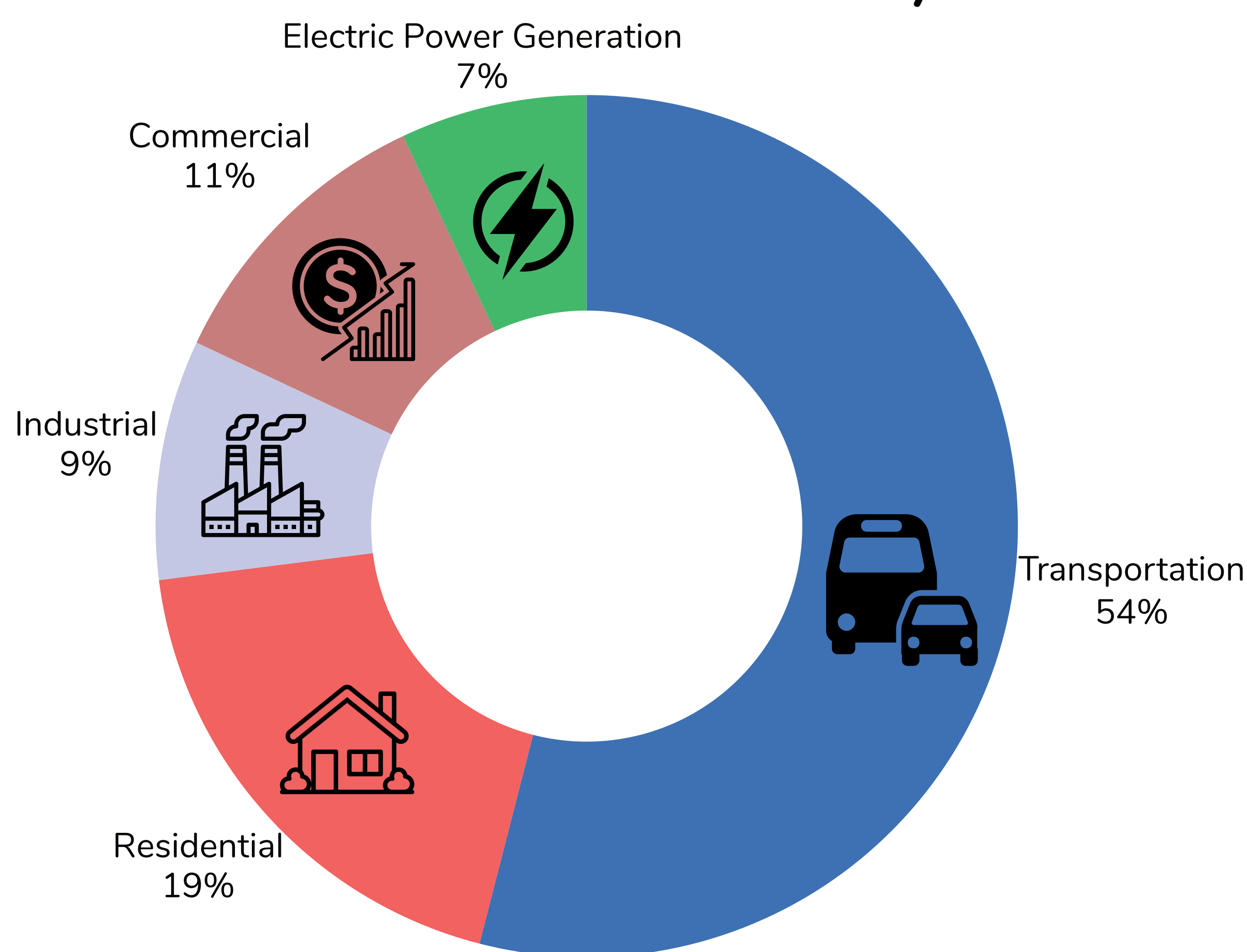
- Installing heat pumps and heat pump water heaters
- Weatherizing your home
- Utilizing Efficiency Maine resources and rebates
- Attending CCAT meetings and programs
- Recycling and reusing items to keep them out of the waste stream
- Walking or biking instead of driving when possible

Heat pumps are a popular option on Chebeague and throughout the state. Maine has already surpassed its goal to install 100,000 heat pumps by 2025 and set a new target of installing another 175,000 heat pumps by 2027.



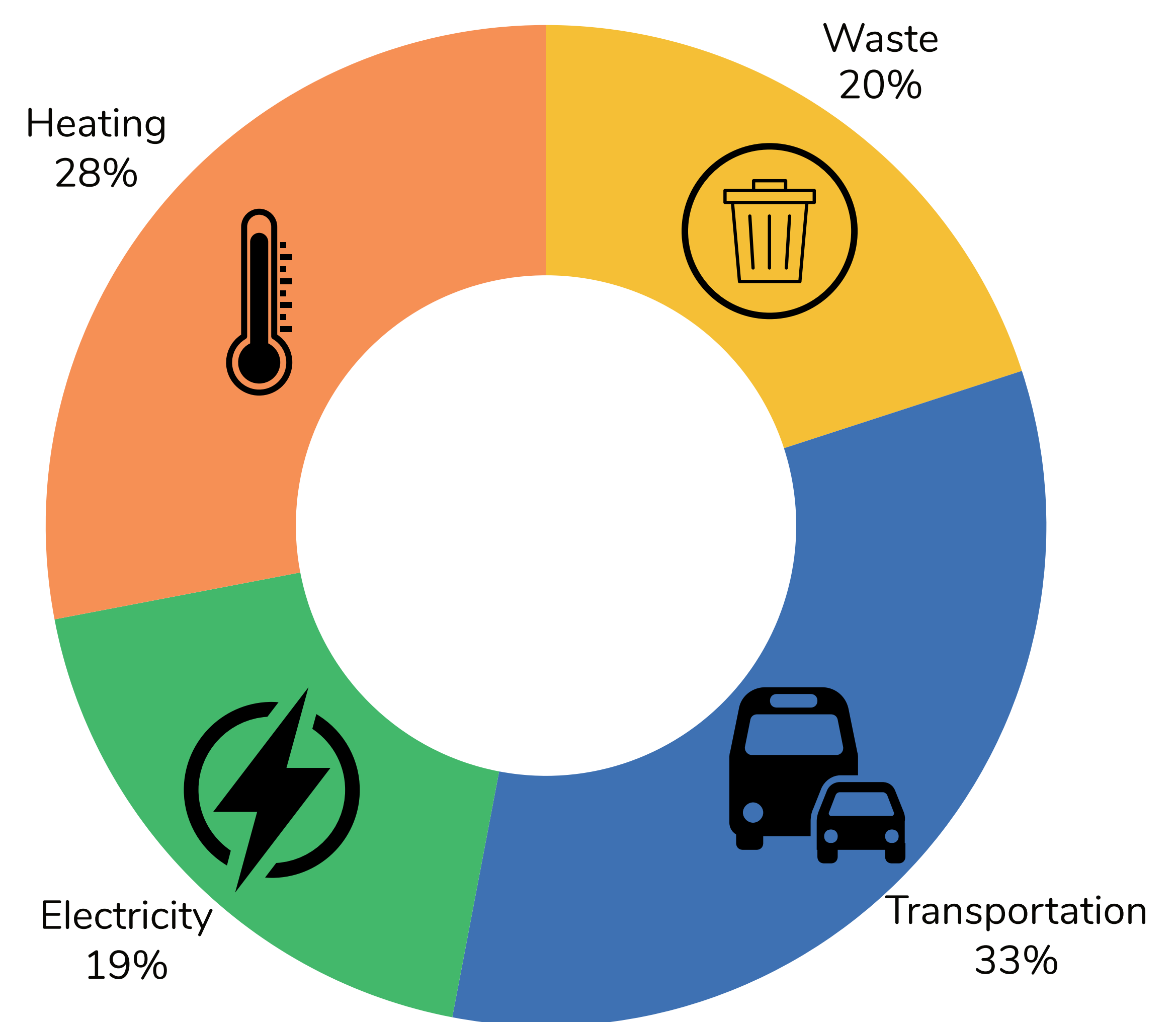
Credit: Efficiency Maine Trust & MaineHousing via Maine Won't Wait

State of Maine 2020 Emissions by Sector



Credit: Maine Climate Council 2020, Maine Won't Wait December 2020 Four-Year Climate Action Plan p.30

Chebeague Island 2021 Emissions by Sector



Credit: Chebeague Climate Action Team 2024, Chebeague Greenhouse Gas Inventory

The State-wide inventory and Chebeague's inventory are structured slightly differently, but it's still interesting to see them side by side. For example, transportation accounts for a much larger share of emissions in the state overall than it does on Chebeague. Electricity accounts for a larger share of emissions on Chebeague than in the state as a whole.