ENERGY

9.1 Existing Conditions

The production and continuous supply of energy are critical for sustaining everyday activities in Lincoln. Energy, within the context of this chapter, refers to utility services that generate electricity, transmit, distribute, and meter energy usage. The existing conditions summary will help the Town develop meaningful actions to support and sustain adequate energy service, enhance energy efficiency, and identify potential opportunities for the creation of renewable energy.

The Rhode Island Comprehensive Planning Handbook describes energy as: "three sectors – electricity, heating and cooling, and transportation – and the resources used to create the energy for those sectors." Within the context of comprehensive planning, those sectors can be described as follows.

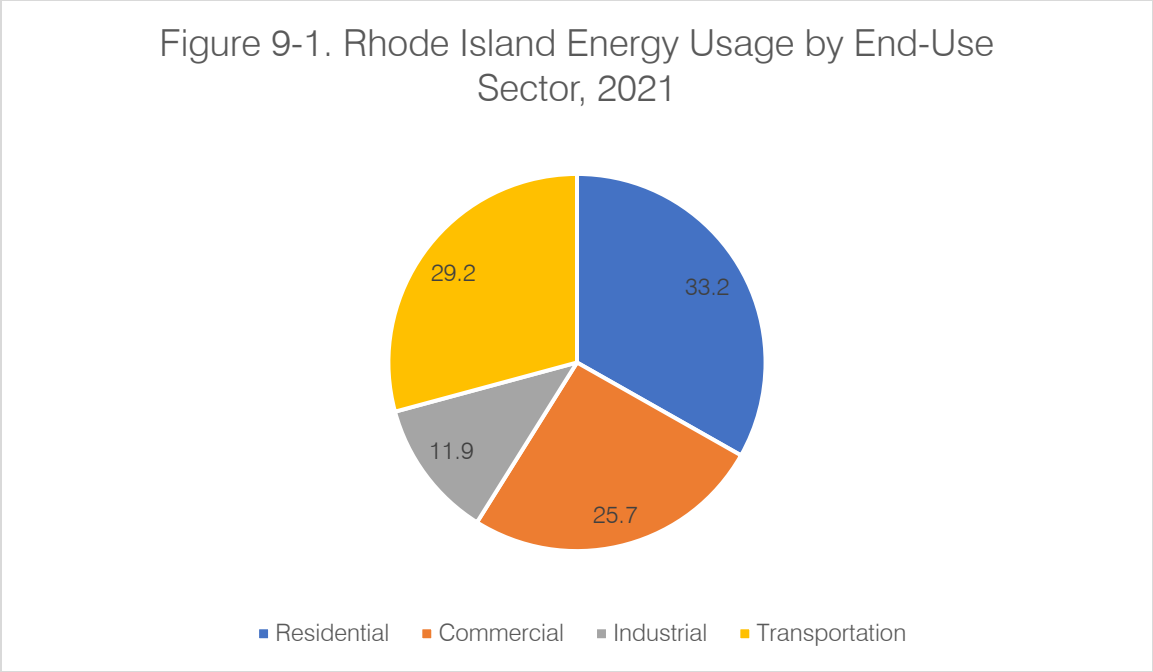
- Electricity is power produced with fossil fuels or renewable energy technologies and used to run electric equipment, appliances, lighting, and electronic devices.
- Heating and Cooling includes natural gas, heating oil, propane, electricity, and renewable technologies, like geothermal.
- Transportation refers to the energy used to fuel vehicles, including petroleum, biofuels, electricity, natural gas, and hydrogen.

Comprehensive planning can help municipalities assess their energy expenditures to pinpoint ways to reduce spending, enhance access and redundancy, and meet net zero emissions goals.

9.1.1 Energy Supply and Use

The major electric company in Lincoln is Rhode Island Energy, which is formerly National Grid. RI Energy provides electricity for all of Rhode Island. Third-party suppliers can provide alternative energy choices for users. Lincoln does not have a major industrial-scale power production facility.

According to the U.S. Energy Information Administration, as shown in Figure 9-1, the residential sector has the highest energy usage in Rhode Island (2021). The study noted individual user usage and costs: "On average, Lincoln, RI residents spend about $215 per month on electricity. The average electric rates in Lincoln, RI cost 26 ¢/kilowatt-hour (kWh), so that means that the average electricity customer in Lincoln, RI is using 819 kWh of electricity per month and 9,828 kWh over the year."



Source: Energy Information Administration, State Energy Data System

In June of 2022, Governor McKee passed historic legislation requiring that one hundred percent of Rhode Island's energy be offset by renewable energy by 2033. This is the first legislation of its kind in the United States. Renewable energy sources are sources that naturally replenish, such as solar, wind, or geothermal. Renewable energy sources do not require combustion of fossil fuels.

To help achieve this goal, the Department of Environmental Management completed a greenhouse gas emissions (GHG) inventory for the years 1990-2019. The 2019 inventory found that the majority of GHG emissions in 2019 were from the transportation sector (39.7%), followed by the residential heating sector (19.3%) and the electricity sector (18.9%). An update to the emissions inventory will be published in December 2025; "GHG emissions inventories published by RIDEM provide the foundational information needed to develop and implement the Act on Climate's emission reduction mandates."

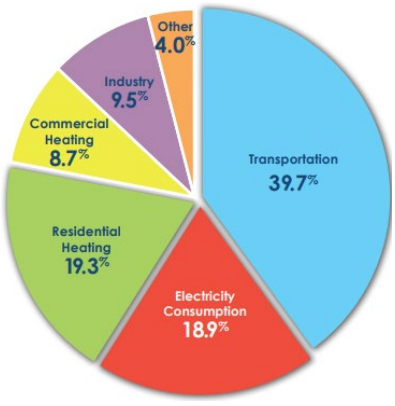


Figure 9-2. Rhode Island Emissions by Sector from 2019 GHG Inventory

The State of Rhode Island Office of Energy Resources is the state's hub for resources related to energy efficiency and renewable energy: "The Rhode Island Office of Energy Resources (OER) mission is to lead the state toward a clean, affordable, reliable, and equitable energy future. OER develops policies and programs that respond to the state's evolving energy needs while advancing environmental sustainability, energy security, and a vibrant clean energy economy. OER is committed to working with public- and private-sector stakeholders to ensure that all Rhode Islanders have access to cost-effective, resilient, and sustainable energy solutions."

Rhode Island Energy Efficiency Program

Lincoln residents have access to Rhode Island Energy Efficiency, a state program that provides residents with no or low-cost energy-saving measures. Rhode Island Energy offers many energy efficiency rebates, incentives, and services to help Rhode Island residents, businesses, and institutions manage their energy usage. These programs are funded by an energy efficiency charge on all customers' gas and electric bills, in accordance with Rhode Island law.

Rhode Island Efficient Buildings Fund (RIEBF)

The RIEBF is a revolving loan fund with low-interest loans for energy efficiency and renewable energy projects in which the annual energy savings achieved exceed the annual debt service. This funding program is jointly administered by Rhode Island Infrastructure Bank (RIIB) and Office of Energy Resources.

9.1.2 Renewable Energy

Lincoln is taking steps to enable the production of renewable energy, which enhances energy resilience and redundancy and reduces carbon emissions outputs. Many of these actions are initiated by the State Energy Resources Department but are available to residents, businesses, and community-based organizations.

Clean Heat Rhode Island

Clean Heat Rhode Island is a heat pump program for households, small to mid-sized businesses, and non-profits. The program offers incentives for the installation of high-efficiency heat pumps. The Clean Heat program is the largest energy rebate program for constituents offered by OER. Thermal emissions account for one-third of Rhode Island's greenhouse gas emissions. Heat pumps are economically and energy-efficient mechanisms for heating and cooling buildings.

Property Assessed Clean Energy (PACE)

PACE is a financing program that allows property owners to repay the costs of energy efficiency or renewable energy projects in conjunction with property tax payments.

9.2 Goals & Policies

Goals and their corresponding policies reflect the desired changes of Lincoln residents for the next ten years, as gathered from a public workshop held in May 2024. The Town seeks to make municipal buildings more energy efficient, increase incentives for energy efficiency retrofits in residential and commercial settings, and promote renewable energy projects in the Industrial Corridor.

Table 9-1. Goals and Policies	
Goals	Policies
EG1. Town Wide Achieve energy efficiency and conservation.	**EG1.1. Town Wide** Promote energy efficiency and conservation measures in municipal operations.
	EG1.2. Town Wide Support residential and commercial energy efficiency initiatives.

	EG1.3. Town Wide Encourage the development of renewable energy facilities.
	EG1.4. Town Wide Facilitate private sector renewable energy projects while protecting the Town's natural resources.
	EG1.5. Town Wide Implement energy efficiency upgrades that preserve the historical integrity of buildings.
	EG1.6. Town Wide Encourage the use of renewable energy sources in new developments.
EG2. Lonsdale and Industrial Corridor Develop the Industrial Corridor as a model of energy efficiency and sustainability.	**EG2.1. Lonsdale and Industrial Corridor** Promote the installation of large-scale renewable energy projects in the Industrial Corridor.

REFERENCES

Rhode Island Department of Environmental Management. 2019. "2019 Rhode Island Greenhouse Gas Emissions Inventory". https://dem.ri.gov/sites/g/files/xkgbur861/files/2022-12/ridem-ghg-inventory-2019.pdf.

U.S. Energy Information Administration. 2021. *State Energy Data System.*