

# ENERGY MATTERS

## REPORT 2023

Energy efficiency in small businesses:  
creating savings, strengthening the local  
economy and protecting the environment

A JOINT PROJECT OF CAPE LIGHT COMPACT AND LOVE LIVE LOCAL



love. live. local.



[www.capelightcompact.org](http://www.capelightcompact.org)

## Purpose

Love Live Local and Cape Light Compact are deeply invested in the well-being of both the natural environment and businesses of Cape Cod and Martha's Vineyard. Thus, the two organizations came together to produce this primer on energy use, its associated environmental impacts, and what measures can be taken by local businesses to address the issue here on Cape Cod and Martha's Vineyard. Ultimately, by becoming more energy efficient, small businesses can help reduce greenhouse gas emissions and create savings that increases their bottom line, strengthening the local economy and protecting the Cape and Vineyard's land, air, and water.

## Framing the issue: Energy Use and Environmental Impacts

In 2021, small businesses on Cape Cod and Martha's Vineyard used an average of 1,800 kWh/month of electricity, accounting for approximately 22% of total electricity use in the region. Electricity is used to keep display lighting on, coffee grinders grinding, blenders blending, walk-ins humming, cash registers going,

and business, in general, flowing.

Running a business requires a lot of energy. Energy use leads to greenhouse gas emissions, because fossil fuels are used to heat many of our buildings and water, and even to generate electricity. Greenhouse gas emissions contribute to climate change, and Cape Cod and the Martha's Vineyard are exceptionally vulnerable to these impacts. According to the Environmental Protection Agency, the largest source of greenhouse gas emissions from human activities in the United States is from burning fossil fuels for electricity, heat, and transportation. Our homes and commercial spaces create a lot of energy demand and unfortunately, the average commercial building in the U.S. wastes approximately 30% of the energy it consumes. What's more, due to their refrigeration, lighting, and heating and cooling needs, restaurants use about five to seven times more energy per square foot than other commercial buildings.

## Addressing the issue: Efficiency Measures

There are a variety of opportunities to reduce greenhouse gas emissions associated with electricity and fossil fuel use in commercial buildings. Moving away from fossil fuel equipment, like natural gas, oil, or propane furnaces and boilers, to electric equipment like heat pumps; employing green building retrofits; and managing electricity demand with energy efficiency measures can go a long way.

Switching to high efficiency electric equipment and improving the energy efficiency of a small business's space doesn't just reduce contributions to climate change, helping to protect our communities, the planet, and our future; it also can positively impact the business's bottom line by reducing operating costs. These measures can also serve to enhance temperature control, increasing comfort for employees and customers; improve air quality by removing on-site sources of combustion fumes and potential gas leaks; provide better light quality with LED lighting; enhance convenience with automated lighting and HVAC controls; and save water with efficient spray

valves, faucet aerators, and shower heads – helping to conserve the Cape and Vineyard’s precious water resources and saving on water heating costs.

### **Acting on the issue: What you can do**

How much and how your business uses energy varies by sector and from business to business. Office buildings tend to use the most energy on heating, cooling, and lighting. Restaurants use a lot of energy for refrigeration and cooking equipment. Hospitality businesses have high heating, cooling, and water heating energy demands. Lighting is a big energy user for retail spaces.

If your equipment is getting old or needs extra maintenance; your building is from an era before today’s high efficiency materials were available or was built without much attention to efficiency; or you are simply interested in improving your business’s energy efficiency, a great way to start saving energy is to schedule a Business Energy Assessment with Cape Light Compact. As the local Sponsor of Mass Save® on the Cape and Vineyard, the

Compact offers this service at no cost. An energy assessment includes a review of your space and a consultation with an energy specialist. They will provide information on energy savings steps that make sense for your business and available incentives to help cover the cost of upgrades – whether you rent or own your space. You will then receive a custom energy action plan that lays out the costs and estimated savings for specific energy efficiency improvements. The Compact offers incentives that cover up to 80% of project costs for lighting and refrigeration upgrades, water saving devices, weatherization, and more. Plus, they offer significant incentives on heat pumps, heat pump water heaters, commercial kitchen equipment, lawn equipment, and more.

Cape Light Compact’s programs are funded through energy efficiency charges on all customers’ electric bills—so you should take advantage of these programs that you’re already paying for! In 2021, the Compact reinvested over \$3 million back into the business community through energy efficiency incentives.

### **More to the issue: Customers care**

Beyond the cost savings, investment in the community, and tackling climate change, implementing these types of measures can also help businesses attract customers. Most U.S. consumers say they prefer to buy sustainable products. 72% of consumers say that sustainability is a very or somewhat important purchase consideration<sup>3</sup>. 67% of Cape and Vineyard residents say they are worried about climate change<sup>4</sup>. Taking steps to improve energy efficiency can deepen customer loyalty and community relations.

Whether you’re interested in increasing your bottom line, or reducing your business’s carbon footprint, implementing energy efficiency measures will be sure to have a long-lasting, positive impact on your business and our community.

Visit [capelightcompact.org/business](https://capelightcompact.org/business) for information on no-cost Business Energy Assessments and efficiency incentives.

## 2021 Business Energy Efficiency Program Metrics

**519** Business Energy Assessment participants

**\$3,064,922**  
paid in incentives

**TOTAL SAVINGS: 3,315,369**  
estimated annual kWh savings

That's enough energy to power **296** homes for one year!

That's enough energy to charge more than **285** million smart phones!

That's the energy equivalent to **264,380** gallons of gasoline! <sup>2</sup>

### INDIVIDUAL SAVINGS

Average annual energy savings per participant: **6,387 kWh**

Average annual savings on energy costs per participant: **\$1,149** assuming \$0.18 per kWh

*This report was produced in partnership with Love Live Local and Cape Light Compact.*

**LOVE LIVE LOCAL** is a Cape Cod organization dedicated to community advocacy and educating consumers on the importance of shopping local. Their mission is to foster an economically sustainable, creative, and exciting future for the Cape and help all those who love this place participate in keeping it special. One of the ways they do this is by working with local businesses to achieve their economic goals and communicate their importance to the sustainability of the Cape Cod community.

**CAPE LIGHT COMPACT** provides energy services to Cape Cod and Martha's Vineyard residents and businesses. The Compact is a public entity operated by the 21 towns on the Cape and Vineyard plus Duke's County. Local businesses can take advantage of its energy efficiency programs, including rebates and incentives for efficiency upgrades and no-cost Business Energy Assessments.

<sup>1</sup> EPA Sources of Greenhouse Gas Emissions [www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions](http://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions)

<sup>2</sup> EPS Greenhouse Gas Equivalencies Calculator [www.epa.gov/energy/greenhouse-gas-equivalencies-calculator](http://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator)

<sup>3</sup> First Insight, Inc., The Baker Retailing Center at the Wharton School of the University of Pennsylvania.

"The Sustainability Disconnect Between Consumers and Retail Executives." <https://tinyurl.com/firstinsight2022>

<sup>4</sup> Yale Climate Opinion Maps 2021 <https://climatecommunication.yale.edu/visualizations-data/ycom-us/>

# Small Business Testimonials

## HARBOR VIEW HOTEL

### The Need

Reduce the environmental footprint, lower operational costs, and automate the energy management systems.

### The Solution

- Energy Management System
- Hotel Smart Thermostats
- ECM Pump
- Kitchen Hood Controls

### Incentive

\$246,247 - more than 50% of the project cost

### Estimated Annual Savings

94,906 kWh and 789 MMbtu (Propane)



## LOWER CAPE TV

### The Need

Environmentally friendly, high-performing, and comfortable operational and studio lighting.

### The Solution

Retrofit Operational Lighting

- Retrofit 62 fixtures and 8 screw-in lamps and added 8 occupancy sensors

Studio Lighting

- 42 lights

**Total Incentive:** \$55,207.56

### Estimated Annual Savings

140,231 kWh



**“ We live on a fragile sandbar, and it’s important to us to be stewards of the environment. Not only are we using less energy - the lighting made such a difference in the human experience of this building. The color, quality, and lack of flicker make people much more comfortable without consciously noticing it.**

*Teresa Martin*

*Executive Director, Lower Cape TV*