



Actions in Our Homes: Overview

19% of RI's energy use is related to residential heating and hot water, and other activities in our homes use fossil fuels as well. We can reduce our emissions by reducing our energy use overall, and by speeding up the state's transition to renewable energy sources.

Rhode Island has invested \$80-100 million in helping people save energy. Fully utilizing those programs helps to preserve them and encourages the state to expand them, as well as nourishing a growing area of Rhode Island's economy. Let's get what we're paying for, lower our utility bills, and reduce the state's contribution to climate change.

Almost all of us depend on our devices and appliances: to earn money, to get chores done quickly, to be entertained. The manual sometimes recommends buying a new appliance or tool: this is because the energy saved by using a more efficient version will soon outweigh the energy used to run *and* make *and* transport that more efficient version. Generally, for appliances with long life expectancies, keep them going until they wear out; if they have shorter life expectancies, move as soon as possible to a more energy-efficient model. There are subsidies and rebates to help you afford this, and they're listed under each topic.

Electricity *can* be generated in sustainable ways; gas and fuel oil *always* add to the

planet's greenhouse gas burden with CO₂ (from burning) and/or methane (from extracting natural gas). That's why the manual recommends switching to electric services and appliances.

Each of us—whether we rent, live with family, work in an office or on our own—can make changes in our lives and habits, and in some cases in the places where we live and work, to reduce our state's emissions. We can also call on our public servants to make these changes easier and more available for all.



Sealing and Insulating Your Indoor Space: Envelopes of Efficiency

Four steps for getting the most out of your energy—and your energy company



- Call RISE at (401) 784-3700 for a *free* home energy assessment
- Insulate your walls, improve the fit and seal of your doors and windows, add storm windows, and seal cracks and gaps with RISE-approved

- contractors and National Grid discounts
- Inform your neighbors that they too can get a free home energy assessment
 - Tell Governor Raimondo and your state senators and representatives about the importance of maintaining RI's energy efficiency fund

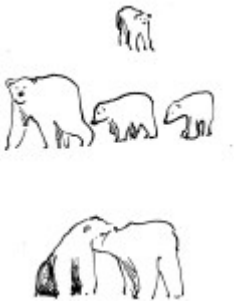
[RISE home energy assessments](#) are *free*, extremely thorough, and available to tenants, homeowners and owners of commercial properties. Our electric bills include charges to pay for this service—let's get what we're paying for.

Since some of the renovations may be expensive, National Grid also provides substantial discounts if you follow the recommendations in the home energy assessment. You can work with RISE directly, or choose a contractor that National Grid has certified (see the above website for details). The energy savings will cover the discounted cost of the improvements in 3-5 years, and after that will just keep saving you money and energy—pure financial benefit.

Household action: Call (401) 784-3700 for your free home energy assessment, and follow as many of the recommendations as you can.

Of all the actions in this manual, this is one of the easiest to get your neighbors excited about: it offers a deal on home improvement projects, saves money long-term, increases our comfort, and reduces our contribution to greenhouse gas emissions. Ask your friends and neighbors if they've done a RISE assessment and urge them to get one if they haven't. Then you can get together and demand that our elected officials reinstate support for energy-efficient improvements in our state—a key part of reducing Rhode Island's fossil fuel emissions.

Community action: After you get your energy assessment and/or follow the recommendations, write to or call Governor Raimondo, the speaker of the Rhode Island house, the Senate President, and your own Rhode Island senator and representative, voicing your support for the state's energy efficiency programs and telling your story.



Heating and Cooling Systems: We Can't Air-Condition the Planet

Six ways to be comfortable using less fossil fuel



- Switch to HVAC powered by electricity
- Install a programmable thermostat that turns systems down/off when you're not at home
- Use a box fan or a ceiling fan rather than air conditioning
- Work with sun, shade and airflow to warm or cool your home

- Pressure the Office of Energy Resources to add an incentives program for air source heat pumps
- Spend time in public places that maintain a comfortable temperature

Here in New England, we need to heat our homes and other indoor spaces in order to get through the winter. As the climate warms, we're more and more often having to cool those spaces as well. Heating, ventilation and air conditioning (HVAC) equipment powered by renewably generated electricity rather than by natural gas or fuel oil reduces the fossil fuel burden of heating and cooling.

Using more energy-efficient and lower-polluting systems brings their cost down, making them more accessible to more people. Combine these actions with the ones in ["Clothing"](#) and ["Sealing and Insulating your Indoor Space"](#) for the greatest energy savings and emissions reduction.

Household action: A particularly efficient and effective electrically powered HVAC system is an air source heat pump. Heat pumps use refrigerants to both heat and cool. ([Learn about how they work and the various types available.](#)) Select a system that's appropriate for your space. The website linked above has more information on how to choose.

If you can't replace your heating system right now or it's not yours to replace, install a programmable thermostat ([National Grid offers a rebate](#)) and work with sun, shade and airflow. In winter, let the sun shine in; in summer, close the shades. In hot weather, open windows at night and close them during the day; open opposite windows to create cross-breezes. These strategies can improve your comfort with no increase in greenhouse gas emissions.

Community action: On days with extreme temperatures, spend leisure time or time when you're doing portable tasks like paperwork outside your home, in comfortable public places like libraries or rec centers, or businesses like movie theaters, coffee shops or malls. This is a way to meet your neighbors, too. Your town may have [cooling centers](#) for particularly hot days, and it's good to know where those are.



Hot Water Tanks and Pipes: Warm Water for a Cooler Climate

Five ways to get the warmth without the waste



- Turn your hot water system's thermostat down to 120°F
- Add an insulating blanket to your hot water tank
- Replace your outdated oil or gas hot water heater with an efficient

electric water heater

- Insulate your hot-water pipes
- Replace or insulate your tenants' tanks and pipes, if you're a landlord, as well as your own

We use hot water to clean ourselves, our dishes, and sometimes our clothes—many of us are so used to it, we forget how lucky we are to have it in our homes. But clean, usable water is one of the things that climate change threatens: anything we can do to reduce that threat is important.

Household action: Setting your water heater at 120°F reduces the greenhouse gas impact of heating the water, cuts your energy bill and makes your heater and pipes last longer, while still letting everyone in your house take hot showers. Check [energy.gov](https://www.energy.gov) to make sure this setting works with your water system.

Replacing your hot-water heater obviously has the most impact in reducing emissions. [Research your options](#) before you need a replacement, to ensure the best combination of efficiency and price: This is particularly important if you're renovating a property or buying multiple hot-water heaters for people besides yourself.

Community action: If you are a landlord, apply these guidelines to your properties. This can help you stabilize rent and retain good tenants. If you live in a condo rather than a single-family home, talk with your condo association about group rates/discounts on the price of new hot-water units and installation.



Lighting: Illuminating Energy Efficiency

Five ways to better use the light we have



- Use natural light whenever you can
- Turn off lights when you leave a room
- Use LED (Light Emitting Diode) bulbs
- Ask for your landlord or employer to do the same
- Work with your neighbors to buy LEDs in bulk for institutions or to share

We no longer rise and go to bed with the sun, so we need to light our homes and workplaces. Light Emitting Diode (LED) bulbs give brighter light than other bulbs that use the same amount of energy, lowering costs as well as emissions. Unlike tube and compact fluorescent bulbs, they don't contain poisonous mercury, and they last a long time. The price of LED bulbs has come down, and there are replacements for almost all sizes and qualities of light. If you get a home energy audit (see "Sealing and Insulating Your Indoor Space"), it sometimes comes with free LED bulbs—take

advantage of this opportunity!

Household action: Replace your standard (incandescent) light bulbs, tube fluorescent and compact fluorescent light (CFL) bulbs (the curlicue-shaped ones), and halogen light bulbs with LED bulbs. Take the old bulb with you to the store to be sure the LED base and configuration is the right size for your fixture. If you have dimmers, or contemplate controlling a fixture with a dimmer, select a bulb that will work with a dimmer.

Like many of the actions in this manual, this one works best if many people are doing it—so share this information with the people who provide the lighting in the buildings you use (landlords, superintendants, employers) .

Community action: Do you have neighbors/community members who may need help purchasing and/or installing LED bulbs? Work with your social or religious organization to get this done. You may be able to save money by buying in bulk.



TV, Computer, and Other Electronic Devices: Screening for Energy Efficiency

Five ways to get more out of your electronics, for less



- Turn your devices off when you're not using them—this won't hurt them!
- Invest in advanced power strips with surge protectors
- Use your devices until they stop working well
- Check the power strips your workplace uses—recommend or install the advanced kind if you're not already using them
- Propose an energy efficiency challenge for your workplace or social organization

Many of our jobs require us to use computers, phones and/or tablets at work and in our homes. These devices also provide us with pleasure, distraction, and connection. Right now, they're made and shipped in fossil-fuel-intensive ways, but there are ways to power and use them that can reduce their contribution to climate change.

Household: Use your devices until they stop working well: this saves money and energy. When you get new electronic equipment, look for Energy Star products—currently the most efficient on the market. For more information, see [the EnergyStar website](#).

Workplaces, especially offices, are particularly good places to increase energy efficiency: the initial expense is paid for by energy savings, and it's a way to get more of us switching faster to using less energy. Whether you're the boss or someone else is, take every opportunity to recommend switching the office power strips to "advanced", energy-saving ones, and choosing EnergyStar options when it's time to replace equipment.

Community: Propose an energy efficiency challenge, like [this one](#), for your workplace or social organization. How about organizing a "donate, educate and install" day for a community or neighborhood? You can frame this in the context of saving money and/or team-building as well as of reducing emissions.



Kitchen and Laundry: Greening Your Chores

Seven energy-efficient changes for your home and housework



- Do your laundry and run your dishwasher at “off-peak” times
- Air-dry your dishes instead of running the dishwasher’s “heated dry” cycle
- Wash your clothes in cold water
- Install a clothesline for warm, dry weather and/or share one with your neighbors
- Keep cold water in the fridge and use ice cube trays, instead of the water & ice functions
- Replace older appliances with EnergyStar electric models—yours, or your tenants’
- Ask your representatives and state agencies for a discount for off-peak electricity

Refrigerators save lives—people used to die of food poisoning much more frequently—and dishwashers and laundry machines save the time and sanity of whoever does the housework. But when we use them inefficiently, we’re outsourcing that suffering to people elsewhere and to future generations. These actions do involve some time and work, but you’ll reduce your energy bill and our state’s fossil fuel responsibility.

Household action: Replace your older home appliances—including your refrigerator—with electric models that are Energy Star rated. While it may cost a little more up front, you will see savings as well as helping the climate. Watch your electric bill for offers from National Grid to buy up your old inefficient appliances, and

offering discounts on the purchase of certain energy efficient appliances ([you can also look here](#)). When it's time to replace your gas stove, replace it with an electric one: natural gas is itself a fossil fuel, and its production, transport and use all create greenhouse gas emissions.

“Off-peak” times for using electricity usually means evening hours after statewide or regional demand for electricity has declined. We don't need to build additional generating facilities if we use wisely the supply we already have. If you use Twitter, the Twitter account @ShaveThePeak will alert you to peak times when it's good to turn your appliances off or wait to use them. Household and community actions can complement each other for the most effective and efficient use of resources.

Community action: Gather your neighbors for a call-in or write-in day to your Rhode Island representatives and senators, and the RI Public Utilities Commission, asking them to adopt rates that give a discount for off-peak electricity use. Massachusetts already does this, and you can refer to [their program](#) in your call or letter.



Improving Our Supply of Electricity: Better Energy Options

Four ways to boost Rhode Island's clean energy economy



- Generate cheaper, cleaner energy at your home or business with a renewable installation
- Organize around opportunities for community aggregation renewable energy projects
- Switch to People’s Power and Light for your home and business energy supply
- Urge our state, cities and towns to reject new fossil fuel projects

Rhode Island is well positioned for investments in renewable energy that will add to our energy independence and reduce harmful emissions. Local companies stand ready to help you evaluate opportunities to generate clean energy at your home or business – see [the Office of Energy Resources’s list](#). They’ll tell you about funds that can reduce the cost of generating renewable energy on site, and how long it will take to recover that investment before your electricity comes free of charge. For details about what these funds can do and how to use them, see the “RI Programs for Energy Efficiency and Renewable Energy” section.

Household action: Choose a renewable energy installer from the OER's list and invite them to do a free assessment of your property.

The Commercial Property Assessed Clean Energy Program offers auditing services and attractive financing terms to improve the energy profile of commercial buildings (see <https://ri-cpace.com/about/>). If you own or rent commercial property, sign up for an audit to learn where you could be saving money and reducing your use of fossil fuels.

If you can't add a solar or wind installation to your property right now, and you have National Grid's Basic Service (check your electric bill), you can still get your electricity from renewable sources through [People's Power and Light](#). The pricing guide for their options is [here](#): read it to find out which is right for you. The service costs about \$10-\$20 extra per month, which [you can write off on your tax return](#).

All of Rhode Island's energy development at this point needs to be in renewable energy, not fossil fuels, whether it's pressure on National Grid, our main energy supplier, to focus on renewables, or investment in [community aggregation](#), which allows towns to choose renewable sources for more of their energy.

Community action: Donate money, time or skill to community groups that fight new fossil fuel projects in Rhode Island, support carbon pricing, and help people gain access to renewable energy. A full list of organizations is in the "Further Resources" section.