

# LANDLORD'S GUIDE TO RESILIENT RENTALS

How Going Green Can Improve Your Bottom Line

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# Energy Efficiency: Benefits for Landlords

Frozen pipes. Destructive tenants. Never-ending maintenance requests. Frankly, why would a landlord even stop to think about energy efficiency when they're not paying the energy bills?

It makes sense that property management strategies often overlook energy usage. However, this is leaving money on the table.

There are financial benefits to properties with highperformance features that go far beyond lower bills for tenants. Throughout this guide we will explore how landlords can cashin on the untapped opportunity of energy efficiency and improve the landlord – tenant relationship in the process.



## For starters, energy efficiency can help landlords:

1. **Qualify for impressive incentives, rebates, and tax credits** that will put money in your pocket and shorten the payback period on upgrades. Take advantage of these offers before they're gone.

2. **Reduce the need for maintenance and repairs**. A wellinsulated property will retain heat longer when the power goes out or a tenant doesn't leave the heat on, resulting in less frozen pipes. Is that not music to your ears?

3. **Reduce Capital Expenditures.** Heating and cooling systems run less in a well-insulated property, therefore extending the lifespan of these major systems. An efficient building can also achieve comfortable temperatures with smaller HVAC systems. This will save you on both the upfront costs of improvements and long-term operating costs.

4. **Decrease turnover costs.** Lower energy bills, comfortable temperatures, less maintenance issues, and a responsive landlord all increase tenant satisfaction. This can improve retention and decrease turnover costs.

5. **Increase property value.** Updated, energy efficient properties and rental units may result in more cash flow, retain their market value, and achieve greater appreciation.

According to the American Council for an Energy–Efficient Economy, the average rental property consumes 15% more energy per square-foot than an owner occupied home.<sup>1</sup> Without energy efficient improvements, tenants are left grappling with excessive energy bills that they have little control over.

Upon making upgrades, you may feel the need to increase rent. However, the goal of this guide is to help you implement strategies that serve you, so that you can avoid large rent increases. If you're able to lower operating costs and take advantage of incentives, you may be in the position to pass savings along to your tenants. They will benefit if their savings on energy bills surpasses any increase in rent.

## What's to come...

As the Commonwealth of Massachusetts moves towards our goal of net zero carbon by 2050,<sup>2</sup> energy efficiency is becoming a requirement. From local building codes to consumer demand, high-performance homes will soon be the norm. Use this guide to help you take advantage of the incentives and resources designated to assist in this transition, before they're gone.



## **Financial Incentives**

Here you'll find an overview of the various financial tools available to help you lower your tax burden and operating costs while making your property more resilient. In many cases, non-owner occupied property will qualify for different incentives than owner occupied property. Homes and rentals with low income tenants may also qualify for additional incentives.

Disclaimer: We are not tax or financial advisors. This guide does not serve as professional tax or financial advice.



## Resources

<u>DSIRE</u> – is a database of financial incentives for efficiency & renewables. Look up your property's zip code to see a list of tax credits, rebates and other incentives that are available in the area.

EnergyCENTS – a similar tool developed by the Massachusetts Department of Energy Resources to connect you with incentives for energy savings.

EnergyStar Rebate Finder – if you're looking to buy a new appliance or home system, look here for rebates on EnergyStar products.

## **Tax Incentives**

The Inflation Reduction Act (IRA) provides significant tax incentives to help property owners pay for energy efficient improvements in an effort to reduce carbon emissions by 40% by 2030.<sup>6</sup>

Check with your tax advisor to verify this information and whether your property will qualify. Tax professionals are still waiting on further IRS guidance on the IRA. As such, this information is subject to change.

## 45L Tax Credit - New Energy Efficient Home Tax Credit

Major residential renovations can qualify for a tax credit of \$500 to \$5,000 per dwelling unit, if the renovation is complete and certified to program standards. According to <u>Engineered Tax Services (ETS)</u>, in order for mixed-use buildings to be eligible, their square footage must be 50%+ residential. <u>Learn more about 45L from ETS here.</u><sup>7</sup>

### 179D Tax Deduction - Energy Policy Act Deduction

A sliding scale tax deduction based on the level of improvement in efficiency to your property, which must be documented by a qualified third party. If the renovation of a 4+ unit building improves its efficiency by at least 25%, the property owner may qualify for a deduction. Starting at 50 cents per square foot for 25% improvement, up to \$5.00 per square foot for 50%+ improvement in efficiency and meeting labor requirements. According to ETS, each percentage point increase in building efficiency results in a 2-cent increase in the deduction amount.

A building must be 5 years or older to qualify and the project must have a "qualified retrofit plan" certified by a professional engineer or registered architect. The deduction amount is capped at the plan's cost. The architect or engineer must do a final certification of the site's energy usage one year after completion. Learn more about 179D from ETS.<sup>8</sup>

#### **Business Energy Investment Tax Credit**

Commercial property, including rental property may qualify for a tax credit of 30% of the cost of the clean energy system. Most residential solar projects are under 1 MW in size and therefore do not need to meet the labor standards that are required by the IRA for larger projects. Verify with your tax professional whether your property qualifies. Learn more about the Business Energy ITC here.<sup>9</sup>

## Tax Incentives for Owner Occupied Property

If you occupy one of your rental properties, you may qualify for these tax incentives:

## **Energy Efficient Home Improvement Credit**

Owner occupants may be eligible for a yearly tax credit of \$1,200 or 30% of the cost of qualified efficiency improvements, whichever is less. This covers building envelope upgrades such as adding insulation and efficient windows. There is an additional tax credit up to \$2,000 for heat pumps, making the maximum yearly credit \$3,200. We recommend making a couple of improvements each year so that you can take full advantage of the tax credit. Energy Star outlines which home improvements are covered here.

### **Clean Energy Property Credit**

Under the Residential Clean Energy Property Credit, owner occupants can qualify for a tax credit equal to 30% of the cost of installing clean energy systems such as geothermal heat pumps, rooftop solar and battery storage.

You can use <u>this simple tool from Rewiring America</u> to see what incentives from the Inflation Reduction Act you may qualify for. As previously mentioned, double check all incentives with your tax professional.

## **State Rebates**

The IRA offers state energy offices funding to provide rebates for energy efficient improvements. These programs (listed below) are still in development and are expected to be available mid to late 2023. When available, the U.S. Department of Energy will list resources on these programs <u>here on their website.</u><sup>12</sup>

- Home Efficiency Rebate Program, also called the Home Energy Performance–Based, Whole–House rebate program
- Home Electrification and Appliance Rebate Program

## Incentives from your utility: Mass Save

Mass Save is an energy efficiency program sponsored by the major electric and natural gas providers in Massachusetts. There are incentives for single family, multifamily, and enhanced incentives for properties with low and moderate income owners or tenants. Properties with one to four units are considered single family and five or more units are considered multifamily. Mass Save incentives include:

- Free energy audits
- Free air sealing and insulation, and up to \$7,000 to address problems like knob and tube wiring or asbestos
- The opportunity to apply for 0% financing for eligible upgrades like heat pumps
- Rebates of up to \$25,000 on energy-efficient improvements that will help lower operating costs, such as occupancy sensors, low-flow fixtures, programmable thermostats, heating and cooling systems, water heaters etc.

Learn more about Mass Save incentives for 1–4 unit buildings <u>here.</u><sup>13</sup> Learn more about Mass Save incentives for 5+ unit buildings <u>here.</u><sup>14</sup>

#### **Major renovations**

Mass Save offers incentives to 1 to 3 unit properties that make energy efficient improvements during a major renovation. At least 50% of the property must be renovated in order to qualify and a Mass Save approved HERS® rater must inspect the property before construction begins. After completion they'll do a final inspection and issue funds in the form of a check. Learn more about the Mass Save Major Renovation program <u>here</u>.<sup>15</sup>



## Landlords with low income tenants

There are increased incentives for landlords with low and moderate income tenants. Rather than Mass Save, properties with income-eligible tenants receive incentives through Massachusetts Community Action Program Agencies (CAP Agencies) for 1 to 4 units or Low-Income Energy Affordability Network (LEAN) for 5+ unit buildings.

Program guidelines consider a multifamily income eligible if 50% or more of the apartments are at or below 60% of state median income. Tenants can complete <u>this free income verification</u> or reach out to SaveGreen@CapeAnnClimateCoalition.org to see if they qualify for any of the programs below. If so, the landlord will have access to incentives to make energy efficient improvements at little to no cost.

#### Moderate income incentives

Mass Save moderate income programs for 1 to 4 unit building include: <u>Enhanced Incentives for moderate income</u><sup>17</sup> <u>Enhanced Incentives for income eligible/low income</u><sup>18</sup>

#### Low income incentives

If 50%+ of apartments in your 1 to 4 unit building qualify as low income, you can qualify for free improvements through a local CAP agency, like <u>Action Inc.</u> in Cape Ann. (978) 281–3900. Find other local CAP agencies <u>here.</u><sup>19</sup>

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For buildings with 5+ units, <u>LEAN</u> offers a multifamily program that provides no-cost efficiency improvements to affordable buildings. Call 617-348-6425 to apply or ask questions on the program.

## **Financing Options**

#### Mass Save 0% Financing

The Mass Save HEAT Loan offers up to \$50,000 for energy-efficient home upgrades at 0% interest. The installation of heat pumps are eligible for up to \$50,000. Insulation and other energy efficient 21 improvements are eligible for up to \$25,000. <u>Apply for the HEAT Loan.</u>

### **Commercial - PACE Funding**

Property Assessed Clean Energy (PACE) is a financing option for commercial buildings, including multifamily properties of 5+ units, to make extensive energy efficient improvements. Offering financing terms up to 20 years for renovations where energy savings will be greater than the cost of the project, including any financing costs. Learn more about PACE Financing.<sup>22</sup>

### Local Funding

The city of Gloucester offers 0% interest loans to income eligible, owner-occupied properties of 1 to 7 units. The loan doesn't have to be paid back until the property is sold and can be used to improve the safety, accessibility, and energy-efficiency of the property. Learn more here.<sup>23</sup>

### Refinancing

Talk to your lender about a cash-out refinance to make energy efficient improvements. There are also energy efficient mortgages that can use the savings the improvements will provide to help you qualify for better terms because your debt-to-income ratio may be lower.

## The Plan

If a property is due for a significant renovation, that is a great time to tackle energy efficient upgrades. In fact, most building codes in Massachusetts will soon require a significant improvement in building performance during major renovations.

If the property isn't due for a renovation, it's best to create a plan that can be implemented over time as replacements are needed. If you have a plan in place before the water heater breaks, you won't have to scramble at the last minute to figure out the best replacement. You'll know exactly which high-performance water heater you want your contractor to install. This chapter will help you create a plan that follows four key steps:

**Step 1. Identify a base line** – Start by noting the age of all major systems in the property and schedule an energy audit.

**Step 2. Reduce** – Tackle the low hanging fruit by taking advantage of low cost efficiency measures to reduce energy usage.

**Step 3. Decarbonize** – Electricity has been identified as the most sustainable path forward. Electric systems are becoming the most cost effective upgrades, especially with the current financial incentives.

**Step 4. Produce** – Once you've reduced energy usage, you're ready to explore clean, renewable options. Even if that just means switching your electric supplier.

## **Step 1. Energy Audit: Identify Baseline**

#### What is an energy audit?

A professional energy audit will help you understand how much energy a property is consuming and how much is going to waste. The auditor will also outline what energy-saving upgrades could improve your building's performance.

They'll start by examining a year's worth of utility bills. If you're analyzing this yourself, be sure to track the amount of energy units used (kWh of electricity, therms of natural gas, or gallons of oil) not just the cost. This is the most accurate way to measure improvement because of the volatility of prices in power markets.

Next your auditor will complete a walk through to analyze the efficiency of major systems and perform diagnostic tests to identify where and how much air leakage is occurring throughout the building. When complete you'll have a good understanding of where the property loses the most energy and what improvements would save the most and provide the best return on investment.

## What incentives are available for energy audits?

Landlords can take advantage of free energy assessments through <u>Mass Save</u>, an energy efficiency program sponsored by the major electric and natural gas providers in Massachusetts.

After completing your free assessment, your energy specialist can also share what discounts and rebates the property is eligible for through the program. Improvements that are often discounted or incentivized include: occupancy sensors, water heaters, low-flow shower heads, faucet aerators, pipe wrap, programmable thermostats, insulation, air sealing, energy efficient heating and cooling systems. Properties with tenants who are income eligible or on fuel assistance may be eligible for increased savings. If your tenants are on fuel assistance or you know that they income qualify, reach out to <u>Action</u> <u>Inc. Energy Services</u> rather than Mass Save to schedule a free assessment. If you're unsure, you can contact Mass Save and they will direct you to the Community Action Agency if necessary.

There are also tax credits available for energy audits of owner occupied property as part of the Energy Efficient Home Improvement Credit detailed on page 8.

Many incentives, especially the tax credits that are outlined in the previous section, require energy audits and improvement in infiltration rates to qualify.

If you'd like a second opinion or a more in depth audit, RESNET provides a database of <u>certified energy auditors near you</u>. Be sure that the auditor you choose is certified and ask which diagnostic tools they use to determine how airtight a property is. Two important tests to ask for:

- Blower Door tests A large fan is secured in the exterior doorway to depressurize your property and measure the rate of air (infiltration rate) getting in through unsealed or uninsulated gaps.
- Thermal Imaging An Infrared camera is used to see temperature within walls. Cold areas appear darker and warm areas appear lighter, so that you can identify where insulation is missing and where air leaks are occurring.



**Blower Door Test** 

### Note the age of major systems

Part of identifying the property's baseline is taking into account the ages of all major systems within the property. This includes the roof, siding, windows, doors, appliances, hot water heaters, and HVAC systems.

Maybe your gas hot water heater is brand new but the siding on your property is due for replacement. Your plan would prioritize insulation and air sealing that can be completed while the siding is removed. It may make sense to wait until the hot water heater approaches the end of its life to upgrade to a more efficient model (more on this later.)

The age, quality, and efficiency of each system will shape your long term plan. Your energy auditor may also take the age of the building's systems into account to help you identify which improvements should be prioritized.

## Step 2. Reduce Usage

Now that you've determined energy usage and air leakage, it's time to reduce both. Many of the steps outlined below can be done now, regardless of the type of fuel you have or how old the systems in your home are. Taking simple measures to reduce usage will go a long way.

## Air Sealing & Insulation

Air sealing is the process of closing gaps and cracks in the building envelope with caulk, weather stripping, spray foam and other sealants. Areas usually in need of sealing include door frames, window frames, chimneys, recessed lighting, attic spaces, and any wall penetrations including plumbing, electrical and duct work.



Insulation is added inside walls or under exterior siding and roofing to keep air from escaping. Putting a stop to air leaks is one of the most cost-effective ways to reduce energy usage.

#### Why are air sealing and insulation important?

Energy Star states that the average home has air leakage equivalent to leaving a window open for 24 hours a day. Our older building supply in New England may be even worse.

Properties that aren't properly sealed are more susceptible to frozen pipes and ice dams. Air leakage causes HVAC systems to run more than necessary, overworking the system and shortening its lifespan. When it's time to replace the HVAC, money is then wasted purchasing an oversized system for a poorly insulated property.

An unsealed home also leads to uncomfortable tenants in drafty apartments, resulting in more turnover costs as they don't renew their lease. Additional benefits of an improved building envelope include reduced noise and less pests. Air sealing and insulation can make a huge difference, they're the 'low hanging fruit' of energy efficiency improvements.

#### How do I air seal and insulate?

Your energy auditor will identify where air sealing and insulation is needed in your property. Your auditor may be able to perform some free air sealing services themselves and/or recommend a Mass Save approved insulation company so that you can take advantage of incentives.

Insulation is measured by R value. The higher the R value the better the degree of insulation. If you have multiple types of insulation covering an area, you can add the R-values of each to get the total R-value of that wall. An air sealed home needs to be properly ventilated to prevent

mold, so be sure that your contractor is also adding or maintaining appropriate ventilation.

You may take into consideration the age and condition of systems while deciding what level of insulation to complete. For example, if you're already planning to replace the roof soon then that's a great time to add insulation while the roof is exposed. If the roof is newer then it may be best to add this step to the long term plan.

- Start by air sealing and insulating all the small gaps and cracks.
- Add additional insulation to your attic as recommended. According to Energy Star, Massachusetts attics should have at least R49 to R60 insulation.
- When the roof needs to be replaced, add insulation while it's exposed.
- When the siding needs to be done, add insulation while it's exposed. Energy Star recommends adding R5 to R6 wall sheathing under siding.
- During a major renovation make sure proper air sealing and insulation are completed throughout.

## Windows

Most property owners know that windows are a big investment. If it's not quite time to replace your windows there are still many things that you can do to improve the efficiency of your existing ones. Gloucester's Sustainability Coordinator, Gemma Wilkens says that property owners often assume that their windows are the cause of the draftiness that they're experiencing but once they air seal and insulate around the windows, they realize the actual window wasn't really the problem.



## If it's NOT time to replace your windows

If you complete air sealing and insulation and find that your windows still need improvement, here are some cost effective strategies that don't involve replacing the window.

- Install insulated cellular shades or another tight-fitting shade.
- Apply a Low-E (low-emissivity) film on the inside of your windows to stop heat transfer.
- If you have single pane windows, install low-e exterior or interior storm windows. Energy.gov states that this can produce similar savings to upgrading to double pane windows, at about 1/3 of the cost<sup>28</sup>You can find ENERGY STAR labeled storm windows at energystar.gov.

### If it IS time to replace your windows

If it is time to replace your windows, here's what to look for in an energy efficient window. Triple pane windows are the most efficient but they can be expensive. Double pane windows are next best. If the window has an Energy Star sticker that's a good sign.

To suit our New England climate, choose double pane windows with a low U-factor, the lower the U-factor, the more efficient the window is. You can look for windows with low-e coatings and argon gas insulation between panes. Single hung windows are also more efficient (and usually less expensive) than double hung windows. Be sure a qualified contractor installs your windows and air seals afterwards, because improper installation leads to significant air leakage.

> If you have single pane windows, Mass Save offers a \$75 rebate per window for upgrading to triple pane windows that are Energy Star certified.

## Doors

Just like windows, energy efficient doors are important to keep the building envelope tight. Insulated fiberglass doors with no windows and a low U-factor are the most efficient. If your existing doors are old but it's not quite time to upgrade, adding a storm door can be helpful.

Swinging doors are more efficient than sliding doors. If you need a sliding patio door, look for double pane glass with a low U-factor and gas insulation between panes, just like your windows. If it's not time to upgrade your existing patio door, improve the air sealing and weather stripping around the door frame and consider adding a low-e coating.

## Lighting

Energy Star states that LED light bulbs use 90% less energy and last 15 times longer than traditional incandescent bulbs. As a result, the average household saves about \$225 in energy costs per year by switching to LEDs, according to the U.S. Department of Energy.<sup>30</sup>

Installing occupancy sensors throughout your rental property can also make a large impact by ensuring lights aren't being left on while not in use. This will help keep energy bills down for the owner and the tenants, prolong the life of the bulbs, and improve safety and security on the property.

An energy auditor will usually inspect the lighting throughout the property to see if you use LEDs or not. If not, start by upgrading to LEDs and occupancy sensors in common spaces including exterior lights, security lighting, parking lots, basements, and any area where lights are left on for long periods of time. Another option is exterior lighting with automatic daylight shut-off.

## **Step 3. Electrify**

As technology improves and our electric grid becomes increasingly powered by renewable sources, electricity has become more efficient than directly burning fossil fuels according to Rewiring America.<sup>31</sup>Of course, the goal is to eventually be fully powered by clean energy, but in the meantime switching to high-performance electric systems can set your property up for success. You don't have to go electric all at once. As we've discussed you can make these upgrades as your current systems start to reach the end of their useful life.

## **Electric Panel**

When you start to electrify a property it's important to consider your long term plan. If your goals require a panel upgrade, you want to be sure that the panel and wiring will suit future plans, not just immediate ones. Talk to your contractor or electrician about properly sizing your panel for future improvements and ask them about pre-wiring for heat pumps, induction stoves, EV chargers, etc. which will be outlined later in this guide. Purchasing high-performance systems that lower your energy usage may in some cases help avoid the need to upgrade the panel. Either way, having a plan is important so that when your fossilfuel systems fail, you're prepared to upgrade to an electric system.

## According to Energy Star, electric panel upgrades may qualify for a tax credit under the IRA.

## Appliances

Modern kitchens are a big selling point in any apartment, so why not go with energy efficient appliances? Your tenants will save on energy bills and appreciate the upgrade. While you get to take advantage of the rebates and incentives, improve property value, make the apartment more desirable, and decrease turnover costs as your tenants renew their lease. Sounds like a win, win.

All appliances are required to have the EnergyGuide label which details on average how much energy they use compared to similar appliances. Not all types of appliances are rated by Energy Star, for example stoves are not rated. Look for dishwashers, refrigerators etc. that are Energy Star and they're more likely to be eligible for a rebate.

#### Induction Cooking

This isn't the electric cook-top that you're used to. Induction is magnetic, it cooks quicker and with more precision. It's one of the safest ways to cook because it heats the pan without heating the actual cook-top, so when the pan is removed, it's not hot. It's also better for indoor air quality.

According to Energy Star, induction is 3x more efficient than gas. Your tenants will need magnetic pans like cast iron and stainless steel, but those are common. If there is already an electric range then switching to induction will be easy, as the wiring is already there. If switching from a gas range, an electrician will need to install an outlet. Rewiring America states that a range (induction cook-top and oven combined) uses less space on your electric panel than a separate cook-top and oven.<sup>31</sup>



MASS Save offers a \$500 rebate for swapping out your natural gas or propane stove for induction.

Check for additional state rebates referenced on page 9.

### Refrigerator

If the refrigerator in your property is more than 10 years old, upgrading to an Energy Star model can lead to significant energy bill savings. This is because refrigerator technology has dramatically improved in recent years. Look for the Energy Star label when choosing a model.

If you're sticking with your current refrigerator for a while, have the coils cleaned twice a year to keep the refrigerator running at its best. You can also test the seal to make sure the refrigerator is airtight. Place a piece of paper in the door seal, if you can easily pull it out then it may be time to replace the seal or have the latch checked.

MASS Save offers no cost pick-up and removal of old inefficient refrigerators and a \$75 rebate on a new one.

Check for additional state rebates referenced on page 9.

### Dishwashers

When choosing a new dishwasher for your rental property, keep energy and water efficiency in mind. As a landlord, you're probably responsible for the water bill. Making water efficient improvements can result in significant savings for you. The Energy Star label is available for dishwashers and the U.S. Department of Energy states that on average an Energy Star Certified dishwasher uses 12% less energy and 30% less water than a standard dishwasher. You can even look for the "Energy Star Most Efficient Designation" to find the most efficient dishwashers.

#### **Clothes washer**

Like dishwashers, both energy and water efficiency are important when it comes to washing machines. According to Energy Star, full-sized washers that have earned the Energy Star label use 14 gallons of water per load, 34 compared to standard machines that use 20 gallons per load. Front load washers are more efficient than top load. Energy Star certified front load

washers use about 45% less energy and 50% less water than a top load washer. When comparing the efficiency of models choose one with a High Integrated Modified Energy Factor (IMEF) and a low Integrated Water Factor (IWF) for the most savings. If you're responsible for the water bill, this improvement will directly benefit your bottom line.

## MASS Save offers a rebate of up to \$150 on Energy Star certified clothes washers.

Check for additional state rebates referenced on page 9.

## **Clothes dryer**

Heat pump dryers use 20%– 60% less energy than conventional dryers according to the U.S. Department of Energy. They don't need to be vented outdoors, so it's easy to add them almost anywhere in your rental property. They will take longer to dry clothes than a conventional dryer because heat pump dryers run at a lower temperature. This also means less damage to clothes from the high temperatures. Look for an Energy Star labeled model with a high Integrated Modified Energy Factor (IMEF)

## MASS Save offers a rebate of \$50 on Energy Star certified electric clothes dryers.

Check for additional state rebates referenced on page 9.

### All-in-one

There are now models that combine a washer and dryer into a single machine. It will take longer to complete a full washed and dried load but it's easier. No need to wait around to switch it over. No more forgetting about wet clothes in the washer. These can be great for rental property and can save money and space only maintaining one unit.

## Heating and Cooling System

Of everything using energy within your property, heating and cooling systems use the most. That is why taking steps to properly air seal and insulate can significantly reduce energy consumption. Once this is complete, it's time to consider switching to heat pumps.

#### Heat Pumps

Heat pumps are a highly efficient, electric heating method that can heat and cool. They are designed to stay on constantly, run quietly and keep your property at a consistent temperature. The technology is similar to a refrigerator. Heat from outdoors is transferred inside using a refrigerant. Even in freezing temperatures there is enough warmth in the air to heat a home. In cooling mode, the system works in reverse, transferring the heat out of the home and leaving the indoor air cooler. This transfer of heat is much more efficient than creating it from burning fossil fuels.

According to Rewiring America, air-source heat pumps use 70% less energy than oil/gas burning furnaces to heat the same property. If your current HVAC systems are nearing the end of their life, switching to heat pumps will consolidate your heating and cooling equipment to one system. This will likely decrease total HVAC replacement and maintenance costs. If you're not currently providing a central air system for your tenants use, the addition of heat pumps will be a nice value add.

Heat pumps also eliminate the need for gas and oil on the property. Which from gas explosions to indoor air quality, have proven to be a safety and health hazard. Upon switching to heat pumps, electric bills may increase while gas/oil bills decrease or disappear. This will likely result in total net savings if the property has been properly air sealed and insulated. The electric bill can then be decreased further by switching to renewable energy.

#### Common types of heat pumps include:

- Ducted air-source heat pumps designed to heat and cool the entire home, can work with existing duct work from forced hot air systems.
- Ductless air-source heat pumps or mini-splits – Ductless indoor air handlers that can heat/cool individual rooms or an entire home with 4+ zones. They are a great solution for homes that don't have existing duct work.
- Ground-source heat pumps or Geothermal – among the most energy efficient and comfortable heating and cooling options available. Pulls heat from the steady underground temperature. According to the U.S. department of energy, these systems are quieter, last longer, and need less maintenance than air-source heat pumps<sup>37</sup>This quality does come with a higher price tag, but the generous incentives offered may bring Geothermal within budget.
- Dual-source heat pumps combine air-source and ground-source models to provide a more cost effective option to Geothermal. Dual-source heat pumps are more efficient than air-source heat pumps and cost less than full Geothermal.



**Air-Source Heat Pump** 



Ductless/mini-split Air-Source Heat Pump

### Heat pump pro tips:

- Look for 'cold climate' heat pumps for properties in New England.
- Install a smart or programmable thermostat designed to work with heat pumps.
- Heat pumps usually require a 200 amp electric panel.
- In coastal areas like Cape Ann, rinse off your outdoor heat pump every few months to remove saltwater.

Mass Save offers 1–4 unit property owners heat pump rebates up to \$10,000. This escalates to \$16,000 if the tenants income qualify. Landlords may be eligible for a separate rebate for each unit in the property.

Check for additional state rebates referenced on page 9.

## Water Heater

After heating and cooling, the second most energy intensive system on your property is the water heater. As part of your long term plan, decide on the water heater that will be installed when your tenant calls to say that all of a sudden there is no hot water. Planning ahead of time will help you avoid installing inefficient upgrades due to urgency.

Heat pump water heaters are the most energy efficient systems, followed by on-demand or tankless water heaters. Heat pump water heaters pull warmth from the air outside the tank to heat the water inside. According to the U.S. Department of Energy, heat pump water heaters need to be installed in a space that remains  $40^{\circ}-90^{\circ}$ F yearround. They also need at least 1,000 cubic feet of space around the water heater for air flow. Heat pumps can serve as dehumidifiers too, so they can be especially helpful in the basement.

## **Electric Vehicle Chargers**

Electric vehicle (EV) chargers are becoming a necessity for many Massachusetts residents. Providing this feature to tenants could help with resident retention, improve property value, and serve as a revenue stream. Plus, it could be FREE for landlords to install! Up to 100% of the cost of chargers and installation could be covered if your property is in an Environmental Justice (EJ) community.



Parts of Gloucester and Rockport are within EJ communities. These communities are determined by median household income and <sup>39</sup> percentage of minority population in the area. <u>Here</u><sup>39</sup> you can see if your property is in an EJ zone or reach out to Cape Ann Climate Coalition at <u>Landlords@CapeAnnClimateCoaltion.org</u> and we can help you figure it out. Even if your property is not in an EJ community, you could still be eligible for a 50% rebate on the charger itself and up to 100% of installation costs covered. Apply for this program <u>here.</u><sup>40</sup>

There are also tax incentives for EV charger installations. According to the IRS, the <u>Alternative Fuel Vehicle Refueling Property Credit</u> allows qualifying businesses a 30% tax credit, up to \$100,000 for the purchase and installation of EV chargers.<sup>41</sup>If your multifamily property is owner occupied, you may qualify for other homeowner tax incentives, see the Clean Energy Property Credit on page 8. Talk with your accountant to see if your rental property/business qualifies for any of these EV charger incentives.

## **Types of EV Chargers**

- Level 1 chargers included with the car, you plug this charger into a standard 120V outlet. This is the slowest charging method. You get about 5 miles per hour of charging according to the U.S. Department of Energy.<sup>42</sup>
- Level 2 chargers the most common charger installed on residential property. You get about 25 miles to 1 hour of charging, according to the U.S. Department of Energy, <sup>42</sup>allowing most cars to fully charge overnight or during the work day. These chargers typically require a 240V outlet and installation by an electrician. Level 2 chargers have J1772 connectors which are compatible with most EVs except Tesla. Tesla vehicles include an adapter to connect to non-Tesla level 2 chargers.
- Level 3 chargers also called Fast or DC Chargers give you about 100 to 200+ miles per 30 minutes of charging according to the U.S. Department of Energ<sup>42</sup>. These chargers are often found along busy roads or shopping centers. Customers can charge their car in under an hour while they shop or grab a bite to eat.

#### **Revenue from EV Chargers**

Just like laundry or parking, EV charging can be another revenue stream for your business. You can install chargers that require payment. Most of the payment systems have an app that allows customers to pay through their phone. You may even be able to offer it to your tenants as an amenity for free and just charge the public. If allowing the public to use the charger, you can add your charger to EV charger maps, such as Plugshare so that EV owners know there is a charger at your property that they can stop by and pay to use.

Electric vehicles are becoming the norm and adding chargers can be a huge value add to your rental property.

## Produce

Electricity has become more efficient than burning fossil fuels, according to Rewiring America and as we transition to more renewable sources, it gets even better. While installing solar panels on your property may be a great value add, it isn't the only way to use renewables.

### **Community Electricity Aggregation**

Gloucester has <u>Community Electricity Aggregation</u>. This means that the city has purchased electricity in bulk that can be distributed to residents, usually at a more affordable rate than standard utility rates. National Grid will still deliver the electricity but by switching to the 'Gloucester Local Green' supply, residents save over \$0.07 per kwh (kilowatthour). Rates subject to change. For the average customer in Massachusetts using 500 kwh per month, this equates to hundreds of dollars in savings per year. The Local Green rate also contains renewable energy certificates to support clean energy.

Community solar is another option. With community solar, residents benefit from solar without installing panels on the property. According to <u>EnergySage</u>, subscribing to community solar typically saves customers between 5 and 20% of their annual electricity costs. National Grid will still remain the electric provider and the customer receives credits from a solar farm to cover a portion of their bill. You can find community solar options in your area through <u>EnergySage's</u> Community Solar platform.<sup>46</sup>



Landlord Tip: Providing your tenants with these resources to lower their bills is an easy way to improve the landlord – tenant relationship and increase resident retention. It shows your tenants that you care about them and that your business values sustainability.

## **Rooftop Solar**

Solar can be a great way to further reduce operating costs and add value to your multifamily. Before adding solar, make sure you improve the efficiency of your property as outlined earlier in this guide. The idea is to reduce before you produce.



If the landlord pays for electricity, going solar can be a huge benefit. Most of the time the electric accounts are in the tenants name. In that case, the solar system will likely be connected to the common meter. A portion of the solar power will cover the common electricity to lower your operating costs. Then remaining solar credits can be distributed to each of the residents' electric accounts. If the credits don't cover their entire bill, the tenant is responsible for any additional usage.

This is one of many possible arrangements. It's important to work with a solar sales rep and real estate attorney who have experience in multifamily solar, to explore what the best set up is for your property. You can also talk with your team about whether solar battery storage (a newer technology) makes sense for your property. If you need recommendations for solar professionals contact Landlords@CapeAnnClimateCoalition.org.

Reduced utility costs is very appealing to tenants. You can't guarantee exact savings from solar but for example, if your solar panels generate enough electricity to take \$100 per month off of your tenants utility bill, your apartment will cost tenants \$1,200 less per year than others on the market. This may allow you to charge a bit more in rent while still passing along savings to the tenants or maybe the strategy is to keep rent the same and utilize solar as a resident retention tool. Solar can be a win, win scenario for tenants and landlords.

When marketing apartments with solar or energy efficient features. We highly recommend that you work with a GREEN Designated Realtor®. They are trained to appropriately market solar. You want to ensure that you're not falsely advertising/guaranteeing savings. In addition to all of the advertising and operational benefits to solar, the system can also add significant value to your property if you own or finance the panels. While panels that are rented or in a Power Purchase Agreement may still be appealing to a buyer, they can not add value during an appraisal because you do not own the panels. We typically recommend purchasing the panels, but talk with your team to see whether buying or renting is best for your property.

Whether you're installing solar panels on or just switching your electric supplier, renewable energy offers many benefits to consumers.

# High-Performance Improves Property Value

All of the improvements discussed throughout this guide have the potential to improve your property value if documented and marketed properly. When advertising your rental units or selling your property, hire a GREEN Designated Realtor®. They have pursued specialized education through the National Association of Realtors® to value and market the energy efficient and renewable features of a home. They can help you maximize on your return by utilizing tools such as:

- Certifications A third party certification is needed to qualify for some of the financial incentives but it also helps you get the value you've earned by making sustainable improvements. One of the best certifications for existing buildings is the Pearl Certification. An appraisal study found that homes in Boston marketed with a Pearl Certification sell for 5% more than similar homes that simply didn't have a certification. A certification is also a tool to communicate the improvements that you've made to potential renters. A GREEN Realtor R can help you determine which certifications would be right for your property and they may have access to discounted pricing.
- Value during a sale/refinance A properly marketed property can sell for a premium if the professionals that you work with know how to use the 'Residential Green and Energy Efficient Appraisal Addendum'. The addendum was developed to improve the appraisal process of valuing green homes but a typical appraiser may not be aware it exists. Your agent/lender can require that an appraiser who is properly trained on high performance properties is hired. They will calculate the value of the sustainable features that you've properly documented so that you can hopefully sell the property for more money.

The PV Value<sup>®</sup> tool<sup>48</sup> is a free service that calculates the value of owned or financed solar panel systems. It is compliant with the Uniform Standards of Professional Appraisal Practice, according to Energy.gov<sup>49</sup> and can be used when selling a home with solar. GREEN Designated Realtors<sup>®</sup> and qualified appraisers are trained to use this tool and can help you calculate the value of your solar system.

Energy savings and energy production are important in today's real estate market. This section outlines just a few of the many ways that these upgrades can add real value to your property. The importance of energy audits, documentation, and working with qualified professionals cannot be overstated. The proper steps must be taken to ensure energy efficiency and renewable energy are huge value adds to your property. Cape Ann has a strong community with a resilient history. We're surrounded by good neighbors who do their part to take care of the places where we live and work. Today, being a good neighbor also means lowering energy demand from the homes, income producing properties, and businesses that we own.

Cape Ann Climate Coalition (CACC) is a collection of local action groups consisting of over 300 members. Together they are exploring efforts to mitigate and adapt to climate change. CACC's Community Building & Education Group was awarded an EmPower Grant from Massachusetts Clean Energy Center (MassCEC) to support Cape Ann landlords and tenants in decarbonizing their buildings. A special thank you to MassCEC for making this guide possible.

Cape Ann Climate Coalition is here to help support our community. Reach out to Landlords@CapeAnnClimateCoalition.org for guidance on making your rental property more resilient.

## Find the most up to date version of this guide at CapeAnnClimateCoalition.org/RentalProperty

### Contact us:

Landlords@CapeAnnClimateCoalition.org



Facebook.com/CapeAnnClimateCoalition



Instagram.com/CapeAnnClimateCoalition



in LinkedIn.com/Company/Cape-Ann-Climate-Coalition



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