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# Home Energy Savings Tips

A Resource for Home Owners and Renters

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## No-cost Home Energy Saving Activities

### Heating and Cooling

- Turn down the heat.
- Turn down the temperature of your water heater to the warm setting (120°F).
- For fresh air, open windows all the way for 5-10 minutes. Do not leave the windows cracked open.
- Use your AC only when you are at home. Turn your fans off when you leave the room.
- Vacuum your radiators and filters.
- Close the fireplace damper when not in use. If no damper, fit rigid insulation board in opening.

### Appliances

- Shut off unneeded appliances.
- Start using energy-saving settings on appliances.
- Don't use a waterbed.

### Cooking

- Use the microwave instead of your stove to warm up food.
- Cook with a pressure cooker.
- Put a lid on your pots.
- Minimize pre-heating your oven.

### Refrigerator

- Vacuum your refrigerator coils regularly.
- Keep your refrigerator and freezer full.
- De-ice your refrigerator regularly.

### Laundry

- Switch to cold when doing your laundry.
- Wash full loads only.
- Use a clothesline.

### Dishwasher

- Wash only full loads.
- Air dry dishes (use 'no-heat dry').
- Only scrape dishes, don't rinse them before you put them in the dishwasher.
- Clean filter regularly.
- Use shortest cycle possible.

### Track your Savings

- Home Energy Yardstick: [http://www.energystar.gov/index.cfm?c=home\\_energy\\_yardstick.index](http://www.energystar.gov/index.cfm?c=home_energy_yardstick.index)
- Review your energy bills and compare this month's usage to the same month last year.

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## Inexpensive Home Energy Savings Checklist

### **Switch To Compact Fluorescent Lightbulbs (CFLs)**

- Last 10 times longer than regular bulbs.
- Will save \$30-40 over lifetime of bulb.
- Take 1-2 min to reach fullest brightness.
- Are less bright when it is cold.
- Should not flicker after 1-2 seconds.
- Not all brands are of equally good quality.
- Have a small amount of mercury: call your city about disposal.
- For a large selection of CFLs go to: [www.efi.org](http://www.efi.org).

### **Get A Programmable Thermostat**

- Suggested sample settings: 68° when home, 58° at night, 50° when not home.

### **Weatherstrip to Stop Drafts**

- Most effective way to reduce energy costs
- Will cost between \$10-\$50 at hardware store
- For more extensive air sealing, refer to: **A Do-It-Yourself Guide To Energy Star® Home Sealing**  
[www.energystar.gov/ia/home\\_improvement/home\\_sealing/DIY\\_COLOR\\_100\\_dpi.pdf](http://www.energystar.gov/ia/home_improvement/home_sealing/DIY_COLOR_100_dpi.pdf)

### **Get a Low-flow Showerhead and Sink Aerator**

- Average shower makes up 22% of the total water you use in a home.
- You can save about 1-2 gallons a minute by installing a low-flow aerator on you sink.

### **Insulate Your Water Heater, Pipes, and Ducts**

- Adding insulation to a water heater can save around 4%–9% in water heating costs
- Get pre-cut jackets or blankets for around \$10–\$20. Choose one with an insulating value of at least R-8.
- Insulate all your hot water and steam pipes. Use at least ¾” thickness for fiberglass pipe insulation and ½” for foam insulation (Don’t use foam on steam pipes, it can melt).
- Seal all your ducts with mastic (don’t use duct tape).

### **Weatherize Your Existing Windows**

- Use rope caulk on frames to seal leaks
- Put plastic over windows that won’t be opened to prevent drafts
- Install storm windows, either exterior or interior (a DIY project)
- Install insulating blinds or drapes on windows that will need to be opened.

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## Investments in Home Energy Savings Checklist

### **Insulate your Home**

- Should be very first larger home improvement!
- Pay back is 1-5 years. Average cost is \$1000-\$5000.
- Most effective insulator is cellulose (made from newspaper with fire retardant & bug repellent).

### **Replace your Refrigerator**

- Get a refrigerator that is Energy Star rated.
- Get the smallest size that fits your needs.
- Side-by-side fridges are least efficient. Fridges with the freezer on the bottom or the top are most efficient.

### **Buy a Front-Loading Washing Machine**

- Uses 40 to 60% less water
- Uses 30 to 50% less energy
- Uses 50 to 70% less detergent than most top-loaders.

### **Replace your Old Furnace or Boiler**

- System is oversized if it runs less than half the time in an hour during very cold weather.
- Insist on a heat loss analysis (it is sometimes called a ACCA Manual J)
- Look into getting sealed combustion system. These are more efficient and do not require a damper, draft hood, or chimney.

### **Replace your Water Heater**

- There are different hot water systems:
  - Storage Water Heater: Most common. There are always standby losses with tank systems. Minimize these by adding insulation or getting a well-insulated tank.
  - On-demand heater: only recommended if installed close to the area of use. Look for electronic ignition (no pilot light).
  - Combined Systems: these use your main heating system to heat up your water.
    - Tank-less coil water heaters: avoid, these systems tend to be inefficient.
    - Indirect water heaters: In combination with a new-high efficiency boiler, this is the most efficient system to heat your hot water (aside from a solar hot water system.)
  - Solar Hot water System: if you have an unobstructed roof with Southern exposure, a solar hot water heater might be very much worth the upfront investment. Also find out if you qualify for a rebate on such a system.

### **Window Replacement**

- Only replace your windows when you have insulated and air-sealed your house and replaced all your lights and appliances with energy efficient ones.
- New high-quality windows, if correctly installed are more energy-efficient
- Get double or triple pane windows with low-e coating and argon-filled glass.
- Get fiberglass frames.

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## Resources for Home Energy Savings

**MassSAVE:** (866) 527-7288, [www.masssave.com](http://www.masssave.com)

Enter zipcode and heating source for best list of resources. Call for audit, advice and access to programs and rebates.

**Gas Networks:** <http://gasnetworks.com/efficiency/applications.asp>

Rebates include: High efficiency heating equipment, high efficiency water heating equipment, windows, and thermostats. Available to customers of: Bay State Gas, NStar Gas, National Grid, Berkshire Gas, Unitil, New England Gas Company, and Northern Utilities Natural Gas.

**Oil, Propane and Electric Heat:** (866) 527-7288, [www.masssave.com](http://www.masssave.com)

Rebates include: High efficiency heating equipment, high efficiency water heating equipment, windows, and thermostats. Available to customers of: Nstar Electric and National Grid Electric.

**Energy Bucks:** [www.energybucks.com](http://www.energybucks.com)

Directs MA income-eligible residents to discounted utility rates, fuel assistance, no-cost energy audits and installation of weatherization materials.

**Energy Federation Inc.:** [www.efi.org/estarlights](http://www.efi.org/estarlights)

Discounts on energy saving materials and products. You must be a customer of one of the participating sponsors (National Grid, NSTAR Electric, Cape Light Compact, Western Massachusetts Electric) or live in a community served by a municipal electric company (Chicopee, Holyoke, Ipswich, Paxton, Shrewsbury, South Hadley, Wakefield, or Westfield).

**Energy Star:**

*Appliances:* (888) 782-7937, <http://energystar.gov>

Appliance ratings and additional information on energy savings.

*Rebates:* [www.myenergystar.com](http://www.myenergystar.com)

Check for MA rebates on light bulbs, lighting fixtures, room air conditioners, clothes washers, refrigerators, dishwashers, and dehumidifiers.

**Massachusetts 0% Heat Loan:** (866) 527-7288, [www.masssave.com/about/heat\\_loan.php](http://www.masssave.com/about/heat_loan.php)

If approved, can borrow up to \$15,000 for up to 7 years for improvements to an owner-occupied 1-4 family home.

**Tax Incentives Initiatives Project:** [www.energytaxincentives.org/consumers](http://www.energytaxincentives.org/consumers)

2009 Federal tax credit is available for many improvements including air sealing and heating systems. Credits for air sealing, insulation, new systems and renewable energy.

**Multi-Unit Buildings:** National Grid, (800) 889-0096; NStar (866) 757-2059

Provides services to the entire complex in coordination with the owner, property manager, or condominium association.

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