

# Wellesley Energy Action Guide

We are surrounded with opportunities to reduce our impact on our environment, save money and increase our energy independence.

Wellesley has adopted a goal to reduce emissions to 10 percent below 2007 levels by 2013. Achieving the goal depends on town-wide action. Individual households can save up to \$3,000 which is 12 tons of e-CO<sub>2</sub> each year.

Use the tips, tidbits and resources in this guide to Step Up (reference to the [RDF recycling program](#)) and put your energy into action.

**With Town-wide Participation** - Even small actions taken by **every** household can produce significant results

- ❑ Every house replaces 1 additional light with CFL – save 250 tons e-CO<sub>2</sub> per year
- ❑ Every house lowers winter thermostat 1 degree for 8 hours/day - 900 tons e-CO<sub>2</sub>
- ❑ Every house maintains proper tire inflation for their cars - 1600 tons e-CO<sub>2</sub>

**Persistent action can reduce a household's GHG emissions 50% over 5-10 years.** Achieving significant results all starts with a plan. If you can measure it, you can manage it

- ❑ [Calculate your baseline](#) with the online tool used in the Low Carbon Diet program
- ❑ [Analyze your home energy use](#) with this on-line tool

❑ **Make a home energy saving plan using one of these options**

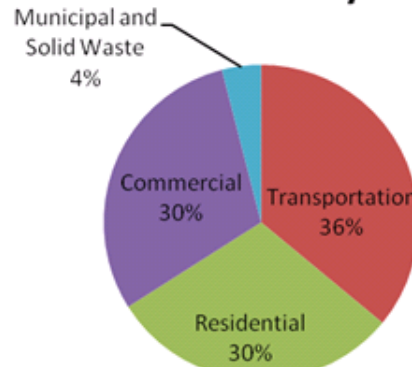
- Home efficiency made easy with professional help - [Next Step Living](#). This advanced home energy audit quantifies, prioritizes and implements changes during audit
- With some help - Wellesley Municipal Light Plant free energy audit from Energy New England. This basic home energy audit is educational for prioritizing your next actions.
- Do it yourself - Follow this resource guide, make a plan and get started

**Did you know!**

Wellesley resident's cars and homes account for more than half of town-wide emissions.

Wellesley 2007 Baseline emissions are

**2007 Emissions by Sector**



**Sources of CO<sub>2</sub> Emissions for a Typical Household**



**Persistent action can reduce a household's GHG emissions 50% over 5-10 years.  
Work your way around your home energy use**

**☐ Heating: 35% reduction**

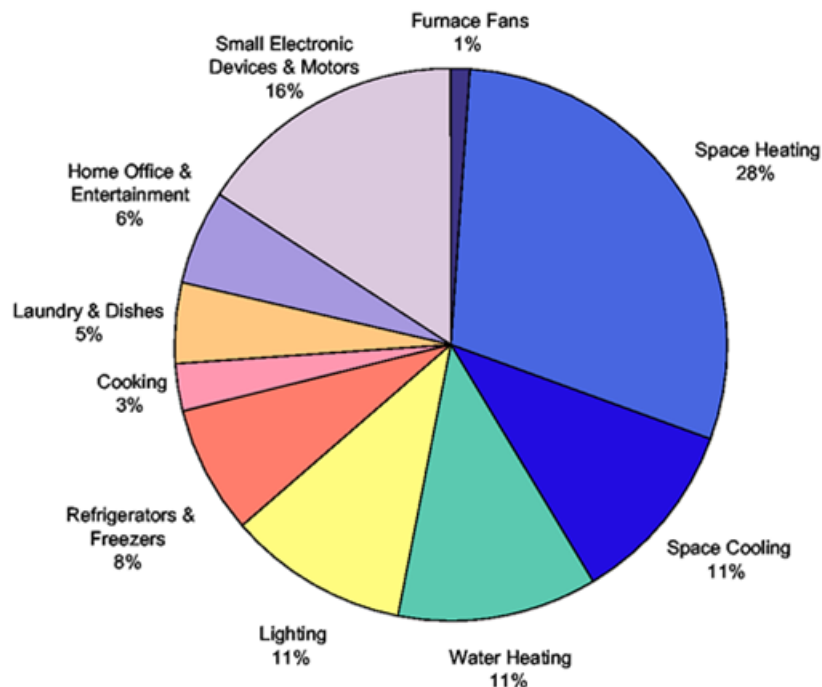
- Set your thermostat back 10 degrees for eight hours seal ducts and cracks
- Add insulation in your attic
- Switch from fuel oil to natural gas
- Replace 20 year old 65% efficient furnace with 90% efficient furnace ~28% reduction of heating

**☐ Space cooling:**

- Set your A/C thermostat up when possible, especially on the hottest days
- Cool your home in the evenings by opening windows and using fans

**☐ Water Heating:**

- Turn down thermostat to 120 degrees
- Replace 2.5gpm shower head with 1.5gpm ~40% reduction
- Insulate hot water pipes



**☐ Electricity: 35% reduction. Use the 15 tips below (source [www.GroundedPower.com](http://www.GroundedPower.com))**

| #  | Name                                                  | Estimated annual savings (kWh) | % of annual kWh |
|----|-------------------------------------------------------|--------------------------------|-----------------|
| 1  | Use power strips on home entertainment                | 350                            | 3.01%           |
| 2  | Use power strips on home computer system              | 180                            | 1.55%           |
| 3  | Reduce wattage in multiple bulb fixtures              | 130                            | 1.12%           |
| 4  | Use lighting controls or timers                       | 660                            | 5.67%           |
| 5  | Use CFL in indoor fixtures                            | 200                            | 1.72%           |
| 6  | Install EnergyStar indoor light fixtures              | 90                             | 0.77%           |
| 7  | Unplug your TV when not in use                        | 15                             | 0.13%           |
| 8  | Unplug your second refrigerator or freezer            | 670                            | 5.76%           |
| 9  | Install CFLs in your outdoor fixtures                 | 240                            | 2.06%           |
| 10 | Set your LCD monitor to sleep instead of screen save  | 210                            | 1.80%           |
| 11 | Air dry dishes                                        | 190                            | 1.63%           |
| 12 | Use your dishwasher economy mode                      | 190                            | 1.63%           |
| 13 | Set refrigerator temperature 37-40F, 3-5F for freezer | 170                            | 1.46%           |
| 14 | Unplug your set top box when not in use               | 150                            | 1.29%           |
| 15 | Air dry clothes                                       | 800                            | 6.87%           |

## ❑ Electricity: Additional reduction

- Borrow a Kill-a-watt meter, which can be used to measure the energy consumption of your appliances both while in use and while in stand-by mode, from the Library or from the Municipal Light Plant  
<http://www.power-of-one.us/killawatt.pdf>
- Appliance replacement with the help of the [MLP Appliance rebate program](#), to ENERGY STAR qualified appliances - Make sure to check the appliance guide as Energy efficiency can vary 50% even within [ENERGY STAR rated products](#).



## Renewable Energy: Enroll in [MLP Voluntary Renewable Energy Program](#) –

- Use \$\$ savings from electricity efficiency and conservation to buy renewable electricity from MLP (10%, 25%, 50% and 100% options available)

### Did you know:



The charge from Wellesley's Municipal Light Plant for electricity, with 50% from renewable sources, is less than the "standard" charge for electricity from National Grid or NStar.

**Transportation is about 50% of typical household emissions.** There are opportunities to achieve 50% reduction

- ❑ Replace vehicle with most efficient vehicle in class
- ❑ Migrate to smaller class of vehicle
- ❑ Take public transport, rideshare or telecommute
- ❑ Redefine the SUV: There are often alternate solutions to large vehicles
- ❑ Learn more at [www.fueleconomy.gov](http://www.fueleconomy.gov)

### Did you know:

A gallon of gas (weighing 6.3 lbs) produces 20 pounds of carbon dioxide! This is true for ALL cars whether they get 50mpg or 15mpg.



- Reducing your gasoline use by ONE gallon is equivalent to recycling 80 plastic water bottles!
- Walking or cycling ½ mile trip instead of driving is equivalent emission reduction to turning off 15 lights (60 watt equivalent CFLs) for 10 hours.

## Find rebates and incentives:

- ❑ [National Grid](#) all the rebates that National Grid offers on energy-efficient equipment and to other great sites through which National Grid offers assistance (including MassSave and EFI)
- ❑ [MassSave](#) all the financial incentives available for purchases of high efficiency heating and cooling systems, home energy audits, weatherization (75% of the cost, up to \$2,000, for insulation and weatherization improvements to your home)
- ❑ ENERGY STAR [Tax credits](#) for energy efficiency

## Energy efficient products

[Energy Federation Inc.](#) Compact fluorescent light bulbs in every shape and size and multiple color temperatures, home energy monitors, and much more.

## Energy efficiency guides:

- ❑ ENERGY STAR offers a great [guide to finding the right light](#)
- ❑ [American Council for an Energy-Efficient Economy](#) offers a useful guide to learn and prioritize energy efficiency changes
- ❑ U.S. Department of Energy – [Energy Savers](#), tips on saving energy and money at home

**Did you know:**  
Compact fluorescent lights come in all shapes and sizes!



5 watts      5 watts each      15 watts

Buy these and more at [www.efi.org](http://www.efi.org)

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- ❑ To use the hyperlinks in this guide or forward to a friend go to [www.Power-of-One.us/EnergyAction.pdf](http://www.Power-of-One.us/EnergyAction.pdf)
  - ❑ Sign up for our monthly email to get more tips and learn about sustainable actions in Wellesley visit - [www.Power-of-One.us](http://www.Power-of-One.us)
  - ❑ Please send any comments or questions about this guide to [info@power-of-one.us](mailto:info@power-of-one.us)

**Thank you from the Green Ribbon Study Committee**