

Part 1 - Electricity in the Home

Much of the difficulty in reducing our impact on the planet comes from habits we have had since we were kids. It wasn't that long ago that Americans prided themselves on their thrift and frugality, their 'conservatism' when it came to resources. It's that instinct that we need to draw upon as we make more deliberate choices to cut back on energy consumption.

The following score card is designed to help you identify actions you can take to make a difference. We know that the point system is not scientifically based, but we hope it gives you a sense of the relative importance of things. We welcome your feedback, your suggestions, and your success stories!

- We use compact fluorescent, T-8, T-5 or LED lights in our home 10- 50% +2 points; 50-100% +3 points _____
- We have Phantom Loads in our house (stereo/TV, garage, cordless phones, computers, printers, microwave oven); 1-4 loads: -2 points; 5 or more: -4 points _____
- We leave equipment on when no one is using it, or when we are away -5 points _____
- We use holiday lights: LED 0 points, 1-2 strings -1 point ; 3-6 strings -3 points; light up the house, yard,night sky -10 pts _____
- We use high-energy personal care appliances (i.e. hairdryer, curling iron, iron) -3 points each _____
- We have EnergyStar appliances (fridge, dishwasher, washer/dryer, stove) +1 point for each appliance _____
- We dry our clothes on a clothesline, 10-50%: +2 points; 50-75% +3 points; 75-100% +5 points _____

Just one compact fluorescent lightbulb (CFL) can reduce emissions from a power plant by more than 450 pounds over its lifetime. That's one heavy bulb!

Switching to high-quality CFLs will save you significant money off your electricity bill, too. But don't stop there. Most appliances suck electricity from the system when they are plugged in, even when they're 'off'. Adding a power strip, unplugging your appliances, using alternatives to electricity, and using more efficient appliances are all really smart ideas.



Part 2 - Heating and Cooling

As much as half the energy used in our homes goes to heating and cooling – so if you want to make a big impact, this is the place to look. The “building envelope” is the barrier separating the inside of your home from the environment outside. Cold, heat, water, wind and sun are what create our ever interesting New England weather and are the elements the envelope should prevent from getting inside our homes. Insulation, air sealing, and the size, quality and placement of windows are what determine the performance of the “thermal envelope”. Having an energy audit done on your home is a great way to find out how to reduce energy consumption and cost. (Check out www.repa-nh.org to find an auditor near you.) Installing properly sized and efficient heating and cooling equipment is also extremely important, as is maintaining that equipment through annual cleaning and servicing.

Because heating and cooling are such a major part of our home's energy demand, energy auditors pay a lot of attention to heating and cooling appliances, insulation, and air leaks. Heat flows naturally from warmer places to colder places – so unless it is 70 degrees outside, our homes have to work (using energy and/or good materials and design) to maintain a comfortable temperature.

- We have effectively insulated our walls to at least R-25 and our attic or roof to at least R-49, +50 pts _____
- We have windows with a U-value below 0.30, +30 points _____
- We have our heating system serviced and cleaned annually, +10 points _____
- We have a timer on our thermostat, +15 points _____
- We use insulating window coverings,+ 10 points each window _____
- Our heating ducts are properly sealed to increase efficiency, +10 points _____
- We use air conditioning in our home -20 for each unit, -50 for central air _____
- We have had a blower door test and sealed all important air leaks in our home, +50 points _____
- We have a relatively efficient furnace installed <5 years, +10 pts _____
- Our furnace is 25 years old (or more) , -40 pts _____

Part 3 - Reduce, Reuse, Recycle

What we buy and what we throw out have big impacts on our energy and environmental systems and can vary widely from household to household. Pay attention to packaging, what part of the world your food and other supplies come from, and how good you are about reducing, reusing and recycling.

We recycle all our paper, aluminum, plastic, glass, 1 point for each material you regularly recycle	_____
We are good about recycling toner, paint, plastic bags, used electronics, etc., 1 point for each material	_____
We buy used items rather than new whenever they are available (clothing, books, household goods, furniture), 3 points	_____
I recycle at work and encourage my co-workers and management to meet 100% participation, 5 points	_____
We compost kitchen scraps and other biodegradable stuff, 3 points	_____
We compost yard trimmings rather than take them to the dump, 3 points	_____
We consistently use non-toxic cleaners and pest control in our home and garden, 5 pts	_____
We buy locally grown and/or organic food, 5 points if usually, 2 points if sometimes	_____
We grow our own food 3 points if it's a hobby, 5 points if you grow enough to store some for the winter	_____
We eat at restaurants once or twice a month, -5 points	_____
We eat at restaurants more than twice a month, -10 points	_____
We do not have a lawn to mow/maintain, or we use a hand-mower, 3 points	_____
We use an electric mower, -1 points per 1/4 acre mowed	_____
We use a gas-powered mower, -7 points per 1/4 acre mowed	_____
We add to our local landfill, -1 point per # bags per week	_____
We regularly talk to our local, state and federal representatives about energy issues, 5 points	_____

Part 4: Transportation

Transportation uses a lot of energy, in fact it accounts for about 40% of the energy used in the Granite State each year. For those travelling by plane, consider this: one cross country trip puts 1 ton of carbon into the atmosphere - per person. Think about that next time you plan a vacation.

We bike or walk to work more than half the time, +50 points	_____
We use public transportation or work from home at least half the time, +30 points	_____
We drive <10 miles to and from work each day, +10 points	_____
We drive a hybrid, low-emissions, or alternatively fueled car, +20 points	_____
We use airplanes to travel for business or vacation, -25 points per person per flight	_____

Part 5: Technology

There are many technologies being adopted by homeowners to produce their own energy. As carbon-based energy costs increase, these technologies become more cost-effective. The suitability of these technologies to your home depends on many factors, and we encourage you to consult with an energy professional. Check out NHSEA's consumer guide to find a professional near you.

Water conservation showerhead, low-flow toilets, + 2 points each	_____
We have a home with Passive Solar Home Design, +50 points	_____
Solar Hot Water heater, +25 points	_____
We use geothermal heating and cooling, +40 points	_____
We have a Net Zero Energy Home, +100 points	_____
We have an Energy Star home, +40 points	_____
Composting toilet, +10 points each	_____
We use renewable fuel for heating, +40 points	_____
We use a heat exchanger or other air recovery system, +10 points	_____
We use Green Power from our utility, +1 point for each percent used by the house	_____
We use PV and/or wind to power our home, 10-30% total energy used: +30 points; 30-75%: +40 points; >75% +50 pts	_____
We purchase Green Tags/Renewable Energy Credits to offset our emissions, +1 point for each percentage point offset	_____
Home size: 1000-1300 sq ft -10 points; 1300-1800 sq ft -15 points; >1800 sq ft -25 points	_____

Total _____

The NH Sustainable Energy Association's mission is to educate NH citizens and organizations about sustainable energy, and to advocate in New Hampshire for favorable sustainable energy policies. For more information, visit us on the web at nhsea.org.