Member Benefit News

We are pleased to announce that the auto insurance discount available to our members has increased from 3% to 5% off the premium. For a list of participating insurance agencies visit www.reliance.org or call the Self-Reliance office at 508-563-6633.

Sustainability Tips: How to Cut Fuel Costs

Obviously driving less, using mass transit, biking, walking or purchasing a fuel efficient vehicle are the best ways to cut your fuel consumption. But for those times where driving a car is a necessity, here are some tips:

1. Don't be a jerky driver: Jumpy starts and fast getaways can burn over **50 percent** more gasoline than normal acceleration. Use cruise control once accelerated.

2. Drive slower: According to the U.S. Department of Energy, most automobiles get about **20 percent** more miles per gallon on the highway at 55 miles per hour than they do at 70 miles per hour.

3. A well maintained car (oil change, fuel filters, tire pressure, alignment) gets an average of **10 percent** better fuel efficiency.

4. Turn off your engine if you stop for more than one minute. (This does not apply if you are in traffic.) Restarting the automobile will use less fuel than idling for more than one minute. **It's the law in Massachusetts!** Massachusetts General Laws, Chapter 90, Section 16A, states that "No person shall cause, suffer, allow or permit the unnecessary operation of the engine of a motor vehicle while said vehicle is stopped for a foreseeable time period in excess of **FIVE** minutes." This means that if you expect to be stopped for more than five minutes, you must turn off your engine or risk getting a ticket with fines up to $100 for the first offense and up to $500 for each subsequent offense. Plus, turning your engine off helps reduce air pollution.

5. Decrease the number of short trips you make. Short trips drastically reduce gas mileage. If an automobile gets 20 miles per gallon in general, it may get only 4 miles per gallon on a short trip of 5 miles or less.

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Learn your home's potential for solar energy through a Solar Site Assessment

Since 2002, Self-Reliance has proudly facilitated photovoltaic system installations in our region. In 2004, Self Reliance became a partner of the US Department of Energy Million Solar Roofs Initiative, with the goal of facilitating 510 solar installations in the region by 2010. We are pleased to announce that we have met and surpassed our goal with a current count of 533 installations!

In 2008 the new Commonwealth Solar Initiative was introduced. This Initiative offers a revised rebate program that supports the installation of photovoltaic systems up to 10 kilowatts (5 kW for residential applications).

These rebates are funded from the renewable energy funds that are collected as a 1/10-of-a-cent charge per kilowatt-hour on all Massachusetts electric bills as well as the alternative compliance fee collected from electricity companies that don't meet the renewable portfolio standards (RPS). The RPS, created by Massachusetts electricity utility restructuring legislation, specifies that 1% of electricity be generated from renewable sources in 2003, with the percentage increasing by 0.5% per year thereafter through 2009. Thereafter, the annual percentage increase is 1% per year, until suspended by the MA DOER.

Self-Reliance works with reputable, locally-based solar installers to conduct the site evaluations and to present you with recommendations for moving forward with a system. Our solar evaluators will thoroughly assess your available south-facing, unshaded roof space, and your electricity demand so that they can propose the best system to meet your needs. We have outlined a sample of system sizes and average costs for a standard installation with the available tax credits and rebates.

The photovoltaic systems typically installed are "grid-tied." This means they are connected to the utility grid through your electric panel. As the sun shines, the collector array on the roof makes direct current (DC) electricity. This current passes through the inverter, mounted next to your electrical panel, to become alternating current (AC), which is what most appliances in your home use. When your system is producing more electricity than you are consuming, the electricity is fed back into the electrical grid for use elsewhere and your meter spins backwards. This is called "net metering" and allows you to sell your PV system's excess generation. At night, when no solar power is produced, your electric meter spins forward as you use electricity. In Massachusetts the electricity company reads your meter monthly and charges you for the amount it has spun forward.

You are probably wondering just how much energy the system would produce for you. A 1.5-kilowatt photovoltaic system of 1500 watts will produce around 2190 kilowatt-hours (kWh) per year. The average home in our area uses 500 kWh per month, or 6000 kWh per year! But because everyone's habits and consumption are different, we recommend that you have a comprehensive site evaluation done to determine if you have a suitable site, what you average electric consumption is, the recommended system size for your roof, based on your budget and roof space.

Before you consider a solar system, you should invest in energy efficiency for your home. **For every dollar spent on energy efficiency, you save three to five dollars in renewable energy costs.** We strongly recommend that you have your

continued on page 2