



## *Everyday Environmental Stewardship*

### **Buying Green Energy**

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#### **Key issue:**

How Can I Supply Green Energy  
for My Home?

#### **Stewardship Opportunity**

Reducing Carbon Footprint

Most of today's electricity in Massachusetts comes from coal, oil, and natural gas power plants. Although fossil fuels can be burned cleanly, these power plants are loud, dirty, and often use obsolete technology. Even under the best of circumstances, "clean" is relative, and in any event is not a product of *renewable* sources.

Currently, green energy is somewhat more expensive to produce than fossil fuels. However it is much much cleaner, and comes from renewable resources. Buying green energy helps develop future green technology, reduce costs by virtue of increased volume and, at the same time, drastically reducing one's carbon footprint.

Four of the five largest electric power plants in Massachusetts rely on fossil fuels (The hydro plant at Northfield Mountain, ranked 3rd, is the exception). **Brayton Point** (pictured at right; near Fall River), the state's largest power plant, relies on natural gas, petroleum, and coal. With a capacity of 1,538 megawatts, it is more than twice the size of the Pilgrim Nuclear Power Plant (Plymouth). Renewable fuels (wind, solar, hydropower) produce no green house gasses (CO<sub>2</sub>) and no byproducts of electricity production (Nuclear waste). They also eliminate SO<sub>x</sub>, NO<sub>x</sub>, VOTs, and gaseous mercury from being released into the air.



There are two ways to purchase renewable electricity: through your electricity distributor with green electricity programs and through Renewable Energy Certificates (RECs). National Grid offers the GreenUp program. NStar is in the process of creating a renewable energy program which will be available shortly. You can buy RECs from many renewable electricity providers no matter what electricity distributor you have.

### *Stewardship Opportunity #1 Buying Green Electricity*

Buying renewable electricity straight from your electricity provider is the easiest and simplest way to purchase renewable electricity. For a typical Massachusetts home that uses 500 kilowatt-hours per month, participating in a renewable electricity program will add on average \$7 per month. Suppliers and cost vary slightly and are explained below. All costs are IN ADDITION to your current electric bill, not instead of. Though it is slightly more expensive to buy green electricity, this cost can easily be offset by the use of Compact Florescent Lightbulbs —“CFLs”. (Go to [www.MIPandL.org](http://www.MIPandL.org) for an *EES* on CFLs. ) and/or by buying efficient energy star appliances such as refrigerators and dryers. You can buy renewable energy AND use less electricity at an economical advantage. This helps to save the earth in two very important ways.



#### **For National Grid Customers**

National Grid offers the **GreenUp** program.  
Enrolling in this program is very fast and easy.  
Visit the **GreenUp** website at

[http://www.nationalgridus.com/masselectric/home/energychoice/3\\_renewable.asp](http://www.nationalgridus.com/masselectric/home/energychoice/3_renewable.asp)  
and choose an energy provider. National Grid partners with three renewable energy power companies: Mass Energy Consumers Alliance New Wind Energy, and Sterling Planet. A description and contact info for each of the three companies is below. It is necessary to have a copy of your electricity bill because you need your account number and the four letter prefix shown under the account number in order to sign up to either of the first two programs.

The three companies participate in the **Clean Energy Choice** program of the Massachusetts Technology Collaborative (MTC). MTC will match your contributions with up to \$2 per your \$1 premium. The money will go to clean energy projects in your town and toward low-income communities in Massachusetts.

Call **Mass Energy Consumers Alliance** at 1.800.287.3950 or go online to sign up

<http://www.massenergy.com/Green.GS.html>

Electricity is provided from wind (.2%), solar (.4%), low impact hydroelectric (68.55%), and biomass (30.5%) sources. The extra cost is 2.4¢/KWH for 100% generation and 1.2¢/KWH for 50% generation. Mass Energy has a New England based renewable content of 25%. This is higher than all other New England based renewable content for MA electric companies. MassEnergy is also MIP&L’s partner for its oil-buying group for congregations and congregants, and in providing a *bio-fuel* option.

Call **New Wind Energy (Community Energy)** at 1.866.WIND.123 or go online

[http://www.newwindenergy.com/buywind/home/mass/step2\\_mass.html](http://www.newwindenergy.com/buywind/home/mass/step2_mass.html)

to sign up. Community Energy also has mailings in National Grid electricity bills every six months notifying you of their services. Electricity is provided from new wind (30%) and low impact hydro (70%) sources. The extra cost is 2¢/kWh for 100% generation and 1¢/kWh for 50% generation. Community Energywind power comes from New York state.

Call **Sterling Planet** at 1.877.457.2306 or go online to sign up

<http://www.sterlingplanet.com/MA/buyMass.php>

Sterling Planet source is wind, landfill gas and small hydro, in roughly equal parts. The extra cost is 5¢/kWh, at a fixed amount of \$7.50/month for the 150 kWh option.

Enrolling with either of these companies is a great improvement from the regular MassElectric electricity service. GreenUp is offered in the service areas of MassElectric and Nantucket Electric which are part of National Grid. If you decide to stop participating in GreenUp, simply notify your GreenUp renewable energy company directly. You will not be charged a termination fee.

### **Municipal Electricity**

Some municipal utilities are considering or have already implemented various forms of renewable energy for their customers. In the case of the Concord Municipal Light Plant, customers can choose to purchase some of their electricity from a nearby low-impact hydroelectric facility. If you have municipal electricity, call your town's public works and find out if they offer green electricity. If not, then you can still buy green energy through RECs.

### **For Other Electricity Distributors**

*NStar* is in the process of developing a green electricity option like GreenUp of National Grid. Watch your electricity bills and advertising from NStar. This should be available in the next few months.

### **Unitil**

Unitil currently does not and is not planning to offer any renewable electricity options. Customers who wish to buy renewable electricity should buy it through RECs.

### **Western MA Electric**

Although Connecticut Light and Power has a partnership with GreenE suppliers in Connecticut, its Massachusetts company, Western MA Electric, does not offer any renewable electricity options. Customers who wish to buy renewable electricity should buy it through RECs.

### ***Stewardship Opportunity #2 Buying RECs***

Renewable Energy Certificates (RECs) are created when a renewable energy power plant generates electricity. Each certificate represents all of the environmental benefits of a specific quantity of renewable generation, usually 100-150 kWh. What you pay for when you buy renewable energy certificates is the benefit of displacing other nonrenewable sources from the electric grid. If you buy an REC for 150 kWh, then that amount of electricity is put on the national electricity grid. This electricity may not directly go

towards your home, but you may credit yourself with buying and using it. You can purchase renewable energy certificates (RECs) regardless of where you live and regardless of your electricity provider.

## **REC Providers in MA**

### **New England Wind Fund**

Visit <http://www.newenglandwind.org/wind/about.intro.php> for more information.

Massachusetts Energy Consumer Alliance began the New England Wind Fund in the summer of 2006 in order to develop and finance support more wind power in New England. Financial support to the New England Wind Fund is 100% tax deductible and is recognized as a charitable donation to MTC for buying RECs. MassEnergy also participates in GreenUp.

### **New Wind Energy (Community Energy)**

In addition to participating in GreenUp, Community Energy offers RECs. These RECs come from the same electricity as their GreenUp program. Community Energy is developing wind farms in New England. However, until these farms are built the electricity comes from wind farms in the Mid-Atlantic. This electricity is 100% wind power. Signing up is easy and includes going to the website at [http://www.newwindenergy.com/buywind/home/new\\_england/step2\\_newengland.html](http://www.newwindenergy.com/buywind/home/new_england/step2_newengland.html).

You buy RECs in blocks of 100 kWh with a two block minimum. Each block costs \$2.50 for an added cost of 2.5¢/KWH. New England Wind adds that amount of electricity grid.

### **Sterling Planet**

Sterling Planet's national REC program offers electricity to any customer whose electricity distributor does have a partnership with Sterling Planet. RECs are bought in 1,000 KWH blocks at \$15 per block for an added cost of 1.5¢/kWh. Customers can choose among 100% wind, 100% low-impact hydro, and 100% landfill gas. Sterling Planet also sells RECs from solar energy as well. These are five times more expensive at \$15 for 200 kWh. Contact

[http://www.sterlingplanet.com/buy\\_national\\_offer.php](http://www.sterlingplanet.com/buy_national_offer.php)

As with the GreenUp program, MTC will match your donations with two equal grants (both equal to your donation) for your town or city to develop renewable energy and to fund renewable energy for low income residents. The **New England Wind Fund** will work with your town to raise matching funds. They can attend meetings, give materials and resources, and help plan ways to leverage funds. Call 800.287.3950 ext. 129 more information.

Joining the New England Wind Fund gives crucial support for future wind projects. This is providing energy for the future. Mass Energy also provides all members with Energy Efficiency information and discounts on money saving products.