

Communities that join the Challenge will receive: (cont'd)

- ENERGY STAR Leaders – for a demonstrated average reduction of 10% or more across all buildings.
- ENERGY STAR Label – awarded to buildings performing in the top 25% according to the National Energy Performance Rating System.
- EPA New England will organize additional recognition activities, including, but not limited to: media events to highlight progress; case studies posted on the web; and articles in general and trade publications.
- EPA will also circulate a Community Energy Challenge newsletter, which will include information on upcoming training opportunities, community news, and success stories.
- EPA will encourage members of our extensive partner network, notably regional utilities, and energy service and product providers, to help Challenge participants implement their energy efficiency plans.

How much does this cost?

EPA does not charge any fees to join the Community Energy Challenge. However, any costs incurred during the process of improving energy efficiency are the responsibility of participants. In addition, in order to receive an ENERGY STAR label for a building, that building must both receive a rating of 75 or greater using ENERGY STAR's Portfolio Manager tool AND the building must also be evaluated by a professional engineer (PE). Any costs related to use of a PE must be borne by participants. Participants may use in-house engineering expertise, however, that engineer must be allowed to practice in the state where the building is located.

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Community Energy Challenge:

Promoting Energy Efficiency and Renewables in
New England Cities and Towns



EPA challenges all New England communities to save money and reduce air pollution by assessing their energy use, taking action to improve energy efficiency, and seeking out renewable energy choices. EPA provides technical assistance to every community that joins the Challenge!

Participants assess energy use in schools, municipal buildings and/or wastewater/water treatment facilities. Energy use reductions of 10% or more earn ENERGY STAR® recognition. EPA offers free training and technical assistance.

The Community Energy Challenge is an opportunity for municipalities across New England to identify simple and cost-effective measures that increase energy efficiency and renewable energy use while reducing air pollution and saving money.

Communities that take the Challenge in 2009 agree to:

1. Return a Community Energy Challenge letter to EPA New England with a commitment to improve energy efficiency by at least 10%. Mayors and town managers representing communities across the region can sign onto the Challenge on behalf of their municipalities with our commitment letter, found online at:
www.epa.gov/region1/energychallenge/

Please note that prospective participants should gather at least one year's worth of data for at least one of their buildings prior to joining.

2. Establish an energy task force to help assess the community's energy needs. Municipal energy task forces, made up of residents, municipal staff, and/or elected officials, can help track progress in the Challenge. This group can promote energy efficiency and

renewables to citizens, companies and organizations in the community.

3. Benchmark the energy performance of all municipal buildings, schools and/or drinking water/waste water treatment facilities in the community.

4. Become an ENERGY STAR Change the World Pledge driver.
www.energystar.gov/changetheworld

5. Participate in the national ENERGY STAR Challenge and sign on as an ENERGY STAR partner.

Why are Energy Efficiency and Renewables so Important?

► Saves Money

New England has among the highest energy costs in the nation.

• New England's 1500 cities, towns and associated districts together spend nearly one billion dollars every year on energy for buildings.

Accessible and Achievable

Every community has opportunities to improve energy efficiency and increase use of renewables cost-effectively today.

• ENERGY STAR® buildings perform about 35% better than average.

• Savings of 10% or more are well within the reach of every community and school district through behavior changes, sensible management changes and cost-effective upgrades using proven, existing technologies.

• A 10% reduction across New England's municipal and school buildings could save \$100 million, prevent billions of pounds of carbon dioxide emissions, and save enough energy to power tens of thousands of homes for one year.

• New England already offers a variety of renewable energy choices.

Please visit our Web site at:

www.epa.gov/region1/energychallenge/

continued ►

Why are Energy Efficiency and Renewables so Important? (cont'd)



Hanson, MA Town Hall
(photo credit: Marco Rivera)

For a map of the
EPA New England
Community Energy Challenge
Participating Communities,
please visit
[www.epa.gov/region1/eco/
energy/energy-challenge.html](http://www.epa.gov/region1/eco/energy/energy-challenge.html)

Community Successes

Community Energy Challenge participants have been working to reduce energy consumption. Some of the efficiency success stories seen in CEC communities include:

In **Somerville, MA**, the new Michael E. Capuano School uses 43 percent less electricity and 24 percent less natural gas than typical school buildings due to energy efficiency measures. These measures reduce energy costs to the city by \$60,000 each year.

Rochester, NH, one of New Hampshire’s first participants in EPA New England’s Community Energy Challenge, has become a model for energy efficiency in municipal operations. Rochester began a multi-phase, \$12 million project with Honeywell Energy Services in the mid-1990s to reduce energy consumption in municipal operations. The city saved \$4 million and was partially funded by \$7 million in state and utility aid. In addition, Rochester, with a contribution from Waste Management of New England, bought two hybrid vehicles for its Code Enforcement office. The city continues to expand its energy initiatives through the Rochester Energy and Sustainability Committee.

In **Waterville, ME**, the Kennebec Sanitary Treatment District improved its facility by installing a heat recovery system for its exhaust ventilation air. This and other upgrades, made in 2007, paid off during the winter of 2007-2008 by saving the facility more than 20,000 gallons of fuel oil - or more than half its annual consumption - at an avoided cost of \$87,000 over historical prices.

Cuts Pollution

Energy use is the number one source of air pollution in New England and the nation.

- Electricity generation alone emits 48% of SO₂ and 8% of NO_x emissions in New England.
- Nationally, electricity generation accounts for 43% of mercury emissions and 40% of carbon dioxide emissions.
- Energy from renewable sources (such as wind, solar, etc.) emits fewer pollutants during production and use.

Reduces Strain on Limited Energy Supplies

Energy demand in New England has been growing at 1.5% per year.

- Energy efficiency can dramatically reduce the chances of price increases and supply disruptions. It is also the cheapest and most environmentally sound way to slow this increasing demand.
- Use of renewables helps diversify energy supply and supports domestic production.



Michael E. Capuano School,
Somerville, MA



Kennebec Sanitary Treatment District
building, Waterville, ME
(photo credit: Marco Rivera)

Change the World, Start with ENERGY STAR®

Joining the Community Energy Challenge is an important step to measuring and improving energy efficiency in municipal buildings. In many communities, town managers, mayors, municipal staff and energy task forces seek to expand the program and involve residents as well. One way to help local residents save money is through ENERGY STAR’s Change the World, Start with ENERGY STAR program.

Change the World, Start with ENERGY STAR is a national campaign from the U.S. Environmental Protection Agency (EPA) encouraging all Americans to join with millions of others and take small steps that make a big difference in the fight against global warming.

Participants sign a pledge, agreeing to take at least one action to reduce energy consumption. For more information, visit: www.energystar.gov/changetheworld



Communities that join the Challenge will receive:

- Targeted training and technical support in the use of the ENERGY STAR® Portfolio Manager benchmarking software. Assessing performance is the first step toward identifying opportunities to improve energy efficiency through better facility management, upgrades to lighting, HVAC, controls, and other building systems and equipment.
- Assistance in efforts to increase the use of renewable energy, through renewable energy credits and the development of small-scale renewable energy projects.

Why Benchmark?

- Using EPA’s Benchmarking tool helps a community establish an energy use baseline, making it easy to track improvements in efficiency over time.
- Benchmarking provides a uniform tool to compare progress across communities.
- Buildings that are benchmarked and achieve a certain level of performance receive recognition from EPA.

- It is easy to track further progress in improving energy efficiency in buildings that have been benchmarked, making possible further energy and financial savings.
- These improvements can help a community meet other environmental goals, such as a reduction in local air pollution and greenhouse gas emissions.

How will EPA help?

- EPA New England and EPA ENERGY STAR contractors will provide free, live web-based training in benchmarking and energy management, including follow-up technical support, to all participating communities.
- EPA New England will recognize community achievements under the Challenge and track overall progress.
- Participating municipalities may be eligible for national EPA recognition: