

A Change in Climate

By Mary Kadleck



Photo courtesy of the Town of North Hempstead

Local communities across New York find innovative ways to **GO GREEN**

“Green is the future,

and Schenectady wants to be a leader in that future,” says Brian Stratton, mayor of the upstate community once known as “the City that Lights and Hauls the World.”

Energy savings, renewable energy and green businesses are moving the former industrial powerhouse toward renewed technical prominence and prosperity, while reducing emissions of heat-trapping greenhouse gases and saving tax dollars. To the south along the Hudson River, the rural/suburban Town of Red Hook is also saving emissions and tax dollars, as its citizens become increasingly engaged in programs that are good for the climate.

In company with more than 40 other New York municipalities, Schenectady and Red Hook recently adopted the Climate Smart Communities Pledge, a commitment to systematically cut emissions of carbon dioxide and other greenhouse gases. From experienced “green” communities to those that are just getting started, New York’s Climate Smart Communities reveal the power of local action to solve climate change.

For Schenectady, declaring itself Climate Smart was a step along a path already charted. An aggressive energy efficiency performance contract now in its third year has streamlined the city’s operations and, to date, has prevented emission of more than a million pounds of carbon dioxide (the most common greenhouse gas). Money spent for energy-conserving LED traffic lights, an updated heating system for City Hall and other improvements is being paid back from the \$200,000 saved each year on electricity and natural gas bills.

For many Climate Smart Communities, a strong recycling program is the first step to saving energy and reducing greenhouse gas emissions—recycled materials do not require energy-intensive disposal, and take less energy to re-manufacture than virgin materials. On Long Island, North Hempstead targets schools, libraries and parks with a vigorous recycling program, an initiative of North Hempstead Supervisor Jon Kaiman (wearing red tie), pictured with students and school officials of the Manhasset School District.



Photo courtesy of the Town of Red Hook

Purchased with grant funding, these solar panels on the roof of the Red Hook Town Hall are on schedule to pay back the initial investment in about nine years, leaving the town with reliable energy at little or no cost and without greenhouse gas emissions.

From experienced “green” communities to those that are just getting started, New York’s Climate Smart Communities reveal the power of local action to solve climate change.

But that is only one of Schenectady’s ambitious green initiatives. The first-of-its-kind Green Homes program has gained national recognition for combining energy saving and affordability. And plans are in the works to “green” more city facilities and make low-carbon living available to more residents.

Mayor Stratton attributes the success of such a variety of projects in a short time to creative leveraging of city, state, federal and private resources by a large and diverse cast of characters: the Thinking Green Committee of community partners and design professionals; city staff; the regional NYSERDA Energy Smart Coordinator; local environmental groups,

and Schenectady County, which shares efficiency programs with the city.

“People are out there looking for ways to be green,” he says. There is a widespread understanding that a green economy could revitalize the city. The mayor notes that the city’s green initiatives are already attracting private development: Schenectady is home to the headquarters of the General Electric Company’s Global Renewable Energy business and will be the site of the company’s state-of-the-art battery manufacturing plant; the Golub Corporation will open an ultra-green headquarters building in the city, and several energy-related small businesses have recently located there.

Though Red Hook has largely avoided the stresses of de-industrialization, the Dutchess County community is just as determined as Schenectady to combat climate change.

“It’s evident that we all have to pull together to save energy,” says Red Hook Supervisor Sue Crane. Like Schenectady, Red Hook began greening itself about three years ago as an outgrowth of longtime work by concerned citizens. But the source of its climate initiatives was a deeply held “waste-not” philosophy.

“Our Conservation Advisory Council developed a recycling program for Red Hook, and those original efforts have evolved. The idea of not wasting became

and solar photovoltaic electricity (installed with an assist from a state grant) have led to such impressive reductions in energy bills and greenhouse gas emissions that the town is planning to add more panels to its solar array.

“Residents are fascinated,” says Supervisor Crane. Visitors to the town hall stop to read an educational display that explains how the solar panels work, and citizens and town staff alike express enthusiasm.

Meeting New York State's climate protection goal of reducing greenhouse gas emissions 80 percent by 2050 will require making homes, businesses and public buildings carbon neutral.

very focused, in me and in others,” the supervisor says. So Red Hook sponsors a goods exchange.

“When people drive in to offload recyclables,” says Supervisor Crane, “they drop off things for reuse—dishes, blankets, a chair or two, clothing—or they stroll over to see if there’s anything they can use. It’s a wonderful community gathering place, and people have become very committed.”

In keeping with its resolve that nothing should go to waste, the town turned its attention to energy, starting with its town hall. Weatherization, energy management,

“This has gone further than I ever dreamed when I took office,” she says. “I try to be careful with tax dollars and not overburden the paid staff—we’re stretched so thin. But there is a lot of cooperation on these projects, and that’s to the credit of both our volunteers and our staff. The people who have the new ideas are right there with the staff to get the work done.”

There is no “typical” way for a community to be climate smart, though nearly all municipalities that adopt the Climate Smart Communities Pledge do name a coordinator to investigate options and spearhead planning and projects.



Photo courtesy of the City of Schenectady

Schenectady is building affordably priced low-energy Green Homes to replace abandoned houses in older neighborhoods. Weatherized and super insulated, the four homes that are already occupied use (on average) less than half the energy of standard houses. Despite their specialized features, these homes actually cost less per square foot to build than traditional houses. The city is leveraging federal grant money to build the homes; an additional ten are currently under construction.

A number of Climate Smart Communities are working on emission inventories, reduction goals or climate action plans. For Schenectady, an initial goal of reducing greenhouse gas emissions by seven percent below 1990 levels was set in signing the 2006 U.S. Conference of

Become a Climate Smart Community

Many communities would like to save energy and emissions, but need a way to decide what to do and how to pay for the changes. Climate Smart Communities, supported by coordinators from NYSERDA, can help local governments find workable starting points, and then select, coordinate and fund “green” improvements.

To learn more about becoming a Climate Smart Community, contact the Office of Climate Change at (518) 402-8448, or e-mail us at climatechange@gw.dec.state.ny.us

Communities may find the following resources useful:

Climate Smart Communities guidance—www.dec.ny.gov/energy/50845.html

NYS Energy-efficiency clearinghouse—www.nyserda.org/clearinghouse

NYSERDA Energy Smart Community Coordinators—www.getenergysmart.org/

CommunityOutreach/EnergySmartCommunities.aspx

NYSERDA Focus on Local Government—www.nyserda.org/municipalities/default.asp



Photo courtesy of the Town of Irondequoit

Photo courtesy of the City of Syracuse



Photo courtesy of the City of New Rochelle



Syracuse's not-for-profit 'Cuse Cars program rents out low-emission cars for short-term use, which helps the city move toward carbon neutral transportation. New Rochelle's diesel hybrid electric garbage truck also helps in reaching a carbon-neutral future by costing less for fuel and emitting less greenhouse gas.

Mayors Climate Protection Agreement, and another round of goal-setting is imminent. Red Hook expects to use the outcome of its emissions inventory to set goals and begin a climate plan.

Conservation is a key element in communities' climate thinking. Even before an emissions inventory is available, most municipal governments can name some operating improvements that would save energy and greenhouse gases. Many of New York's Climate Smart Communities start by replacing inefficient boilers, light fixtures, and other energy-wasting equipment in municipal facilities. Some communities are beginning to green their vehicle fleets with cars, trucks and buses that use lower-carbon technologies or fuels. Behind the scenes, in Schenectady and other towns, improved maintenance is saving significant fuel and emissions.

Communities are reasoning that if they generate some of their own power from renewable sources, they will emit less greenhouse gas and enjoy greater security and predictability in energy price and supply. A few have completed renewable energy projects, often using the carbon-free energy to operate municipal facilities. Several other communities are considering renewable power generation as a way of turning closed landfills to productive use, following the example of the Town of Hunter where a horizontal windmill on the old landfill powers equipment that cleans landfill leachate to protect surrounding wetlands.

Meeting New York State's climate protection goal of reducing greenhouse gas emissions 80 percent by 2050 will require making homes, businesses and public buildings carbon neutral. Carbon

neutral buildings get utility and convenience from the smallest possible amount of energy, and tap carbon-free sources for the energy they do use.

While Schenectady works on energy-efficiency for new construction, other Climate Smart Communities have started the huge project of greening existing public and private buildings. The Town of Babylon's Long Island Green Homes program was the first in the nation to provide up-front funding for residents to increase home energy efficiency, with the cost paid back out of home energy savings. In western New York, the Town of Irondequoit partners with a nonprofit organization to help low- and moderate-income homeowners weatherize their homes and save money. Several other communities, including Red Hook, are exploring the possibility of providing up-front financing for home weatherization.

"We are all looking for conservation methods and innovation," says Red Hook Supervisor Crane. "We are excited about the financial and energy savings we've already realized. Our program is a wonderful evolution of an idea that has perked along."

Schenectady Mayor Stratton observes, "Green doesn't cost more if you really plan from the very beginning. When funding and assistance become available, you have to be ready with your ideas. You have to see what the future is, where the money's going, and when that happens you climb on board.

"This is very much part of the city's economic development program," he adds. "We continually try to do more and more with conservation and going green. Once you get into this green world, you don't want to go back to your old way."

Mary Kadlecsek works in the NYS Office of Climate Change in Albany.