Climate Smart Communities Profile

March 2014

Program Overview

The Climate Smart Communities (CSC) program is a New York State initiative to help local communities reduce greenhouse gas (GHG) emissions, prepare for effects of climate change and save taxpayers money. The program is designed to address 10 focus areas, or "pledge elements," outlined in the CSC Pledge: http://www.dec.ny.gov/energy/53013.html.

New York State is offering technical support to communities that have adopted the CSC Pledge. This profile provides a stepping stone for identifying a technical support service package to help the City of Schenectady progress through the 10 pledge elements (see below).

Detailed information on actions completed, in progress, and identified for future action is provided in the tables on the following pages. If a table is missing for a particular pledge element, it means that the CSC program does not have a record of actions taken to address that element.

SMART COMMUNITY

City of Schenectady

Local Government Facts:

Adopted Climate Smart Communities (CSC) Pledge: 2009

CSC Pledge Elements Addressed: 8 out of 10

Total Actions Completed: 22

Government Type: City

County: Schenectady County

Region: Capital District

Population: 66,135

Climate Smart Communities Pledge Elements:

- 1. Pledge to Combat Climate Change by Becoming a Climate Smart Community
- 2. Set Goals, Inventory Emissions, Move to Action
- 3. Decrease Energy Demand for Local Government Operations
- 4. Encourage Renewable Energy for Local Government Operations
- 5. Realize Benefits of Recycling and Other Climate Smart Solid Waste Management Practices
- 6. Promote Climate Protection Through Community Land Use Tools
- 7. Plan for Adaptation to Unavoidable Climate Change
- 8. Support a Green Innovation Economy
- 9. Inform and Inspire the Public
- **10.** Commit to an Evolving Process

Pledge Element 1: Pledge to Combat Climate Change by Becoming a Climate Smart Community

Action	Status	Description
Adopted CSC Pledge	Completed	The City of Schenectady adopted the Climate Smart Communities Pledge in 2009.
Energy Advisory Board	Completed	The Energy Advisory Board was created in May 2007 by Schenectady City Council Members Barbara Blanchard and Frank Maurizio after former Mayor Brian U. Stratton signed the U.S. Mayor's Climate Protection Agreement pledging to reduce the City's carbon footprint 7% by 2012.

Pledge Element 2: Set Goals, Inventory Emissions, Move to Action

Action	Status	Description
Government GHG Inventory	Completed	The Energy Advisory Board completed the City of Schenectady Energy and Carbon Footprint Review for municipal operations and the city as a whole. The baseline year is 2009.
Community GHG Inventory	Completed	The Energy Advisory Board completed the City of Schenectady Energy and Carbon Footprint Review for municipal operations and the city as a whole. The baseline year is 2009.

Pledge Element 3: Decrease Energy Demand for Local Government Operations

Action	Status	Description
LED Streetlights	In progress	The City is working to change their streetlights to LED, in cooperation with National Grid.
LED Traffic Signals	Completed	The City replaced all of the traffic signals (130) to LED.
Retrofitted all Diesel Vehicles	Completed	In 2012, the City retrofitted the exhaust systems of all diesel vehicles older than 2007. This was accomplished through a NYS DOT grant. The retrofit reduces emissions of nitrogen oxide (NOx), VOC's (HC) and particulate matter (PM) from high-emitting internal combustion engines.
Install Variable Frequency Drives at Water Treatment Plant	Completed	The City installed variable frequency drives at the water treatment plant which has improved energy efficiency. They also recently eliminated the diesel power well (they are switching to two generators), which will increase the capacity to power the wells.
Green Building at the Bureau of Services	Completed	The City constructed a new green building for the Bureau of Services.

Pledge Element 4: Encourage Renewable Energy for Local Government Operations

Action	Status	Description
Solar on Reservoir	In progress	The City has entered a Power Purchase Agreement with SolarCity, through funding from NYSERDA, for a solar field on the former reservoir at Beavis Road in Niskayuna (5-acre site). This site would be remote net metered and power the Bureau of Services building. At this time, this is the largest solar installation in the State of NY.
Install Co-Generation Plant at WWTP	Completed	Through a grant from NYSERDA the City served as a demonstration project to upgrade the wastewater treatment plant (WWTP) to use anaerobic digester gas in a high efficient combined heat and power (CHP) system. The DG-CHP project offers a viable path to diversify the energy mix with renewable fuels and locally available resources, such as wastewater treatment plants and landfills, that otherwise vent or flare methane containing fuels. Unique aspects of the project include not only innovative approaches to heat recovery which maximize energy efficiency but financing and operation under an energy service contract. The project was completed in 2012 and has reduced electricity costs \$30,000 a month, or \$1,000 a day.

Pledge Element 5: Realize Benefits of Recycling and Other Climate Smart Solid Waste Management Practices

Action	Status	Description
E-Waste and Bulk Items Collected curbside	Completed	The City collects e-waste and bulk items at all households weekly.
Yard Waste Collection	Completed	The City completed a compost pilot through Cornell Cooperative Extension.
Recycling Program	Completed	The City of Schenectady has a curbside recycling program. They would like to increase the recycling rate and are investigating PAYT, or a similar type of program (i.e., a proximity badge) that would decrease the amount of garbage while incentivizing increasing recycling.
Hazardous Household Waste Collection Days	Completed	Schenectady County holds hazardous household waste collection days in which the City can participate.

Pledge Element 6: Promote Climate Protection Through Community Land Use Tools

Action	Status	Description
Reduced impervious surfaces and parking maximums	Completed	The City adopted restrictions to the amount of impervious surface on lots and shared parking and parking maximums in all districts in the City.
Installed EV Charging Stations	Completed	The City installed 2 EV Charging Stations near City Hall.

Pledge Element 6: Promote Climate Protection Through Community Land Use Tools

Action	Status	Description
Traffic calming measures	Completed	Several areas of the City have been retrofitted with traffic calming measures, including Erie Blvd., State Street, and Lower State Street.
Schenectady ReTree Program	Completed	ReTree Schenectady is a non-profit organization dedicated to the planting, care, and conservation of current and future generations of trees in the City of Schenectady. Our goals are achieved by fostering community involvement through education and collaboration with local organizations and businesses. The City is a financial supporter, with an Urban Forester providing support to this Program.
Reduced restrictions on density in City Center	Completed	In 2008, the City updated its zoning code to reduce the restrictions on density in downtown Schenectady.
Safe Routes to School Program	In progress	The City applied for a grant for a Safe Routes to School program and sidewalk upgrades. This is a \$1 million program.

Pledge Element 7: Plan for Adaptation to Unavoidable Climate Change

Action	Status	Description
Wellhead Protection Plan	In progress	The City is preparing a Wellhead Protection Plan for Rice Road.
Address Vulnerabilities around Water Treatment Plant	In progress	The City is working to implement recommendations to address identified vulnerabilities around the water treatment plant.
NY Rising Pilot Community	In progress	The NY Rising Community Reconstruction program was established to provide additional rebuilding and revitalization assistance to communities severely damaged by Hurricane Sandy and/or Irene and Tropical Storm Lee. The NY Rising Community Reconstruction program enables communities to identify resilient and innovative reconstruction projects and other needed actions based on community-driven plans that consider current damage, future threats and the communities' economic opportunities. Communities successfully completing a recovery plan will be eligible to receive funds to support the implementation of projects and activities identified in the plans. Each NY Rising Community has a Planning Committee that includes, among others, a representative from the County, Town or Village, elected legislative representatives, local residents, and leaders of other organizations and businesses in the community. The Planning Committee will take the lead in developing the content of the plan. The State has provided each NY Rising Community with a planning team to help prepare a plan.

Pledge Element 8: Support a Green Innovation Economy

Action	Status	Description
Brownfield Redevelopment along Waterfront	In progress	The City is redeveloping the former Alco site which is in the Waterfront Zoning District. The site will include floodplain mitigation to account for future storm events, mixed uses and bike trails.
Green Homes Program	Completed	The City implemented a Green Homes Program to retrofit blighted, vacant properties with "green" components and resell them at an affordable rate. Between 2007 and 2012, the program put \$180,000 into a new home filled with energy efficiencies and sold them for \$80,000 each to low- to moderate- income buyers. The program has been discontinued in its previous form but the City will continue to incorporate energy efficiency components through the US HUD HOME program.
Schenectady Greenmarket	Completed	The City supports the Eat Local, Buy Local program, Greenmarket.

Pledge Element 9: Inform and Inspire the Public

Action	Status	Description
Cable TV Ad on Recycling	Completed	An advertisement/campaign was created to encourage recycling in the City. It airs on Schenectady cable TV.
Energy Smart in the Park Day	Completed	Gary McCarthy, as acting Mayor of Schenectady, held an "Energy Smart in the Park Day in October of 2011 to let homeowners know what help is available to weatherize their homes.

For more information about the City of Schenectady's climate protection efforts, please contact: Steve Strichman at sstrichman@schenectadyny.gov



The Climate Smart Communities Program is jointly sponsored by six New York State Agencies: the New York State Energy Research and Development Authority (NYSERDA), Department of State, Department of Environmental Conservation, Department of Health, Department of Transportation, and Public Service Commission.