



# Climate Smart Communities

November 2015

City of Schenectady

## CSC 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 impacts of climate change and save taxpayer dollars. The program is designed to address 10 focus areas outlined in the [CSC 10 Pledge Elements](#) (see below).

This CSC profile outlines the City of Schenectady's progress through the 10 pledge elements. 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 pledge element.

The [CSC Certification](#) program provides local governments with a comprehensive framework to guide climate action and enables high performing communities to achieve recognition for their leadership. Each pledge element below is accompanied by a [CSC Certification Manual](#) that recommends initiatives and resources for getting started. Click on any of the pledge elements for additional information.



## LOCAL GOVERNMENT FACTS:

**Adopted Climate Smart Communities (CSC) Pledge:** 2009

**CSC Pledge Elements Addressed:** 9 out of 10

**Total Actions Completed:** 23

**Government Type:** City

**County:** Schenectady County

**Region:** Capital District

**Population:** 66,135

## Climate Smart Communities Pledge Elements [Click links to view CSC Certification Manual]

1. [Pledge to be a Climate Smart Community](#)
2. [Set Goals. Inventory Emissions, Plan for Climate Action](#)
3. [Decrease Community Energy Use](#)
4. [Increase Community Use of Renewable Energy](#)
5. [Realize Benefits of Recycling and Other Climate-Smart Solid Waste Management Practices](#)
6. [Reduce Greenhouse Gas Emissions Through Use of Climate-Smart Land-Use Tools](#)
7. [Enhance Community Resilience and Prepare for the Effects of Climate Change](#)
8. [Support Development of a Green Innovation Economy](#)
9. [Inform and Inspire the Public](#)
10. [Commit to an Evolving Process of Climate Action](#)

## Pledge Element 1: Pledge to be 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, Plan for Climate 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 Community Energy Use

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 130 of the traffic signals to energy efficient LED lamps.
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: Increase Community Use of Renewable Energy

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.
Cable TV Ad on Recycling	Completed	An advertisement/campaign was created to encourage recycling in the City. It airs on Schenectady cable TV.
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: Reduce Greenhouse Gas Emissions Through Use of Climate-Smart 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.
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.
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.
Installed EV Charging Stations	Completed	The City installed 2 EV Charging Stations near City Hall.
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: Enhance Community Resilience and Prepare for the Effects of Climate Change

Action	Status	Description
NY Prize Phase 1 - Microgrid Feasibility Study	Completed	Parts of the City of Schenectady experienced widespread flooding from Hurricanes Irene and Lee, and lost power for more than a week. The proposed microgrid would make use of an existing power system called Marquee Power, operated by Proctors theater and arts center, which also serves as a place of refuge in case of emergencies. Marquee, a district energy system, already provides heating and cooling to 30 nearby businesses and organizations. The proposed microgrid would expand power distribution to current Marquee thermal customers, including city mission, a fire station, a CVS, the Salvation Army, several county buildings, the county jail, the Schenectady County Sheriff's Office, city police headquarters, the city library, a CDTA bus transit hub, and a proposed Amtrak station. The microgrid might also be expanded to include Union College, Ellis Hospital, Golub Corp., the proposed casino, and Schenectady County Community College.

## Pledge Element 7: Enhance Community Resilience and Prepare for the Effects of Climate Change

Action	Status	Description
NY Rising Pilot Community	In progress	The NY Rising Community Reconstruction program enables communities to identify resilient and innovative reconstruction projects based on community-driven plans that consider current damage, future threats and the communities' economic opportunities. As a NY Rising Community, the City has a Planning Committee that includes a representative from the County elected legislative representatives, local residents, and leaders of organizations and businesses in the community to take the lead in developing the content of the recovery plan.
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.

## Pledge Element 8: Support Development of 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
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 Stirchman at [sstirchman@schenectadyny.gov](mailto:sstirchman@schenectadyny.gov)**



**Climate Smart  
Communities**

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.