

Climate Smart Communities Profile



Town of Bethlehem

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 Town of Bethlehem 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.

Local Government Facts:

Adopted Climate Smart Communities (CSC) Pledge: 2009

CSC Pledge Elements Addressed: 9 out of 10

Total Actions Completed: 25

Government Type: Town

County: Albany County

Region: Capital District

Population: 33,656

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 Town of Bethlehem adopted the Climate Smart Communities Pledge in 2009.

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

Action	Status	Description
Government GHG Inventory	Completed	The Town of Bethlehem completed a GHG inventory for local government operations and the community in 2012 for the baseline year 2010.
Energy Management and Land Use Plan	Completed	This Plan was developed to address the GHG inventory results and includes prioritized energy management and land use policy recommendations to help the Town reduce emissions. The Plan can be found on the Sustainable Bethlehem webpage: http://www.townofbethlehem.org/DocumentCenter/View/3045
Community GHG Inventory	Completed	The Town of Bethlehem completed a GHG inventory for local government operations and the community in 2012 for the baseline year 2010.

Pledge Element 3: Decrease Energy Demand for Local Government Operations

Action	Status	Description
Completed lighting upgrades	Completed	The Town of Bethlehem recently completed lighting upgrades in town hall and work in the town highway garage has been scheduled. This work is estimated to have an annual energy savings of 111,051 kWh and an annual cost savings of \$12,348. The upgrades were performed and partially funded through the National Grid Conservation Program.
Conducted an Energy Audit of Municipal Facilities	Completed	Novus Engineering conducted an energy audit of 11 municipal facilities including Town Hall, water/wastewater treatment plants, sewage pump stations, and the Highway and DPW garages. Recommendations were prioritized by payback period and ranged from replacing windows and lighting to weatherization and building envelope upgrades.
Climate and Energy Training for Employees	Completed	VHB and Novus Engineering conducted a training on climate, energy and sustainability issues for Town employees. Sixteen staff members attended the training in March 2012. Attendees received an Energy Training Participant Guide.
Install Variable Frequency Drives	Completed	Variable frequency drives have been installed on most of the motors throughout the Town.

Pledge Element 3: Decrease Energy Demand for Local Government Operations

Action	Status	Description
Conducted Energy Studies	Completed	Two energy studies were conducted at the wastewater treatment plant to look at aeration and energy efficiency through installation of variable speed blowers to regulate dissolved oxygen levels.

Pledge Element 4: Encourage Renewable Energy for Local Government Operations

Action	Status	Description
Creating a Solar Roadmap	In progress	The Town has signed on with Optony through the American Solar Transformation Initiative to create a Solar Roadmap that identifies feasible locations for solar, as well as opportunities and barriers to installation.
Solar Field	Identified	In Fall 2013, the Town applied for a NYSun Initiative Grant to install 20,000 solar panels over 20 acres. This would be a Power Purchase Agreement with Durego.
Hydro-electric generation study	Completed	Conducted a study of Vly Creek reservoir to determine if hydro-generation is viable. They have already determined that anaerobic digestion is not viable due to the lack of dissolved oxygen loading.
Solar Panels on Parks Administration Building	Completed	The Town received a \$291,000 grant from NYSERDA to install 30kW solar panels on the Elm Avenue Park Administration Building.

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

Action	Status	Description
Electronics and Household Hazardous Waste Days	Completed	The Town of Bethlehem hosts electronics and household hazardous waste collection days.
Curbside Food Waste Collection	Completed	In a partnership with the Town's Recycling Department, Empire Zero is offering curbside pickup of food waste for customers. The new program is in its first stages (as of Summer 2013) and is only being offered within Delmar and Slingerlands neighborhoods until the effort expands. The program costs \$5 per week. Each week, Empire Zone picks up the food waste and replaces the two buckets with clean ones. Once a month, residents are supplied with compost. Any unwanted compost is kept by Empire Zero to be donated to local community gardens.
Recycling Program	Completed	The Town of Bethlehem has a community recycling program.

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

Action	Status	Description
Yard Waste Collection and Composting	Completed	Throughout the year, properly prepared yard waste is picked up by the Town of Bethlehem Highway Department and is composted at the town's Compost Facility. The composting facility is open to the public for both dropping off yard waste as well as obtaining compost.

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

Action	Status	Description
Bicycle and Pedestrian Committee	Completed	This is an active bicycle and pedestrian committee formed in 2009. They created a bike and pedestrian network priority map in 2012 and implemented a pilot route. The committee has created education materials, participates annually in the National Bike Month, and created a Manual to ensure safe and accessible sidewalk and roadway conditions for pedestrians and bicyclists. The Program information can be found: http://www.townofbethlehem.org/330/Bicycle-Pedestrian-Program
Streamlined Permitting Process for Renewable Energy Projects	Completed	The Town adopted a streamlined permitting process for renewable energy projects.
Land-Use Review for Sustainability	Completed	Bethlehem reviewed its land use policies for sustainability and developed a set of recommendations including parking requirement changes, open space conservation, and creating walkable communities.
Complete Streets Resolution	Completed	In August 2009, the Town adopted a resolution with the intent that the Complete Streets Policy is to recognize bicyclists and pedestrians as equally important as motorists in the planning and design of all new street construction and street reconstruction undertaken by the Town. The resolution can be found: http://www.townofbethlehem.org/documentcenter/view/3727
Delaware Avenue Hamlet Enhancement Project	In progress	The purpose of the Delaware Avenue Hamlet Enhancement Project is to implement transportation and land use design treatments that will strengthen Delaware Avenue's main street character, consistent with principles outlined in the Town Comprehensive Plan and the Capital District Transportation Committee's New Visions Plan for Transportation. This project will reinforce and enhance the architectural style, pedestrian scale and aesthetics of the area, respect and strengthen the surrounding residential neighborhoods along the corridor and provide for safe and convenient corridor travel and access for walkers, bicyclists and transit users. Funding for these enhancements has been applied for through Cleaner Greener Communities and NYDOT.

Pledge Element 7: Plan for Adaptation to Unavoidable Climate Change

Action	Status	Description
Green Infrastructure Matrix	Completed	To assist the development community in implementing required water quality and stormwater management techniques, the Town Engineering Division developed a matrix of acceptable stormwater management treatment practices (including green infrastructure and other LID practices) that can be used under various development conditions.
Implemented Resiliency Measures into WWTP Upgrades	Completed	The Town conducted a vulnerability assessment of the wastewater treatment plant, including flow management. As a result of this assessment, they raised some of the structures to maintain the resiliency of the plan, including the Dinmore Road wellfield.

Pledge Element 9: Inform and Inspire the Public

Action	Status	Description
Sustainable Bethlehem website	Completed	A webpage was created on the Town's website to educate and engage the community in sustainability efforts. http://www.townofbethlehem.org/322/Sustainable-Bethlehem

Pledge Element 10: Commit to an Evolving Process

Action	Status	Description
Capital District Regional Sustainability Plan	Completed	Erik Deyoe participated on the Executive Committee for the Regional Sustainability Plan, as well as on the Adaptation Technical Committee. Rob Leslie participated on the Transportation Technical Committee.
Capital District Bike and Pedestrian Task Force	Completed	Rob Leslie participates on the Capital District Transportation Committee's Bike and Pedestrian Task Force.
Stormwater Coalition of Albany County	Completed	Bethlehem is a member of the Stormwater Coalition of Albany County.

For more information about the Town of Bethlehem's climate protection efforts, please contact: Erik Deyoe at (518) 439-4955 ext. 1137



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.