



Climate Smart Communities

November 2015

Town of Bethlehem

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 Town of Bethlehem'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: 36

Government Type: Town

County: Albany County

Region: Capital District

Population: 33,656

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

Pledge Element 2: Set Goals, Inventory Emissions, Plan for Climate Action

Action	Status	Description
Energy Management and Land Use Plan	Completed	Adopted the Energy Management and Land Use Plan that includes a 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.
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

Pledge Element 3: Decrease Community Energy Use

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.
Installed Variable Frequency Drives	Completed	Variable frequency drives have been installed on most of the motors throughout the Town.
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.

Pledge Element 3: Decrease Community Energy Use

Action	Status	Description
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.
Completed Lighting Upgrades through National Grid Conservation Program	Completed	The Town of Bethlehem completed lighting upgrades at Town Hall and the Highway Garage. The annual energy savings are estimated to be 111,051 kWh with 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.
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.
Installed Variable Frequency Drives	Completed	Variable frequency drives have been installed on most of the motors throughout the Town.
Light Upgrades through National Grid Conservation Program	Completed	The Town of Bethlehem completed lighting upgrades at Town Hall and the Highway Garage. Annual energy savings are estimated to be 111,051 kWh with an annual cost savings of \$12,348.
Conducted Energy Studies in Wastewater Treatment Plant	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.
Climate and Energy Training for Employees	Completed	VHB and Novus Engineering conducted a training on climate, energy and sustainability issues for Town employees. Each of the sixteen staff members received an Energy Training Participant Guide.

Pledge Element 4: Increase Community Use of Renewable Energy

Action	Status	Description
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 Parking 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 4: Increase Community Use of Renewable Energy

Action	Status	Description
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.
Solar Panels on Parks Administration Building	Completed	The Town received a \$291,000 grant from NYSEERDA to install 30kW solar panels on the Elm Avenue Park Administration Building.
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.
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.

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.
Recycling Program	Completed	The Town of Bethlehem has a community recycling program.
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 for \$5 per week. Each week, Empire Zero 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.
Electronics and Household Hazardous Waste Days	Completed	The Town of Bethlehem hosts electronics and household hazardous waste collection days.

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

Action	Status	Description
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.

Pledge Element 6: Reduce Greenhouse Gas Emissions Through Use of Climate-Smart Land-Use Tools

Action	Status	Description
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
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.
Streamlined Permitting Process for Renewable Energy Projects	Completed	The Town adopted a streamlined permitting process for renewable energy projects.
Green Infrastructure Matrix	Completed	To assist the development community in implementing 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.
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 6: Reduce Greenhouse Gas Emissions Through Use of Climate-Smart 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 ped 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

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

Action	Status	Description
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 of Climate Action

Action	Status	Description
Capital District Regional Sustainability Plan	Completed	Town of Bethlehem participated in Capital District's regional sustainability planning process. Under Phase I of NYSERDA's Cleaner, Greener Communities Program, each region developed a regional comprehensive sustainability plan. http://sustainablecapitalregion.org/
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**



**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.