

# TOWN OF WOODSTOCK CLIMATE SMART TASK FORCE

Erin Moran, Coordinator  
Kenneth Panza, Secretary

Application for 14 Points

## PE4 Action: Solar Energy Installation

9 Points

14 Points

17 Points

20 Points

## Woodstock PV Solar

The town has two PV solar arrays: one on the highway garage and another on the town hall totaling over 30 KW installed.

Facility	Capacity	Installed
Highway Garage	16.2 KW	July 2011
Town Hall	16.8 KW	August 2005

## Town Hall Solar

### Woodstock Town Hall Solar



16.8 KW Photovoltaic System

16,000 kWh/Year

3.6 metric tons CO<sub>2</sub>



The town hall solar was installed fifteen years ago, and the fundamental design and construction documents are unavailable, buried deep in the town archives. The project was audited, along with several other solar projects, by the New York State Office of the Comptroller in March 2008 and the full report is available.

The NY State Comptroller's report on the Usage of Solar Panels by Municipalities stated, "Woodstock achieved the lowest rate per kilowatt by directly purchasing its components. Officials properly researched and bid the components to ensure the best possible pricing." The comptroller's report and a summary of Woodstock's audit are attached. Information about the installation's cost and performance is contained within this report.

Several newspaper articles were published at the time of the installation. Copies of these articles are attached.

## Highway Garage Solar



The Woodstock Highway Garage solar project is recent, and the design documentation is available and attached.

## Highway Garage Electrical Usage Before and After Solar Installation 2011, 2012, 2013

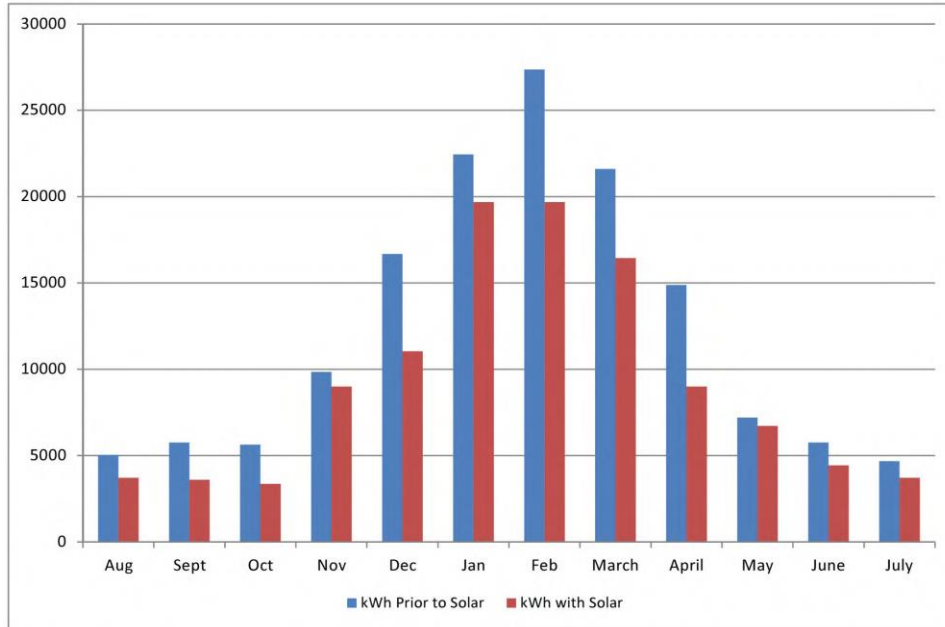


Chart showing Central Hudson Supplied kWh  
Before and After Installation of Solar Panels

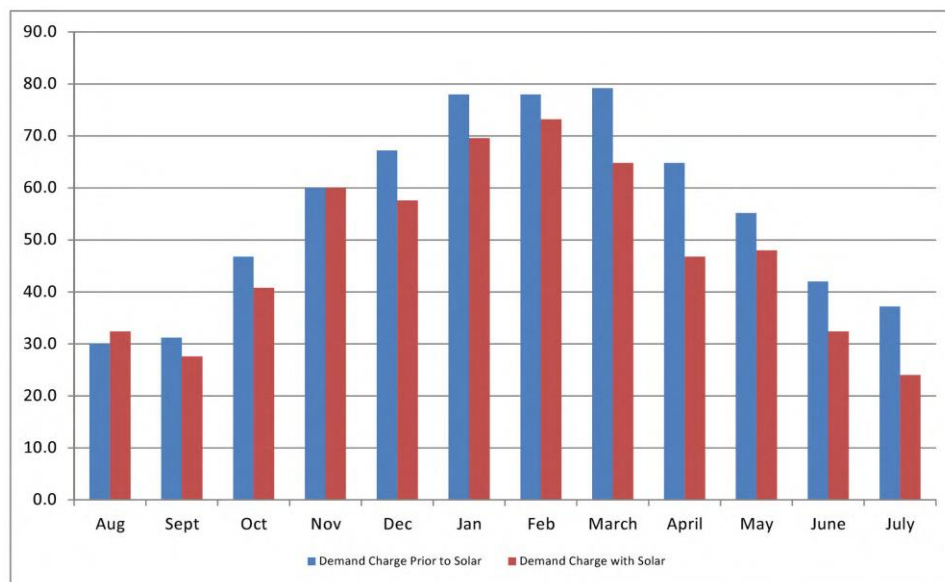


Chart showing Demand Charges  
Before and After Installation of Solar Panels

## Public Information Sessions

A series of presentations, given at the Woodstock Library Forum, presented and reviewed the town's progress in implementing and achieving its carbon neutral resolution. The operations of the town's solar and geothermal facilities were included in these presentations. The Woodstock Library Forum, founded in 1986, has been described as a place for Woodstock to sound off and show off. "The Forum allows people to talk to each other on public issues. It allows people to share their talents and knowledge. My goal from the start was to offer a platform to anyone who seemed relatively sane and who might draw ten people."



Dates of Library Forums on climate change and Woodstock's renewable energy strategy.

### January 12, 2013

A presentation by Ken Panza on Woodstock's solar initiative. Some claims for the benefits of the Solar PPA: It would eliminate the town's Central Hudson bills; show a first year's extra cost of \$20,000, and provide surplus power for the Town Hall Geothermal system. Come listen, learn, and decide for yourself. Ken Panza is a Woodstock Town Councilman.

### February 22, 2014

In 2007, Woodstock adopted the Zero-Carbon initiative, declaring that Woodstock would become carbon neutral by 2017. Town Board member Ken Panza will provide an update on the status of the initiative, what has been accomplished to date, and outline a path towards net carbon neutrality. A report on the carbon impact of the geothermal heating and cooling systems at the Highway Garage and Town Hall will be explained.

### June 20, 2015

The third in a series of presentations about Woodstock's Zero-Carbon Initiative. For the past four years, Woodstock's carbon dioxide contribution from governmental sources has been carefully tracked, and this year Woodstock can claim that it has achieved net zero carbon dioxide. Ken Panza, Woodstock Town Councilman, has been working on Woodstock's Carbon Neutral Incentive for the past three years. He has a BS in electrical engineering and an MBA, both from the University of Illinois.

### March 30, 2019

#### **Woodstock Road to Carbon Neutrality: A Presentation by Ken Panza**

In March of 2007, the Woodstock Town Board adopted a resolution committing Woodstock's governmental operations to be carbon neutral by the end of 2017. Not only did Woodstock meet its commitment to the 2007 resolution, but it accomplished it in 2015, nearly two years before the deadline. Ken Panza's presentation will explain how zero net carbons were achieved and will cover plans for additional reductions.

Former town councilman Ken Panza was responsible for tracking the town's carbon emissions and electricity usage. He is currently the town's liaison to the Ulster County Climate Smart Committee and is an at-large member of the Ulster County Environmental Council.