



Project: Highway Garage Solar

The Opportunity

Gardiner's Highway Garage relied on expensive electricity sourced from polluting facilities.

The Town of Gardiner Highway Garage is heated by fuel oil but is otherwise powered by electricity. The Town's Municipal Climate Action Plan calls for eliminating all climate pollution (greenhouse gas emissions) from its activities. The first step for the Highway Department was to install a solar energy system at the garage to offset its electricity usage. The array will operate under the Value of Distributed Energy Resources System (VDER) which essentially means that the excess electricity production over what is consumed by the Highway Garage in real time will be purchased from Central Hudson.

- The Highway Garage uses approx. 16,600 kWh of electricity at a cost of approx. \$5,000 per year.¹
- The Highway Garage's electricity use generates approx. 2.1 tons of climate pollution per year as most of the electricity provided by Central Hudson is generated from fossil fuel burning facilities.^{2, 3} Burning fossil fuels releases greenhouse gases, which significantly contributes to climate change with effects such as global warming, extreme weather events and rising sea levels. Displacing the electricity provided by Central Hudson with local solar will eliminate the emissions caused by Highway Garage electricity usage.
- The electricity provided by Central Hudson also contributes significant air pollution at the source of generation. The production of sulfur dioxide (SO₂), nitrogen oxide (NO_x) and carbon dioxide (CO₂) at facilities supplying Central Hudson's customers are 7% higher than the state average.³ Burning fossil fuels leads to serious health issues, including respiratory diseases, cardiovascular problems and cancer, primarily due to air pollution from fine particulate matter and other harmful emissions. It is estimated that fossil fuel pollution is responsible for nearly one in five deaths worldwide, significantly impacting vulnerable populations.⁴

The Solution

The solution was to generate renewable solar electricity on site.

Climate Smart Gardiner used a portion of the 4-Star Designation Grant that they earned from the New York State Energy & Research Development Authority (NYSERDA) to construct a 40.3kW solar array that is expected to produce 48,500 kWh of electricity annually. The Town engaged SunCommon to install the array. Work was completed in February 2026.



Funding

The \$106,270 project was fully funded by NYSERDA and federal tax credits.

- Climate Smart Gardiner earned a 4-Star Designation Grant of \$175,000. \$67,375 of the grant was used for this project. You can find a full list of CSG's actions [here](#).
- NYSERDA NY-Sun Incentive provided \$10,083.
- The Inflation Reduction Act provided a 30% tax credit of \$28,812.

Benefits

This project created numerous and significant benefits.

- Greenhouse gas emissions were reduced by 2.1 metric tons annually.²
- Air pollution created by electricity generation for the Highway Garage is reduced by 100%.
- The Town will reduced electricity costs by approx. \$5,000 annually.
- The ongoing savings help make the Town more affordable for residents.

Thanks

This project was completed with the hard work, collaboration and support of the local community:

- NYSERDA
- Highway Spvsr. Brian Stiscia, Spvsrs. Marybeth Majestic & Michael Hartner, the Gardiner Town Board and Town staff
- The Hudson Valley Regional Council
- SunCommon
- The Climate Smart Gardiner Taskforce



If you are interested in participating in a project like this, please consider joining the Climate Smart Gardiner Taskforce by sending an email to climatesmartgardinerny@gmail.com.



References & Explanations:

¹Based on Central Hudson electric bills for 2024-2025

²2024 Gardiner Greenhouse Gas Emissions Inventory

³Central Hudson Environmental Disclosure Labels

⁴Environmental and Energy Study Institute Fact Sheet