

Opportunity to connect the dots: saving energy and money through Solarize and Community Solar programs: Town of Red Hook in Dutchess County, NY

The Town of Red Hook is proud of renewable energy initiatives it has taken over the past decade, which help preserve the environment while reducing municipal costs. Since his election in 2015, Supervisor Robert McKeon has continued this work with the Town Council, the town's Conservation Advisory Council, Bard College, and other local and state entities to install solar panels on town buildings, LED lights in municipal buildings and streetlights, and electric vehicle (EV) chargers on Town Hall property. The stakeholders are looking for ways to extend EV charging to the entire community, including multi-unit dwellers and low-income residents. McKeon says that "it's not that installing a few EV charging stations will change the world, but it will be our part of a network of charging stations across the region and state. It's our piece that can make the puzzle complete. Each renewable energy initiative is an opportunity for our residents to connect the dots."

Historic Red Hook, situated in the Mid-Hudson Valley along the east side of the Hudson River in northwest Dutchess County, has a quiet country charm with a bit of college flavor due to students and faculty of nearby Bard College. One-third is prime agricultural soil, so Red Hook's economy is mostly agriculture and tourism, with little in the way of industry. The town of 11,000 residents has a large historic property inventory to be protected, which introduces limitations for changes, but proximity to the major north-south thoroughfare of Route 9 will help facilitate solar hookups because it is close to three-phase wiring.

Back in October, 2008, Red Hook installed a 3.8 kilowatt photovoltaic (PV) demonstration system on Town Hall, which generated 4,479 kilowatt hours in its first year, saving 1.5 tons of greenhouse gas emissions and providing 7.6% of Town Hall electricity consumption.¹ The initial NYSERDA grant of \$100,000 used for the solar installation and energy efficiency upgrades also funded a consultant who prepared an Energy & Climate Action Plan. In 2009 the Town's Conservation Advisory Council (CAC) applied to NYSERDA for funding and was awarded over \$120,000 to install an additional 23 kW solar panel system. In addition to the Town Hall solar system, solar panels were installed at the Town's Recycling Center, and the electricity generated is expected to meet all of the center's electrical needs. A recent Clean Energy Community award will be used for further Town Hall energy efficiency upgrades and another, larger solar installation.

While the town was able to move quickly on building solar on municipal buildings, passing a Community Solar law took longer than expected because of the many viewpoints being addressed and some resistance to ground-mounted solar. During the debate, compromise, calculation of savings, and the positive impact on the environment were convincing to skeptics.

Red Hook organized seven northern Dutchess County municipal allies to be part of a Solarize Northern Dutchess program. They had to find leaders in each town who were willing to support

¹ [Climate Action In The Town of Red Hook](https://www.redhook.org/Search?searchPhrase=GHG) - Presentation by Intern Lindsay Chapman, powerpoint available at <https://www.redhook.org/Search?searchPhrase=GHG>

the solar initiative, and the project eventually got 80 residential solar adoptions. The town joined Sustainable CUNY to support development of solar friendly initiatives in NY including their web-accessible, interactive tool tailored specifically for solar PV installers, and adopted the NYS Unified Solar Permit, a standardized solar permit for residential and small business projects which reduces the soft costs and tailors the permitting process for a specific project.

Red Hook now has municipal solar on Highway Department buildings' roofs, also obtained with a state grant, in addition to the Town Hall panels. Together they provide all of the Fire House electricity needs and 2/3 of Town Hall energy needs. Energy-efficient LED lighting has been installed in municipal buildings, and the town is replacing streetlights with LED lights as the existing lamps burn out. They are negotiating contracts with the New York Power Authority to get a half million LED bulbs through a turnkey program which includes the neighboring towns of Tivoli, Rhinebeck, New Paltz and Kingston.

Currently, Red Hook has four public EV chargers on Town Hall property which came from a \$100,000 state grant through its status as a Clean Energy Community, though its fleet of two cars does not include any plug-in vehicles. As part of its commitment to extend charging to all residents, the town is publicizing incentives to homeowners for EV charger installations. Transportation pollution in this tourist and college town is a major area McKeon would like to address, since reduced emissions result in fewer healthcare costs.

While NYS has been Red Hook's most important ally because of the grants and guidance it provides, Supervisor McKeon credits Laurie Husted, Chief Sustainability Officer at Bard College who chairs the town's Conservation Advisory Council (and is a member of the Mid-Hudson Citizens' Climate Lobby), with helping to get these grants. Consultant Pat Courtney Strong, subject matter expert George Woodbury, and Bard College physics professor Paul Cadden-Zimansky, who did a study providing calculations for required project sizes and benefits, were key to the success of the town's energy saving efforts. Dan Smith, Energy Manager for Bard, is also an important partner.

Going forward, McKeon and the Red Hook Town Council are contemplating a 1.75 megawatt Community Solar project to be installed beside the Fire House on a town wellfield. The strategy is to privately develop it because the town cannot take advantage of credits as others can, and once the credits are completed in Year 6 of the program, the village will purchase the solar farm from the developer, so the initial \$4 million cost will then be only \$2 million. The project is expected to pay for itself within 5.3 years, and residents who subscribe to the Community Solar project will receive a 10% discount on their electricity costs.

Supervisor McKeon suggests that other municipal leaders contemplating changes like these have a vision and be persistent in working towards it. It is important to educate residents, to inform the townsfolk about the impacts of their actions and what results can be expected from taking positive steps. He found that sharing information and maintaining a dialogue with fellow Dutchess County supervisors was helpful; they meet once a month to discuss projects. But allow the vision to be flexible; Red Hook originally planned for rooftop solar on the Fire House but the roof wasn't strong enough, so they changed plans.

Fighting climate change disruption seems daunting but when municipalities join together, they can make a big difference. As McKeon says, “we can’t say it’s the federal government’s responsibility or that the state needs to step up. We must take action at the local level and do our part.” If other communities are considering making the kinds of changes that Red Hook did, their leaders may contact the Supervisor at rmckeon@redhook.org or 845-758-4622 for more information.

Switching to renewable energy also saves municipalities money, with taxpayers benefiting from lower town operating expenses and from getting a discount on their electricity through a Community Solar subscription. Municipal leaders who are aware of the possibilities can earn great praise from their constituents, as Supervisor McKeon has discovered: “In my 18 year involvement in my community, the work earned me the only standing ovation I have ever received.”

For more information contact Supervisor Robert McKeon at rmckeon@redhook.org or 845-758-4622.

Photos sent by the Town of Red Hook below used with permission.



Denis Collet explaining the solar project (Laurie Husted)



Energize Red Hook launch (Laurie Husted)



Town of Red Hook Energy Code building site visit, site 2, Town Supervisor Robert McKeon 2nd from right (Laurie Husted)



Town of Red Hook Energy Code building site visit, site 2, Town Supervisor Robert McKeon center (Laurie Husted)



Town of Red Hook Energy Code building site visit, Town Supervisor Robert McKeon facing front (Laurie Husted)