

Taking advantage of the New Jersey Clean Energy Program

For two Hunterdon County homeowners, solar is the “natural” choice.

Alice and Ralph Celebre own a natural foods market designed to help customers boost their energy. However, they own a home designed to reduce energy in every way—energy consumption that is.

The Ringoes, NJ residents recently built a 3,100 sq. ft. house outfitted with a 2.7 kW solar electric system, a solar hot water heater and a 300 sq. ft. “sun space” room. According to Alice Celebre, both the home and business reflect a long-standing commitment to conserving natural resources. “Our professional and personal goals have always been linked to preserving the environment,” she said. In fact, before opening their Flemington, NJ-based store, the Basil Bandwagon, the Celebres were energy consultants who helped residential customers of New Jersey utilities implement home energy audits and identify energy saving measures.

Here comes the sun

When it came to choosing a power source for the new home, solar was the obvious choice. “We like the idea of saving on energy costs,” said Alice, “but our goal is really to help reduce our impact on the environment.” The Celebres qualified for a rebate through the New Jersey Clean Energy Program that covered more than 50% of the system’s purchase and installation cost.

The Celebres had first-hand knowledge of the benefits of solar power at their previous residence, a barn converted into a passive solar (not solar electric) home. “We were so pleased with the first house,” Alice said, “we wanted to build one from scratch that was solar, but we wanted to take it a few steps further.” The architecture of the new house is French country, which the Celebres believe supports the fact that a solar electric system can blend with any style home.

For the installation, the Celebres selected Rick Brooke of Jersey Solar. The couple determined the size of the system based on their pre-set spending limit of \$13,000



A 2.7 kW solar electric system like the one installed on the Celebre’s home will generate, on average, 4,400 kWh annually. This size system can prevent the annual production of more than 5,300 lbs. of CO₂. You can calculate the energy production, emissions reduction and savings your size system can achieve. Just visit the New Jersey Clean Energy Program site at www.njcep.com and click on the Clean Power Estimator icon.

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(after rebates). They budgeted additional funds for the solar hot water system and the sun space. Brooke installed a roof-mounted solar electric system that consists of 24-modules manufactured by AstroPower, and an inverter with battery backup. The physical installation of the system took less than a week.

The additional 300 sq. ft. sun space is a south-facing room that helps provide heat for the house in the winter by trapping and storing solar heat. "On sunny days," said Alice, "we open the room's doors, turn on the ceiling fan and blow the trapped heat into the house. On cloudy days, we keep the doors closed and it's an unheated room."

The power of incentives

Alice Celebre learned about the New Jersey Clean Energy Program rebate through a newspaper article on clean energy technology. The couple received a \$15,353 rebate, which covered more than 50% of the system's purchase and installation cost. To obtain the incentive, Rick Brooke followed the New Jersey Clean Energy Program installation guidelines and worked with JCP&L, the administrator of the program.

In addition to solar technology, the home has ENERGY STAR-rated features. The Celebres received an additional rebate of \$2,150 from the New Jersey ENERGY STAR Homes Program (also administered by JCP&L) for having an energy efficiency rating 30% higher than the average home.

A range of benefits

The 24-module system the Celebres installed generates, on average, 4,400 kWh annually. It's designed to deliver environmental benefits, such as reducing annual carbon dioxide (CO₂) emissions by 5,348 lbs. The system is also a reliable source of backup power in case of a power outage. For example, Alice noted that during a summer outage the system could "basically continue to run everything but the central air."

Alice believes solar electric technology can have side benefits for future system buyers and the economy. "Like any another product," she said, "the more people buy solar systems, the more likely their cost will decrease, and that helps make the technology accessible to a wider audience." Since system components such as her AstroPower modules are built in the United States, she also believes increased production can help the job market.

The couple is considering expanding their solar electric system in the future to provide close to 100% of their energy needs. They are also considering a solar electric system for their business. And they've noticed additional homes in their community with solar electric systems. Said Alice, "It's interesting that people who move to this area seem to be looking for an alternative lifestyle, and an alternative energy source."

Visit njcep.com or call 1-800-823-6462 for more information about the New Jersey Clean Energy Program and to learn how you can benefit from a solar electric system.



