



*Ralph Byrd, of Egg Harbor Township, reduced his carbon footprint by installing solar panels, which eliminated 13,230 pounds of carbon dioxide from the air. That is the equivalent of carbon dioxide emissions from 675 gallons of gasoline consumed.*

## What is Solar Power?

Solar electric or photovoltaic technology converts sunlight into electricity whenever it strikes the electric modules or panels. Photovoltaic panels are installed to capture light and convert it to direct current (DC). A solar inverter then changes the power to alternating current (AC) that is used to meet the electric needs of homes and businesses. The amount of power that is generated depends on the size and the number of solar panels and access to direct sunlight. More electricity is generated when the light is most intense (a sunny day) and strikes the solar electric system's modules directly.

Today, homes and businesses with solar panels remain connected to the electrical grid. That way, when the solar panels are not generating enough power to meet customer needs, additional power can be drawn from the grid.

Adoption of renewable energy technologies represents a big step in the fight against global warming.

## Reduce your energy usage

The cleanest kilowatt is the one not used. *New Jersey's Clean Energy Program* offers energy efficiency programs, information, and resources to help residents, businesses, municipalities, and other organizations reduce their energy consumption. By implementing energy efficiency measures first, you not only reduce your overall energy use, but you may also reduce the amount of renewable capacity that you need, saving you money for years to come. Visit [NJCleanEnergy.com](http://NJCleanEnergy.com) to see how to start.

## Learn about more renewable energy options

There are more great renewable energy technologies, including wind and biopower, to help us meet our energy goals and reduce our use of fossil fuels.

For more information, technical support, and incentives for wind, biopower, and solar initiatives, call **866-NJSMART** or log on to [NJCleanEnergy.com/reip](http://NJCleanEnergy.com/reip).



# Solar Power— A Bright Idea for New Jersey

Harness the power of the sun for clean, renewable energy.



It's a smart way for New Jersey residents, municipalities, businesses, schools and other building owners to reduce their carbon footprint, stabilize electric costs, preserve natural resources and support the economy.



# Financial Incentives Make Solar Power More Affordable

New Jersey is leading the way.

In fact, we're number one, per capita, for both number of solar installations and installed capacity.

**Residents, businesses, and municipalities across New Jersey are already seeing the benefits of solar power.**

- Reduces pollution
- Stabilizes electric costs
- Lessens our dependence on fossil fuels
- Preserves natural resources
- Strengthens our commitment to our planet's future
- Increases our self-reliance
- Supports local jobs and our State's economy



## Getting Started

The New Jersey Board of Public Utilities and *New Jersey's Clean Energy Program*™ make it easy to get started by offering financial and technical assistance. The first step towards installing a solar energy system is to find an installer. The Trade Ally Database on NJCleanEnergy.com includes a list of renewable energy installers that have completed at least three projects in New Jersey. It is recommended that customers interview at least three installers to discuss design and cost considerations before choosing an installer and discussing financing options.

## Financing Your System

**Rebates** – Residents, municipalities, schools and non-profits may earn incentives for solar systems. Solar Renewable Energy Certificates (SRECs) can provide a recurring source of revenue to help finance solar installation projects. Many local utility companies also provide solar financing programs. Incentives are available for sustainable biomass and wind energy generation, as well.

## SRECs and the SREC Registration Program

– New Jersey is one of the fastest growing markets for solar photovoltaics in the United States and one of the largest in terms of both installations and installed capacity. Much of this success is due to New Jersey's solar financing model, which relies on the Renewable Portfolio Standard (RPS) and the use of SRECs.

Representing all of the clean energy benefits of a solar energy system, SRECs can be sold or traded separately from the power, providing solar system owners a recurring source of revenue to help offset the cost of installation. All solar project owners in New Jersey with electric distribution grid-connected systems are eligible to generate SRECs. Each time a system generates 1,000 kilowatt hours (kWh) of electricity, an SREC is earned and placed in the customer's electronic account on the SREC tracking system.



The SREC tracking system is a web-based tool that enables account holders to track solar energy system production from individual generators and record the transfer of SRECs from generators to purchasers.

The *SREC Registration Program* (SRP) is used to register non-rebated solar projects in New Jersey. Registration of the intent to participate in New Jersey's solar marketplace provides market participants with information about the pipeline of anticipated new solar capacity.

**Tax Credits** – A 30 percent federal investment tax credit may be available for businesses on the gross cost of the system. A 30 percent federal investment tax credit may be available for residents on the net cost of the system. Please visit [www.irs.gov](http://www.irs.gov) and contact your tax professional for further information.

**Net Metering** – Net metering allows qualified customers to receive full retail credit for electrical generation on an annual basis. Each year, on the anniversary of the customer's interconnection, the customer will be compensated for any unused credits at the cost of wholesale power.