

Looking Forward

Project Spotlight

- The Technology Demonstration Program and the Research and Development Program will be reopened in 2020. These programs had been suspended since 2010 to deploy more funds to the Green Energy Program.
- The Solar Schools Curriculum Program will be evaluated to enhance the program's learning objectives for teachers and students.
- The Energy Efficiency Information Program will be launched in 2020 to offer grants for energy efficiency information and education programs.
- The regulatory process for updated GEF regulations will be completed, with newly published program standards.
- A centralized online application database is being created in coordination with DNREC's Energy Efficiency Investment Fund.
- New outreach materials are being developed to increase public awareness about the Green Energy Fund and all its program offerings.
- For the first time in Program history, the Division of Climate, Coastal, & Energy retained EcoMetric Consulting to perform a program evaluation of the Green Energy Program, Energy Efficiency Investment Fund, and Weatherization Assistance Program. EcoMetric Consulting evaluated program offerings for calendar years 2016-2018. This evaluation report was scheduled to be completed after the close of the program year and will be updated periodically.



New solar PV panels on the Deely residence in Townsend.

Installation: 5.69 kW
Installer: CMI Solar & Electric

Bill and Veronica Deely of Townsend, Delaware, had solar panels on their previous residence, but local neighborhood restrictions at their new home prevented solar installations. In 2019, House Bill 65 passed and lifted this restriction, allowing the Deelys to install solar.

The cost of solar is a significant factor, but the state grant and the federal tax credit certainly helped. In addition to being good for the environment, solar provides a significant return on investment and is something that we will benefit from for many years.

Bill Deely, Townsend, Delaware

The Green Energy Fund has been a substantial benefit towards growing Delaware solar since its launch in 1999, as the program helps Delaware solar customers make the easy choice to Go Green. We are grateful for the assistance this program contributes to a renewable-friendly state.

Lauren Donovan, CMI Solar & Electric

Contact Us

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Front cover: Rooftop solar PV installation on residence in Townsend (upper right); Junior Solar Sprint participant readies solar-powered car for race (lower left).

Green Energy Fund

Annual Report
2019



What is the Green Energy Fund?

For twenty-one years, the Green Energy Fund (GEF) has been transforming the Delaware market for renewable energy. The GEF was established by the Delaware Legislature in 1999. It is funded by Delmarva Power electric customers who are then eligible to access the GEF for renewable energy projects.

The GEF was created to accelerate deployment of renewable energy systems in Delaware. Why? Because renewable energy:



reduces emissions that are harmful to the environment and human health



improves energy security



benefits our local economy

GEF resources in 2019 were principally used to fund work under the Green Energy Program to help Delaware homeowners, businesses, and nonprofit organizations in the Delmarva Power service territory meet their energy needs in a more sustainable way through the installation of renewable energy systems. Qualifying systems include solar photovoltaic (PV) systems, solar water heating systems (SWH), small wind turbines, and geothermal heat pumps.



New solar PV installation at Freewill Baptist Church.

Highlights

In 2019...

- The Green Energy Program received 217 new applications requesting funding to support 1.92 megawatts (MW) of new solar and 91 tons of new geothermal capacity. The additional solar capacity reduces carbon dioxide (CO₂) by 2,000 metric tons annually. Saving 2,000 metric tons of CO₂ each year is equivalent to either:



432 passenger vehicles taken off the road for a year



339 homes' electricity use

- DNREC's Division of Climate, Coastal, & Energy teamed with the Delaware Technology Student Association and other partners to host 39 teams of middle-school students from across the state for the 2019 Junior Solar Sprint solar-powered model car competition. Racers competed for top speed in time trials, as well as for awards in engineering design and creative design at the 25th annual event.
- Data on the Green Energy Program is now shared through Delaware's open data portal, increasing transparency of information on the program. Data on program-supported installations are updated monthly, so residents can see the effects that the Green Energy Fund is having in their neighborhood or throughout Delmarva Power's territory.
- Since 1999, the Green Energy Fund has:
 - provided more than \$55 million for renewable energy projects installed in Delaware
 - benefited 4,764 Delaware homeowners, businesses, and nonprofit organizations
 - supported local jobs at 23 solar installation companies and more than 35 geothermal installers
 - helped increase Delaware's solar capacity from 8.6 MW in 2010 to 120 MW by the end of 2019.
 - awarded \$2.1 million to projects in the Technology Demonstration Program
 - awarded \$1.2 million in Research and Development Program funding

Sources and Uses of GEF Funds

The GEF collected \$2,774,553.76 in proceeds in 2019. In response to a sharp reduction in grants disbursed after several years of oversubscription, the GEF plans to adjust grants to better reflect current market conditions, reopen the Research & Development and Technology Demonstration programs, and explore other programs to promote renewable energy. By statute, up to 65 percent of funds can be directed to the Green Energy Program, up to 35 percent of funds can be directed to Research & Development and Technology Demonstration programs, and up to 10 percent of funds can be used for administration, marketing, and outreach.

The table below summarizes the funding of Green Energy Program projects in 2019.

2019 Green Energy Program Grants Paid

		Number of Projects	System Capacity	Funding Paid	Leveraged Funds
Residential	PV	184	1.56 MW	\$512,794	\$5,325,428
	Geo	20	109 tons	\$73,100	\$370,414
	SWH	2	118 Sq. Ft.	\$9,032	\$20,000
Commercial	PV	6	0.11 MW	\$18,000	\$371,979
Non-Profit	PV	2	0.06 MW	\$55,969	\$160,875
Totals		214		\$668,895	\$6,248,696

DNREC has been successful in using the Green Energy Program to leverage other investment into clean energy systems. At a 9:1 ratio, the leveraging effect of the GEF in 2019 was a real success.



Installing rooftop solar PV system.



Entry in Junior Solar Sprint (top); rooftop installation of solar PV panels and solar thermal panel (bottom left); solar PV panels on Sussex County Habitat for Humanity office. (bottom right).

