



Delaware  
Sustainable  
Energy Utility



# 2016 Annual Report



---

## DESEU VISION AND MISSION STATEMENT

---

### Delaware Sustainable Energy Utility Vision Statement

The Delaware Sustainable Energy Utility (DESEU) will be the leading organization in the State of Delaware that offers cost effective opportunities for energy savings, creates new markets for customer-sited renewable energy generation and reduces environmental impacts of energy production and use.

The DESEU's efforts will build jobs in Delaware, improve our national security, support the local economy, improve energy reliability and protect Delaware from the damaging effects of volatile energy prices. The DESEU will accomplish this by utilizing both its authority granted by the State of Delaware and private sector entrepreneurial strategies.

Respected as an accountable, transparent, effective and nimble non-profit organization, the DESEU operates at the highest standards recognized in its industry.

### Delaware Sustainable Energy Utility Mission Statement

Delaware Sustainable Energy Utility, a 501 (c) 3 non-profit organization, serves Delawareans by promoting the use of affordable, reliable clean energy and energy efficiency initiatives. The DESEU operates as the premier one-stop-shop for connecting and empowering energy consumers with the resources to reduce costs, improve the environment and ensure energy independence for future generations.

The DESEU develops and implements energy efficient solutions, clean energy and air pollution reduction programs. These programs include funding, financing, and educational programs. In addition, we provide highly valuable technical and financial services to our clientele so that they can make informed decisions regarding their energy future.

The DESEU offers our programs by fully utilizing the authority granted by the State of Delaware to issue tax-exempt bonds, use Regional Greenhouse Gas Initiative (RGGI) funds, bank solar renewable energy credits (SRECs). The DESEU also utilizes private sector entrepreneurial strategies.

The DESEU focuses on building relationships with residents and businesses so that they are motivated to use less energy, generate clean energy and reduce harmful emissions. We serve people of all incomes and housing styles. We serve businesses, industries and institutions from all sectors. We apply our programs to new construction projects, the rehabilitation of existing buildings, transportation projects and innovative technologies.



## A LETTER FROM THE CHAIRMAN AND EXECUTIVE DIRECTOR



State Senator Harris B. McDowell III



DESEU Executive Director Tony DePrima

### Dear Delawareans,

Throughout 2016, the Delaware Sustainable Energy Utility continued to build on its many successes by expanding existing programs and introducing new ones. Overall, the DESEU continues its track record of providing real value to the State of Delaware through its energy efficiency and clean energy programs.

Our third Annual Report includes a page dedicated to each of our energy saving programs with supporting data and testimonials. We are especially proud to have launched two programs for those Delawareans who are most financially vulnerable and are making considerable progress toward launching several others in 2017. This report includes our annual financial statement, annual energy savings chart, several pages that highlight new initiatives, as well as what we are looking forward to in 2017.

The DESEU has achieved several ambitious accomplishments for 2016, including:

- Recognized by the Standards for Excellence Institute® for completing the requirements for their Standards Basics program
- Finalized participants for the 2017 Bond Issue
- Closed on a \$4.5 million loan with the Delaware Army National Guard
- Launched two programs for low to moderate income families: Pre-Weatherization Program and Community Energy Centers

- Provided grants to non-profits for energy efficiency measures through DNREC's Energy Efficiency Investment Fund
- Upgraded our website with a new look and more functional and secure back-end
- Hired Kate Bayard as Marketing and Communications Manager

Created new program alliances with:

- New Ecology and Elevate Energy
- First State Community Action Agency
- Catholic Charities
- Milford Housing Development Corporation

The Delaware Sustainable Energy Utility is excited to continue serving Delaware businesses, non-profits, state agencies, local governments and residents through our Energize Delaware programs. We are dedicated to the goals of reducing energy consumption via energy efficiency, creating green jobs, reducing greenhouse gas emissions and pollution, all while saving our customers money and reducing our dependence on foreign oil.

With our array of funding mechanisms, we will continue to add more sustainable energy programs in 2017. We thank all Delawareans for our success!

Sincerely,

**Sen. Harris B. McDowell III**  
Chairman

**Anthony J. DePrima**  
Executive Director

***“We are especially proud to have launched two programs for those Delawareans who are most financially vulnerable.”***

Tony DePrima  
Executive Director

# 2016 DESEU ACCOMPLISHMENTS



**The Delaware Sustainable Energy Utility (DESEU) and its Energize Delaware programs have a proven track record of providing energy savings for Delaware's homes, businesses, non-profits and schools. These programs make more money available for expansion and job growth through energy saving projects that reduce operating costs and lower greenhouse gas emissions. Many of our programs are designed to be cash positive from the point of implementation.**

We are proud of the progress we've made during the 2016 calendar year. We've established new partnerships to broaden our program inventory, making energy savings programs accessible to even more Delawareans. We are now positioned as the one-stop-shop for energy saving and clean energy programs in Delaware.

Here are some of our 2016 accomplishments:

- **Standards for Excellence® Recognition:** After completing a thorough review, staff at the Standards for Excellence Institute concluded that we comply with the basic principles of the Standards for Excellence code, and awarded Standards Basics recognition as acknowledgment that the DESEU is a well-managed, responsibly governed organization.
- **Finalized Bond Issue participants:** The DESEU worked with potential participants in the upcoming Bond Issue to complete the necessary preparations to participate, including conducting energy audits and selecting Energy Service Companies to perform the work. Several state agencies and school districts will be participating.
- **Another successful year for the Loan Program:** The Energize Delaware Revolving Loan program completed another successful year, closing six loans, with the highlight being a \$4.5 million loan to the Delaware Army National Guard for energy efficiency upgrades and 399 kW in solar energy generation.
- **Launched two programs for low to moderate income families:** The Pre-Weatherization Program and Community Energy Centers launched as part of our initiative to expand the availability of energy efficiency programs to low and moderate income Delawareans.
- **Rolled out the Energize Delaware Farm Program.** This program offers technical assistance, audits, rebates and low interest loans to agricultural producers who want to save energy. We launched the program in late 2016.
- **Expanded DNREC's Energy Efficiency Investment Fund:** Provided funding to

EEIF to expand the program to local governments who previously weren't eligible for the Fund, and cover grants to non-profits.

- **Upgraded the EnergizeDelaware.org website:** In December a new content management system brought a new look, as well as added functionality and security to our website.
- **We've hired a Marketing and Communications Manager:** Kate Bayard joined the Delaware Sustainable Energy Utility as Marketing and Communications Manager in October. She has more than 10 years of experience in renewable energy marketing.

DESEU has built new tactical alliances to bring our Energize Delaware programs to market. These include:

- New Ecology and Elevate Energy have been brought on to develop our Affordable Multifamily Housing Program. Both organizations have deep expertise in designing and implementing efficiency programs for affordable and multifamily housing.
- First State Community Action Agency (FSCAA) and Catholic Charities have been selected to run our Community Energy Center locations. Catholic Charities will operate our Wilmington location and FSCAA will operate locations in Newark, Dover and Georgetown. Both organizations are leaders in providing social services to financially vulnerable Delawareans.
- Vermont Energy Investment Corporation (VEIC) and Milford Housing Development Corporation are working to launch the Zero Energy Modular Home (ZeMod) program in early 2017. VEIC has extensive experience in designing affordable high performance homes and programs while Milford Housing brings expertise in providing affordable housing to rural communities in Delaware.

We are extremely proud of our achievements, growth and success in 2016. As we move into fiscal year 2017, the DESEU will build on its successes and launch new programs based on market demand.



## 2016 ENERGIZE DELAWARE PROGRAM LIST

PROGRAM	MARKETS SERVED
• Home Performance with ENERGY STAR®	Homeowners
• Assisted Home Performance with ENERGY STAR®	Low-income homeowners
• Energize Delaware Revolving Loan Fund	Businesses; non-profits; government
• SREC Upfront Purchase Program	Homes; businesses; non-profits
• Green for Green program	Homeowners
• Energy Assessments for Non-Profits and Government	Non-profits; local government
• Pathways to Green Schools	Schools
• Energy Savings Performance Contracting and Bond Financing	Public schools; government
• Annual SREC Procurement Auction	Homes; businesses; non-profits; schools; government
• Pre-weatherization Program	Low-income Homeowners
• Community Energy Centers	Low-income Delawareans
• Faith Efficiencies Partnership	Houses of worship
• Energy Efficiency Investment Fund (EEIF)	Non-profits; local government



# Home Performance with ENERGY STAR® Program



The flagship Home Performance with ENERGY STAR® program is going into its fourth year. A whole-house approach to improving comfort and safety in the home, it provides homeowners significant savings on their utility costs. Delaware homeowners learn ways to improve the energy efficiency of their homes through completion of a subsidized, comprehensive home energy audit performed by certified contractors.

After the audit, homeowners can make energy-saving improvements and take advantage of rebates that make the energy improvements more affordable. Homeowners also receive these energy-saving items (up to a \$160 value) at no additional cost: LED light bulbs, shower heads, faucet aerators, pipe insulation and smart power strips. Qualifying homeowners may also receive special 5.99% financing for energy-saving home improvements, up to \$25,000, through Renew Financial.

To support Delaware's new Downtown Development District initiative, the Home Performance program offers \$50 energy audits and higher rebates to property owners in the designated districts of Wilmington, Dover, Seaford, Georgetown, Harrington, Laurel, Milford and Smyrna.

Program Start.....	2014	Lifetime Energy Savings .....	\$3,715,704
2016 Participating Households .....	1,518	Tons of Air Emissions Avoided.....	951
Rebates/Incentives Awarded .....	\$1,235,842		
Annual Energy Savings.....	\$247,734		

## MARK & TRACY HAGERTY'S HOME



**Mark and Tracy Hagerty have lived in their home for 30 years. Both work from home, so having a comfortable, energy-efficient house is a priority. Their home's aging HVAC and hot water systems were causing comfort problems during the winter.**

**Joe Turtoro, an energy advisor, connected the Hagertys with a contractor who performed diagnostic tests using state-of-the-art equipment. The tests revealed insufficient air sealing and insulation and an inefficient air conditioning system, water heater and flue.**

**“We had no idea how much energy we were losing,” said Mark. “We learned so much from the home energy audit. If we hadn’t scheduled one, we might’ve spent thousands replacing our windows, with minimal benefits to show for it.**

**“We noticed improved comfort right away,” continued Mark. “We also try to be conscious of the environment, so there’s an additional feeling of satisfaction that less energy is being wasted.”**

- Mark and Tracy Hagerty

# Assisted Home Performance with ENERGY STAR®



**As an important part of our strategy to assist communities in need, this program is designed to bridge the gap between Home Performance with ENERGY STAR® and the State of Delaware’s Weatherization Assistance Program. Assisted Home Performance with ENERGY STAR® provides increased incentives for income-qualified Delawareans.**

Delaware residents that meet the program’s income requirements can take advantage of a Home Performance with ENERGY STAR® home energy audit at a reduced cost of \$50 and increased rebates for energy efficiency upgrades. The program is available to income-qualified

Delaware property owners and renters with their landlord’s permission.

Rebates up to \$9,100 are available which can cover up to 75% of the cost of upgrades. Homeowners are responsible for paying the remaining 25% of the cost.

<b>Program Start.....</b>	<b>2015</b>	<b>Lifetime Energy Savings .....</b>	<b>\$48,293</b>
<b>2016 Participating Households .....</b>	<b>15</b>	<b>Tons of Air Emissions Avoided.....</b>	<b>13</b>
<b>Rebates/Incentives Awarded.....</b>	<b>\$28,863</b>		
<b>Annual Energy Savings.....</b>	<b>\$2,947</b>		

## JIM NAPOLITANO’S HOME



*As a senior on a fixed income, Kent County resident Jim Napolitano recognized the value of boosting his home’s comfort and reducing his long-term energy use and costs. “I want to stay in this house as long as possible,” he said. “This program seemed like a great opportunity to see what was in working order and what needed to be upgraded.” An energy audit of Napolitano’s home revealed the need for a new heating system and attic insulation.*

***“The contractors Joe put me in contact with exceeded my expectations,” said Napolitano. “They were always professional, were always there when they said they would be and did a great job and within budget with rebates of \$4,983.***

***“I try to do whatever I can to make my house more efficient and cost effective,” said Napolitano. “Thanks to Energize Delaware’s Assisted Home Performance with ENERGY STAR program, I can save a lot of money and live more comfortably, which allows me to spend my money on other things.”***

- Jim Napolitano

# Energize Delaware Revolving Loan Fund



Solar panels on Lewes Library.

**The Energize Delaware Revolving Loan Fund has a track record of providing low-interest loans for businesses, non-profits, school districts and local governments to reduce their energy bills by improving the efficiency of their operations. 2016 was another strong year, closing 6 loans totaling \$6,363,994.**

The program's appeal is the attractive return on investment (ROI). The loans are structured to be cash positive from day one, eliminating the financial risk of making recommended upgrades. Savings over the life of the project must be greater than the investment including financing.

The program's objective is to encourage the installation of end-user energy efficiency and customer-sited renewable generation and greenhouse gas reduction measures. The result is lower customer bills and reduced environmental impact.

Program Start.....	2011	Annual Energy Savings Closed Loans	
2016 Applications Received .....	5	EE projects.....	\$343,514
Value of New Loan Applications .....	\$3,873,913	RE projects* .....	\$33,934
Loans Closed .....	5	Closed Loans Lifetime Energy Savings	
Value of Closed/Completed Loans .....	\$1,865,963	EE projects.....	\$6,870,280
Capacity of Solar PV Systems to be Installed .....	168 kW	RE projects* .....	\$848,349
		*Annual retail value of solar generation	

## LEWES LIBRARY SOLAR PROJECT



*When the Lewes Public Library Board determined that their community would support making their new library “Green,” they turned to the DESEU low-interest loan program. They financed solar panels, LED lighting, and a highly efficient Variable Refrigerant Flow HVAC system. The estimated energy savings from these measures was \$47,500 annually. Their savings enabled them to receive a \$415,000, ten-year loan from the DESEU which covered 50% of the outstanding costs related to the systems.*

***“The DESEU helped the Lewes Library Board achieve its goal of building a highly energy efficient building. The loan process that we went through was well explained and easy to complete. The loan enabled us to include the solar panels while the project was under construction and not have to wait until after the Library was completed. The loan money, together with the 40% net savings in our utility costs, allows us to leverage our funds in the best way possible for the new library”***

- Hugh Leahy, President, Lewes Library Board.



# Solar Renewable Energy Credit Upfront Purchase Program



Funded by the DESEU, the SREC Upfront Purchase Program is open to all Delawareans who install new 50 kW or lower photovoltaic (PV) solar systems. This program provides an upfront payment of \$.45/watt (\$450/kW) in exchange for the first 20 years of solar renewable energy credits (SREC's) created by the system.

This program was funded in 2014 at \$1.5 million per year for two years in an effort to encourage small PV construction projects in Delaware that create local green jobs.

This program will end in 2017, after all committed funds are expended and will be replaced with a residential low-interest solar loan program.

Program Start.....	2014	Annual Tons of Air Emissions Avoided .....	2,093
2016 Number of Systems Enrolled .....	684	Annual Solar Production.....	6,304 MWH
Total SREC Purchase Costs .....	\$2,363,839	Lifetime Solar Production.....	126,072 MWH
kW of enrolled systems .....	5,253	Program Funds Reserved .....	\$3.75 million

## CMI SOLAR



*“The SREC Upfront Purchase Program has been an effective funding source for my customers who don’t have all the ready cash, or who do not want to wait for SREC payments spread over 20 years. That represents about 20% of my customers. The requirements are straightforward, the program is well run, and the GreenGrantDelaware.com online application is easy to use. I am looking forward to this program transitioning into a loan program, as most of my customers will be interested in using the low-interest solar loan program for their homes. The SEU’s innovative programs continue to promote both renewable energy and energy efficiency across our state. The SEU’s nimbleness allows the program mix to be adjusted to meet the needs of the market”*

– Dale Davis, President CMI Solar

# Green for Green Program



**Developed jointly with the Home Builders Association of Delaware, this rebate program was available for new homes in Delaware's designated growth areas and applied for by a participating home builder.**

The program offered Delaware's new home buyers rebates between \$1,000 to \$4,500 for homes upgraded to national standards for energy efficiency, water conservation, indoor air quality, building materials and other conservation-oriented, energy-saving features.

Average savings range from \$21 to \$47, or up to 36 percent on a monthly electric bill.

The program stopped accepting new applications in 2015, and the homes that were under construction at that time were completed and processed through the incentive program until June 30, 2016.

The results of the program are being used to develop a new program for residential new construction that incentivizes homes built above current residential energy codes and on a path toward net zero energy.

<b>Program Start.....</b>	<b>2013</b>	<b>Annual Energy Savings.....</b>	<b>\$75,007</b>
<b>2016 Participating Households .....</b>	<b>70</b>	<b>Lifetime Energy Savings.....</b>	<b>\$1,500,140</b>
<b>Home Builders .....</b>	<b>7 Profit; 1 Non-Profit</b>	<b>Tons of Air Emissions Avoided.....</b>	<b>305</b>
<b>Rebates/Incentives Awarded.....</b>	<b>\$206,200</b>		

## CENTRAL DELAWARE HABITAT FOR HUMANITY



***"We are the beneficiary of the Green for Green program that helps us build energy efficient houses by giving us the incentives necessary to offset the cost. We are very grateful to the State of Delaware, the Delaware Sustainable Energy Utility and the Homebuilders Association of Delaware who manages the program."***

- Jocelyn Tice, Interim Executive Director, Central Delaware Habitat for Humanity

*Celebrating the groundbreaking for the Moore Family's house in Dover.*



# Energy Assessments for Non-profits and Government



**Through its partnership with the University of Delaware’s award-winning Mid-Atlantic Industrial Assessment Center (IAC), the Delaware Sustainable Energy Utility funds energy assessments for large and medium size buildings operated by non-profits and local governments in Delaware. The DESEU pays 90% of the cost.**

The energy audits are done by University of Delaware graduate students under the supervision of IAC directors. The program offers energy savings solutions for a wide variety of buildings including senior centers, community

centers, churches, municipal buildings and firehouses. Savings between 20% and 30% are typically found after the installation of recommended upgrades.

<b>Program Start.....</b>	<b>2013</b>	<b>Lifetime Energy Savings Found .....</b>	<b>\$3,411,540</b>
<b>2016 Participating Non-profits .....</b>	<b>9</b>	<b>Tons of Air Emissions Avoidance Found .....</b>	<b>1,254</b>
<b>Annual Energy Savings Found .....</b>	<b>\$170,577</b>	<b>Total Program Funding .....</b>	<b>\$106,000</b>

## LORELTON ASSISTED LIVING IN WILMINGTON



*The Lorelton is an award-winning assisted living facility housed in a historic school building that was converted to apartments in the late 1980’s. Recognizing that its aging equipment would need to be replaced, the Lorelton requested an energy audit to identify improvements that would reduce their energy usage while improving building operations.*

***“As a non-profit assisted living community, providing high quality, affordable care for seniors is our primary concern. The IAC energy audit recommended a number of improvements to our building that would reduce our energy usage while enhancing the comfort and health of our residents. The DESEU was instrumental in helping us understand the recommendations, identify additional incentives to leverage project funds, as well as, work with us to help finance the efficiency measures. We’ll be making the improvements in 2017, financed by a loan through the DESEU’s Revolving Loan Fund.”***

- Richard Stat, President, The Lorelton Foundation



# Pathways to Green Schools



**In 2016, the Pathways program expanded its reach statewide, adding schools in Kent and Sussex County. Administered by the Delaware Valley Green Building Council, the Pathways program continues to assist schools to become energy efficient by providing mini grants for student eco-action and green team projects, free energy audits and assistance with energy benchmarking in ENERGY STAR Portfolio Manager.**

Practical Energy Solutions joined the Pathways team in 2016, providing energy audits that include student participation and collaboration with teachers on energy curriculum.

Two schools that have participated in the Pathways program

were recognized nationally for their efforts. Mount Pleasant Elementary earned the Eco-Schools USA Green Flag certification and Wilmington Montessori School was named a U.S. Department of Education Green Ribbon School.

Program Start.....	2014	Annual Energy Savings Found .....	\$397,591
2016 Participating Schools .....	14	Lifetime Energy Savings Found .....	\$7,951,820
Schools Enrolled in Portfolio Manager .....	10	Tons of Air Emissions Avoidance Found .....	6,774
School Audits Complete .....	5	Total Program Funding .....	\$105,000
Schools Received Awards .....	6		

## WILMINGTON MONTESSORI SCHOOL



***“The Pathways to Green Schools program has inspired the Wilmington Montessori School community to reach for higher goals related to green practices and awareness. Pathways to Green Schools has given our staff and students access to resources by way of high-quality professional development, a network of specialists and an abundance of good ideas. Through the Pathways program, Wilmington Montessori has also joined the Eco-Schools program, and we were honored as a 2016 U.S. Department of Education Green Ribbon School. These programs have allowed us to connect with schools in Delaware and the United States to learn what is possible. Most importantly, the students and staff are more engaged, more knowledgeable, and more committed to the school's environmental stewardship and sustainability.”***

- Laura Z. Orsic, Assistant Head of School  
Wilmington Montessori School

# Energy Savings Performance Contracting Program



**The DESEU has the authority to issue tax exempt bonds or low-interest loans to finance Energy Saving Performance Contracts (ESPC). Available to public agencies and schools, ESPC's use utility cost savings to finance construction through pre-qualified Energy Services Companies (ESCO) that offer guaranteed energy savings.**

In 2016, the Delaware Army National Guard received a loan of \$4.5 million for energy efficiency and renewable energy capital improvements. Projected guaranteed savings will be more than \$6 million over the next 20 years, and will reduce annual energy consumption by more than 38%.

Also in 2016, the DESEU continued to finalize the upcoming energy efficiency bond issue, which will move forward in 2017. The bond issue will finance a variety of energy savings projects for school districts and state agencies.

<b>Program Start.....</b>	<b>2011</b>	<b>Total Construction Value.....</b>	<b>\$4.5 million</b>
<b>2016 Contracted State Agencies .....</b>	<b>1</b>	<b>Guaranteed Annual Energy Savings .....</b>	<b>\$265,171</b>
<b>Overall Financing Interest Rate .....</b>	<b>2%</b>	<b>Guaranteed Lifetime Energy Savings.....</b>	<b>\$5,303,420</b>
<b>Bond (Loan) Term .....</b>	<b>20 years</b>	<b>Capacity of Solar PV Systems to be Installed..</b>	<b>400 kW</b>
<b>Total Loan amount .....</b>	<b>\$4.5 million</b>	<b>Tons of Air Emissions Avoided.....</b>	<b>1,626</b>

## DELAWARE NATIONAL GUARD



***“This is a win -win for everyone. The sheer size of our facility and our annual energy usage is enormous. The capital improvements to the base facilities will save us millions over time. The Delaware Sustainable Energy Utility has structured the terms of the loan to make it extremely attractive.”***

- General Francis D. Vavala, DNG

*From left to right: Tony DePrima, Senator Harris McDowell, General Frank D Vavala, Richard Madeia, Col. Cost, Dr. John Byrne.*

# Annual SREC Procurement Auction



The DESEU manages the annual Solar Renewable Energy Credits (SREC) auction on behalf of Delmarva Power in accordance with rules set by the Delaware Public Service Commission. The auction provides a market for solar system owners to sell their SRECs through long-term contracts to Delmarva Power, protecting ratepayers from above market SREC pricing. Delmarva Power is the largest procurer of SREC's in Delaware.

The DESEU operates the program and plans to run at least one solicitation each spring as an online auction in order to fulfill Delmarva's long-term SREC needs. Facilities may qualify for a 10% SREC bonus if built with Delaware labor.

Program Start.....	2012	Value of all SREC Transactions .....	\$754,725.25/year for the first 10 years; \$396,966.50/year for the last 10 years (20 year contracts)
2016 Auction Bids Received .....	187		
SRECs Bid into Auction .....	14,032		
Auction Bids Accepted .....	167		
SRECs Accepted .....	10,627		

## WILMINGTON HOUSING AUTHORITY



The Wilmington Housing Authority (WHA) has had a long-term interest having solar energy on its property. They were able to take a major step forward toward that goal by partnering with Ecogy Delaware LLC (Ecogy) to develop a 1.15 MW ground mounted solar array on WHA property. Ecogy will own the project and sell electric from the system at a low cost to the Authority. Critical to the project was its successful participation in the annual Delaware SREC Auction operated by the Delaware Sustainable Energy Utility. The WHA project was one of only five large projects accepted into the auction. Revenue from the sale of the SREC's to DESEU will be passed along as energy savings to the WHA. In addition to participating in the SREC Auction, the project will be financed with a DESEU low-interest loan.

**“The Wilmington Housing Authority will enjoy the long-term benefit of lower cost energy from the Ecogy Solar project over the next 20 years. More importantly, this project allows us to help make Wilmington a greener city by greatly reducing our dependency on fossil fuels. Without the Delaware SREC auction, our project would not have been possible.”**

– Eugene Rudder, WHA Executive Director



# Pre-weatherization Assistance Program



**The Pre-Weatherization program helps low-income families in Delaware prepare their homes to meet the requirements for weatherization help.**

The program is designed to complement to the State of Delaware's Weatherization Assistance Program (WAP) administered by Catholic Charities. Participants whose properties have been deferred by WAP for structural reasons are referred to the Pre-Weatherization program. Many potential clients cannot afford the structural home repairs needed to qualify the home, and therefore lose the ability to participate in weatherization assistance. The Pre-Weatherization Assistance Program will remedy issues that caused homes to be deferred from participating in the

Weatherization Assistance Program, at no cost to the client. The DESEU provides funding to pay for the repair of the structural issues, such as leaky roofs, broken windows and doors, or moisture in crawl spaces. The Pre-Weatherization Assistance Program will inspect homes, hire contractors, schedule repair work, and perform a quality assurance post-inspection, then re-admit these units into the Weatherization Assistance Program.

## INCOME QUALIFIED HOMEOWNERS



***"...about the program staff, Vivian and Dan...I wanted to say that both of them are my angels.***

***They were so kind, pleasant and caring. They were a very big help in getting the work done that I so badly needed. I can't say enough about the two of them...everyone was so nice and caring. God bless them all. Many many thanks."***

- from a satisfied customer

# Community Energy Centers



**In November 2016, the DESEU launched the Community Energy Center Program through a partnership with the Energy Coordinating Agency of Philadelphia, who administers the program, and through contractual arrangements with First State Community Action Agency and Catholic Charities who manage the day to day operations at the Community Energy Centers.**

With locations in Wilmington, Newark, Dover and Georgetown, the Community Energy Center program offers low-income Delawareans a one-stop-shop to access bill payment assistance, energy education, weatherization and related home repair services, energy and budget counseling, as well as referrals to other related programs and services.

While they have only been open a short time, the Community Energy Centers have received a tremendous response from the community, as well as from the state's utilities, who view

it as a welcome complement to their payment assistance programs.

In addition to one-on-one counseling, the Centers also conduct Home Energy Workshops throughout the community. Attendees at workshops receive free weatherization kits, are taught how to install the materials provided, and learn other ways to reduce their energy bills.

## DOVER COMMUNITY ENERGY CENTER



***I met with a client that wanted energy education because of high utility bills. The client and I sat down and figured out what new changes and habits were needed to help lower their utility bills. I provided several other resources that the client was able to use to get assistance with the electric bill and was happy. I also told them about the Weatherization Assistance Program and the client was excited to hear about the program.***

- Vickie Bryant, Energy Advisor at the Dover Community Energy Center

# Faith Efficiencies for Houses of Worship



**The Faith Efficiencies program provides a wide range of energy resources including energy audits, remediation strategies, funding options and ongoing cost-saving energy education to faith communities throughout the State.**

The program, implemented by Delaware Interfaith Power and Light (DeIPL), also serves the members of participating faith communities by offering Home Performance with ENERGY STAR® workshops and providing design assistance to establish Earth Care Displays to provide further energy education and resources.

DeIPL's mission is to rally faith communities to address causes and impacts of climate change by empowering them to adopt creative, effective and affordable energy conservation, energy efficiency and renewable energy strategies.

<b>Program Start.....</b>	<b>2015</b>	<b>Lifetime Energy Savings Found .....</b>	<b>\$471,880</b>
<b>2016 Participants .....</b>	<b>12</b>	<b>Tons of Air Emissions Avoidance Found .....</b>	<b>161</b>
<b>Annual Energy Savings Found .....</b>	<b>\$23,594</b>	<b>Total Program Funding .....</b>	<b>\$60,000</b>

## WESTMINSTER PRESBYTERIAN CHURCH



***“As an Earth Care Congregation, Westminster Presbyterian Church appreciates the Faith Efficiencies Program. Under the program, the church was audited this past summer at a nominal cost. The church is implementing recommendations beginning with lighting; the church estimates that lighting upgrades will reduce electric use by about 19,000 kWh annually with a rapid payback if it is successful in securing an incentive through the Energy Efficiency Investment Program.”***

- Sally Buttner, Westminster Presbyterian Church



# Energy Efficiency Investment Fund



**In 2016, the DESEU helped re-launch and expand DNREC's Energy Efficiency Investment Fund (EEIF) by providing funding to the program to cover non-profit organizations, as well as local governments that were previously excluded if they did not pay the public utility tax.**

Administered by DNREC's Division of Energy & Climate, EEIF provides grants to Delaware businesses, local governments, and non-profits to help replace aging, inefficient equipment and systems with energy efficient alternatives.

Prescriptive grants are available for high efficiency natural gas heating and water heating equipment, energy efficient lighting

and lighting control improvements, vending improvements, and more. The program also offers incentives for energy assessments, as well as custom incentives for unique energy efficiency projects that do not qualify for a prescriptive grant.

<b>Program Start.....</b>	<b>2016</b>	<b>Lifetime Energy Savings Found .....</b>	<b>16,620 MMBTU</b>
<b>2016 Participating Non-profits.....</b>	<b>3</b>	<b>Tons of Air Emissions Avoidance Found .....</b>	<b>182</b>
<b>Rebates/Incentives Awarded.....</b>	<b>\$22,065</b>	<b>Total Program Funding Budgeted .....</b>	<b>\$1,000,000</b>
<b>Annual Energy Savings Found .....</b>	<b>831 MMBTU</b>		

## AMERICAN LEGION POST 19



*When the Laurel American Legion Post 19 decided to make some energy improvements to reduce costs and improve the lighting in their facility, they applied for an Energy Efficiency Investment Fund grant last year—only to learn their project was denied due to lack of program funding. Darryl Potteiger, Finance Officer, said **“We were happy to learn that the Delaware Sustainable Energy Utility provided additional funds so our project could move forward!”***

***“The new LED lights installed at our Post have saved us about 15 to 20% on our utility bills—even with increased activities and functions at the facility, and the new LED lights provide better quality lighting with more accurate dimming features.” Darryl also stated that their lighting contractor provided excellent customer service for the project. The Laurel American Legion Post 19 received over \$3,700 to assist with the lighting improvements. Darryl also stated that other American Legion Posts across the State could benefit from this program too.***

# Energize Delaware Program Results

## Updated for 2016

Program	Energy Savings Annual	Energy Savings Lifetime	Gross Energy Savings (MMBTU) Annual	Gross Energy Savings (MMBTU) Lifetime	Annual Emissions Avoided* Metric Tons
Green for Green	\$ 75,007	\$ 1,500,140	2,428	48,552	305
Home Performance	\$ 247,734	\$ 3,715,704	9,752	154,943	951
Assisted Home Performance	\$ 2,947	\$ 48,293	213	3,965	13
Revolving Loan	\$ 343,514	\$ 6,870,280	16,418	328,351	2,628
Energy Performance Contracting	\$ 265,171	\$ 5,303,420	11,673	233,462	1,626
SREC Purchase	NA	NA	21,492	429,842	2,093
EEIF for Non-Profits	NA	NA	831	16,620	182
Solar Thermal & Geothermal	\$ 2,463	\$ 49,257	199	3,972	11
<b>Total Savings</b>	<b>\$ 936,836</b>	<b>\$ 17,487,094</b>	<b>63,004</b>	<b>1,219,706</b>	<b>7,809</b>

### Savings Found through Energy Audits

Program	Potential Energy Savings (\$) Annual	Potential Energy Savings (\$) Lifetime	Potential Gross Energy Savings (MMBTU) Annual	Potential Gross Energy Savings (MMBTU) Lifetime	Annual Emissions Avoided* Metric Tons
Energy Audits for Non Profits	\$ 170,577	\$ 3,411,540	10,444	208,875	1,254
Pathway to Green Schools	\$ 397,591	\$ 7,951,820	40,087	801,738	6,774
Faith Efficiencies	\$ 23,594	\$ 471,880	1,741	34,811	161
<b>Total Savings</b>	<b>\$ 591,762</b>	<b>\$ 11,835,240</b>	<b>52,271</b>	<b>1,045,424</b>	<b>8,189</b>

\*The emissions avoided include CO<sub>2</sub>, SO<sub>2</sub> and NO<sub>x</sub> emissions.

# Telling Our Story

**2016 saw the DESEU and Energize Delaware programs represented in a variety of ways across print, radio and digital platforms.**



## In Print

We ran a series of full page ads in the Delaware Business Times that featured our business, government, non-profit, and renewable energy programs.



## Online

In July, 2016 we launched our first e-newsletter. Delivered quarterly, this newsletter will feature our favorite news items, tips and stories from our portfolio of programs.

At the end of the year we revealed a new look and feel to the EnergizeDelaware.com website. This more modern look is matched by exciting behind the scenes changes that increase the functionality and security of the site.

## On the Air

A four week long spring radio ad campaign on WDSD, WDOV and WILM also featured a series of on air interviews about the DESEU and three of its programs, Home Performance with Energy Star, Faith Efficiencies, and Pathways to Green Schools.



## Personnel

In the fall we hired our first full-time Marketing and Communications Manager, Kate Bayard. Having Kate onboard will allow us to increase our marketing and community outreach efforts, so you will see more about the DESEU and Energize Delaware in print, on the radio and online in 2017.





# Looking Forward

## A number of new Energize Delaware initiatives are in the works for 2017.

- **Energy Efficiency Bond Issue** - Throughout 2016, DESEU worked with state agencies and school districts to develop Energy Saving Performance Contracts (ESPC) to be funded with an Energy Efficiency Bond Issue. There are three state agencies and two school districts participating in the program, with the potential for a third school district joining. Originally planned for 2016, the bond issue will move forward in 2017, and is expected to be as high as \$35 million.
- **Zero Net Energy Modular Housing (ZNEMH) Program** – A unique housing option being developed for low and moderate income Delawareans, these modular homes produce as much energy through solar panels as they use annually. Beracah Homes in Greenwood, Delaware is manufacturing the homes, and we expect to have two models completed by June 2017. We will be deploying these homes through a partnership with the Milford Housing Development Corporation.
- **Energize Delaware Affordable Multifamily Housing Program** – This program is designed to help owners and tenants of multifamily housing save energy and utility costs through a combination of incentivized audits, technical assistance, rebates, and low-interest loans. Our goal is to roll this program out in the summer of 2017 in conjunction with our partners at New Ecology and Elevate Energy.
- **Solar Resiliency Pilot Program** – This program is planned for deployment in 2017 through pilot locations at three fire houses and a school or community center. Installed at each location will be a solar system with a battery backup that can support

the facility during electric outages. A third party solar developer will own the systems, with the DESEU providing incentives and low-interest loans so that the solar electric can be provided to the host facilities at a lower electric cost with no capital outlay.

- **Statewide Energy Savings Database** – In cooperation with the State of Delaware Division of Energy and Climate and the Energy Efficiency Advisory Council, the DESEU has agreed to develop and manage a Statewide Energy Savings Database. When it is deployed in the summer of 2017, all agencies and utilities can report energy savings to a centralized database so that statewide energy saving goals can be tracked and reported.
- **Energize Delaware Farm Program** - In late 2016, we launched this program and it will be fully functional in 2017. Through a combination of energy audits, technical assistance, incentives, and low-interest loans, the program's goal is to help Delaware farmers save energy and utility costs.
- **Quick Home Energy Check Up** – This program is planned to complement the Home Performance with Energy Star Program by offering lower cost, quicker and simpler energy assessments that can help homeowners decide what is their best path toward energy savings. This program will also be an option for Delawareans who live in apartments and condominiums, which will make it a valuable addition to our Community Energy Center program. Our goal is to launch in fall of 2017.
- **Property Assessed Clean Energy (PACE) Legislation** – PACE allows for voluntary clean energy financing through commercial property assessments. Similar PACE programs in other states have been successful in increasing the number of commercial energy efficiency and renewable projects completed. The DESEU and the Delaware Division of Energy and Climate drafted legislation in 2016, and is working on building enough support for its adoption in 2017.



## Delaware Sustainable Energy Utility Financial Statement

Below are comprehensive financial statements excerpted from the DESEU fiscal year (ending June 2016) audit performed by the accounting firm of Whisman, Giordano & Associates LLC, Certified Public Accountants, Newark, Delaware. Complete audited statements are available at [www.energizedelaware.org](http://www.energizedelaware.org).

Balance Sheet as of June 30th, 2016	
<b>Assets</b>	
Cash and Investments	\$ 34,648,349.00
Program Receivables	\$ 68,620,767.00
Program Loans Receivable, net	\$ 10,328,489.00
Fixed Assets, net	\$ 1,457,500.00
Limited Use Assets Held by Trustee	\$ 116,280.00
<b>Total Assets</b>	<b><u><u>\$ 115,171,385.00</u></u></b>
<b>Liabilities and Net Assets</b>	
Accounts Payable	\$ 4,374,557.00
Bonds Payable	\$ 60,350,100.00
Net Assets	\$ 50,446,728.00
<b>Total Liabilities &amp; Net Assets</b>	<b><u><u>\$ 115,171,385.00</u></u></b>

Statement of Revenue and Expenses as of June 30th, 2016	
<b>Revenue</b>	
Program Service Revenue	\$ 3,605,301.00
State of Delaware Contract-RGGI	\$ 12,687,241.00
Other Income	\$ 646,191.00
<b>Total Revenue</b>	<b><u><u>\$ 16,938,733.00</u></u></b>
<b>Expenses</b>	
Program Activities	\$ 3,236,118.00
Support Services	\$ 3,516,254.00
<b>Total Expenses</b>	<b><u><u>\$ 6,752,372.00</u></u></b>
<b>Increase in Net Assets</b>	<b><u><u>\$ 10,186,361.00</u></u></b>



# 2016 Delaware Sustainable Energy Utility Oversight Board & Staff



**Senator Harris B. McDowell III**  
Chair and Co-Founder  
Delaware State Senator



**Kristopher E. Knight**  
Treasurer/Secretary  
Director of Accounting, State of DE



**Dr. Charles Gilbert Wagner, MD**  
Vice-Chairman  
Manufacturer of Energy Devices



**David Small**  
Secretary, DE Dept. of Natural Resources and Environmental Control



**W. Charles Paradee III**  
Delaware House of Representatives



**Pamela Bakerian**  
Executive Director, Delaware State Farm Bureau



**Rob Underwood**  
Ex-Officio Member  
DE Division of Energy and Climate



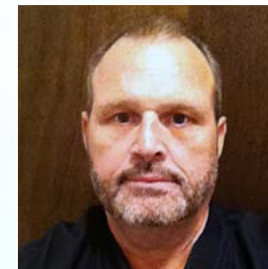
**David Bonar**  
Delaware Public Advocate



**Sean Finnigan**  
Chief of Staff, Delaware House of Representatives



**Dr. Syed Ismat Shah**  
Sr. Policy Fellow at the Institute of Energy and Environment Policy, UD



**Joseph Schorah**  
Board Member



**Nnamdi Chukwuocha**  
Wilmington City Councilman

## DELAWARE SUSTAINABLE ENERGY UTILITY STAFF



**Dr. John Byrne**  
Hon. Member & Co-Founder UD Ctr. for Energy and Environ. Policy



**Frank Murphy**  
General Counsel



**Tony DePrima**  
Executive Director



**Suzanne Sebastian**  
DESEU Program Manager



**Lisa Gardner**  
Office Manager



**Kate Bayard**  
Marketing and Communications Manager



**Joohee Lee**  
University of Delaware Intern



500 West Loockerman Street · Suite 400  
Dover, Delaware 19904  
[www.EnergizeDelaware.org](http://www.EnergizeDelaware.org)



## The Sustainable Energy Utility and Energize Delaware

The Delaware Sustainable Energy Utility is a unique non-profit organization offering a one-stop resource through its Energize Delaware programs to help residents, businesses, non-profits and government save money through clean energy and efficiency. The DESEU was created in 2007 by the State of Delaware to foster a sustainable energy future.