

Office of Central Services

Sustainable Energy

Progress Update

March, 2018 - March, 2020



Transforming our Communities, One Kilowatt at a Time

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Executive Summary

BACKGROUND

The Office of Central Services (OCS) Sustainable Energy (SE)'s objective is to provide reliable and environmentally sound energy solutions that enhance the quality of life of Prince George's County residents while concurrently maximizing energy savings. Sustainable Energy coordinates efforts to reduce energy consumption, costs, and greenhouse gas (GHG) emissions.

SE's initiatives support efforts to reduce GHG emissions in the region. SE not only manages sustainable energy efforts for County Government operations, but SE and its partners are also implementing the following initiatives funded by proceeds from the Exelon/PHI merger: (1) Energy Resiliency Communities (ERC) Clean Energy Program Grants; (2) ENERGY STAR Certification & Green Leasing (ESGL) Grant; (3) Sustainable Energy Workforce Development Initiative; (4) an energy literacy effort called Energizing Student Potential; and (5) Green Energy Loan Fund. These initiatives create opportunities within the community for residents and businesses to lower their energy consumption and costs, reduce their carbon footprint, and encourage energy consciousness in the community.

Prince George's County has been a leader in sustainability efforts, currently being the *number one in installed solar* in the D.C. Metro region and has reduced GHG emissions by 12% since 2005 per Metropolitan Washington Council of Governments (COG) data. The County and SE also received COG's 2018 Climate and Energy Leadership Award for outstanding efforts to reduce GHGs, increase energy efficiency, and advance regional goals established by leaders at COG. This award exemplifies our commitment and leadership to providing a clean energy, ecosystem-based approach to energy and climate change management for our residents and businesses.

This report outlines SE's current grant award implementation and progress, including resources and application instructions, as well as workforce development initiatives, green government operations efforts, and other sustainable community initiatives.

PRINCE GEORGE'S COUNTY SUSTAINABLE ENERGY AWARDS

MWCOG Climate and Energy Leadership Award

Greater Washington Clean Cities Coalition Clean Transportation Award

Maryland Energy Administration Smart Communities Award


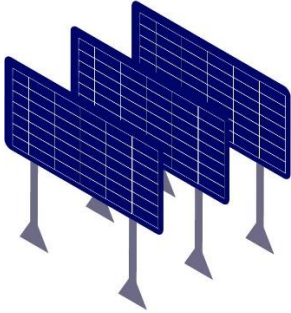

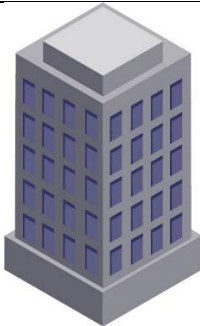


Greater Washington Clean Cities Coalition Clean Transportation Award



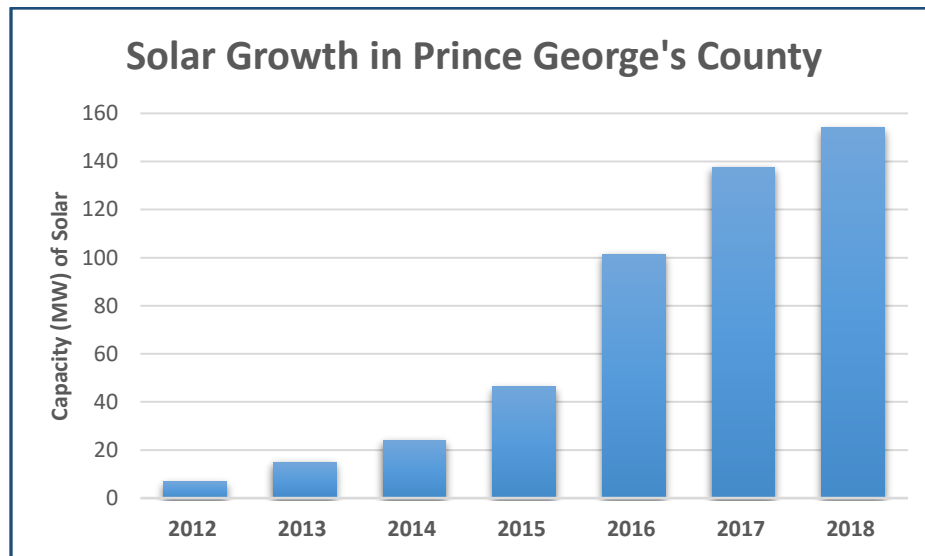
MWCOG Climate and Energy Leadership Award

KEY GOALS AND SUCCESSES

	Goal	Progress
	Reduce County-wide greenhouse gases by 80% below 2008 levels by 2050.	The County has achieved MWCOG's regional GHG 2012 goal: despite experiencing an 8% growth in population, GHG emissions reduced from 11.3 million metric tons of carbon dioxide equivalent (MMTCO ₂ e) in 2005 to 9.9 MMTCO ₂ e in 2015, representing an <u>overall decrease of 12%</u> .
	Meet 20% of government buildings' electricity demand with distributed renewable energy generation by 2022.	The County Government's largest solar canopy system at the Wayne K. Curry Administration Building generates about 1 MW of clean solar energy - enough electricity to power around 70 average size homes. The County is identifying the buildings to install 4 MW of additional solar carport per Exelon/PHI merger over the next two years.
	Help residential grant award recipients achieve at least 15% energy savings for energy efficiency projects and 10% energy savings for solar projects.	Residential clean energy grant award recipients have achieved an estimated average of ~18% annual energy savings. (Based on prequalified grant award applications through February 2020; energy savings estimated based on Beacon Audit Reports).
	Help grant award recipients reduce energy consumption by 20% or greater for office buildings and multi-family dwellings.	Sustainable Energy is coordinating the ESGI grant award, offering incentives for energy efficiency projects and ENERGY STAR certification in office buildings and multifamily dwellings.

Solar Capacity in Prince George's County

- ❖ Prince George's County is number one in installed solar in the region, with over 150 megawatts (MW) of installed solar in 2018 per Council of Governments (COG) annual assessment of National Capital Region's Installed Renewable Energy Capacity.
- ❖ Installed solar energy capacity in Prince George's County has grown from around 7 MW in 2012 to over 150 MW in 2018, over a 2000% increase per COG's assessment.



Installed Solar Energy Capacity in Prince George's County (Source: MWCOG)

- ❖ As of March 2020, there is currently over 213 MW of solar installed in Prince Georges County, per the PJM Generation Attribute Tracking System (GATS).
- ❖ The largest solar system on County Government property was completed and generates about 1 MW of clean solar energy - enough electricity to power around 70 average size homes. The County plans to install an additional 4 MW on government properties.



Solar Carport at Wayne K. Curry Administration Building in Largo, MD

KEY INITIATIVES SUMMARY

Grants

Clean Energy Program Grants

Prince George's County is working to uplift and improve the quality of life of nine (9) underserved areas, classified as Energy Resiliency Communities (ERCs). The ERCs evolved from a County initiative, formerly known as Transforming Neighborhoods Initiative (TNI) and builds on existing TNI efforts, assisting ERC residents with adopting energy efficiency measures, and for subsequent access to rooftop solar photovoltaics and solar water heaters. The initiative is designed to improve quality of life, energy efficiency, and resiliency in these neighborhoods.

These grant awards greatly reduce the up-front costs for energy efficiency measures and provide support to residents throughout the application and administration process. Residents can now receive up to \$7,500 to implement energy efficiency measures, with up to \$5,000 available for electric measures and up to \$2,500 for natural gas measures. Upon the successful implementation of efficiency measures, residents may apply for up to \$10,000 in grant award funds to install rooftop solar photovoltaic (PV) and up to \$7,500 in grant award funds to install a solar water heater.

Progress: As of February 2020, the Office of Central Services prequalified 681 grant award applications since the beginning of the grant award in March 2018 and awarded over \$2.2 million in energy efficiency and solar photovoltaic (PV) grant awards in Energy Resiliency Communities in Prince George's County. Of the total spent on Clean Energy Program Grant awards, 38% was spent on Prince George's County businesses.

ENERGY STAR & Green Leasing Grant

The ENERGY STAR Certification and Green Leasing (ESGL) Grant award seeks to increase the number of ENERGY STAR certified buildings and encourage the adoption of green leasing practices within Prince George's County. This effort helps support the County's goals of reducing GHG emissions while attracting and retaining high-valued tenants. Commercial building owners of office buildings and multifamily housing (including affordable or low income properties) may apply for up to \$150,000 per project to fund energy efficiency measures, professional services required to achieve ENERGY STAR Certification, and implement green leasing practices to align the interests of landlords and tenants so that they are both financially motivated to engage in energy efficient behavior.

Progress: As of 2019, the Environmental Protection Agency lifted the moratorium on ENERGY STAR Certification for office buildings. Eligible office buildings are now able to apply for the ESGL Grant award. As of May 2020, the grant award has prequalified two applications in the sum amount of \$90,000 in electric measures. Of the two applications, one has been completed – The Prince George's County Sheriff's Office.

Energy Coach Services

The "Energy Coach" serves as an objective and trustworthy advisor for community-based sustainable energy initiatives. S/he provides one-on-one consultation with residents, participates in community meetings, and hosts community events to ensure residents are educated on the importance of home energy efficiency, how to reduce

their carbon footprint and live more sustainably, benefits of installing solar systems, and the availability of incentives such as EmPOWER Maryland. The Energy Coach also assists applicants with completing the Clean Energy Program and ENERGY STAR & Green Leasing Grant award applications.

Workforce Development Initiatives

Sustainable Energy Workforce Development Program (SEWDP)

The Sustainable Energy Workforce Development Program (SEWDP) is focused on creating “Pathways out of Poverty” by providing training and career pathways assistance in renewable energy, energy efficiency, and construction and skills trades specific to the energy sector. The SEWDP provides eligible Prince George’s County residents with free industry certified training, one-on-one career counseling, job placement assistance, basic skills training, and supportive services to help you gain employment in the sustainable energy industry.

Progress: The first training session was completed in April 2018, with the first solar PV training concluding in December 2018. Prince George’s Community College is currently providing training in solar PV, energy efficiency, hybrid/electric vehicles, and other technologies and skills.

Energizing Student Potential

The National Energy Education Development’s (NEED), *Energizing Student Potential* (ESP) is a science, technology, engineering, and mathematics (STEM)-focused energy literacy effort implemented in Prince George’s County Public Schools. This initiative was extended into the Summer Youth Enrichment Program (SYEP) in summer of 2019.

Progress: Over 6,010 students from 29 elementary and middle schools successfully participated in ESP during the 2018 – 2019 school year. Additionally, over 200 youth participated in Prince George’s County’s SYEP to develop a deep understanding of energy, including resources, energy efficiency, and conservation, in the summer of 2019.

Green Energy Loan Fund

On behalf of SE, FSC First serves as the Fund Manager and provides loan guaranty to participating lenders to compel them to provide financing for sustainable energy projects. Eligible projects include, but are not limited to: energy storage, community solar and other distributed energy generation, energy and water efficiency in buildings, microgrids, clean transportation, resiliency measures, and more.

Progress: To increase participation, FSC First modified this effort in March 2020 to allow for direct loans in addition to loan loss reserve.

Government Operations

Maryland Energy Administration (MEA) launched the Maryland Smart Energy Zones program in 2013. The goal of the program is to have local governments commit to sustained energy savings and adopt policies related to energy efficiency, renewable energy, and/or transportation efficiency. The County received multiple grants under this effort, starting in 2014. SE, Fleet, and Department of the Environment utilized grant funds to purchase six plug-in hybrid electric vehicles (PHEV) and install three dual-head electric vehicle charging stations (six chargers). We also

utilized funds to perform a “deep energy retrofit” of a senior facility, upgrade HVAC systems at public housing residences, and install solar PV at the Animal Services Center.

Resiliency Efforts

Pepco in partnership with Prince George’s County, SE, and Montgomery County submitted a proposal to construct the first [public purpose microgrids](#) in its service territory in Maryland. The proposal included the development of a microgrid in the Largo area of the County consisting of a grocery store, gas station, pharmacy, a county government building, and two medical facilities. During times of widespread power outages, the public purpose microgrid would ensure County residents access to essential supplies such as food, water, medicine, fuel, as well as medical treatment, and support public safety by maintaining normalcy during periods of extended power outages.

Electric Vehicle Charging Expansion

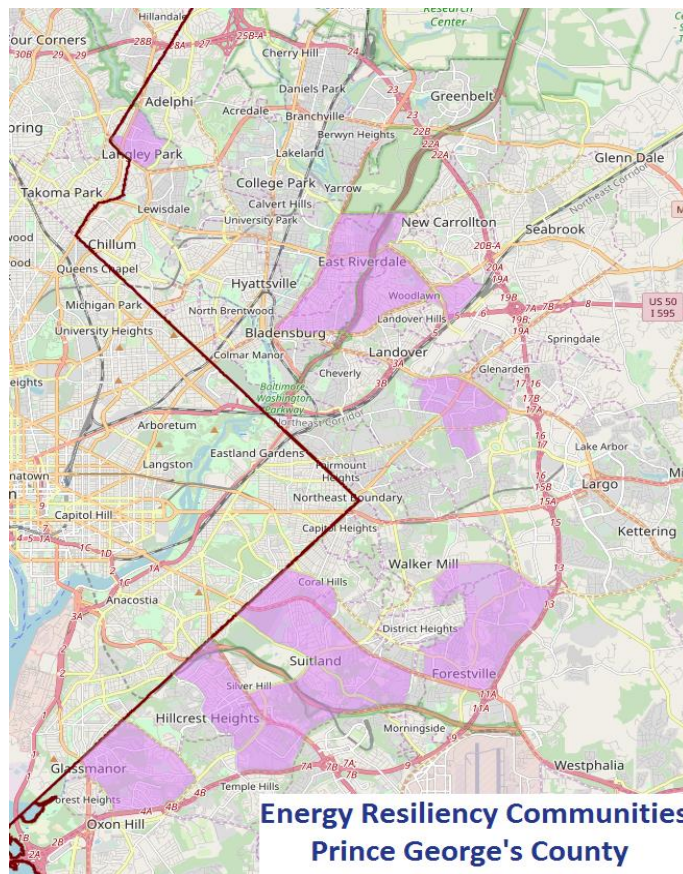
The Maryland Public Service Commission approved an electric vehicle (EV) charging pilot program to test limited EV charging deployment at a reduced cost to limit exposure to Maryland ratepayers. Prince George’s County has developed a working list of proposed locations for possible public charging stations in the County, across the three utilities: Pepco, Baltimore Gas and Electric (BGE), and Southern Maryland Electric Company (SMECO). The County is also working with COG to develop an electric vehicle charging infrastructure (EVSE) plan focused on community-wide EV charging.

Progress: A license agreement was completed by the County and Pepco in March 2020 with the first public purpose electric vehicle charging stations installations occurring at the Equestrian Center in the fall of 2020.

Grants

CLEAN ENERGY PROGRAM GRANTS

Prince George's County is working to improve the quality of life in nine designated neighborhoods, classified as [Energy Resiliency Communities](#) (ERCs): Bladensburg - East Riverdale, Forestville, Hillcrest Heights - Marlow Heights, Kentland - Palmer Park, Oxon Hill – Glassmanor, Silver Hill, Suitland - Coral Hills, Langley Park, and Woodlawn - West Lanham. The ERCs evolved from a County initiative formerly known as Transforming Neighborhoods Initiative (TNI), which focused on uplifting neighborhoods in Prince George's County that face significant economic, health, public safety, and educational challenges. The County is working to improve the quality of life in those neighborhoods, while identifying ways to improve service delivery throughout the county for all residents. Prince George's County offers clean energy grant awards to residents with homes in these ERCs.



ERC Designated Areas (note: ERC map was updated in August 2018)

Why Energy Resiliency Communities?

Energy plays a crucial role in most residential needs, especially for heating, cooling, and refrigeration, which are closely tied to quality of life. According to the Environmental Defense Fund (EDF), “the more than 36 million U.S.

households with incomes below twice the federal poverty level (\$49,200 for a family of four) use more than 30% of U.S. residential electricity and comprise 27% of U.S. households.”¹ Yet EDF reports that as of 2015, only an estimated 6 percent of dollars spent on energy efficiency programs was going to fund low income residential programs. EDF also estimates that low income households can spend about 12% of income on electricity bills (for homes using electric for heating). That is four times greater than the average amount of income spent on electricity for similar fuel use in households across all income groups. Not only is this an equity issue in our communities, but inefficient homes also contribute to increase in carbon emissions and other air pollutants which can exacerbate health issues in the community.

Conversely, energy efficient homes bring multiple benefits to homeowners, renters, and the community in the form of financial savings, increased comfort, support for economic and social development, and promotion of environmental goals. Energy efficiency programs also support job creation in the community; EDF estimates that more than two million people in the US are working in the energy efficiency industry. OCS Sustainable Energy encourages vendors within the County to participate in the grants, boosting the local economy and job creation.

The Clean Energy Program Grant awards build on the former TNI initiative and seek to help alleviate efficiency challenges faced by County residents, reduce the economic burden of energy in these households, and promote equity within the community. The average household income in ERC neighborhoods is around **\$63,650**,² over 20% lower than the 2018 median household income of **\$80,776** in Maryland.

As of 2018, it is estimated that residents in ERC designated neighborhoods spend approximately **\$140.5M** annually on electricity costs and **\$65.5M** on natural gas costs:³

ERC Neighborhood	Annual Electricity Cost (@ 13.09¢/kWh ⁴)	Annual Natural Gas Cost (@ \$11.79/Mcf ⁵)
Bladensburg - East Riverdale/Woodlawn – West Lanham	\$28,593,973	\$20,386,249
Forestville/Suitland - Coral Hills	\$40,084,188	\$14,835,585
Hillcrest Heights - Marlow Heights	\$18,703,037	\$7,913,701
Kentland - Palmer Park	\$14,587,123	\$7,108,664
Langley Park	\$11,754,247	\$6,568,573
Oxon Hill – Glassmanor	\$12,993,734	\$4,535,475
Silver Hill	\$13,807,724	\$4,138,774
Total	\$140,524,026	\$65,487,021

Estimates of electricity expenditures for ERC Designated Neighborhoods (Source for MWCOG, 2018)

¹ EDF Low Income Energy Efficiency National Summary: https://www.edf.org/sites/default/files/documents/liee_national_summary.pdf

² Data compiled from the American Community Survey by zip codes.

³ SE staff receives annual report from MWCOG at the zip code level for electricity and natural gas consumption and expenditures.

⁴ Cents per kWh is an average for residential cost in Maryland in 2018 from U.S. Energy Information Administration https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_5_6_a.

⁵ Cost per Mcf (1000 cubic feet) is an average for residential cost in Maryland in 2018 from U.S. Energy Information Administration: https://www.eia.gov/dnav/ng/NG_PRI_RESCOM_DCU_SMD_A.htm.

Given the potential to empower households to reduce energy consumption and spur economic development, the business case for energy efficiency upgrades is compelling. Taking the link between energy efficiency and social inequality to heart and helping to break the cycle of energy inefficiency and energy poverty, the Clean Energy Program Grant awards assist ERC residents with adopting energy efficiency measures, and subsequent access to rooftop solar PV and solar water heaters upon the successful implementation of efficiency measures.

The grant awards work to overcome the unique obstacles to energy efficiency in low income homes. Residents can greatly lower, and in some cases eliminate, the upfront costs of energy efficiency measures, as well as access administrative support from the County throughout the process. The Clean Energy Program Grant awards also allow a portion of the grant award measures to pay for necessary health and safety measures which may otherwise create obstacles to energy efficiency implementation.

The Importance of Resiliency

Presidential Policy Directive (PPD) 21 defines resiliency as “the ability to prepare for and adapt to changing conditions and withstand and recover rapidly from disruptions.” These disruptions include extreme weather events and utility grid failures. Energy efficiency and use of clean energy generation help to reduce reliance and stress on the utility grid therefore enhancing resiliency in these communities. Energy efficiency has many benefits to resiliency including reducing electricity demand, greenhouse gas emissions, pollution, exposure to energy price increases, and energy costs. With the incidence of extreme weather events in the US increasing, investing in resiliency can help minimize the effects of these events and shorten the recovery time, reducing vulnerability and empowering these communities. The Center for American Progress estimates that \$4 is produced in economic benefits from every \$1 spent on resiliency efforts.⁶

Goals

SE will educate residents about cost-effective energy efficiency measures and promote implementation of such measures while minimizing barriers to energy efficiency. Thus, the Grant award seeks to:

- Make energy efficiency a primary consideration for residents and enhance awareness of energy efficient technologies and measures;
- Help applicants achieve substantial energy and cost savings:
 - At least 15% for electric and natural gas energy efficiency projects;
 - At least 10% for electric only energy efficiency projects;
 - At least 10% energy savings for solar projects.
- Address budget constraints and high up-front costs that typically lead residents to rule out or delay implementation of energy efficient technologies and measures;
- Help meet the County-wide GHG reduction goals of 80% below 2008 levels by 2050.

Grant awards will be available to offset the costs of measures as recommended by a home energy assessment. To facilitate implementation of efficiency measures, funds may also be used to address challenges, such as health and safety issues, that would prevent the adoption of recommended efficiency measures. Upon completion of

⁶ Center for American Progress 3 Strategies for Building Equitable and Resilient Communities:
<https://www.americanprogress.org/issues/green/reports/2016/10/17/146243/3-strategies-for-building-equitable-and-resilient-communities/>

energy efficiency upgrades, residents in ERC designated neighborhoods may apply for Clean Energy Program Solar PV and/or Solar Water Heater Grant awards.

Energy Efficiency Measures

The most commonly implemented energy efficiency measures are listed below. *Note: These are examples of efficiency measures and every home is different; all measures may not be applicable.*

Electric	Natural Gas
Attic Sealing	Furnace Replacement (min 95.1% AFUE)
Attic Insulation	Boiler Replacement (min 95.1% AFUE)
Rim Joist Insulation	Storage Water Heater (min UEF 0.69)
Smart Thermostats	Tankless Water Heater (min UEF 0.89)
Duct Sealing	
Central Air Conditioner (Min 16 SEER and 13 EER)	
Air Source Heat Pump (Min 16 SEER, 13 EER and 9 HSPF)	

*NOTE: All HVAC, water heater, and other appliances must be ENERGY STAR certified.

Applying for Grants

General Eligibility Requirements

To apply for Clean Energy Program Grant awards, applicants must:

- Be a Prince George's County resident;
- Be a Pepco customer (and Washington Gas customer for natural gas incentives or solar water heater) as evidenced by a copy of a recent electricity bill and natural gas bill if applicable;
- Live in a single-family home, townhouse residence, or condominium⁷ that is individually metered, built before March 23, 2016, and in one of the following ERC designated neighborhoods: Bladensburg - East Riverdale, Forestville, Hillcrest Heights - Marlow Heights, Kentland - Palmer Park, Oxon Hill - Glassmanor, Silver Hill, Suitland - Coral Hills, Langley Park, and Woodlawn - West Lanham. The [ERC Address Locator](#) is an interactive map that will allow you to key in an address and determine if it is located within a designated ERC area.
- Have applied to the applicable EmPOWER Maryland incentive program:
 - Market rate applicants participate in Pepco's Home Performance with ENERGY STAR (HPwES) Program.⁸
 - Low-to-moderate-income (LMI) qualified applicants utilize the Maryland Department of Housing and Community Development (DHCD)'s Low Income Energy Efficiency Program (LIEEP).⁹
- Select a contractor to perform a comprehensive home energy audit and receive Audit Report and Prioritized List of Measures (PLOM). As part of the Clean Energy Program Grant awards, SE expects the contractor, on behalf of the applicant, to achieve no less than 15% energy savings for Energy Efficiency

⁷ *For traditional styled condominiums, eligible measures funded differ from other housing types. The installation of ENERGY STAR certified appliances is eligible for funding. Air sealing and insulation, unfortunately at this time, are not a part of the list of eligible measures for award funding since the whole structure is not always owned entirely by the applicant. In this case, EmPOWER Maryland will not provide the \$300 incentive for the energy audit but will provide rebates/discounts as incentive on appliances based on performance savings. Consequently, the applicant may submit a QHEC audit report in lieu of the Home Performance with ENERGY STAR audit identifying the appliances they would like award dollars to fund along with a copy of the applicable Pepco rebate forms. Applicants should also provide links to or a copy of the documents needed to verify energy savings in both dollars and kWh.

⁸ <https://homeenergysavings.pepco.com/home-performance-with-energy-star-program>

⁹ <http://dhcd.maryland.gov/Residents/Pages/lieep/default.aspx>

Grant award applications for both electric and natural gas incentives, 10% energy savings for electric incentives only, 10% energy savings for Solar PV Grant, and 50% water heater energy savings for the Solar Water Heater Grant.

- Under the LIEEP, the home energy audit will be available at no cost to the program participant. For participants in the Pepco energy efficiency program, the home energy audit, called the Home Energy Assessment,¹⁰ is under the Home Performance with ENERGY STAR (HPwES) program.
- Market rate applicants must select one of the more than 35 [HPwES contractors](https://homeenergysavings.pepco.com/home-performance-with-energy-star-program/overview/participating-contractors) approved by Pepco to perform energy audit and install energy conservation measures under the HPwES program.
- All grant award applicants who seek to claim grant awards and/or incentives under the Clean Energy Program Grant are required to acknowledge reading and understanding the terms and conditions, and must accept the terms and conditions before SE will process an application and/or incentive payment. Please see the Clean Energy Program Grant applications for a complete list of terms and conditions. These now include a COVID19 Participation Terms and Conditions form.

Solar PV Energy Grant

This option is also available to homeowners in ERC designated communities who are Pepco customers. The solar grant award option builds on Maryland and Prince George's County's energy efficiency and carbon reduction goals, using a holistic approach to break energy and cost barriers. Grantees must successfully implement energy efficiency measures to qualify for funding for solar PV. All systems supported through the grant award are subject to the following conditions:

- The minimum system size to qualify for a grant award is 2 kilowatts direct current (kWDC);
- Only rooftop solar PV systems installed after January 1, 2018 are eligible;
- Systems must be installed by an appropriately licensed contractor in accordance with all applicable federal, state, and local laws. Self-installers are not eligible to receive rebates at this time;
- All selected solar PV contractors must be North American Board of Certified Energy Practitioners (NABCEP) Certified as well as registered as a vendor of Prince George's County;
- All major system components (panels, inverters, and solar power outlets, if applicable) must be new and not previously placed in service in any other location or for any other application. Rebuilt, refurbished, or relocated equipment are not eligible for a photovoltaic incentive;
- In order to increase the resiliency of the solar PV system, a solar power outlet can be included in the scope of work or contract between the resident and the contractor, and the solar outlet design analysis must be provided (the County provides up to \$2,000 towards the cost of a solar power outlet);
- A manual or manuals must be provided with each photovoltaic system and balance-of-system, including the inverter; and
- To protect the purchaser against defective workmanship, system or component breakdown, or severe degradation, all systems must carry the original manufacturer's warranty of one year or greater, and all installation workmanship must be guaranteed for a minimum of one year. The entire solar generating system must carry a warranty, including PV modules (panels) and inverters, and warranties should provide

¹⁰ <https://homeenergysavings.pepco.com/home-performance-with-energy-star-program/overview/participating-contractors>

for no-cost repair or replacement of the system or system components, including any associated labor during the warranty period.

Benefits and Resources:

- Environmental: Solar panels produce clean, renewable energy, reducing the need for production from fossil fuels and greenhouse gas emissions released.
- Energy Savings: Solar PV systems reduce the amount of electricity that needs to be purchased from the utility grid saving money on residents' electricity bills. You can estimate how much money could be saved by installing a solar panel on your home with the [U.S. Department of Energy National Renewable Energy Laboratory PVWatts calculator](#).
- Home Value: A study from Lawrence Berkeley National Laboratory found that solar PV installed on homes could increase the value of a home by an average of \$15,000.¹¹
- Job Creation: Additionally, the Solar Foundation 2016 Solar Job Census estimated that over 5,400 people were employed in jobs relating to solar energy systems in Maryland.¹²

More resources and information for consumers interested in solar panel installation is available at the Maryland Energy Administration's [A Maryland Consumer's Guide to Solar](#).

Solar Water Heater Grant

This grant award, available in September 2020, coupled with state energy incentives, aids residents to access the benefits of solar thermal energy upon the successful implementation of energy efficiency (electricity and natural gas) measures. Available to homeowners in ERC designated communities who are Washington Gas customers. All systems supported through the award are subject to the following conditions:

- The minimum collector size to qualify for an award is 50 sq-ft;
- The solar water heating system must meet the requirements of local codes and operated in compliance with the Solar Rating and Certification Corporation OG-100 Certification;
- The solar water heating system must be installed after January 1, 2018 to be eligible, and 50% of the yearly water heater energy use must come from the solar water heater;
- The solar water heating system must be installed by an appropriately licensed contractor in accordance with state and county laws. Self-installers are not eligible to receive rebates;
- A manual or manuals must be provided for solar system; and
- To protect the purchaser against defective workmanship, system or component breakdown, or severe degradation, all systems must carry the original manufacturer's warranty of five years or greater, and all installation workmanship must be guaranteed for a minimum of one year. The entire solar generating system must carry a warranty, including collectors and tanks, and warranties should provide for no-cost repair or replacement of the system or system components, including any associated labor during the warranty period.

Benefits and Resources:

¹¹ ENERGY STAR Benefits Residential Solar Electricity: <https://www.energy.gov/energysaver/benefits-residential-solar-electricity>

¹² A Maryland Consumer's Guide to Solar: <https://energy.maryland.gov/Reports/A%20Maryland%20Consumers%20Guide%20to%20Solar.pdf>

- Environmental: A solar water heater can decrease carbon dioxide emissions produced by water heating by 50% and can prevent up to 4,000 pounds of carbon dioxide emissions annually.¹³
- Energy savings: The U.S. Department of Energy estimates that a solar water heater can decrease the heating bills for a home by 50-80%.¹⁴

For more resources and information relating to solar water heaters, including estimating the cost and size please visit the [U.S. Department of Energy](https://www.energy.gov/energysaver/estimating-cost-and-energy-efficiency-solar-water-heater).

Available Incentives

Subject to the availability of funds, grant awards will be dispersed on a first-come, first-served basis.

For **energy efficiency**, SE provides grant awards up to \$7,500 after incentives from the respective EmPOWER Maryland programs, to offset:

1. The cost to perform an energy audit (\$100 maximum as the EmPOWER program covers the remaining costs);
2. The installation of energy efficiency measures of which \$5,000 can be allocated towards electric incentives and \$2,500 toward natural gas incentives, and up to 50% of total grant award amount (\$3,750) can be allocated towards air sealing and insulation (does not include ancillary equipment like baffles/ventilation); and
3. A portion of the cost (up to 15%) to address health and safety measures that prevent the adoption of recommended efficiency measures.

For **solar PV**, the incentive amount depends on whether the solar PV system is owned by the homeowner or a third-party:

1. If system is owned by the homeowner:
 - a. Grant awards up to \$10,000 to cover eligible costs associated with installing a solar photovoltaic system.
 - b. Grant awards up to \$2,000 to purchase and install a solar power outlet in case of grid failure.
2. For third-party owned systems:
 - a. Grant awards up to \$2,000 to cover eligible costs associated with installing a solar photovoltaic system.
 - b. Grant awards up to \$2,000 to purchase and install a solar power outlet in case of grid failure.

For **solar water heaters**, the incentive amount depends on whether the solar water heating system is owned by the homeowner or a third-party:

1. If system is owned by the homeowner: Grant awards up to \$7,500 to cover eligible costs associated with installing a solar water heater; or
2. For third-party owned systems: Grant awards up to \$2,000 to cover eligible costs associated with installing a solar water heater.

Eligible costs for solar PV and solar water heater installation include any parts, component, or accessory equipment necessary to operate and/or install the device. A maximum of 15% of the award can be spent on reasonable measures to facilitate the installation of the system on a home (for example, tree trimming). OCS Sustainable Energy staff should be contacted to ensure the measure(s) qualifies.

¹³ https://www.energystar.gov/products/water_heaters/water_heater_solar/benefits_savings

¹⁴ <https://www.energy.gov/energysaver/estimating-cost-and-energy-efficiency-solar-water-heater>

Application Process

Applications are reviewed on a first-come, first-served basis. A prequalification must be issued to the applicant before commencement of energy efficiency upgrades or solar PV/water heater installation. SE staff has 15 days to prequalify a complete application for Energy Efficiency Grant awards and 20 days to prequalify a complete application for Solar PV or Solar Water Heater Grants; 10 days to process the final application after work is completed; and the Office of Finance has up to 30 days to process the invoice. The approval timeline is subject to change if deficiencies occur in the application submittal process.

Installation of solar PV or solar water heater should be completed within four months of receiving prequalification approval notification. Applicant may request a onetime extension provided the total allowed timeframe is within twelve months of the prequalification approval notification. The County is not required to award an extension.

A completed **energy efficiency** application must include:

- A recent (within 3 months) copy of an energy and natural gas bill (if applying for gas incentives) for the property;
- A copy of the home energy assessment/audit report and recommendations;
- Proof of having applied to one of the EmPOWER Maryland incentive programs;
- An itemized signed copy of contract and scope of work (SOW) with cost to install, remedy, or perform measures needed to address findings in the audit including supplemental information such as the Air Conditioning, Heating, & Refrigeration Institute (AHRI) certification model number and ENERGY STAR label/certificate for all applicable grant requested equipment;
- IRS Form W-9: Request for Taxpayer Identification Number and Certification;
- The completed and signed Affidavit of Income; and
- The completed and signed Terms and Conditions/Agreement.

Required for final approval:

- A copy of the HPwES Reservation of Fund email if applying for electric incentives and a copy of the Washington Gas Rebates receipt or Reservation of Fund email if also applying for gas incentives, and test-out form.
- Final invoice that itemizes all work completed (including AHRI Statement, Brand/Model/Serial Numbers for grant funded equipment); included should be the job completion date; and
- Proof of any necessary electrical, plumbing, mechanical, or other permits.

A complete **solar PV** application must include:

- A copy of recent (within 3 months) Pepco bill for the property;
- Proof of successful implementation of energy efficiency measures;
- A copy of the signed contract to install a solar photovoltaic system on the roof of the property that includes an itemized scope of work to include cost and all system components, a solar PV analysis that includes a detailed breakdown specifying the proposed solar project system size, lifetime, total cost after receiving other incentivizes, yearly estimated output inclusive of degradation rates, lifetime avoided cost savings, and overall energy savings from utility bills (i.e. kWh offset, SREC value and ownership, etc.). *Energy savings must be at least 10%.*
- Proof of vendor registration from the Prince George's County Contract Administration and Procurement Division;
- Proof of the contractor being North American Board of Certified Energy Practitioners (NABCEP) Certified;
- IRS Form W-9: Request for Taxpayer Identification Number and Certification;
- The completed and signed Affidavit of Income; and
- The completed and signed Terms and Conditions Agreement.

Required for final approval:

- Final invoice that itemizes all system component(s) installed to include job completion date;
- Copy of Pepco's Authorization to Operate letter;
- Proof of purchase/installation of the solar power outlet (if applicable);
- A copy of the official sticker used by a Third Party Solar Inspector participating in the Third Party Residential Solar System Inspections Program; and
- Proof of system registration with the Maryland (or District of Columbia) Public Service Commission.

A complete **solar water heater** application must include:

- A copy of a recent (i.e. within 3 months) Washington Gas utility bill;
- Proof of successful implementation of energy efficiency measures;
- A copy of the signed itemized scope of work (SOW) and contract to install a solar water heater;
- A solar water heater analysis report to include a detailed analysis specifying the proposed solar project: system size, lifetime, total cost after receiving other incentivizes, yearly cost savings, lifetime avoided cost savings, and energy savings from utility bills (i.e. offsets, SREC value and ownership, etc.);
- IRS Form W-9: Request for Taxpayer Identification Number and Certification;
- Proof of being a registered vendor of Prince George's County from Contract Administration and Procurement;
- The completed and signed Affidavit of Income; and
- The completed and signed Grant Award Terms and Conditions Agreement.

Required for final approval:

- Final invoice that itemizes all system component(s) installed to include job completion date;
- Proof of plumbing, electrical and any other applicable permits; and
- A copy of the official sticker used by a DPIE or Third Party Solar Inspectors Participating in the Third Party Residential Solar System Inspections Program.




A complete list of requirements are contained in the applications located on the SE website.

Site Visits

SE staff will conduct site visits to review installed energy conservation measures, solar installation and other grant award funded activities against the proposed measure list to assure project completion, appropriate expenditure of funds, and legal compliance. SE reserves the right to make additional site visits on any and all projects as deemed necessary.

Accomplishments

Through February, 2020, OCS Sustainable Energy has awarded ~**\$2,253,139.95** in Energy Efficiency (EE) and Solar PV Grant awards. Clean Energy Program Grant awardees are expected to save over 1.5 million kWh annually, the equivalent of over 1,000 metric tons greenhouse gas emissions. Over the past two years SE has achieved the following:

Clean Energy Program Grant Awards March 2018 - February, 2020		
	Average amount pre-qualified for grant awards	~\$4,300
	Average kilowatt hours of electricity savings per applicant annually	~3,000 kWh
	Average percent electricity savings per home annually	~18.0%

Note: Averages are compiled based on grant awards prequalified between March 2018 and February 2020. Average kilowatt hours of electricity saved and average percent electricity savings are based on Beacon Audit Reports.

Clean Energy Program Grant Awards	
Number of EE Applications Received	~689
Number of EE Applications Prequalified	~677
Number of Solar PV Applications Received	8
Number of Solar PV Applications Prequalified	4
Total Amount Spent on EE Applications	~\$2,218,139.95
Total Amount Sent on Solar Applications	~\$35,000.00
Total Amount Spent	~\$2,253,139.95

Clean Energy Grants Awarded between March 2018 and February, 2020

Energy Resiliency Community	Number of Applications *
Bladensburg - East Riverdale	112
Forestville	69
Hillcrest Heights - Marlow Heights	49
Kentland - Palmer Park	78
Langley Park	3
Oxon Hill - Glassmanor	21
Silver Hill	79
Suitland - Coral Hills	185
Woodland - West Lanham	88
Total	~684

Energy Efficiency Grant Awards Applications between March 2018 and February, 2020 by ERC

*(*Note: five of the applications received were outside of the ERC areas)*

ENERGY STAR Certification and Green Leasing Grant (ESGL)

For commercial real estate, ENERGY STAR certification is a market differentiator. To earn certification, buildings and plants meet strict energy performance standards set by the U.S. Environmental Protection Agency (EPA) - a facility must operate among the top 25 percentile of similar facilities nationwide, with no sacrifices in comfort or quality. ENERGY STAR certified buildings use less energy, are less expensive to operate, and create fewer GHG emissions than their peers. On average, these buildings use 35% less energy and create 35% fewer greenhouse gas emissions than comparable buildings across the country according to ENERGYSTAR.gov.

Certification can also help to increase a building's value. Academic studies show that ENERGY STAR certified buildings are more valuable — typically having higher rents and sale prices, among other economic benefits. As a building's energy usage and efficiency also retain and attract tenants, certified properties can generate more income when compared to similar buildings.¹⁵ Further, tenants are seeking leased spaces that meet minimum energy-efficiency standards. As of 2010, federal agencies are now required to lease space in buildings that have earned ENERGY STAR certification in the most recent year.

As of 2020, about 8.4% of office buildings (over 10,000 square feet) in Prince George's County were ENERGY STAR certified, and that number drops to 2.8% when factoring in all office buildings in the County.

Total Number of Office Bldgs. in the County:	~566
Number of Office Bldgs. 10K+ Sq. ft.:	~191
Number of Office Bldgs. 10K+ certified:	~16
Number of Multifamily Housing Bldgs. certified:	~5

Number of office and multifamily buildings in the County as of February 2020¹⁶

SE is currently accepting commercial applications for both Multifamily Housing building types and Office building types. As of July 31, 2019, the moratorium for office buildings has been lifted by the U.S. Environmental Protection Agency (EPA). The moratorium previously inhibited the grant award application process for office buildings. Now that the moratorium is lifted, SE is working to educate building owners about the available incentives and encourage participation in the Grant award.

Goals

The ENERGY STAR certification and Green Leasing (ESGL) Grant seeks to increase the number of ENERGY STAR certified office and multifamily buildings in the County. This will support the County's goals of reducing greenhouse gas emissions while stimulating economic activity. Grant award funds are available to assist commercial buildings obtain ENERGY STAR certification. As a condition of grant award, recipients are to adopt

¹⁵ From Ten Reasons to Pursue ENERGY STAR certification: (<https://www.energystar.gov/buildings/about-us/how-can-we-help-you/build-energy-program/business-case/10-reasons-pursue-energy-star>).

¹⁶ List of commercial buildings in Prince George's County provided by M-NCPPC, current as of February 2020. BPRUC codes were used to classify building type.

green leasing best practices and maintain certification for three years following the award. The grant award's goals are to:

- Reduce energy and water consumption of commercial properties by 20% or greater;
- Help meet the County-wide GHG or carbon emissions reduction goals of 80% below 2008 levels by 2050; and
- Increase the number of ENERGY STAR certified office buildings to 30 at a minimum.

Funds can be used to offset the costs of electric and/or natural gas only energy efficiency measures and for professional services required to verify that the information contained within the certification application is accurate.

The grant award targets office building and multifamily housing owners located in Prince George's County, built at the time of application, and are in the Pepco service territory (and Washington Gas service territory for natural gas incentives). Definitions of what constitute eligible office buildings and multifamily housing will follow the subset of building types as defined and listed on ENERGY STAR's [list of property types eligible](#) to receive the 1-100 ENERGY STAR score.¹⁷ Grant award funds will be dedicated to multifamily housing with an emphasis on affordable housing.

Energy Efficiency Measures

Efficiency measures for which funding support is requested must be identified by the audit, and are subject to pre-inspection to qualify for incentives. The grant award reserves the right to not fund certain measures if deemed not cost-effective. The efficiency measures must meet the following requirements:

- Must result in a measurable and verifiable reduction in energy usage (kWh/therms);
- Must produce energy savings through an increase in efficiency;
- Must be cost-effective as defined by the grant manager;
- New equipment must exceed minimum current equipment efficiency standards as defined by the current version of the Northeast Energy Efficiency Partnership's [Mid-Atlantic Technical Reference Manual](#);¹⁸ and
- Must not develop any savings due to fuel switching.

For purposes of this grant award, a project is defined by a set of proposed electric and natural gas energy savings measures included in a single project application - projects that include multiple measure types are encouraged. Examples of efficiency measures are listed below.

Examples of Eligible Electricity Measures:

Commercial lighting	Commercial plug load equipment
Commercial unitary HVAC	Appliances
Variable frequency drives	Appliance Recycling
Commercial refrigeration equipment	

Examples of Eligible Natural Gas Measures:

Boiler Systems

¹⁷ Property types eligible to receive a 1-100 ENERGY STAR score: <https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager/identify-your-property-type-0>.

¹⁸ <http://www.neep.org/mid-atlantic-technical-reference-manual-v6>

Small Boiler – Tier 1 and 2	Medium Pressure Steam Trap
Large Boiler – Tier 1 and 2	Steam Boiler Trap Repair/Replace
Boiler Cut Out Control	Outdoor Air Reset
High Pressure Steam Trap	

Food Services

Convection Oven	Combination Oven
Conveyor Oven	Rack Oven
Gas Fryer	Gas Griddle
Gas Steam Cooker	Kitchen Demand Ventilation Controls
Spray Rinse Valve	

Water and Space Heating

Large Furnace – Tier 1 and 2	Large Storage Water Heater
Small Furnace – Tier 1 and 2	Small Storage Water Heater
Infrared Heater	Large Tankless Water Heater
Wi-Fi Enabled Thermostat	Small Tankless Water Heater

Multifamily Group Meter to Individual Meter Conversion

Furnace – Tier 1 and 2	Storage Water Heater – Tier 1 and 2
Boiler Tier – Tier 1 and 2	Tankless Water Heater – Tier 1 and 2
Boiler Reset Controls	

Customer Business Solutions

Gas System or Equipment

Applying for Grants

Available Incentives

Subject to the availability of funds, grant awards will be dispersed on a first-come, first-served basis.

The maximum grant award available per application is \$150,000. The following incentives are available to qualified applicants:

1. The following incentives are available to qualified applicants: Of the \$150,000, if required, up to \$50,000 will cover the ASHRAE Level 2 Audit and shall not exceed this amount.
2. Grant awards to cover up to \$100,000 for electric and/or natural gas measures.
3. Grant awards to cover up to \$150,000 for electric and/or natural gas measures, if ASHRAE Level 2 Audit is not required.
4. Grant awards to offset 100% of the cost of the Licensed Professional's sign off to verify and stamp the ENERGY STAR certification application. This cost will be inclusive of the \$150,000 grant amount.

With the receipt of a complete application, a prequalification will be issued. Once a site visit is conducted by a Sustainable Energy staff member and a final invoice is submitted, OCS Sustainable Energy will pay up to 80% of the prequalified amount. Upon receiving the ENERGY STAR Certificate, OCS Sustainable Energy will pay the remaining 20% of the prequalified amount.

Eligibility Requirements

Office buildings and multifamily housing must be in Prince George's County and meet the following requirements:

- Located in the Pepco service territory (and/or Washington Gas territory for natural gas incentives) as evidenced by a copy of a recent electricity bill and a copy of a recent natural gas bill if applicable;
- Must be built at the time of application submittal;
- Perform benchmarking utilizing [Energy Star Portfolio Manager](#);
- Have or plan to apply to EmPOWER Maryland's applicable commercial energy efficiency programs (if necessary);
- Has or will perform, at a minimum, an American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) Level 2 Commercial audit or demonstrably equivalent (if necessary); and
- Has or will apply for Energy Star certification.

The owner of the property must:

- Have a status of "Good Standing" for the current year, as evidenced by a certificate of status from the Maryland State Department of Assessments and Taxation.¹⁹

Commercial Office Buildings must:

- Be at least 10,000 square feet;
- Be in operation at least 30 hours per week;
- Have at least 1 worker during the main shift; and
- Greater than 50% occupancy.

Multifamily housing properties must contain:

- 2 units or more per building;
- 20 units or more per property/campus;
- Greater than 75% occupancy.

Please note communities of single-family homes are not eligible; however, they may be eligible for grant awards offered by the Clean Energy Program Grants. If the housing property is a mix of multifamily and single-family homes, the property would still be eligible for the multifamily ESG Grant award if the single-family homes are less than 25% of the total gross floor area.

All grant award applicants who seek to claim grants and/or incentives under the ESG Grant are required to acknowledge reading and understanding the terms and conditions, and must accept the terms and conditions before SE will process an application and/or incentive payment. Please see the ENERGY STAR Certification and Green Leasing Grant application for a complete list of terms and conditions.

Benchmarking in ENERGY STAR Portfolio Manager

Benchmarking the energy performance of your buildings is a key first step to understanding and reducing energy consumption and your carbon footprint. All buildings can assess their energy performance, water efficiency, and carbon emissions using [ENERGY STAR's Portfolio Manager](#) to receive an ENERGY STAR score (1 – 100).

¹⁹ Certificates of Status are available on the Maryland State Department of Assessments and Taxation (SDAT) website [\[https://egov.maryland.gov/BusinessExpress/EntitySearch\]](https://egov.maryland.gov/BusinessExpress/EntitySearch).

For more information on how to use the ENERGY STAR Portfolio Manager, please visit the ENERGY STAR web portal: <https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager>. Visit the [training section](#) for Portfolio Manager how-to guides, short videos, and live and recorded training sessions.

- If the property score is below 75, apply for applicable EmPOWER Maryland Incentive Programs;
- If the property score is above 75, it is not necessary to apply to EmPOWER Maryland Incentive Programs and an application can be submitted.

Applying for Applicable EmPOWER Maryland Programs

As part of the EmPOWER Maryland legislation, incentives are available to help reduce the initial cost of energy audits, and for upgrades to energy efficient equipment and systems. Applicants to the ENERGY STAR Grant award must first apply to the applicable Commercial (C&I) program, and agree to share information with the ENERGY STAR Certification and Green Leasing Grant's staff.

Market Rate Programs

Maryland utilities administer the C&I incentives for market rate applicants interested in EmPOWER Maryland energy efficiency incentives.

Pepco's (C&I) Energy Savings Program²⁰

Under the EmPOWER Maryland initiative, Pepco offers a variety of programs to assist commercial properties (including office buildings and multifamily housing) with cutting costs, improving marketability, and boosting bottom lines by implementing simple energy saving strategies. To qualify for the ESG Grant award, the office building must be at least 10,000 square feet; and multifamily properties must have 20 or more units.

- The office building incentives are available here: <https://cienergyefficiency.pepco.com/Office.aspx>
- The multifamily properties incentives are available here: <https://homeenergysavings.pepco.com/business/energy-efficiency/multifamily>

Washington Gas²¹ participates in the EmPOWER Maryland initiative - helping businesses, local governments, and other commercial customers throughout Maryland reduce their energy consumption and save money on utility bills. As part of the initiative, rebates are available on high-efficiency natural gas equipment. Rebates provide the perfect opportunity to save on overall operating costs. Currently we offer high-efficiency natural gas equipment rebates for boiler systems, water and space heating, and food service.

Income-Based Programs

Maryland's Department of Housing and Community (MD DHCD) administers the income-based incentives for applicants interested in EmPOWER Maryland energy efficiency incentives.

MD DHCD Multifamily Energy Efficiency Improvement Program:²²

The Maryland Department of Housing and Community Development's multifamily energy funds are restricted to affordable multifamily rental properties. "Affordable" means rental housing with existing income or rent restrictions, or housing with units that serve tenants with low to moderate incomes, as determined by the Department. Multifamily rental housing may include apartment buildings, townhouses, single-family homes,

²⁰ <https://cienergyefficiency.pepco.com/>

²¹ <https://www.washingtongas.com/business-owners/savings/rebates#maryland>

²² <http://dhcd.maryland.gov/HousingDevelopment/Pages/EnergyEfficiencyWeatherization.aspx>

single room occupancy, and shared housing facilities with five (5) or more units. Eligible applicants include non-profit organizations, for-profit organizations, and governmental entities.

Apply to the MD DHCD Multifamily Energy Efficiency Improvement Program and agree to share application and program information with the ENERGY STAR Grant staff.

NOTE: To qualify for the ENERGY STAR certification and Green Leasing Grant, multifamily properties must have 20 or more units.

The Efficiency Audit

An efficiency audit is a systematic review of the energy and/or water consuming installations in a building or premises to ensure that resources are being used sensibly and efficiently. The audit usually commences with the collection and analysis of all information that may affect the utility consumption of the building or premises, then follows with reviewing and analyzing the condition and performance of various building services installations and building management, with an aim at identifying areas of inefficiency and suggesting means for improvement. As a part of the ESG Grant, we expect contractors performing the work on behalf of the applicant to achieve no less than 20% energy savings, considering the dollar amount requested per application.

The American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) Level 2 audit provides the building owner with a more detailed building survey and energy analysis. A detailed fuel use analysis is performed and the building is benchmarked to gauge overall performance. Energy consumption is broken out by end use such that building owners and operators can easily understand which areas of operation may present the greatest opportunities.

The audit must be performed by a Building Performance Institute (BPI) certified contractor. The scope of the audit and the audit report must be equivalent to the procedures as described for a Level 2 Energy Survey and Analysis in accordance with Procedures for Commercial Building Energy Audits, 2011 edition, published by the American Society of Heating, Refrigerating and Air-conditioning Engineers, Inc. (ASHRAE).²³

At a minimum, the audit report must include:

1. All reasonable measures, including capital improvements, that would, if implemented, reduce energy/water use and/or the cost of operating the building;
2. For each measure, the associated annual consumption savings, the cost to implement, and the simple payback, calculated by a method determined by the Department;
3. The building's benchmarking output consistent with the United States Environmental Protection Agency Portfolio Manager tool or as otherwise established by the Department;
4. A break-down of energy usage by system and predicted energy savings by system after implementation of the proposed measures; and
5. A general assessment of how the major energy consuming equipment and systems used within tenant spaces impact the energy consumption of the base building systems based on a representative sample of spaces.
6. A copy of a current or future lease agreement that incorporates green leasing best practices.

If ENERGY STAR Score is 75 or Above: You do NOT have to submit an ASHRAE Level 2 Energy Audit.

²³ <https://www.ashrae.org/resources--publications/bookstore/procedures-for-commercial-building-energy-audits>

Applying for ENERGY STAR Certification

Grant award recipients must achieve ENERGY STAR certification within 9 months of the prequalification notice, and provide evidence to OCS Sustainable Energy. OCS Sustainable Energy may extend the terms of this grant award if you successfully meet the performance objectives outlined in the application and submit a written request for an extension. The total period the grant award/application can remain valid, including any extensions, shall not exceed 18 months.

To earn certification, buildings and plants must meet strict energy performance standards set by the EPA - a facility must operate among the top 25 percent of similar facilities nationwide, with no sacrifices in comfort or quality. ENERGY STAR certified buildings use less energy, are less expensive to operate, and cause fewer greenhouse gas emissions than their peers. For more information, visit:

- “How to Apply for ENERGY STAR® Certification”:
(https://www.energystar.gov/sites/default/files/tools/EnergyStar_HowToApply_09102014_508_1.pdf);
- Alternatively, contact the ENERGY STAR Program:
(<https://www.energystar.gov/index.cfm?fuseaction=host.showContact&sub=LH>) by calling 888-STAR-YES.

Application Submittal

Applications are reviewed on a first-come, first-served basis. A prequalification must be issued to the applicant before they may perform grant award funded activities. Request for prequalification includes the submittal of:

- The complete ENERGY STAR Certification and Green Leasing Grant application. Include on your application information about the primary service provider and the contracted efficiency measures and services;
- Proof of having applied to one of Pepco’s EmPOWER Maryland incentive programs (if required);
- A copy of recent energy and water bills for all meters on the property.
- Electricity and natural gas are the most common energy sources used in commercial buildings. Most individual commercial buildings have their own heating and cooling systems. Typically, energy audits require 12 months of all energy and water consumption data. Applicants should submit 12 months of energy and water bills for all meters on the property;
- Read access to the applicant’s building data within the ENERGY STAR portfolio manager; and
- Certificate of status from Maryland State Department of Assessments and Taxation.

A complete application will include:

- A copy of the results of the ASHRAE Level 2 (equivalent or better) energy audit (if required);
- A copy of contract with cost to install, remedy, or perform measures needed achieve ENERGY STAR certification.
- Invoice showing the cost for a Licensed Professional (LP) to sign and stamp the ENERGY STAR Data Verification Checklist for Certification.
- A brief narrative of no more than 500 words describing your organization’s existing and planned approach to green-leasing and landlord/tenant engagement.
- A copy of a current or future lease agreement which features green leasing best practices.

- The signed Terms and Conditions;
- IRS Form W-9: Request for Taxpayer Identification Number and Certification; and
- Proof of ENERGY STAR certification.

A complete list of application requirements is available via the ESG application located on the Sustainable Energy website.

Application Review

Applications will be accepted and reviewed on a first-come, first-served basis, and SE staff is available to support applicants to address deficiencies. With the receipt of a complete application, a prequalification notice will be sent out by an OCS Sustainable Energy staff member within 15 business days.

You or your service provider must achieve ENERGY STAR certification within 9 months of the prequalification notice, and additional documents required for complete application must be submitted within 90 days from the date of confirmation of receipt of your complete application by OCS Sustainable Energy. If OCS Sustainable Energy has not received your invoice within 90 days of confirmation of complete application, your application will be retired and you must prequalify again. OCS Sustainable Energy may extend the terms of this grant award, provided you successfully meet the performance objectives outlined in your application and submit to the staff a written request for an extension. The total time period the grant award can remain valid, including any extensions, shall not exceed six months.

The invoicing for the grant award is a two-part process. The first invoice will be processed upon a receipt of the complete application; a site visit is conducted by a Sustainable Energy staff member and a final invoice is submitted. In this instance, OCS Sustainable Energy will pay up to 80% of the prequalified amount. Final approval of application and site visit will occur within 15 business days of receipt of invoice. The second invoice will be processed upon receiving proof of the ENERGY STAR Certificate. OCS Sustainable Energy will then pay the remaining 20% of the prequalified amount. Upon submitting request for payment, the Office of Finance will approve invoices within 30 business days.

Site Visits

The grant award staff will conduct site visits to review installed measures against the proposed measure list, to assure project completion, appropriate expenditure of funds, and legal compliance. Sustainable Energy reserves the right to make additional site visits on any and all projects as deemed necessary.

Resources

Auditors, Contractors, and Service Providers

The information below is provided as a courtesy to applicants for the ENERGY STAR and Green Leasing Grant award, and should not be considered an endorsement of any particular company or organization.

- Prince George's County's Supplier Development and Diversity Division (SDDD) maintains a directory of certified Prince George's County suppliers as providers of goods & services, and/or contractors. SDDD strongly believes the certified firms in each directory have the skill and capability to deliver quality services and products.

- Applicants can visit <https://www.princegeorgescountymd.gov/1315/Supplier-Directories> or call 301-883-6480 for assistance.
- Pepco's C&I Energy Savings Program Service Provider Network is available here: <https://cienergyefficiency.pepco.com/Findally.aspx>. Service Providers in the Prince George's County service area are reproduced below for your convenience separated by small and medium/large businesses.
- For a list of approved service providers and contractors to participate in Washington Gas' Existing Business, New Business Construction, and Custom Business Solutions Programs, [download here](#).

Pepco's Resource Advisor Tool

Pepco's Resource Advisor tool can be used to collect whole-building historic electric use data for energy benchmarking. With the Resource Advisor, you can access your aggregate building data on a monthly basis and automatically transfer it into the Portfolio Manager. Information on how to request data, access the tool, and share with the ENERGY STAR's Portfolio Manager is available [here](#).

ENERGY STAR's Portfolio Manager

Data sharing combines building performance and benchmarking (the comparison of a building's performance against similar facilities across the nation) with other building information sources - including cleansing and validating the data, analyzing it, assessing compliance, and disclosing results per public transparency requirements - and is necessary to measure progress and to ensure the County is on track to meeting its emissions targets. Managing building performance data (such as energy or water consumption efficiency) with a record of performance will inform public and private decision-making strategies around the built environment.

EPA's ENERGY STAR [Portfolio Manager](#)²⁴ tool helps users measure and track the energy and water use, waste and materials, and GHG emissions of their buildings, all in a secure online environment. Results can be used to identify under-performing buildings, set investment priorities, verify efficiency improvements, and receive EPA recognition for superior energy performance.

By entering details about the property and consumption data into Portfolio Manager, one can:

- Assess whole building energy performance;
- Track changes in energy, water, waste, GHG emissions, and cost over time;
- Track green power purchases;
- Create custom reports; and
- Share data with others.

The steps to share read-access to your building's data with the SE staff are available [here](#).²⁵

Receipt of a grant award from ESGL requires grantees to provide a copy of the ENERGY STAR Statement of Energy Performance, which is available through Portfolio Manager (on the Reports tab). A verifying professional should sign and stamp the Statement of Energy Performance to verify the validity of the data. SE staff is available to assist with these processes.

²⁴ <https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager>

²⁵ https://www.energystar.gov/sites/default/files/tools/Print%20Resource_Sharing%20Properties_04_21_16.pdf

Green Lease Best Practices

Green leasing aligns the financial and environmental benefits of landlords and tenants to work together to save money, conserve resources, and ensure the efficient operation of buildings. These contractual arrangements can serve as a powerful mechanism to assist the commercial real estate industry in responding to market pressures and increase energy efficiency of the existing and newly constructed building stock.²⁶ The Institute for Market Transformation conducted a study in 2015 that estimated green leasing practices in office buildings could reduce energy consumption between 11 and 22% and reduce utility costs by up to \$0.51 per square foot.²⁷ These practices have the potential to generate significant energy and cost savings and reduction in greenhouse gas emissions.

A green lease contains clauses that are aligned with sustainability and energy efficiency goals for the building. Using green leases allows landlords and tenants to work together to ensure the building operates as efficiently as possible. Both landlords and tenants can benefit from the practices.

The applicant must implement green leasing best practices or adopt a green lease. If the applicant chooses green leasing best practices, they are to implement at least three of the following:

- Adoption of a green lease between landlord and tenant. ***(High Priority of the County)***
- Obtaining LEED Operation and Maintenance (O+M) certification. More information on LEED Certification for existing buildings can be found here: [LEED for Operations and Maintenance](#) ***(High Priority of the County)***
- Installation of Electric Vehicle (EV) charging infrastructure. Examples of incentive programs for EV charging can be found here: [Pepco's EVsmart Program](#) and [Electric Vehicle Supply Equipment \(EVSE\) Rebate Program 2.0](#). ***(High Priority of the County)***
- Building standards and/or tenant improvement guidelines for energy efficiency. For example:
 - Tenant improvements will conform to LEED C.I. standard or better.
 - Tenants will install ENERGY STAR appliances only.
 - This may also cover items like lighting specification or available plug load watts per square foot. ***(High Priority of the County)***
- Agreement to disclose monthly utility data to the landlord for the purposes of whole-building energy benchmarking by the landlord. Request the landlord share the ENERGY STAR score of the building and/or other energy and waste usage information on a regular basis.
- Sustainable operations and maintenance rules and regulations. (Language should cover restricted HVAC weekend operating hours, janitorial services provided during daytime hours, tenants not allowed to bring in space heaters).
- Sub-metering of tenant spaces or separate metering of tenant plug load and equipment, including data centers. Ideally tenants are billed per actual use rather than on a pro-rata basis.
- Landlord agrees to incorporate energy management best practices into building operations, such as regular benchmarking, energy audits, or commissioning of building systems.

²⁶ See the Institute for Market Transformation's (IMT) green lease library, for more info (www.greenleaselibrary.com)

²⁷ Institute for Market Transformation Green Lease Impact Potential: https://www.imt.org/wp-content/uploads/2018/02/Green_Lease_Impact_Potential.pdf

- Landlord provides sustainability training to leasing agents and/or building marketing materials cover sustainability and energy efficiency features. (Documentation can include any relevant materials and is not expected to be included in the lease itself.)
- Landlord designates a sustainability point of contact within the lease or related documents.
- Lease language specifies that the landlord may sell power generated on-site to tenants at a competitive price.

Encourage the deployment of additional energy efficiency and conservation measures in the space and/or building (this could cover a range of language from agreeing to cost recovery clauses for capital improvement to agreeing to share the costs of LEED certification or retro-commissioning of the building). For more resources, please visit the [Institute for Market Transformation's Green Lease Library](#).

NOTE: Of the green leasing best practices listed above, implementing any of the practices denoted as a high priority of the County will supersede requiring the implementation of three practices.

Workforce Development Initiatives

ENERGIZING STUDENT POTENTIAL

Pepco and the Exelon Foundation, in partnership with the NEED Project and Prince George's County Public Schools, launched Energizing Student Potential (ESP), a STEM-focused energy program for grades 4 through 8 in Prince George's County Public Schools, in February 2018. This program brings together standards-based curriculum for use by classroom teachers, library media specialists, and afterschool program leaders in classroom or other school settings.



Energizing Student Potential is a collaborative educational initiative designed to empower students to explore opportunities in STEM fields and help them discover their own path to innovation through a variety of classroom subjects.

ESP is designed to help educators bring energy into the school and to provide all the tools and resources necessary for students and educators to learn together, explore energy together, and teach their local communities about energy. The program begins with an energizing workshop in February and culminates with school hosted Energizing Student Potential Energy Fairs.

The program provides participating schools the following:

- District standards-aligned curriculum and hands-on kits;
- An Energizing Student Potential Energy Fair Kit to host an Energy Fair and Carnival at their school and a \$150 cash grant for supplies;
- A free half-day Educational Energy Audit for students to learn about their school building with energy professionals;
- Three Days of Professional Development for teachers and other members of the school team;
- Opportunity to apply for up to \$400 in a cash grant to supplement the ESP STEM program; and
- Connections to STEM professionals to help students see all the possibilities of STEM and Energy Careers.



Students and educators engage in science, technology, engineering, and mathematics activities in the classroom, while learning fundamental principles of energy use and conservation. Students learn best when engaged in inquiry learning, and the activities and explorations included in the program allow them to think, explore, share,

and develop a profound respect for energy and the world around them. The lessons and projects in this program are designed to allow students to teach their peers as well as their local community.

In the summer of 2019, the program was extended into the Summer Youth Enrichment Program (SYEP). The program involved a Capstone program for 14- and 15-year-olds. For six weeks, a team of educators and student leaders worked with over 200 Prince George's County students to develop an understanding of energy, resources, and conservation. Participants learn about designing energy efficient buildings, as well as clean energy and transportation options. Youth also learn about potential career tracks in the energy field.

Accomplishments

Year Two of Prince George's County ESP Program included 29 schools (10 returning schools) and 80 teachers engaged in the program with at least 6,010 participating students.

- Three professional development trainings were held in Bowie;
- A total of 19 schools participated in an Educational Energy Audit where a National Energy Education Development (NEED) Certified Energy Manager worked with students;
- A workshop evaluation was provided at the end of each training. Energy themed post-test scores reflect an average 76% increase in knowledge gain; and
- The ESP Program hosts an Energy Fair at participating schools for the local community. A total of 23 Energy Fairs were held.

Over 200 youth participated in Prince George's County's SYEP to develop a deep understanding of energy, including resources, energy efficiency, and conservation, in the summer of 2019.

SUSTAINABLE ENERGY WORKFORCE DEVELOPMENT PROGRAM

On behalf of SE, Prince George's Community College is implementing the Sustainable Energy Workforce Development Program (SEWDP). SEWDP plays a critical role in establishing an advanced energy industry in the County that will create quality jobs and build employment capacity in the energy sector. It unites the business community with training institutions, community-based organizations, and the local workforce development board to provide work-based learning and occupational skills training to prepare eligible Prince George's County residents, within the Pepco service territory, for employment in the sustainable energy sector.

Overview

The SEWDP provides eligible Prince George's County residents with free industry-certified training, one-on-one career counseling, job placement assistance, basic skills training, and supportive services to help you gain employment in the sustainable energy industry. A sustainable energy job or career produces goods or services that benefit the environment, promote a low-carbon economy, and/or conserve natural resources by performing duties in the area of energy efficiency and renewable energy. Examples of careers in the sustainability industry include:

- Energy Auditors;
- Geo-thermal Installers;
- Solar Panel Installers;

- Solar Water Heating Installers;
- Wind Energy Technicians;
- Energy Retrofit and Weatherization Technicians; and
- Hybrid/Electric Vehicle Specialists.

To register for the free industry-certified trainings, please visit: <https://www.pgcc.edu/sewdp/>



SEWDP Information Session, June 2018

The SEWDP is converting the Westphalia Training Center into a Building Performance Institute (BPI) Testing Center to meet minimum BPI Testing Center requirements. The program will provide BPI courses and certification for Building Analysts, Envelop Professionals, Residential Energy Auditors, and Hybrid /Electric Vehicle Specialists.

On behalf of the OCS Sustainable Energy, the Prince George's County Community College (PGCC):

- Develops course content that will provide interdisciplinary and applied skills training in energy efficiency, renewable energy, and other emerging energy techniques. The program shall target County residents within the Pepco service territory and low- and moderate-income workers.
- Provides the OCS Sustainable Energy the proposed curriculum or syllabus for each of the training courses funded by this contract to review prior to course offering to County residents.
- Develops or utilizes existing resources, centers, and/or councils to ensure there is continuous engagement with businesses and industry partners on training efforts and work-based learning activities.

General Eligibility Requirements include:

- 18 years of age or older;
- Proof of County residency; and
- Transcripts: HS Graduate, GED recipient, or proof of unemployment.

Other Sustainable Energy Initiatives

GREEN ENERGY LOAN

This Pepco/Exelon-sponsored Program was created to advance public and private investment in clean energy and other innovative green technologies in Prince George's County. FSC First serves as the Fund Manager and provides loan guaranty to participating lenders to compel them to provide financing for sustainable energy projects. Eligible projects include, but are not limited to: energy conservation, clean renewable energy generation (solar fuel cells, geo-thermal, etc.), energy and water efficiency in buildings, clean transportation including electric vehicle charging stations, resiliency measures, and more for commercial buildings.

The loan fund is unique in that it is (1) managed by FSC First, a U.S. Treasury Community Development Financial Institution, whose goal is to expand economic opportunities in local communities by providing access to financial products and services; 2) requires the use of diverse/minority businesses and lenders to implement the projects with a goal to spend 35% with diverse suppliers, contractors, or vendors; and 3) requires job creation with a goal of the borrower creating 1 job for every \$75,000 loaned. To learn more about the loan, please visit [FSC First website](#).

Loan Requirements:

- Loan Term: Not to exceed 20 Years
- Loan Guaranty Size: Up to \$250,000.00
- Interest Rate: Market (determined by Bank)
- Energy Audit or Feasibility Study is Required
- Eligible Borrowers: Commercial Building Owners
- 1% Application Fee
- 1% Issuance/Closing Fee
- .20% Annual Guaranty Fee

MICROGRID COMMITMENT

Pepco agreed as a condition of the multi-party settlement in the Exelon-PHI Merger to develop two pilot public purpose microgrid projects in its service territory. The Maryland Public Service Commission determined this commitment was consistent with the public interest and adopted Condition No. 13 to [Order No. 86990](#), which provides, in pertinent part, as follows:

"Pepco shall, within 18 months following merger close, file with the Commission a proposal for pilot public-purpose microgrid projects to provide enhanced energy services to the selected areas, including during emergency events. The filing shall include a proposal for funding of Pepco's costs in connection with the projects through Pepco's regulated rates and a description of any federal, state, or local contribution to the development of the microgrid projects. The pilot projects shall be developed in the Pepco service territory, with one project in Prince

George's County and one project in Montgomery County. Pepco shall coordinate with Montgomery County and Prince George's County and the Maryland Energy Administration on the selection of the pilot locations, the development of the proposal, and implementation of the projects. The county hosting the microgrid will have final approval and consent of the location. The proposal of the microgrid projects will include, but is not limited to: planning, design, and construction of physical facilities and control technologies, the development of onsite distributed-generation sources such as combined heat and power, solar photovoltaic, and fuel cells, and operation and maintenance activities; the development and implementation of each microgrid shall be competitively-sourced. Subject to a prudency review by the Commission, Pepco shall install the microgrids within five years after receiving approval from the Commission."

Unfortunately, the proposal Pepco submitted to build the public purpose microgrids in the Counties was not accepted and we are working to provide a supplemental proposal.

ELECTRIC VEHICLE CHARGING INFRASTRUCTURE EXPANSION

Pilot Project

The electric vehicle (EV) market share is expected to grow significantly in the next decade, and while such widespread adoption will reduce harmful health and environmental effects of automotive transportation, it could also impact our electric grid, thereby requiring a proactive approach to facilitate the seamless integration of new and emerging EV-related technologies. Thus, the Maryland Public Service Commission outlined a series of potential actions that could be pursued by a newly-formed EV Work Group in the context of a statewide grid modernization proceeding.

The Maryland Department of the Environment (MDE) and the Maryland Department of Transportation (MDOT) have implemented a plan to invest approximately \$11.3 million from Maryland's portion of the Volkswagen settlement toward the deployment of EV charging infrastructure.

The petition proposes a statewide EV Portfolio that consists of utility offerings in five component areas targeted for EV charging deployment. These five areas include; Residential; Non-Residential; Public; Innovation; and Technology. Each utility has an offering for each component except for Potomac Edison, which does not include an Innovation or Technology sub-portfolio. Delmarva and Pepco are each proposing eleven programs across the five component areas. Pepco's portfolio is designed to install 2,264 EV chargers for a total cost of \$30.6 million. The Maryland Public Service Commission approved an EV charging pilot program to test limited EV charging deployment at a reduced cost to limit exposure to Maryland ratepayers.

Prince George's County has developed a working list of proposed locations for possible public charging stations in the County across the three utilities: Pepco, Baltimore Gas and Electric (BGE), and Southern Maryland Electric Company (SMECO). The proposed sites include County office buildings, parks and recreation centers, public libraries, schools, parking lots, and Metrorail stations. A license agreement was completed by the County and Pepco in March 2020 with the first public-purpose electric vehicle charging stations installations occurring at the Equestrian Center in the fall of 2020.

Council of Governments (COG) Planning

COG will lead a team effort to conduct research, data collection, and analysis to develop necessary components of a planning study to support development of coordinated electric vehicle charging infrastructure (EVSE) for Prince George's County government operations. Future efforts will focus on community-wide EV charging.

SOLAR GENERATION COMMITMENT – COUNTY-WIDE

Exelon has committed to develop or assist in the development of 15 MW of solar generation in Maryland, with 5 MW to be developed in each of Prince George's County, Montgomery County, and Delmarva's Maryland service territory. Exelon will not recover the costs associated with this renewable generation through Delmarva's or Pepco's rates. Additionally, the Solar Renewable Energy Certificates ("SRECs") created by these projects will not be used for Maryland Renewable Portfolio Standard compliance prior to 2020. Of the 15 MW, ~8 MW has been or is under construction with the remaining installations slated for completion in 2022.

GREEN GOVERNMENT OPERATIONS

Prince George's County Solar Co-op

OCS Sustainable Energy in collaboration with the Metropolitan Washington Council of Governments (MWCOG) and Maryland Solar United Neighbors (MD SUN) formed a co-op to make it easier for residents to save money on the purchase of solar panels and build a community interested in solar energy. Approximately five community meetings were held to educate the public about solar energy and how the co-op simplifies the process of going solar, while providing a discount through members' bulk purchasing power. Over 100 County residents joined the co-op and selected two solar vendors to perform the installation by the end of 2016.

Rooftop Solar Challenge Grant

The County received a technical assistance grant from the U.S. Department of Energy (DOE) via MWCOG to develop and promote the *Solar Road Map* - a web tool that provides guidance on how to transform the local solar market by reducing "soft costs." According to DOE, non-hardware costs or "soft costs" - including permitting, installation, and interconnection - can make up as much as 60% of the total installed cost of a rooftop PV system. The County in partnership with MWCOG is taking actions in four areas to bring down these soft costs and make it faster, easier, and cheaper to go solar:

- Permitting and interconnection processes;
- Financing options;
- Planning and zoning; and
- Net metering and interconnection standard.

Solar and Government Buildings

In addition to the solar carport at the Wayne K. Curry Administration Building, two additional solar PV systems operate at Consolidated Warehouse and Fleet Maintenance facilities. These systems produce approximately 527,000 kWh of electricity and offset over 373 metric tons of carbon dioxide equivalent.²⁸ The County also has two small generating systems in operation at the Animal Service Facility and at the Correctional Department facility, both on Brown Station Road.

The County has identified the following buildings to install 4 MW of additional solar carport per Exelon/PHI merger. The projects are planned to begin over the next two years.

- RMS Building;
- Inglewood Business Center I, II, and III;
- Largo Government Center;
- Old County Administration Building; and
- Bowie Police Station.

Energy Efficiency in Government Buildings

The County entered into energy performance contracts with energy service companies Pepco and Johnson Controls, Inc., to perform energy and water improvements to ten County Government buildings. This project, known as *Phase I EPC*, generates approximately \$1,000,000 of energy savings annually. An Energy Performance Contract (EPC) provides customers with a comprehensive set of energy efficiency, renewable energy, and/or distributed generation measures, accompanied with guarantees that the savings produced by a project will be sufficient to finance the full cost of the project.

The County has completed additional investment grade energy audits and received ~\$400,000 from MEA to perform a "Deep Energy Retrofit" of the Harriet Hunter Senior Center and upgrade to LED lighting in various areas at the County Administration Building. Additionally, Energy Efficiency and Conservation Block Grant funds were used to install energy-efficient windows and "cool roofs" at the Harriet Hunter Senior Center. SE has plans to retrofit an additional 30 government facilities over the next 10 years.

The County also replaced about 80 High Pressure Sodium (HPS) light fixtures with energy-efficient LED fixtures in the parking lot area of Inglewood III and Largo Government Center. LED fixtures reduce energy use between 35 and 60% per light fixture. The LED conversion project is expected to save the County approximately 121,000 kWh and \$13,000 in energy costs annually.

Green Fleet

Fleet currently has 12 plug-in hybrid electric vehicles in service with an additional two on order or to be purchased in 2020 and 70 hybrid electric vehicles with an additional 57 on order to be purchased in 2020. Fleet also has one Neighborhood Electric Vehicle (NEV) that serves the Department of Corrections campus and nearby Work Release facility in Upper Marlboro. Fleet also plans to purchase two Chevy Bolts and an additional NEV for use at the Wayne Curry Building in 2020.

Fleet has installed 14 Level 2 electric vehicle chargers at County facilities (seven dual head stations). Eight are at the Wayne Curry Building with four for fleet only and four for public access. Of the other six charging ports, two

²⁸ Determined using EPA Greenhouse Gas Equivalencies Calculator: <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

are being converted for public use. Fleet also plans to install a Level 1 fleet only charger at our Central Avenue fleet facility and two Level 2 chargers at 1801 McCormick Drive (DOE Headquarters), split for fleet and public use

APPENDIX

Glossary

For a glossary of energy and energy efficiency related terms, visit the U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy (EERE) [Glossary of Energy-Related Terms](https://www.energy.gov/eere/sisc/glossary-terms#A).²⁹

Property Type Definitions

Definitions of property types will follow the ENERGY STAR Portfolio Manager Glossary. Please refer to it for information relating to property types, and their corresponding eligibility:

(<https://portfoliomanager.energystar.gov/pm/glossary#Office>)

Office

Refers to buildings used for the conduct of commercial or governmental business activities. This includes administrative and professional offices.

Gross Floor Area (GFA) should include all space within the building(s) including offices, conference rooms and auditoriums, break rooms, kitchens, lobbies, fitness areas, basements, storage areas, stairways, and elevator shafts.

If you have restaurants, retail, or services (dry cleaners) within the office, you should most likely include this square footage and energy in the Office Property Use. There are 4 exceptions to this rule when you should create a separate Property Use:

- If it is a [Property Use Type that can get an ENERGY STAR Score](#) (note: Retail can only get a score if it is greater than 5,000 square feet);
- If it accounts for more than 25% of the property's GFA;
- If it is a vacant/unoccupied office;
- If the Hours of Operation differ by more than 10 hours from the main Property Use.

Multifamily Housing³⁰

Refers to residential properties that contain two or more residential living units. These properties may include low-rise buildings (1-4 stories), mid-rise buildings (5-9 stories), or high-rise buildings (10+ stories). Occupants of these buildings may include tenants, cooperators, and/or individual owners.

Eligibility for an ENERGY STAR score and certification for multifamily properties:

- 2 units or more per building;
- 20 units or more per property/campus;
- Greater than 75% occupancy;

²⁹ <https://www.energy.gov/eere/sisc/glossary-terms#A>

³⁰ The ENERGY STAR score for Multifamily Housing is available only to properties with 20 units or more (<https://portfoliomanager.energystar.gov/pm/glossary#MultifamilyHousing>).

- Communities of single-family homes are not eligible. If your property is a mix of multifamily and single-family homes, the property would still be eligible as long as the single-family homes are less than 25% of the total GFA;
- GFA should include all buildings that are part of the multifamily property, including any separate management offices or other buildings that may not contain living units. GFA should include all fully-enclosed space within the outside surfaces of the exterior walls of the building(s) including living space in each unit (including occupied and unoccupied units), interior common areas (e.g. lobbies, offices, community rooms, common kitchens, fitness rooms, indoor pools), hallways, stairwells, elevator shafts, connecting corridors between buildings, storage areas, and mechanical space such as a boiler room. Open air stairwells, breezeways, and other similar areas that are not fully enclosed should not be included in the GFA.

Definitions and Standards of Energy Efficiency Measures

For definitions and standards of energy efficiency measures, refer to the current version of the Northeast Energy Efficiency Partnership's (NEEP) [Mid-Atlantic Technical Reference Manual](http://www.neep.org/mid-atlantic-technical-reference-manual-v6).³¹

Office of Finance Grant Invoicing Process

1. Qualified residents/businesses will apply for the grant award/rebate;
2. Included with the application will be an IRS W-9 form;
3. Grants/rebates will be entered into SAP utilizing a grant-specific, one-time vendor (to be created) by OCS A/P Analyst, and all supporting documentation will be attached;
4. These documents will workflow to an OCS A/P Approver for review and release or reject;
5. When released, these documents will workflow to Finance A/P for review and release or reject. Finance will be validating the TIN provided on the IRS W-9 form as part of this review;
6. When released, these documents will produce payment to the recipient;
7. At calendar year-end, Finance will issue 1099-G forms to recipients.

If a document is rejected at any point in this process, it will be redirected back to the OCS A/P Analyst for corrective action and then proceed through the approval process again or possibly deleted.

³¹ <http://www.neep.org/mid-atlantic-technical-reference-manual-v6>