

## MURIEL BOWSER MAYOR

February 1, 2024

The Honorable Phil Mendelson Chairman Council of the District of Columbia John A. Wilson Building 1350 Pennsylvania Avenue NW, Suite 504 Washington, DC 20004

Dear Chairman Mendelson:

I am pleased to submit to the Council of the District of Columbia the enclosed "Fiscal Year 2021 Solar for All and Renewable Portfolio Standard Expansion Amendment Act of 2016 Annual Report," which was prepared by the Department of Energy and Environment (DOEE), pursuant to section 216(f) of the Clean and Affordable Energy Amendment Act of 2008, effective October 22, 2008 (D.C. Law 17-250; D.C. Official Code 8-1774.16(f)).

This report describes DOEE's progress in FY 2021 toward achieving the benchmarks established by DOEE's Solar for All Implementation Plan. It provides the number and capacity of solar energy systems installed, the number of District residents benefiting from those systems, and the expenditure of funds allocated to the Solar for All program.

I am available to discuss any questions you may have regarding this report. In order to facilitate a response to your questions, please contact Richard Jackson, Director, DOEE, at (202) 535-2600.

Sincerely,

# **Department of Energy and Environment**

# Fiscal Year 2021 Solar for All and Renewable Portfolio Standard Expansion Amendment Act of 2016 Annual Report

October 1, 2020 - September 30, 2021

# Table of Contents

Introduction	1
Background	1
Solar for All Program	2
Solar for All Innovation and Expansion Grant Projects	2
Interagency Partnerships	5
Challenges and Solutions	7
Systems Installed and Households Served in FY 2021	9
Expenditure of Funds	9

## Acronyms

CREF CY DCHA DCPL DCRA DCSEU DGS DOEE	community renewable energy facility calendar year District of Columbia Housing Authority District of Columbia Public Library Department of Consumer and Regulatory Affairs District of Columbia Sustainable Energy Utility Department of General Services Department of Energy and Environment
DOES	Department of Employment Services
FY	fiscal year
GRID	GRID Alternatives Mid-Atlantic
I&E	Innovation and Expansion
kW	kilowatts
LMI	low-to-moderate income
MW	megawatts
NPCS	New Partners Community Solar Corp.
OAG	Office of Attorney General
OPC	Office of the People's Counsel
PSC	Public Service Commission
PV	photovoltaic
REDF	Renewable Energy Development Fund
RFP	request for proposals
RPS	Renewable Portfolio Standard
SFA	Solar for All
SREC	Solar renewable energy credit
UDC	University of District of Columbia

### **GOVERNMENT OF THE DISTRICT OF COLUMBIA**

Department of Energy and Environment

Dear Solar for All community and District residents:

Fiscal Year 2021 was another difficult one for many of us. As the District and the Department of Energy and Environment (DOEE) began to emerge from the most stringent COVID-19 restrictions, we also ratcheted up progress on our Solar for All program, which serves District residents in need of energy assistance by helping them benefit from clean solar energy. The agency has made progress in expanding access to solar energy for low-to-moderate income (LMI) District residents. DOEE began the fiscal year by continuing to register residents for Solar for All virtually and worked with the Department of Employment Services (DOES) to provide virtual solar installation training through Solar Works DC. As COVID-19 restrictions lifted, DOEE was able to restart in-person outreach and trainings.

Additionally, DOEE's partnership with the DC Sustainable Energy Utility (DCSEU) continued to be productive. In FY 2021, DCSEU installed 8.2 megawatts (MW) of solar, across 64 solar installations, that will benefit over 2,300 District households through the Solar for All program. The vast majority of these 64 installations are located in Ward 7 and Ward 8. In addition to DCSEU's installations, DOEE completed projects with contractors to install an additional 3.2 MW of community solar capacity under the Innovation and Expansion (I&E) Grants that began in 2017. This included three installations in Wards 5, 7, and 8. The combined added capacity for FY 2021 totaled 11.4 MW.

As of the end of FY 2021, the Solar for All program provided the benefits of solar energy to nearly 3,500 households and installed over 12 MW of solar capacity. This includes the I&E and DCSEU installations mentioned above, but also single family and net-energy metering (NEM) installations for the year. Overall, the program surpassed 20 MW of total installed solar capacity in FY 2021. To realize these accomplishments, DOEE worked diligently to secure site access for solar projects, develop effective and efficient program processes, educate and conduct outreach to potential program customers and solar installers, and ensure residents successfully receive the benefits of solar energy. DOEE continued to ensure our efforts to address the District's contributions to climate change are equitable across all eight wards, meeting Mayor Bowser's commitment to provide a fair shot for all District residents to enjoy the benefits of solar, regardless of income.

I am very proud of the work DOEE has accomplished through Solar for All. As the program continues to grow, I look forward to serving more District residents with the benefits of solar energy and reducing residents' energy burdens.

Sincerely,

Richard Jackson Director





#### Introduction

Pursuant to section 216(f) of the Clean and Affordable Energy Amendment Act of 2008, effective October 22, 2008 (D.C. Law 17-250; D.C. Official Code 8-1774.16(f)), the Department of Energy and Environment (DOEE) submits this Fiscal Year 2021 Solar for All and Renewable Portfolio Standard Expansion Amendment Act of 2016 Annual Report to the Council of the District of Columbia (Council) covering the period from October 1, 2020, through September 30, 2021.

This report describes the progress that has been made toward achieving the benchmarks established by DOEE's Solar for All (SFA) Implementation Plan, provides the number and capacity of solar energy systems installed under the SFA Program, provides the number of low-to-moderate income (LMI) households served by the SFA Program, and describes how the funds allocated to the SFA Program have been expended.

#### Background

The Act established the District of Columbia's SFA Program in 2016. Pursuant to the Act, SFA is funded by the Renewable Energy Development Fund (REDF) (D.C. Official Code § 34-1436). The REDF is a special purpose revenue fund established to promote solar energy projects in the District. It is funded through compliance fees paid by electricity suppliers as required by the District's Renewable Energy Portfolio (RPS) standard.

The District's RPS also creates a market for Solar Renewable Energy Credits (SRECs), as electricity suppliers may purchase SRECs instead of paying compliance fees required by the RPS. SRECs are created based on the amount of solar energy generated by a solar facility in the District and they are regulated by the Public Service Commission of the District of Columbia (PSC).

Funding from the REDF pursuant to the Act is used to expand the District's solar capacity, increase the amount of solar generated within the District, and provide the benefits of locally generated solar energy to LMI households, small businesses, nonprofits, and seniors. SFA's specific target is to provide the benefits of solar energy to at least 100,000 LMI households (defined in the Act as households at or below 80 percent of area median income<sup>1</sup>) in an amount equivalent to reducing the average electric bill by 50 percent (based on the residential rate class average electricity bill for 2016) by December 31, 2032.

The SFA Implementation Plan established a phased approach to program implementation, with the initial phase covering FY 2017 to FY 2019. This initial implementation phase focused on issuing several Innovation and Expansion (I&E) grants to experiment with different methods for deploying solar and providing program benefits to District residents. That phase is now complete and the current phase, covering FY 2020 to FY 2022, focuses on implementing the lessons learned from that initial phase and improving the efficiency and effectiveness of program delivery by utilizing the tools and institutions established in the first phase of deployment.

<sup>&</sup>lt;sup>1</sup> The Department of Housing and Urban Development (HUD) releases income classification guidelines that are updated regularly based on changes to area median income or state metropolitan income. However, HUD caps its calculation of 80% of area median income for the upper bound of the low-income category at the national median household income. The calculation of 80% of area median income in DC exceeds this cap, allowing for low-income and some moderate-income classified households to benefit from SFA.

#### **Solar for All Program**

Since its inception in FY 2017, SFA's installed solar capacity and subscriber enrollment continue to grow significantly each year. SFA continues to operate through its Innovation and Expansion grant projects as well as its interagency partnerships. The details of both parts of the SFA program's operations during FY 2021 are provided below.

#### Solar for All Innovation and Expansion Grant Projects

The initial implementation phase of SFA focused on researching and developing solutions necessary to complete large-scale projects in subsequent implementation phases. This first phase achieved these goals through SFA Innovation and Expansion Grants, and through strategic external and interagency partnerships.

DOEE awarded nine Innovation and Expansion Grants. Grantees were chosen following a competitive process noticed in the D.C. Register on February 10, 2017 (Notice IDs: <u>N0062340</u> and <u>N0062339</u>) and posted on the DOEE <u>website here</u>. Grantees were selected based on their ability to: 1) meet the baseline eligibility criteria, 2) establish clear plans for addressing core barriers, and 3) demonstrate innovation in their grant applications. Grantees include both nonprofit and for-profit entities, and the grantees also engaged many District-based businesses as partners. These grantees all completed the construction and interconnection of their projects by the end of FY 2021 (with the exception of a delayed project at the University of the District of Columbia), and continue to maintain their projects, provide ongoing services to residents, and report annually on their performance to DOEE for the duration of their grant performance period, which is at least 15 years.

Some of the grantees are still working on finalizing delivery of the benefits to residents for the solar systems they have installed and interconnected. Each of the grantees has committed to provide DOEE with annual reports and meet other grant conditions for the duration of the grant performance period. There are clawback provisions if the grant conditions are not met at any time during the grant performance period.

Below is a description of each project that was funded by these grants.

- **Open Market ESCO** installed and interconnected 499 kilowatts (kW) of solar systems on Winn Companies' Atlantic Terrace property in Ward 8 in December 2018. The energy produced benefits income-qualified households in the District through no-cost community solar subscriptions. The project has been completed and continues to serve 152 households at full subscription capacity. Open Market ESCO did experience some subscriber turnover in the past two years due to address changes or account number changes. Starting in 2020 and spilling over into 2021, Pepco updated its subscriber portal and required that service numbers be provided to enroll subscribers. This new requirement created an administrative burden for Open Market ESCO and other grantees. Again, due to communication difficulties during the COVID-19 pandemic, it was challenging to collect this information from subscribers. After a transition period in which several subscribers were stuck on a waitlist, Pepco agreed to provide the service numbers to enroll subscribers. Subscribers who had been waitlisted due to this administrative change were all subscribed by early 2021. There were 152 subscribers as of April 2021.
- **Groundswell's Shared Power Project** maintains 326 kW of solar capacity across the District. The Shared Power Project has allocated 100 percent of the electricity generated to benefit at least 92

LMI households with community solar subscriptions and resident services, at no cost, for a minimum of 20 years. Construction and interconnection have been completed on all three host sites. Groundswell continues to partner with Elevate Energy to provide subscriber management and enrollment services for income-eligible households. All three Share Power Project community renewable energy facilities (CREFs) produced electricity close to projected output during 2021. Groundswell's two CREFs at St. Luke Baptist Church and Dupont Park SDA Church both generated electricity within eight percent of the anticipated production. Groundswell's third CREF at Dupont Park Apartments generated approximately 80 percent of the expected electricity production for 2021. Groundswell is currently investigating the causes of the reduced output at the Dupont Park Apartments. Each project's subscription capacity was full or nearly full throughout the year. Currently, the Share Power Project CREFs deliver clean energy savings to 91 qualified households, with only one subscription remaining to be filled. The output and subscriptions for each CREF are provided in the table below.

Table 1: Below are Groundswell's Shared Power Project CREFs completed as of FY 2021, as reported in Groundswell's annual grantee report to DOEE:

CREF Name	Generation (Megawatt hours)	Total Households Served
St. Luke Baptist Church	5.70	15
Dupont Park Apartments	10.34	28
Dupont Park SDA Church	21.69	48
TOTAL	37.73	91

• NHT Ingenuity Power (NHT-IP), a partnership between Urban Ingenuity and National Housing Trust, installed and interconnected 773 kW of solar photovoltaic (PV) systems on affordable multifamily properties in the District with funding from the SFA Program. This capacity can host up to 220 full-sized subscriptions. All installations were completed in 2019. The annual savings generated from solar are spread across 14 sites and are provided to the property owners in the form of free electricity. Table 2 lists the kW capacity and the dollar value of benefits generated by the solar systems. In return for receiving the free electricity, property owners provide a variety of free resident services. NHT also worked with housing partners, including Mission First, Mi Casa, So Others May Eat (SOME), Urban Atlantic, and Victory Housing, to provide a variety of benefits across the 14 multifamily property sites. The resident service benefits included the following: COVID-19 vaccine drives, transportation assistance, community engagement/education and workshops, food drives, rental and utility assistance for tenants, on-site security services, and Internet access for residents.

Table 2: Below are CREF sites, capacity (kW direct current (DC)), total annual benefits on subscribers' electric bills, the number of households that each CREF can support through SFA, and the annual average electric bill credit from these CREFs. These CREFs were completed during FY 2021 as reported by Urban Ingenuity and National Housing Trust in an annual grantee report to DOEE.

Installation		Denefite (¢)	Ususshalds	Benefit per
Installation	Capacity (kW)	Benefits (\$)	Households	Household (\$)
Shalom House	79,269	11,578.99	94	123.18
SOME O Street Office	46,083	6,491.72	0	NA
Altamont	23,909	3,509.85	38	92.36
Griffin House	28,374	2,786.72	40	69.67
Jeremiah House	31,032	4,303.68	52	82.76
Fendall Heights	19,184	5,386.84	29	185.75
Chesapeake House - 1	25,139	4,629.37	11	420.85
Chesapeake House - 2	24,989	4,601.74	11	418.34
Barnaby House	50,457	7,249.62	11	659.06
Gasner House	32,700	4,317.28	49	88.11
House of Lebanon	98,340	11,800.80	82	143.91
Genesis	24,634	3,202.42	27	118.61
Summit at St. Martins	227,107	31,794.98	178	178.62
Arthur Capper Senior II	165,774	29,320.12	139	210.94
Totals:	876,991	\$130,974.13	761	\$214.78 (annual avg.)

- Neighborhood Solar Equity, LLC completed and interconnected solar installations on all five buildings at George Washington University. Three had been completed in FY 2020 and have a combined capacity of 252 kW. Two installations were completed and interconnected in FY 2021 and provide 340 kW of solar generation. Electricity generated by the five solar installations is being provided to the university while SREC revenue from the completed project benefits approximately 100 LMI households for 15 years. Root + Branch administers benefits and subscriber management services for the project while remaining a liaison for DOEE. Neighborhood Solar Equity, LLC adapted to subscriber enrollment challenges presented during the COVID-19 pandemic by building partnerships with nonprofit housing developers to provide the enrollment opportunity to their residents. Neighborhood Solar Equity, LLC also worked through existing nonprofit partners to help with subscriber outreach. In 2021, Neighborhood Solar Equity, LLC established new partnerships with Manna DC and Habitat America, and reached out to Empower DC, District Bridges, One DC, Food & Friends, and other mutual aid groups to enhance subscriber enrollment efforts.
- The PEER project will provide 529 kW of solar capacity for the benefit of approximately 150 households at no cost for 15 years. During FY 2021, PEER completed installation and interconnection of one of its installations in Ward 5, which provides 53 kW of clean electricity. This project's in-kind benefits include new resident services, new energy efficiency building improvements, and other shared amenities for income-qualified residents.

- Enterprise Community Development (formerly Community Preservation and Development Corporation (CPDC)) installed 1.08 megawatts (MW) of solar capacity on 12 affordable housing properties that it managed located in District Wards 5, 6, 7, and 8. These solar energy systems benefit approximately 2,200 housing units.<sup>2</sup> The benefits provide new resident services, new building improvements, and other shared amenities for residents. This project was completed by the beginning of FY 2021.
- New Partners Community Solar Corp. (NPCS) has installed and interconnected a total of 731 kW of solar systems on commercial and multifamily rooftops from FY 2017 through FY 2020, resulting in free, 25-year community solar subscriptions for at least 208 LMI households. The project resulted in innovative uses of rooftop space on Class-A downtown office buildings, including wall-mounted panels, panels integrated with a green roof, and bi-facial panels that utilize sunlight from above and below. The project also included the District's first solar and battery storage system for resiliency in an affordable housing building. Another project innovation piloted by NPCS is the first solar plus battery storage installation to provide grid services. This installation is located on the roof and playground canopy of Ludlow-Taylor Elementary School in Ward 6. This project has been completed.
- Enflection, LLC deployed rooftop solar systems, solar canopy systems, and ground-mounted solar systems on underutilized or difficult-to-develop spaces at five affordable housing properties. The projects installed a total of 773 kW of solar capacity, including 25.8 kW of solar canopy systems and 511 kW of ground-mount systems, to benefit approximately 300 LMI District households for at least 15 years, which is the period of the grant agreement for this project. The LMI beneficiaries receive direct benefits, in the form of utility credits, or indirect benefits, such as reductions in homeowners' association fees. This project's installations were all completed and interconnected from FY 2020 through FY 2021.
- University of the District of Columbia (UDC) DOEE has partnered with UDC to repair the roof of a campus building to install solar systems. DOEE awarded a grant of \$885,535 to UDC for roof repair to facilitate solar system installation on August 14, 2019. This project has a 24-month grant (which has been extended) with 2 phases: 1) the first 12 months for completion of the roof repair and 2) the second 12 months for the installation of the solar system. Following technical delays and an extension on the grant period, the roof repair is expected to be completed in early FY 2022 and the solar installation is expected to be completed by the end of FY 2022.

#### **Interagency Partnerships**

**Solar Works DC** - DOEE and the Department of Employment Services (DOES) partnered to develop Solar Works DC, a program that provides solar installations for LMI residents as well as job training for District residents. The program launched in May 2017 and is administered by DOEE's grantee GRID Alternatives

<sup>&</sup>lt;sup>2</sup> Benefits provided to the 2,200 housing units in CPDC properties are not yet equivalent to the statutory level of an average 50% reduction of households' electric bills but are equivalent to providing a 50% reduction in the electric bill of 309 households. CPDC had several installations drop off in its initial phase, but CPDC continues to add installations and will continue to develop other installations that will be part of CREF community solar generation. Benefits are provided through new resident services, new building improvements, and other shared amenities for residents.

Mid-Atlantic (GRID), which recently received a new grant award to continue administering the program. The job training program operates 12-week cohorts in the fall and spring, which are open to District residents ages 18 and over. Participants in each cohort complete GRID's Installation Basics Training program and earn industry-relevant skills certificates by demonstrating competency in solar installations. In addition, the participants attend customer outreach and construction workshops, receive CPR and OSHA 10 certifications, and take the North American Board of Certified Energy Practitioners (NABCEP) PV Associate Credential exam. During the summer, a six-week pro-rated program is offered for District residents ages 18-24 who are enrolled in the DOES Marion Barry Summer Youth Employment Program.

Since Solar Works DC's launch, the program has become the District's premier solar installation job training program. The program has enrolled a total of over 300 District residents and graduated 288 residents, with 122 graduates now working in the solar and related industries. In addition, Solar Works DC has installed solar systems on over 200 LMI residents' homes and has increased solar capacity in the District by over 780 kW. Solar Works DC is also a flagship program of the DC Infrastructure Academy in Ward 8 and recruits underserved and unemployed District residents who are disconnected from educational and workforce development service provers. The program offers program participants transferable skills, hands-on practical training, key certifications, full-time case management, and employer connections postgraduation.

The fourth cohort completed their training in FY 2021. They helped to install a total of 19 single-family solar systems across the city. These systems have a combined capacity of 79.04 kW. The average single-family system installed in FY 2021 has a capacity of 4.16 kW.

**DC Housing Authority (DCHA)** - In FY 2021, as part of its work under a \$5 million grant from the SFA Program, DCHA continued work on its solar installations at Benning Terrace after completing installations at Parkway Overlook, Ft. Lincoln, Elvans Road, Hopkins Apartments, Potomac Gardens, and LeDroit. The solar installations at Parkway Overlook and Benning Terrace are CREFs that deliver benefits by enrolling community solar subscribers. Benning Terrace is still under construction. Upon completion of final inspections, DCHA estimates the total capacity funded by the grant will be 1.16 MW, which was originally slated to provide benefits to over 5,000 households in the properties served by these new solar systems.<sup>3</sup> However, DCHA will now only provide benefits to 1,256 households and is focusing on refining its plans for resident engagement and distribution of the benefits associated with the solar projects. Not all of the sites originally identified were deemed feasible for solar installations, which led to the reduction from 5,000 to 1,256 households.

**District of Columbia Public Library (DCPL)** - DOEE partnered with DCPL for the procurement and installation of a 125-kW solar system, coupled with an energy storage system, at the newly constructed Southwest Public Library. DOEE provided technical assistance for the project, including engaging in discussions regarding the selection of critical loads to be backed up by the uninterruptible power system. The project completed construction in FY 2020 and the facility began operations in early FY 2022. Ultimately, the solar benefits from this system will be shared with an estimated 30 LMI residents in the surrounding community through the SFA Program.

**Department of General Services (DGS)** - DGS awarded a contract to GRID to design, construct, and maintain a community solar facility at Oxon Run in Ward 8, which was funded through the SFA Program. Construction and system interconnection was completed in FY 2021. The project provides 2.65 MW of solar capacity, making it the largest single community solar installation in the District. The community solar facility will produce enough electricity to benefit over 750 LMI households within 2 miles of the solar facility. These households will receive credits on their electric bills for 100 percent of the energy produced

by the system. Subscribers should start receiving those credits in FY 2022 because of a delay in system operation due to the need to complete some remedial electric work at the site.

**DC Sustainable Energy Utility (DCSEU)** - DOEE has partnered with DCSEU to serve LMI residents through the SFA Program by installing solar systems both at single family residences and at other sites as CREFs serving multiple residents. DCSEU completed 6.59 MW of solar installations in FY 2021, which will provide benefits to an estimated 2,000 LMI households.

DCSEU continues to conduct timely market analysis of solar market dynamics, including price trends and projections for SRECs. DCSEU also conducts financial analysis to evaluate the benefits of net metering, federal investment tax credits for solar installations, and DC Green Bank financing rates, and works with the DOEE SFA team to establish a price-per-watt incentive for contractors and developers that complete community solar projects for the SFA program.

In the fourth quarter of FY 2021, DCSEU launched a new request for proposals (RFP) to offer \$10 million in incentives to contractors and developers to install community solar projects for the SFA program. DCSEU worked in close consultation with DOEE staff to develop the terms for the RFP, such as term of performance (15+ years) for CREF projects, and whether to fund roof repairs for single-family installations. DOEE staff also served as members of the review panel to select the winning proposals.

DCSEU administers the SFA program, including ensuring SFA subcontractors complete each phase (e.g., planning, permitting, installation, and electricity generation) of CREF project development and operation. DOEE and DCSEU also coordinate with the local utility company, Pepco, and the Department of Consumer and Regulatory Affairs (DCRA) to shepherd projects through each of the stages leading up to operation of the CREFs. This includes holding weekly meetings with Pepco and regular meetings with DCRA throughout the fiscal year to resolve project delays and permitting issues. DCSEU also reports on project updates to DOEE weekly.

### **Challenges and Solutions**

DOEE has identified the following challenges related to the implementation of SFA:

1. It remains challenging to ensure that subscribers begin receiving SFA benefits in a timely and accurate manner. In FY 2020, Pepco launched a community solar portal to allocate the energy from community solar systems to their subscribers through electric bill credits for all community solar projects within the Pepco territory. However, there were issues with how this new portal interacted with the existing Pepco billing system, delaying assignment of community solar subscriber credits to residents' accounts for several months. The delay continued into FY 2021. DOEE continues to work with Pepco to address this issue to ensure that all SFA subscribers receive their full allocation of benefits. Pepco has processed credits into SFA subscriber accounts to make up for the missed credits throughout FY 2021. It is important that this issue be addressed expeditiously, as prolonged problems could damage the reputation of the SFA Program and the concept of community solar as a viable option for District residents to enjoy the benefits of clean solar energy.

While this report is for FY2021, as these metering and billing issues persisted, in early calendar year (CY) 2022 the Office of the People's Counsel for the District of Columbia (OPC) and the Office of the Attorney General (OAG) filed a joint complaint and petition with the Public Service Commission for investigation into Pepco's community renewable energy facility practices. Joint petitioners have received numerous complaints from residents, subscriber organizations (including DOEE's SFA

CREFs), and developers alleging that Pepco is not assigning CREF credits to subscribers as intended and mandated by law, which is undermining confidence in CREFs and the SFA Program. DOEE worked with OPC and OAG in preparing the complaint and petition, and provided documentation and data on billing issues involving the SFA CREFs. At the time of this report, the Public Service Commission has opened a formal investigation under Formal Case 1171, with both Pepco and the OPC/OAG filing legal briefs, which are currently under deliberation. The Commission has also stated plans to undertake a third-party audit of Pepco's CREF practices. A further update will be provided in the next annual report.

- 2. The DC SREC market continues to be strong and is supported by the expanded solar carve-out and lengthened SREC holding period enacted through the Clean Energy DC Omnibus Amendment Act of 2018 (CEDC Act). SREC prices rebounded from prior shocks from the COVID-19 pandemic in 2020. Retail electricity consumption during CY 2021 rose 3.1 percent relative to consumption for the same period in CY 2020, which increased the demand for SRECs slightly in CY 2021.<sup>3</sup> The SREC price in CY 2021 continued to hover around \$400, which is consistently one of the highest, if not the highest, in the country. The DC PSC stated in its annual Renewable Portfolio Standard (RPS) report that the District had 130.6 MW of RPS-eligible solar installations as of April 9, 2021. This is compared to 91.7 MW of RPS-eligible solar capacity as of April 9, 2020 a year-over-year growth rate of 42 percent.<sup>4</sup> The market appears to have stabilized compared to CY 2020 and RPS-eligible solar capacity is expected to increase with an eventual dip in SREC prices. Overall, the SREC market continued to provide favorable financing terms for SFA projects during FY 2021.
- 3. Site access continues to be a challenge and has caused some delay in solar system installations. Securing access commitments from building owners is critical to meeting the goals of SFA and ensuring the benefits continue to accrue to LMI households for the life of the solar system. Grantees and DCSEU SFA subcontractors are required to secure site access for at least a 15-year period. Securing site access will be a focus of the lessons learned report that DOEE is working on to document the Innovation and Expansion Grant phase of SFA's implementation. The report will provide recommendations for DOEE to implement in the near term.
- 4. Subscriber acquisition is an ongoing challenge. DOEE and its grantees have grappled with attracting and maintaining a pipeline of eligible solar beneficiaries to eventually meet its goal of serving 100,000 District subscribers by 2032. To overcome this barrier, DOEE placed greater emphasis on educating District residents about SFA and seeking creative engagement opportunities in partnership with the income-eligible community and trusted organizations that serve them to explain how solar energy works, address general skepticism of solar technology and related program offerings, and educate households on the benefits available from deployment of solar and subscriptions for community solar. DOEE is establishing partnerships with other District Government agencies to leverage their existing processes and systems to overcome administrative burdens and enroll customers more efficiently. For example, DOEE is utilizing the District Government's existing administrative data on income eligibility to speed approval for benefits. DOEE is already utilizing data from District-administered programs for LMI to allow beneficiaries of those programs to avoid the income verification process to qualify for SFA. These programs include the Low-Income Home

<sup>&</sup>lt;sup>3</sup> U.S. Energy Information Administration, Form 861M "Monthly Electric Power Industry Report" (for residential sales consumption in megawatt hours specifically). Accessed: https://www.eia.gov/electricity/data.php <sup>4</sup> Information from the Public Service Commission of the District of Columbia. Accessed: https://dcpsc.org/Ordersand-Regulations/PSC-Reports-to-the-DC-Council/Renewable-Energy-Portfolio-Standard.aspx

Energy Assistance Program (LIHEAP), Clean Rivers Impervious Area Charge (CRIAC), Supplemental Nutrition Assistance Program (SNAP), and Temporary Assistance for Needy Families (TANF).

DOEE is continuing its efforts to identify and access data for other utility affordability programs that could serve as proxy income verification sources for SFA enrollments. In FY 2022, DOEE anticipates it will be able to use additional programs for income verification, potentially including the Low-Income Household Water Assistance Program (LIHWAP), the Emergency Mechanical Systems (EMS) program, the Weatherization Assistance Program (WAP), and the Lead Reduction Program (LRP). Using existing administrative data helps beneficiaries avoid having to provide documentation to DOEE that they have already provided in other interactions with the District Government, saving both DOEE and the resident time and costs.

Going forward, DOEE will continue to work with grantees and partners to identify innovative methods to provide benefits to LMI households equivalent to Council's target of a 50 percent reduction in electricity bills, particularly when directly applying benefits on energy bills is not practical or possible. DOEE will develop criteria for verifying that the benefits from the SFA program benefit the intended population, over and above the benefits to communities that have suffered disproportionately from air pollution and greenhouse gases.

#### Systems Installed and Households Served in FY 2021

In FY 2021, the SFA Program installed 70 solar systems with a total capacity of 8.59 MW that can provide the benefits of solar energy to over 2,500 LMI District households.

#### **Expenditure of Funds**

As detailed below, the REDF expenditures for FY 2021 totaled \$17,546,259.71.

Total expenditures	\$17,546,259.71
Nonpersonal Services	\$15,086,460.14
Personal Services	\$2,459,799.57
Category	Expenditures

Personal services were employee salaries. Non-personal services included completing the SFA Innovation and Expansion grants, implementing a modification to the SFA Program's contract with DCSEU, and continuing partnerships to deploy solar with sister agencies through memoranda of understanding, such as with DCHA, DGS, and DCPL. DOEE also continued to coordinate subscriber management services, which are provided by its grantee, Groundswell, and continued the successful Solar Works DC Program in partnership with GRID and DOES. Projects that were not completed in FY 2021 will continue into FY 2022, and funds will be re-obligated in FY 2022 to support the construction, installation, and final interconnection of these projects.