



DC
SUSTAINABLE ENERGY
UTILITY

First Quarter Report for Fiscal Year 2019

October 1 – December 31, 2018

January 31, 2019



This report of the District of Columbia Sustainable Energy Utility covers the period from October 1 to December 31, 2018. This progress report contains information about the DCSEU's activity to date in FY 2019 in the four core service areas: Residential, Low-Income Multifamily (LIMF), Renewables, and Commercial and Institutional (C&I). It also contains information on Solar for All and Emergency Heating, Ventilation, and Cooling programs.

Table of Contents

MESSAGE FROM THE MANAGING DIRECTOR	1
QUARTERLY FEATURE: Introducing the Pay for Performance (P4P) program	2
1. At a Glance: Progress against Benchmarks	3
2. Sector Highlights in the Core Areas	7
3. Activity Supporting DCSEU Initiatives	11
4. Renewable Energy Development Fund	15
5. Additional Sustainable Energy Trust Fund (SETF) Programming	16

MESSAGE FROM THE MANAGING DIRECTOR

This is an exciting time to do energy work in the District of Columbia. With the recent passage and signing of the most aggressive clean energy legislation in the country, the District is positioning itself as an energy role model for the nation. We at the DCSEU are using this momentum toward sustainability and energy efficiency to do our part to help DC meet its clean energy goals, which is evident in our work over the first quarter of fiscal year 2019.

Over that period, we not only used our resources to help local businesses and residents save money on their energy bills, but we also created green jobs and focused our efforts on DC's most vulnerable populations. During the holidays, DCSEU staff packed boxes of food at Capital Area Food Bank. We also planned a coat drive with the DC Public Service Commission (PSC) and Unity Health Care that will be facilitated in January.

In November 2018, DC Council approved funding for the DCSEU to operate the District's Solar for All program. This program is designed to help lower the energy-burden on income-qualified residents by using solar power to decrease their energy bills. The DCSEU released requests for proposal (RFPs) in December seeking contractors and developers to install solar systems on single-family homes as well as design community renewable energy facilities (CREFs). After receiving a promising number of responses, the DCSEU's Solar for All Team plans to announce the contract winners in February 2019.

The Emergency Heating, Cooling, and Air Conditioning (HVAC) Program is another important effort that the DCSEU kicked off during the first quarter. This program serves income-qualified DC senior residents as well as DC residents living with a disability. We intend to live up to our goal of making their homes more efficient by replacing eligible HVAC systems and water heaters with those that are above code for energy efficiency.

We are also proud of the six externs that participated in the Summer/Fall 2018 DCSEU Workforce Development graduation ceremony. These externs gained hands-on experience at some of the District's largest energy consumers and helped make them more energy efficient. The success of the Workforce Development Program was recently highlighted in [East of the River](#). We will be launching a new building operator pilot as part of the DCSEU Workforce Development Program in February 2019. This pilot program is meant to address the need to bolster the building operator talent pool for buildings with increasingly "smart" technology.

As people become more in need of heat to combat frigid temperatures, we will continue to help DC's most vulnerable residents stay warm and save money on their energy bills in the second quarter of FY 2019. We are grateful to the DOEE for giving us the opportunity to serve even more DC residents through the Emergency Heating, Cooling and Air Conditioning Program as well as through Solar for All.

Ted Trabue

Managing Director

QUARTERLY FEATURE: Introducing the Pay for Performance (P4P) program

Currently, most energy efficiency programs offered by the DCSEU, and by other energy efficiency utilities across the country, provide customers with rebates based on a project's estimated future energy savings. With the DCSEU's new Pay for Performance (P4P) program, select existing commercial and institutional (C&I) buildings will now be eligible to receive incentives based on the measured change in energy usage after project implementation. P4P programs can help in calculating savings in complex, multi-measure efficiency projects where it is difficult to estimate savings in advance using traditional estimation methods. This is especially true when building owners and managers incorporate behavioral or operational changes that impact energy use.

The program, which the DCSEU expects to officially launch in January 2019, works by using pre- and post-project metered data to calculate energy savings rather than estimated savings based on the measures or equipment being installed. The DCSEU will then pay incentives to customers based on the level of savings measured over time. While each project is considered unique and incentive structures vary, the current incentive structure for Fiscal Year 2019 will include yields of \$15-25/MWh for electricity and \$3-5/MMBtu for gas. Because the savings are calculated after the energy efficiency measures are installed, the P4P Program is designed to motivate customers to be more energy efficient through behavioral and operational changes, not just through equipment upgrades. This provides a more precise savings approximation.

The DCSEU has been developing the P4P program since Fiscal Year 2016. Since that time, the pilot phase of the program has included work on nine projects, such as a local university's academic center, retail space, and a historic building, representing a total of over 6,000 MWh in electricity savings using the industry-recognized P4P method of savings analysis.

This is an especially exciting time to introduce this program as building emissions standards are set to change after the passage of the Clean Energy DC Omnibus Act of 2018. This legislation will have a large impact on existing commercial and institutional buildings, which according to DOEE currently account for the greatest portion of the District's electricity and natural gas usage. This program may also help commercial buildings, as ENERGY STAR scores are expected to drop in August 2019 due to performance metric updates to ENERGY STAR's Portfolio Manager tool.

1. At a Glance: Progress against Benchmarks

Table 1. Performance to date, measured against benchmarks and contract requirements¹

Item	Benchmark	Description	Metric Unit	Goal Type	FY19 Annual Results (October 1, 2018 through December 31, 2018)	Cumulative Benchmark Minimum (October 1, 2016 through September 30, 2019)	Cumulative Benchmark Maximum (October 1, 2016 through September 30, 2019)	Cumulative Results (October 1, 2016 through December 31, 2018)	Minimum Benchmark Progress	Maximum Benchmark Progress
1a	Cumulative Performance Benchmarks	Reduce per-capita consumption - Electricity	MWH Net	Cumulative	29,132	230,594	288,242	257,714	112%	89%
1b		Reduce per-capita consumption - Natural gas	Therms Net	Cumulative	497,547	4,092,310	5,797,438	4,795,959	117%	83%
2		Increase renewable energy generating capacity	KW	Cumulative	256	2,300	3,000	4,336	189%	145%
3		Leverage funds	Dollars	Cumulative	-	\$ 2,500,000	\$ 5,000,000	\$ 669,589	27%	13%

¹The DCSEU provides services under a performance-based contract that contains a broad array of performance benchmarks and other contract requirements. These benchmarks are derived from goals established in the District's Clean and Affordable Energy Act of 2008. The DCSEU contract contains additional minimum contract requirements, beyond the contract performance goals.

Item	Benchmark	Description	Metric Unit	Goal Type	FY19 Annual Results (October 1, 2018 through December 31, 2018)	Cumulative Benchmark Minimum (October 1, 2016 through September 30, 2019)	Cumulative Benchmark Maximum (October 1, 2016 through September 30, 2019)	Cumulative Results (October 1, 2016 through December 31, 2018)	Minimum Benchmark Progress	Maximum Benchmark Progress
4a	Annual Performance Benchmarks	Improve energy efficiency in low-income housing - spend	% of annual budget	Annual	\$635,241	\$ 3,694,167			17%	
4b		Improve energy efficiency in low-income housing - savings	MMBTU Net	Annual	5,742	23,278	46,556		25%	12%
5		Increase number of green collar jobs	Green job FTE's directly worked by DC residents, earning at least a Living Wage - Hours	Annual	19	66	88		29%	22%

Item	Benchmark	Description	Metric Unit	Goal Type	FY19 Annual Results (October 1, 2018 through December 31, 2018)	Cumulative Benchmark Minimum (October 1, 2016 through September 30, 2019)	Cumulative Benchmark Maximum (October 1, 2016 through September 30, 2019)	Minimum Benchmark Progress	Maximum Benchmark Progress
6	Other Contract Requirements	DCSEU General and Administrative Expenses	% of Cost Reimbursement Ceiling	Annual	\$ 687,816		\$ 3,694,167		19%
7		Expenditures with Small Business Enterprises/Certified Business Enterprises	% of annual DCSEU operating budget subcontracted to SBEs/CBEs	Annual	\$ 306,067	\$ 6,845,900		4%	
8a		Annual expenditures related to electric energy efficiency	% of funds provided from assessments on electricity company	Annual	\$ 2,673,286	\$ 11,135,000		24%	
8b		Annual expenditures related to natural gas energy efficiency	% of funds provided from assessments on natural gas company	Annual	\$ 754,004	\$ 2,783,750		27%	

Item	Benchmark	Description	Metric Unit		FY19 Annual Results (October 1, 2018 through December 31, 2018)	
9	Tracking Goals	Reduce growth in energy demand of largest users	# of projects completed with a square footage of > 200,000		24	
10		Reduce growth in peak demand	KW		3,920	

2. Sector Highlights in the Core Areas

Residential Services

- **The Efficient Products program has achieved electricity savings of 1,450 MWhs in the residential market during the first quarter.** The DCSEU has also achieved natural gas savings of 347 MMBtus through December 31. There have been approximately 3,000 participants served in the residential market during the first quarter.

Low-Income Multifamily

- **The DCSEU completed ten Low-Income Multifamily Comprehensive projects resulting in more than \$117,481 in annual energy cost savings during the first quarter.** These projects represent 900 MWh in combined electricity savings and took place at apartment buildings, some of which are managed by the District of Columbia Housing Authority (DCHA), as well as a local food bank.
- **The Low-Income Team worked with Mega Lights to distribute a total of 4,800 bulbs at multiple income-qualified sites throughout December.** These locations included Bread for the City, House of Ruth, Father Mckenna, Friendship Place, and Central Union Kitchen.
- **The Low-Income Team worked with the Community Preservation and Development Corporation (CPDC) to educate residents on energy efficiency.** The team also held an event with the National Housing Trust (NHT) that kicked off an Innovation pilot project with a company that creates technology that allows tracking individual unit electricity use in master-metered buildings. This event had at least 40 low-income residents in attendance, many of whom speak Spanish as their first language.
- **The Low-Income Team held a class for DCSEU Certified Business Enterprise (CBE) contractors in November.** The DCSEU provided training to contractors so they will be able to educate residential property owners and residents about the energy-efficient equipment being installed as well as general information on energy efficiency and the importance of maintaining the equipment.

- **The Low-Income Team distributed 2,036 home energy conservation kits to income-qualified households during the first quarter of FY 2019.** The team worked with Low Income Home Energy Assistance Program (LIHEAP) centers as well as the Community Preservation and Development Corporation (CPDC) on this effort.
- **As originally scheduled, the Income Qualified Efficiency Fund (IQEF) application closed on November 1, 2018.** More than 50 applications were received for IQEF projects. The work orders for these projects are expected to be executed by the end of January.

Renewable Energy

- **The solar renewable energy credits (SREC) support program, which was established by the DCSEU in partnership with Solar United Neighborhoods (SUN), supported 18 solar installations on low-income single-family homes during the first quarter of FY 2019.** These installations were funded by a 2017 Solar for All grant to SUN. This is an activity supported by the DCSEU's Leveraging Team.

Commercial and Institutional

- **During the first quarter, the DCSEU closed 21 commercial and institutional projects resulting in more than \$2.65 million in annual energy cost savings.** These projects were completed at places such as local universities, an organic grocery store, a hotel, a Great Streets Grantee winner and multiple schools.
- **The Account Management Team completed the first university roundtable/cohort event in October with plans for a second event.** One team member has connected with the Pew Health Impact Project to document the DCSEU's process on expanding the non-energy benefits of energy efficiency. They also compiled data and historical information to create an interactive map showcasing MWh, MMBTU, CO₂, and site impacts across the District and presented at the American Council for an Energy-Efficient Economy (ACEEE)'s Conference on Health, Environment, and Energy in New Orleans on health and energy work.
- **DCSEU staff had successful meetings with the ownership of a hotel chain to present their pilot program with INNCOM, a smart digital thermostat, by**

Honeywell. They also gave a presentation to all Mid-Atlantic Directors of Engineers. The DCSEU team provided third-party support to evaluate the smart thermostat's performance, comparing energy use in rooms where the smart thermostat was connected to the hotel's property management system to those that were not connected and measuring the savings.

- **The Business Energy Rebate (BER) program processed 49 projects comprising \$103,322 in rebates during the first quarter.** These projects represent 5,887 MWhs of electricity savings. There are currently 19 projects in queue for payment with a rebate value of \$59,315. By the end of the first quarter, the DCSEU had 23 active BER opportunities, with an estimated rebate value of more than \$76,898.

Leveraging

- **In Q1, the Leveraging Team launched the Energy Opportunity Fund, and was awarded a \$5,000 grant in support of Building Operator Certifications for Workforce Development program participants.** The team launched the Energy Opportunity Fund as a mechanism to support projects in the city furthering energy justice. The team was also awarded a grant in support of 2019's Workforce Development cohort focused on Building Operator Certifications. Working with the Marketing Team, the Leveraging Team supported the second Focus on Green Tech event and conducted surveys of DCSEU newsletter subscribers and other DC residents to provide more targeted communications and identify potential Energy Opportunity Fund donor prospects.
- **The Leveraging Team solicited proposals from providers of innovative energy efficiency financing solutions, such as Energy Savings Agreements (ESA)/ Efficiency-as-a-Service (EaaS), to be implementation partners in the Energy Efficiency Finance Program (EEFP) 2.0.** The team sought proposals from service providers experienced in serving single family homes and small businesses.

- **The Leveraging Team participated in #GivingTuesday and had meetings with four potential sponsors.** After a soft launch of the Energy Opportunity Fund in October, the Leveraging and Marketing Teams worked to develop the first individual giving campaign in support of this fund, participating in #GivingTuesday. This is a global day of giving focused on online giving, celebrated the Tuesday after the widely-recognized shopping events, Black Friday and Cyber Monday. It kicks off the charitable season, when many focus on their holiday and end-of-year giving. The DCSEU highlighted its work with Christ House on a project at their facility through the DCSEU’s email newsletter and promoted social media posts resulting in the first donation to the Energy Opportunity Fund. The Leveraging Team also had meetings with potential sponsors to discuss energy conservation kits, Refresh the District, and partnering with large events to offer local clean energy credits.
- **The Leveraging Team also attended events such as the Opportunity Finance Network’s (OFN) annual conference.** This conference is dedicated to the state of the Community Development Financial Institution (CDFI) industry and ran from Oct 9, 2018 – Oct 11, 2018. CDFIs are regulated lending institutions that are created specifically to address the needs of the underserved market actors such as low-income housing, small businesses, non-profits, health clinics and community facilities. Financing plays a key role in DCSEU’s leveraging strategies and CDFIs could play a crucial role as potential partners to the DCSEU or as lenders to DCSEU’s customers. The various sessions at this conference allowed the DCSEU to understand the landscape of partnership opportunities and emerging trends in the CDFI industry. There were also networking opportunities that will be used to engage in conversations with potential partners. The team also attended the 4th Annual Sustainability Summit on October 18, where the DCSEU spoke about the financing barriers faced in the development of solar PV systems on single family and multi-family buildings along with representatives from DOEE, Groundswell, Skanska, and GW University.

Green Jobs

- **The DCSEU held a graduation ceremony for six externs from the Summer/Fall 2018 Workforce Development cohort in December.** At the ceremony, which was attended by representatives from participating mentor organizations, a

staff member from Councilmember Kenyan McDuffie’s office, and Dr. Taresa Lawrence and Dr. Lance Loncke from the DOEE, each extern presented what they learned while participating in the program. This cohort of externs was the first to produce [a newsletter highlighting their accomplishments](#). Councilmember Brandon Todd wrote a letter congratulating the externs on completing the program. Prior to graduating, the externs participated in mock job interviews and attended the Grid Alternatives Solar Job Fair in downtown DC during the first quarter. They also went through Building Operator Certification (BOC) training at the DCSEU.

- **The Workforce Development Team participated in a “Career Day” held at the DC Youth Detention Center and presented at “Toolfest,” a STEM career fair for students grades 3-12 from schools in the DC area.** One team member was also a guest speaker at the United Planning Organization’s graduation ceremony. The team is currently preparing for the building operator pilot program that will be launching in February 2019.

3. Activity Supporting DCSEU Initiatives

Marketing, Public Relations, and Public Affairs

- **The DCSEU launched the Refresh the District initiative in Ward 8’s Skyland neighborhood.** Skyland is home to more than 30 homes, originally a DC Habitat for Humanity-built community, that participated in the DCSEU's 2012 Affordable Solar initiative. Partnering with DC Habitat for Humanity, NBC 4 Washington, United Planning Office (UPO), and Major League Baseball, the DCSEU hosted a block party for Skyland residents. The team distributed 40 Home Energy Conservation Kits containing an Advanced Power Strip, six LED light bulbs, a low-flow faucet aerator, and educational materials to Skyland residents. In November and December, the team surveyed residents on issues in their home, such as drafts and high energy bills, and reached out via letter, e-mail, phone, and in-person to income-qualify residents for additional energy efficiency services. Next steps in the program include an initial home inspection by a DCSEU contractor in January and February.

- **The DCSEU also organized or participated in 10 additional events in Q1 of FY 2019**, including the Public Service Commission's Winter Ready DC event and Pepco's 2018 Energy Assistance Summit.
- **The DCSEU held its second Focus on Green Tech event in October at Latham and Watkins law firm.** More than 50 people attended and the event featured speakers from the National Housing Trust, Nest/Google, Sealed, Aquanta, Arcadia Power, and IMT.
- **The Marketing and Communications Team welcomed a new member in November.** Karen Blyton joined the DCSEU as Public Relations Specialist and will be seeking to raise the DCSEU's profile through positive earned media engagement. She will also be responsible for DCSEU monthly and quarterly reporting to DOEE.
- **The Marketing and Communications Team delivered the DCSEU's FY 2018 Annual Report.** This work included story and photo collection to deliver a designed report to DOEE. The stories will be utilized as case studies and success stories in FY 2019.
- **The Marketing and Communications Team supported the December Workforce Development graduation.** The team promoted the graduation, recorded interviews for a video to deliver in Q2 of FY 2019, and pitched the graduation and program to local media.

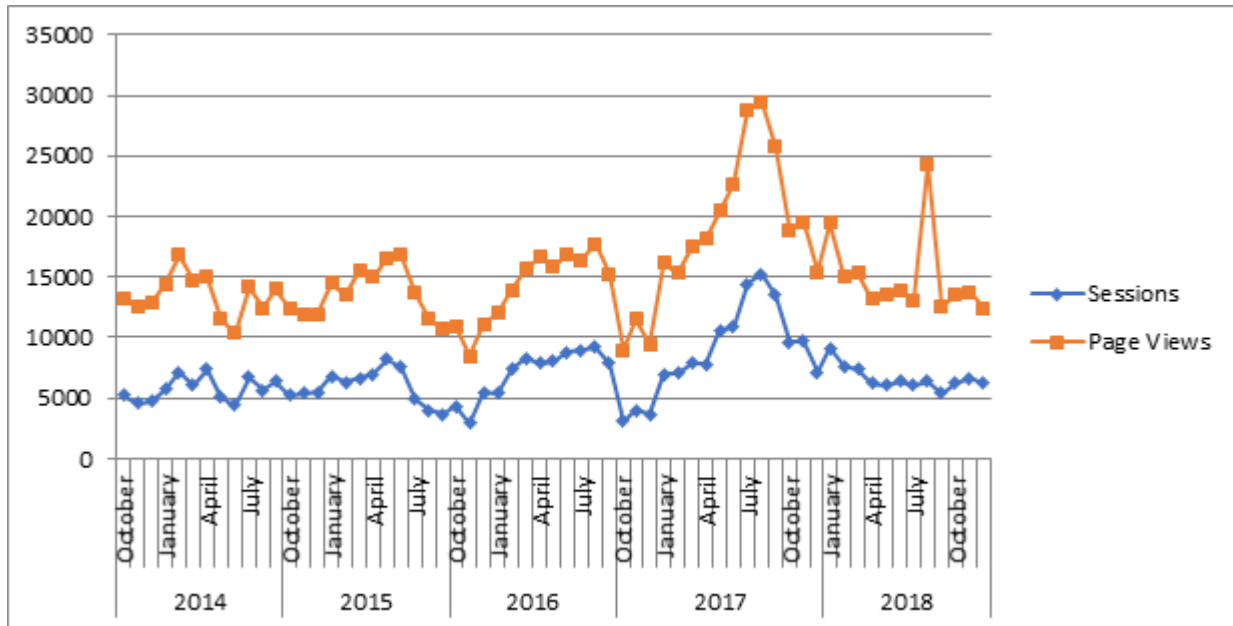


Figure 1. DCSEU website sessions and page views, by month FY 2014 – FY 2019 to date.

- First-quarter website statistics **18,990 Sessions**
- Facebook **879 Followers**
- **Twitter** **1,807 Followers**

Table 6. DCSEU initiatives, by sector

Core area	Initiative name	Description	Customer	Status
Residential	Efficient Products	Deep discounts on LEDs with partnering retailers in DC; mail-in rebates for qualifying energy-efficient appliances; free energy kits for DC residents	DC residents	On track
Low-Income Multifamily	Low-Income Multifamily Comprehensive	Custom technical and financial assistance for energy efficiency improvements for multifamily properties	Property owners of multifamily buildings, shelters, and clinics serving income-qualified DC residents	On track
Renewable Energy	Commercial Solar	Incentives and financing to install solar PV systems	Commercial business owners	On track
Commercial and Institutional	Business Energy Rebates	Rebates for energy-efficient lighting, heating, refrigeration, cooking, and other qualifying equipment	Business owners	On track
	Commercial Direct Services	Direct installation of energy efficiency measures at primarily small and medium-size commercial businesses	Business owners	On track
	Instant Business Rebates	Discounted energy-efficient lighting through CBE distributors	Business owners	On track
	Commercial and Institutional Custom	Technical assistance, account management, and financial incentives for energy efficiency projects	Large commercial and institutional customers	On track

Core area	Initiative name	Description	Customer	Status
	Pay for Performance	Technical assistance, account management, and incentives for energy efficiency projects. Measures energy savings using pre- and post-project metered data rather than calculation estimates. Allows incentives for behavioral, operational, and complex mixed-measure projects.	Large commercial and institutional energy users; qualified vendors	Launching January 2019

4. Renewable Energy Development Fund

Solar for All

- **The DCSEU’s Solar for All Team kicked off in November after DC Council approved appropriations for the latest phase of the Solar for All program.** Shelley Cohen, a DC resident and solar expert, joined the team as the Solar Portfolio Program Manager.
- **The Solar for All Team released RFPs for contractors and developers for single-family solar and community solar projects.** The team held a webinar to review RFP details and released a question and answer (Q&A) document. They worked with the Marketing and Communications Team to send multiple e-blasts to notify potential bidders of updates and relevant documents posted to the DCSEU website. After receiving a promising number of responses, the DCSEU’s Solar for All Team plans to announce the contract winners in February 2019.
- **The Solar for All Team is working to create a pipeline of buildings with solar potential for future Solar for All funding cycles.** They are working to set up solar design software as well as solar project tracking system. This will enable the team to track which buildings and homes qualify and are good candidates for solar. The team also had meetings with numerous stakeholders.

5. Additional Sustainable Energy Trust Fund (SETF) Programming

Emergency Heating, Cooling, and Air Conditioning (HVAC) Program

- **The Emergency Heating, Cooling, and Air Conditioning (HVAC) Program Team was introduced during the first quarter and was able to service 12 DC residents during that time.** All projects were for single-family homes. The team also onboarded four contractors to the Emergency HVAC Program and completed the Acumen Social Impact class with the internal DCSEU team.
- **The Emergency HVAC Team repaired or replaced 17 HVAC or water heating systems in total,** as depicted in the following chart (note: some residents received assistance on HVAC and water heating equipment):

Equipment Type	Number of Units to Date
Water Heater Replacement	5
Water Heater Repairs	2
Boiler Replacement	3
Boiler Repair	2
Furnace Replacement	4
Furnace Repair	1
Heat Pump Repair	1
AC Repair	1