



DC
SUSTAINABLE ENERGY
UTILITY

Second Quarter Report for Fiscal Year 2019

January 1 – March 31, 2019

April 30, 2019



This report of the District of Columbia Sustainable Energy Utility covers the period from January 1 to March 31, 2019. 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.

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MESSAGE FROM THE MANAGING DIRECTOR

The second quarter was a significant time for the DCSEU as we celebrated our 8th year serving the District in March. We are proud of the work we have done to make DC a more energy-efficient and environmentally-friendly place to live. Since 2012, we have prevented over 5 million tons of lifetime CO₂ emissions through our efforts. According to the EPA, that is equivalent to eliminating the emissions from burning 5.4 billion pounds of coal.

We have also helped DC residents, local businesses, and institutions keep \$855.7 million in their pockets from lifetime energy savings. Through our energy justice work, we have invested more than \$30 million in low-income DC communities. Now halfway through our five-year contract with the District, our performance has been particularly strong during the second quarter of fiscal year 2019.

The recent passage of DC's Clean Energy Omnibus bill will require the District to be completely reliant on renewable energy sources by 2032. Over the next few years, the DCSEU will play a key role in helping existing commercial and institutional DC buildings meet more rigorous emissions standards. According to the District Department of Energy and Environment (DOEE), these buildings currently account for the greatest portion of the District's electricity and natural gas usage. 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 measurable energy savings, rather than incentives solely based on equipment replacement.

In addition to the Clean Energy bill, a key change we have witnessed since we started in 2011 has been to the light bulb itself. Back then, the CFL was the most efficient light bulb on the market. Now the LED bulb has won that title. Considering the U.S. Department of Energy has recently announced it wants to roll back standards that would have eliminated the incandescent bulb, it is now more important than ever for DC residents to understand the benefits of switching to LEDs.

This past March, we launched a lighting campaign to promote discounted LEDs in retailers around the District where we offer these bulbs for as low as \$0.95 cents. These ads encourage customers to "make the switch" to LEDs and will be displayed in bus shelters, metro stations, and through geo fencing that triggers an ad when a potential customer walks by a select location. The lighting campaign is expected to run until mid-summer.

We are also excited for the future role of energy efficiency in DC. In early March, DCSEU staff members celebrated the future of STEM by serving as guest judges at the John Burroughs Elementary School Science Fair for the second year in a row. With projects from 75 individual participants from grades 3-5 and group projects from PreK through Second Grade, the judges' work was cut out for them.

Now that we are transitioning into warmer weather, the DCSEU will make every effort to help those in need stay cool this spring through our work with the DOEE's Emergency Heating, Cooling and Air Conditioning Program. You will find more information on how that program is making a positive impact on people's lives in our Quarterly Feature.

Ted Trabue

DCSEU Director

QUARTERLY FEATURE: Keeping DC Cool with The Emergency HVAC Program

The DCSEU is grateful to work with the District Department of Energy and Environment to facilitate the Emergency Heating, Cooling, and Air Conditioning (HVAC) Program. Through this program, the DCSEU helps repair and replace broken heating and air conditioning systems for eligible seniors and people living with disabilities who own or rent homes. This is especially important work considering these populations are the most vulnerable to extreme weather conditions.

Low-income families are more susceptible to cold winters because it typically costs more to heat their homes, which are often older and less insulated. They are also less likely to have the available funds to be able to fix a broken heater. Through the Emergency HVAC Program, DC resident Vanessa Brooks was able to receive a new, energy-efficient boiler and hot water heater.

“I used to dread the winter time,” said Brooks. “Now I’m feeling very optimistic about next winter.” Brooks said she was previously unable to heat the second floor of her home due to a broken radiator. Now she says she feels comfortable in her house. Her energy bills have also gone down because the equipment exceeds code requirements for efficiency.

As temperatures start to rise in DC, the DCSEU is also starting to help with repairing and replacing air conditioners. According to [The Washington Post](#), roughly 40 percent of low-income DC residents live on “heat islands”—areas with little vegetation to offer solace from the heat. These areas create summers that are roughly 5 degrees hotter in Washington during the day and about 7 degrees hotter at night than surrounding areas.

The program has assisted about 50 DC residents since the DCSEU started facilitating the Emergency HVAC Program in late 2018.

To qualify for the program, DC residents must be over the age of 60 or aged 18 or older with a disability and meet certain income requirements. For example, a family of four would be qualified with a maximum household income of \$88,250 per year.

Residents can apply online at: <https://doee.libera.com/portal> or in-person at a Department of Human Services location based on the ward they live in.

1. At a Glance: Progress against Benchmarks

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

Item	Benchmark	Description	Metric Unit	Goal Type	FY19 Period Results (January 1, 2019 through March 31, 2019)	FY19 Annual Results (October 1, 2018 through March 31, 2019)	Cumulative Results (October 1, 2016 through March 31, 2019)	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
1a	Cumulative Performance Benchmarks	Reduce per-capita consumption - Electricity	MWH Net	Cumulative	32,323	61,455	290,037	230,594	288,242	126%	101%
1b		Reduce per-capita consumption - Natural gas	Therms Net	Cumulative	646,752	1,144,299	5,442,711	4,092,310	5,797,438	133%	94%
2		Increase renewable energy generating capacity	KW	Cumulative	77	333	4,413	2,300	3,000	192%	147%

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.

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3	Cumulative Performance Benchmarks	Leverage funds	Dollars	Cumulative	\$ 5,200	\$ 207,943	\$ 674,789	\$ 2,500,000	\$ 5,000,000	27%	13%

Table 2. Annual Benchmarks. Performance to date, measured against benchmarks and contract requirements²

Item	Benchmark	Description	Metric Unit	Goal Type	FY19 Period Results (January 1, 2019 through March 31, 2019)	FY19 Annual Results (October 1, 2018 through March 31, 2019)	Annual Benchmark Minimum (October 1, 2018 through September 30, 2019)	Annual Benchmark Maximum (October 1, 2018 through September 30, 2019)	Minimum Benchmark Progress	Maximum Benchmark Progress
4a	Annual Performance Benchmarks	Improve energy efficiency in low-income housing - spend	% of annual budget	Annual	\$ 602,430	\$ 1,237,671	\$ 3,694,167		34%	
4b		Improve energy efficiency in low-income housing - savings	MMBTU Net	Annual	8040	13,782	23,278	46,556	59%	30%
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	38	66	88	58%	43%

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6	Other Contract Requirements	DCSEU General and Administrative Expenses	% of Cost Reimbursement Ceiling	Annual	\$ 735,393	\$ 1,423,209		\$ 3,694,167		39%
7		Expenditures with Small Business Enterprises/Certified Business Enterprises	% of annual DCSEU operating budget subcontracted to SBEs/CBEs	Annual	\$ 607,044	\$ 856,865	\$ 6,845,900		13%	
8a		Annual expenditures related to electric energy efficiency	% of funds provided from assessments on electricity company	Annual	\$ 3,227,364	\$ 6,106,288	\$ 11,135,000		55%	
8b		Annual expenditures related to natural gas energy efficiency	% of funds provided from assessments on natural gas company	Annual	\$ 614,736	\$ 1,163,102	\$ 2,783,750		42%	

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9	Tracking Goals	Reduce growth in energy demand of largest users	# of projects completed with a square footage of > 200,000		16	40				
10		Reduce growth in peak demand	KW		4,302	8,222				

2. Sector Highlights in the Core Areas

Residential Services

- **The Efficient Products program has achieved electricity savings of 9,454 MWhs** in the residential market during the second quarter and allocated \$293,910 in incentives. The DCSEU has also achieved natural gas savings of 217 MMBtus from residential programs in the second quarter. There were approximately 7,046 participants served in the residential market during the second quarter.

Low-Income Multifamily

- **The Low-Income Program Team completed 20 projects resulting in \$226,056 in annual energy cost savings during the second quarter.** These projects represent 2,082 MWhs in combined electricity savings and 277 MMBtus of natural gas savings. Projects were completed at multifamily buildings throughout the District as well as at a non-profit that provides health care, food and clothing to low-income families.
- **The team met with Local Initiatives Support Corporation (LISC),** which supports affordable housing groups, to review programs at a member meeting. They also spoke with Google/NEST to review new and current program offerings.
- **The team attended multiple events during the second quarter.** The team went to a procurement expo sponsored by the Department of Small and Local Business Development (DSLBD) to onboard new contractors. The team distributed 30 energy conservation kits at a Community Preservation and Development Corporation (CPDC) event in March. Team member Patrice Brooks presented at the National Environmental Justice Conference in March about the DCSEU's efforts to reduce the energy burden in low-income DC communities.
- **Phase 2 of the Income Qualified Efficiency Fund (IQEF)** launched on January 25, 2019. Applications closed on March 15, 2019.

Renewable Energy

- **The DCSEU in partnership with Solar United Neighborhoods (SUN)**, an installer / contractor, installed 83kws of solar on 21 Single Family Homes in DC. Once the project is completed, the DCSEU purchases the solar renewable energy credits (SREC), which helps improve the upfront value of SRECs. The DCSEU program (1) allows SUN, the program grantee, to increase the number of households it can serve, and (2) provide additional solar benefits to income-qualified DC residents (3) reduces utility costs, and (4) leverages SREC funding to support DCSEU programming.

Commercial and Institutional

- **During the second quarter, the DCSEU closed 24 commercial and institutional projects resulting in 63,313 MMBtus of natural gas savings and 14,472 MWhs of electricity savings.** These projects represent more than \$1.8 million in annual energy cost savings and were completed at places such as hotels, public schools, a grocery store, and a convenience store.
- **The Account Management Team closed out multiple projects during the second quarter**, such as a refrigeration project at a grocery store that produced over 795 MMBtu of savings and projects at multiple DC public schools. One of the elementary schools will benefit from a class at a local recreation center that will teach kids how to garden. Additionally, the team started a new Pay for Performance (P4P) project on a DC museum and coordinated meetings for two new P4P projects. It also held its second university cohort to promote sustainability on college campuses.
- **The Account Management Team also inspected the largest solar project in DC** and made new contacts to establish additional pipeline. The team made further impacts in the community by volunteering as guest judges at the John Burroughs Elementary School Science Fair, DC's only STEM public elementary school in March.
- **The Business Energy Rebate (BER) program processed 38 projects comprising of \$137,000 worth of rebates during the second quarter.** These projects equate to 3,154 MWhs of savings. There are currently 9 projects in queue for payment with a rebate value of \$68,000. By the end of the second quarter, the DCSEU had 31 active BER opportunities, with an estimated rebate value of more than \$145,000.

- **The Commercial Direct Services Program processed 1 project comprising of \$62,500 worth of rebates during the second quarter.** There are 5 lighting projects associated with public transportation to be completed by the end of May with an estimated 2,181 MWhs of savings set.
- **Instant Business Rebates projects worth \$118,274 were invoiced during the second quarter.** The DCSEU is partnering with both Certified Business Enterprise (CBE) and non-CBE lighting distributors to offer instant rebates on energy-efficient lighting, making it simple for District businesses to take advantage of savings.

Leveraging

- **In Q2, The Leveraging Team took the opportunity to evaluate and refine FY 2019 plans,** conducting prospect research and outreach. This includes potential funding opportunities at the intersection of health and energy efficiency. Additionally, the team developed a strategy to embed the social impact goals of the Energy Opportunity Fund into the overall communication strategy. A project-based campaign approach to support the Energy Opportunity Fund was also developed and will be executed in Q3. VEIC closed on a financing facility with Calvert Impact Capital for funding DCSEU incentives for low-income single homes in the District in support of the 2017 Solar for All program. The team also worked on developing a Carbon Offset program to sell local offsets generated by projects completed by the DCSEU. Additionally, a local home improvement store verbally committed to providing energy efficient equipment in support of Refresh the District's final phase in Skyland.

Green Jobs

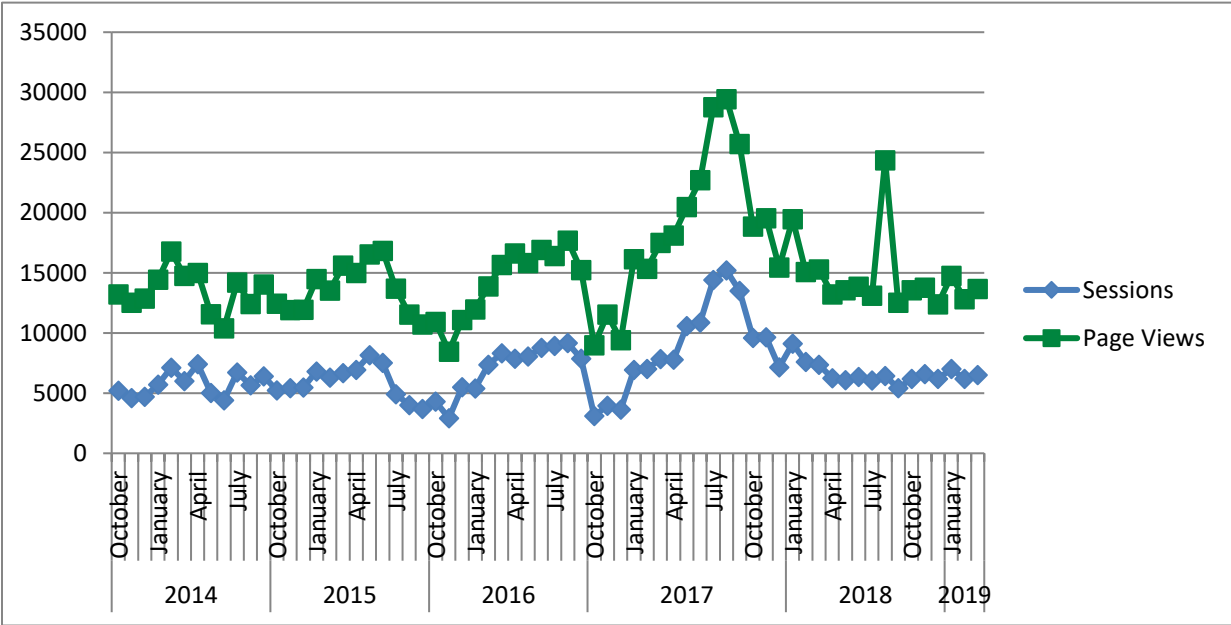
- **The Workforce Development Team prepared for the upcoming FY 2019 Winter/Spring Cohort during Q2.** This cohort, which began in April, will focus on training externs to become building operators. The team held interviews with potential externs, met with potential extern sponsor organizations, and held meetings with a potential light industrial staffing agency. Three alumni from the Workforce Development Program spoke at the National Environmental Justice Conference about their experience in the program.

3. Activity Supporting DCSEU Initiatives

Marketing, Public Relations, Community Outreach, and Public Affairs

- **The Marketing and Communications Team planned, designed, and launched a residential Lighting and Smart Thermostat Campaign in Q2.** The campaign will run through July and is featured in Metro stations, bus shelters, and in print and digital media outlets. The campaign directs potential customers to a custom URL, MakeTheSwitchDC.com.
- **The team sponsored the BISNOW Affordable Housing Summit in March.** The sponsorship included an exhibit table where DCSEU's Community Outreach Manager and Director of Account Management answered questions about DCSEU technical assistance and incentives from developers, owners, and property managers attending the event. The team also sponsored Leaders in Energy's Sustainability Extravaganza at George Washington University, a joint program with the Association of Energy Engineers National Capital Chapter (AEE NCC). A member of the DCSEU's staff spoke on a Council on Women in Energy and Environmental Leadership (CWEEL) panel at the event. Finally, on March 22, the DCSEU's Director, Ted Trabue, spoke on a panel at AEE NCC's Panel and Q&A session of Utility Energy Efficiency & Conservation Programs
- **The team pursued a partnership with Rebuilding Together DC – Alexandria in Q2.** Rebuilding Together DC-Alexandria repairs and rehabilitates homes free of cost for those in need, including the elderly, persons with disabilities, military veterans, and families with children, and works to install energy-efficient equipment and weatherization measures where possible. The DCSEU seeks to partner with the organization to provide energy conservation kits, as well as explore further opportunities to partner on weatherization and energy efficiency upgrades for the homes they repair and rehabilitate in DC.
- **The DCSEU received 18 earned media hits in Q2.** This included mentions in a VOX article with a reach of more than 10 million readers, as well as in a GreenBiz article on the District's new Clean Energy Omnibus Bill. The DCSEU also celebrated its 8th anniversary in March, and featured highlights of its eight years of work in the District on social media.

Figure 1. DCSEU website visits and page views, by month, from FY 2014 to date



- Facebook **882 Followers**
- Twitter **1,827 Follower**

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 and smart thermostats; HVAC rebates on qualifying equipment; 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	On track

4. Renewable Energy Development Fund

Program	Q2 Spend Amount	Total Spend to Date
Solar For All	\$202,758	\$251,938
Emergency Heating and Cooling	\$176,634	\$186,794

Solar for All

- **The DCSEU Solar for All Team awarded contracts to multiple developers for single family and community solar projects and is working to finalize all contracts.** The team awarded contracts to four contractors to install solar on 130 Single family homes, about 0.5 MW of capacity. These systems are designed to reduce customer utility bills by about 50%. The team awarded contracts to six contractors to install 54 CREF solar facilities. The output from these facilities, expected to be around 7 MW, will be designated for income qualified residents to help reduce their utility bills.
- **The team held meetings with multiple stakeholders,** including all awardees for the single family and CREF programs. The first meeting the team had with the awardees reviewed the award and expected milestones from the contractors. They also addressed CREF developers in a webinar format to

demonstrate how the output penalty calculator would work if they fail to meet their annual production goals. The team met with a beam manufacturer in DC to learn more about the inventory and what types of beams are available for flat roofs. They also joined a DC group of solar industry representatives focused on making the CREF process easier.

- **The Solar for All team is working to create a pipeline of buildings with solar potential for future Solar for All funding cycles.** To aid in building pipeline, the team is working to set up solar design software as well as a solar project tracking system. This will enable the DCSEU to determine if buildings and homes are good candidates for solar.
- **The team hired a Solar Program Associate to support the Solar for All work.** Charlene Mortyn started at DCSEU on April 8th as a Solar Program Associate, serving DC's Solar for All initiative. She previously worked as a Sales Analyst at Empower Energies, a Bethesda-based commercial solar developer, where she monitored solar market developments and regulations, managed proposals and RFP's, and helped land a major national corporate account for 100+ MW of solar projects.

5. Additional Sustainable Energy Trust Fund (SETF) Programming

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

- **The Emergency HVAC Team assisted 36 DC residents in total** with boiler, furnace, and water heating repairs and replacements during the second quarter and there are currently 52 active projects.