



DC
SUSTAINABLE ENERGY
UTILITY

Second Quarter Report for Fiscal Year 2018

January 1 – March 31, 2018

April 30, 2018



This report of the District of Columbia Sustainable Energy Utility covers the period from January 1 through March 31, 2018. This progress report contains information about the DCSEU's activity to date in FY 2018 in the four core service areas: Residential, Low-Income Multifamily (LIMF), Renewables, and Commercial and Institutional (C&I).

The use of the term *DCSEU* throughout this report indicates an integrated collaboration among the members of the Sustainable Energy Partnership, under the leadership of the DCSEU Contractor, the Vermont Energy Investment Corporation: George L. Nichols & Associates, Institute for Market Transformation, New Columbia Solar, and PEER Consultants.

Table of Contents

MESSAGE FROM THE MANAGING DIRECTOR	1
QUARTERLY FEATURE.....	3
1. At a Glance: Progress against Benchmarks	4
2. Sector Highlights in the Core Areas	9
3. Activity Supporting DCSEU Initiatives	13

MESSAGE FROM THE MANAGING DIRECTOR

It feels like we just finished the first quarter of Fiscal Year (FY) 2018, yet, here we are almost half way through! But let's back up for a second – if you have not yet had time to read about the DCSEU's accomplishments during FY 2017, our annual report [Building the Future of Energy in the District](#) has just been released. Back to the second quarter: I am proud to announce that we are very far ahead on the way to exceeding our goals, even further ahead than we were at the end of the second quarter of FY 2017. Our goal is to exceed all of our maximum benchmarks and surpass our stunning results from last year.

The reason why we are so far ahead is that thanks to the new five-year contract, we can seamlessly transition from fiscal year to fiscal year. During our year-to-year contract, we stopped building the pipeline every year as soon as we got close to the end of the fiscal year. Now, the reality is very different. With continuity, we have been constantly building our pipeline of new energy efficiency projects throughout the city over the past 18 months. We are looking forward to maintaining this constant flow of work so we can smoothly make the District more energy efficient, project by project.

For the next quarter, we are looking at a big seasonal change. As the cherry blossoms bloom and the temperatures go up outside – and we are finally able to turn off the heating – we are almost instantly turning on our air conditioning. But during the time in between, our HVAC systems, every spring and every fall, are having a downtime. This is the perfect time to either give them an annual check-up, ensuring that they are running as efficiently and safely as possible, or even replace them, if they are broken or outdated. As the average American family spends almost half of its energy bill on heating and cooling, upgrading to a newer model can result in lots of energy cost savings, enabling residents to spend less on their utility bills, and more on the things that matter most to them.

To make the transition easy and help residents with the cost involved, the DCSEU offers rebates for businesses and residents for equipment such as HVAC, water boilers, as well as air conditioners. Let's take a residential air conditioning system: Not only does the DCSEU offer rebates up to \$300, but at the same time, a typical household's energy bill can go down by 10% to 18% through the efficiency of a new model - that's a lot of savings! So here is my call to all of you to use this perfect season to inspect your HVAC and increase efficiency.

It continues to be an honor for me and the DCSEU's staff to be able to serve the District of Columbia, its residents, businesses and institutions. Halfway through our FY 2018, the DCSEU looks forward to continuing its great work to bring energy savings to the District.

Ted Trabue

Managing Director

QUARTERLY FEATURE

The DCSEU supports Energy Efficiency at The Wharf, creating Millions in Savings over next Decades

Bringing waterside experiences to the District, The Wharf has become one of the hottest spots in town. Bars, restaurants, music venues, hotels, offices, and residences overlooking the water with views of ships cruising by and seagulls in the air have revealed a whole new feature of the nation's capital.

But what many do not know about The Wharf is that it's very energy efficient. LED lighting, energy-efficient heating equipment and water coolers, as well as appliances make the buildings and retailers that line the waterfront some of the most energy-efficient buildings in the city.

The \$2.5 billion dollar neighborhood on 24 acres of land and 50 acres of water was developed by PN Hoffman and Madison Marquette. The DC Sustainable Energy Utility (DCSEU) worked with Sustainable Building Partners, which is an energy efficiency consulting group, to provide technical and financial assistance for the development, and the implementation of energy efficiency measures such as efficient HVAC, LED lighting, heating, water coolers, and appliances. The DCSEU also helped with meeting the LEED certification requirements to attain the LEED Silver certification.

The mammoth neighborhood, which took nearly four years to build, incorporates an investment of \$5.4 million in energy efficiency. During the first year, the various energy efficiency measures installed are expected to result in \$300,000 of energy cost savings. These are created through saving more than 2,400 MWh of electricity – that's enough to power up to 240 average American homes for one year – and more than 74,000 therms of gas – every single year. Such a large reduction of The Wharf's footprint will also benefit the environment: the measures will prevent the emission of almost 2,000 metric tons of carbon dioxide every year – that's the equivalent of taking more than 428 passenger vehicles off the road for one year (saving 4.9 million vehicle miles).

In addition to the five major buildings, shops and restaurants at The Wharf also implemented energy efficiency measures, going through the DCSEU's Business Energy Rebate Program, which offers rebates on various energy efficiency measures.

"The DCSEU is very proud to be able to provide guidance on energy efficiency implementation in support of this landmark project. The Wharf is the centerpiece of the renaissance of the South East Waterfront", said Ted Trabue, Managing Director of the DCSEU.

Currently, the DCSEU is also assisting with energy efficiency implementation for the second phase of the development which is due to be completed by 2022, and will deliver 1.15 million square feet of retail, condos, apartments, restaurants, hotel, and a marina.

At a Glance: Progress against Benchmarks

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

Item	Benchmark	Description	Metric Unit	Goal Type	FY18 January 1, 2018 through March 31, 2018 Period Results	FY18 Annual Results (October 1, 2017 through March 31, 2018)	Cumulative Benchmark Minimum (October 1, 2016 through March 31, 2018)	Cumulative Benchmark Maximum (October 1, 2016 through March 31, 2018)	Cumulative Results (October 1, 2016 through March 31, 2018)	Minimum Benchmark Progress	Maximum Benchmark Progress
1a	Cumulative Performance Benchmarks	Reduce per-capita consumption - Electricity	MWH Net	Cumulative	23,887	46,621	121,756	172,945	140,579	115%	81%
1b		Reduce per-capita consumption - Natural gas	Therms Net	Cumulative	364,442	668,266	2,250,770	3,410,258	2,782,404	124%	82%
2		Increase renewable energy generating capacity	KW	Cumulative	263	1,598	1,380	2,000	3,842	278%	192%
3		Leverage funds	Dollars	Cumulative		\$ 239,932	\$ 2,500,000	\$ 5,000,000	\$ 239,932	10%	5%
4a	Annual Performance Benchmarks	Improve energy efficiency in low-income housing - spend	% of annual budget	Annual	\$ 148,420	373,645	\$ 3,711,667			10%	
4b		Improve energy efficiency in low-income housing - savings	MMBTU Net	Annual	682	3,678	23,278	46,556		16%	8%
5		Increase number of green collar jobs	Green job FTE's directly worked by DC residents, earning at least a Living Wage Hours	Annual	26,919	50,206	128,700	171,600		39%	29%
6	Other Contract Requirements	DCSEU General and Administrative Expenses	% of Cost Reimbursement Ceiling	Annual	\$660,225	\$1,367,348		\$ 3,711,667			37%
7		Expenditures with Small Business Enterprises/Certified Business Enterprises	% of annual DCSEU operating budget subcontracted to SBEs/CBEs	Annual	\$ 619,197	845,029	\$ 2,382,009			35%	
8a		Annual expenditures related to electric energy efficiency	% of funds provided from assessments on electricity company	Annual	\$ 2,867,100	5,976,779	\$ 11,135,000			54%	
8b		Annual expenditures related to natural gas energy efficiency	% of funds provided from assessments on natural gas company	Annual	\$ 579,937	1,457,026	\$ 2,783,750			52%	
9	Tracking Goals	Reduce growth in energy demand of largest users	# of projects completed with a square footage of > 200,000		34	61					
10		Reduce growth in peak demand	KW		2879	6,382					

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.

Energy savings values in **Table 1** represent the first year's savings at the customer meter, with generally accepted utility adjustment values for: (1) free-ridership (action by customers who make efficiency improvements without program assistance); (2) spillover effects (action by customers who are influenced by the existence of the program to make efficiency improvements, but who are not program participants); and (3) energy losses (losses from electricity generation and distribution ["line losses"] and losses from natural gas generation and distribution)

1. Sector Highlights in the Core Areas

Residential Services

- **The Residential Program Team focused on building and strengthening its collaboration with Nest, a smart thermostat manufacturer, and other partners.** The DCSEU offers \$50 rebates on Nest Smart Thermostats. The DCSEU and Nest are collaborating on Leveraging, Marketing and PR projects. Nest will be donating 10% of its sales during Earth Day and Memorial Day to organizations committed to ending energy poverty, and Nest is matching donations up to \$1 Million. The DCSEU will help Nest to identify local organizations dedicated to this cause. Beyond the partnership with Nest, the Residential Program Team hosted a workshop with DOEE on Residential Heat Pumps with Mitsubishi on March 27.
- **The Residential Program Team is making great strides towards meeting its annual goals.** To date in FY 2018, the DCSEU has achieved electricity savings of 10,482 MWh in the residential market, 61% of its annual MWh savings goal. The DCSEU has also achieved natural gas savings of 8,167 MMBtus in this market, 106 % of its annual natural gas savings goal through the 2nd Quarter of FY 2018. There have been 25,175 participants served in the residential market to date. To compare: After Q2 in FY 2017, the DCSEU had achieved electricity savings of 673 MWh in the residential market – 3% of its annual MWh savings goal - and 825 MMBtus or 15% of its annual natural gas savings goal.

Low-Income Multifamily

- **The DCSEU completed five Low-Income Multifamily Comprehensive Projects resulting in more than \$16,000 annual energy cost savings.** They include lighting and other efficiency measures at multiple affordable multifamily housing complexes, including one for seniors. In total, 438 units were affected through the renovations.
- **The DCSEU's Income Qualified Efficiency Fund (IQEF) launched in early 2018.** The program received 30 applications. Up to now the applications pre-approved for funding are worth more than \$1.2 million, with more than \$570,000 leveraged from customers. This can be interpreted as a great success, as historically, customers were often not able to support projects with funding. The idea of the new IQEF is to encourage customers to commit to a contribution to the project. The next step is to draft work orders so the projects can be implemented.

- **The Low-Income Program is working with DCHA to provide technical assistance for an [Energy Capital Improvement Plan \(ECIP\) 2 project](#), in which DCHA was awarded funding to renovate 24 affordable housing communities. The goal of the meeting was to help DCHA identify energy efficiency measures to reduce operating cost at some of these sites, the savings of which will then allow them to renovate and upgrade additional sites that are not featured in this ECIP 2 project.**
- **The DCSEU is also working with the Housing Association for Nonprofit Developers (HAND) to host a panel discussion and training on energy efficiency and affordable housing for their members, which is projected to happen in May.**
- **The Low-Income Team is also successfully partnering with DSLBD to onboard two new CBE contractors.** The plan for this partnership is to launch outreach events and information sessions to engage and promote the work of CBE contractors in the heating and electrical space. The first event of the partnership was the Income Qualified Efficiency Fund Information session. DSLBD and the DCSEU are planning a second event at the end of the year to highlight the contractors that participated in the program as well as the projects completed.

Renewable Energy

- **The Solar Energy Team installed 1,699 kW of solar, leading to 2,389 MWh of savings. It also formalized a partnership with a Solar for All grantee to implement the SREC support program, which improves the upfront value of SRECS. This program will 1) allow the grantee to increase the number of households they are able to serve with their grant, and 2) provide additional solar benefits to income-qualified DC residents and leverage SREC funding to support DCSEU programming. The team also released an RFP to select a potential off-taker for SRECs received through the proposed SREC support program. The winning bid will be selected and awarded in April, with the contract expected to be executed by the end of April.**

Commercial and Institutional

- **During the second Quarter, the DCSEU closed 27 commercial and institutional projects resulting in more than \$1.12 million in annual energy cost savings.** The projects, among others, include the second phase of an energy efficiency overhaul at the Smithsonian National Zoo, energy efficiency implementation at multiple apartment buildings, a retrofit at American University, lighting at various Metro stations, and a boiler replacement at Sirius XM.
- **The Account Management (AM) Team stayed focused on building a pipeline for FY 2018 through concentrating on pay for performance, the hotel sector and outreach**

to different organizations. For pay for performance, the team has been developing a tracking mechanism to better quantify the market potential and has been hosting vendor meetings to look for pilot projects and discuss the ongoing pipeline. In the hotel sector, the team has been undertaking discussions with two leading international hotel chains. The team also presented to the members of the Apartment and Office Building Association (AOBA) to inform about the DCSEU's programs.

- **The Account Managers are also focusing on excellence in professional development.** Two Account Managers are currently working on their Project Management Professional certification, while two other Account Managers successfully completed their Certified Energy Manager Exams.
- **The Business Energy Rebate (BER) program processed 72 projects comprising of \$334,905 worth of rebates during the second quarter.** These projects equate to 8,731 MWh of savings. There are currently 26 projects in queue for payment with a rebate value of \$93,241. By the end of the second quarter, the DCSEU had 70 active BER opportunities, with an estimated rebate value of more than \$233,177. The projects included lighting at Sirius XM Radio, a Hotel, and at an advocacy organization.
- **The Commercial Direct Services initiative currently has two active projects with an estimated incentive value of \$44,315.** These projects include a lighting installation at a WMATA location with 1,023 MWhs, and a lighting project at a local university.
- **Instant Business Rebates projects worth \$28,048 were invoiced in 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. During the second quarter the DCSEU received 13 submissions from participating distributors. These submissions equated to \$28,048 worth of rebates equating to 1,178 MWh of savings.

Leveraging

- **In March, the Leveraging Team submitted three proposals totaling \$120,000, implemented a Customer Relationship Management platform for leveraging activities, and participated in two community events.** Proposals submitted include \$50,000 and \$20,000 requests in support of the DCSEU's Workforce Development Program, as well as a \$50,000 proposal for general support of the DCSEU's programs. The DCSEU will be notified of the result for the three proposals by June.

- **To manage leveraging relationships, the Team has worked with VEIC to implement a DCSEU offspin of Salesforce.** The setup is complete and the team is now developing best practices to ensure the program is fully utilized.
- **In March, the Leveraging Team attended the Greater Washington Community Foundation's Celebration of Philanthropy (March 12th) and Leadership Greater Washington's Nonprofit Showcase (March 20th) to learn more about and network with potential partners.** The Leveraging Team also represented the DCSEU at a recent visit to a proposed resilience hub location in Ward 7 and is examining the possibility of identifying funders to support energy resiliency at the site.
- **The Leveraging Team has identified three funders to target with requests in April and has also compiled a short list of prospects to reach out to.** In addition, the Leveraging Team is working to finalize leveraging operational guidelines with DOEE and working to incorporate leveraging into the DCSEU communication strategy. The Team will be participating in a 2-day corporate responsibility workshop at the end of April, to learn more about prospective funders and meet them in person. The DCSEU also submitted for approval the SREC Support Pilot Initiative program plan which aims to support the installation of 215 solar PV systems on low-to-moderate income single family homes in the District and leverage in revenue upwards of \$ 1,000,000 for the DCSEU over the next 5 years.

Green Jobs

- **The Workforce Development Graduation Ceremony was held on Tuesday, January 30, at the DCSEU's offices.** Ten graduates completed the program, while five externs received the LEED certification, two received their Building Operator Certificate and one graduate received a Microsoft Office Certificate. While some are going to start working on sustainability abroad such as in Nepal and Senegal, others will transition into full-time roles at WMATA and Howard University. One participant chose to enlist in the military, and two others are moving on to PhD programs.
- **During Q2, the Workforce Development Team met with a variety of different external partners to strengthen the impact of the program.** The meetings included a major University and a staffing agency. On February 21, the team hosted community based organizations from the city for a workforce development information session. On March 7, another contractor information session was held.
- **The Team is also currently in the process of conducting interviews for the next cohort, which will start in June.**

2. Activity Supporting DCSEU Initiatives

Public Affairs & Public Relations

- **The DCSEU received the 2018 ENERGY STAR® Partner of the Year Award.** The DCSEU was chosen for demonstrating exemplary commitment to increase awareness for ENERGY STAR certified products through a well-rounded approach to energy efficiency program delivery, and for its dedicated work serving hard-to-reach populations. The DCSEU's accomplishments will be recognized by the U.S. Environmental Protection Agency and the U.S. Department of Energy at a ceremony in Washington, D.C. on April 20, 2018. Read the DCSEU's [Press Release](#), or read about the DCSEU's achievements on the [EPA's website](#).
- **During Q2, the DCSEU counted 83 media mentions.** This includes the PR promotion of the DCSEU's work with its Teaming Partner Institute for Market Transformation (IMT) on the [Putting Data to Work Tool](#), which includes several newspaper articles, press releases and blog posts. The DCSEU also released a [press release](#) with its Teaming Partner New Columbia Solar about the joint work to bring solar to DC Charter Schools. Other articles featured the [DCSEU's work at the Emery Shelter](#), an [interview](#) with the DCSEU's Managing Director Ted Trabue, and an [interview with Thor Cheston](#), a DC-based craft brewer whom the DCSEU helped to green his businesses.
- **The Marketing and Communications Team, in collaboration with the Leveraging and Funding Team, organized *Focus on Green Technology: Building the Sustainable Cities of the Future*** which took place on Jan. 24 at PNC Place. The event explored and discussed emerging technologies that will help District businesses, institutions, and residents save energy. Participants heard from companies whose products can help generate onsite renewable energy, conserve energy through internet of things (IoT), and be more resilient by combining energy storage solutions with solar technology. A panel discussion on Challenges and Trends for Smart Buildings followed the presentations.
- **The Marketing and Communications Team continued to work on the initial planning and design stages** of the DCSEU brand campaign *Humanizing Energy Efficiency*. The DCSEU will launch the campaign in late Spring. The team also assisted in the launch of the IQEF with program support, materials, and contractor outreach. The team took video and photos at the Workforce Development graduation in January, and assisted in the preparation efforts.

- **The DCSEU Blog continued to grow in content and readership**, making up approximately 14% of website page views in Q2. The biweekly posts focus on a range of topics, from residential energy tips to commercial success stories. The most read posts were an [Interview](#) with National Lighting Expert Scott Rosenfeld, which was also featured on 730DC, [6 Ways to Prep for Winter](#) and a post on [Women in Energy Efficiency](#) celebrating International Women's Day.

Community Outreach

- **During the second quarter of FY 2018, the DCSEU's Community Outreach team focused on outreach to senior citizens, and schools.** In March, the team participated in six events with an estimated participant count of more than 1000 people.
- **The DCSEU supported educational efforts around energy efficiency and sustainability at three District schools.** At Democracy Prep Elementary School, the DCSEU collaborated with BroccoliCity, Martha's Kitchen and the Joyful Food market to participate in their Food Bank after school program. The purpose of the event was to provide healthy and fresh food and vegetables to vulnerable families. The DCSEU distributed energy efficiency kits to families. On March 26, some of the DCSEU's staff, as part of the DCSEU's extensive partnership with Burroughs Elementary, volunteered to judge the school's annual science fair. The children came up with creative ideas, including an environmental project tackling water conservation and energy conservation. The DCSEU also supported H.D. Woodson's STEM Program by conducting mock interviews with students as part of their career services.
- **Offering information about rebates and energy efficiency for seniors, the DCSEU participated in a variety of events aimed at the senior citizen community.** For the first time the DCSEU participated in the JW Kind Senior Center Community & Wellness Information Fair. The event focused on connecting key resources, and removing barriers for seniors to access a variety of services. The DCSEU also presented at the Senior Citizen Spa Day.
- **In April, the DCSEU will be participating** at an Earth Day event at the Pentagon, the House of Lebanon Senior Fair, the Chevy Chase Community Fair, the Michigan Park Senior Symposium and an event with the Washington Teachers Union.

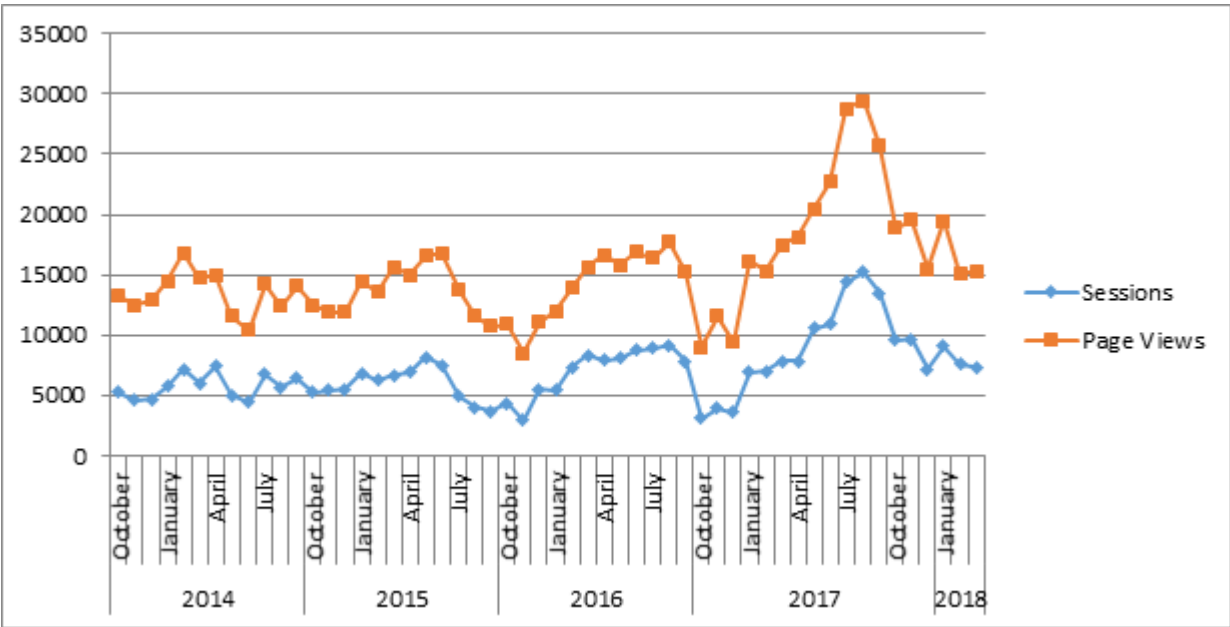


Figure 1. DCSEU website sessions and page views, by month, FY 2014, 2015, 2016, and 2017 to date

- First-quarter website visits **49,821 page views**
- Facebook **843 Likes**
- Twitter **1,723 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