



DC
SUSTAINABLE ENERGY
UTILITY

Third Quarter Report for Fiscal Year 2017

April 1 – June 30, 2017

July 31, 2017

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MESSAGE FROM THE MANAGING DIRECTOR

When we signed the new contract this Spring for delivering DCSEU services across the next five years, we knew that the DCSEU would be fulfilling a vision for planning far ahead. The new contract allows us to design programs and carry out projects that require extensive preparation. This next era of DCSEU services also requires a revised and long-term strategy—one that reflects constructive thinking about program designs, years in advance. Given the alignment of the DCSEU performance goals with the City’s admirable sustainability targets (particularly those in the Sustainable DC, Clean Energy DC, and Climate Ready DC plans), we are ready to make history – again.

We plan to set a new standard for meeting the nation’s most demanding energy efficiency program trifecta: performance goals for sustainability, energy efficiency, and job creation.

Three quarters into FY 2017, we are in a good position to reflect. As we prepare for the future, what have we learned from the marketplace? And how can we apply that knowledge to the next five years of programs and strategies? To answer that question, my team and I have asked scores of people—from DOEE representatives and customers, to SEU Advisory Board members: Where did we have success? What were the hurdles and challenges? How did we overcome them? What lessons did we learn?

Their input has helped inform the DCSEU Five-Year Strategic Plan, which will soon be finalized. It contains long-term, patient programs (like the Innovation Fund and Pay for Performance) that will involve broader and deeper partnerships. It also describes advanced methods for engaging customers with strategies that reflect a deep understanding of marketplace trends.

Looking forward to the next five years, we cannot help but acknowledge that U.S. participation in the Paris Climate Agreement is in peril. Uniting most of the world’s countries in taking action to limit global temperature rise to below 2 degrees Celsius is breathtaking. Saying “no” to it is asphyxiating. Four days after that “no” declaration, Mayor Muriel Bowser led what is now a growing list of U.S. cities in pledging to uphold the Agreement. Her fast action in the District helped inspire thousands of American communities, organizations, companies, and institutions to fill the void. The DCSEU looks forward to being part of this growing community striving to accomplish a cleaner and more livable future. Our special contribution is that our CO₂ reductions will also result from work that benefits the District’s vulnerable communities. Our 2017 efforts—offering comprehensive services across ten programs to serve all markets, increasing access to renewable energy, and incorporating energy efficient measures more easily into affordable housing—will result in lifetime CO₂ reductions and everyone benefits. With programs serving both low-income and all other customers, our actions this year to date will accrue to save the equivalent CO₂ emissions from 45 million gallons of gasoline consumed.

That said, our work is only beginning. As we move forward, we are firm in our long-standing purpose: to build a brighter economic and environmental future for the District, and to reduce the economic and environmental cost of everyone’s energy use.

Ted Trabue

Managing Director

QUARTERLY FEATURE

Capital Solar Challenge: First Clean Energy Installations Finished

Though former President Barack Obama left the White House more than six months ago, his efforts to reach ambitious renewable energy goals are ongoing in the District. One of them is the Capital Solar Challenge (CSC), a solar energy project driving the roll-out of almost two megawatts (MW) of solar panels on federal and federally-controlled buildings. Initiated while he was still in office, the first DCSEU solar installations were finished in the third quarter, amounting to about 1.2 megawatts and allowing us to exceed our goals for this fiscal year.

Blue solar panels now shine atop the Cohen Building, the American Indian Museum, the GSA Headquarters and the Ronald Reagan building, unfolding their full power to reduce costs and generate clean energy. Without the DCSEU's help in buying down the price of these panels, these installations would not have been possible. "The Capital Solar Challenge is an impressive undertaking by GSA and a shining example for renewable energy in the District," said Ted Trabue, Managing Director of the DCSEU.

The original idea of former President Barack Obama and the Council of Environmental Quality (CEQ) was to put the District at the forefront of meeting the Obama Administration's 20% Renewable Energy Goal by 2020. The initiative, launched in April of 2014, directs federal agencies, military sites, and federally-subsidized complexes to deploy solar energy across the National Capital Region. The former President tasked both the Energy Department and GSA to assist agencies to develop the respective sites.

In 2014, Ron Allard, Energy Branch Chief of the National Capital Region at GSA, approached the DCSEU for help to bring down the price of the solar installations. GSA and the DCSEU, already great partners, had been working towards delivering \$1.4 million in annual energy cost savings between 2012 and 2015 through energy efficiency. This time, for CSC, the mission was to accomplish a power purchase agreement price of \$0.04 per kWh, or a reduction of \$0.01 per kWh.

The DCSEU stepped in to support the project with an incentive of \$0.20 per watt installed. The newly lowered price was competitive and offered two advantages. First, it is well below the cost of grid power nationally, currently averaging \$0.11 per kWh. Second, what seems like a small improvement translates into \$5 million in utility cost savings over the 10-year period of the contract. "We are proud to be an ongoing partner with GSA to help them find ways to save energy and operate more efficiently," said Trabue.

Over the next few months, the remaining Capital Solar Challenge projects will be completed by WGL Energy Systems. The contractor designs, installs, and owns all the panels and sells the energy to the agencies. Among the projects to be completed are renewable energy installations on the roof of the National Archives, the Truman Building at the State Department, and the Smithsonian Museum of Natural History. The almost two megawatt project is expected to be completed by the end of August. Then the panels are anticipated to generate more than 2000 MWh of electricity annually. The clean energy installations will also avoid 1406 metric tons of CO₂ emissions per year, an amount emitted by almost 300 passenger vehicles driven for one year.



This report of the District of Columbia Sustainable Energy Utility covers the period from April 1 through June 30, 2017. This progress report contains information about the DCSEU’s activity to date in FY 2017 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.

1. At a Glance: Progress against Benchmarks

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

Category	Item	Description	Metric Unit	Goal Type	Benchmark Minimum	Benchmark Maximum	Year to Date	Minimum Benchmark Progress	Maximum Benchmark Progress
Performance Benchmarks	1a	Reduce per-capita consumption - Electricity	MWH Net	Cumulative	60,878	86,473	38,391	63%	44%
	1b	Reduce per-capita consumption - Natural gas	Therms Net	Cumulative	852,565	1,705,129	1,165,183	137%	68%
	2	Increase renewable energy generating capacity	KW	Cumulative	650	1000	1,714	264%	171%
	3a	Improve energy efficiency in low-income housing - spend	% of annual budget	Annual		\$ 3,515,833	1,367,368		39%
	3b	Improve energy efficiency in low-income housing - savings	MMBTU Net	Annual	29,297	46,556	10,817	37%	23%
	4	Increase number of green collar jobs ²	Green job FTE's directly worked by DC residents, earning at least a Living Wage - Hours	Annual	103,350	171,600	72,811	70%	42%
	5	Leverage funds	Dollars	Cumulative		5,000,000			
Contract Requirement	6	Expenditures with Certified Business Enterprises	Minimum expenditure for Certified Business Enterprises	Annual	\$ 2,217,753	\$ 2,217,753	1,514,601	68%	68%
Tracking Requirements	7	Reduce growth in energy demand of largest users	# of projects completed with a square footage of > 200,000	Annual	30	50	60	200%	120%
	8	Expenditure of annual SETF dollars allocated to DCSEU services	Fiscal year dollars	Annual	\$ 19,179,167	\$ 20,000,000	9,578,640	50%	48%
	9a	Annual expenditures related to electric energy efficiency	Program expenditures that reduce electrical energy consumption, allocated to sustainable energy activity	Annual	\$ 11,507,500	\$ 15,343,334	6,130,330	53%	40%
	9b	Annual expenditures related to natural gas energy efficiency	Program expenditures that reduce natural gas consumption, allocated to sustainable energy activity	Annual	\$ 2,876,875	\$ 3,835,833	3,448,311	120%	90%

² Period results are estimates subject to final verification of green job hours.

³ Expenditures with Certified Business Enterprises Benchmark Minimum number is derived from DCSEU's FY17 Subcontracting Plan request for waiver amount.

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).

2. Sector Highlights in the Core Areas

Residential Services

- **Home Performance with ENERGY STAR.** The DCSEU completed six Home Performance with ENERGY STAR projects in the third quarter. District homeowners who complete a DCSEU Home Performance project were eligible to be reimbursed by the DCSEU for up to 50% of the cost of air sealing up to \$150, and for 50% of cost of insulation up to \$300. The program was discontinued, effective close of business on March 31. In April, DCSEU incentives toward energy audits, air sealing, and insulation were honored for completed projects, with energy savings data submitted to the DCSEU through March 31.
- **FY 2017 retail lighting promotions.** LEDs at DCSEU participating retailers are available for as low as \$0.95 per bulb for omnidirectional bulbs and \$2.95 per bulb for directional bulbs. This price floor makes these ENERGY STAR certified LED lighting products more competitive against non-ENERGY STAR rated LED bulbs. In the third quarter, the DCSEU efficient lighting program saw a substantial increase in spend and resulting energy savings – a trend that is expected to continue in coming months. May alone saw a 40% increase.
- **Smart thermostat promotion.** In April, the DCSEU built and launched a web tool allowing DC residents to access a unique discount code get a \$100 rebate on Nest Learning Thermostats directly from the Nest website. This allows customers to realize instant savings. The DCSEU also offers \$100 mail-in rebates for ecobee and Honeywell smart thermostats. The DCSEU is coordinating with Nest to promote Nest thermostats during the company's Fourth of July promotion, which offers a \$50 manufacturer discount from June 28 through July 8. There is expecting to be a significant jump in codes redeemed during this time.
- **Spring and summer retail events.** In the third quarter, the DCSEU hosted 18 events at participating retailers across the District to raise awareness of DCSEU residential services. DCSEU staff spoke to residents about the importance of using energy efficient products in their homes, answered questions about LED lighting, and gave information to customers about DCSEU appliance, smart thermostat, and heating and cooling equipment rebates at Lowe's, Home Depot, Costco, Annie's Ace Hardware (Brookland and Petworth), and the Walmart stores in Brookland and on Georgia Avenue.
- **Partnership with Capital Area Food Bank.** LED lighting distribution to income-qualified District residents through the Capital Area Food Bank (CAFB) concluded for

FY 2017 in the third quarter. The DCSEU partnered with CAFB to distribute approximately 5,000 LED light bulbs to CAFB customers. These customers will cumulatively save \$224,137 over the life of the bulbs.

Low-Income Multifamily

- **Low-income multifamily projects completed.** The DCSEU completed two low-income direct-install projects in the third quarter. The projects will result in estimated annual savings of 2,955 Mcf (natural gas).
- **HAND Awards & Expo.** On June 20, the DCSEU attended the 26th Annual Housing Association of Nonprofit Developers (HAND) Awards & Expo. The DCSEU staffed a table at the event to spread awareness of the DCSEU's offerings for nonprofit developers and to help develop business opportunities with new and existing customers.

Renewable Energy

- **Capital Solar Challenge.** In the third quarter, the DCSEU continued its partnership with GSA to begin Capital Solar Challenge projects. The Capital Solar Challenge (CSC) is a solar energy project driving the roll-out of almost two megawatts (MW) of solar panels on federal and federally-controlled buildings. Over the next few months, the remaining Capital Solar Challenge projects will be completed by WGL Energy Systems. Among the projects to be completed are renewable energy installations on the roof of the National Archives, the Truman Building at the State Department, and the Smithsonian Museum of Natural History.

Commercial and Institutional

- **Custom projects completed.** In the third quarter, the DCSEU completed 43 Commercial and Institutional custom projects, with estimated annual savings of 10,638 MWh (electricity) and 90,817 Mcf (natural gas).
- **Earth Day celebrations.** The DCSEU participated in Earth Day events with commercial and institutional partners and customers in April. On April 18, the DCSEU participated in two Earth Day events at Tower Companies. On April 18, the DCSEU also attended the Earth Day event at the US Institute of Peace. On April 20, the DCSEU participated in Earth Day events at the US Department of Transportation and the Architect of the Capital Library of Congress Earth Day event.

- **Commercial real estate outreach.** In the third quarter, the DCSEU intensified outreach efforts to commercial real estate management companies to discuss opportunities for future partnership. The DCSEU met with heads of several companies including Bozzuto, Manna, Inc., Pointer, and Bernstein Management, and WC Smith, among others.
- **Business Energy Rebates.** The BER initiative serves the District’s small and medium-sized businesses, providing rebates for energy-efficient lighting, heating, refrigeration, cooking, and other qualifying equipment. The DCSEU completed 54 commercial projects involving Business Energy Rebates (BER), with an estimated total rebate value of \$176,512 during the third quarter. By the end of the quarter, the DCSEU had 99 active (under way, but not yet completed) BER projects, with an estimated rebate value of over \$414,407.
- **Commercial Direct Services.** The DCSEU offers direct installation of energy efficiency measures at primarily small and medium-size commercial businesses through the Commercial Direct Services initiative. In the third quarter, the DCSEU completed two Commercial Direct Services projects, with an incentive value of \$35,000. The initiative currently has 37 active projects with an estimated incentive value of \$1.2 million.
- **Small Business Workshop.** On May 1, the DCSEU hosted a Small Business Workshop alongside the Institute for Market Transformation. Attendees learned about DCSEU rebates and the importance of energy auditing and green leasing. Businesses who have successfully navigated energy efficiency projects also shared their lessons learned.
- **Business Energy Rebates lighting promotion.** The DCSEU is offering limited-time enhanced rebates on lighting and controls for businesses. For a limited time, District businesses are eligible for at least 50% more in cash back for their purchase of downlights, pin- and screw-based bulbs, and occupancy sensors through the end of the fiscal year.

Green Jobs

- **Workforce Development Spring/Summer Cohort.** The DCSEU Workforce Development Spring cohort externs attended trainings and participated in educational site visits throughout the third quarter. On April 21, the externs participated in Howard University’s Earth Day celebration event. The externs also

attended Building Operator Certification training on April 26. The externs are receiving Building Operator Certifications, LEED certifications, and training in new, efficient technologies in preparation for careers in building operations. On May 10, the externs attended the last day of class ceremony for the Building Operator's Certification Program. Three out of four externs received certificates of class completion.

- **New hire update.** The DCSEU hired a Finance Director in April. She will join the DCSEU on May 8. In April, the DCSEU also began the recruiting and hiring process for several other positions: Account Manager, Development Manager, Financial Project Coordinator, Office Coordinator, Project Intake Coordinator, and Public Relations Project Manager.
- **Workforce Development Summer/Fall Cohort.** In June, the DCSEU began the interview process for the Workforce Development Summer/Fall Cohort. The DCSEU met with partners such as ADC Management Solutions, Howard University, University of the District of Columbia, Goodwill Industries of Washington, DC, and more. The DCSEU hosted an orientation on June 21 at Greenscape Environmental Services. There are 12 externs in the cohort.

3. Activity Supporting DCSEU Initiatives

Public Affairs & Public Relations

- **DC Transportation and Environment Budget Oversight Committee meeting.** On April 28, the DCSEU attended the DC Transportation and Environment Budget Oversight Committee meeting. DCSEU Managing Director Ted Trabue delivered testimony on behalf of the DCSEU.
- **Quarterly Environmental Stakeholders Meeting.** On May 4, Ted Trabue and George Nichols attended and participated in the DOEE's Quarterly Environmental Stakeholders' meeting on behalf of the DCSEU under the leadership of Director Tommy Wells. Among the participants were DC Climate Action, Chesapeake Climate Action Network, National Housing Trust, Sierra Club, and other environmental and civic representatives from the Greater Washington region.

Community Outreach

- Community Events.** The DCSEU attended two community events in April. The DCSEU attended an event with the Washington Teachers Union – Retiree Chapter on April 12. The event, sponsored by the DC Office on Aging was attended by retired DC Public Schools teachers, the majority of whom reside in the District of Columbia. On April 14, the DCSEU partnered with Burroughs STEM Elementary School for a Lunch in the Garden event. More than 500 community members were in attendance. The DCSEU also attended the DC Office on Aging: Model Cities Senior Wellness Older Americans Month event on May 31. On June 2, the DCSEU attended Mayor Bowser’s Annual Ward 8 Senior Symposium spread awareness of DCSEU services to senior residents of Ward 8.

Marketing

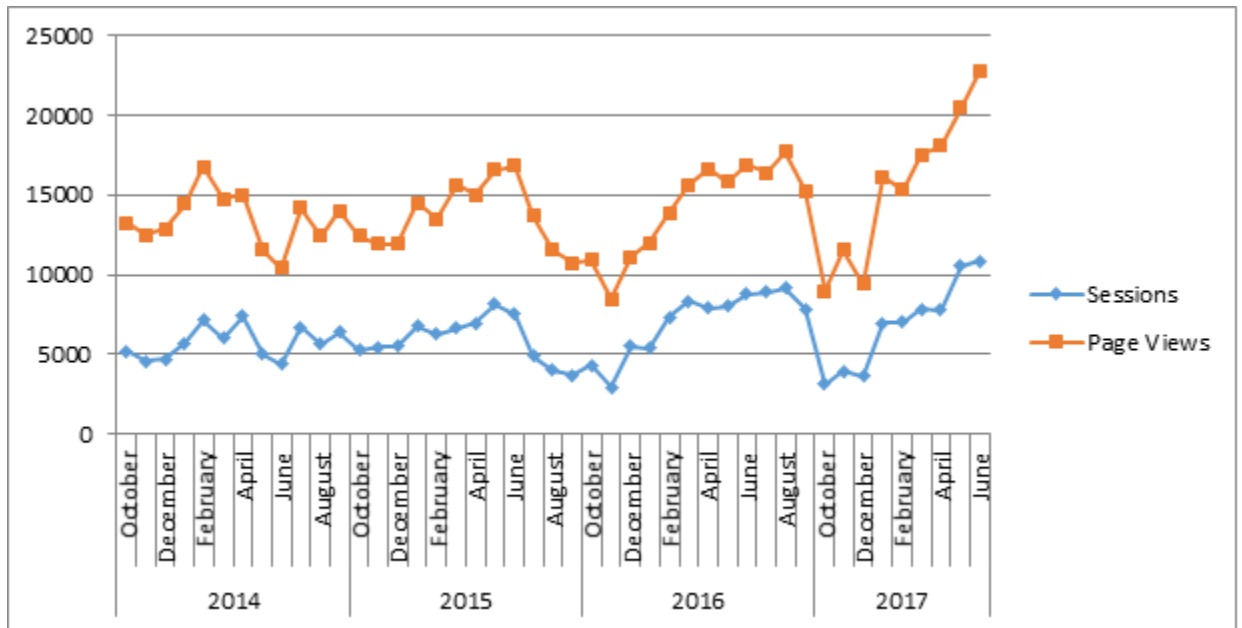


Figure 1. DCSEU website sessions and page views, by month, FY 2014 through 2017 to date

- Third-quarter website visits **29,235**
- Facebook **626 Likes**
- Twitter **1,566 Followers**

- **Efficient product promotion.** Efficient product promotion emphasizing the smart thermostat rebate offering and new, low prices on LED lighting continued in the third quarter with ad placements across print and digital outlets. The DCSEU is advertising with Current newspapers, Pandora, Google Adwords, Capital Community News Publications, and sponsored posts on the Prince of Petworth blog (www.popville.com).
- **Nest discount code tool.** The DCSEU marketing and web teams collaborated to develop a web tool that allows District residents to get a coupon code to realize instant \$100 savings on Nest smart thermostats when purchasing the device from Nest.com. The site was visited 2,539 times in the third quarter.
- **Summer campaign development.** In May, the marketing team began development of a summer advertising campaign. The campaign promotes both the DCSEU’s smart thermostat and efficient products offerings to residential customers and the limited-time lighting promotion for District businesses. The DCSEU will launch the campaign in July.
- **Home Energy Kits.** In July, the DCSEU will offer no-cost Home Energy Saving Kits to District residents. In May, the DCSEU marketing team began work on the design and development of branding and materials for the kits. The kits will contain LED light bulbs, an advanced power strip, and faucet aerators.

Table 6. DCSEU initiatives, by sector

Core Area	Initiative Name	Description	Customer	Status
Residential	Efficient Products	Deep discounts on CFLs and LEDs with partnering retailers in DC; mail-in rebates for qualifying energy-efficient appliances; free energy kits for DC residents	DC residents	On track
	Home Performance with ENERGY STAR	Rebates for energy efficiency improvements: air and duct sealing, insulation, and heating system improvements	DC single-family homeowners	Discontinued

Core Area	Initiative Name	Description	Customer	Status
	Income-Qualified Services	Home energy improvements such as air and duct sealing, insulation, and heating system improvements	Pre-enrolled DC single-family homeowners meeting income requirements	Discontinued
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
	Solar Thermal	Incentives to install solar thermal arrays to provide hot water and reduce natural gas consumption	Income-qualified cooperative housing and property owners of multifamily buildings serving income-qualified DC residents	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	In design

Core Area	Initiative Name	Description	Customer	Status
	Commercial and Institutional Custom	Technical assistance, account management, and financial incentives for energy efficiency projects	Large commercial and institutional customers	On track