

TOGETHER WITH THE DCSEU,  
THE DISTRICT HAS THE POWER  
TO GO BEYOND ENERGY SAVINGS

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TO ENSURE A CLEAN ENERGY FUTURE

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TO CREATE  
GREEN JOBS

TO HELP LOCAL  
BUSINESSES  
GROW+THRIVE

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TO BUILD A LASTING IMPACT  
IN OUR COMMUNITY

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DC  
SUSTAINABLE ENERGY  
UTILITY

2018 ANNUAL REPORT

PEOPLE.

POWER.

PURPOSE.



## A Message from the DCSEU

Fiscal Year 2018 marks a year in which the DCSEU turned in its strongest performance ever. With a five-year contract in place, we began the year fully staffed, with a large pipeline of projects in place. This year's strong performance contributes significantly toward our ability to meet the challenging energy savings benchmarks in Year 4 and Year 5 of the contract.

How the DCSEU performs against its benchmarks tells only part of the story. Our impact goes well beyond megawatt-hour and MMBTU savings. Our work created more than 102,500 hours of work at DC's Living Wage and put 21 unemployed or underemployed DC residents on a path to succeed in green careers through the DCSEU Workforce Development Program. We provided opportunities for local businesses to grow, including 15 certified business enterprises (CBEs). We also helped schools and small businesses reduce their energy costs, freeing up their budgeted dollars for the classroom or stronger staffing. The energy savings are real; but it is the non-energy measurable benefits where important impacts are felt.

The District has adopted a bold, visionary, and comprehensive energy plan for the City. The goals, driven by climate change, are to reduce annual greenhouse gas emissions and energy consumption by 50 percent, and to increase the amount of energy derived from renewable sources by 50 percent by 2032. The DCSEU plays a visible, exemplary role in supporting the achievement of these goals. In FY 2018 alone, we reduced annual carbon emissions by 111,000 tons. We look forward to another year of working with the District to implement solutions that will help the city confront climate change head-on and position DC as **the** model city for sustainability.

A handwritten signature in black ink that reads "Ted Trabue". The signature is written in a cursive, flowing style.

Ted Trabue  
Managing Director

# TABLE OF CONTENTS

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FY 2018 Highlights . . . . .	3
Accessible Choices For Efficient Homes . . . . .	5
Energy Justice For All . . . . .	9
Innovative Approaches, Long-Term Success. . . . .	13
In A Growing Field, Immense Opportunity. . . . .	19
A Clean Energy Vision For DC. . . . .	23
Investing In Impact . . . . .	26
Neighbors Helping Neighbors. . . . .	31
Performance Benchmarks . . . . .	35



*The 2018 fiscal year (FY) data presented in this report are based on the DCSEU's estimates of energy savings and green job hours. These data are subject to rigorous monitoring and verification by a third-party evaluation firm hired by the District Department of Energy and Environment (DOEE).*

# FY 2018 HIGHLIGHTS

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## 1.2 MILLION

TONS OF LIFETIME CARBON EMISSIONS PREVENTED,  
equivalent to the emissions from burning 550,000  
tons of coal<sup>1</sup>

## \$187M

IN LIFETIME ENERGY COST  
SAVINGS FOR CUSTOMERS

---

### ENOUGH NATURAL GAS SAVED

to offset Woodrow  
Wilson High  
School's usage for

## 40 YEARS<sup>4</sup>

### ENOUGH ELECTRICITY SAVED TO POWER 15,000 HOMES

in DC for one year<sup>2</sup> —approximately 5 percent of all  
households in DC<sup>3</sup>

## 88

GREEN JOBS<sup>5</sup>

created for DC  
residents at  
or above DC's  
Living Wage

### MORE THAN 240

DC businesses  
and institutions  
served

---

## \$2.8M

INVESTED WITH CBES

## \$4.1 MILLION

INVESTED IN ENERGY EFFICIENCY  
FOR LOW-INCOME COMMUNITIES

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1 U. S. Environmental Protection Agency, Greenhouse Gas Equivalencies Calculator. <https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator>

2 According to the Energy Information Administration, the average residential monthly electricity use in DC is 746 kWh. [http://eia.gov/electricity/sales\\_revenue\\_price/xls/table5\\_a.xlsx](http://eia.gov/electricity/sales_revenue_price/xls/table5_a.xlsx);

3 Total households in the District; per the U.S. Census. <https://www.census.gov/quickfacts/dc>

4 Woodrow Wilson School natural gas use between October 2016 and September 2017 totaled 52,303 therms. <http://www.buildsmartdc.com/buildings/286>.

5 A green job or green-collar job is 1 full-time equivalent (FTE) direct job held by a District resident who is paid at least a living wage or a factor of \$200,000 of direct cash incentives to end-use customers and/or manufacturers to buy down the cost of energy efficiency measures. One FTE is equal to 1,950 hours worked by a District resident.

# PEOPLE. POW



# ENERGY PROMISE.

## ACCESSIBLE CHOICES FOR EFFICIENT HOMES

Since FY 2011, the DCSEU has provided energy-saving resources and accessibility to efficient products for District residents, at every economic level, in all eight Wards. Working with local retail partners, manufacturers, and a group of 24 DCSEU Participating Contractors in heating and cooling, the DCSEU continued to maximize savings and improve customer experiences.

The DCSEU continued evaluating market shifts in the retail costs of light-emitting diode (LED) lighting to improve the cost effectiveness of its efficient products lighting program. The DCSEU partnered with 16 manufacturers and more than a dozen city retailers, both in person and online, to increase access to highly efficient, omnidirectional ENERGY STAR® qualified LEDs. In 2018, residents purchased more than 250,000 LED products—a 20 percent increase over 2017. Lighting will continue to be a strong activity for the DCSEU in the coming years, as the market shifts toward full adoption of LED lighting technology.



**270,000**

efficient products sold through retail stores across the District and online

**44,000+**

program participants in DCSEU residential rebates

With the expansion of ENERGY STAR certification to the smart thermostat market, the DCSEU began offering rebates for a wide variety of smart thermostat technologies, increasing customer access to this technology for residents at every economic level. Customers continued to take advantage of an instant rebate on Nest smart thermostats through the Nest website via a DCSEU coupon code. The DCSEU also offered rebates on residential efficient appliances and water heaters, and on heating, ventilation, and air conditioning (HVAC) equipment.

Throughout the year, the DCSEU worked with many companies, agencies, organizations, and other partners to bring innovative, energy-saving solutions to District customers. Through community events and building walkthroughs, the DCSEU distributed energy savings tips, energy savings information, and communications about DCSEU services to District residents. Partnerships with government entities such as the Office on Aging and the Public Service Commission allowed the DCSEU to reach many hard-to-reach populations—particularly DC’s senior and Spanish-speaking communities.

To push the market toward adoption of innovative technologies, the DCSEU participated in a residential heat pump study with DOEE and Cadmus, evaluating the efficiency of heat pumps and their viability in the market. The DCSEU also deepened its partnership with Nest to support its Seasonal Savings program. The program automatically optimizes home energy efficiency via the thermostats of those who are participating in the program.



The DCSEU has grown its partnership with Nest since 2016. In 2018, the DCSEU partnered with Google|Nest to offer instant and mail-in rebates on Nest smart thermostats, helped to enroll customers in the Nest Seasonal Savings program, and became one of the District’s Energy Partners for the Nest Power Project.

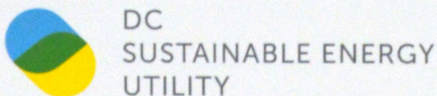




## Welcome to your Nest thermostat.

It's much more than just a pretty face. Your Nest thermostat keeps you comfortable and helps you save energy. And you can control it from anywhere.

nest

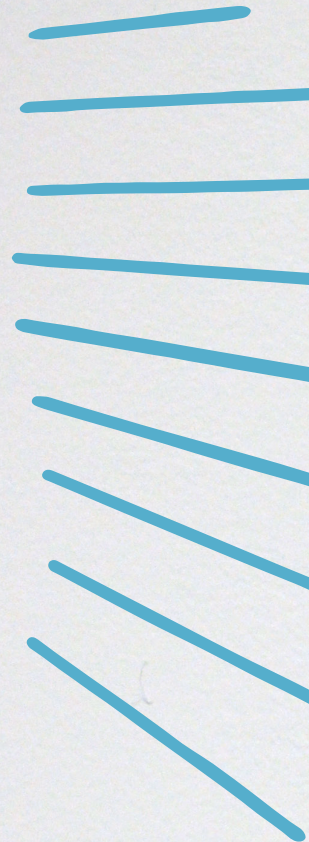


Turn over to get started.

“

Google|Nest is proud to have partnered with the DC Sustainable Energy Utility since 2016 to save energy and money for residents of DC. This past year saw the continuation of an innovative mass market option, as well as collaboration via the Nest Power Project to bring the benefits of smart thermostats to a senior living facility in the Columbia Heights neighborhood of DC. We are excited by the collective impact of the partnership in 2018 and look forward to even more success with the DCSEU in 2019.”

— Google|Nest





PEOPLE.  
POWER.  
PASSION.

# PASSION

## ENERGY JUSTICE.FOR ALL

Part of the DCSEU's purpose is to harness energy efficiency as a method for creating safer, more sustainable communities and for lowering the energy burdens of the District's most vulnerable residents. As the city's economy and building expansion continue to grow, vulnerable people are at risk of being displaced from their communities. To reduce that risk, the DCSEU designs programs to reduce the energy burdens on low-income communities and preserve the city's affordable housing stock.

In the last year, the DCSEU invested \$4.1 million in energy efficiency projects that benefit low-income communities, completing work in affordable housing, foodbanks, clinics, and shelters that serve low-income residents. The DCSEU's work in low-income communities will result in annual energy costs savings of roughly \$1 million.

In FY 2018, the DCSEU redesigned its approach to serving affordable multifamily buildings and other qualified facilities with the launch of the Income Qualified Efficiency Fund (IQEF) program.

The IQEF program supports projects that improve buildings, neighborhoods, and whole communities through energy efficiency with competitively awarded funding. The IQEF awarded funds to DCSEU Approved Contractors for projects that generated significant energy savings and passed the associated financial benefits on to low-income residents in the District of Columbia. Projects that maximize energy savings and reach substantial numbers of low-to-moderate income (LMI) residents—and projects submitted by CBE contractors—received funding priority. The DCSEU's IQEF Approved Contractors number eight CBEs, two of which were new to DCSEU work this year. In all, the DCSEU IQEF



**\$10.9 million**  
in lifetime energy cost savings  
on income-qualified projects  
with the DCSEU

**126**  
projects completed in the  
affordable housing sector

**1,700**  
Home Energy Conservation  
Kits distributed to income-  
qualified residents

program supported 24 efficiency projects at DC multifamily properties, shelters, or clinics serving income-qualified DC residents.

Energy justice—the application of ethical principles to reducing the energy burden on disadvantaged and vulnerable populations—remains one of the DCSEU’s core values. Studies show that low-income families spend a disproportionately large share of their wages on energy costs. Reducing this burden means that they can dedicate more income to things that matter most to them. To maximize the number of DC residents served, the DCSEU fostered new partnerships and deepened existing ones with developers, manufacturers,

and other organizations addressing vulnerable communities. The DCSEU partnered with Nest to provide 288 free smart thermostats to three income-qualified multifamily buildings, as part of the Nest Power Project. Launched on Earth Day 2018, the project raises awareness of energy inequity (the disproportionate cost of energy on various segments of the population). Nest has committed to installing 1 million energy- and money-saving thermostats in qualifying homes across the next five years, via collaborations with partners like the DCSEU. The DCSEU also provided free Home Energy Conservation Kits more than 1,700 residents at DOEE’s Low-Income Home Energy Assistance Program (LIHEAP) service centers.



Home Energy Conservation kits contain LED light bulbs, a low-flow faucet aerator, and an advanced power strip - all easy and accessible steps to start saving energy. In 2018, the DCSEU partnered with Capital Area Food Bank, DOEE, Broccoli City, Joyful Food Market, and multifamily property managers to provide more than 1,700 kits to income-qualified households. At one Joyful Food Market event at Democracy Prep Congress Heights Public Charter School, the DCSEU provided kits to approximately 50 families.

“

*Providing a clean, bright facility is so central to our mission of high quality healthcare for men in the District experiencing homelessness. Not only have the new lights brightened up our facility, but we have been able to reduce our energy consumption and lower our bills. This frees up funds to support other parts of our mission!”*

—Matthew Jordan, Director, Christ House

Christ House opened in 1985 as the first 24-hour residential medical facility for homeless persons in the United States. In FY 2018, the community organization reached out to the DCSEU for support in completing a comprehensive LED lighting upgrade to replace outdated and inefficient lighting throughout their facility. The project was the first IQEF project to be completed, and it will result in more than \$120,000 in energy cost savings for Christ House over the lifetime of the bulbs.





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# PEOPLE. POWER. PERFORMANCE.

## INNOVATIVE APPROACHES, LONG-TERM SUCCESS

As it had articulated in its Strategic Plan, the DCSEU deepened relationships with new and long-term partners and customers in the Commercial & Institutional (C&I) market, bringing innovative technology within reach for all sizes of customers, and objective, no-cost technical assistance.

For the first time, the DCSEU expanded its business rebates to in-unit lighting for multifamily residents, making it easier for multifamily property managers and building owners to reduce electricity and maintenance costs.

The DCSEU continued to offer enhanced rebates for qualified LED lighting to small and medium-sized businesses, parking garage lighting products and fixtures, variable frequency drives (VFDs), and combinations of fixtures and sensors.



**\$4.79 million**  
invested in energy efficiency  
incentives by the DCSEU

**\$79 million**  
invested by DC businesses  
and institutions in energy-  
efficiency improvements

**5**  
CBE Distributor Instant Rebate  
Partners

The Instant Business Rebates pilot, which launched in 2017 as an upstream lighting program, allowed DC businesses to purchase qualified LEDs directly from participating distributors at discounted prices. This pilot matured into a full-fledged program with 10 partner distributors, half of which were CBEs. More than 850 business locations took advantage of this easily accessible opportunity to save energy and money. For small and medium businesses, the DCSEU dedicated an energy consultant and an account manager to facilitate relationships and projects in FY 2018. This included projects with Rise Bakery, Tastemakers DC, Capitol Cider House, Jimmy Valentine’s Lonely Hearts Club, and Shouk Union Market.

For larger energy users, the DCSEU continued offering objective, reliable technical assistance, and a hub for collaboration between District and federal government agencies, developers, and private partners. Using innovative and smart technologies designed to make energy savings easier than ever, the DCSEU steered the market toward adoption of steam trap monitoring systems, smart ventilation hoods, and refrigeration monitoring and controls. The DCSEU worked closely with customers to implement these technologies at hospitals, universities, multifamily properties, the Capital Area Food Bank, and infrastructure operated by the U.S. General Services Administration (GSA).

The DCSEU’s multi-year contract also allowed the DCSEU to better serve large, multi-year projects with some of its longstanding customers. In FY 2018, the DCSEU maximized energy-saving opportunities for projects across a wide spectrum of building uses—for example, The Wharf, GSA buildings, and the Mandarin Oriental Hotel.





“ At The Wharf, our dedication to sustainability has influenced and informed every detail and every stage of this neighborhood—to create a thriving community, maintain healthy waterways, and improve our surrounding environs. Sustainability started at the master planning stage and informed every decision of development, design, construction, and operation.”

—Shawn Seaman, Executive Vice President,  
PN Hoffman and Project Director, Phase 1 of  
Wharf DC Development

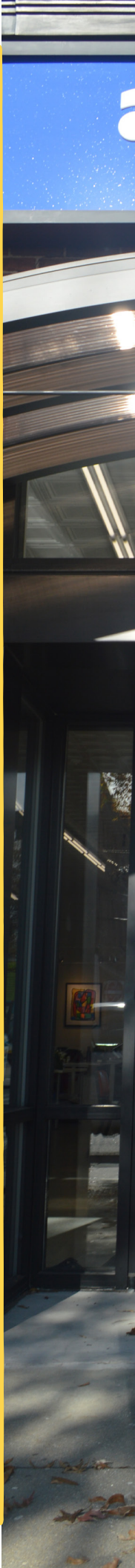
The Wharf's energy-efficient LED lighting, heating equipment and water coolers, as well as appliances make the buildings and retailers that line DC's newest waterfront location some of the most efficient buildings in the city. The DCSEU worked with Sustainable Building Partners, which is an energy efficiency consulting group, to provide technical and financial assistance for the development. 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.





MedStar Washington Hospital Center is a model for sustainable healthcare facilities in the District. Working with the DCSEU, MedStar has made or has plans to make efficiency upgrades in all three DC locations. This year, MedStar Washington Hospital Center received LED lighting upgrades, steam traps, and an efficient chiller.

MedStar hospitals are among twenty-one local healthcare facilities that gathered to sign the Sustainable DC Healthcare Sector Sustainability Pledge in 2014. The pledge focuses on such areas as healthy food, energy reduction, storm water management, and waste management. The signatories of the pledge meet quarterly to share ideas and resources, and to explore funding opportunities to green the healthcare sector, one of the largest employment sectors and energy consumers in the District.



# art Enables

Art Gallery & Studio



Art Enables is an Art Gallery and Vocational Arts program dedicated to creating opportunities for artists with disabilities to make, market, and earn income from their original and compelling artwork. Established in 2001, Art Enables believes that artists with disabilities are vital to a robust arts landscape and should be afforded the opportunity to pursue art as a vocation and career. In 2018, the organization took advantage of DCSEU Business Energy Rebates to replace their studio and gallery lights with highly efficient LED lighting.

“It’s very important for us to think of ways to lower our overhead so that we can redirect as much of our revenue as possible into work supporting our artists and our programmatic efforts. Lighting was an obvious opportunity for us to reduce our carbon footprint and energy usage in the building. It was also really timely because a lot of our older fixtures were starting to fail. Our experience was 100% effortless and we’re super grateful that there are rebate opportunities for this sort of thing.”

— Tony Brunswick Executive Director, Art Enables

# PEOPLE. POWER. POTENTIAL.



# POTENTIAL

## IN A GROWING FIELD, IMMENSE OPPORTUNITY

Energy efficiency is a green jobs powerhouse. According to a recent national report, energy efficiency jobs comprise 12,359 jobs in the District of Columbia—including more than one third of all construction jobs.<sup>6</sup> The DCSEU is committed to supporting and shaping the local clean-energy labor market through strategically designed programs that enhance green jobs' effects on the city's economy. In FY 2018, the DCSEU created an equivalent of 88 full-time equivalent green jobs, paid at DC's Living Wage or higher, and spent \$2.8 million on work involving CBEs.

This year, the DCSEU continued its Workforce Development Program (WDP), which hosted two cohorts of externs, one that began in Fall 2017 and completed in Winter 2018, and one that began in Summer 2018 and will complete in December 2018. The program consists of six months of paid hands-on job experience (externships) with DCSEU partners. The DCSEU also hosts weekly classes for externs, where they learn about career development and goal setting. They also obtain practical knowledge about energy efficiency-related topics such as lighting and HVAC.

The 13 externs from the Fall 2017 cohort graduated with hands-on project experience in engineering, program management, energy consulting and auditing, project assistance, HVAC operation, and electrical contracting. The DCSEU also offered the externs training opportunities and specialized, nationally recognized certifications. In FY 2018, externs had access to no-cost LEED certification, certification from the Passive House Institute U.S. (PHIUS), and Building Operator Certification. The WDP deepened its relationships with Howard University, Greenscape Environmental Services, and other long-time local program partners. It also worked closely with DC Water and the Washington Metro Area Transit Authority (WMATA) to place externs in their sustainability and engineering departments.



**\$2.8 million**  
spent with 15 CBEs

**100%**  
of externs found full-time  
employment or pursued higher  
education

<sup>6</sup> E4TheFuture, E2, and BW Research Partnership, September 2018. Energy Efficiency Jobs in America. Data are from the National Association of State Energy Officials' and E4TheFuture's 2018 U.S. Energy and Employment Report (May 2018). <https://e4thefuture.org/wp-content/uploads/2018/09/EE-Jobs-in-America-2018.pdf>.



“

*When you're looking to change your career path, sometimes that's so hard to do, especially in the adult phase of your life. The DCSEU's Workforce Development program has meant a great deal to me in helping me make that change."*

— Joshua Brown, Workforce Development Program graduate



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In 2016, Joshua, a resident of Anacostia, was driving for a rideshare company. He happened to mention that he had some background in HVAC repair while driving a DCSEU staff member, who provided her e-mail address and encouraged him to check out the DCSEU's Workforce Development program. Joshua graduated from the program in FY 2018 and now works as an HVAC technician at a local hospital.

In addition to the strong green careers opportunities through the WDP, the DCSEU designed strategic programs that created opportunities for local businesses and green jobs for DC residents. The Income Qualified Efficiency Fund (see III b, Low-Income Initiatives) and Instant Business Rebates programs (see IV b, Commercial & Institutional Initiatives) provided preferential opportunities to local CBEs working with the city's businesses, institutions, affordable housing communities, and shelters serving vulnerable residents.

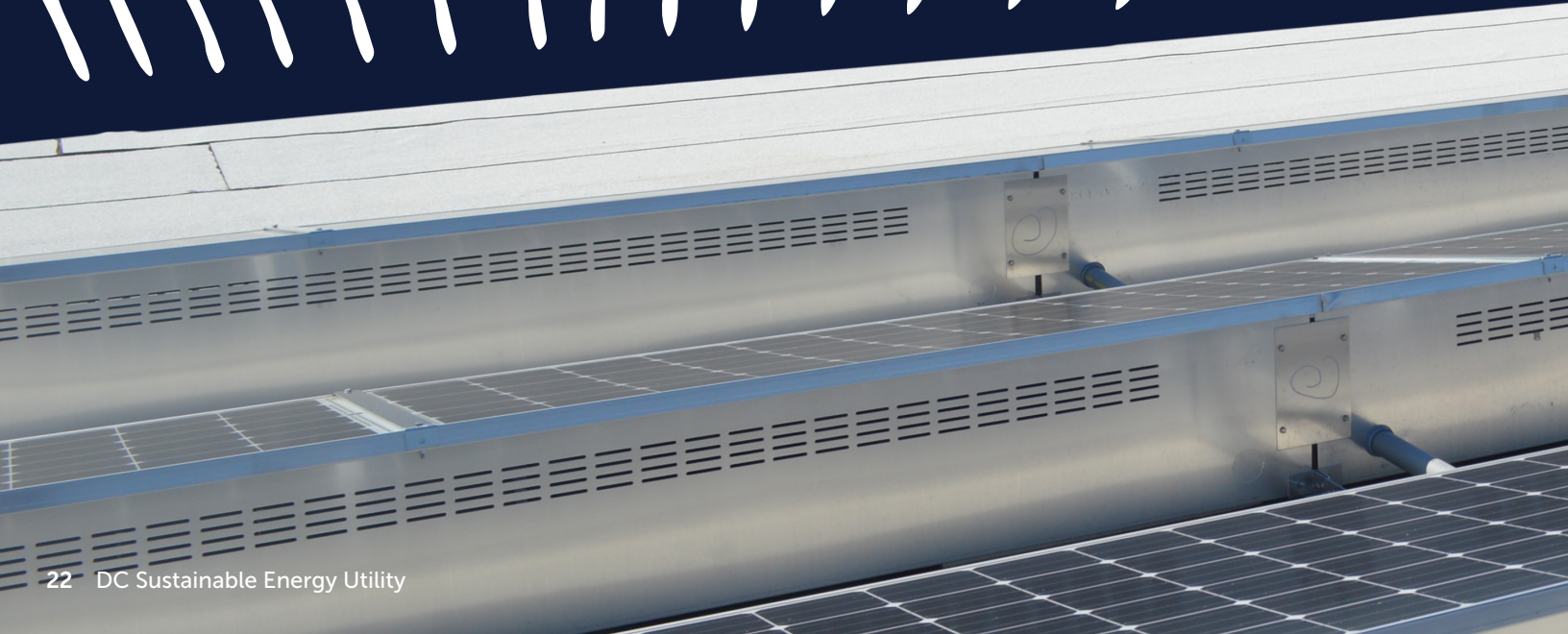


Humberto Garces was a third-year medical student when, in 2000, he and his brother were forced to flee Colombia. In 2011, he founded Green Construction Services Group. Earlier this year, Garces landed his first contract on an energy efficiency project through the DCSEU IQEF program. Green Construction Services Group, now a CBE, completed water heater replacements at three income-qualified multifamily buildings in Southeast DC in 2018.

“*The DCSEU program is one of the most effective I have ever participated in. The program is trying to encourage people to reduce energy consumption, and it's also bringing opportunities to small businesses like mine that don't have opportunities in other arenas because of all the competition.*”

—Humberto Garces, President and CEO,  
Green Construction Services Group

PEOPLE. POWER.  
PROGRESS.





# PROGRESS.

## A CLEAN ENERGY VISION FOR DC

Through targeted and effective policies and programs, Washington, DC, has become a national leader in solar energy installation. Solar Power Rocks, which evaluates state renewable energy policies, ranks DC Number 5 in the nation on its 2018 Solar Report Card<sup>7</sup> —up from Number 9 in 2017's rankings. Increasing access to affordable solar energy has been an ongoing objective since the DCSEU began. The DCSEU dedicated its FY 2018 initiatives to building solar capacity in the large and small commercial and institutional markets, with the intention to support and enhance program design and planning for Renewable Energy Development Fund (REDF) programs (pending DC Council approval in early FY 2019).

This year, the DCSEU continued to support the federal government's adoption of solar energy through a strong partnership with GSA. This relationship helps the federal government increase its use of cleaner and cheaper sun-powered electricity, and thereby lower its energy bills.



**1,836 kW**

of renewable energy generating capacity installed

<sup>7</sup> <https://www.solarpowerrocks.com/2018-state-solar-power-rankings/>



Despite barriers such as security concerns, building age, and historical preservation priorities, the DCSEU helped GSA complete the Capital Solar Challenge. This solar energy project initiated by the Obama Administration provided nearly 2 megawatts (MW) of solar capacity on federal and federally controlled buildings.

In the residential market, to allow one of DOEE's Solar for All (SfA) grantees to serve more residents and to leverage funds for the DCSEU, the DCSEU and Solar United Neighbors (SUN) worked in FY 2018 to forge an innovative partnership that will allow residents receiving solar systems to benefit from ten years of Solar Renewable Energy Credits (SRECs). This will allow SUN to maximize the number of income-qualified homes receiving solar through Solar for All.

Moving forward, in June 2018, DOEE and the DCSEU entered into an agreement for the DCSEU to design and prepare to implement the new DCSEU SfA initiative, with REDF funding. This new initiative will complement existing SfA grants by using competitive solicitations and direct support and engagement with potential project hosts to further encourage and catalyze market growth of solar. The initiative will contribute to long-term SfA goals. Pending DC Council approval, the DCSEU will begin implementation of this work in FY 2019.



President Obama launched the White House Capital Solar Challenge in April 2014, directing federal agencies, military sites, and federally subsidized complexes to deploy solar energy across the National Capital Region. The DCSEU has worked in tandem with the General Services Administration (GSA) and other partners to help see the solar installations to completion across nine federal properties including the National Archives, the Smithsonian Museum of Natural History, and the Ronald Reagan Building and International Trade Center.

“

*Our beer starts and ends with the sun. I love that so much. Being a small business, my main job every day is to save this business money, and DC has made it really easy from an energy savings standpoint with organizations like the DCSEU.”*

—Thor Cheston, Owner,  
Right Proper Brewing Company



Right Proper Brewing Company has been working with the DCSEU since 2017 to increase efficiency at their Brookland location, including LED lighting, rooftop solar, and now a solar canopy in 2018. At the height of summer Right Proper may be able to get obtain 99% of its electricity from solar.

# PEOPLE. POWER. PARTNERSHIP.



## PARTNERSHIP. **INVESTING IN IMPACT**

The DCSEU Leveraging Team chose three areas of primary activity in FY 2018: financing for projects, leveraging additional funds to support DCSEU activities, and securing strong partnerships and sponsorships. Through the Energy Efficiency Financing Program (EEFP), the DCSEU helped a local business obtain property-assessed clean energy (PACE) financing for efficient equipment. The DCSEU also entered into a partnership with the US Green Building Council to collaborate on energy savings and energy justice, in the context of workforce development, projects involving affordable housing, low-income efficiency services, and special projects designed for community-based enterprises.



The DCSEU's MOU with SUN (see VI b, Renewable Energy Initiatives) allows incentives for solar PV installed on income-qualified single-family homes. The DCSEU incentives will help SUN serve more income-qualified homes with solar. In return for the incentives, the DCSEU will receive all SRECs produced by the incentivized solar PV systems for the first five years of operation. This will occur via an offtake contract with Sol Systems, a DC broker and aggregator of SRECs.

Because of the urgent need to leverage more outside funding for other DCSEU initiatives, the DCSEU is entering into a securitization deal with Calvert Impact Capital (Calvert), a leading social impact investor. This will allow the DCSEU to leverage more than \$1 million over the life of the transaction. This money will go back into the Sustainable Energy Trust Fund (SETF) to provide funding for future DCSEU initiatives.

The DCSEU continued to monetize the energy savings of eligible projects in the PJM Interconnection, the Reliability Pricing Model (RPM) Market serving the District of Columbia. In FY 2018, the DCSEU entered into a new contract with its aggregator, Electric Market Connection, Inc. That company connects demand resource providers like the DCSEU to PJM capacity market rewards. The total revenue received in FY 2018 was \$202,743. In addition, the DCSEU completed

its portion of a three-year U.S. Department of Energy grant secured by DCSEU teaming partner the Institute for Market Transformation (IMT). That project involved a program targeted to help DC building owners run their buildings more efficiently, using benchmarking data.

The Leveraging Team also drafted the guidelines, processes, and procedures, and created the infrastructure, to successfully secure additional funding. This effort involved agreeing with DOEE on the types of leveraged resources, their lifecycles, and operational guidelines for acceptable types of leveraged funds. To support the tracking and management of funding and associated relationships, the DCSEU also invested in a customer relationship management platform.

The Leveraging Team also collaborated with the DCSEU Marketing & Communications Team to position the sustainable energy utility as a service to all DC residents, with a special interest in helping the most vulnerable populations. This work has helped to shape a leveraging presence on the DCSEU website and a new mechanism, the Energy Opportunity Fund, which will be launched in FY 2019. The webpage and the fund will allow District residents to help their neighbors take advantage of the health and economic benefits of energy efficiency and renewable energy.



Through the Energy Efficiency Financing Program (EEFP), the DCSEU helped Capitol Cider House get PACE financing of approximately \$136,000. PACE financing and DCSEU incentives helped fill a gap in the buildout of the new retail space, allowing a small business owner to install the efficient equipment they wanted for their cidery.



capitol  
cider  
house

“ Sustainability is a key pillar of our business model. For example, whenever we press fruit, the leftover pomace is taken to a local farm for compost and animal feed. Likewise, energy efficiency dovetails nicely with this approach.”

—Jared Fackrell,  
Founder, Capitol Cider House

PEOPLE.  
POWER.  
PRIDE.

TOGETHER WITH THE DCSEU,



I HAVE THE POWER  
TO SUCCEED IN  
MY NEW CAREER.

TO GET THE SKILLS  
+ EXPERIENCE TO  
BE MORE VALUABLE  
TO EMPLOYERS,

TO HAVE SUPPORT  
FROM A TEAM  
I CAN COUNT ON,

TO KNOW MY  
PROFESSIONAL  
LIFE IS ON TRACK.

PEOPLE. POWER. POTENTIAL.

Joshua,  
Graduate  
DCSEU  
Workforce  
Development  
Program

Learn more at  
[DCSEU.com/impact](http://DCSEU.com/impact)

DC  
SUSTAINABLE ENERGY  
UTILITY

DEPARTMENT  
OF ENERGY &  
ENVIRONMENT  
DC



# PRIDE NEIGHBORS HELPING NEIGHBORS

This year, the DCSEU continued to support program lead generation and elevate the DCSEU brand in the District. But above all, it enhanced the DCSEU's reputation as an energy efficiency leader in the United States.

The DCSEU used national Energy Efficiency Day on October 5 as an opportunity to highlight its work on the Great Day Washington program on WUSA9. In further celebration of the event, the DCSEU team produced an op-ed in The Hill, a press release with energy tips, a special sponsored blog post on popville.com to share tips on how to save energy with residents, and strong social media presence.

In May of 2018, the DCSEU launched a new brand campaign. The effort reflected a design for "humanizing" energy efficiency (and renewables), and demonstrated the DCSEU's community impact beyond energy rebates and energy savings. The ads were featured on bus shelters throughout the city, on Metro platforms, and in print and digital outlets. The DCSEU also pitched stories from the campaign to media outlets, and featured them on the DCSEU Blog and social media. In FY 2018, the DCSEU organized the Focus on Green Technology event series to explore and discuss emerging technologies that will help District businesses, institutions, and residents save energy. The first of the series, Building the Sustainable Cities of the Future, took place in January and was sponsored by Pepco. More than 100 attended the event, which featured speakers from three innovative energy technology companies.

The DCSEU also launched a blog in FY 2018 to highlight its work, provide a platform for partners, and drive social media users to the DCSEU website. The blog addressed residential energy tips and commercial success stories, and



**100+**  
media mentions

**17%**  
increase in likes on Facebook

**9%**  
increase in Twitter followers

opened itself to guest bloggers with unusual topics highlighting new energy efficiency and renewable energy work in DC and around the world.

The DCSEU's outreach activities supported the Public Service Commission's Winter Ready DC event, Pepco's Utility Discussion, Washington Gas Open House event series, and a meeting with DC Council Constituent Service Directors. The DCSEU continued to partner with District agencies on activities that support all populations, including seniors and low-income residents.

The DCSEU also supported educational efforts around energy efficiency and sustainability at three District schools. At Democracy Prep Elementary School, the DCSEU collaborated with Broccoli City, Martha's Kitchen, and the Joyful Food market to participate in their Food

Bankafter-school program. The program offered home energy conservation kits to families. As part of the DCSEU's extensive partnership with Burroughs Elementary, DCSEU staff volunteered to judge the school's annual science fair. The DCSEU also supported H.D. Woodson's STEM Program throughout the year, conducting mock interviews with students, participating in the first STEM Awards, celebrating the inaugural class of the STEM program, and the students' academic achievements.

The DCSEU raised its profile throughout FY 2018, with earned media. The DCSEU's earned media increased at least threefold over FY 2017, with articles featuring or mentioning the DCSEU in outlets such as The Hill, EcoWatch, NextCity, GreenBiz, DC Eater, Washington Business Journal.



“*Team building and community service are intricately woven in the culture of the DCSEU. Whether it’s by scouring through construction drawings and specifications for energy analyses or coming together to lend a hand in our community, my team loves to involve themselves in the mix!*”

—Mansi Talwar, Senior Energy Consultant, DCSEU

The DCSEU engineering team takes a “hands on” approach to everything they do. On any given day, this team is busy analyzing ways in which commercial and institutional customers in the District can save on energy costs through energy efficiency upgrades. In 2018, the team volunteered to clean up the urban garden at the University of the District of Columbia Community College Bertie Backus Campus.



“*We have a long-term academic plan, so every dollar we save in the operation of our schools we are able to reinvest in classrooms.*”

—Donny Tiengtum, Principal, KIPP DC



KIPP DC has been working with the DCSEU for several years to uncover opportunities to save on their energy costs when making upgrades on existing buildings and building new schools. From LED lighting and HVAC upgrades to comprehensive planning during construction, the operational savings begin to add up.



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# PERFORMANCE BENCHMARKS

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## **Natural Gas Savings and Electricity Savings**

DCSEU initiatives in FY 2018 resulted in an annual reduction of 2,280,353 therms in natural gas consumption. This exceeded the Performance Benchmark maximum annual target for natural gas savings. Electricity consumption was reduced by 135,425 MWh, which also exceeded the Performance Benchmark maximum annual target.

## **Renewable Energy Generating Capacity**

The DCSEU installed 1,836 kW in solar capacity, exceeding the Performance Benchmark maximum annual target.

## **Low-Income Spending**

The DCSEU spent \$4,128,200 on energy efficiency projects in low-income communities. This exceeded the Performance Benchmark maximum annual target for low-income spending.

## **Low-Income Savings**

The DCSEU significantly reduced energy use in low-income communities, with combined electricity and thermal savings of 43,969 MMBTU. This exceeded the Performance Benchmark minimum annual target and met 94 percent of the maximum annual target.

## **Green Jobs**

All DCSEU jobs and contractor positions, both internal and external, are offered at or above the District's Living Wage. In FY 2018, the DCSEU created 88 FTE jobs, meeting the Performance Benchmark maximum annual target.

## **Leveraging**

The DCSEU leveraged \$230,478 in FY 2018 toward its five-year cumulative Performance Benchmark of \$5,000,000.

**Table 1. Annual Performance Benchmarks**

	Goal type	FY 2018 actuals	FY maximum target	% of maximum target
Total electricity savings	Contractual	135,425 MWh	86,473	157%
Total natural gas savings	Contractual	2,280,353 therms	1,705,129	134%
Total renewable capacity	Contractual	1,836 kW	1,000	184%
Summer peak demand	Tracking	20,745 kW		
Total low-income savings	Contractual	43,969 MMBTU	46,556	94%
Total low-income budget spend	Contractual	\$4,128,200	\$3,835,833	108%
General & administrative costs	Contractual	\$3,410,107	\$3,835,833 (Must not exceed 20% total budget spend)	89%
Total budget spend	Contractual	\$19,505,983	\$19,555,139	99%
Total green jobs created	Contractual	88 FTEs	88 FTEs	100%
Large energy users engaged	Tracking	136 companies	50 companies	272%
CBE spend	*Contractual	\$2,894,737	\$2,425,000	119%
Electricity spend	Tracking	\$15,799,846	\$15,644,111	101%
Natural gas spend	Tracking	\$3,706,137	\$3,911,028	95%

**Contractual:** Contract requirement; financial bonuses and penalties can be issued.

**Tracking:** Requirement to track; no financial bonus or penalty is associated with this goal type.

**\*Contractual:** Contract requirement based on District law; District Department of Small and Local Business Development can issue financial penalty.

**Table 2. Cumulative Benchmarks Progress**

	Goal type	Actuals October 2016– September 2018	Contract minimum target	% of contract minimum	Contract maximum target	% to contract maximum target
Total electricity savings	Contractual	228,109 MWh	461,188	49%	576,486	40%
Total natural gas savings	Contractual	4,278,373 Therms	7,980,096	54%	10,230,774	42%
Total renewable capacity	Contractual	4,080 kW	4,050	101%	5,000	82%

**Table 3. Economic Benefits**

	Residential customers	C&I customers	Total
Lifetime economic benefits	\$34,736,071	\$152,315,937	\$187,052,008
First-year annual cost reduction	\$4,271,000	\$12,757,773	\$17,028,773

**Lifetime economic benefits:** The present value of the avoided cost of energy for the life of each measure installed. The value of the avoided costs is based on average retail rates, for the first 12-month period in which the efficiency and / or renewable energy measures are in operation.

**First-year annual cost reduction:** The estimated savings in energy costs, at average retail rates, for the first 12-month period in which the efficiency and / or renewable energy measures are in operation.

### Table 4. Budgeted to Actual Expenditures

#### DCSEU FY 2018 BUDGET

#### FY 2018 ACTUALS

Sector	Programs/ Initiatives	Incentive Budget	Non-Incentive Budget	Total Budget	Incentive Actual	Non-Incentive Actual	Total Actual
C&I	Business Energy Rebate	\$1,044,071	\$351,457	\$1,395,528	\$1,013,861	\$188,123	\$1,201,984
C&I	Commercial Upstream	\$201,271	\$149,162	\$350,433	\$212,858	\$70,203	\$283,061
C&I	Commercial Custom	\$2,494,126	\$1,864,933	\$4,359,059	\$2,886,721	\$2,079,325	\$4,966,046
C&I	Commercial Direct Install	\$529,250	\$57,911	\$587,161	\$499,222	\$36,753	\$535,975
LIMF	Income Qualified Efficiency Fund	\$1,871,727	\$580,222	\$2,451,949	\$2,042,881	\$403,048	\$2,445,929
LIMF	Low Income MF Comprehensive	\$1,284,749	\$170,299	\$1,455,048	\$1,007,423	\$151,714	\$1,159,137
LIMF	Low Income MF BER	—	—	—	\$473,247	\$18,276	\$491,523
LISF	Emergency Heating Replacement	\$5,400	\$1,000	\$6,400	\$5,400	\$12,266	\$17,666
RES	Residential Efficient Products	\$1,077,427	\$392,405	\$1,469,832	\$1,058,984	\$283,605	\$1,342,589
RES	Residential Upstream	\$4,347	\$0	\$4,347	\$5,307	\$0	\$5,307
IN	Innovation: SREC (LI)	\$148,050	\$20,000	\$168,050	\$0	\$25,032	\$25,032
IN	Innovation: Curb Project (LI)	\$34,500	\$5,000	\$39,500	\$0	\$5,000	\$5,000
IN	Innovation: Other	\$20,000	\$59,969	\$79,969	\$0	\$46,136	\$46,136
WD	Workforce Development	\$0	\$409,816	\$409,816	\$0	\$466,912	\$466,912
RE	Commercial Solar	\$520,591	\$70,875	\$591,466	\$320,591	\$65,295	\$385,886
PS	Program Support	\$0	\$2,350,748	\$2,350,748	\$0	\$2,717,693	\$2,717,693
G&A	General and Administrative Support	\$0	\$3,835,833	\$3,835,833	\$0	\$3,410,107	\$3,410,107
<b>Total</b>		<b>\$9,235,509</b>	<b>\$10,319,630</b>	<b>\$19,555,139</b>	<b>\$9,526,495</b>	<b>\$9,979,488</b>	<b>\$19,505,983</b>



## Inventory of FY 2018 Services by Market

CORE AREA	INITIATIVE NAME	DESCRIPTION	CUSTOMER
Residential	Efficient Products	Deep discounts on LEDs with partnering retailers in DC	DC residents
		Mail-in rebates for qualifying energy-efficient appliances	
		Free energy kits for DC residents	
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
	Income Qualified Efficiency Fund	Custom rebates and technical assistance accessed through a competitive application process for income-qualified multifamily, shelter, and clinic facilities, including contractor support	Property owners of multifamily buildings, shelters, and clinics serving income-qualified DC residents Approved DCSEU Contractors
Renewable Energy	Commercial Solar	Incentives and financing to install solar PV systems	Commercial business owners
Commercial and Institutional	Business Energy Rebates	Rebates for energy-efficient lighting, heating, refrigeration, cooking, and other qualifying equipment	Business owners
	Commercial Direct Services	Direct installation of energy efficiency measures at primarily small and medium-sized commercial businesses	Business owners
	Instant Business Rebates	Discounted energy-efficient lighting through CBE distributors	Business owners
	Commercial and Institutional Custom	Technical assistance, account management, and financial incentives for energy efficiency projects	Large commercial and institutional customers





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