GOVERNMENT OF THE DISTRICT OF COLUMBIA
District Department of the Environment

November 14, 2012

The Honorable Phil Mendelson
Chairman
Council of the District of Columbia
1350 Pennsylvania Avenue NW, Suite 504
Washington, DC 20004

RE: DC Sustainable Energy Utility's Quarterly Report

Dear Chairman Mendelson:

Pursuant to Section 201 of the Clean and Affordable Energy Act of 2008, D.C. Law 17-250, the District Department of the Environment ("DDOE") is pleased to submit the enclosed Annual Report on behalf of the District of Columbia Sustainable Energy Utility ("DC SEU"). The report details the activities undertaken and the accomplishments of the energy efficiency programs administered during October 1, 2012 – September 30, 2012. The report was prepared by the DC SEU and DDOE, as the designated contract administrator, has fully reviewed and approved the attached report.

Please feel free to contact me or Dr. Taresa Lawrence at 202-671-3313 if you have any questions regarding this report.

Sincerely,

Keith A. Anderson, Interim Director
District Department of the Environment

Attachments

cc: Councilmember Mary Cheh, Chairperson, Committee on the Environment, Public Works, and Transportation
DC Councilmembers
Nyasha Smith, Secretary of the Council

CREATING A **NEW GENERATION**

OF ENERGY, JOBS, AND ECONOMIC OPPORTUNITY

DCSEU

DISTRICT OF COLUMBIA SUSTAINABLE ENERGY UTILITY

ANNUAL REPORT 2012

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FY 2012 Annual Report

FY 2012

A Year of Opportunity and Development

FY 2012, the first full year of operation for the DC SEU, defined the utility as a fast-growing, trusted resource for energy savings to District ratepayers, and a promising source for meaningful jobs and economic development. The fiscal year began October 1, 2011, with a continuation of programs from FY 2011, and ended September 30, 2012, with full-fledged initiatives that enable short-term and long-term energy efficiency and renewable energy solutions for homes, businesses, institutions, and communities.

Continuation of FY 2011 Initiatives

The first contract for DC SEU services required the design, development, and launch of three "Quick-Start" programs within 120 days of the signing of the original contract on March 24, 2011. The DC SEU delivered these programs through the end of the 2011 fiscal year and into the first quarter of FY 2012. The programs offered installations—all carried out by qualified local contractors—to the following customer groups, at very low cost or at no cost to the customer:

- **Low-income multifamily buildings**: Free installation of compact fluorescent light bulbs (CFLs), faucet aerators, and other energy-saving devices
- **Small businesses and institutional buildings**: Free installation of CFLs and solid-state lighting (LEDs), and other energy-saving devices
- **Single-family homeowners**: Half-day (using a two- or three-person crew) of air-sealing and insulation, and installation of light bulbs

The first quarter of FY 2012 brought these early DC SEU programs to a close in a way that supported continued contractor growth and development in the sustainable energy industry. That is, these programs continued to provide "green job" hours at living wages for District residents working with the DC SEU's network of contractors, while also building the supply of contractors trained in sustainable energy work and familiar with the requirements for DC SEU work.

Developing a Portfolio of Market-Based Initiatives

Throughout the first quarter of FY 2012, as the DC SEU brought the Quick-Start initiatives to a close, it simultaneously designed market-based initiatives to address a wider scope of customer groups. Using a comprehensive market analysis that had been completed for the *FY 2012 Annual Plan*, the DC SEU developed program plans for specific markets.

Market-based programs start with the understanding that residents and businesses make thousands of decisions every day that affect future energy use. Each time a resident buys a light bulb at a local hardware store, each time a local grocery store buys a new commercial refrigerator, each time an engineer specifies an air-conditioning system for a high-rise office building, a decision is

made that affects future energy use. At one level, market-based programming attempts to influence these decisions directly by providing customers with technical services, customized incentives, and rebates. At a level further up the supply chain, market-based programs also influence markets indirectly through agreements with suppliers and distributors of energy-efficient products. A customer is more likely to buy an efficient light bulb if that bulb is offered at a lower cost through a buy-down supported by the sustainable energy utility and agreed to by suppliers, distributors, and retail outlets. In some cases, such collaborations might result in affordable, efficient light bulbs being placed in the customer's line of sight, promoted via incentives and marketing provided to retailers. Market-based programming is composed of long-term initiatives and programs to support customer decisions to save energy.

To serve all major District customer groups, the DC SEU developed the following market-based initiatives:

- **Commercial and Institutional Custom**. Energy analysis services and customized financial incentives for large energy users with annual electricity consumption over 500 MWh.
- **Business Energy Rebates**. Rebates on purchases of qualified efficient products for businesses and institutional customers.
- **Low-Income Multifamily Comprehensive**. Energy analysis services and custom financial incentives for energy improvements in qualified low-income multifamily buildings that are under construction or are going through major rehabilitation.
- **Low-Income Multifamily Property Manager Direct Install**. Free energy-efficient light bulbs and faucet aerators for installation by property managers of qualified low-income buildings.
- **Leveraging Low-Income Housing Opportunities**. Collaboration with agencies serving low-income homeowners and renters to provide energy-efficient products and services. (Further development and launch of this initiative were delayed and resources were deployed on other initiatives.)
- **Home Performance with ENERGY STAR®**. Incentives to single-family homeowners for air-sealing, insulation, and other energy upgrades, provided the homeowners use contractors from a DC SEU-trained and qualified contractor network.
- **Efficient Products**. Market support for promoting the purchase and installation of qualified energy-efficient products, including price reductions through negotiated buy-downs, and collaborative marketing efforts with local retailers.

In the Community

The DC SEU Events Staff was involved in retail and community events across the District with aggregate participation of more than 300,000 people.

After the DC SEU designed these program plans, it developed full implementation plans, specifying necessary program rules and procedures, marketing plans, enrollment forms, and technical procedures and tools. The implementation plans for some of the initiatives were relatively simple. However, other initiatives involved specialized training, collaboration, contractor network development, cross-sector promotion, and technologies targeting individual commercial processes.

A Wide Array of Goals, and the Challenges in Meeting Them

The DC SEU provides services under a performance-based contract that contains a broad array of performance benchmarks and other contract requirements. These benchmarks are derived directly from the District's Clean and Affordable Energy Act of 2008:

- **Reduce per-capita energy consumption**
- **Increase renewable energy generating capacity**
- **Reduce growth in peak demand**
- **Improve energy efficiency of low-income housing**
- **Reduce growth of energy demand of largest energy users**
- **Increase number of green collar jobs**

In addition to those benchmarked goals, the DC SEU contract contains minimum contract requirements:

- **Fully expend annual allocation from the Sustainable Energy Trust Fund**
- **Use Certified Business Enterprises for at least 50% of dollars that are spent using Implementation Contractors**
- **Spend on electric and natural gas efficiency programming in proportion to the revenues from each of those utility ratepayer sources**

Most experienced efficiency and renewables program implementers would recognize that programming designed to achieve the performance thresholds for any of the above goals or requirements is likely to compromise the achievement of the other goals. For example, effectively improving the efficiency of low-income housing is generally achieved at a relatively high cost per megawatt-hour or therm, because low-income residents typically are not able to pay for a substantial share of the cost of improvements. The contract spending requirement for improving low-income housing means that fewer dollars are available for use in other program areas where the DC SEU could achieve higher energy savings at lower costs. Thus, more funds allocated for improvements in low-income housing means fewer dollars available for custom commercial projects—which deliver high energy savings and contribute significantly to reductions in per-capita energy consumption, reductions in the growth of peak demand, and reductions in the growth of demand from large energy users.

The contract metric for green collar jobs requires full documentation of each hour worked on DC SEU activity. This documentation requirement means that contractors must regularly submit complete payroll records to the DC SEU. Training, tracking, and following up with contractors who are unaccustomed to this type of requirement drives up programming costs

for both the contractor and the DC SEU; conversely, it can reduce the number of contractors willing to participate in DC SEU programs.

Each of the contract goals is ambitious. Together, they represent the best of the District's intentions to ensure that DC SEU work provides optimal benefits to local residents and businesses. The DC SEU embraces these demanding goals, while recognizing that the contract goals are a challenge to programming. That is, resources devoted to one area reduce impacts in another. As an organization that is "new to market" with a comparatively limited resource base, the challenge is even greater. In a more mature efficiency utility, long-standing relationships and additional leveraging provide the bases for higher cost-effectiveness.

Launch of Market-Based Programming

Following the development of program and implementation plans, the second quarter was dedicated to the sequential launch of market-based programming. The sequence corresponded with priorities for staff development and recruiting, as well as other factors, such as contractor recruitment and program qualification by the U.S. Department of Energy for the DC SEU Home Performance with ENERGY STAR program. Programs were available in the market in the following sequence:

- **Commercial and Institutional Custom**: second quarter FY 2012
- **Low-Income Multifamily Comprehensive:** third quarter FY 2012
- **Business Energy Rebates**: third quarter FY 2012
- **Low-Income Multifamily Property Manager Direct Install**: third quarter FY 2012
- **Home Performance with ENERGY STAR**: fourth quarter FY 2012
- **Efficient Products**: fourth quarter FY 2012

Building up market-based programming is a long process of action by the DC SEU—in introducing initiatives and gauging reaction to them by the market. Sometimes responses are highly predictable, and at other times less so. Behaviors that drive decisions about what equipment to buy, what contractor to use, or where to make a purchase, do not change overnight. In some cases with market-based initiatives, many of these targeted points of purchase or decisions might be years in the future. If an entire building system has just been changed—a new boiler put in, or a new lighting control introduced—it will be years before the building owner is likely to consider the next buying decision for energy infrastructure. Market-based systems have their own cycle of maturity, needing time to gain footholds from which they can build momentum, and eventually transform the market to one that values efficiency as a regular part of daily life or business.

Increasing the DC SEU's Visibility and Impact

As the DC SEU launched its market-based initiatives and tracked their acceptance by "early adopters," DC SEU staff supplemented these initiatives with other offerings to increase the utility's visibility and impact. The structure of a performance-based contract allows this latitude for adapting plans to meet changing conditions, especially in the context of meeting activity milestones and performance metrics.

In the third quarter of FY 2012, the DC SEU launched a set of integrated approaches and initiatives for citywide implementation, which involved the recruitment of a workforce that could be developed for future sustainable energy jobs:

- **Recruitment, hiring, and training of Retail Account Managers who solicit retailers to stock compact fluorescent lighting and who educate retail staff on how to promote these products**

Working with Businesses

The DC SEU worked with 296 District businesses and institutions on energy efficiency and renewable energy installations.

- **Recruitment, hiring, and mentoring of Events Staff to promote energy-efficient products at District events throughout the summer and early fall**
- **Recruitment and hiring of Project Assistants who provide support to outreach, intake, administrative, and quality assurance functions and operations**
- **Solicitation and selection of qualified CBE Implementation Contractors who install energy-efficient products**
- **A T12 Replacement initiative that provided for no-cost replacement of inefficient T12 lighting with high-performance T8 lighting; this work was completed by qualified Implementation Contractors, for businesses and institutions throughout the District**
- **A similar T12 Replacement initiative for qualified low-income multifamily housing, including fixtures in common areas and within residential units**
- **A Small-Scale Solar initiative for low-income residents in Wards 7 and 8**
- **The re-launch of the Low-Income Multifamily Direct Installation initiative to provide CFLs, low-flow faucet aerators and showerheads, and insulation of hot water pipes and tanks**

Together, these initiatives provided thousands of green job hours for District residents and a significant amount of business for local contractors. All of the 106 temporary hires for Retail Account Managers, Events Staff, Interns, Data Collection Analysts, and Project Assistants were District residents. All of the Implementation Contractors were CBEs.

In addition to providing momentum in fulfilling the green jobs goal and CBE spending requirements, these initiatives also gave high visibility to the DC SEU in the late summer and early fall. Events Staff covered retail and community events with aggregate participation of more than 300,000 people. Retail Account Managers obtained the participation of 39 retailers that were new to the DC SEU—resulting in purchases of more than 43,000 discounted CFLs. Project Assistants went from storefront to storefront, and visited faith-based organizations and community centers, identifying opportunities for lighting efficiency improvements. This work generated more than 675 project leads for FY 2013.

FY 2012 Event Locations

Ace Hardware 5th Street	Ace Hardware Tenleytown	Achievement Prep PCS - Back to School Night	Adams Morgan Day
Adams Morgan Safeway	Alabama Ave. Safeway	Anacostia Safeway	Annie's ACE Hardware
Aya Community Market	Barracks Row Festival	Bed Bath and Beyond Columbia Heights	Bread and Roses Annual Labor Day Concert and Benefit
Councilmember Marion Barry's Annual Ward 8 Family Day	DC Green Festival	DC SEU / Office of the People's Counsel Education Forum	DC Solar Flare
Department of Housing and Community Development Housing Summit	Downtown BID 2012 Building Energy Summit	Eastern Market Safeway	Energy Efficiency at DC Public Library
Fiesta DC	Green Building Symposium and Expo - DCRA	Green Living Expo at UDC	Green Day at Fairmont Hotel
H St. Festival	H St. Safeway	Home Depot	Housing Counseling Services
Inc. "Pre-Purchase Orientation"	Howard Road Academy PCS - Back to School Night	Jefferson Academy and Middle School - Back to School Night	Logan Circle ACE
Mt. Pleasant Farmers Market	Mt. Vernon C.I.D. Property Managers Meeting	Mt. Vernon Safeway	Mt. Vernon Triangle Market
Old School Hardware	Piney Branch Safeway	Rodman's	Safeway Georgetown
Tenant and Tenant Association Summit	True Value Brookland	True Value on 17th	Waterfront Safeway
	Windows Cafe	World Environment Day	

This level of activity, particularly in the fourth quarter, was extraordinary. Further, the DC SEU discovered that the momentum from this activity and many of its features complemented the regular market-based activity and programming. Some of these approaches have been incorporated into the *FY 2013 Annual Plan*, with contractors seamlessly continuing to work on projects from leads generated in FY 2012.

FY 2012
Performance

Performance Benchmarks

Table 1. FY 2012 Performance Benchmarks and Minimum Requirements

Category	Item	Name	Metric Unit	Minimum Performance Benchmark	FY 2012 Results[1]
Performance Benchmarks	1a	Reduce per-capita consumption - Electricity	MWh	45,746	24,504
	1b	Reduce per-capita consumption - Natural Gas	Mcf	120,000	6,254[2]
	2	Increase renewable energy generating capacity	Verify program cost effectiveness	Design a cost-effective replacement program to the District's Renewable Energy Incentive Program	DC SEU contracted for the installation of 54 solar photovoltaic systems, providing 26kW of generating capacity at a cost 24% less than retail, and societal benefit-cost ratio of 1.12:1
	3	Reduce growth in peak demand	kW	2,000	3,732
	4	Improve energy efficiency in low-income housing	% of annual budget	$ 2,640,000	$ 4,805,199
	5	Reduce growth of energy demand of largest users	Verify completion of study of largest energy users	Complete report of DC largest energy users	Report submitted to DDOE on September 30, 2012
	6	Increase number of green collar jobs	The number of hours directly worked by DC residents, earning at least a Living Wage, on DC SEU activity; 2,080 hours = 1 green job	109,824	112,320[3]
Minimum Requirements	7	Expenditure of annual SETF dollars allocated to DC SEU services	Fiscal year dollars	$ 13,800,000[4]	$ 13,796,448
	8	Expenditures with Certified Business Enterprises	50% of expenditures on Implementation Contractors	$ 2,623,293	$ 4,489,103
	9a	Annual expenditures related to electric energy efficiency	Program expenditures allocated to energy efficiency and / or renewable energy activity that reduce electrical energy consumption	$ 7,920,000	$ 13,071,187
	9b	Annual expenditures related to natural gas energy efficiency	Program expenditures allocated to energy efficiency and / or renewable energy that reduce natural gas consumption	$ 1,980,000	$ 725,261

[1] Results to be verified through DDOE's evaluation, measurement, and verification contractor.
[2] Represents the Mcf savings for gas efficiency measures installed. Total aggregate annual gas savings are negative (-5,562 Mcf) due to waste heat adjustment from the installation of energy-efficient lighting measures.
[3] Estimate subject to final verification of green job hours.
[4] DDOE increased the FY 2012 annual budget by $600,000 through a reallocation of SETF dollars.

Table 1 presents DC SEU performance on each contract benchmark and requirement.

Total Electricity Savings
The DC SEU reduced electricity consumption by over 24,000 MWh, enough to power 2,000 homes for one year in the United States.

Per-capita consumption. Electricity consumption was reduced by 24,504 MWh. Per capita, this is a reduction of just under 40 kWh per year or approximately 95 kWh per household. Over 60% of total electric savings came from the commercial and institutional sector. The breakout of savings by sector is presented in **Figure 1**.

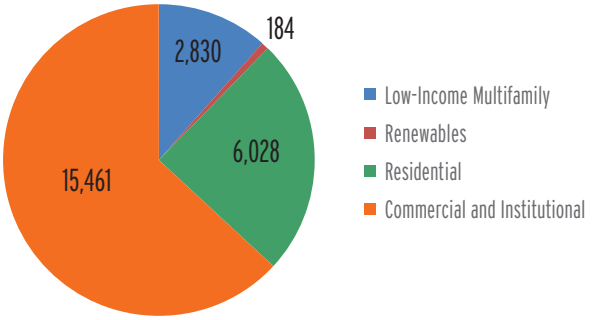


Figure 1. Savings by Sector, MWh

Savings in natural gas consumption fell short of the minimum performance benchmark. Large reductions in gas consumption typically require longer lead times, since they invove replacing furnaces, boilers, and hot water systems with more efficient equipment or improving a building's thermal shell. The low-income multifamily sector was the largest source of gas savings, with both the in-unit, hot-water saving measures and larger comprehensive projects contributing. Most natural gas savings result from customer purchases of large-scale equipment such as heating systems, or from large-scale changes to building systems (additional insulation or new windows, for example). There are few natural gas savings that can be achieved through customer purchases in retail stores. As DC SEU initiatives for Home Performance with ENERGY STAR, custom commercial projects, and comprehensive low-income multifamily projects expand in FY 2013, these savings are expected to increase significantly.

Reduction in the growth of peak demand. The reduction of growth in peak demand for electricity is measured in kW; the DC SEU reduced kW by 86% more than the minimum requirement. For electricity users and suppliers, this reduction in peak load can mean significant dollar savings, since peak load capacity is typically purchased by utilities on the spot market for immediate delivery; this capacity is more expensive than baseload electricity supply. The electricity savings in the commercial and institutional sectors provided the majority of these demand-side savings

Energy efficiency in low-income housing. On a percentage basis, the DC SEU's spending minimum for improving the energy efficiency of low-income housing is significantly higher than that of most other energy efficiency programs nationwide. The contract threshold shows the District's commitment to its most vulnerable

residents—a commitment shared by the DC SEU. FY 2012 results show spending in that sector was 76% higher than the minimum benchmark. Balancing the long-term social and environmental benefits of providing energy efficiency services to the low-income population with meeting a specific year's benchmarks presents a special challenge. From an efficiency program perspective, energy improvements in low-income housing yield lower energy savings per dollar spent. The high level of spending on low-income initiatives is one reason that energy savings in FY 2012 are lower than projected in the *FY 2012 Annual Plan*.

Number of green collar jobs. *Green collar jobs* are those that are held by District residents and are directly attributable to DC SEU activity. All DC SEU green jobs must be paid at the District's Living Wage or higher, and must be documented through certified payroll data. The minimum performance benchmark for green collar jobs is 109,824 hours. The DC SEU exceeded this minimum benchmark by more than 1 FTE, totaling 112,320 hours. The documentation requirements for these hours are significant, and are a factor in increasing costs to the contractors and the DC SEU. That is, the DC SEU bears the costs of special labor documentation, as well as the costs of monitoring and assuring the quality of the data provided by the DC SEU and scores of vendors and subcontractors. Taken together, these costs negatively affect the yields on energy savings per dollar invested in the DC SEU.

CBE requirement. The DC SEU contract requires that 50% of spending on Implementation Contractors be contracted to CBEs; the DC SEU exceeded that minimum by more than 70%, with $4.5 million in contracted spending for Implementation Contractors going to CBEs to support activity related to the installation of energy-efficient and renewable energy products and equipment. A total of 86% of Implementation Contractor spending for DC SEU services went to CBEs.

Spending on electric and natural gas efficiency. The contract sets parameters for spending on electric and natural gas efficiency, correlating to the proportion of revenues that are contributed by the respective utilities to the Sustainable Energy Trust Fund (SETF). Spending patterns for DC SEU activity in FY 2012 reflect greater attention to electricity-saving initiatives, as indicated by the DC SEU's failure to meet its minimum benchmark for natural gas efficiency spending. The primary reasons for missing this performance threshold are presented at the beginning of this section. However, two factors now indicate better performance in FY 2013. The *FY 2013 Annual Plan* indicates a sharp focus on enhanced programming for natural gas efficiency in both the residential and business sectors. Further, new, interpolated data on natural gas energy use is now documented in the DC SEU *Report on the Largest Energy Users in the District of Columbia*. Given the planning framework and the greater knowledge of opportunities for high-value natural gas savings, DC SEU activity in the natural gas efficiency market will be better informed in FY 2013 than it was in FY 2012.

Economic Benefits

Table 2. Lifetime Economic Benefits and Annual Customer Savings

	Residential Customers	Commercial and Institutional Customers	Total
Lifetime economic benefits[1]	$ 8,586,000	$ 17,127,500	**$ 25,713,500**
First-year annual energy cost reduction[2]	$ 977,817	$ 1,844,575	**$ 2,822,392**

[1] Lifetime economic benefits *equals the present value of the avoided cost of energy over the life of the energy efficiency / renewable energy measures.*
[2] First-year annual energy cost reduction *equals 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.*

Lifetime economic benefits are defined as the present value of the avoided cost of energy for the life of each measure installed. The avoided cost of energy is based on the utility's avoided costs, not on the individual customer's costs. As the DC SEU reduces electric and natural gas energy use through its programming, the utilities can avoid buying energy. When reduced energy use coincides with peak system demand, the value of those avoided costs rises, providing more benefits to a region's

utility systems. These benefits are calculated in the context of the lifetime of each installed measure. That is, a CFL may have a relatively short expected life while a new boiler system might have an expected life of 25 years or more. Each of these measures brings different, but calculable, value to the electric and natural gas utilities. Using present value enables a comparison of benefits that can be attributed to DC SEU activity with the costs of DC SEU programming. In this case, with more than $25 million in lifetime benefits from FY 2012 activity, compared to $13.8 million in program costs, District ratepayers have begun to accrue significant value for the dollars invested in energy efficiency and renewable energy.

At the customer level, the DC SEU has reduced first-year energy costs by $2.8 million. This value is typically provided only in terms of first-year savings, since measure lives and savings vary after the first year of installation.

Stimulating the Local Economy

The DC SEU exceeded its Implementation Contractor spending goal by over 60%, helping grow DC's green economy and creating jobs for District residents.

Residents and Businesses Participating in DC SEU Initiatives

Table 3. Participants in FY 2012 Initiatives

Customers	Quantity
Residential customers with energy efficiency and renewable energy installations	18,795
Commercial and institutional customers with energy efficiency and renewable energy installations	296
Number of low-income customers served	11,395
Number of customers purchasing efficient lighting at retailers (estimated)	7,242
Supply chain participants	**Quantity**
CBE general contractors	17
CBE consultants	4
CBE office supply and other vendors	4
CBE lighting wholesale and retail vendors	4
CBE marketing and graphic design firms	4
CBE solar installation contractors	3
CBE engineering and architectural firms	2
CBE recruiters	2
CBE technical support providers	2
CBE real estate operator	1
Total DC SEU CBEs	**43**
Total DC SEU-issued RFPs / RFQs	13
CBE vendors responding to DC SEU RFPs / RFQs	51

In FY 2012, the DC SEU provided products and services to more than 19,000 residential, commercial, and institutional customers. To complete the work across

"I came to the DC SEU with a background in green building and sustainable design, to make the District more sustainable. First, as a Customer Support Specialist, I increased my knowledge about building energy efficiency. I am grateful for the mentoring I received from DC SEU staff, which helped me to implement successful Efficient Products initiatives."
Stacy Szczepanski, Efficient Products Program Manager

initiatives, the DC SEU issued 13 requests for proposals (RFPs) and requests for qualifications (RFQs) to solicit the services of CBEs. The DC SEU received responses from 51 CBE contractors. The DC SEU has placed a high priority on CBE spending for all of its contract and retail needs. Therefore, the CBE census also contains firms that provided advertising, graphics, printing, and other services in support of direct DC SEU activity.

The New Generation

To meet ambitious green job creation and CBE spending goals, the DC SEU invested in staff growth and development to expand outreach and deliver energy savings. Throughout the year, the DC SEU recruited, hired, trained, and mentored permanent staff. In the summer, the DC SEU introduced its first summer internship program. In the latter half of the year, staff resources were augmented through temporary staff positions. In all of these efforts, the investment in hiring and training produces the new generation of DC-based talent that propels the DC SEU forward.

Development of Permanent Staff

The DC SEU's emergence as a landmark sustainable energy utility has corresponded with its expansion of permanent staff dedicated to DC SEU programs, activities, and initiatives. Most important, during FY 2012, the DC SEU recruited and hired its first permanent Managing Director and Director of Operations. Each of these leadership positions was filled by native or long-term District residents who have brought an exceptional understanding of the many District market types, and of its socioeconomic demographics, business climate, and political structure.

In addition, the DC SEU expanded its core staff, defining new roles and responsibilities for the wider range of work that occurred in FY 2012. At the beginning of the fiscal year, 4 core permanent DC SEU employees were in place; at year-end, 18 such employees are in place. Each new staff member represents a substantial investment in building and shaping the sustainable energy industry in the District, and receives targeted training, mentoring, and opportunities for professional development. Several employees were promoted in FY 2012. The growth of the DC SEU provides substantial opportunities for professional development of individual staff.

Development of Interns and Temporary Staff

The DC SEU is committed to developing emerging talent and exposing students and new hires from many different backgrounds to the sustainable energy industry. As project work ramped up in the latter half of the fiscal year, the DC SEU recruited, hired, trained, and mentored additional staff members—

including summer interns and temporary staff. Summer interns and temporary staff members represented every Ward in the District.

The DC SEU's summer internship program involved collaboration with university partners. The "first class" of summer interns was composed of highly skilled engineering, environmental science, environmental studies, and business students. DC SEU interns received real-world experience, working on programs and projects that put them into the field, behind desks, and in public forums. Workforce development at the DC SEU consisted of significant opportunities in FY 2012 for expanding and deepening the "bench strength" of the field staff. The DC SEU Compliance Officer dedicated a portion of the workforce development budget to training 12 District residents, referred by the Department of Employment Services' On-the-Job training program, as Data Collection Associates (DCAs). Beginning in the third quarter, 12 Data Collection Associates, all District residents, were hired to collect utility release permissions, door-to-door, from consumers. Support for the DCAs was leveraged through the Department of Employment Services' On-the-Job training program.

The DC SEU worked with DCAs to build their resumes and provided training to improve their knowledge about energy efficiency programs and their oral presentation skills. The DCAs attracted the attention of Mayor Vincent Gray during the May "Saving Money and Energy with DC SEU" forum, for which they provided assistance. The Mayor spoke to the DCAs about the program and its career impacts, referring to them later in his speech at the forum as his "Light Brigade."

The DC SEU also brought on temporary staff during the period of highest activity in late summer and early fall. These temporary employees ranged from those who had faced long-term unemployment to recent graduates with advanced degrees.

The hiring of interns and temporary staff benefited the staff members and the DC SEU. The DC SEU gained the "feet on the street" it needed to increase its visibility and impact in the fulfillment of its programming. Temporary personnel staffed retail and festival events, conducted basic assessments of energy efficiency potential in buildings, and provided quality assurance inspections on installations. Meanwhile, these talented individuals were introduced to the energy efficiency and renewable energy industry, gaining valuable experience and connections.

All employees received training from senior staff members on the requirements of the DC SEU contract, on energy efficiency generally, and on lighting efficiency. The training program provided temporary employees with skills appropriate

"It makes me feel proud that I'm doing something in my community. I feel good, to give back."
Damien Aull, trained in solar panel installation to support the Small-Scale Solar initiative in Wards 7 and 8

for the industry and for developing their careers. Interns and temporary staff members also received training specific to their roles in the DC SEU, including database management, customer support skills, commercial lighting and solar installation inspection, and outreach and project opportunity development. In addition to specific job training, the DC SEU temporary staff benefitted from a training series on career development topics.

Building Toward Maturity

As the DC SEU designed, developed, and delivered programming for FY 2012, it also continued to lay the foundation for longer-term success, first by deepening its understanding through reflection on activities during the first 18 months of operation. Early programming has included the launch of high volumes of fully supported installation activity with very tight timelines and fast deliverables, as well as the introduction of market-based initiatives. This has led to a high variability in activity and initiatives. Moving into FY 2013, a steadier platform of activity will provide a better base to move the market through understanding, responsiveness, and adoption.

Even as the fully supported activity was delivered in the latter part of FY 2012, continuing market-based programming remained the highest priority, with additional activities and initiatives complementing the core programming and building out the green job hours and CBE requirements. These additional activities effectively increased the DC SEU's visibility in the marketplace at the same time that market-based programming continued to gain traction and increase activity.

With the steadier platform of market-based programming for FY 2013, the DC SEU expects to see increased customer participation levels. Direct installation activity will continue to drive green job hours and local economic development. Over time, market-based programming will steadily grow and become the dominant mode of delivery of sustainable energy services in the District.

CORE INITIATIVES
and Activities

Residential

Home Performance with ENERGY STAR

***Customers**: Owners of single-family homes*
***Goal:** Reduce energy use and costs by air-sealing and insulating the structure, and installing efficient lighting and appliances*
***Key Results**: Program was approved for implementation by the U.S. Department of Energy; Implementation Contractors were recruited and trained; 60 audits were completed*

Home Performance with ENERGY STAR, a comprehensive, whole-house approach to improving energy efficiency and home comfort, debuted in the District in FY 2012 when the DC SEU was approved as the Home Performance Program Administrator for the District of Columbia by the U.S. Department of Energy.

The DC Home Performance Program offers homeowners incentives for the installation of energy improvements, completed by trained contractors. The program provides customers with assurance of quality, through rigorous adherence to industry-accepted standards and protocols.

Energy improvements for most homes generally involve sealing air leaks, adding insulation, improving heating and cooling systems, sealing ductwork, and upgrading lighting and appliances. These improvements are completed by local contractors who have been pre-qualified by the DC SEU.

The program will expand through marketing, consumer education, and neighborhood campaigns planned in FY 2013. The DC SEU continues to recruit and provide training to increase the supply of local contractors qualified to undertake this work. At program launch, three Participating Contractors had been approved and received comprehensive training on technical tools and program rules. The DC SEU continues to support and guide these contractors through weekly meetings. The DC SEU selected two more contractors in August for training so that they might be considered for Participating Contractor status.

DC Home Performance for Low-Income Homeowners

***Customers**: Low-income owners of single-family homes*
***Goal**: Provide leveraged resources to help low-income homeowners reduce their energy use and costs*
***Key Results**: Participating bank was identified and it committed to the initiative; 80 households qualified for services*

Although the DC Home Performance with ENERGY STAR program is a well-respected and effective program, the DC SEU recognized that, even with

Valencia Copeland, a satisfied Home Performance with ENERGY STAR participant, shared this experience with her community saying, "My Church Family was just as excited as I was about expressing my gratitude towards DC SEU and Elysian Energy for the many benefits [this program] offers DC residents. Some of them look forward to having audits completed at their homes, as well as the home of a family member or friend. The word is truly spreading like wildfire…This proves how essential your program is to the residents of DC…"

Frager's Hardware

The DC SEU established a partnership with Frager's Hardware to provide customers with access to reduced-price, energy-efficient CFL light bulbs. Assistant Manager and Electrical Buyer, Ricky Silverstein, was attracted to the promotion's low prices for District residents, saying, "DC SEU's program helps Frager's Hardware by giving the consumer great savings...it also reduces their energy consumption...and people like to see great value! With DC SEU coming, they were able to explain to our staff what their role is in the District...and most of our employees are DC residents, so they learned what benefits they get from the DC SEU."

incentives, participation would be difficult for those who are most burdened by energy costs and least able to afford improvements. The Federal Home Loan Bank of Atlanta (FHLB-Atlanta) offers a regional program to support low-income homeowners who want to reduce energy costs. The DC SEU explored the opportunity with representatives of the FHLB-Atlanta, and then approached Industrial Bank, a local FHLB-Atlanta member bank, and began a partnership that will enable forgivable loans, backed by the FHLB-Atlanta, to qualifying low-income homeowners seeking home energy improvements.

The DC SEU hosted or spoke at 18 community meetings to discuss this opportunity with low-income homeowners, and received additional promotion of the program from Habitat for Humanity of Washington, DC. This initiative was fully subscribed only three weeks after it was announced. It has a current waiting list of more than 150 homeowners.

Home energy audits have been completed on 75 qualifying homes, with improvements expected to take place before December 31, 2012. One Participating Contractor experienced such significant growth from this initiative that the firm is now working with the DC SEU to hire four new staff members, including weatherization technicians. Most important, participants will benefit from lower energy bills and increased home comfort. In the words of one low-income homeowner, this program is "a dream come true."

Retail Efficient Products

***Customers**: District residents—renters and homeowners*
***Goal**: Increase the availability and sales of reduced-priced energy-efficient light bulbs*
***Key Results**: 39 retailers enrolled; sales of more than 43,000 efficient light bulbs*

The Retail Efficient Products initiative helps District residents to purchase CFLs. In 2010, the U.S. Environmental Protection Agency (EPA) identified the District as a major metropolitan area with a low proportion of CFLs. The DC SEU developed a multi-pronged approach to ensure the availability and affordability of CFLs. The DC SEU negotiated contracts with manufacturers that provide pass-through incentives to the retailer. The retailer is then able to provide the product at a lower price to the consumer through a negotiated partnership with the DC SEU. This reduces the initial purchase price of the CFL.

Benefits of partnership. The DC SEU staff met with more than 45 retail store owners and managers throughout the city's eight Wards, and provided information on the energy-saving benefits of CFLs. They also encouraged the stores to participate, seeking retail locations across the entire District: grocery stores, corner stores, hardware stores, pharmacies, and bookstores. These included local, independently owned True Value and ACE hardware stores, as

well as national chains like Safeway, The Home Depot, and Bed Bath & Beyond. Many retail locations were already carrying CFLs, and DC SEU staff helped them increase sales. The DC SEU developed relationships with other local retailers that did not previously carry CFLs to enroll them in the promotion and increase the availability of energy efficient lighting in the District. The DC SEU trained store employees, and provided marketing support materials that were specific to the store's needs.

Direct customer education. DC SEU staff also provided direct customer education by staffing tables at more than 40 participating store events, and by speaking with shoppers about the promotion. The DC SEU table display contained a light strip featuring CFL products and comparing energy-saving benefits of CFLs to incandescent bulbs. This successful tactic led to increased sales and improved customer understanding of the promotion, and provided a way to share information about the DC SEU.

Partner retailers benefited from the DC SEU advertising campaign, which included an online locator of retail partners, website banners for participating stores, posters, flyers, displays, and advertisements in local newspapers. Rodman's, a discount store in Northwest DC, took advantage of the DC SEU's cooperative advertising options and printed an advertisement featuring the "Cool Bulb Hot Price" promotion in the *Washington Post*. Rodman's owner and President, Roy Rodman, recommended the CFL promotion as "a unique program, a winner, a winner for Rodman's and for Rodman's customers…This is one of the best programs of the year, maybe of the decade."

Food Bank Distribution of Efficient Products

***Customers**: Low-income District residents*
***Goal**: Reduce energy costs for low-income residents*
***Key Result**: More than 42,500 light bulbs were distributed through District food banks*

DC SEU partnered with nonprofit organizations that serve low-income District residents to distribute energy-efficient CFLs to clients. District residents who receive meals and job training from the Greater Washington Urban League (GWUL), Bread for the City, and the So Others Might Eat (SOME) Center for Employment Training (CET) received bulbs packaged in a DC SEU-branded tote bag with informational flyers about the DC SEU and CFLs.

The DC SEU's community-based partners for this effort helped reach populations that might not be able to afford CFLs, even at reduced prices. The SOME CET program distributed CFLs to its clients following an energy efficiency and lighting training session as a part of their coursework, directly

Helping Low-Income Residents

The DC SEU worked with Bread for the City, the Greater Washington Urban League, and So Others Might Eat to distribute more than 42,500 CFLs to low-income residents of the District.

New Construction and Major Rehabilitation

These projects provide an excellent opportunity to improve the energy efficiency of multifamily housing at a lower cost. DC SEU incentives can help to cover the cost difference of high-efficiency equipment.

linking the lesson with the action of saving energy at home. GWUL trained its staff members and set up tables at each of its three clinics, surveying residents on the lighting uses in their homes and then providing the corresponding number of bulbs needed. This survey also provides the DC SEU with valuable information for planning future initiatives.

CFL products for this distribution were sourced from CBE suppliers, adding to the local economic impact of the work. Employee time from the partnering food banks contributed to the DC SEU's green jobs goal, and the initiative enabled the hiring of new staff and retention of existing staff for this distribution effort.

Low-Income Multifamily

Comprehensive Low-Income Multifamily Initiative

***Customers**: Developers and residents of low-income housing*
***Goal**: Improve energy efficiency of buildings at the time of construction or rehabilitation through technical assistance and incentives*
***Key Results**: Completed 5 rehabilitation projects involving 348 apartments; enrolled 12 projects with more than 1,000 units for FY 2013*

The *FY 2012 Annual Plan* laid out the DC SEU's plan to enter this sector with services to housing developments that were being constructed or going through major rehabilitation. The program design for the DC SEU's Comprehensive Low-Income Multifamily initiative drew on successful models in Vermont, New York, Wisconsin, and elsewhere. New construction and major rehabilitation provide an excellent opportunity for lower-cost energy efficiency in housing because building systems are open and are already being upgraded. For example, because base costs for new lighting are typically included in a construction budget, the incremental cost difference of high-efficiency fixtures can be absorbed by both the customer and the efficiency utility. This cost-effectiveness holds true for other building systems: walls, windows, doors; heating, ventilation, and air-conditioning; domestic hot water; and refrigeration and laundry appliances. Conversely, if building systems do not receive efficiency upgrades at the time of construction or rehabilitation, the opportunity to make energy improvements is considered lost for 15 to 20 years because of funding cycles in the affordable housing world.

A major hurdle to the DC SEU's rapid implementation of this initiative is the long development period for construction and rehabilitation projects—typically two to four years. The most cost-effective delivery of comprehensive services requires early communication and planning to bring energy expertise to the design table, even before an initial plan and budget are drawn up. When DC SEU staff can work as a full member of the development team, from the start of the project,

costs are minimized. This integrated process ensures that efficiency goals are developed alongside other project goals. For example, instead of a high-efficiency boiler being added after the project is under way, the equipment can be specified during design and planning, and be fully integrated with other building systems.

The DC SEU recognized that it would be able to provide services only to a few projects that would complete during FY 2012, and understood that the ability to change major systems would be limited for projects already in construction. Project energy savings goals, low for FY 2012, are expected to increase as the DC SEU enters long-term projects progressively earlier in the design and specification phases.

The Comprehensive initiative was announced to the affordable housing development community through an e-mail blast to more than 300 contacts developed during FY 2011 Low-Income Multifamily initiative and through the first part of FY 2012. Five comprehensive projects were completed in FY 2012, representing energy improvements to 348 low-income homes. Upgrades included air-sealing and insulation of the buildings, improved windows, and upgrades to mechanical and lighting systems. An important feature of this initiative is the development of key relationships with affordable housing developers, owners, managers, financing partners, architects, engineers, and general contractors who routinely provide construction services.

Low-Income Multifamily Direct Product Installation

***Customers**: Low-income multifamily housing owners and residents*
***Goals**: Improve energy efficiency for low-income residents and building owners; increase CBE spending and green job hours*
***Key Result**: 3,834 low-income households provided with energy-saving lighting and hot water products*

The first program that the DC SEU offered in FY 2011 was one that used local contractors to install low-cost, energy-saving products in qualified low-income multifamily rental housing. They installed compact fluorescent screw-base lighting, low-flow faucet aerators, low-flow showerheads, and insulation wraps for hot water tanks and pipes. This initiative continued into 2012 with installations in an additional 1,016 units. The *FY 2012 Annual Plan* included a design to shift to a cost-shared approach, with the DC SEU providing products and the building owner using its own maintenance staff to install them.

Initial response to the Property Manager Direct Installation initiative approach was not strong, with only three projects enrolled. As part of the effort to increase its impact and visibility, the DC SEU returned to direct contracting for this work in the latter half of the year. This revision of the approach also helped the

Reducing Energy Costs

The DC SEU served more than 3,000 low-income households with energy-saving lighting and hot water products in FY 2012.

Children of Mine Youth Center

When solar panels began to go up on houses in Wards 7 and 8, including many Habitat for Humanity homes, Mrs. Hannah Hawkins became interested. Mrs. Hawkins is the Founder and Director of the Children of Mine Youth Center, Inc. She talked to Mark Davis, President of WDC Solar, about the possibility of installing panels on the Youth Center. Mr. Davis saw this as an opportunity to both showcase his company's work and invest in his community, and he offered to install the panels at no cost to Mrs. Hawkins or her Youth Center. Mrs. Hawkins told the DC SEU, "With the money I save, I can buy food and help so many other residents in the community." The Children of Mine Youth Center is a nonprofit after-school program dedicated to providing a safe space for children.

DC SEU advance job creation, local contractor development, and service to low-income residents. Replacements for T12 lighting were also offered, integrated with the T12 Replacement initiative (described on page 23). The pipeline for this initiative was developed via the DC SEU's contacts in the affordable housing provider community. More than 8,500 units were enrolled, and service was provided to more than 2,818 units. These services are also made available to projects that are enrolled in the Comprehensive initiative to increase savings for those projects and residents.

With the pipeline built, this initiative will continue into FY 2013, with Implementation Contractors providing direct services to qualified low-income multifamily projects

Renewable Energy

Small-Scale Solar Installations

***Customers**: Low-income residents in Wards 7 and 8*
***Goal**: Install photovoltaic solar systems to reduce the energy costs of low-income residents of Wards 7 and 8*
***Key Results**: 54 installations completed with estimated total energy savings of more than 184 MWh; installations and savings were leveraged using solar renewable energy credits*

The traditional solar energy market provides a cost-effective alternative to conventional power for many District residents, supported by Solar Renewable Energy Credits (SRECs) and the DDOE's Renewable Energy Incentive Program. For many District residents, however, the initial cost barriers are too high, and participation rates for low-income residents are low. This observation is borne out by data showing very few renewable energy installations east of the Anacostia River, where there are greater concentrations of low-income households.

The DC SEU's Small-Scale Solar initiative, launched in FY 2012, developed a pipeline of 87 low-income residents in Wards 7 and 8 for qualified solar installations. Prior to this initiative, there were fewer than a dozen homes with solar panels in these two Wards. In FY 2012, 54 installations were completed in these Wards, with average estimated savings of 3,412 kWh annually per installation. SRECs provided an important leveraging opportunity for this initiative. The combination of SRECs, federal tax incentives, DC SEU incentives, and contractor financing reduced the upfront costs to participating residents to zero dollars. Further, these residents now benefit from no-cost electricity produced by the systems.

A key success of this initiative involves the Implementation Contractors, who demonstrated the capacity of local businesses to leverage and package federal and local funding opportunities to provide solar systems to a new customer base—while promoting economic development within the District. The DC SEU rolled out the initiative with Implementation Contractors, relying on relationship-building with communities and word-of-mouth marketing, and enabling the employment of neighborhood jobseekers.

One of the challenges the DC SEU faced was convincing residents that the solar panel systems were free and would provide significant long-term energy and monetary savings. To overcome these perceptions, the DC SEU worked with influential community members and relied on knowledgeable DC SEU staff to provide information to customers about the initiative and the technology.

The Small-Scale Solar initiative expanded the District's renewable energy market through these installations and stimulated job creation. Implementation Contractors hired and trained local jobseekers to install solar panels and the DC SEU trained temporary staff members as quality assurance inspectors.

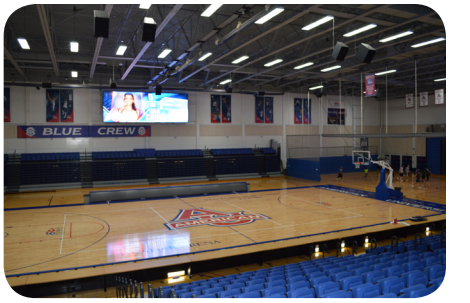
Commercial and Institutional

Commercial and Institutional Custom Initiative

***Customers**: Businesses and institutions that use more than 500 MWh per year*
***Goal**: Reduce both energy consumption and demand by large commercial and institutional users*
***Key Results**: 39 projects with reduced energy consumption of more than 8,450 MWh and reduced energy demand of 1.22 MW*

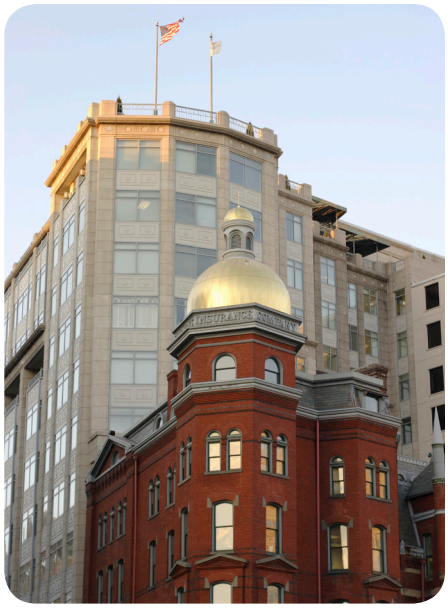
The commercial and institutional (C&I) market comprises the largest energy users in the District: universities, office buildings, government buildings, garages, houses of worship, hospitals, hotels, and retail establishments The C&I Custom initiative provides highly specialized technical assistance, and offers customized incentives to help these largest users reduce energy use and demand.

The DC SEU provides these services through a strategic combination of account management for ongoing customer support, and engineering services for specialized technical assistance. A customized approach is important because the energy-saving opportunities of a large university are very different from those presented by the District's water treatment plant. Understanding the energy uses, the savings opportunities, and the overarching business strategies and objectives are keys to significant energy reductions for these large users.



American University Bender Arena

"The DC SEU has really, really helped contribute to making this viable for us to start to develop these opportunities and start moving forward with a plan," said David Osborne, Director of Energy and Engineering at American University. Bender Arena is a high-traffic space that hosts sporting events, concerts, commencement exercises, and speakers. AU had identified improvements at Bender Arena that could improve quality of light, energy efficiency, and operations and maintenance efficiency. The DC SEU reviewed the proposals and provided an unbiased report of energy savings potential. Account Managers helped AU's decision-making team to compare scenarios. The result was a two-phase energy efficiency project that enhances the aesthetics of this high-visibility space and decreases the electrical energy usage by 300 MWh per year.



New Requirements for Benchmarking

The DC SEU established a Benchmarking Help Center designed to assist building owners and managers with the benchmarking process as new reporting requirements come into effect.

Using industry events and trade groups, and leveraging new and existing relationships, the DC SEU has built a strong pipeline of projects for FY 2013. The DC SEU *Report on the Largest Energy Users* provides additional information about the needs of these customers. The largest energy users in the District are also potentially the largest energy savers. The DC SEU key account management approach identifies and vets energy-saving opportunities to provide a long-term pipeline for progressively deeper energy savings.

The DC SEU has also built relationships with the vendor community. The DC SEU's market-based approach is a new framework for many vendors who are more familiar with standard utility rebate programs.

Benchmarking DC's Largest Buildings

***Customers**: Businesses and institutions with buildings that are larger than 150,000 square feet*
***Goals**: Provide technical assistance to help building owners and managers benchmark their buildings and report the findings to DDOE*
***Key Results**: Established a dedicated Benchmarking Help Center; completed 10 training events for more than 300 attendees*

Benchmarking energy use in buildings allows building owners to track and assess energy and water consumption across an entire portfolio of buildings online. The District enacted a benchmarking requirement in 2008, with implementation of the requirement starting with the largest buildings in 2011.

The DC SEU provides support for this benchmarking regulation by informing building owners and managers about the city's benchmarking requirement and providing educational resources to assist customers. The DC SEU has internal resources ready for the final regulation, which is expected to be published late in 2012. These resources are internal benchmarking training sessions, expertise in Portfolio Manager, the EPA's measurement and tracking tool, and establishment of a Benchmarking Help Center. The Benchmarking Help Center is available to all District residents who have questions regarding Portfolio Manager. The Help Center can be reached via e-mail, phone, or Twitter.

In addition to providing services through the Benchmarking Help Center, the DC SEU completed 10 training events and presentations for more than 300 attendees. These training sessions addressed benchmarking requirements and improved attendees' understanding of Portfolio Manager. The training sessions were promoted through business networks including DC SEU networks, DDOE's Benchmarking Listserv, the Apartment and Office Building Association, the District of Columbia Building Industry Association, and hotel and restaurant associations.

Business Energy Rebates / T12 Replacement

***Customers**: Small businesses and institutions replacing equipment and businesses with inefficient T12 lighting*
***Goals**: Promote the installation of efficient equipment through rebates for qualifying purchases; increase CBE activity and employment through the fully supported T12 Replacement initiative*
***Key Results**: 19 Business Energy Rebate projects were completed with estimated energy savings of more than 1,220 MWh; 115 T12 upgrade projects were completed, with energy savings of more than 4,870 MWh; a pipeline of 675 project leads for energy-efficient lighting upgrades was developed for FY 2013*

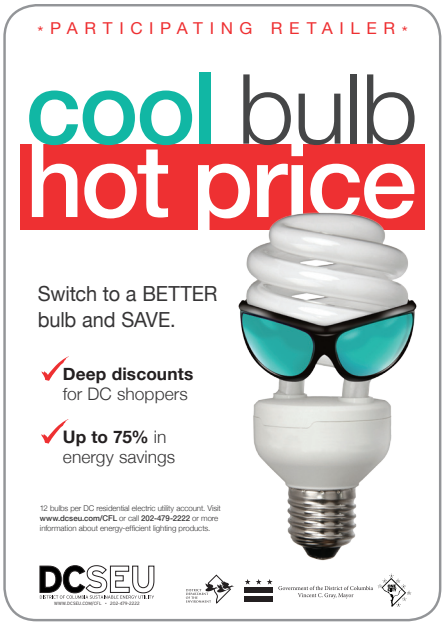
More than 50,000 small businesses employ 46% of the District's private-sector workforce. Although the energy use of a single small business is low, compared to large energy users, energy savings from efficiency improvements can contribute significantly to profitability for small businesses. The Business Energy Rebate initiative provides standard rebates to encourage the purchase and installation of energy-saving products and equipment. This can help spur additional market activity because contractors and vendors showcase options for efficiency, using rebates as a sales strategy.

Business energy rebates help businesses and institutions in DC upgrade to new energy-efficient technologies and equipment that reduce electric and gas consumption. These rebates reduce the up-front cost—and long-term costs—of efficient lighting, refrigeration, heating and cooling, water heating, and commercial cooking equipment.

Business customer participation was immediate at launch, and remained steady throughout FY 2012, with nearly 250 rebate forms downloaded from the DC SEU website. Ongoing outreach by DC SEU staff throughout the summer and fall of FY 2012 involved rebate seminars for suppliers, distributors, and manufacturers. Outreach activity also involved program presentations to associations and civic groups representing the interests of trade allies and customers.

The original Business Energy Rebate initiative was complemented in the latter part of FY 2012 by a T12 lighting replacement program. The DC SEU designed this initiative to spur market activity and job creation in that period. Replacing T12 lamps with high-performance T8 systems, the initiative targeted the hundreds of qualified leads DC SEU staff had acquired on small and large businesses, and assessed the potential for replacement. The initiative recruited CBE contractors and trained them to identify and install upgrades of the new efficient lighting. This work generated more than 675 project leads for FY 2013 for the T12 initiative. The T12 Replacement program has reduced the initial cost,

"... thanks for this experience. We've learned a lot, we have figured a few things out and we are better equipped to move forward even more successfully. The DC SEU created a fertile environment for the growth of the small forward-thinking business. The NDS Fix-IT Team really appreciates the partnership...Hats off to DC SEU!"
Deatrice Simpson, NDS Fix-IT



Selling the Savings

The DC SEU's "Cool Bulb. Hot Price" campaign helped 39 District retailers sell more than 43,000 CFLs in FY 2012.

making the switch to efficient products easier for small businesses. It has also built awareness of efficient alternatives, established long-term relationships with CBE contractors and CBE suppliers, reduced energy consumption in the District, and created jobs for District residents.

Market-Supporting Services

In addition to providing initiatives directly to customers, a fully developed market-based strategy provides services such as customer support and education, marketing, information technology (IT) and management information systems (MIS), and advanced technical services.

Customer Support and Education

Customer support and education directly assists all DC SEU initiatives. Customer support is a consolidated resource center with trained staff who provide information on specific services and respond to inquiries. In FY 2012, the DC SEU expanded the level of its FY 2011 customer support, creating seven Talking Point Memos, which provide guidance to the Customer Support Specialists on how to represent initiatives and goals to interested customers to ensure consistency in messaging. Extensive call tracking will take place in FY 2013 to capture data on the content of customer calls.

Marketing

DC SEU brand recognition increased in FY 2012. Marketing supports initiatives to ensure that messaging reaches the appropriate markets in the District. During FY 2012, the DC SEU increased its presence at events, developed new advertising campaigns, completed brand and market research, and developed targeted messaging for each initiative.

The DC SEU team also developed a more visible public profile for its initiatives and activities. In the third quarter, the DC SEU hosted a successful educational forum, in collaboration with the DC Office of the People's Counsel, with opening remarks by Mayor Vincent Gray. The strong "Cool Bulb Hot Price" summer advertising campaign encouraged retailer participation and successfully promoted CFL sales. In the fourth quarter, the DC SEU exhibited at 20 community events, including back-to-school nights, green festivals, and neighborhood festivals. Throughout the year, the DC SEU has built an increased social media presence that provides more insight into the DC SEU's work, and provides up-to-date information on how people can take advantage of services and how contractors can work with the DC SEU.

Marketing statistics show a significant increase in website visits this spring and again in late summer. In the five-month period of October 2011 through February 2012, the number of individual hits averaged 1,308 per month; in the four-month

period from March 2012 through June 2012, average hits increased to 2,789 per month; in August 2012 and September 2012, individual hits continued to increase to an average of 3,628 per month. These increases can be attributed to the public roll-out of initiatives, advertising campaigns, and public outreach. In addition, the DC SEU's social media presence was established this year and grew at an impressive rate. Twitter followers increased from 0 in October 2011 to 290 Followers by September 2012. Facebook "Likes" increased from 0 in October 2011 to 114 Likes by September 2012.

The DC SEU issued a Request for Proposals for a full-service marketing and public relations firm to assist the DC SEU in understanding and defining its branding and marketing. Retaining a CBE, the DC SEU completed brand research with a broad spectrum of stakeholders. This research will help to position the DC SEU for greater recognition in FY 2013 and beyond.

Through advertising, community events, and campaigns, the DC SEU has raised awareness of market initiatives to residents and businesses that can take advantage of programs, as well as contractors who can work with the DC SEU to provide services. Contractors and participating retailers also benefit from the DC SEU's professional marketing, including collateral materials and ad campaigns, because it assists them in their own marketing efforts.

Information Technology and Management Information Systems

The DC SEU established greater internal IT infrastructure in FY 2012, with communication equipment installed in office conference rooms. In addition, the DC SEU developed a new software application that enabled technical staff to create, edit, access, and distribute energy efficiency measure characterizations that support DC SEU implementation activities. The DC SEU continued to upgrade management information systems to support market and initiative managers and enable accurate data collection and recordkeeping.

As new initiatives evolved through FY 2012, the KITT+ database was enhanced to provide the necessary data for reporting and Customer Support functions. The database serves the multiple initiatives and activities of the DC SEU, with up-to-date savings profiles and activity reporting. The DC SEU trained new staff to update their field data in KITT+. In support of the development of Home Performance with ENERGY STAR, data analysis tools were modified to record project activity and progress.

A Sustainable DC

"It is my vision that in just one generation we can transform the District into the healthiest, greenest, and most livable city in the United States," said Mayor Vincent C. Gray at an educational forum hosted by the DC SEU in collaboration with the Office of the People's Counsel on May 24, 2012. "The DC SEU is one of many organizations helping translate that vision into reality by putting District residents to work on projects that enable us to use our energy in smarter, more sustainable ways every single day."

Advanced Technical Services

The DC SEU must provide accurate, transparent, and consistent assessments of energy savings and performance. The DC SEU has developed protocols to profile and report the impacts of energy efficiency and renewable energy activities. New measure characterizations have been added to supplement the Mid-Atlantic Technical Reference Manual, the relevant standard measure characterization document for the District. Custom project protocol manuals were created for new construction and lighting power density. Additional guidance documents include cost-effectiveness screening for renewable energy installations and comprehensive prescriptive rebate protocols for C&I and Efficient Products. DC SEU staff have been trained in these protocols and the Custom Assessment Tool. In FY 2012, the DC SEU provided all required information to the third-party contractor hired by DDOE to evaluate, measure, and verify savings and job creation claims.

EXPENDITURES

Budgeted and Actual

Table 4 presents FY 2012 budgeted and actual expenditures.

Table 4. FY 2012 Budget and Actual Expenditures

Delivery of Services	Annual Plan Budget[1]	Adjusted Budget Forecast[2]	Actual Expenditures
Commercial Initiatives	$ 4,806,272	$ 4,588,789	$ 5,991,341
Residential Initiatives	$ 2,910,786	$ 1,207,635	$ 1,184,849
Low-Income Multifamily Initiatives	$ 3,173,451	$ 3,984,798	$ 2,103,141
Renewable Energy Initiatives[3]	$ 350,958	$ 702,347	$ 1,064,284
Administration, IT, Compliance, and Workforce Development	**Annual Plan Budget**	**Adjusted Forecast**	**Actual Expenditures**
Administration[4]	$ 820,929	$ 1,657,863	$ 1,959,894
Information Technology	$ 624,715	$ 635,717	$ 517,731
Compliance	$ 369,672	$ 381,264	$ 318,135
Workforce Development	$ 143,217	$ 641,587	$ 657,073
Total	**$ 13,200,000**	**$ 3,800,000**	**$ 13,796,448**

[1] Filed with DDOE in December 2011.
[2] Budget forecast revised in July 2012 to accommodate expanded activity.
[3] In FY 2012, services for renewable energy measures were provided only to low-income-qualified residents..
[4] Administration comprises general management, financial management, DC SEU contract management, and operation-wide expenditures including facilities, insurance, and supplies.

The DC SEU completed FY 2012 at $3,552 under the full adjusted allocation of $13.8 million. The original allocation from the SETF was $13.2 million. This was augmented by an additional $600,000 mid-year when DDOE completed the contracting process for evaluation, measurement, and verification, and was able to reallocate unused resources.

- Actual expenditures for Commercial initiatives were $1.4 million higher than budgeted due to increased activity in the Custom initiative and the higher-than-expected enrollment in the T12 Replacement initiative.
- Expenditures on Residential initiatives were just $22,786 less than budgeted, not a significant variance.
- Expenditures for Low-Income Multifamily initiatives were $1.9 million less than budgeted. This was due to the decision to delay implementation of the Low-Income Housing Leveraging initiative as well as lower-than-projected opportunities for T12 Replacements in this submarket. Lower expenditures in this market did not adversely affect the overall low-income spend rate of the DC SEU, as reported in **Table 1**, due to increased low-income opportunities in both renewable and residential initiatives.
- The potential for cost-effective spending in the Renewable area was underestimated. The decision to focus installations to benefit low-income residents of Wards 7 and 8 greatly expanded the potential for Renewable Energy projects. Expenditures for Renewable Energy initiatives were $361,937 higher than budgeted.
- Administration costs were $302,031 higher than budgeted, for an overall administration rate of 14% of total budget. IT and Compliance expenses were lower than budgeted, and Workforce Development was higher than budgeted. In total, expenditures in these four areas were $136,402 (less than 4%) higher than budgeted.

POSITIONS HELD
by Ward

Table 5 lists all of the positions held by DC SEU workers, by Ward. In FY 2012, the Department of Employment Services made 5 referrals, leading to the hire of 2 permanent DC SEU employees.

Table 5. Positions Held by Ward

Job Title	Ward 1	Ward 2	Ward 3	Ward 4	Ward 5	Ward 6	Ward 7	Ward 8	Total
Assistants (administrative, project, and program)	7	1	1	10	14	5	11	5	**54**
Associates (initiative, project, and program)	8	2	4	6	5	6	2	3	**36**
Interns	1	1	2	1	1	2	1	1	**10**
Specialists (energy, IT, and customer support)		2	1		1	1	1	1	**7**
Managers (account, initiative, and program)	7	2	3	4	2	5		1	**24**
Coordinators (project and administrative)				1	1			2	**4**
Advisors and Researchers			1	3		2			**6**
Directors (compliance, managing, operations)				2	1				**3**
Cumulative total positions, by Ward	**23**	**8**	**12**	**27**	**25**	**21**	**15**	**13**	**144**

The District of Columbia Sustainable Energy Utility (DC SEU) helps District households, businesses, and institutions save energy and money through energy efficiency and renewable energy programs. It is committed to community engagement, economic development, job creation, and environmental preservation.

The DC SEU is a project of the Sustainable Energy Partnership under contract to the District Department of the Environment (DDOE).

The Sustainable Energy Partnership consists of a team of seasoned, local collaborative organizations and individuals that collectively brings together national leadership in energy efficiency, renewable energy, program planning and implementation, and local community networks.

- Vermont Energy Investment Corporation (VEIC)
  Partnership Lead
- George L. Nichols & Associates
- Groundswell
- Institute for Market Transformation
- L. S. Caldwell and Associates, Inc.
- PEER Consultants
- PES Group
- Skyline Innovations
- Taurus Development Group

The FY 2012 data presented in this report are based on the DC SEU'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 the Environment.

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Government of the District of Columbia
Vincent C. Gray, Mayor

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