

January 4, 2018

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

**RE: Annual Report of the Sustainable Energy Utility Advisory Board**

Dear Chairman Mendelson:

Pursuant to Section 204(g) of the Clean and Affordable Energy Act of 2008 (CAEA), D.C. Law 17-250, I hereby transmit the Sustainable Energy Utility Advisory Board's (Board) Annual Report (Report) on behalf of the Board. This Report provides the Board's assessment of the DC Sustainable Energy Utility's (DC SEU) performance in FY 2016, and offers recommendations to the Department of Energy & Environment (DOEE) and the Council of the District of Columbia (Council). This Report was approved by the Board. It is the Board's understanding that DOEE will make this Report available to the public on its website within 10 days of its submission to the Council, as required by the CAEA.

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

Sincerely,



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Chair, SEU Advisory Board  
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cc: Nyasha Smith, Secretary of the Council  
Councilmember Mary Cheh, Chairperson, Committee on the Environment, Public Works and Transportation

## I. EXECUTIVE SUMMARY –

The District of Columbia Sustainable Energy Utility (“DC SEU”) was created in 2008, in part because of concern that:

. . . energy users interested in improving energy efficiency, lowering their energy bills, and using renewable energy are faced with a fragmented array of equipment distributors, consulting firms, contractors, and energy services companies. They often have little access to financing for sustainable energy choices, and must navigate complex, bureaucratic labyrinths to secure funds. Because of the complexity of these conditions, more traditional approaches for supplying sustainable energy services can in practice discourage prospective participants. These trends have given rise to the concept of the *sustainable energy utility*, which was first established through legislation by the State of Delaware in 2007.<sup>1</sup>

In response, the Council of the District of Columbia (“Council”) determined that it would privatize the provision of technical and financial assistance to District residents and businesses to aid them in, *inter alia*, reducing their energy consumption and increasing their energy efficiency, chiefly, by basing a private contractor’s remuneration on its performance, measured by its achievement of a set of “benchmarks.”

The DC SEU Advisory Board provides advice, comments and recommendations to the District’s Department of Energy and the Environment (“DOEE”) and the Council<sup>2</sup> regarding the procurement and administration of the DC SEU contract; advises the DOEE on the performance of the DC SEU under the DC SEU contract; and monitors the performance of the DC SEU under the DC SEU contract. Board members include the Mayor’s appointee, who serves as Chair; representatives from Pepco and Washington Gas, the People’s Counsel (OPC) and the Chair of the Public Service Commission (“PSC”), or their respective designees; representatives of the Chairman of the Council committee with oversight of DOEE and the Chairman of the Council;

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<sup>1</sup> “The Sustainable Energy Utility (SEU) Model for Energy Service Delivery,” Jason Houck and Wilson Rickerson, *Bulletin of Science and Technology Society* 2009; 29; 95 (emphasis theirs), <http://bst.sagepub.com/cgi/content/abstract/29/2/95>.

<sup>2</sup> See D.C. Code § 8-1774.03(a). See also Article 1, Section 1.2. of the Board’s Bylaws.

and Mayoral appointees who represent the renewable energy industry, an environmental group, the low-income community, the building construction industry, the building management industry, and the economic development community who has particular expertise in the generation of green-collar jobs.<sup>3</sup>

Currently, the DC SEU's enabling legislation requires that the DC SEU contract provide minimum performance benchmarks for (A) reduced energy consumption in the District; (B) increased renewable energy generating capacity in the District; (C) increased energy efficiency and renewable energy generating capacity of low-income housing, shelters, clinics, or other buildings serving low-income residents in the District; and (D) increasing the number of green-collar jobs in the District. Two objectives contained in the original law ((1) reducing the growth of peak electricity demand in the District, and (2) reducing the growth of the energy demand of the District's largest energy users) were eliminated as numeric performance benchmarks, but remain as "tracking" goals and have reporting requirements. *Compare* the Clean and Affordable Energy Act (CAEA) (2008), Sec. 201(d)(1) – (6), and D.C. Code § 8-1774.01(d)(1)(A) – (D), (2).

The annual Evaluation, Measurement, and Verification (EM&V) Report<sup>4</sup> indicates that the DC SEU's performance in FY 2016 was satisfactory. Specifically, the Report's author (Tetra Tech) found that the DC SEU met or exceeded all of its minimum performance targets, and in one out of four instances, met or exceeded its maximum performance targets,<sup>5</sup> entitling it to receive \$590,000 out of the total \$680,000 of incentive payments contemplated in the contract for meeting or exceeding the performance benchmarks. As shown on page 24 of the EM&V Report, in 2016, the DC SEU: (1a) achieved 72% of its maximum performance target for reductions in electricity

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<sup>3</sup> See D.C. Code § 8-1774.03(b).

<sup>4</sup> "Evaluation of the District of Columbia Sustainable Energy Utility: FY 2016 Annual Evaluation Report for the Performance Benchmarks (Final Draft)," Tetra Tech, June 28, 2017.

<sup>5</sup> *Id.*, p. xii.

consumption and (1b) 37% of its maximum performance target for reductions in natural gas consumption; (2) 90% of its maximum performance target for increasing renewable energy generating capacity; (3) 98% of its maximum performance target for improving the energy efficiency of low-income housing and other buildings; and (4) 119% of its maximum performance target for increasing the number of green-collar jobs in the District. The annual financial and compliance audit done on the DC SEU<sup>6</sup> verified the financial statements of the DC SEU, commenting only on minor paperwork infractions, also suggesting that nothing is amiss.<sup>7</sup>

The Board is aware that the DC SEU's performance has been in the media and has received favorable and in some cases critical review.<sup>8</sup> The Board recognizes that this is a very technical and complicated subject matter and believes the some of the articles largely reflected a misunderstanding of the purpose of the DC SEU.<sup>9</sup>

Regardless, the Board has independently questioned why the DC SEU is not hitting all its maximum benchmarks, and recommended that the DC SEU's reporting on its own performance

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<sup>6</sup> "Report of Results of the Financial and Compliance Audit of the District of Columbia Sustainable Energy Utility for the Year Ended September 30, 2016," F.S. Taylor & Associates, P.C.

<sup>7</sup> That report found that in two instances, documentation related to income eligibility under the Affordable Solar program had not been provided. *Id.*, p. 1. Those omissions were reportedly, subsequently, corrected.

<sup>8</sup> See the Loose Lips articles in the CityPaper, September 7, 2017, "D.C.'s Sustainable Energy Utility Misleads and Falls Short on Solar,"

[http://www.bing.com/cr?IG=1D4B287B37E7459784790A3D97207A49&CID=3CAC8E7D195666422882856B18506737&rd=1&h=niIf\\_gcywTLRwUF3OA2mzpPxZP8r-](http://www.bing.com/cr?IG=1D4B287B37E7459784790A3D97207A49&CID=3CAC8E7D195666422882856B18506737&rd=1&h=niIf_gcywTLRwUF3OA2mzpPxZP8r-)

[uOt1\\_iVvQonGuM&v=1&r=http%3a%2f%2fwww.washingtoncitypaper.com%2fnews%2floose-lips%2farticle%2f20974797%2fdcs-sustainable-energy-utility-misleads-and-falls-short-on-solar&p=DevEx,5105.1;](http://www.bing.com/cr?IG=1D4B287B37E7459784790A3D97207A49&CID=3CAC8E7D195666422882856B18506737&rd=1&h=kj7N4CvdWyltl1vrP0QMp-zOGzDn1F233JH00Qkbcyw&v=1&r=http%3a%2f%2fwww.washingtoncitypaper.com%2fnews%2floose-lips%2farticle%2f20974797%2fdcs-sustainable-energy-utility-misleads-and-falls-short-on-solar&p=DevEx,5105.1;)

and April 13, 2017, "Politically Connected Company Gets \$100 Million Energy Contract,"

<http://www.bing.com/cr?IG=1D4B287B37E7459784790A3D97207A49&CID=3CAC8E7D195666422882856B18506737&rd=1&h=kj7N4CvdWyltl1vrP0QMp-zOGzDn1F233JH00Qkbcyw&v=1&r=http%3a%2f%2fwww.washingtoncitypaper.com%2fnews%2floose-lips%2farticle%2f20858083%2fpolitically-connected-company-gets-100-million-energy-contract&p=DevEx,5162.1>

See also, a May 24, 2016 case study of DC SEU contributions recognized by Northeast Energy Efficiency Partnerships, <http://www.neep.org/case-study/us-office-personnel-management-opm>.

<sup>9</sup> For example, the CityPaper column assigned to the DC SEU responsibility for the District's achieving its goal of 50% renewable energy target by 2032. However, responsibility for achieving the 50% goal for renewable energy by 2032 lies with retail suppliers who are licensed by the DC Public Service Commission (who must supply a portion of their energy mix from renewable energy sources, or pay a fee if they miss the mark), not with the DC SEU. See D.C. Code § 34-1431.

distinguish between whether it has met or exceeded minimum or maximum performance benchmarks.<sup>10</sup> Specifically, in FY 2016, the DC SEU did not meet or exceed the maximum benchmark target of a 0.85% reduction in energy consumption in the District; rather, it achieved 72% of the target for reductions in electricity consumption, and only 39% of the target for reductions in natural gas consumption.<sup>11</sup>

In sum, the Board believes that generally, the DC SEU's FY 2016 performance shows movement in the right direction. The Board also believes that while the DC SEU is presently achieving all its "minimum" benchmarks,<sup>12</sup> achieving the minimum benchmarks may not be enough to advance the District's objectives. Thus, the Board is committing to determining what precludes the DC SEU from achieving all its maximum benchmarks, and to continuing to make recommendations to ensure that the DC SEU's potential is optimized. To that end, the Board has requested information with regard to both the DC SEU's spending and its performance; and commits to identifying which of several possible factors are in fact serving as barriers to greater progress by the DC SEU, including factors which may be external to the DC SEU (such as a lack of coordination among District agencies with overlapping responsibilities for energy savings, or the Council's transfers of Sustainable Energy Trust Fund ("SETF") monies otherwise available for DC SEU programs).<sup>13</sup>

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<sup>10</sup> Sustainable Energy Utility Advisory Board, FY 2015 Annual Report, September 2016, Available online in this link: <https://doee.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/FY%202015%20SEUAB%20Annual%20Report.pdf>

<sup>11</sup> See SEU FY16 annual report, p. 37, [https://doee.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/DCSEU%20FY16\\_Annual\\_Report\\_FIN\\_AL.pdf](https://doee.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/DCSEU%20FY16_Annual_Report_FIN_AL.pdf).

<sup>12</sup> Note that the original language in the CAEA on the performance benchmarks was amended by § 6062(b) of the Fiscal Year 2015 Budget Support Act of 2014. Compare CAEA (2008), Sec. 201(d)(1) – (6) (which provides that "the contract shall provide that the SEU shall, at a minimum, achieve the following . . ."), and D.C. Code § 8-1774.01(d)(1)(A) – (D), (2) (which states: "Provide minimum performance benchmarks consistent with the purposes of this chapter"). The change was not explained in BSA Report language.

<sup>13</sup> To the extent an issue associated with the DC SEU's performance involves the adequacy of funding, the Board notes that in a June 20, 2016 report, the District of Columbia Auditor found that "a net total of approximately \$24.1

## **II. THE BOARD'S INPUT INTO THE NEW DC SEU CONTRACT**

### **a. Background**

As described further below, a significant portion of the Board's 2016 activities focused on contributing to the DOEE Request for Proposal that would form the basis of the next DC SEU contract, whose purpose was to capture the Council's direction that the contract be multi-year, rather than annual.

The original contract consisted of a base year ending September 30, 2011, that was renewable annually thereafter for up to six option years, and benchmarks, the achievement of which were determined on an annual basis. The contract was also comprised of both at-risk and non-at-risk compensation. Because the contract was a performance contract, the at-risk compensation was paid only upon achievement of the benchmarks. Further, penalties could be imposed for failure to achieve the benchmarks.

The original contract benchmarks specified a goal that had to be achieved for each performance benchmark, but permitted the DC SEU to begin earning an incentive when it achieved a certain percentage (i.e., it achieved X percent of 1% reduction; X equaled 50% for the gas and electric savings benchmarks) of the goal. The original contract benchmarks' minimum requirements to start earning incentives were modified by DOEE and the DC SEU through Contract Modifications (specifically, #s 3 and #7).<sup>14</sup> Thus, new minimum amount of progress towards achieving the

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million has been transferred from the SETF to the General Fund . . . since 2009 contrary to the stated intent of the 2008 law." . . . [S]ince the inception of the energy trust funds, the Council has authorized transfers of funds in and out of SETF and [Energy Assistance Trust Fund, "EATF"]. The Auditor further noted: "While the fund transfers were approved during the annual budget process, it should be noted as mentioned by the PSC, the funds in the SETF and EATF were not tax dollars but surcharges added to the monthly bills and collected from District utility consumers for the specific purpose of funding clean and affordable energy initiatives." The Board notes that the total net transfer since inception amounts to more than one year's operating expenses out of the SETF.

<sup>14</sup> The Board notes that it was not involved in these contract modifications, and has requested that it be apprised of all future modifications, at a minimum, that pertain to performance benchmarks.

benchmark required to begin earning an incentive was lower than in the original contract, including 22.5% for gas; achievement of the maximum benchmark (i.e., making it a greater percent of the way towards achieving the target), would still prompt a larger reward.

In 2013, the Council amended the CAEA to require that upon the expiration of the initial DC SEU contract, including any option years, subsequent DC SEU contractors would be required to be multi-year contracts of not less than 4 years, with a minimum 2-year option period. CAEA, § 202(a), D.C. Code § 8-1774.02(a), as amended by § 6062(b) of the Fiscal Year 2015 Budget Support Act of 2014 (“BSA”). The Board was a major contributor to the dialogue that led to the Council’s converting the contract from an annual contract to a multi-year contract.<sup>15</sup>

Because the base year contract (created in 2011) did not conform to the new legislation, DOEE determined that it would create a new, five-year contract period. Notably, although the BSA did not specify any changes to the benchmarks, the Board and others recommended inclusion of multi-year benchmarks in the now multi-year contract, for reasons including that the use of multi-year benchmarks:

- a. Would mitigate the “hockey stick” phenomenon, pursuant to which the DC SEU’s spending is relatively flat for the bulk of the year, with a significant uptick in the last few months of the fiscal year, due to the length of time necessary to advertise, finalize, etc., contracts. Multi-year targets were thought to permit the contractors and subcontractors to better plan for longer-term work, and with the reasonable expectation that their work with the DC SEU would be continuous;
- b. Were also thought preferable, as the annual nature of the incentives and at-risk compensation mechanism encouraged fast development, and so may not have allowed for

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<sup>15</sup> See the Board’s FY 2015 Annual Report, p. 3.

development of projects with better energy-efficiency gains over the lifetime of the project;<sup>16</sup>

- c. Would aid in engaging commercial customers who generally have an interest in developing larger projects, which projects generally span longer than one contract year because the development cycles require long-term planning, complex materials and equipment specification, and financing;<sup>17</sup>
- d. Would allow for leveraging of additional funding and acquisition of capital in quantities sufficient to cover program funding or project financing that requires long-term contract horizons; and
- e. Would permit long-term planning and establishment of aggressive goals.

DOEE retained a consultant, BDA Global, to provide assistance in evaluating the effectiveness of the benchmarks, in light of the conversion of the contract into a multi-million dollar, multi-year contract. BDA, in turn, devised its report based in substantial part on input from 5 long-term members of the Board, as well as with two interviews with staff from the DC SEU and VEIC and staff from Tetra Tech (the contractor which performed the then most recent EM&V reporting of the DC SEU, and its own literature searches. BDA pp. 11, 12. BDA also made its recommendations based upon its comparison with Maryland's EmPOWER program (in which PEPCO is also a participant); the Delaware SEU program, and Cincinnati. *See* BDA, pp. 13 – 14.<sup>18</sup>

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<sup>16</sup> BDA Global (“BDA”), *Performance Benchmark Assessment and Recommendations Report, A Review of the DCSEU's Performance Benchmarks*, September 30, 2015

<sup>17</sup> DC SEU, FY 2017 - FY 2021 Strategic Plan, August 3, 2017, p 4.

<sup>18</sup> The Board has noted that it is difficult to make apples to apples comparisons, given differences in population size, and commercial v. residential v. agricultural mix, and differences between the programs (for example, the Maryland EmPOWER program focuses only on two main objectives (as compared with the DC SEU's 6), and is implemented by Maryland's utilities, under the MPSC oversight; and the Greater Cincinnati Energy Alliance, which is comprised of multiple local governments in the greater Cincinnati area, gives no emphasis to low-income homes within the scope of the Energy Alliance.



BDA also recommended changes to the current compensation and penalty structure; and adoption of the societal cost test, pursuant to which programs are evaluated based upon their potential to deliver societal benefits.

The Board reviewed the BDA evaluation, adopted some of the BDA recommendations, and made additional recommendations. The new contract reflects all of these.

#### **b. The New Contract Benchmarks**

The new contract consists of a 5-year Base Period (FY17 – FY21), and a 5-year Option Period (FY22 - FY26); and allows for a total payment of \$15 million in FY 2017, and \$20 million in FYs 2018 - 2021 per year from the SETF (or \$95 million over 5 years), with \$ 5 million over five years withheld for at-risk performance; 4% of reimbursed costs for a Fixed Fee; and penalty provisions for non-performance. The performance targets and incentives are cumulative such that any incentives not earned in a given year may still be earned in the following year if the DC SEU achieves the minimum benchmark performance targets for a given fiscal year,<sup>19</sup> except that performance incentives for the green jobs and low-income benchmarks are awarded annually (Contract, B.7.3) as follows:

##### **1. Reduction of electricity consumption by 5 percent in 5 years; reduction of natural gas consumption by 3 percent in 5 years.**

The original contract set as a goal a reduction in per capita energy consumption by 1%, later amended to 0.85% per year, from a baseline of 2009 levels. The new contract eliminates the “per capita” requirement, because it is difficult to obtain accurate population data, given the large numbers of visitors and transient works (i.e., the people who work in the District but live elsewhere).<sup>20</sup>

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<sup>19</sup> In the 2016 contract, the contractor receives 25% of at-risk funding if it meets 50% of the total target. For each additional 25% of the target met, the contractor receives an additional 25% of the allocated funds.

<sup>20</sup> BDA ES, pp. 1, 17.

## **2. Increase renewable energy generation (5 MW in 5 years).**

Benchmark Two was designed as a cost reduction benchmark for renewable energy installations, requiring “cost-effective” renewable energy capacity.<sup>21</sup> The new contract removes “cost-effective” from the benchmark definition. The “cost-effective” requirement was deemed to hold the DC SEU accountable for reducing the cost of renewables, although BDA and others agreed that the cost is in fact determined primarily by much larger state, federal and global markets, such as the federal investment tax credit for solar development. The “cost-effective” requirement also impeded the ability of the DC SEU to increase renewable energy generation by low-income populations, which have a low ability to pay. BDA, p. 21. That said, the removal of the “cost-effective” requirement did not mean that the Board intended to give the DC SEU a blank check to spend, or otherwise reduce its review and assessment of the DC SEU’s expenditures in a meaningful way, but rather that the effectiveness of the expenditures would be determined through different means, such as a capacity benchmark. Previously, the DC SEU was tasked with reducing costs by 10% per year, but the benchmark did not dictate that amount of renewable energy capacity that had to be installed for those expenditures. The new contract now sets instead a minimum target of installing 4 MW over the 5 years, and a maximum target of 5 MW.

## **3. Improve energy efficiency and renewable energy generation of buildings that house and serve low-income District residents (20 percent of spending, 10 percent of savings).**

The prior contract (“increase energy efficiency or increase the renewable energy generating capacity of low-income housing, shelters, clinics, or other buildings serving low-income

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<sup>21</sup> A minimum target of a 10% decrease in dollars per Kilowatt Hour (kWh) year-over-year was set. If this minimum target is met, the contractor receives 50% of total allocated at-risk compensation. For each additional 5% decrease, the contractor receives 25% of the allocation. Total spend for this benchmark is capped at 10% of total at-risk compensation. In FY 2014, the Contractor missed the minimum target by 204%. BDA, p. 9.

residents”) initially focused on residences, which meant that achievement of the benchmark did not reflect gains that could occur elsewhere (such as in shelters or clinics).

Additionally, the prior contract provided for an award, or an incentive payment for achievement of a spending target, specifically, spending a minimum of 30% of SETF funds on low-income housing. Out of concern that rewarding “spending” could encourage expensive, though not necessarily high-yield, projects in which high-cost, low-ROI projects would be favored over a low-cost, high ROI opportunity, BDA p. 21, citing Jerome Paige, 2013, the new contract converts the benchmark into one where meeting the spend goal is a pre-requisite for obtaining any at-risk compensation. Thus, the present contract requires as a maximum target that at least 20% of annual SETF dollars be spent on energy efficiency and renewable energy projects in the low-income sector, and 10% of overall energy savings must be attributable to low-income projects. The minimum target requires a 20% spend, and 5% of total savings attributable to low-income projects.

#### **4. Increase green collar jobs in the District (88 FTEs per year)**

Under the original contract, the DC SEU would receive 50% of the risk compensation allocated to green jobs if it hit 80% of the performance target. Thus, the change to a requirement to create 88 jobs, or spend \$200,000 in incentives to count as a green job, was intended to incentivize generation of a number of green jobs, rather than reward money spent on trying to produce such jobs.

#### **5. Report on reduction in growth of peak demand**

This benchmark had already been converted from a performance target to a tracking goal, due to the expectation that reductions in peak demand will occur, for example, as a result of the energy savings achieved from the DC SEU’s energy efficiency programs and also because the law was

amended to make peak demand a tracking goal. Thus, consistent with current law, this benchmark requires that the DC SEU track the reduction in the growth of peak electricity demand attributable to DC SEU programs. Contract C.39.1.5; D.C. Code § 8-1774.01(d)(2).

#### **6. Report on growth of energy demand of largest users**

This benchmark was also converted, by law, from a numeric target to a tracking and reporting requirement.

#### **C. Additional Contract Requirements**

In addition to Benchmark changes, the Board recommended inclusion of additional provisions in the new contract, many of which were included.

For example, the Board recommended that a benchmark be created that encourages the DC SEU to devise new methods for generating revenue for clean energy efforts, such as RGGI, DC PACE or the PJM Capacity Market. This recommendation was included, and materialized as a cumulative, \$5 million leveraging goal to be achieved by the end of FY 2021. The performance incentive is 5 percent of the performance incentive pool, or \$250,000, with penalties capped at \$250,000.

The Board also recommended that the DC SEU develop and implement a 5-year Strategic Plan, in particular, to harmonize the DC SEU's goals with those of Clean Energy DC Plan goal of 50% GHG reductions (from 2006 levels) by 2032. This recommendation became a contract deliverable.

#### **D. Board's Recommendations re Future Contract Terms**

- The Board is mindful of the connection between the pace with which the DC SEU is achieving its objectives, and the manner of its spend (*i.e.*, the proportion of spend on administrative costs). To that end, the Board notes that the current contract caps administrative costs at 20 percent throughout the five years. Additional measures that

the Board is instituting to review spending are in progress, but are beyond the scope of this Annual Report.

- As was noted above, contract benchmark requirements were modified via contract modifications negotiated between DOEE and the DC SEU. The Board has requested that it be apprised of any such discussions.
- The CAEA was modified so as to permit the Board to submit its Annual Report after completion of independent third party annual EM&V Report. With regard to the EM&V Report itself, the Board recommends that the methods used be examined, and understands that the time for its input into this discussion is right now. The Board questions whether the metrics presently used are meaningful (*e.g.*, realization rates; and acquisition costs), in light of the many alternative models that are available. The goal of the evaluation should be to determine whether the program is meeting its goals, not whether it is simply “performing” as required by contract.
- As the purpose of having a 5-year contract is to enable improvements in programmatic focus and financial sustainability of the DC SEU, the Board questions whether the audit should also provide greater insights into the interaction between the two. The Board will explore whether that examination should occur in the context of the new EM&V contract, or a revised approach to the audit.

### **III. THE BOARD’S ACTIVITIES IN FY 2016**

The Board formally met 10 times in 2016: in closed executive sessions (to discuss input into the draft Request for Proposals (RFP)), conference calls, and open Board meetings.

### **IV. Board Review of DC SEU Accomplishments in FY 2016; Recommendations for 2017 & Beyond**

#### **A. DC SEU 2016 Performance**

##### **1. Low Income Programs**

#### **Low Income Program - Summary of Tetra Tech Results**

Tetra Tech claims to have verified that the DC SEU achieved 98% of its maximum target. The DC SEU should be commended for achieving these results, which impact our low-income residents and reduce their energy usage and associated costs; however, the evaluator did not conduct a desk review of the project files to either verify the income qualifications or the spending

claims. “For the FY2016 evaluation, no project-level documents were sampled to verify the income-eligibility requirements. As a result, the evaluation team utilized the FY2015 analysis to inform an adjustment of the reported FY2016 low-income spending,” as stated by Tetra Tech. Instead, Tetra Tech used a proxy factor, as determined by the FY2015 EM&V of the programs, and multiplied it by the FY2016 Reported Direct Spend, as given to them by DC SEU in spreadsheet format. The evaluation of this program is straightforward: review and verify program spend to ensure benchmark was met or exceeded. Energy savings from low income programs is not reported by the DC SEU, as it was not included as a benchmark by the DOEE, thus it is not verified. To properly evaluate the effectiveness of this program, a review of project documents should be conducted to verify project and program expenditures. Additionally, the DC SEU should still track energy savings in order to measure the true impact of the program against regional and national benchmarks.

### **Benchmark Achievement**

The low-income benchmark dictates the DC SEU spend a minimum of 30 percent of SETF funding on improving the energy efficiency of low income housing. The intent of this provision in the law is to meet the immediate energy needs of low income residents, the most vulnerable of DC residents, which include the elderly, the disabled and households with young children. The 2016 Minimum Performance Target was \$3,520,000 and the Maximum Performance Target was \$5,280,000. The DC SEU reported a Low-Income Housing Program spend of \$5,243,647 and Tetra Tech verified results were \$5,187,757. Based on the verified results, the DC SEU achieved 147% of the Minimum Performance Target and 98% of the Maximum Performance Target.

Tetra Tech evaluated the spending for the Low-Income Program by reviewing the summary-level financial document provided by the DC SEU. This document included a breakdown of the program costs, administrative costs and incentive dollars. In addition, Tetra Tech reviewed the program tracking database to verify that the low-income projects were classified correctly.

### **Market Transformation**

Market transformation for low income programs can only truly be assessed by evaluating program success on (estimated and verified) energy savings and associated bill impacts. Without this evaluation, it is not possible to determine if the FY2016 performance of the DC SEU low income programs transformed the market.

### **Recommendations**

Upon review of the FY2016 Annual Evaluation Report for the Performance Benchmarks for the DC SEU, the DC SEU Advisory Board makes the following recommendations for the DC SEU:

- Prioritize low income resident participation numbers, as against renewables and commercial projects, within the spending benchmark. Focusing on energy efficiency for low income housing increases the number of low income residents who will benefit from the DC SEU funding.

For Tetra Tech (or EM&V vendor selected):

- Conduct a desk review and interviews of all low-income projects to verify spend and energy savings. This modified impact analysis should verify that spending is as reported, and energy savings are in line with the cost effectiveness assessment in program design. This includes both measure and overall program cost effectiveness.
- Provide a more detailed review of the program impact, including a discussion of individual program measures installed, challenges, DC SEU and subcontractor

interviews, verification of measure installation at a percentage of overall projects that is in line with industry standard.

- Conduct a process evaluation on how the DC SEU tracks low income program costs and a review of the program management.
- Evaluate whether there is any spillover, programmatic overlap or benchmark double counting of spend, energy efficiency savings or renewable energy generation.

## 2. Green Jobs

The DC SEU's Green-Collar Jobs contract performance benchmark target calls for the DC SEU to create a specific number of Green Jobs annually. The target and the metric for measuring the target is described in the FY2015 contract modification as follows:

“The SEU shall ensure that...at least 88 green jobs [are created] in Year 4. The following criteria will be used in the calculations of what constitutes a green job for the purposes of this benchmark: A green job or green-collar job is 1 Full Time Equivalent (FTE) job held by a District resident who is paid at least a living wage<sup>22</sup> or a factor of \$200,000 of SEU direct cash incentives to end-use customers and/or manufacturers. No distinction is required for new versus retained jobs.

1 FTE = 1,950 work-hours and is applied to hours reported by the SEU and its subcontractors. SEU direct cash incentives to end-use customers and for upstream/midstream cash incentives to manufacturers to buy down the cost of energy efficiency measures will be used to estimate the number of green jobs created through DC SEU incentive programs.

Only direct jobs are to be used in the green jobs calculation. Indirect (primarily suppliers to SEU contractors or subcontractors) and induced jobs (derived from a multiplier effect) are not counted.”<sup>23, 24</sup>

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<sup>22</sup> The Living Wage Act of 2006 is Title I of the “Way to Work Amendment Act of 2006”, D.C. Law 16-118 (D.C. Official Code §2-220.01 to .11), which became effective June 8, 2006. See the following cite for details: <http://www.does.dc.gov/does/cwp/view,a,1233,q,636800,doesNav,%7C32064%7C.asp>.

<sup>23</sup> 48 For a more complete definition of indirect and induced jobs, see Executive Office of the President, Council of Economic Advisors, Estimates of Job Creation from the American Recovery and Reinvestment Act of 2009, May 2009, p. 6.

<sup>24</sup> Contract Number DDOE-2010-SEU-0001, Amendment /Modification No. M07.



“The Contractor shall receive 60% of the compensation at risk allocated for this benchmark in Table 1 for creating 60% of the number of green jobs.”<sup>25</sup>

The calculation (88 green jobs \* 0.60) results in a minimum target of 53 green jobs for FY2015. No additional contract changes were made in FY2016 to the green jobs performance benchmark.

Table 7-1 highlights the FY2016 Green Jobs Benchmarks, and the verified results against those initiative goals. The FY2016 verified green jobs total of 104.5 jobs exceeds the Maximum Performance Target of 88 for the Green Jobs Performance Benchmark. This total was arrived at by combining the 62 DOEE-verified FTE green jobs (that earned a living wage) and 42.5 green job equivalents based on direct cash incentives (1 FTE for every \$200,000 of the DC SEU direct cash incentives to end-use customers or manufacturers).<sup>26</sup>

**Table 7-1. Green-Collar Jobs Summary—FY2016**

Metric	Minimum Performance Benchmark	Maximum Performance Benchmark	Reported*	Total Verified Green Job FTEs & Equivalents	DOEE Verified Green Job FTEs**	Direct Cash Incentive Jobs***	Minimum Benchmark Achieved	Maximum Performance Benchmark Achieved
Increase the number of green-collar jobs (FTE or equivalent)	53	88	88	104.50	62	42.50	Yes (197%)	Yes (119%)

Evaluation of this benchmark in FY2016 involved two distinct approaches. First, DOEE conducted a detailed audit and review of the DC SEU reporting for this benchmark. DOEE appraised the DC SEU payroll hours and DC SEU subcontractor payroll hours for FY 2016, and

<sup>25</sup> 50 Contract Number DDOE-2010-SEU-0001, Amendment /Modification No. M07.

<sup>26</sup> 51 Source: FY2016 incentives paid amount of \$8,495,152 was obtained from the file provided by the DC SEU entitled "DC SEU FY16' Gas Electric Split.

arrived at total of 91,137.75 DC SEU applicable hours and a total of 29,768 subcontractor applicable hours which totaled 120,905.75 hours for jobs held by a District resident who was paid at least a living wage. This number was then converted to FTE using the conversion factor of 1,950 work-hours to 1 FTE. This year, DOEE verified that the DC SEU provided 62 green jobs for which a District resident was paid a living wage.

Green Job Equivalents was calculated using: a) the DC SEU direct cash incentives to end-use customers, and b) upstream and/or midstream cash incentives to buy down the cost of energy efficiency measures in FY2016 to determine an estimated number of additional green jobs created through program activity this program year. In FY2016, the DC SEU provided incentives totaling \$8,495,152. These incentives were converted into Green Job Equivalents using the following calculation:

*Total end-use and manufacturer incentives / \$200,000 = FY2016 Calculated Green Jobs Equivalent*  
*\$8,495,152 / \$200,000 = 42.5 calculated green jobs equivalents*

This benchmark exists to measure jobs directly created for District residents resulting from the DC SEU's implementation of the DC SEU energy efficiency and renewable energy portfolio. This includes jobs held with the DC SEU and those resulting from others in the District performing work directly associated with the DC SEU portfolio. It excludes indirect jobs—those jobs created in support of direct jobs such as suppliers of energy efficiency equipment—and induced jobs, which are those created due to the economic impact of hired workers spending incomes within the District.

It is unclear if these cash incentives were allocated to the same teaming partners and subcontractors that reported distinct jobs created and hours worked and whether or not that

would be conflicting metric measurements. It may be prudent to discuss how these numbers are calculated moving forward or for DOEE to provide clarification on the methodology.

The Performance Benchmark was modified in FY2014 to allow for the inclusion of estimated green job creation based on the “Total dollar amount of DC SEU cash incentives to end-use customers and for upstream/midstream cash incentives to manufacturers to buy down the cost of energy efficient measures.”<sup>27</sup> This additional FTE equivalent was included to account for how incentive payments to District customers, contractors, and manufacturers also contribute to green jobs in the District.

In fiscal year 2016, the DC SEU reached 119 percent of the maximum performance target for this benchmark.

The DC SEU worked with five teaming partners, and thirteen implementation contractors, and two workforce development organizations to meet Benchmark 6. The teaming partners contributed 8,760.4 DC Green Job Hours covering the functional categories of public affairs, engineering, market transformation, and renewables for 28 DC residents in unique green job positions. The implementation contractors contributed 13,8122.3 DC Green Job Hours covering the functional categories of lighting, weatherization, renewables, low-income, gas, and public relations for 60 DC residents in unique green job positions. The workforce development organizations contributed 7,195.25 DC Green Job Hours covering the functional categories of operations and weatherization for 15 DC residents in unique green job positions.

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<sup>27</sup> Contract Number DDOE-2010-SEU-0001, Amendment /Modification No. M07, Article 1.3.6.1.11.

The DC SEU contributed 87,613.75 DC Green Job Hours covering the functional categories of commercial, residential, renewable, and low-income for 44 DC residents in unique green job positions.

In total, the work of the teaming partners, implementation contractors, workforce development organizations, and the DC SEU represents the equivalent of 60.2<sup>28</sup> full time employees for 2016's green-collar jobs, not including the incentives calculation described above.

### **3. Residential Programs**

In fiscal year 2016, the DC SEU surpassed its historical record of delivering services to residential customers through select programs. By way of background, the suite of residential programs that are developed and implemented by the DC SEU are designed to improve the energy efficiency of residences, while inherently reducing energy costs. Data provided by the DC SEU reflects that for the projects completed for residential customers through Home Performance with ENERGY STAR services, savings increased by 70% over fiscal year 2015, which is of note.

The CAEA sets forth minimum requirements for the DC SEU, including a mandate to improve the energy efficiency of low-income housing. Therefore, select programs target some the District's most vulnerable residents. In 2016, the DC SEU invested \$5.6 million in energy efficiency for low-income residents.

In 2016, the DC SEU continued its efforts to educate residents regarding options they should consider for making their homes more energy efficient. These efforts were maximized with the collaboration of 50 participating retailers and manufactures on promotions, events and

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<sup>28</sup> As of September 30, 2016.

marketing. Local retailers continue to be directly instrumental in advancing the sale of discounted LED light bulbs at select locations in the District of Columbia. In 2016, 313,000 efficient products were sold which resulted in \$2.4 million in annual energy savings.

In 2016, the DC SEU increased the number of photovoltaic interconnections when compared to 2015 interconnection data. In 2015, with the support of the DOEE, the District of Columbia Department of Consumer and Regulatory Affairs and Pepco, the DC SEU completed the installation and interconnection of 137 photovoltaic systems for income-qualified residents through the Solar Advantage Program (“SAPP”). This number increased in 2016 to 158 interconnections, although the target was 137 systems by the end of the fiscal year. The funding source for this initiative is the Renewable Energy Development Fund. It has been projected that the 158 solar photovoltaic installations for income-qualified homeowners will result in \$1.2 million in lifetime energy cost savings and \$530 in annual energy cost savings per household. To supplement this important initiative, in 2016, the DC SEU targeted customers that participated in the SAPP for Home Performance with Energy Star services at no cost which will assist these customers realize further energy reduction savings and environmental benefits.

With a new approach, in 2016, the DC SEU offered financial incentives and technical assistance to developers, owners, and property managers who incorporate energy efficiency and renewable energy into their affordable housing projects. In addition, the DC SEU began to qualify shelters and health care clinics as low-income facilities, making them eligible for energy efficiency savings.

#### *Economic Benefits Analysis*

According to the economic benefits analysis conducted by the DC SEU, the lifetime economic benefits realized by residential customers is \$25,874,873 and the first-year annual

energy cost reduction is \$2,401,895. Life time economic benefits are defined as the present value of the avoided cost of energy for the life of each measure installed and include Sustainable Energy Trust Fund (“SETF”) and Renewable Energy Development Fund (“REDF”), funded projects. The 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. This includes SETF and REDF funded projects.

According to the DC SEU Annual report, expenditures in fiscal year 2016 on residential initiatives totaled \$2,516,642 and renewable energy initiatives totaled \$561,871.<sup>29</sup>

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<sup>29</sup> Please note – we are still verifying some of these numbers; if they need to change, we will supplement this report.

**Fiscal Year 2016 DC SEU Residential Count and Savings**

<b>Sector</b>	<b>Initiative</b>	<b>Participants</b>	<b>Total Incentive</b>	<b>Annual Customer Savings</b>	<b>Lifetime Customer Savings</b>
Renewables	Solar PV Market Rate	955	\$ 104,608.00	\$ 26,923.45	\$840,139.52
Renewables	Solar PV REDF	125	\$1,157,659.50	\$ 69,154.57	\$1,988,193.89
Renewables	Commercial Solar PV REDF	12	\$ 371,466.00	\$ 26,941.08	\$695,127.51
Renewables	Solar PV	27	\$ 242,775.00	\$ 15,172.99	\$407,880.16
Renewables	Solar Hot Water	150	\$ 13,500.00	\$ 5,048.63	\$ 87,088.87
Total Renewables		1,269	\$1,890,008.50	\$143,240.72	\$4,018,429.95
Low Income Single Family	Low Income single family	26	\$ 71,327.85	\$ 4,197.90	\$57,294.30
Residential	Home Performance with Energy Star	187	\$ 196,209.24	\$ 17,762.31	\$316,977.96
Low Income Multi Family	Low Income Contractor Direct Install	2,036	\$1,703,723.63	\$181,480.99	\$2,543,715.45
Low Income Multi Family	Low Income Custom Projects	611	\$ 346,622.92	\$ 47,774.01	\$ 789,855.16
Low Income Multi Family	Low Income Custom Projects	1,297	\$ 358,937.00	\$ 352,288.77	\$5,346,491.80
Total Low Income		4,157	\$2,676,820.64	\$603,503.98	\$9,054,334.67
Retail	Appliance Rebates	222	\$ 52,650.00	\$ 46,751.38	\$647,414.50
Retail	Heating/Cooling Rebates	660	\$ 141,287.50	\$ 148,676.97	\$2,658,326.16
Retail	Lighting Rebates	52,104	\$1,036,670.85	\$2,185,231.84	\$18,871,566.50
Total Retail		52,986	\$1,230,608.35	\$2,380,660.19	\$22,177,307.16

Residential Program Descriptions -- In 2016, the DC SEU implemented the following residential programs:

- **Efficient Products-** Provides discounts on CFLs, LEDs and appliances, with partner retailers in the District of Columbia; and rebates for appliances and gas equipment installed by licensed DC contractors.  
*Customer Segment:* All District residents
- **Home Performance with ENERGY STAR-** Rebates for whole-home energy efficiency improvements  
*Customer Segment:* District single-family homeowners
- **Low-Income Direct Services-** Direct installation of household energy efficiency products and improvements  
*Customer Segment:* Income-qualified District homeowners
- **Low-Income Multifamily Comprehensive-** Custom technical and financial assistance for energy efficiency improvements in multifamily properties  
*Customer Segment:* Multifamily building owners serving income-qualified District residents
- **Low-Income Multifamily Direct Services-** Direct installation of CFLs, low-flow faucet aerator and showerheads, hot water tank wrap, and pipe wrap for low-income multifamily properties  
*Customer Segment:* Multifamily building owners serving income-qualified District residents
- **Renewable Energy-** Incentives and financing to install solar PV systems in partnership with the DOEE  
*Customer Segment:* Income-qualified District homeowners
- **Solar Thermal-**Incentives to install solar thermal arrays  
*Customer Segment:* Cooperative housing groups and multifamily building owners serving income-qualified District residents



**District of Columbia Sustainable Energy Utility Performance in FY 2016**

<b>Item</b>	<b>Benchmark</b>	<b>Benchmark Metric Unit</b>	<b>Minimum Performance Target Achieved</b>	<b>Max Performance Target Achieved</b>
1a	Reduce per-capita energy consumption—electricity	MWh	Yes (145%)	No (72%)
1b	Reduce per-capita energy consumption—gas	Mcf	Yes (164%)	No (37%)
2	Increase renewable energy generation capacity	Cost/kWh	Yes (180%)	No (90%)
3*	Reduce growth in peak demand*	kW		
4	Improve energy efficiency in low-income housing	% of annual budget	Yes (147%)	No (98%)
5*	Reduce growth in energy demand of largest users*	# projects completed >200,000 Sq. ft.		
6	Increase number of green-collar jobs	Green job FTEs	Yes (197%)	Yes (119%)

\*Tracking Metric only

**Compensated Performance Benchmark Targets Achieved or Exceeded**

\* Benchmark 1a. *Reduce per-capita energy consumption—electricity (MWh)*. The DC SEU achieved 145 percent of the minimum performance benchmark threshold and achieved 72 percent of the maximum performance target for this benchmark.

\* Benchmark 1b. *Reduce per-capita energy consumption—natural gas (Mcf)*. The DC SEU achieved 164 percent of the minimum performance benchmark threshold and achieved 37 percent of the maximum performance target for this benchmark.

\* Benchmark 2. *Increase renewable energy generating capacity: cost per kWh reduction from prior year (percentage)*. The DC SEU renewable energy cost per kWh decreased by 18 percent

over FY2015 costs, meeting its 10 percent reduction minimum performance benchmark target but falling slightly short of meeting the maximum performance benchmark target of 20 percent.

\* Benchmark 4. *Improve energy efficiency in low-income housing: 30 percent spend (\$)*. The DC SEU exceeded its minimum performance target, achieving 147 percent of the minimum target, and nearly met the maximum target, achieving 98 percent the maximum performance target.

\* Benchmark 6. *Increase number of green-collar jobs: green-job hours directly worked by District residents (FTE)*. The DC SEU reached 119 percent of the maximum performance target for this benchmark.

### **Tracking Goals Achieved or Exceeded**

\* Benchmark 3. *Reduce growth in peak demand (kW)*. Tetra Tech verified 8,917 kW.

\* Benchmark 5. *Reduce growth in energy demand of largest users: number of projects completed with a square footage > 200,000*. Tetra Tech verified 132 unique sites over 200,000 square feet with FY2016 projects.

### **Market Transformation**

Market transformation is a convergence of factors/programs that permanently change how people consume energy in a specific manner (i.e. the movement of CFLS to LEDs in the lighting market).

The DC SEU EM&V report focused on verifying reported aggregate energy savings/costs/number of projects to determine the performance of its portfolio relative to Benchmark targets. Based on this information, it would not be possible to make a determination concerning the extent to which the DC SEU is contributing to market transformation. Market Transformation occurs at a national market level; therefore, it is unlikely that an EM&V report for an individual jurisdiction could provide a metric to help answer this question. To understand the impact on market transformation, one would have to review saturation studies, market penetration, sales data and price data for particular energy-intensive products, which are outside the scope of the EM&V report.

### **Additional Evaluation, Measurement and Verification Comments**

- The DC SEU evaluation report is focused on evaluating programs in the District of Columbia utilizing the societal cost test (SCT). The SCT has more lenient assumptions than the underlying assumptions of the Total Resource Cost Test, the cost benefit test required in Maryland and in most other states. For example, one of the assumptions in the report underlying this Societal Cost analysis was a 2.04% discount rate, while in Maryland; the utility is required to use the Weighted Average Cost of Capital (WACC) which is ~7%. As a result, the assumptions make the \$ benefit to \$ cost ratio of the DC SEU programs much higher than it would be with the more stringent Total Resource Cost assumptions. The calculations or assumptions are not inaccurate; however, they are not conservative.
- This evaluation report appears to use a high realization rate of .94 based on historical rates and seems to apply it in aggregate across programs. This could have an impact has well.
- It is also important to note that each jurisdiction has its own set of directives and methodology; therefore, this must be taken into consideration when comparisons are made.

#### District of Columbia Sustainable Energy Utility Historical Performance

In fiscal year 2015, the DC SEU met all six of its benchmarks by achieving at either the highest level or minimum threshold. The DC SEU exceeded the minimum performance targets for the electric and natural gas savings benchmark for the second time. It is important to note that fiscal year 2014 was the first time that the DC SEU achieved these benchmarks.

The DC SEU fully achieved and exceeded the maximum performance targets for three benchmarks and achieved the minimum performance targets for three performance benchmarks.

In fiscal year 2015, the DC SEU delivered a cost-effective portfolio, based on the findings of the evaluation.

**District of Columbia Sustainable Energy Utility Performance in FY 2015**

<b>Item</b>	<b>Benchmark</b>	<b>Benchmark Metric Unit</b>	<b>Minimum Performance Target Achieved</b>	<b>Max Performance Target Achieved</b>
1a	Reduce per-capita energy consumption—electricity	MWh	Yes (104%)	No (52%)
1b	Reduce per-capita energy consumption—gas	Mcf	Yes (153%)	No (35%)
2	Increase renewable energy generation capacity	Cost/kWh	Yes	No
3	Reduce growth in peak demand*	kW	Yes (398%)	No (40%)
4	Improve energy efficiency in low-income housing	% of annual budget	Yes (158%)	Yes (105%)
5	Reduce growth in energy demand of largest users*	# projects completed >200,000 Sq. ft.	Yes (173%)	Yes (104%)
6	Increase number of green-collar jobs	Green job FTEs	Yes (211%)	Yes (127%)

**Maximum Performance Benchmark targets achieved or exceeded:**

***Improve energy efficiency in low-income housing: 30 percent spend (4).*** The DC SEU reached 105 percent of this maximum performance target for this benchmark.

***Reduce Growth in energy demand of largest users: number of projects completed with a square footage > 200,000.*** The DC SEU reached 104 percent of the maximum performance target for this benchmark.

***Increase number of green-collar jobs:*** green-job hours directly worked by District residents (FTE) or \$200,000 paid in incentives assumed to create the equivalent of one FTE. The DC SEU reached 127 percent of the maximum performance target for this benchmark.

**Minimum Performance Benchmark targets achieved or exceeded:**

***Reduce per-capita energy consumption-electricity (MWh).*** The DC SEU achieved 104 percent of the minimum performance benchmark threshold and achieved 52 percent of the maximum performance target for this benchmark.

***Reduce per-capita energy consumption- natural gas (mcf).*** The DC SEU achieved 153 percent of the minimum performance benchmark threshold and achieved 35 percent of the maximum performance target for this benchmark.

***Increase renewable energy generating capacity.*** Cost per MMBtu reduction from prior year (percentage). The DC SEU cost per MMBtu decreased by 14 percent over FY2014. This was in contrast to FY2014 where the DC SEU costs per MMBtu were found to have increased by 20 percent compared to the prior year, FY 2013.

***Reduce growth in peak demand (kW).*** The DC SEU exceeded the minimum performance target for this benchmark by more than 398 percent.

**FY 2014 Benchmarks (EMV)**

In fiscal year 2014, the DC SEU achieved five of the six benchmarks at either the highest level or minimum threshold. The DC SEU exceeded the minimum benchmark targets for electric and natural gas savings for the first time. In fiscal year 2014, the DC SEU fully achieved and exceeded two performance benchmark targets and achieved the minimum targets for three other performance benchmarks. The DC SEU did not meet the benchmark for reducing the acquisition cost of renewable energy initiatives. However, the DC SEU did have a cost-effective portfolio, based on the independent evaluation.

## **District of Columbia Sustainable Energy Utility Performance in FY 2014**

<b>Item</b>	<b>Benchmark</b>	<b>Benchmark Metric Unit</b>	<b>Minimum Performance Target Achieved</b>	<b>Max Performance Target Achieved</b>
1a	Reduce per-capita energy consumption—electricity	MWh	(115%)	(58%)
1b	Reduce per-capita energy consumption—gas	Mcf	(222%)	(50%)
2	Increase renewable energy generation capacity	Cost/kWh	(0%)	(0%)
3	Reduce growth in peak demand*	kW	(396%)	(40%)
4	Improve energy efficiency in low-income housing	% of annual budget	(175%)	(117%)
5	Reduce growth in energy demand of largest users*	# projects completed >200,000 Sq. ft.	(223%)	(134%)
6	Increase number of green-collar jobs	Green job FTEs	(121%)	(96%)

### **Maximum Performance Benchmark targets achieved or exceeded:**

***Improve energy efficiency in low-income housing: 30 percent spend (\$).*** The DC SEU reached 117 percent of high performance benchmark target.

***Reduce growth in energy demand of largest users: number of projects completed with a square footage >200,000.*** The DC SEU reached 134 percent of this high-performance benchmark target.

### **Minimum Performance Benchmark targets achieved or exceeded:**

***Reduce per-capita energy consumption-electricity (MWh).*** The DC SEU achieved 115 percent of the minimum performance benchmark threshold and achieved 50 percent of the high-performance benchmark target.

***Reduce per-capita energy consumption-natural gas (mcf).*** The DC SEU achieved 222 percent of the minimum performance benchmark threshold and achieved 50 percent of the high-performance benchmark target.

***Reduce growth in peak demand (kW).*** The DC SEU exceeded this minimum benchmark by more than 396 percent.

***Increase number of green-collar jobs: green-job hours directly worked by District resident (FTE).*** DOEE verified that the DC SEU achieved 121 percent of the minimum benchmark threshold and exceeded the 85 percent threshold by achieving 96 percent of the high-performance benchmark.

**Performance Benchmark targets not achieved:**

***Increase renewable energy generating capacity: Cost per MMBtu reduction from prior year (%).*** The DC SEU costs per MMBtu increased by 20 percent compared to the prior year, FY13.

**FY 2013 Benchmarks (EMV)**

The results of the evaluation team verification of the six performance benchmarks found that the DC SEU fully achieved 2 performance benchmarks and exceeded the minimum targets for 2 of the performance benchmarks.

## **District of Columbia Sustainable Energy Utility Performance in FY 2013**

<b>Item</b>	<b>Benchmark</b>	<b>Benchmark Metric Unit</b>	<b>Minimum Performance Target Achieved</b>	<b>Performance Target Achieved</b>
1a	Reduce per-capita energy consumption—electricity	MWh	Yes (100.9%)	No (50.4%)
1b	Reduce per-capita energy consumption—gas	Mcf	No (37.0%)	No (18.5%)
2	Increase renewable energy generation capacity	Cost per MMBtu reduction from FY12	Yes- Exceeded by 730%	Yes-Exceeded by 315%
3	Reduce growth in peak demand*	kW	Yes (400.8%)	No (40.1%)
4	Improve energy efficiency in low-income housing	% of annual budget	Yes (177.1%)	Yes (118.1%)
5	Reduce growth in energy demand of largest users*	N/A	N/A	N/A
6	Increase number of green-collar jobs	Green job FTEs	No (64.5%)	No (51.9%)

### **Performance benchmark targets achieved:**

***Increase renewable energy generating capacity: Cost per MMBtu reduction from FY12.*** The DC SEU reduced the MMBtu acquisition cost from \$2,253 in FY 12 to \$380 in FY13, a reduction of 83 percent.

***Improve energy efficiency in low-income housing: 30 percent spend (4).*** The DC SEU reached 118 percent of this performance benchmark target.

### **Minimum performance benchmark targets achieved:**

***Reduce per-capita energy consumption- electricity (MWh).*** The DC SEU achieved 101 percent of the minimum performance benchmark.

***Reduce growth in peak demand (kW).*** The DC SEU exceeded this minimum benchmark by more than 300 percent.





## **FY 2012 Benchmarks (EMV)**

In 2012, the DC SEU achieved two of the six minimum performance benchmarks. The DC SEU reduced the growth of peak demand in the District of Columbia by achieving a verified kW reduction of 3,216 kW. The DC SEU's expenditures for the low-income programs achieved 32 percent of the total DC SEU expenditure.

### **District of Columbia Sustainable Energy Utility Performance in FY 2012**

<b>Item</b>	<b>Benchmark</b>	<b>Benchmark Metric Unit</b>	<b>Minimum Target Achieved Performance</b>
1a	Reduce per-capita energy consumption—electricity	MWh	No (46.9%)
1b	Reduce per-capita energy consumption—gas	Mcf	No (4.0%)
2	Increase renewable energy generation capacity	Design a cost-effective replacement program to the District's Renewable Energy Incentive Program	Not achieved
3	Reduce growth in peak demand*	kW	Yes (160.8%)
4	Improve energy efficiency in low-income housing	% of annual budget	Yes (32%)
5	Reduce growth in energy demand of largest users*	N/A	Not Achieved
6	Increase number of green-collar jobs	Green job FTEs	

## **4. Commercial & Institutional (C&I) Markets for Energy Efficiency & Renewable Energy**

## **How C&I is Distinct from Residential and LIMF**

The Commercial and Institutional (C&I)<sup>30</sup> market differs from residential and low-income multi-family in more than scale. Because of scale and ownership patterns, the C&I market has been the focus of a great deal of technical innovation in construction (green building and net zero building), cleaner production processes, and a focus on sustainability of operations, from paper waste recycling to the development of nano- and even micro-grids for reliability. The decision to invest in energy efficiency, and the financial tools for doing so, are market-specific. The DC SEU recognized this distinction early with its attempts to develop and deploy custom advisory and installation services. Contractual parameters that had not taken the time needed to develop, and especially credit, relationship building and long-term projects, initially hampered the DC SEU's ability to compete in the C&I. Contract terms were revised, and the 5-Year Strategic Plan shows the DC SEU's approach to the C&I markets under the new contract. Also, it should be noted that Washington, DC is a national leader in green building, which makes the large end of the C&I market more aware of the benefits of energy efficiency.

## **Summary Performance History and Case Study Findings**

Program expectations, options and performance benchmarks for the C&I "sector" have evolved steadily. This evolution reflects the DC SEU's increasingly sophisticated understanding of the non-residential users of energy, and testing of service lines to serve this very varied market. While it is not possible, to easily visualize market transformation *attributable to the D C SEU*, however one can see how the mix of services and customers has evolved from FY2014-FY 2016.

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<sup>30</sup> In reading the wider literature on energy efficiency, it is useful to recall that in larger jurisdictions with agriculture, fishing, mining and manufacturing operations, that is, most of the country, C&I often stands for commercial and industrial.

The DC SEU’s Strategic Plan prepared to guide operations under the new contract, contains a very promising set of strategies and actions in the C&I market.<sup>31</sup>

In **FY 2014**, the goal for the C&I market was to reduce growth in energy demand of the largest users; the benchmark for the C&I market was defined as a target number of projects completed in buildings of 200,000 sq. ft. or larger. The DC SEU’s efforts to understand and meet the needs of this market consisted of a survey conducted late in the year. The EM&V report stated there were deficiencies in the documentation of survey results, and the proxy for future years was revised to 50,000 sq. ft. to be able to serve small and medium enterprises. At least some work was performed on at least 67 buildings, which meant that the DC SEU exceeded both its minimum and maximum performance targets for this market segment in FY2014.

The **FY 2015** EM&V study reported on 16 programs meant to result in gross savings at the meter level; five of these programs were aimed at the C&I market:

Program Description	kWh ex-ante Gross	Kwh ex-post Gross	RR	kW ex-ante Gross	kW ex-post gross	RR	MMBtu ex-ante gross	MMBtu ex-post gross	Realization Rate
Business Energy Rebates	8,594,703	8,299,391	<b>0.97</b>	771	1,152	<b>1.5</b>	-3,292	-2,910	<b>0.88</b>
T12 Market Transformation Value	3,587,788	3,301,235	<b>0.92</b>	582	687	<b>1.18</b>	-2,196	2,106	<b>0.96</b>
Custom Services, Large C&I customers	14,837,521	12,732,804	<b>0.86</b>	1,883	2,157	<b>1.15</b>	60,134	67,790	<b>1.13</b>
Custom Market opportunity	1,978,521	1,818,074	<b>0.92</b>	347	260	<b>0.75</b>	14,474	14,116	<b>0.98</b>
Custom New Construction	229,937	226,849	<b>0.99</b>	38	36	<b>0.92</b>	937	879	<b>0.94</b>

\*RR=realization rate

<sup>31</sup> Note that the new contract was not signed until April 2017, and the Strategic Plan was submitted in June. The “FY 2017” evaluation report should reflect this reality.

In the case of larger buildings, it is easier to influence new construction than to effect change within established energy users, and there are many players in the energy efficiency markets, i.e. competitors to the DC SEU, known on the national stage and therefore known to large tenants and building owners. Nonetheless, the DC SEU has had considerable success in lighting changeovers in some very large users.

The Business Energy Rebates (BER) and T12 Market Transformation offerings were made to small and medium enterprises using less than 5,000 kwh/month, or occupying less than 10,000 sq. ft. Business Energy Rebates covered installation of process equipment, while the T12 Market Transformation piece covered lighting applications. The most successful BER efforts were in the realm of motors & drives and refrigeration. Heating and cooling remained challenging. Problems of HVAC in larger buildings can be addressed in part with better training of property managers, improved analytics with graphical interface, and with use of combined heat and power technologies. The relationship approach to the C&I market outlined in the 5-year Strategic Plan should offer avenues for addressing these problems.

## **2016 Performance**

By **FY 2016**, the DC SEU had made great progress with respect to reducing the growth of energy demand among DC's largest energy users (200,000 sq. ft.+). Beginning in 2016, this benchmark is no longer a "performance benchmark" under the contract terms, to reflect in part the length of time C&I interventions require for design, financing and completion, and thus to bear measurable results. Tetra Tech provided a summary count of C&I projects under 5 program tracks, and prepared two case studies to document lessons learned from work to date, and to showcase the

value added by the DC SEU which is not quantifiable through the energy savings number or attainment of benchmarks.

These case studies, which clearly informed the idea of a series of narrowly defined “campaigns” in the initial DC SEU 5-Year Strategic Plan, reported on relationships with two federally-owned buildings and one owned by a publicly-traded company, in Washington, DC. The case studies report on the substantial value of metering to uncover reasons for poor energy performance, the value of green leases, and the ability to plan and execute complex lighting retrofits. In the case of the publicly-traded company, the fact that the DC SEU is able to make the financial case for improvements in energy performance was a key factor in the project’s successful completion. Many of the DC SEU’s competitors in the energy efficiency markets are not able to do this, financial expertise is a competitive factor.

2016 C&I Program Description	N Unique Projects	N Unique Sites
Custom	315	51
Prescriptive	284	67
Market Opportunities	35	17
Direct Services	98	4
New Construction	15	1

The DC SEU’s Annual Report for FY2016 notes that in 2016 it served more C&I customers and achieved greater energy savings in the C&I market than ever before. An increased emphasis on data analytics, which is continuing, and more emphasis on longer-term, integrated technical assistance, has helped the DC SEU improve its yield of energy savings per dollar invested.

The DC SEU continues to serve the small and medium enterprise market segment by offering rebates on qualifying equipment, including energy efficient lighting, heating, refrigeration, and cooling. It has spread the incentive payments to more customers by making smaller individual offers of equipment and using CBE contractors to complete the work. In line with the emissions reduction aims of the District's Clean Energy Plan, the DC SEU should ensure that future installations of refrigeration equipment are made with the best available refrigerant (there are trade-offs in the emissions effects of the various technologies), and document the technological choices made.

In FY 2016, the DC SEU improved its account management approach to serving larger C&I customers, broadening and deepening relationships with commercial real estate owners, universities and hospitals. Such relationships facilitate long-term planning, more in-depth analysis and greater energy savings, moving from short-term tactics to the longer-term planning for these customer segments reflected in the 5-Strategic Plan. FY 2016 also saw more interaction with buildings owned by the federal government, with the DC SEU completing projects and developing relationships with the Office of Personnel Management, the National Park Service, the Smithsonian Institution, and the General Services Administration.

**Promise of DC SEU participation in the Clean Energy Plan for C&I Markets: Hospitals, Schools, New Developments, Renewable Energy**

The Clean Energy Plan provides a framework for inter-agency coordination to effect the market transformation needed to reduce greenhouse gas emissions; because buildings are a major contributor to these emissions, the role of the DC SEU is significant. The DC SEU's Strategic Plan proposes greater emphasis on client relationships, and to undertake campaigns limited by scope and timing, in order to have the flexibility to meet customer needs. As an example, the Strategic

Plan proposes to use data analytics to undergird its relationship with a hospital. Analytics are the first step in planning nano- or micro-grids for improved resilience of hospital operations. Note that hospital water usage is also something that could be improved using this approach.

Schools are a potential C&I market segment. The impetus for green building is to reduce emissions. Indoor health is an important component of green building. The Board recommends that DC Public Schools be encouraged to consult the DC SEU regarding design and procurement of maintenance and upgrades to school buildings to improve the quality of the school environments. The number of new or real estate developments or re-developments in the District — viz. Walter Reed, Waterfront, Petworth Affordable Housing, and Capitol Crossing implies the need for a degree of coordination with the Deputy Mayor for Economic Development, to ensure proper specifications at the beginning of the process, and with the Planning Department as developments proceed. The Board recommends that the DC SEU allocate senior staff time to ensuring DC SEU input into specifications for new developments.

The Board recommends that the DC SEU work with Pepco and utility-scale developers (e.g. those located in Maryland but who can or will serve the grid) to collect data that support interconnection of renewable energy generating projects with the grid. With data on demand for all market segments and jurisdictions, financing of supply is easier, and clean energy goals can be met. Realization of DC's Clean Energy Plan will require a Pepco commitment to buying renewably-generated energy.

## **B. Going Forward**

### **1. Energy Efficiency**



The District is a national leader in energy efficiency and sustainability. A large part of which is attributable to aggressive legislative action and the implementation of cutting edge sustainable initiatives by the Bowser Administration. Indeed, the District has received several national awards recognizing it for its performance.<sup>32</sup> We note that the District had a small drop, from 14<sup>th</sup> to 15<sup>th</sup> place in the nation, in the American Council on Energy Efficiency Economy (ACEEE) Scorecard for 2016. ACEEE’s 2016 State Energy Efficiency Scorecard while generally praising the District, noted:

Washington, DC has made significant strides with energy efficiency in recent years. The DC Sustainable Energy Utility continues to ramp up implementation and monitoring of programs and realize higher levels of energy savings each year. The District is also a leader in energy use transparency through its BuildSmart DC program. Following a rapid rise in previous rankings, Washington, DC dropped slightly in the rankings this year, indicating there are opportunities to build upon its success. For example, pursuing a wider range of policies to encourage CHP deployment would also go a long way toward improving the District’s score.<sup>33</sup>

The District’s total score was 24.5 out of a possible 50 points. D.C.’s scores in each category are as follows:

Utility & Public Benefits Programs & Policies (5.5/20)

Transportation Policies (7.5/10)

Building & Energy Codes (6/7)

Combined Heat & Power (1/4)

State government initiatives (4/7)

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<sup>32</sup> D.C. earned #1 ranking on U.S. EPA annual list of U.S. metropolitan areas with the most Energy Star certified buildings, third year in a row. D.C. named 1<sup>st</sup> LEED Platinum city in the world.

<sup>33</sup> American Council for an Energy-Efficient Economy, *The 2016 State Energy Efficiency Scorecard* (“2016 State EE Scorecard”), September 2016, Report U1606.

## Appliance efficiency standards (0/2)<sup>34</sup>

The District's ranking shows that the City is significantly lower in the first category. Overall, the top 10 ranked states that scored at least a 9/20 have more robust programs that greatly impact these sectors. Maryland, for example, scored a 9.5/20 in the utility and public benefits programs and policies and overall ranked 9<sup>th</sup> scoring 32 out of a possible 50 points.<sup>35</sup> In addition, number 4 ranked Rhode Island scored all 20 points by diversifying its portfolio through rebates, loan programs and PACE financing.<sup>36</sup> As noted by several Board members it is difficult to make an “apples to apples” comparison as demographic and regulatory variances among jurisdictions impact the programs. For example, in almost all these other states, energy efficiency programs are carried out by the utilities themselves pursuant to Commission orders, or in some cases in coordination with an energy efficiency entity such as the DC SEU, but this is not the case in the District. (In other states the SEU is a program of the utility commission as well.) Washington Gas has no energy efficiency program in the District—and Pepco has one residential program, the Energy Wise Rewards Program.<sup>37</sup> In other states the government also provides tax dollars for programs. Both these things could account for the low rating in this category of utility and social benefit programs.

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<sup>34</sup> *Id.*, Table ES1 Summary of state scores in the *2016 State Scorecard* at xi.

<sup>35</sup> *Id.*

<sup>36</sup> *2016 State EE Scorecard* at viii.

<sup>37</sup> The Energy Wise Rewards program is a voluntary residential direct load control program in the District of Columbia. Through this program, Pepco works with customers to improve energy efficiency and reduce strain on the electric grid by decreasing electricity consumption during peak energy use periods. Participating customers allow Pepco to remotely cycle off the compressor on their home's central air conditioning unit or heat pump during specific time periods on peak-use days, at a participation level selected by the customer. In exchange, customers are rewarded financially with incentive payments and reduced electricity consumption.

Nevertheless, it is helpful, however, to consider reports such as ACEEE's findings as we determine how to improve the DC SEU's programs. The D.C. PACE \$25 million clean energy installation project at D.C. United's soccer stadium is an example of how the District is working to diversify its portfolio going forward.

Going forward, it is imperative that we foster a cohesive and collaborative effort to provide policies and programs that reflect transformative change to all sectors. The ACEEE noted that low-income households make up one-third of the U.S. population and are the most underrepresented individuals in the energy efficiency arena in terms of programs geared to assist them.<sup>38</sup> As one of the most vulnerable households, more programs and rebates must be geared towards this group. It is important for the Board to review the programs the DC SEU has specifically tagged for this group, and the criteria used for selection. The ACEEE has determined that in 2017 additional points will be given to states that pursue investment opportunities in low-income energy efficiency programs that assist in moving that sector.<sup>39</sup> OPC believes while the ACEEE Report is not the single indicator of success, it provides useful guidelines we move forward.

## **2. Solar Coordination**

### **FY 2016 Achievements:**

In FY 2016, the DC SEU implemented one renewable energy initiative and had in the design or redesign stage two additional solar programs by December 31, 2015. On track by December 2015 was Solar Thermal, an incentive program to install solar thermal arrays to provide hot water and reduce natural gas consumption for income-qualified cooperative housing and

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<sup>38</sup> *Id.* at 120.

<sup>39</sup> *Id.*

property owners of multifamily buildings serving DC residents meeting income requirements. The Small to Medium Size Commercial Solar Program was a new program offering in FY 2016 that provided incentives and financing for small to medium-size business owners to install solar photovoltaic (“PV”) systems. In the redesign phase was the Affordable Solar Photovoltaic Program, which facilitated a no-cost installation of solar PV systems for DC single-family homeowners meeting certain income requirements. By the end of FY 2016, the DC SEU had installed 158 solar PV installations for income-qualified homeowners, achieved \$1.2 million in lifetime energy cost savings and achieved \$530 in annual energy cost savings per household.

A major concern of the Advisory Board in FY 2015 was finding a way to make the low-income program that installed solar photovoltaic systems on low-income homes sustainable so “it is more than a one-shot deal.”<sup>40</sup> Specifically, the Advisory Board recommended that the DC SEU “[e]ngage in greater coordination of various programs to reduce barriers to broader uptake of solar, better planning and oversight so both the DC SEU and DOEE will be able to ascertain how to make the solar program sustainable, to institutionalize it so it is more than a one-shot deal and even to determine how to leverage the funds to make the benefits available to a larger number of low-income residents.”<sup>41</sup>

The DC SEU continued the low-income solar installation program, which was implemented in FY 2015 as Solar Advantage Plus Program (“SAPP”) and subsequently changed its name to the Affordable Solar Program in FY 2016. In response to concerns about funding for low-income solar programs being suspended, DOEE explained that typically, the low-income solar programs were intermittently suspended while waiting for new fiscal year funding.

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<sup>40</sup> Sustainable Energy Utility Advisory Board, *FY 2015 Annual Report* at 17, September, 2016.

<sup>41</sup> *Id.*

The DC SEU fully funded low-income costs for photovoltaic systems in FY 2016 and, as noted earlier, installed 158 solar PV installations by the end of FY 2016. Additionally, DOEE conducted a small business pilot for 13 businesses, all east of the river. The projects were fully funded at the level of \$27,000 for each small business. As for the Advisory Board's recommendation that limitations should be removed that precluded contractors from installing third-party owned systems, DOEE clarified that the agency had no overall requirement that homeowners own their photovoltaic system to have it installed. Prospectively, DOEE under the auspices and authority of the "Solar for All" legislation will be the agency responsible for low-income solar installations.

### **3. Ongoing Challenges**

The Board has consistently raised concern with regard to high administrative costs reflected annually. In addition, questions continue regarding what projects are being identified as low income multi-family dwellings to the extent that they are used to meet low-income benchmarks. The later concern arises because there does not appear to be a delineation of a clear methodology explaining how the DC SEU qualifies low income multi-family dwellings. For example, while qualifying shelters and health care facilities as low -income facilities making them eligible for energy efficiency savings is permitted, OPC and other members of the Board presented questions regarding where the health care facilities are located, whether there are income criteria required by patients being served and the amount of money utilized on these types of facilities versus actual dwellings. DOEE subsequently provided the Board answers to these questions, which OPC deemed satisfactory as long as there was a clear determination that low income consumers were actually being served at these facilities and it did not significantly diminish service to individual low-income consumers.

As of July 1, 2016, the U.S. Census Bureau determined that 17.7% of the D.C. population was living in poverty, which is approximately 120,567 D.C. residents whom failed to meet the median household income of \$70,848. The Board wants to ensure that the DC SEU is serving as a prudent administrator of funds for DC ratepayers and that funds “earmarked” for specific programs are properly being utilized and administered to the individuals that the program was designed to help not just funneled through to reach a benchmark.

#### **4. Going Forward**

Going forward, the Board requests that the DC SEU and DOEE identify with specificity if and how they will coordinate programs that are outside the DC SEU but have similar objectives, to optimize results and meaningfully increase savings benefits for low-income customers. For example, the Board anticipates solar program coordination will be enhanced by DOEE’s Solar for All Program that was established by the Renewable Portfolio Standard Expansion Amendment Act of 2016 effective October 8, 2016 (D.C. Law 21-154; 63 DCR 12926). Mayor Bowser signed DC Law 21-154 in FY 2016 on July 25, 2016. The purpose of the law is to serve 100,000 low-income households by 2032 and reduce their electricity bills by 50%. DOEE is responsible for preparing an implementation plan with community involvement.

Additionally, DC PACE was created under the Energy Efficiency Financing Act of 2010; later amended by the Sustainable DC Act of 2012. Urban Ingenuity is the PACE administrator and is under contract with DOEE currently.

The performance targets for FY17 were as follows:

1. Energy / Water Saved:
  - 1,000,000 kWh
  - 40,000 therms

- 2,000,000 gallons
2. GHG mitigation: 1,000 metric tons
  3. Number of Projects: 6 - 12
  4. Amount of Financing: \$10 - \$20 M

The FY18 performance targets have not yet been established to date as the program is slated to be rolled into the DC Green Bank program, which is scheduled to be launched in 2018. The performance targets would consequently be collective goals for both programs.

Overall the District is seeking to diversify its portfolio with the proposed launch of the DC Green Bank in 2018. Legislation is currently before the Council and a hearing was held on July 14, 2017. DOEE is optimistic that the law will be passed and become effective before the end of the calendar year. It's important to note that as part of the Green Bank legislation, the District's PACE program will be under the Green Bank and provide the foundation for additional programs. The DC Green Bank will be an innovative financial program that will address financing gaps and increase private investment so the District can meet its climate change, resiliency, and sustainability goals. Despite its name, the "DC Green Bank," is not a classic financial institution since as proposed it will not take deposits or manage savings. In addition to administering the District's PACE Program, the DC Green Bank will have the authority to establish loans, loan guarantees, credit enhancements, grants, bonds, and other financing programs with terms designed to expand available capital and improve financing terms for sustainable projects and programs.

The Green Bank is structured as an independent agency. When Green Banks have been structured as a wholly government entity, they have been less able to react quickly to market needs and foster the collaboration and innovation needed to be attractive to the private sector. This is the most common structure in other states with high performing Green Banks, notably, the Connecticut

Green Bank, which has achieved a private to public leverage ratio exceeding 5-to-1. As currently structured, the Green Bank will be nimble and attractive to private investment, while still ensuring accountability and stewardship of these public funds through stringent reporting and ethics requirements. Other green banks in other jurisdictions have generally been cash-flow positive and the DC Green Bank is structured to be a breakeven entity, where the revenues earned from financing activities cover all the operating costs.

## **V. CONCLUSION**

A review of the preceding 5 years, shows that the DC SEU has made gains in achieving the statutory benchmarks. The DC SEU, however, remains challenged in meeting its maximum goals and minimizing its administrative costs. This is of continuing concern because of the magnitude of the costs borne by all DC ratepayers. The Board believes progress is being made and the upward trajectory will presumably continue with the emergence of several intervening factors, including modifications reflected in the new 5-year contract, and creation of a Green Bank that should complement the DC SEU's ability to effectively achieve its statutory mandates and goals.