Sustainable Energy Utility Advisory Board

FY 2015 Annual Report
September, 2016

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District of Columbia Sustainable Energy Utility Advisory Board
Fiscal Year 2015 Annual Report

I. EXECUTIVE SUMMARY

By the end of Fiscal Year 2015, the confluence of several significant trends was dramatically changing the nature of energy use in the District and elsewhere. The combined effects of slower electricity demand growth, lower natural gas prices, precipitous drops in the price of solar, numerous innovations that aid customers in controlling how much energy they consume, growing awareness of climate change, and public and private sector adoption of policies intended to drive adoption of renewables-sourced electricity generation[1] have caused District residents, businesses and officials to re-think the District's energy future. Even the U.S. Supreme Court elected to weigh in, giving, generally, a thumbs up to demand response[2] and a thumbs down to EPA limits on coal-burning power plant mercury emissions,[3] and taking the unusual step of staying the effective date of EPA's Clean Power Plan.[4]

The District has received praise regionally, nationally and internationally for leadership it is demonstrating in this important arena. For example, it is well-known that that the District leads the nation's cities in its number of green buildings, with 577 LEED-certified projects and 327 ENERGY STAR®-certified buildings;[5] and that its residents consume less energy on a per capita basis than do the residents of nearly any other city [6] or state[7] in the country.

Perhaps less well-known, however, is that as far back as 2008, the Council of the District of Columbia ("DC Council") passed one of the most innovative pieces of energy legislation in the country, the Clean and Affordable Energy Act of 2008 (CAEA).[8] Among other energy policy innovations, the CAEA created the DC Sustainable Energy Utility (DCSEU), whose purpose is to reduce the energy footprint of the District, and lower energy costs for District residents and businesses, while contributing to economic development and job creation.

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[1] *See e.g.*, U.S. Energy Information Administration, Today in Energy, March 18, 2016, https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=9&ved=0ahUKEwjd8tTNi83LAh-WLaz4KHSH2BKQQFgg_MAg&url=https%3A%2F%2Fwww.eia.gov%2F&usg=AFQjCNGqLtS6llcWXITDZvlCySXMGvJMUQ&sig2=WvUx66C7fNplMtbf4ifuA.

[2] *See, Federal Energy Regulatory Commission v. Electric Power Supply Association et al.*, Jan. 25, 2016 (FERC's regulation of wholesale market operators' compensation of demand response bids was not illegal even though it affects the quantity or terms of retail rates).

[3] *See, Michigan v. Environmental Protection Agency*, June 29, 2015 (finding illegal an EPA regulation limiting toxic emissions from coal-burning power plants on grounds that EPA failed to consider costs in the earliest stages of developing its regulation).

[4] *See, Chamber of Commerce, et al. v. EPA, et al.*, 136 S. Ct. 999 (S. Ct. Feb. 9, 2016).

[5] Sustainable DC, Second Year Progress Report, April 2015, http://www.sustainabledc.org/wp-content/uploads/2014/04/Sustainable-DC-Progress-Report-April-2015.pdf.

[6] *See e.g.*, The American Council for an Energy-Efficient Economy's State and Local Policy Database website, http://database.aceee.org/sites/default/files/docs/local-energy-data.pdf.

[7] *See* U.S. Energy Information Administration, U.S. States, State Profiles and Energy Estimates, available at https://www.eia.gov/state/.

[8] D.C. Official Code § 8-1773.01 *et seq.*

Even less well known is that the CAEA also created a Sustainable Energy Utility Advisory Board (Board), [9] which since its inception has played a pivotal role in recommending to the Department of Energy and the Environment (DOEE) programmatic, legislative, institutional and spending changes to make the DCSEU more effective. For example, the Board recommended amending the CAEA so as to confirm that the DCSEU is not required to spend all of its funds before the end of the budget year. That change was essential, insofar as energy projects that yield significant reductions, particularly those projects whose affordability benefits from the availability of private financing, will often not see returns on investment until some period of time after the end of the traditional, governmental, budget year.

The Board itself is a remarkable innovation of the CAEA, as it reflects the DC Council's wish to enlist a carefully crafted slate of volunteer experts to aid in realizing the goals of the DC Council, the objectives of the Administration, and the will of the District's constituents in shaping their energy future. Thus, the CAEA sets forth that the Board's role is to:

- Provide advice, comments and recommendations to the DOEE and DC Council regarding the procurement and administration of the DCSEU contract;
- Advise the DOEE on the performance of the DCSEU under the DCSEU contract; and
- Monitor the performance of the DCSEU under the DCSEU contract.[10]

The Board is comprised of 13 members, all District residents, representing the wide variety of perspectives and expertise in energy, efficiency, the community, and the built environment. Included on the Board are the Public Service Commission of the District of Columbia, the People's Counsel, Pepco, Washington Gas, the Chairman of the DC Council, the DC Council Committee with oversight over DOEE, the renewable energy community, the building management community, the environmental community, the building construction industry, and the low income community.

In keeping with its advisory obligation, the Board determined that as FY 2015 marks the fifth year of the DCSEU's operation, and its total expenditure of roughly $80 million of ratepayer funds in fulfilling its mission, that this year's annual report should start a dialogue on the DCSEU's role in the District's energy future, as well as comment on the DCSEU's performance in FY 2015. The Board believed it particularly important that this year's annual report provide this longer view, as FY 2015 ushered in a new Mayor, 5 new Councilmembers, 6 new Board members, multiple amendments to the CAEA, and most pivotally, a new Request for Proposals (RFP), whose terms the new Board helped craft. In addition, the merger of Pepco and Exelon Corporation has been completed, resulting in Exelon serving as the new parent company for Pepco.[11]

Thus, the purpose of this year's report is to provide an overview of the DCSEU and the importance of a transition to a multi-year contract; to highlight the expertise and diversity of opinion on the Board, which has some of the most knowledgeable people in the District on

[9] D.C. Code § 8-1774.03(a).

[10] D.C. Code § 8-1774.03(a)(1) – (3).

[11] The Public Service Commission has approved the merger in a 2-1 vote; however, parties have 30 days, from the date of the order, to seek reconsideration.

energy issues; and to identify and explain the significant contributions that the DCSEU, in partnership with DOEE and the Board, can make to the District's energy future. In addition to critiquing the DCSEU's annual performance, this report will address:

- The role of the DCSEU in the context of the District's other energy programs (such as PACE, and the District's Weatherization program);
- The role of the DCSEU in innovation, education and outreach in the District; and
- The role of the DCSEU in technology deployment to save energy, reduce Greenhouse Gas (GHG) emissions, and promote environmental protection.

Section II provides an overview of changes to the DCSEU's mission, as reflected in the forthcoming DCSEU contract. Section III provides an analysis of the CAEA amendments to date that have been most relevant in shaping the DCSEU's mission. Section IV reports on the activities of the Board in FY 2015, as well as to date, in 2016. Section V identifies the Board's FY 2015 recommendations, and discusses whether they were implemented. Finally, Section VI contains both a summary review of the DCSEU's performance in FY 2015, as well as the Board's recommendations for the DCSEU in FY 2016 and beyond. Section VII contains the Board's concluding remarks.

II. OVERVIEW OF CHANGES TO THE DCSEU CONTRACT

As is explained in depth in Section III, the DCSEU is the private contractor selected to develop, coordinate, and provide programs for the purpose of promoting the sustainable use of energy in the District of Columbia. The private contractor is competitively selected and supervised by DOEE. DC ratepayers capitalize a Sustainable Energy Trust Fund (SETF) from a surcharge on their gas and electric bills, and DOEE administers the SETF to finance DCSEU operations. The DCSEU began operations in FY 2011 under a seven year contract (one base year plus six option years), which had six specific goals:

- **Reduce per capita energy consumption in the District of Columbia;**
- **Increase renewable energy generating capacity in the District of Columbia;**
- **Reduce the growth of peak electricity demand in the District of Columbia;**
- **Improve the energy efficiency of low-income housing in the District of Columbia;**
- **Reduce the growth of the energy demand of the District of Columbia's largest energy users; and**
- **Increase the number of green-collar jobs in the District of Columbia.**

To implement recent amendments to the CAEA, DOEE has issued an RFP for a new 5-year base period plus a 5-year option period for the DCSEU contract. The competitively awarded contract is anticipated to begin in Fiscal Year 2017. The performance benchmarks under this new contract have been revised to only include four main areas:[12]

- **Reduce energy consumption in the District of Columbia;**

[12] Request for Proposal for District of Columbia Sustainable Energy Utility Contractor, January 25, 2016, DC Department of Energy and Environment

- **Increase renewable energy generating capacity in the District of Columbia;**
- **Improve the energy efficiency and renewable energy generating capacity of low-income housing, shelters, clinics, or other buildings serving low-income residents in the District; and**
- **Increase the number of green-collar jobs in the District of Columbia.**

Significantly, the "per capita" qualifier was removed from the first benchmark, consistent with a Board recommendation. Given that the District's residential per capita consumption is now low, the Board believes it important to encourage the DCSEU to tackle reductions by remaining energy users.

The two benchmarks that were repealed -- on the reduction of the growth in peak electricity demand and the reduction in the growth of energy demand of the District's largest energy users due to DCSEU programs -- were transformed into semiannual tracking requirements to enable the DCSEU to better focus its finite resources on the remaining benchmarks.

III. OVERVIEW OF RELEVANT CAEA AMENDMENTS SINCE THE DCSEU'S FORMATION

Summary

The CAEA,[13] among other purposes, created authority for the Mayor, by and through DOEE, to contract with a private company, which would become known as the District's Sustainable Energy Utility, or DCSEU. The intent of the legislation was to advance the sustainability goals and priorities of the District of Columbia through programs that would reduce energy usage, promote innovation, reduce the carbon footprint of the District of Columbia and promote renewable energy sources. This would be achieved through targeted programs that would be implemented and coordinated by the DCSEU to meet the performance benchmarks set forth in the legislation. The DCSEU was intended to have a degree of flexibility in coordinating, developing and implementing programs. The market was to be key in influencing both program development and responsive modifications. To ensure appropriate accountability, the contract is performance-based and the contractor is subject to an independent evaluation, measurement and verification (EM&V) of its performance. Further, the contractor is subject to the oversight of DOEE.

The CAEA also directs the Board to advise the Director of DOEE on the administration of the DCSEU contract. The Board is required to advise on the procurement of the contract with the DCSEU and monitor its progress in meeting the performance targets.

While the DCSEU at present is funded solely by an assessment on electric and natural gas customers, based on energy usage, the legislation encourages this entity to identify supplemental funding resources (*see* Section V.C).

Amendments to the Clean and Affordable Energy Act

[13] Officially cited as D.C. Law 17-250, the "Clean and Affordable Energy Act of 2008," effective October 22, 2008 (D.C. Law 17-250; D.C. Official Code § 8-1773.01 *et seq.*).

Since the CAEA was enacted, there have been several amendments to the legislation. These amendments are captured in Table 1.

Table 1.

Short Title	Effective Date	Law Number	Register Cite
Clean And Affordable Energy Act of 2008	Oct. 22, 2008	DC Law 17-250	55 DCR 9225
Residential Aid Discount Subsidy Stabilization Amendment Act of 2010	July 23, 2010	DC Law 18-195	57 DCR 4519
Sustainable Energy Utility Amendment Act of 2010	Mar. 31, 2011	DC Law 18-331	58 DCR 22
Fiscal Year 2011 Supplemental Budget Support Act of 2010	Apr. 8, 2011	DC Law 18-370	58 DCR 1008
Fiscal Year 2013 Budget Support Act of 2012	Sep. 20, 2012	DC Law 19-168	59 DCR 11423
Technical Amendments Act of 2012	Sep. 26, 2012	DC Law 19-171	59 DCR 7577
Sustainable DC Act of 2012	Apr. 20. 2013	DC Law 19-262	60 DCR 9504
Sustainable DC Omnibus Amendment Act of 2014	Dec. 17, 2014	DC Law 20-142	62 DCR 1243
The Residential Essential Service Subsidy Stabilization Amendment Act of 2014	Feb. 26, 2015	DC Law 20-155	62 DCR 3601
The Clean and Affordable Energy Amendment Act of 2015, as Title VI, Subtitle J of the Fiscal Year 2016 Budget Support Act of 2015	Oct. 22, 2015	DC Law 21-036	63 DCR 1164

Broad Purpose and Effects

The changes made to the CAEA, as noted in the chart above, have addressed three major areas of focus: (1) The affordability of essential utility services; (2) Benchmarking standards; and (3) The alignment of DCSEU performance and budget goals. These categories are summarized as follows:

Affordability of Essential Utility Services

The *Residential Aid Discount Subsidy Stabilization Amendment Act of 2010* amended the CAEA to, among other things, provide for an increase in the assessment imposed upon the sales of the electric company and to increase the subsidy level to maintain the discount levels approved by the Public Service Commission (PSC). Due in part to increases in the participation rate of the RAD program as of fiscal year 2009, Pepco determined that a new subsidy level of $5.207 million would be required to maintain the discount levels approved by the PSC.

The *Residential Essential Service Subsidy Stabilization Amendment Act of 2014*, among other things, amended the CAEA to clarify the definition of "Existing low-income program" to include the LIHEAP Expansion and Energy Education program and required the PSC to establish a discount program for low-income gas customers in the District.

The *Clean and Affordable Energy Amendment Act of 2015*,among other things, amended the CAEA so that the performance benchmark for the DCSEU's low income programs is to increase the energy efficiency and renewable energy generating capacity of low-income housing, shelters, clinics, or other buildings serving low-income residents in the District of Columbia.

Benchmarking Standards

The *Sustainable Energy Utility Amendment Act of 2010* amended the CAEA to, among other things, enable benchmarking program enforcement by shifting the reporting deadline and allowing fine authority. During hearings on the bill, DDOE indicated that it would be beneficial to push back the date for building owners to submit their Energy Star Portfolio Manager benchmarking data, as required by the Green Building Act of 2006, as amended by the CAEA.

The *Sustainable DC Omnibus Act of 2014* amended the CAEA to, among other things, make it easier for building owners to obtain whole-building energy use data. The amendments also limited automatic access to aggregate data in order to protect the privacy of customers. In addition, the changes required the energy and natural gas utilities to provide benchmarking data via an online portal. The changes required the buyer of a building to be responsible for benchmarking reporting in the year a building is sold, and required the seller to transfer the relevant utility records when a property subject to the benchmarking requirements changes ownership/control. This ensured that the new building owner can track the building's performance and submit a complete benchmarking report to the DOEE for that year.

Alignment of DCSEU Performance & Budget Goals

The *Fiscal Year 2011 Supplemental Budget Support Act of 2010* amended the CAEA to adjust the allocation of funds in several key areas discussed in further detail below. The amendments served to reduce the obligations to be paid from the SETF and EATF in FY 2011 by approximately $2.07 million.

The *Fiscal Year 2013 Budget Support Act of 2012* amended the CAEA to authorize funding in certain programs as discussed further in the next section, while the *Sustainable DC Amendment Act of 2012* amended the CAEA to extend the Renewable Energy Incentive Program, change the allocation for existing natural gas programs and add the ENERGYSTAR Benchmarking program to acceptable uses of the Sustainable Energy Trust Fund (SETF).

The *Clean and Affordable Energy Amendment Act of 2015* amended the CAEA to accomplish a number of goals, including the setting of new performance benchmarks, the provision of other structural amendments to enable a multi-year contract and benchmarks, and the removal of the proportional spending ceiling on the allowable expenditures for gas or electric initiatives. These changes were intended to give DDOE more flexibility in setting the performance benchmarks of the DCSEU contract to facilitate the most efficient use of DCSEU funds. The amendments also removed the cap on the amount of funds from the gas utility that may be spent on gas initiatives and the amount of funds from the electric utility that may be spent on electric initiatives, allowing more flexibility in the spending of these funds, while keeping the minimum spend requirement for electric and gas initiatives to ensure ratepayers of both utilities are served.

In addition, the changes required the Board to recommend benchmark changes at least every two years, clarify the Board's role, allowed DOEE to use contract administration funds to develop a comprehensive energy plan for the District, and amended the annual reporting deadline for DOEE on SETF and EATF expenditures.

IV. THE BOARD'S ACTIVITIES IN FY 2015, AND FY 2016 TO DATE.

Overview

The Board survived as a Board in fiscal year 2015 despite a legislative effort to amend its statutory duties and makeup. The Board continued to provide input to the DOEE and the DCSEU on ongoing programs. It advocated for the ability of the DCSEU to provide multi-year programs and identified a need for public meeting to hear from District residents on the progress made by the DCSEU. It set an agenda of issues that now the Board with its full complement of members will be able to fully tackle, including but not limited to:

- low income energy efficiency performance;
- source-to-site issue for common efficiency measures for electric/gas programs;
- multi-year performance measures;
- participation and transparency within the Board;
- microgrids; and
- DCSEU coordination with PACE

FY 2015

The Board met 4 times in fiscal year 2015. The first meeting in fiscal year 2015 was held on October 30, 2014. At that meeting the Board focused on the preparation of its Annual report to the DC Council and discussed the process for Board public meetings to obtain input from District of Columbia residents on the work of the DCSEU. The Board discussed holding these public hearings in early December and asked DOEE to investigate appropriate locations for the hearings. The Board anticipated that evening hearings would result in larger participation by the public. Also at this meeting the DCSEU provided updates on its fiscal year 2014 accomplishments and its operating plans for fiscal year 2015. The Board raised questions and offered advice to DOEE related to these plans. Between October and December 2014, a draft of the Board's Annual Report to the Council was prepared by a Subcommittee appointed by the Board.

A conference call was held by that Subcommittee with an invitation to all Board members on December 9, 2014 to obtain input from the full board on the draft report. The Board made revisions to the report and assignments were handed out to Board members to complete the report. The Chair of the Subcommittee incorporated the revisions and sent the report to DO-EE by email on December 21, 2014. The Subcommittee members also held a conference call on January 7, 2015 to further discuss that draft report. The Subcommittee continued to work and a final report was submitted to DOEE on January 27, 2015. The DC Council received the fiscal year 2014 Report of the Board on June 1, 2015 as RC 21-0017.

The March 2, 2015 meeting of the Board was the first Board meeting after the appointment by the new Mayor of the new Director of DOEE. The new Director indicated he would be at every meeting and an active participant in the Board processes, but had not made a decision on whether he would serve on the Board itself. The Director said he would provide a fresh look at how the Board can be leveraged most effectively to provide value to DOEE and the DCSEU. At this meeting the Board continued to discuss plans for public meetings. Also a report was given by the Board Subcommittee on Benchmarks. That Subcommittee reported on its suggestions on how to better align the DCSEU with PACE and how annual budgeting and annual performance measures, and integrated efficiency measures and a benchmark that addressed energy efficiency over the life cycle of an electron (site-to-source), should be addressed. The Board also reiterated the request that DOEE encourage the new Mayor to fill all vacancies on the Board. Several seats on the Board remained vacant for several months. These vacancies included the renewable energy, building construction, low income, and building management representatives. The Board also discussed the frequency of its meetings. Representatives from DOEE recommended that the Board only meet quarterly, per the statute. Discussion was held about whether more meetings might be needed. Historically, the Board had met much more frequently, especially in its first year of operation. The Board raised the issue at this meeting of multi-year performance measures for the DCSEU and a common efficiency measure that would run across natural gas and electricity efficiency.

The last Board meeting in fiscal year 2015 was held on June 29, 2015. At this meeting, Tetra Tech — the consultant that performs EM&V and reports on its evaluation of DCSEU activity — presented its FY 2014 report to DOEE and the Board on the DCSEU's performance. DO-EE gave its update on legislative matters including the submittal by DOEE of the Board fiscal year 2014 Annual Report. The legislative updates included changes to the structure of the DCSEU contract to allow extended contracts. This report also indicated that SETF funds were swept by about $5 million dollars; $3.5 million dollars of gas and electric ratepayer monies were transferred to the general fund from their intended purpose along with $1.5 million that was reallocated to Low Income Home Energy Assistance Program (LIHEAP). There was considerable discussion about this issue as the majority of the members of the Board expressed their opinion that this was not an appropriate use of the funds. While the Board considered taking a vote to take action with respect to the matter, no vote was taken on the issue based upon a recommendation that each member had the ability to influence the legislative process independent from the Board.[14]

[14] As of this writing, it is the Board's understanding that in FY 2016, an effort is again underway to re-direct rate-payer monies towards FY 2017 purposes other than those for which the CAEA originally authorized their collection. Again, the Board wishes to convey its concern with such Executive and legislative branch actions.

Also at this meeting, the Board discussed its priorities and the Structure and Finance Subcommittee's focus related to the following issues: low income energy efficiency performance; the source-to-site issue with common efficiency measures for electric/gas programs; multi-year performance measures; participation and transparency within the Board; microgrids; and DCSEU coordination with the PACE contractor. The DCSEU gave a report on its programs and activities at this meeting. The Board asked questions of the DCSEU and offered suggestions related to those programs. Finally, DOEE gave an update on planning efforts for a public meeting. The public meeting was scheduled for July 16, however the Board agreed that the summer was not the optimal time for a public meeting. No date was selected for a future public meeting.

FY 2016

The new Board held two meetings as set forth in its published schedule, and held two closed meetings and conference calls:

By the time the slate of new members of the Board were sworn in and able to act, the Board faced an imminent deadline for DOEE's issuance of the RFP for the new SEU contract. Accordingly (and for reasons discussed below), the Board determined that its action on the draft RFP was most pressing, and immediately took up resolution of legal impediments to the Board's participating in drafting the RFP (October/November). These impediments arose as a result of recent CAEA amendments, which were unclear as to whether the DC Council intended that the Board not have an advisory role to the DOEE in their drafting of the RFP (purportedly out of concern that the Board's participation would violate requirements regarding maintaining confidentiality so as to ensure the integrity of the RFP process), or whether the DC Council intended the Board to continue to provide advice for the new RFP, as it had done for the first contract. With the assistance of the Office of Contracting and Procurement, the Board of Ethics and Government Accountability, and DOEE's Office of General Counsel, the Board amended its bylaws to confirm that Board members who signed a Non-Disclosure Agreement, and agreed that the entities they represent would not be pursuing the contract, could participate in the RFP drafting. The members of the Board who signed the agreement provided timely input into the draft RFP (December/January) in closed meetings.

In the Board's second meeting, and associated interim meetings and calls, the Board next turned to compiling its annual report. The Board missed the statutory deadline while it focused on the RFP. In part, the Board determined its ordering of priorities was correct, for the reasons explained below in Section V.D.

V. THE STATUS OF THE BOARD'S RECOMMENDATIONS FROM FY 2014

A. The Board recommended that all Board positions be filled as soon as possible. This recommendation was implemented.

Under Mayor's Order 2015-192, Mayor Muriel Bowser appointed the following new members to the Board effective July 30, 2015:

- **Randall Speck,** as the Mayor's Designee, and Chairman of the Sustainable Energy Utility Advisory Board . Mr. Speck relinquished the appointment while participating in his non-Board capacity in a pending regulatory matter. The Executive opted to keep the seat vacant until the regulatory matter was resolved. DOEE Director Wells recommended that the Board select a Vice Chair to execute the responsibilities of the Chair in the interim. He recommended that Bernice ("Bicky") Corman serve as Vice Chair, pending a mayoral appointment or reappointment to the Chair position. Board Member Dan Wedderburn nominated Ms. Corman, which was seconded by Board Member John Mizroch. The Board voted unanimously for Ms. Corman to fill the position of Vice Chair.
- **Nicole Steele** was appointed as a member of the Sustainable Energy Utility Advisory Board, representing the renewable energy industry, and shall serve for a term to end July 13, 2018.
- **Bicky Corman** was appointed as a member of the Sustainable Energy Utility Advisory Board, representing an environmental group, and shall serve for a term to end July 13, 2018.
- **Jared Lang** was appointed as a member of the Sustainable Energy Utility Advisory Board, representing the low-income community, and shall serve for a term to end July 13, 2018.
- **Nigel Parkinson** was appointed as a member of the Sustainable Energy Utility Advisory Board, representing the building construction industry, and shall serve for a term to end July 13, 2018.
- **Anna Pavlova** was appointed as a member of the Sustainable Energy Utility Advisory Board, representing the building management industry, and shall serve for a term to end July 13, 2018.
- **Leni Berliner** was appointed as a member of the Sustainable Energy Utility Advisory Board, representing the economic development community with particular expertise in the generation of green collar jobs, and shall serve for a term to end July 13, 2018.

B. <u>The Board recommended that the Low Income Efficiency and Conservation measure be outcome–based. This recommendation has not been implemented.</u>

The Board recommended that DOEE modify the benchmark for low-income efficiency and conservation measures to emphasize outcomes instead of a fixed budget percentage spend measure. The Department did not implement this change in fiscal year 2015, in light of its understanding of constraints imposed by the existing contract. The Department has included outcome in the energy efficiency and conservation measures in the multi-year Request for Proposals, and the resulting contract will contain provisions to include this recommendation.

C. <u>DCSEU should share its analysis concerning participating in the PJM Capacity Market. This recommendation has not been implemented.</u>

In 2015, the DCSEU stated that it would collaborate with a company called Encentiv Energy to bid into the PJM auction market. The minutes do not reflect that the DCSEU provided any additional information or analysis of its participation in the PJM market to the Board in fiscal year 2015, nor did it report to the Board on whether or not it bid into the market, or the share of revenue it may have received because of its collaboration with Encentiv Energy.

D. Board's annual report should be submitted on a schedule that allows for more thorough review of DCSEU annual reports. Resolution of the recommendation is pending.

The fiscal year 2014 EM&V report was submitted to DOEE in March. However, the statutory due date for the Board's annual report continues to be an issue of concern for the Board. A major concern raised by the Board was that the Report's statutory due date is in advance of the results in the Tetra Tech EM&V report. The Executive has proposed amendments to the Clean and Affordable Energy Act of 2008 to move the due date of the Board report to 90 days after the conclusion of EM&V report.

E. Pilot community engagement/enhance public participation and transparency in meetings. This recommendation has not been implemented.

During fiscal year 2014 the Board considered convening public/community engagement forums. The forums would be used to inform the public of the DCSEU's activities, accomplishments and to solicit public input. DOEE surveyed the public on the DCSEU and the Board, and received 51 responses. The Board considered several dates and DOEE published Notice of a Public Meeting in the *District of Columbia Register* for July 16, 2015. Several Board members questioned whether the timing of the meeting during the summer and the lack of advertising or promotion would produce an optimal result, particularly with respect to attendance. The Board voted to cancel the July 16, 2015 public meeting. The Board agreed to consider the selection of a more optimal date for the public meeting to facilitate wider public participation. The Board has not yet rescheduled the public meeting.

VI. BOARD REVIEW OF DCSEU ACCOMPLISHMENTS IN FY 2015; RECOMMENDATIONS FOR FUTURE REPORTING AND EVALUATION

A. DCSEU 2015 Performance

As discussed above, the Board continued to find its ability to meaningfully comment on the DCSEU's performance hampered by the fact that its report was due prior to its receipt of TetraTech's EMV Report. Accordingly, the Board agreed to summarize the findings contained in the DCSEU's Annual Report for 2015, and wishes to convey one important observation it made in preparing this report.

According to the DCSEU's Annual Report: 1) the targets for the renewable generation, green jobs, largest energy users, and low income programs performance benchmarks were met or exceeded; 2) the minimum requirements for the natural gas and electricity savings, and peak demand benchmarks were achieved; and 3) the CBE spend requirement was also met, as follows:

BENCHMARK	TARGET	REAL	Percent Over Target	Notes
Natural Gas Savings	273,428 mcf	87,694 mcf	-68%	In future natural gas consumption will be reported in therms (a measure of contained energy), to enable direct comparison with electricity saved
Electricity Savings	103,690 MWh	57,208 MWh	-45%	
Increase renewable energy generation	10%	23%	130%	
Reduction growth in Peak Demand	20,000 MW	8,625 MW	-57%	
Green Jobs	88 FTE	95 FTE	8%	85% of DCSEU externs were hired for FT positions
Certified Business Enterprise contracting	$2.95 million	$5.6 million	90%	
Work with largest energy users	50 projects	56 projects	12%	Buildings over 200k ft^2
Low-income residential energy efficiency	$5.28 million spent	$5.77 million spent	9%	
Emergency heating replacement, low income customers	No target-weather dependent	114 installations	No Target	
Solar Advantage Plus Program		Largest income-qualified solar program on the East Coast. 137 solar PV systems installed, yielding $36 million lifetime energy savings.	No Target	Reduced interconnection time through cooperation with utility

In compiling this Report, the Board learned that the DCSEU's Annual Report reflects only the DCSEU's Minimum targets, but does not reflect the "Maximum/Full" benchmarks that are also set forth in its contract. The DCSEU is expected to meet the latter each fiscal year. However, the DCSEU begins to earn an incentive as soon as it achieves the Minimum target for a particular benchmark; then would receive a "proportional" amount of additional incentive dollars for every unit (for example, MWh for electricity or mcf for gas) of savings achieved or jobs created above the Minimum target. The maximum incentive amount allocated for a benchmark will be awarded only if the DCSEU meets or exceeds the Maximum/Full benchmarks.

The Board's discovery is important for two reasons. First, it underscores the importance of moving the Board's reporting deadline until after it has had an opportunity to digest TetraTech's EM&V Report, which analyzes the Board's performance against both sets of benchmarks. Second, it highlights a deficiency, or lack of transparency, in the current DCSEU reporting method. The template for the report was fashioned by the DCSEU, and approved by DOEE. It is the Board's understanding that neither the existing contract, nor the new RFP, would prevent the contractor from reporting on both the Minimum and Maximum/Full targets, as the contract vehicles contain only general obligations that the DCSEU submit monthly, quarterly and annual reports. Accordingly, the Board may request that the DCSEU prepare, and/or that DOEE approval be conditioned on, a report that reflects both sets of targets. The Board intends to address this matter in its next Board meeting.

In 2015, DOEE commissioned a review of the DCSEU's Performance Benchmarks, to support more meaningful assessment of the accomplishment of the DCSEU's purposes and identify any barriers to achieving those purposes. The RFP for the new contract incorporates many of the recommendations that were made in that review,[15] and also incorporates suggestions made by the Board in January. In the meantime, the DCSEU has defined and is implementing the following programs in fiscal year 2016:

Residential Programs:

Promoting use of Energy Efficient Products
Improving individual home performance with ENERGY STAR®

Low-Income Multi-Family Programs (LIMF)

Comprehensive programs that leverage other efforts to improve indoor environment in low-income multifamily housing
Low Income Multi Family Direct Building Services

Renewable Energy

Income-qualified residential solar PV
Small Business Solar

Commercial & Institutional Programs

Business energy rebates for gas & electric
Custom rebates, gas & electric

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[15] BDA Global *Performance Benchmark Assessment and Recommendations Report: A Review of the DCSEU's Performance Benchmarks* September 30, 2015, for the Department of Energy and Environment.

Business direct services

B. **Going Forward**

Topical.

The Board has noted several areas for increased attention under the new DCSEU contract. One of these is an additional focus on energy efficiency. Another is improved coordination of the DCSEU's solar programs with other private and public solar activities in the District.

1. Energy Efficiency. The District has markedly improved in the energy efficiency space in the last several years, and is now ranked 14th place in the nation in the American Council on Energy Efficient Economy (ACEEE) scorecard.[16] Energy use disclosure in commercial and multi-family buildings and robust implementation of building energy codes has helped the District become more efficient. Further, the District has innovated in requirements for energy savings and building energy benchmarking for many public buildings, and the number of LEED or other green building certified buildings in the District. Despite these achievements, the Board recommends that energy efficiency remain a priority, even as the District pursues increased reliance on renewable sources of energy, and other innovative policies.

By adding a benchmark for an annual strategic planning exercise to the RFP, the Board provided a mechanism for the contractor under the next RFP to explore innovative means of integrating energy efficiency into SEU programs, such as by :

- Capitalizing on the results of data from energy usage disclosure program for commercial and multi-family buildings to have a dialogue with building owners on how to increase the number of energy upgrades in the worst performing buildings;
- Initiating a "big data" analysis to decode the results of energy usage disclosure and benchmarking to identify city hotspots where upgrades are needed the most, and work with owners to pool buildings into portfolios ready for efficiency upgrades[17];
- Financing the above, using PACE, Qualified Energy Conservation Bonds (QECB) funds, and other innovative mechanisms, to focus on portfolios of buildings for upgrades;
- Helping banking and appraisal communities to train in "green appraisals" for residential and commercial properties and encourage adoption of green appraisals
- Assessing the need for a Green Bank and come to a decision on the need for such a program for the District for both energy efficiency and renewable energy. The DCSEU should consider the feasibility of joining with Maryland in its efforts to form

[16] *See* http://aceee.org/sites/default/files/pdf/state-sheet/2015/district-of-columbia.pdf.
[17] The analysis will adhere to District law and regulations, relative to customer privacy.

a Mid-Atlantic Green bank, which might save on administrative costs. The Green Bank should rely upon other funding mechanisms beside ratepayer funds to ensure that the DCSEU can meet its statutory objectives under the existing CAEA;

- Considering whether under the existing legislative authorities, the DCSEU could be rewarded for incorporating water savings in large energy efficiency projects (in other words, in recognition of the water-energy nexus).

- Considering Public Private Partnerships (P3) for buildings as a means of design, build, financing, and maintenance of public buildings. These have often been used in transportation and infrastructure, but an increasing number of P3s is done to upgrade or completely rebuild public buildings, notably courthouses, jails, and other city institutions. Continue dialogue with GSA on their contribution to energy efficiency of buildings occupied by federal government. Several agencies with large spaces in DC are significantly behind on their sustainability and efficiency goals.

The SEU should develop a comprehensive list of energy and demand savings measures that should be evaluated and considered for implementation in the District of Columbia. Savings measures that pass the evaluation screening process would then be packaged into programs that could be implemented and offered to customers. The SEU should prepare a detailed report describing this review process and containing program implementation recommendations that would be shared with the Board for its approval and guidance. A summary of this planning effort should be developed and provided to the public. Special consideration should be given to new technologies, innovative behavioral energy reduction programs, and programs that leverage the unique characteristics of the District of Columbia energy market to further increase energy savings. While the Board realizes it cannot stipulate the means whereby a performance-based contractor seeks to perform, the Board believes that several new approaches could encourage greater efficiency and reduction of energy consumption, and warrant further exploration, such as:

- More behavioral energy programs.
- Wi-Fi-enabled thermostats and multifamily programs focused on gas equipment (new tankless water heater systems with heating application are becoming popular).
- Larger incentives for certain gas measures like gas dryers.
- Better promotion of the Home Performance with Energy Star audit program.
- Better promotion of central and individually-metered gas heating systems for multi-family.
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2. Solar Program Coordination

On February 26, 2015, the District's Renewable Portfolio Standard (RPS) was amended to allow funds from the Renewable Energy Development Fund (REDF) to supplement the DCSEU's solar programs.[18] Approximately $1.8 million of this source of funding was spent

[18] D.C. Law 20-155, § 6063, 61 DCR 9990 (Feb. 26, 2015), amending D.C. Code § 34-1436.

in launching and implementing the Solar Advantage Plus Program to help low-income residents install solar panels on their homes. The Program is intended to both yield energy savings for such residents, while also helping to increase the use of clean and renewable energy in the District. The program subsidizes the costs of installing solar PV systems on single-family homes owned or rented by low-income residents. The installers were six contractors who were contracted and approved by the DCSEU, and were reimbursed up to $10,000 per installation, from the $1.8 million budget allotted for FY 2015.[19]

The goal was to have 130 solar photovoltaic (PV) systems on 130 low-income homes installed and operational by the end of September, 2015. Pepco was instrumental in the District meeting its target, and has indicated its intent to continue its support moving forward. The Board wholly supports this program, and commends the Executive for acting so promptly and so effectively in immediately realizing one of Mayor Bowser's campaign commitments – to make solar affordable throughout the District. However, the Board understands that expenditures from the REDF on solar have been ad hoc, and respectfully recommends that with better planning and oversight, the DCSEU and DOEE would be able to ascertain how to make this program sustainable, to institutionalize it so it is more than a one-shot deal, and even to determine how to leverage the funds so as to make the benefits available to a larger number of low-income residents.

The Board also notes that certain less overt problems may detract from the successes. For example, low-income homes eligible for the program often have roofs that are not structurally sound enough to support the installation of solar panels; and roof repairs are generally too expensive for the residents. The Board suggests that in the future such programs might have greater impact if they were coupled with, or thoughtfully addressed such barriers to broader uptake. For example, the DCSEU and DOEE could coordinate with city-run programs to expedite repairs and provide a guaranteed funding stream. The need for electrical upgrades – which can cost upwards of $3,000 each -- also poses a significant barrier to greater uptake. It is the Board's understanding that there are no existing programs that assists in funding these upgrades. The Board notes as well that in the same way that greater coordination of various programs could reduce barriers to broader uptake of solar, such coordination could also yield benefits in other arenas. For example, inspections by solar installers into the condition of home electrical systems can reveal safety and fire hazards needing attention by other District agencies.

The reach of the program may also have been limited by its precluding contractors from installing third-party owned systems. This limitation may have reduced the amount of funding that could be leveraged towards the solar system. The additional funding (on average, $1,500 per system) could also assist with roof repair and electrical system upgrades, and/or could reduce the amount of rebate needed per system, thus allowing for more systems to be installed.

Further, the amount of the rebate also warrants attention, because different systems cost different amounts. A flush-mount racking system is much cheaper, easier to install and does not

[19] DOEE collected $6.3 million in REDF in spring, 2015, and intends to spend approximately $2.4 million on SEU solar programs in FY 2016. *SEU Contract, Contract Modification No. 13, D.C. Official Code § 8-1774.01*

require neighbor notification, compared to the parapet to parapet design needed for most flat roof homes in the District. Homeowners with pitch roofs have an unfair advantage, as the contractors are going to target them to receive systems rather than homeowners with flat roofs.

The Board also recommends considering making solar accessible to all low income individuals in the District who may not own their homes, and/or whose roofs are not suitable, for example, by designing incentives that support both multifamily installations and community solar.

Finally, the Board wishes to commend the DCSEU, which did an excellent job rolling out the program, and surpassing its goal of 130 installations during the program implementation period that ran from March 2015 - September 2015, a significantly compressed timeframe. The DCSEU has publicly stated it plans to run the program again for FY16, however, it was not ready to roll out on Oct 1 2015, as it had targeted; and the program still has not been rolled out as of this writing. Further, the DCSEU has goal of installing more systems (140 systems) in a much shorter timeframe this year. The Board is concerned this causes problems on a number of levels. Accordingly, the Board recommends that programs be ready to roll out at the beginning of
each fiscal year and that their commencement not be delayed.

Procedural

It is the Board's opinion the design and presentation (including timing) of evaluation reports should be improved, so the insight gained from them may be used to make decisions in a timely manner. The Board recommends that DOEE consider this issue in future evaluation contract definitions, taking advantage of initiatives like US DOE's State and Local Energy Efficiency Action Network, which has published detailed guidance for evaluating the impact of energy efficiency programs.[20]

a. Purposes and Types of Evaluations Going Forward -- Only a few jurisdictions have sustainable energy utilities, and the nature of the problem to be addressed, which could be tackled by several organizations simultaneously, means that expectations for one organization can become burdensome. The Board is concerned that program evaluations generally do not and cannot address broader questions of how energy policies in the District affect the operations of the DCSEU, and vice versa, whether certain roles assigned to the DCSEU could be better implemented by others with input from the DCSEU (e.g. workforce development). As discussed below, the Board proposes to use its professional networks to advise DOEE on administering the DCSEU contract, including helping to identify and plan to manage risks to the DCSEU. The Board intends to determine the budget needed for it to function in a policy coordination role, for discussion with DOEE.

b. Coordination -- Board composition is such that it could help identify opportunities to coordinate DCSEU activities with other energy management activities in the District. "Other energy management activities" covers the gamut, from

[20] See Action Evaluation, Measurement and Verification Group *Energy Efficiency Program Impact Evaluation Guide* December 2012

planning and transportation support for green building and adoption of low-emission fuels, to support for low-income housing and creation and support of green jobs. Board members have a wide variety of contacts locally and nationally. As the Board members have a tremendous array of resources at their fingertips, the Board should consider formalizing a process to solicit input from the Board members' own constituencies towards advancing the District's energy future, and determining how to evaluate and act on these in an orderly manner. Board "scans" of the DC energy management environment, will be included as a regular agenda item for Board meetings.

Additionally, it does not appear that a formal mechanism exists for the Board to contribute to other District initiatives that would benefit from improved energy management -- work not under DOEE's control. The Board suggests that such a mechanism be developed. For instance, there should be a mechanism whereby the Board could advise those working to build new homeless shelters on specifying that those shelters be served by renewably-fueled and intelligent nano-grids.

c. Planning – Per the Board's comment on the RFP, the new DCSEU contractor will be required to conduct annual strategic planning exercises, with a view to ensuring the long-term organizational, financial, and technological sustainability of the DCSEU itself. If DOEE determines it is appropriate to explore various possible trajectories for the DCSEU after 2021, rather than renewing the contract, the Board would be uniquely positioned to facilitate the discussion of options for enhancing the sustainability of the DCSEU. If asked to do so, the Board could serve as a bridge to the District's new Office of Public-Private Partnerships and investigate the prospects for eventual semi-privatization of the DCSEU, *i.e.*, making it a public-private partnership or an ESCO so as to allow it to become less dependent on a single contract from a single agency for its survival and operations.

1. Recommendations on Changes to the Annual Report: The Board recommended that a management audit of the DCSEU be added to annual oversight activities. It is not clear whether this will be incorporated, as part of the required reports and financial audit, as it is not named separately in the RFP. The Board further hopes that future reports will compare the costs of executing a particular program with the energy savings and other benefits generated by that program.

   Concurrently, the contractor is expected to include in its strategic planning identification of any risks to its performance, so these may be mitigated or managed. 'External risks' include items such as changes to regulation or practice of related programs, technical requirements for the location, development and operation of micro-grids, new energy efficiency standards, etc.; and 'internal risks' include items such as employee turnover, inadequate maintenance of installed equipment, etc.

VII. CONCLUSION

The Board is optimistic about improvements in the DCSEU's performance that will be enabled by new contract language that will emerge as a result of the new RFP, as well as changes that have been made to the DCSEU's organic legislation, both of which benefited from the Board's involvement. The Board is also hopeful that to the extent that the DCSEU's quarterly reports reflect the more sophisticated approach to contract management required by the new RFP, the Board will be in a better position to fulfill its advisory role. Finally, the Board is eager to take on responsibilities it believes are inherent in its duties, such as each Board member informally 'polling' his or her own 'constituency' so as to be able to identify barriers to the District's improved energy performance, and recommend solutions that could be effectuated through the DCSEU.

The Board appreciates the opportunity to participate in preparing this report, and otherwise serving its function.

APPENDIX A CAEA Amendments

Detailed Purpose and Effects

The Residential Aid Discount Subsidy Stabilization Amendment Act of 2010 amended the CAEA to:

Return control of the Residential Aid Discount (RAD) program to the Public Service Commission of the District of Columbia (PSC) and to provide for an increase in the assessment imposed upon the sales of the electric company to maintain the RAD program through fiscal year 2010; and

Increase the subsidy level to $5.207 million to maintain the discount levels approved by the PSC.

The Sustainable Energy Utility Amendment Act of 2010 amended the CAEA to:

Enable Benchmarking program enforcement by shifting the reporting deadline and allowing fine authority;

Expanding authority of the DCSEU to include energy efficiency programs;

Authorize the Executive to operate a renewable energy incentive rebate program for solar using the Renewable Energy Development Fund; and

Exclude the value of a solar incentive from tax liability.

The Fiscal Year 2011 Supplemental Budget Support Act of 2010 amended the CAEA to:

Lower the funds allocated for pre-execution of the first contract to $775 thousand;

Lower the annual funds allocated for DCSEU Advisory Board activities to $9,880;

Lower the annual funds allocated for existing electricity programs to $2.375 million;

Lower the annual funds allocated for temporary electricity programs to $1.073 million;

Lower the annual funds allocated for existing gas programs to $1.106 million; and

Amend the allocation for Energy Assistance Trust Fund (EATF) as follows:

- o$2.409 million in Fiscal Year 2011; and
- o$2.6 million annually thereafter.

The Fiscal Year 2013 Budget Support Act of 2012 amended the CAEA to: authorize $2 million in weatherization, appliance replacement, and healthy homes programs in Fiscal Year 2013.

The Technical Amendments Act of 2012 amended "Green-collar" for "Green collar" in (10); and validated previously made technical corrections in definitions (3) "Electric company" and (22) "Utility or energy company".

The Sustainable DC Amendment Act of 2012 amended the CAEA to:

Extend the Renewable Energy Incentive Program (Fiscal Year 2013);

Change the allocation for existing natural gas programs:

- o$1.106 million for fiscal year 2011;
- o$2 million for fiscal year 2012; and
- o$1 million for fiscal year 2013; and

Add the ENERGYSTAR Benchmarking program to acceptable uses of the Sustainable Energy Trust Fund (SETF).

The Sustainable DC Omnibus Act of 2014 amended the CAEA to:

Make it easier for building owners to obtain whole-building energy use data by requiring the District's electric and gas companies to provide building owners access to monthly aggregate data for buildings with at least 5 customer accounts, where no single account represents more than 80% of the total energy use of the building[21];

Limits automatic access to aggregate data in order to protect customer privacy where a customer has not authorized the utility to transfer individual energy use data to the building owner;

Require the energy and natural gas utilities to provide benchmarking data via an online portal, and to automatically upload the information to a building owner's linked ENERGY STAR® Portfolio Manager account on a monthly basis; and

Require the buyer to be responsible for benchmarking reporting in the year a building is sold, but require the seller to transfer the relevant utility records when a property subject to the benchmarking requirements changes ownership/control. This ensures that the new building owner can track the building's performance and submit a complete benchmarking report to DOEE for that year.

The legislation also amended the Retail Electric Competition and Consumer Protection Act of 1999 to clarify that the transfer of whole-building energy use data where five or more customer accounts are aggregated and no single account represents more than 80% of the total energy use of the building does not violate the consumer privacy protections provided for in the subject law.

The Residential Essential Service Subsidy Stabilization Amendment Act of 2014 as Title II, Subtitle K of the Fiscal Year 2015 Budget Support Act of 2014 amended the CAEA to:

Clarify the definition of "Existing low-income program" to include the LIHEAP Expansion and Energy Education program;

Reduce the EATF assessment on sales of natural gas by decreasing the per therm assessment on the gas company from $.006 per therm to $.0051 per therm;

Lower the allocation for the EATF from $2.409 million in fiscal year 2011, and $2.6 million annually thereafter to $2.33 million annually;

Add a bi-annual audit requirement for the EATF; and

Require the PSC to establish a discount program for low-income gas customers in the District (Residential Essential Services)

The Clean and Affordable Energy Amendment Act of 2015 as Title VI, Subtitle J of the Fiscal Year 2016 Budget Support Act of 2015 amended the CAEA to:

Amend the performance benchmarks for the DCSEU to:

oFour performance benchmarks

- Reduce energy consumption in the District of Columbia
- Increase renewable energy generating capacity in the District of Columbia
- Increase the energy efficiency and renewable energy generating capacity of low-income housing, shelters, clinics, or other buildings serving low-income residents in the District of Columbia; and

[21] Pepco worked closely with the District Department of Energy and the Environment and customers to provide required energy use data and establish a process for ensuring customer privacy.

- Increase the number of green-collar jobs in the District; and
  - Two semiannual tracking requirements on the reduction of the growth in peak electricity demand and the reduction in the growth of energy demand of the District's largest energy users due to DCSEU programs;

Provide other structural amendments to enable a multi-year contract and benchmarks;

Remove the proportional spending ceiling on the allowable expenditures for gas or electric initiatives (formerly 125% of collected revenue) to allow the DCSEU more flexibility in meeting the performance benchmarks;

Require the Board to recommend benchmark changes at least every two years;

Clarify the Board's role as one of advice on the management of the contract and benchmarks and reduce the likelihood of a financial conflict of interest among board members;

Allow DOEE to use contract administration funds to develop a comprehensive energy plan for the District; and

Amend the annual reporting deadline for DOEE on SETF and EATF expenditures to allow adequate time for data collection, evaluation, and verification at the end of the fiscal year.