Task Force on the Maryland Clean Energy Center

FINAL REPORT

Annapolis, Maryland

June 2017

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TASK FORCE ON THE MARYLAND CLEAN ENERGY CENTER

June 30, 2017

The Honorable Lawrence J. Hogan, Jr., Governor of the State of Maryland
The Honorable Thomas V. Mike Miller, Jr., President of the Senate
The Honorable Michael E. Busch, Speaker of the House of Delegates
Members of the Maryland General Assembly

Dear Ladies and Gentlemen:

The Task Force on the Maryland Clean Energy Center, established by Chapter 577 of 2016, respectfully submits its final report. The task force was charged with determining how best to make the Maryland Clean Energy Center (MCEC) self-sustaining without deviating from MCEC's mission which is to (1) encourage the development of the clean energy industry and deployment of clean energy technologies in the State; (2) help retain and attract business activity and commerce in the clean energy technology industry sectors in the State; and (3) promote economic development and the health, safety, and welfare of residents of the State.

The full task force met twice during the 2016 interim: October 11 and 25. Other smaller group meetings were held later in the interim. The full task force's final meeting was held on February 7, 2017. During these meetings, the task force (1) assessed the programs then provided by MCEC and the programs that, within its mission, charge, and structure, MCEC may provide, including the establishment of a green bank; (2) reviewed existing State financing instrumentalities that may have similar financing capabilities to determine whether there are advantages for MCEC to coordinate or partner with those State financing instrumentalities on financing programs; (3) identified the availability of resource capacity in State financing instrumentalities for purposes of determining whether there are cost-effective opportunities for MCEC to share resources with those State financing instrumentalities on financing programs; and (4) reviewed other cost-effective opportunities, including having MCEC co-locate with another State financing instrumentality or State agency, that may assist MCEC during the time when MCEC is working toward becoming self-sustaining.

As part of its work, the task force was charged to determine: whether the outstanding balance of loans initiated in fiscal 2009 from the Maryland Energy Administration (MEA) should be converted to a grant and considered as start-up funds as a way in assisting MCEC to become self-sustaining; and an appropriate amount of State annual grant funding that MCEC should receive for operating and program assistance as MCEC works toward becoming self-sustaining and in no further need of operating and program support from the Maryland Strategic Energy Investment Fund or any other State money.

Based on the task force's discussions, the task force supported, in concept, Senate Bill 313/House Bill 410 "Economic Development – Maryland Energy Innovation Institute." This report summarizes the task force's activities and recommendations for passage of legislation. The report also summarizes legislation passed by the General Assembly and signed by the Governor (Chapters 364/365 of 2017). Generally, the Acts establish the Maryland Energy Innovation Institute to house MCEC and develop clean energy programs under the auspices of the University of Maryland; provide State funding for five fiscal years to the institute and for use by MCEC; convert previous loans made by MEA to MCEC into grants; and require MCEC to establish a work plan to become self-sustaining within five years.

Very truly yours,

Thomas M. Middleton

Sally Y. Jameson

Thomas M. Middleton
Senate Co-chair

Sally Y. Jameson
House Co-chair

cc: Mr. Warren G. Deschenaux

Task Force on the Maryland Clean Energy Center

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Senator James N. Mathias, Jr.
Senator Stephen S. Hershey, Jr.

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Executive Summary

Task Force Charge and the Maryland Clean Energy Center Background

Chapter 577 of 2016 established the Task Force on the Maryland Clean Energy Center (MCEC). The task force was charged with determining how best to make the center self-sustaining without deviating from MCEC's existing mission and charge.

The task force was required to assess the programs then provided by MCEC and the programs that, within its mission, charge, and structure, MCEC may provide; review existing State financing instrumentalities that may have similar financing capabilities; identify the availability of resource capacity in State financing instrumentalities; review other cost-effective opportunities; determine whether the outstanding balance of loans initiated in fiscal 2009 from the Maryland Energy Administration (MEA) should be converted to a grant; and determine an appropriate amount of State annual grant funding that MCEC should receive for operating and program assistance as MCEC works toward becoming self-sustaining and in no further need of State operating support.

MCEC was established by Chapter 137 of 2008 as a body politic and corporate and an instrumentality of the State. The purpose of MCEC is to (1) promote economic development and jobs in the clean energy industry sector; (2) promote the deployment of clean energy technology; (3) serve as an incubator for the development of the clean energy industry; (4) collect, analyze, and disseminate industry data; and (5) provide outreach and technical support to further the clean energy industry.

MCEC operates four financing programs: Maryland Home Energy Loan Program; Maryland Clean Energy Capital Program; Commercial Property Assessed Clean Energy Finance; and MarylandSAVES Green Communities Program. In addition to financing programs, MCEC has engaged at times in a number of nonfinancing activities.

MCEC was established as a nonbudgeted entity. Chapter 137 did not establish a funding mechanism for MCEC for either startup costs or ongoing activities; however, MCEC received an initial startup loan, as well as subsequent loans and grants from MEA for operating support. Due to limited activity and the new nature of some of its programs, revenue has been limited. MCEC has operated with an operating loss from fiscal 2013 through 2016.

Meetings

2016 Interim

- During the 2016 interim, the task force learned about the structure and operations of MCEC and other State financing instrumentalities: Maryland Environmental Service; Maryland Economic Development Corporation (MEDCO); Maryland Technology Development Corporation; Maryland Health and Higher Educational Facilities Authority (MHHEFA); and Maryland Industrial Development Finance Authority.

- The task force discussed with representatives of these State financing instrumentalities whether (1) there are advantages for MCEC in to coordinate or partner with them on financing programs; (2) the instrumentalities have resource capacity available for MCEC to share resources with them; or (3) there are cost-effective opportunities, including having MCEC co-locate with any of them. These discussions continued through multiple subsequent small group meetings. Several instrumentalities indicated they may have space and resources they could share with MCEC; however, it was unclear if the offers would provide MCEC with the type of assistance and benefits that it needed at the time.

2017 Session: Meeting and Legislation

- Early in the 2017 session and before submitting final recommendations, the task force was briefed on the provisions of Senate Bill 313/House Bill 410 "Economic Development – Maryland Energy Innovation Institute" and the structure and operations of the University of Maryland Energy Research Center. The legislation was a collaborative effort to reach the goal of having MCEC continue with its current programs and slowly expand into financing projects. Given revenue constraints, an infusion of $1.5 million a year for five years from the Strategic Energy Investment Fund (SEIF) was the only available funding that the Administration could dedicate to the proposal.

- The bills were amended to incorporate additional task force concerns, as discussed below, and were enacted as Chapters 364 and 365 of 2017. The Acts established the Maryland Energy Innovation Institute as a part of and managed by the A. James Clark School of Engineering in the University of Maryland, College Park (UMCP). The purposes of the institute are to collaborate with academic institutions (public and private nonprofit four-year institutions) in the State to participate in clean energy programs; and to develop and attract private investment in clean energy innovation and commercialization in the State.

- For fiscal 2018 through 2022, the Acts require $1.5 million annually to be transferred from SEIF to the new Maryland Energy Innovation Fund (MEIF). The fund is used by the institute and MCEC for their administrative and operating costs, and MCEC may use the fund to provide certain types of financial assistance, including making grants or loans, providing equity investment financing for a business enterprise; and guaranteeing loans, equity, investments, or any other private financing to expand the capital resources of a business enterprise.

- The Acts altered MCEC's Board and functions slightly.

- The Acts stated that the intent of the General Assembly that, as MCEC develops programs and activities for which it is authorized, MCEC and MEA work collaboratively together, as appropriate, in order to coordinate shared-interest functions and avoid duplication of efforts. MCEC is authorized to conduct its activities in consultation with MEA. In addition, MCEC must collaborate with MEA when collecting, analyzing, and disseminating industry data. MCEC must establish a work plan to become self-sustaining within five years after the effective date of the Acts using the SEIF transfers, other funding that MCEC may obtain, and projected revenues from project financing activities. The fiscal 2018 operating budget contains the first year of funding proposed in the legislation ($1.5 million).

Task Force Discussions and Recommendations

- The task force unanimously indicated its support for the concept of the legislative proposal which included establishing the institute and providing funds to MEIF for use by MCEC.

- The task force discussed where an appropriate place would be for MCEC to be located. MCEC will relocate to an incubator room near the UMCP campus. Details concerning this move are anticipated to be specified in a memorandum of understanding (MOU) between MCEC and the institute.

- The task force discussed whether MCEC should continue its current functions, such as nonrevenue generating activities. In providing clean energy summits, MCEC receives revenues from sponsors, attendees, and donors that cover the expenses. The task force saw value in MCEC continuing these gatherings since they pull together the clean energy industries and may lead to providing some of them financial assistance. The task force saw value in MCEC's service as a clearinghouse for information and materials that may be pertinent to clean energy technology, education, and development in the State for persons engaged in the clean energy industry as long as this function would not duplicate MEA's activities.

- The task force discussed that the legislative proposal is a cautious approach toward MCEC becoming self-sustaining. The proposal did not specify how funding would be allocated between the institute and MCEC. The institute manages and supervises MEIF, but must use MEIF for the administrative and operating costs of MCEC. It is anticipated that MCEC and the University of Maryland Energy Research Center will enter into a MOU to outline specifics of the arrangement for the funding. MCEC will need to redefine its business plan to adapt to the level of funding. MCEC retains its statutory authority to issue bonds, lend revenue from bond sales, and own, sell, or lease property; however, with limited funding, MCEC will not be able to finance many loans. But, with the five-year funding commitment, businesses and residents will know that MCEC is an ongoing operational entity. The task force expressed interest in MCEC being able to use the funding to begin financing projects and becoming self-sustaining.

- The task force was interested in specifying in the legislation that earnings generated by MCEC from activities not funded through MEIF, either before or after enactment of the legislation, accrue to MCEC. Further, the task force was interested in specifying in the legislation that debt incurred by MCEC through bonds, either before or after enactment, would not become a debt of the State or UMCP. It further believed that the legislation needed to specify that the institute and MCEC are independent entities and are not liable or responsible for the debts, liabilities, bonds, or obligations of each other. This was subsequently incorporated into the legislation.

- The task force strongly recommended that State agencies work collaboratively together, coordinate shared-interest functions, and avoid duplication of efforts.

- The task force discussed that MCEC would need to develop expertise in providing financing programs. MHHEFA and MEDCO may provide mentorship services to MCEC. The task force strongly recommended that there be an annual evaluation of the institute to determine how successful the proposal is in moving MCEC toward becoming self-sustaining. The Acts require MCEC to report by December 1, 2019, to the Governor and the legislature on its progress and recommendations for becoming self-sustaining.

- The 2017 *Joint Chairman's Report* includes narrative requesting a report on the use of MEIF and allocation to MCEC.

Final Report

Task Force Charge

Chapter 577 of 2016 established the Task Force on the Maryland Clean Energy Center (MCEC). The task force is charged with determining how best to make the center self-sustaining without deviating from MCEC's mission and charge to:

- encourage the development of the clean energy industry and deployment of clean energy technologies in the State;
- help retain and attract business activity and commerce in the clean energy technology industry sectors in the State; and
- promote economic development and the health, safety, and welfare of residents of the State.

The task force must:

- assess the programs currently provided by MCEC and the programs that, within its mission, charge, and structure, MCEC may provide, including the establishment of a green bank;
- review existing State financing instrumentalities that may have similar financing capabilities for purposes of determining whether there are advantages to MCEC to coordinate or partner with those State financing instrumentalities on financing programs;
- identify the availability of resource capacity in State financing instrumentalities for purposes of determining whether there are cost-effective opportunities for MCEC to share resources with those State financing instrumentalities on financing programs;
- review other cost-effective opportunities, including having MCEC co-locate with another State financing instrumentality or State agency, that may assist MCEC during the time when MCEC is working toward becoming self-sustaining;
- determine whether the outstanding balance of loans initiated in fiscal 2009 from the Maryland Energy Administration (MEA) should be converted to a grant and considered as startup funds as a way in assisting MCEC to become self-sustaining;
- determine an appropriate amount of State annual grant funding that MCEC should receive for operating and program assistance as MCEC works toward becoming self-sustaining and in no further need of operating and program support from the Maryland Strategic Energy Investment Fund (SEIF) or any other State money; and

- consider any other related matter that the task force determines appropriate.

On or before December 1, 2016, the task force was required to report its findings and recommendations to the Governor and the General Assembly. Since the task force had not yet completed its work, on November 30, 2016, the task force requested a delay in the submission of its final report until January 30, 2017. In order to include the enacted legislation in the report, the completion of the report was delayed until after the 2017 session.

Meetings

2016 Interim

At its first meeting, held on October 11, the task force reviewed its charge. Further, the task force learned about the structure and operations of the State financing instrumentalities listed below.

- The Maryland Environmental Service (MES) (Beth Wojton, Assistant Director and Janet Irvin, CFO, MES, presenting for John O'Neill, Acting Director, MES).

- The Maryland Economic Development Corporation (MEDCO) (Robert C. Brennan, Executive Director, MEDCO).

- The Maryland Technology Development Corporation (TEDCO) (John M. Wasilisin, President/Chief Operating Officer, TEDCO).

- The Maryland Clean Energy Center (I. Katherine Magruder, Executive Director, MCEC, and Wyatt Shiflett, Director of Finance Programs, MCEC).

At its second meeting, held on October 25, the task force learned about the structure and operations of the State financing instrumentalities listed below.

- The Maryland Health and Higher Educational Facilities Authority (MHHEFA) (Annette Anselmi, Executive Director, MHHEFA).

- The Maryland Industrial Development Finance Authority (MIDFA) (D. Gregory Cole, Senior Director, Office of Finance Programs, and Executive Director, MIDFA, Department of Commerce).

MCEC also described the types of financing programs that it provides and other functions that it performs. These are described below under "About MCEC."

Further, at this meeting, the task force discussed with representatives of the State financing instrumentalities whether (1) there would be advantages for MCEC to coordinate or partner with the instrumentalities on financing programs; (2) the instrumentalities had resource capacity available for MCEC to share resources with them; or (3) there were cost-effective opportunities, including having MCEC co-locate with them. These discussions continued through several subsequent small group meetings. Several of the instrumentalities indicated they might have space and resources they could share with MCEC, including MEA. However, was unclear if some of the offers would provide MCEC with the type of assistance and benefits that it would need at the time. Discussions involved shared space, as well as shared services (accounting, payroll, transaction underwriting and loan servicing, and incubator management). Further discussion at small group meetings included the option of having MCEC become affiliated and co-locate with the University of Maryland Energy Research Center (UMERC).

MCEC individually met with MEDCO and MHHEFA to go through MCEC's business plan. Also, MCEC presented several operating *pro formas* at a small-group meeting, one based on no growth and no green bank, the second based on a $15.0 million infusion to MCEC to establish a green bank, and the third based on a $30.0 million infusion to MCEC to establish a green bank. Without new funding, it appeared likely that MCEC would fold. With some infusion funds, MCEC could establish a limited green bank or a full green bank. MCEC estimated that it could become self-sustaining within three to five years with an infusion of funds. MCEC's $1.2 million loan from MEA would not be able to be paid back without MCEC receiving an infusion of funds. At that time, MCEC was operating with a fiscal 2017 grant of $485,000, as provided in a memorandum of understanding (MOU) between MCEC and MEA.

Note: The task force was provided with background papers on each State financing instrumentality and a comparison chart. **See Appendices 2 and 3.**

2017 Session

At its last meeting held on February 7, the task force was briefed on:

- the provisions of Senate Bill 313/House Bill 410 "Economic Development – Maryland Energy Innovation Institute" (Mathew J. Palmer, Deputy Legislative Officer, Office of the Governor) and

- the structure and operations of the UMERC (Eric D. Wachsman, Ph.D., Director of UMERC).

The task force discussed with the representatives of the Governor's office and UMERC about UMERC's intention for, and relation to, MCEC.

Legislation

Mr. Palmer explained the legislation (described below) and indicated that the proposal is a collaborative effort to reach the goal of having MCEC continue with its current programs and slowly expand into financing projects. Given revenue constraints, an infusion of $1.5 million a year for five years from SEIF was the only available funding that the Administration could dedicate to this proposal. Since the Regional Greenhouse Gas Initiative (RGGI) revenue to SEIF has been declining, there has been concern about funding existing programs even before considering this transfer. While the five-year funding commitment may not produce a "green bank," it would provide some stability for MCEC as MCEC works toward becoming self-sustaining. Additional potential funding may become available in the future. As part of the Governor's legislative environmental package, Mr. Palmer indicated that the proposal shows that MCEC will be part of the promotion of future environmental programs.

About University of Maryland Energy Research Center

UMERC is administered by the A. James Clark School of Engineering. It includes faculty from all Clark School departments, as well as from the College of Agriculture and Natural Resources; the College of Computer, Mathematical, and Natural Sciences; the School of Public Policy; and the College of Behavioral and Social Sciences. According to its website, UMERC is a "multidisciplinary initiative dedicated to advancing the frontiers of energy science and technology, with a special focus on forward-looking approaches for alternative energy generation and storage. The center focuses on a broad array of research areas critical for future energy technology development." The center brings together the research capabilities necessary to create a sustainable energy future, with faculty expertise in both energy technology and policy. The center's mission is to develop energy efficient and environmentally sustainable technologies and practices; educate the public about energy and environmental technologies; inform the larger policy debate on urgent, global issues of sustainable energy and environment; and improve U.S. energy security by developing indigenous and environmentally sustainable energy resources while promoting energy policies that have a positive impact on the environment.

The University of Maryland, College Park (UMCP) campus has several energy research centers that focus on different aspects of energy research. These centers solicit research funding through various federal and private sources, which pays for graduate research assistants, a portion of research professor salaries, equipment, *etc*. The centers may be loosely affiliated with each other but do not necessarily benefit from a centralized coordination of their activities.

While the legislation does not require it, Dr. Wachsman advised that the intent of the proposal was to integrate MCEC and the energy research centers at UMCP (and more broadly, at other institutions of higher education across the State) under the general structure of the Maryland Energy Innovation Institute (MEII). The institute would provide centralized services to the research centers, including assistance in seeking additional research funding and providing a dedicated energy policy resource. These centralized services would be funded through the transfer from SEIF and also from assessments on participating research centers.

UMERC indicated that many of the details of the research center integration under the institute would be established in a separate "institute proposal" that must ultimately be approved by the University System of Maryland (USM).

About the Maryland Clean Energy Center

MCEC was established by Chapter 137 of 2008 as a body politic and corporate and an instrumentality of the State. The purpose of MCEC is to (1) promote economic development and jobs in the clean energy industry sector; (2) promote the deployment of clean energy technology; (3) serve as an incubator for the development of the clean energy industry; (4) collect, analyze, and disseminate industry data; and (5) provide outreach and technical support to further the clean energy industry. MCEC operates four financing programs:

- **Maryland Home Energy Loan Program:** Began operations in fiscal 2011 with funds provided by MEA. In the first two years of the program, MCEC operated the program as a direct lending program. During fiscal 2012, MCEC revised the program and partnered with Mariner Finance. Since that time, Mariner Finance has been the provider of loans with MCEC providing a loan loss reserve and an interest rate subsidy. (This is a nonrevenue generating function.)

- **Maryland Clean Energy Capital Program (MCAP):** Works with governmental and nonprofit partners on energy savings projects. MCEC issues bonds on behalf of the entity to finance projects. (This is a revenue generating function.)

- **Commercial Property Assessed Clean Energy Finance (PACE):** Under a PACE program, the clean energy and conservation measures are financed and repaid through tax assessment associated with the property. MCEC offers businesses financing for these projects through an equity partnership with Pace Financial Services. MCEC indicates one project had been financed under this program as of the end of January 2017. (This is a limited revenue generating function that is designed to recapture costs.)

- **MarylandSAVES Green Communities Program:** Was established in the summer of 2016. Under this program, MCEC works with a third-party administrator to assist local governments in financing renewable energy, energy efficiency, and alternative fuel vehicle and infrastructure projects using Qualified Energy Conservation Bonds awarded to the jurisdiction but not yet issued. However, no projects had been undertaken in this program as of the end of January 2017. (This is a revenue generating function.)

In addition to financing programs, MCEC has engaged at times in a number of non-financing activities. For example, MCEC initially was involved in an incubator project with the Maryland Clean Energy Technology Incubator Network, although the network is no longer operational. MCEC also conducts education and outreach efforts including in-person and webinar training. MCEC has convened various events to bring energy stakeholders together including clean energy summits and legislative receptions, has hosted workgroups, and has coordinated meetings and held receptions for visiting international groups. Many of these business development events have been supported by sponsors, attendees, and donations.

MCEC has also conducted several studies at the request of the General Assembly, including reviewing the opportunities for a green bank and residential clean energy program financing.

Maryland Clean Energy Center Funding Sustainability

MCEC was established as a nonbudgeted entity. Chapter 137 of 2008 did not establish a funding mechanism for MCEC for either startup costs or ongoing activities. MCEC has the ability to charge fees for the programs that it offers and receives revenue, or could potentially receive revenue, from its MCAP, Commercial PACE, and MarylandSAVES programs. Due to limited activity and the new nature of some of these programs, revenue from these sources has been limited. MCEC has operated at an operating loss from fiscal 2013 through 2016 and in three of those four years had operating revenue of less than $300,000. During this same period, operating expenses averaged over $700,000.

MCEC received an initial startup loan, as well as subsequent loans and grants from MEA for operating support. Through fiscal 2016, MCEC received loans in three fiscal years totaling $1.3 million from MEA. MCEC also received a grant of $212,000 in fiscal 2016 for operating costs. While the loans for operating support have allowed MCEC to continue to operate, the loans are expected to be repaid. To date, MCEC has made one payment of $50,000 on the startup loan, in fiscal 2014.

The fiscal 2017 budget bill restricted $3.3 million of funding from MEA's budget to be used for a grant to MCEC for operating support and assistance. This grant would have provided funding for both administrative activities and additional programmatic activities. These funds were not released. However, MEA agreed to provide a smaller grant to MCEC totaling $485,000 to allow the entity to continue operations through fiscal 2017, while future funding options were under discussion.

2017 Legislation (as passed by the Maryland General Assembly)

Chapter 364/365 of 2017 (Senate Bill 313/House Bill 410) "Economic Development – Maryland Energy Innovation Institute"

Maryland Energy Innovation Institute

(MEII) was established as a part of and managed by the A. James Clark School of Engineering at UMCP. The purposes of the institute are to:

- collaborate with academic institutions (public and private, nonprofit four-year institutions) in the State to participate in clean energy programs; and

- develop and attract private investment in clean energy innovation and commercialization in the State.

An advisory board was established in the institute to advise the university on the management of the institute. The legislation establishes provisions on board membership and meetings. A member of the board may not receive compensation but is entitled to reimbursement for travel expenses. The School of Engineering must manage the institute according to UMCP and USM policies with the advice of the institute board.

The Director of UMERC, a University of Maryland faculty member, must be the director of the institute. The director must appoint an associate director, who also must be a University of Maryland faculty member. The director, or the director's designee, must (1) attend all meetings; (2) act as board secretary; (3) keep board minutes; (4) approve all salaries, *per diem* payments, and allowable expenses of the institute, its employees, and its consultants; (5) approve any incidental expenses; and (6) perform other duties the board directs in carrying out the legislation.

Generally, the institute may do all things necessary or convenient to carry out the powers granted to it by the legislation. Specific powers include, among others:

- maintaining offices at UMCP and retain any staff or consultants;

- coordinating and promoting energy research and education, as specified;

- providing energy policy innovation advice to State and federal units and working closely with State and federal agencies, among others, to ensure effective implementation and execution of the State's energy mission and vision;

- collaborating with specified entities and pursuing grants, other funds, and in-kind contributions for clean energy research and innovation;

- providing seed grant funding to academic institution-based entrepreneurs or entities in order to promote the commercialization of clean energy technologies developed wholly or partly by an academic institution, but not duplicating existing seed grants made through TEDCO;

- working with the Maryland Technology Enterprise Institute and the University of Maryland Office of Technology Commercialization to (1) identify energy technologies at academic institutions that may be viable for commercialization and (2) provide grant funding and investment financing to cover patent, facilities, and other costs, as specified, in order to promote the commercialization of clean energy technologies developed wholly or partly by an academic institution;

- working with the Maryland Technology Enterprise Institute to jointly manage, operate, and maintain facilities for a clean energy incubator at UMCP; and

- coordinating incubation and potential financing of academic institution-based entrepreneurs or entities with resources provided by MCEC.

The institute is exempt from State and local taxes. The books and records of the institute are subject to audit at any time by the State and each year by an independent auditor that the Office of Legislative Audits approves.

The institute and MCEC are independent entities that are not liable or responsible for each other's debts, liabilities, bonds, or obligations.

The institute must report annually to the Governor, MEA, and the General Assembly. The report must include a complete operating and financial statement covering the institute's operations and a summary of the institute's activities during the preceding fiscal year. In addition to the annual report, the institute must study and evaluate aspects of funding for clean energy technology in the State and submit a report of its findings and recommendations to the Governor, MEA, and the General Assembly by December 1, 2019.

Maryland Energy Innovation Fund

The Maryland Energy Innovation Fund (MEIF) is established as a special, nonlapsing fund in USM. The institute must manage and supervise the fund, which consists of money appropriated by the State to the fund and other specified sources, including:

- repayment of principal and payment of interest of loans made from the fund;

- recovery of investments made by MCEC in business enterprises from the fund; and

- repayment of conditional grants made by MCEC from the fund, with interest earnings being credited to the fund.

For fiscal 2018 through 2022, $1.5 million annually must be transferred from SEIF to MEIF. The fiscal 2018 operating budget included funds representing the first year of these transfers.

The fund is to be used by the institute and MCEC for their administrative and operating costs, and MCEC may use the fund to provide certain types of financial assistance. Specifically, the institute may use the fund to (1) carry out the purposes of the legislation; (2) purchase advisory services and technical assistance to better support economic development; and (3) pay the institute's administrative, legal, and actuarial expenses. The institute also must use the fund for the administrative and operating costs of MCEC.

MCEC may use the fund to:

- make grants and loans, at the rate of interest MCEC sets;
- provide equity investment financing for business enterprises; and
- guarantee loans, equity, investments, or any other private financing to expand the capital resources of business enterprises.

Money expended from the fund is supplemental to and is not intended to take the place of funding that otherwise would be appropriated for MCEC, the institute, or any part of USM.

Maryland Clean Energy Center Board and Functions

The Governor, not the MCEC board of directors, must appoint the chair of the MCEC board. The board must elect a vice chair and a treasurer. In addition to MCEC's existing advisory committee, the board must establish a financing investment advisory committee, consisting of individuals with knowledge and expertise in financing matters relevant to borrower eligibility, terms and conditions of support, and other financing evaluation criteria. Before MCEC provides financing for a project, including a project to be funded from MEIF, the committee must review and make recommendations to the board for qualifying project applicants. MEDCO and other State economic development units may provide resources and expertise to the committee and MCEC to assist in evaluating projects, coordinating financing for projects, and other matters.

MCEC may disseminate information and materials pertinent to clean energy technology, financing, and development in the State, for persons engaged in the clean energy industry, as specified.

It is the intent of the General Assembly that, as MCEC develops programs and activities as authorized, MCEC and MEA work collaboratively together, as appropriate, in order to coordinate shared-interest functions and avoid duplication of efforts. MCEC is authorized to conduct its activities in consultation with MEA. In addition, MCEC must collaborate with MEA when collecting, analyzing, and disseminating industry data.

MCEC must establish a work plan to become self-sustaining within five years after the effective date of the legislation using funding provided by the legislation, other funding that MCEC may obtain, and projected revenues from project financing activities.

By December 1, 2019, MCEC must submit a report to the Governor and the General Assembly on:

- its progress since enactment of the legislation to become self-sustaining with its current activities, funding, and revenue levels; and

- recommendations for changes, including additional necessary funding, to become self-sustaining within five years. The report may be part of MCEC's annual report.

The existing outstanding loan obligations to MEA by MCEC as of the effective date of the bill were converted to a grant from MEA to MCEC.

Other State Economic Development Units

MEDCO, MES, and other State economic development units must cooperate with MCEC and may make resources and expertise available to MCEC for the evaluation of project financing and coordination of financing between MCEC and other economic development units.

Task Force Discussions and Recommendations

At its meeting on February 7, the task force unanimously indicated its support for the concept of the legislative proposal which included establishing MEII and providing funds to MEIF for use by MCEC. Areas of discussions and recommendations are described below.

Location of the Maryland Clean Energy Center at the University of Maryland Energy Research Center

The task force discussed where an appropriate place would be for MCEC to be located. MCEC will relocate to an incubator room near the College Park campus. Details concerning this move are anticipated to be specified in a MOU between MCEC and UMERC.

Maryland Clean Energy Center Functions

The task force discussed whether MCEC should continue its current functions. There was discussion as to whether or not MCEC should engage in nonrevenue generating activities. In providing clean energy summits, MCEC receives revenues from sponsors, attendees, and donors that cover the event expenses. The task force sees value in MCEC continuing these gatherings since they pull together participants in clean energy industries. Continuing to engage with businesses may lead to providing financial assistance to some of them. The legislation would repeal MCEC's function of serving as a clearinghouse for information and materials that may be pertinent to clean energy technology, education, and development in the State, for persons engaged in the clean energy industry. Nevertheless, the task force continued to see value in MCEC retaining this function in a way that would not duplicate MEA activities.

Use of Funds in the Maryland Energy Innovation Fund

The task force discussed that the legislation appeared to be a cautious approach toward MCEC becoming self-sustaining, but expressed concern that the amount of funding would not be adequate to allow MCEC to do so. The task force expressed interest in MCEC being able to use the proposed funding to begin financing projects and become self-sustaining.

It remained unclear how funding would be allocated between the institute and MCEC. The institute is to manage and supervise MEIF, but must use MEIF for the administrative and operating costs of MCEC. It was anticipated that MCEC and UMERC would enter into an MOU to outline specifics of the arrangement for the funding. In addition, narrative in the 2017 *Joint Chairman's Report* requests information on the use of the funds and the allocation to MCEC. MCEC must redefine its business plan to adapt to the level of funding. MCEC retains its statutory authority to issue bonds and lend revenue from bond sales, own, sell, or lease property; however, with limited funding, MCEC may not be able to finance many loans. But with the five-year funding commitment, businesses and residents would know that MCEC remains an ongoing operational entity.

Maryland Clean Energy Center Earned Revenue and Debt, Maryland Energy Innovation Fund, Independent Entities

The task force was interested in specifying in the legislation that earnings generated by MCEC from activities not funded through MEIF, either before or after enactment of the legislation, accrue to MCEC. Further, the task force was interested in specifying in the legislation that debt incurred by MCEC through bond, either before or after enactment, would not become debt of the State or UMCP. It further believed that the legislation needed to specify that the institute and MCEC be independent entities and not liable or responsible for the debts, liabilities, bonds, or obligations of each other. Under existing law, a bond issued by MCEC (1) is not a debt or liability of the State or a political subdivision of the State, or a pledge of the faith and credit of the State or a political subdivision of the State; and (2) is payable solely from money available in accordance with the Maryland Clean Energy Center Act.

Collaboration, Coordination, and Duplication Among State Agencies

The task force strongly recommended that State agencies work collaboratively together, coordinate shared-interest functions, and avoid duplication of efforts. Under the legislation, MCEC must conduct activities in consultation with MEA. The task force discussed making this requirement not be too restrictive of MCEC and suggested that there should be further discussion about how to do this while ensuring collaboration and coordination with MEA. Existing law also required MCEC to coordinate with MEA and prohibited MCEC from duplicating the programs or activities of MEA without consent of MEA. This requirement might also need to be altered so that it would not unduly restrict MCEC; again, the task force similarly suggested that there ought to be further discussion about how to do this while ensuring collaboration and coordination with MEA.

At the last meeting of the task force, Ms. Tung mentioned that it was important that there be one voice among the State agencies for policy purposes. MEA's role is to advise the Governor on issues, policies, and changes in various segments of the energy market. Its mission is to promote affordable, reliable, and cleaner energy for the benefit of all Marylanders. Ms. Tung felt that MEA should be the agency that provides the voice. It should be noted that the legislation, as introduced, specified that the institute may "provide energy policy advice to State and federal units" and "work closely with State units, industrial partners, nongovernmental organizations, and federal agencies and laboratories to ensure effective implementation and execution of the State's energy mission and vision."

Mr. Wasilisin suggested avoiding duplication between MCEC and TEDCO by consolidating similar seed investment programs into TEDCO, which is known as the State's seed/early-stage investment entity. The institute would be required to contract with TEDCO to provide seed grant funding to academic institution-based entrepreneurs or entities in order to promote the commercialization of clean energy technologies developed wholly or partly by an academic institution. TEDCO would turn over the investment entity to MCEC after the entity completed TEDCO's early-stage program.

Mentors

The task force discussed that MCEC would need to develop expertise in providing financing programs. Mr. Palmer indicated that the legislation included MHHEFA and MEDCO on the board so that they could mentor MCEC. Further discussion was needed as to whether representatives of those agencies should serve as board members or rather in an advisory capacity for at least five years. An amendment to the legislation removed MHHEFA and MEDCO from the board.

Evaluation

The task force strongly recommended that there be an annual evaluation of the institute to determine how successful the proposal was in moving MCEC toward achieving self-sustaining status.

Appendix 1. Letter to Delay Submission of Final Report

THE MARYLAND GENERAL ASSEMBLY
ANNAPOLIS, MARYLAND 21401

TASK FORCE ON THE MARYLAND CLEAN ENERGY CENTER

November 30, 2016

The Honorable Thomas V. Mike Miller, Jr., Co-chairman
The Honorable Michael E. Busch, Co-chairman

Dear President and Speaker:

The Task Force on the Maryland Clean Energy Center, established by Chapter 577 of 2016, respectfully requests a delay in the submission of its final report which is due on or before December 1, 2016. As you know, the task force is charged with determining how best to make the center self-sustaining without deviating from the center's mission which is to (1) encourage the development of the clean energy industry and deployment of clean energy technologies in the State; (2) help retain and attract business activity and commerce in the clean energy technology industry sectors in the State; and (3) promote economic development and the health, safety, and welfare of residents of the State.

The full task force met twice during the interim: October 11 and 25, 2016. Other smaller group meetings have also been held. During these meetings, the task force assessed the programs currently provided by the center and the programs that, within its mission, charge, and structure, may be provided by the center, including the establishment of a green bank; reviewed existing State financing instrumentalities that may have similar financing capabilities for purposes of determining whether there are advantages to the center to coordinate or partner with those State financing instrumentalities on financing programs; identified the availability of resource capacity in State financing instrumentalities for purposes of determining whether there are cost-effective opportunities for the center to share resources with those State financing instrumentalities on financing programs; and reviewed other cost-effective opportunities, including having the center co-locate with another State financing instrumentality or State agency, that may assist the center during the time when the center is working toward becoming self-sustaining.

The task force has not completed its work and, therefore, needs additional time to develop it findings and recommendations. Specifically, the task force is currently working toward determining whether the outstanding balance of loans initiated in fiscal year 2009 from the Maryland Energy Administration should be converted to a grant and considered as start-up funds as a way in assisting the center to become self-sustaining; and determining an appropriate amount of State annual grant funding that the center should receive for operating and program assistance as the center works toward becoming self-sustaining and in no further need of operating and program support from the Maryland Strategic Energy Investment Fund or any other State money.

The task force anticipates completing its work with the issuance of a final report on or before January 30, 2017.

Very truly yours,

Thomas M. Middleton

Sally Y. Jameson

Thomas M. Middleton
Senate Chairman

Sally Y. Jameson
House Chairman

cc: Governor Larry Hogan
Mr. Warren G. Deschenaux

TDB/nac

Appendix 2. Background Papers

Maryland Clean Energy Center
(MCEC)

Overview

The Maryland Clean Energy Center (MCEC) was chartered by Chapter 137 of 2008, which established MCEC as a body politic and corporate and an instrumentality of the State. MCEC was originally located at the Universities at Shady Grove where it received space for free, but a change in location was driven by the Universities' need for additional academic space. MCEC has rented space at 1212 West Street, the Maryland Municipal League building, in Annapolis since December 2013. Its website address is http://mdcleanenergy.org/.

Purpose

MCEC's charter is codified in Title 10, Subtitle 8 of the Economic Development Article. As provided in § 10-806 of the Economic Development Article, the purposes of MCEC are to promote economic development and jobs in the clean energy industry sector, promote the deployment of clean energy technology, serve as an incubator for the development of the clean energy industry, collect, analyze, and disseminate industry data, and provide outreach and technical support to further the clean energy industry.

Oversight

MCEC is managed by a nine-member board of directors, which consists of the director of MEA (or director's designee) and eight members appointed by the Governor with the advice and consent of the Senate. Two members represent the nonprofit clean energy research sector, two have expertise in venture capital financing, two represent clean energy industries, and two are members of the general public. The Governor is expected to consider diversity and the geographic regions of the State in making the appointments. Board members do not receive compensation as members but do receive reimbursement for expenses. Board members serve four-year staggered terms that begin July 1.

The MCEC statute also provides for an advisory committee under § 10-810 of the Economic Development Article. The board of directors determines the composition of the advisory committee. The 2016 advisory committee consists of 81 members including representatives of State and local government, electric and natural gas utilities and supplies, universities, construction, financing/banking industries, renewable/clean energy industries, nonprofit environmental organizations, and other entities.

MCEC is a nonbudgeted entity that has limited oversight by the General Assembly. MCEC submits an annual report which is required to include operating and financial statements to the Governor, MEA, and the General Assembly by October 1 of each year. MCEC's books and records are subject to audit by the State. MCEC is audited each year by an independent auditor approved by the Office of Legislative Audits. MCEC funds are deposited in a State or national bank or a federally insured savings and loan association rather than being held by the State Treasurer.

MCEC is exempt from the general procurement law and certain miscellaneous requirements related to the Board of Public Works (Title 10 and Division II of the State Finance Article) and the Open Meetings Act (§§ 3-301 and 3-303 of the General Provisions Article). However, MCEC is subject to the Public Information Act, Title 4 of the General Provisions Article. In addition, the board of directors and employees of MCEC are subject to the Public Ethics Law, Title 5 of the General Provisions Article. MCEC, the board of directors, and employees of MCEC are also subject to requirements related to policies for exempt units and the minority business participation found in Title 12, Subtitle 4 and Title 14, Subtitle 3 of the State Finance and Procurement Article, respectively.

Operations

Start-up Funding

MEA Support for Administration/Operations: From fiscal 2009 through fiscal 2016, MCEC has received loans in three fiscal years totaling $1.3 million and a grant in one year totaling $212,000 for operational support and start-up costs. The loans began with an initial start-up loan in fiscal 2009 ($400,000). Additional loans were provided in fiscal 2014 ($140,000) and 2015 ($760,000). The grant was provided in fiscal 2016 ($212,000). MCEC made the first payment on the start-up loan ($50,000) in fiscal 2014, but has made no subsequent payments or payments on the other two loans. Following the first payment, the payment schedule for the first loan was revised. The current schedule for loan payments is:

- one payment of $50,000 per year from 2015 through 2021 (the 2015 payment is overdue) (a fiscal 2009 loan);
- two payments per year of $7,000 from 2018 through 2027 (a fiscal 2014 loan); and
- two payments per year of $38,000 from 2018 through 2027 (a fiscal 2015 loan).

MCEC's fiscal 2017 budget includes funding to make the required loan payments and the payment that was not made in 2015. However, given the expected funding level of MCEC in fiscal 2017, these payments may not occur as originally planned.

MEA Support for Programs: In addition to this operational support, MEA has provided MCEC with funds for programmatic activity. In fiscal 2010, $4.0 million of funding from American Recovery and Reinvestment Act of 2009 (ARRA) was planned to be provided by MEA for a residential energy efficiency loan program (see below). MCEC indicates that $3.4 million was provided for the program while the remainder was retained by MEA for measurement and verification purposes. In fiscal 2011, MEA provided a separate grant to MCEC. This funding,

$1.0 million of funding from ARRA, was restricted from MEA's budget by the General Assembly for MCEC to use for residential consumer energy education and local government funding assistance.

Additional MEA Funding: The fiscal 2017 budget bill contains language that restricts $3.3 million of funding from the budget of MEA for use by MCEC for operating support and assistance. MCEC expected to use these funds both for administrative purposes and for programs. The restricted funds were not released, however, MEA is providing a $485,000 grant to MCEC from separate funding within the agency in fiscal 2017. The grant is not sufficient to fund MCEC's base operations fully in fiscal 2017. Therefore, MCEC will be unable to use the funding for program investments or expanded staffing as originally expected and will need additional funding to operate for the full year.

Other Start-up Funding: In addition to start-up funding provided by the State through MEA, MCEC received grants totaling $606,225 from Montgomery County from fiscal 2009 through 2011. MCEC also received a grant of $275,000 from the Town Creek Foundation to conduct the green bank study. As noted above, MCEC also received the use of office space from the Universities at Shady Grove at no rental cost.

Personnel

Employees of MCEC are not subject to provisions that govern the State Personnel Management System, Division I of the State Personnel and Pensions Article. MCEC employees are not State employees and do not participate in the State health insurance or retirement programs.

The executive director of MCEC is appointed by the board of directors, subject to the approval of the Governor. The executive director serves at the pleasure of the board. The board establishes the salary of the executive director.

The number of positions at MCEC has varied slightly since fiscal 2009, the first year of operations. In fiscal 2009, MCEC employed a staff of two, an executive director and an administrative manager. In fiscal 2010, MCEC added a director of finance programs. MCEC has maintained these three positions since fiscal 2010. In fiscal 2012 and for part of fiscal 2014 and 2015, MCEC employed a full-time communications director; beginning in fiscal 2016, MCEC employed a part-time communications officer. The Office of the Attorney General serves as the legal advisor for MCEC.

MCEC has budgeted a total of $824,291 for salaries and fringe benefits in fiscal 2017, an 86% increase over fiscal 2015 and 74.8% increase over fiscal 2016. The increased expenses primarily result from the planned addition of two positions (a finance and account manager and a project development manager) and a change from part-time to full-time status for the communications and event manager. The funding for fringe benefits also increased in fiscal 2017 compared to the amount budgeted in the prior year. A final factor contributing to the increased funding in fiscal 2017 compared to prior years is staff turnover which resulted in lower than budgeted spending for two of the positions in fiscal 2016. Outside of these changes there was minimal to no change for salaries of the other three positions at MCEC. Due to the current funding situation for MCEC in fiscal 2017, personnel in the agency will not be expanded as originally budgeted.

Budget

MCEC operates on the State fiscal year, July 1 through June 30. From fiscal 2010 through 2016, MCEC operated with a positive change in net assets and an operating income gain in only two years (fiscal 2010 and 2012). In the two years with the positive change in net assets, MCEC benefited from higher levels of revenue, primarily due to funding from MEA for a residential energy efficiency loan program, Maryland Home Energy Loan Program (MHELP), and consumer education and local government funding assistance. In these two years, MCEC operating revenue totaled $907,847 and $1.2 million, as shown in **Exhibit 1**. In three other years, the operating revenue totaled less than $300,000. **Exhibit 2** presents information on operating revenue sources by fiscal year.

Exhibit 1
Revenue/Expense Statement
Fiscal 2010 to 2016

	2010	2011	2012	2013	2014	2015	2016
Total Operating Revenue	**907,847**	**758,138**	**1,244,347**	**156,921**	**229,352**	**478,895**	**286,216**
Total Operating Expenses	648,015	1,007,068	1,201,812	568,995	698,299	848,719	768,504
Depreciation and Amortization	0	0	0	2,998	64,689	353,045	597,073
Total Expenses	**648,015**	**1,007,068**	**1,201,812**	**571,993**	**762,988**	**1,201,764**	**1,365,577**
Operating Income/Loss	**259,832**	**-248,930**	**42,535**	**-415,072**	**-533,636**	**-722,869**	**-1,079,361**
Non Operating Revenue							
Cash for Loan Reserves	0	0	2,500,000	0	0	0	0
Other Investment Income	0	0	82,882	347	30	63	76
Energy Savings Revenue Restricted for Debt Service	0	0	0	0	178,732	1,123,957	1,195,683
Total Non Operating Income	**0**	**0**	**2,582,882**	**347**	**178,762**	**1,124,020**	**1,195,759**
Non Operating Expenses							
Interest Expense	0	0	0	0	48,732	531,588	347,650
Loss on Disposal of Fixed Assets	0	0	0	0	3,073	0	0
Loss on Sale of Loan Portfolio	0	0	0	35,002	0	0	0
Loan Loss Reserve Payments	0	0	0	0	0	24,886	46,539
Interest Rate Subsidy	0	0	221,186	885,463	857,767	249,444	117,826
Bond Issuance Costs	0	0	0	0	155,500	228,491	0
Total Non Operating Expenses	**0**	**0**	**221,186**	**920,465**	**1,065,072**	**1,034,409**	**512,015**
Non Operating Income/Loss	**0**	**0**	**2,361,696**	**-920,118**	**-886,310**	**89,611**	**683,744**
Total net assets beginning of the year	16,410	276,242	27,312	2,431,543	1,096,353	-323,593	-956,851
Total net assets, end of year	276,242	27,312	2,431,543	1,096,353	-323,593	-956,851	-1,352,478
Change in Net Assets	**259,832**	**-248,930**	**2,404,231**	**-1,335,190**	**-1,419,946**	**-633,258**	**-395,627**

Source: Maryland Clean Energy Center Financial Statements

Note: The audited fiscal 2016 financial statements of the Maryland Clean Energy Center altered some fiscal 2015 revenue, expense, and asset numbers, including reporting bond issuance costs, operating revenue, depreciation and amortization, and beginning of the year net assets. Similarly, an adjustment was made in fiscal 2014 to account for bond issuance costs resulting in a restatement of the fiscal 2014 closing net assets.

Exhibit 2
Operating Revenue by Source
Fiscal 2010 to 2016

	2010	2011	2012	2013	2014	2015	2016
Grants	869,704	612,398	1,029,393		10,000	275,000	213,126
Sponsorships	0	0	131,373	149,575	171,518	170,427	25,580
Energy Savings Revenue	0	0	0	0	0	25,818	33,434
Bond Issuance Revenue	0	0	0	0	35,000	6,000	14,000
Miscellaneous	0	0	64,239	0	9,923	0	77
Interest Income	0	0	13,971	7,306	2,871	1,000	0
Donations/Contributions	0	0	5,371	40	40	650	0
Other Revenue	38,143	145,740	0	0	0	0	0
Total	**907,847**	**758,138**	**1,244,347**	**156,921**	**229,352**	**478,895**	**286,217**

Source: Maryland Clean Energy Center

After having minimal net assets through fiscal 2011, MCEC's net assets increased substantially in fiscal 2012. This increase resulted from a small operating income gain and a substantial level of non-operating income gain, primarily due to cash set aside for loan reserves. This set aside occurred as MCEC transitioned MHELP from a direct loan program to a loan loss reserve and interest rate subsidy program. In the subsequent years, MCEC's net assets decreased substantially and by fiscal 2014, MCEC had negative net assets, as shown in Exhibit 1. The transition of MHELP to a loan loss reserve and interest rate subsidy program and the use of funds for these purposes were a significant contributing factors in the losses among non-operating income and the decline in net assets as MCEC had $2.2 million in expenses associated with the interest rate subsidy from fiscal 2012 through 2014, while in fiscal 2015 and 2016 significant operating losses were the primary cause of the decline in net assets.

In most years, MCEC's operating expenses have outpaced operating revenue, with operating losses of more than $200,000 in all but two years since fiscal 2010. The largest expense in all but one year has been salaries and fringe benefits. From fiscal 2013 to 2016, salaries and fringe benefits have accounted for more than 50% of operating expenses. These expenses have varied somewhat between fiscal years, generally following changes in staffing patterns of the agency. In fiscal 2012, personnel costs represented only 33% of operating expenses. In that year, MCEC had higher than normal expenses for grants and advertising, primarily from the funding restricted in MEA's budget for MCEC for consumer education and local government projects. From fiscal 2013 to 2015, operating expenses varied little in most areas, however, there were some increased expenditures associated with activities related to the green bank study. Fiscal 2016 expenditures were slightly lower than in fiscal 2015 (approximately $75,000).

MCEC's original board-approved fiscal 2017 budget totals $1.48 million, after excluding non-operating expenses. If the budget were spent at that level total spending would be higher than any year in the organization's history, and 91% higher than fiscal 2016 expenditures.[1] The anticipated higher level of expenditures results largely from budgeted increases in salaries and fringe benefits (discussed in the following section). Other significant causes of the increased fiscal 2017 budget, are planned loan repayments to MEA totaling $114,000 (including the missed payment from fiscal 2016) and a planned new low- to moderate-income solar program (budgeted at $300,000).[2] **Exhibit 3** presents information on fiscal 2015 expenditures, 2016 expenditures, and the fiscal 2017 budget. The fiscal 2017 board-approved budget assumes the full level of funding received from MEA from the restricted funding in the fiscal 2017 budget. Because the grant from MEA is at a considerably lower level than that expected based on the restricted funds, actual expenditures will vary (including a likely reduction of planned program expenses such as the low- to moderate-income solar program, additional positions, and the loan payments).

[1] The fiscal 2017 board approved budget includes $200,000 of new funding for the Maryland Home Energy Loan Program (MHELP). Funds for the loan loss reserve and interest rate subsidy (the two most likely uses of these funds) have typically been categorized as non-operating expenses and as a result are excluded from Exhibit 1.

[2] While the new low-to-moderate income solar program is shown as an operating expense the details of the program when implemented may result in the program being shown as non-operating expenses in the future, similar to the treatment of MHELP.

Exhibit 3
Operating Expenses
Fiscal 2015 to 2017 est.

	2015	2,016*	2017 est.
Salaries	$374,861	$397,646	$610,586
Fringe Benefits	95,417	93,475	213,705
Conferences and Meetings	65,563	5,951	7,500
Information Technology	28,943	10,159	27,200
Professional Fees	57,697	38,836	38,920
Office Expenses	40,115	27,671	13,628
Advertising	40,629	11,838	35,800
Rent	21,000	22,050	23,160
Miscellaneous	19,832	11,855	180,400
Telephone	4,551	4,209	5,100
Printing and Publications	773	3,497	0
Travel	4,549	3,024	4,960
Grant Awards	0	0	0
Consultants	4,170	4,977	0
Purchase of Service	89,764	132,500	0
Dues and Subscriptions	855	816	666
Interns and contractors	0	0	16,200
Low and Moderate Income Program	0	0	300,000
Total Operating Expenses	**$848,719**	**$768,504**	**$1,477,825**

*YTD: Year to date expenses are through June 1, 2016.

Source: MCEC Financial Statement; MCEC

Bond Issuing Authority

MCEC has the authority to issue bonds under § 10-840 of the Economic Development Article. Under § 10-843 of the Economic Development Article, the bonds issued by MCEC are not debts or liabilities of the State. MCEC issues bonds for one of its three programs, the Maryland Clean Energy Capital Project (MCAP). MCEC indicates that to date the bonds have been privately placed and have not been rated by the rating agencies. Before issuing bonds, MCEC receives board approval and approval of the Maryland Attorney General that the project meets the mission of MCEC and that it is prudent to issue bonds for the project. MCEC also receives a satisfactory bond counsel opinion for tax exempt bond issuance.

Programs

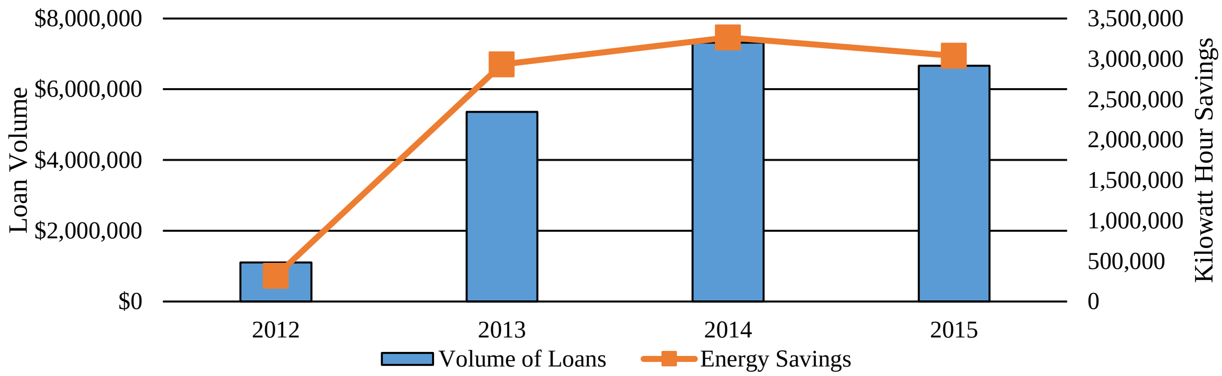
The purposes of MCEC as provided in statute are broad, focusing on encouraging the development clean energy industries, attracting and retaining this sector, encouraging the deployment of clean energy technology, and promoting economic development. Only one specific activity for MCEC is provided in statute, the administration of a Maryland Clean Energy Technology Incubator Program under §§ 10-829 through 10-837 of the Economic Development Article. MCEC currently offers four primary financing programs. One of these programs is available but has not yet been utilized and another launched in July 2016.

Current Financing Programs

MHELP: MHELP began operations in fiscal 2011 with federal funds from ARRA provided by MEA. In fiscal 2011 and 2012, MCEC operated MHELP as a direct lending program. In these two years, MCEC provided 52 loans with a total loan volume of $412,956. During fiscal 2012, MCEC revised the program and partnered with Mariner Finance. Mariner Finance lends the funds with MCEC providing a loan loss reserve and an interest rate subsidy. The subsidy has generally declined over the years as more experience has been gained with the default rates and riskiness of the loans. The program is available only to borrowers with credit scores over 620.

In fiscal 2013, MCEC sold the direct loan portfolio, at a slight loss. The volume of loans financed by Mariner Finance increased from 136 in fiscal 2012 to 1,016 in fiscal 2014. There was a slight decrease to 916 in fiscal 2015. The total volume of loans financed by Mariner Finance in these years was $20.4 million. **Exhibit 4** presents information the energy savings of Mariner Finance MHELP loans compared to energy savings. MCEC reports few defaulted loans from the program. In total from fiscal 2013 to 2015, six loans defaulted, with total loan loss reserve payouts of $36,270.

Exhibit 4
MHELP
Fiscal 2012 – 2015



Although Mariner Finance provides the loans, MCEC approves the loans for eligibility. Contractors participating in the program must agree to report information on the project scope, job hours, and kilowatt-hour savings. MCEC reports program information to MEA. MCEC noted that it received some administrative cost recovery from the ARRA funding used to support the program, but has not received any administrative revenue since fiscal 2014 for the program. However, MCEC continues to have administrative costs including staff time, legal expenses, and accounting expenses.

MCAP: Under MCAP, MCEC works with governmental and nonprofit partners on energy savings projects. MCEC's primary role is to issue bonds on the behalf of the entity as financing for the program. MCEC has supported three projects – Coppin State University, University of Maryland Baltimore County, and the National Aquarium – through this project in fiscal 2013 and 2014. No projects were undertaken in fiscal 2015. For the two university projects, the bonds are repaid through the energy savings. For these projects, the equipment is owned by MCEC and treated as an asset of the agency. For the third project, MCEC leased the equipment, which was financed through bonds, and the National Aquarium sub-leases the equipment. The total volume of tax-exempt and taxable bonds issued through MCAP is $14.7 million.

Limited information is available on project energy savings from the projects in part due to timing. MCEC does not receive information on the National Aquarium project. The UMBC project has only recently completed the initial measurement and verification phase. For the Coppin State University project, only two of the 14 savings periods have been completed. In those two periods kilowatt-hour savings totaling 8.47 million kilowatt-hours were achieved and dollar savings in one of those periods exceeded the guaranteed savings from the project.

MCEC has received three types of revenue from the completed projects, including one-time fees paid at closing, an annual administrative fee (not for the National Aquarium project), and annual excess energy savings payments, which are payments made when the energy savings exceed the amount of the guaranteed energy savings. For the two university projects the annual administrative fee was minimal ($6,000 and $2,000, respectively) while the closing fees for the three projects combined were expected to cover the bulk of the administrative costs and were more substantial ($130,000 and $214,390, respectively). MCEC has received one annual excess energy savings payment to date of $25,818. The closing fee for the National Aquarium project was $35,000. No annual excess energy savings are available for the National Aquarium project. MCEC indicates that it revised its fee schedule in February 2015. No projects have been undertaken since the fee schedule was revised.

Commercial PACE: Chapters 472 and 473 of 2014 authorized private lenders to provide funding for commercial PACE loans (property assessed financing). The acts also allowed for collection of administrative expenses under the program. MCEC has established a third program directed toward businesses, which operates as a commercial PACE program. Under this program, MCEC offers businesses financing for energy projects through an equity partnership with Pace Financial Services. These projects can be undertaken in jurisdictions that have certain local laws and agreements in place. As of July 2016, five jurisdictions have local laws in place (Anne Arundel, Garrett, Howard, Queen Anne's, and Montgomery counties) and ordinances have been introduced (but not yet adopted) in three other jurisdictions (Charles and Kent counties and Baltimore City). MCEC would receive 0.01% of the principle balance of each new loan in revenue for each eligible transaction. Pace Financial Services would receive administrative fees including application fees, closing fees, servicing fees, and fees based on the level of energy audit completed. No projects had been undertaken as of July 2016.

MarylandSAVES: MCEC also began offering a new program in July 2016 known as MarylandSAVES. Under this program, MCEC, working with a third party administrator (Clean Source Capital), will assist local governments in financing renewable energy, energy efficiency, and alternative fuel vehicle and infrastructure projects using Qualified Energy Conservation Bonds awarded to the jurisdiction but not yet issued. Under the program MCEC will act as a conduit for the bond issuances, which will be privately placed. The project of the borrower is reviewed, along with borrower credit worthiness. MCEC will receive a $5,000 application fee from the borrower. The application fee is credited toward the 0.5% issuance fee if the projects moves on to a bond issuance. The cost of issuance fees are provided to a variety of entities for the costs associated with the bond issuance, which totals up to 2% of the cost. The borrower also pays an administrative fee which is shared by MCEC and the program administrator. The program administrator also receives a program fee up to 2% of the cost. Similar programs are offered in Virginia, North Carolina, and South Carolina.

Non Financing Activities

Maryland Clean Energy Technology Incubator Program: As noted above, the administration of the Maryland Clean Energy Technology Incubator Program is the only specific activity designated in statute for MCEC. Under statute, the program was expected to promote entrepreneurship and job creation in clean energy industries by operating incubators through the

State. MCEC was authorized to award financial assistance to support the development and use of best practices, provide strategic planning/needs assessments/feasibility studies, acquire or improve space for an incubator (including acquiring land or architectural or engineering services), pay administrative costs, develop or upgrade communications infrastructure, or pay costs related to tenant build-out including furnishings or equipment. The financial assistance was to be available to local governments, or a designated entity of a local government, a public or private college or university, the Maryland Economic Development Corporation, or a nonprofit entity operating an incubator in the State. Financial assistance was limited to $1 million to a single county in a fiscal year unless two-thirds of the board approved the greater funding. However, no awards were provided due to a lack of funding.

MCEC was involved in an incubator project with the Maryland Clean Energy Technology Incubator (CETI) Network through a partnership with bwtech@UMBC. MCEC and bwtech@UMBC received a grant of $75,000 from Baltimore County to establish CETI at the University of Maryland Baltimore County. There was a ribbon-cutting event for CETI in March 2009. The incubator housed five companies at the time of the fiscal 2010 MCEC Annual Report and there were six tenants and ten affiliates as of the fiscal 2011 MCEC Annual Report. CETI also hosted various networking and educational events. The incubator also had a part-time entrepreneur-in-residence through 2012. The entrepreneur-in-residence continued on a volunteer basis following the end of the paid part-time position for a time.

According to MCEC, CETI is no longer operational. MCEC has worked with other organizations to refer entrepreneurs for assistance.

Outreach: MCEC views as part of its primary mission to inform and promote (educate and outreach) clean energy technology. MCEC serves as an entity familiar with a variety of energy products and the availability of capital and responds to inquiries for request and assistance by consumers. MCEC has also worked with State agency partners to facilitate relationships with business partners. For example, MCEC indicates that it is currently working with the Maryland Port Administration to identify technologies to address greenhouse gas emissions related to federal air quality improvement regulations. MCEC has also conducted general outreach and education to residential and business customers.

MCEC also provides outreach through its website which contains a business directory, information on its various financing programs, and information on retail energy service providers. However, MCEC notes that some of the information is not up to date due to lack of funding. MCEC has also published a newsletter. MCEC also, working with industry partners, developed *Energy 101: A Resource Guide to Building the Maryland Energy Economy* in calendar 2014 which provides information on Maryland’s energy landscape, including a chronology of State policies related to advancements in the energy economy (such as, the Greenhouse Gas Emissions reductions goals and the Renewable Portfolio Standard).

In the past, MCEC has also conducted in-person and webinar training. In-person training for municipal permitting officials and solar contractors was conducted in calendar 2010 and held in several areas of the State. This training was funded, in part, by MEA. Webinars were conducted in calendar 2011 and 2012 targeted towards local policy makers and planning and zoning officials related to consistent implementation of regulations and policies related to clean energy generation technologies.

Hosting: MCEC also has served to convene various events that bring a variety of energy stakeholders together. This role includes convening its advisory council as discussed above. In addition, MCEC held Clean Energy Summits from calendar 2010 through 2015, with participation ranging from 250 to 400 individuals. The summits included sessions on technology, financing, and policy. MCEC received funds through sponsorships and registration fees to support the summit. MCEC also hosts a legislative reception during the General Assembly session each year.

MCEC also hosted workgroups with local permitting officials and solar contracts in calendar 2009 related to standardizing permitting regulations and processes. MCEC has also coordinated meetings and held receptions for visiting international groups with energy interests.

Legislative Activities: MCEC convenes a legislative and policy committee which meets each week during the General Assembly session to review proposed legislation. The committee makes recommendations on positions on the legislation for MCEC's testimony on the legislation.

MCEC has also participated or plans to participate in several workgroups, task forces, and other studies that arose out of legislation including the Task Force on Solar Hot Water Systems in Prince George's County (Chapter 649 of 2010). In addition, MCEC will lead efforts to investigate the potential for adoption of residential PACE lending in Maryland (Clean Energy Loan Program-Residential Property – Study Chapter 593 of 2016) and led the study of green banks (Maryland Clean Energy Center – Green Banks and Clean Bank Financing – Study Chapter 365 of 2014).

Potential Programs

The *Green Bank Study: Final Report* released in December 2015 identified a number of potential new programs or expansions of current programs that MCEC could undertake if it were to become a green bank in Maryland. With ongoing or additional funding these programs might also be undertaken by MCEC regardless of status as a green bank. The potential new programs include:

- a revolving loan fund for small businesses for energy efficiency and renewable energy technology projects (a direct lending program);
- a low-to-moderate income residential program focused on whole house improvements available for both energy efficiency and solar projects;
- a program to support the deployment of microgrid and energy storage projects including technical assistance, study support, and project financing;
- a program to provide equity investment awards for Maryland businesses developing new clean energy technologies;

- general market support, education, and assistance;
- a residential PACE program;
- financing for virtual net-metering/community solar pilot projects; and
- support for projects related to distributed on-site energy storage.

The study also highlights the possibility for expansions to MCEC's current programs including:

- MHELP – add renewable energy technologies as eligible project elements, expand to additional private lenders, increase the cap on the loan size, provide better loan terms (such as lower interest rates), convert to a loan loss reserve program only (stop providing an interest rate subsidy) and
- MCAP – create an additional direct lending program for projects under $2.0 million for government projects only (such as local governments) and add credit enhancement offerings for private financing.

Low-to-Moderate Income Solar Financing: In addition, to potential activities discussed in the green bank study, MCEC is involved in the planning of other programs. MCEC is currently engaged with the U.S. Department of Energy and Baltimore City in developing and financing solar installations for underserved populations in Baltimore City, including workforce training.

Residential PACE Program (RPACE): As required under Chapter 593 (House Bill 387) of 2016, MCEC conducted a study to determine optimal design and implementation strategies for a residential clean energy loan program in the State. MCEC was required to include consideration of whether the strategies will work advantageously with loans made by private lenders for residential energy efficiency and renewable energy projects. MCEC was required to consult with MEA, the Maryland Association of Counties, the Maryland Bankers' Association, clean energy loan provides, the Chesapeake Climate Action Network, and the Sierra Club. MCEC's report, issued December 1, 2016, provides the following summary recommendations:

- MCEC believes there is a great opportunity for RPACE in Maryland to succeed in overcoming barriers to energy efficiency and renewable energy adoption currently not being addressed by existing efficiency programs and financing options. The MCED study concludes that there is a need to facilitate access to capital which may enable residential property owners to implement energy and conservation measures on their properties; and that RPACE financing could potentially provide a workable solution. However, more work needs to be done on program development for the Maryland General Assembly to pass related enabling legislation.
- Some workgroup members opposed RPACE program specifications, but others support RPACE. Not all work group members agree that the time is right to advance RPACE

legislation, but MCEC believes that the policy has merit and that the legislature should consider it in a future session.

- In regard to program implementation and oversight, MCEC is statutorily enabled to provide central oversight serving as a joint powers authority to enable program implementation on a statewide basis. So too could counties or regional authorities that wish to issue related bonds could implement legal entities to provide oversight for implementation at a local scale, but certain decisions and direction related to program design and best practices for implementation and oversight need to be future developed for adoption by the State in future proposed enabling policies.

- A source of funding to cover initial costs associated with creation, management, and administration of a centralized State, regional, or local program oversight entity must also be identified before RPACE lending constructs are put into place.

- The workgroup did not reach consensus on adoption of related policy and implementation of RPACE lending program/s in Maryland. At the time of the report, MCEC finds there is split opinion by key stakeholder audiences on whether the absence of FHFA guidelines are a major hurdle for successful adoption of RPACR financing should those guidelines be revised that hurdle may be removed.

Maryland Economic Development Corporation (MEDCO)

Overview

The Maryland Economic Development Corporation (MEDCO) is a nonbudgeted entity chartered in 1984 by the General Assembly to assist business and governmental entities through ownership, financing, and development of real and personal property projects. MEDCO is codified in Title 10, Subtitle 1 of the Economic Development Article as a body politic and corporate and is an instrumentality of the State. Its office is located in downtown Baltimore City. Its website address is http://medco-corp.com/.

Purpose and Legislative Intent

The statutory purposes of MEDCO are to (1) relieve unemployment in the State; (2) encourage the increase of business activity and commerce and a balanced economy in the State; (3) help retain and attract business activity and commerce in the State; (4) promote economic development; and (5) promote the health, safety, right of gainful employment, and welfare of residents of the State. In addition to these specific purposes, the statute provides further detail about legislative intent. Specifically, the General Assembly intends that MEDCO:

- operate and exercise its corporate powers in all areas of the State;
- without limiting its authority to otherwise exercise its corporate powers, exercise its corporate powers to assist governmental units and State and local economic development agencies to contribute to the expansion, modernization, and retention of existing enterprises in the State as well as the attraction of new business to the State;
- cooperate with workforce investment boards, private industry councils, representatives of labor, and governmental units in maximizing new economic opportunities for residents of the State;
- accomplish at least one of its legislative purposes and complement existing State marketing and financial assistance programs by owning projects, leasing projects to other persons, or lending the proceeds of bonds to other persons to finance the costs of acquiring or improving projects that the persons own or will own; and
- not own and operate a project unless (1) the board determines by resolution that the private sector has not demonstrated serious and significant interest and development capacity to own and operate the project or (2) a representative of a governmental unit requests in writing that MEDCO own and operate the project.

General Authority

MEDCO purchases or develops property that is leased to others under favorable terms. MEDCO also makes direct loans to companies throughout the State to maintain or develop facilities, and it often serves as the conduit for loans administered by the Department of Commerce. MEDCO issues bonds to raise funds for its loans. The bond debt consists primarily of revenue bonds and notes payable to government agencies, such as the Department of Commerce. The debt represents nonrecourse obligations because MEDCO is not liable to bondholders and lenders in the event of a project or borrower default. Each project must have self-supporting revenues, and no projects are cross-collateralized. As a result, MEDCO debt is not debt of the State, and there is no implied State guaranty or State obligation to protect bondholders from losses.

MEDCO has been involved in 294 projects from its inception in 1984 through fiscal 2016 and has issued bonds totaling $5.1 billion during that time. Of these, MEDCO currently owns and operates 14 as operating facilities, meaning MEDCO is involved in management decisions and has a hand in ensuring successful daily operations. For most other projects, MEDCO generally serves as an arms-length financing entity. Recently MEDCO also has begun to be involved in a third type of project – where MEDCO owns a property and collects rent or other fees but is not involved in the management of the facility.

Oversight

Board of Directors

MEDCO is governed by a 12-member board of directors, including the secretaries of Commerce and Transportation as *ex officio* voting members. The remaining ten board members are appointed by the Governor with the advice and consent of the Senate: two representatives of local government, three members who are knowledgeable in real estate or commercial financing, three members who are knowledgeable in industrial development or industrial relations, and two members of the general public.

Annual Audit

As soon as practical after the close of a fiscal year, an independent certified public accountant must audit the financial books, records, and accounts of MEDCO. The audit must include revenue and expense detail for each of the operating facilities of MEDCO. Generally, by November 1 after each fiscal year, the accountant must report the results of the audit, including the accountant's unqualified opinion of the presentation of the financial position of the funds of MEDCO, individual financial detail for each of the operating facilities of MEDCO, and the results of the financial operations of MEDCO. If the accountant cannot express an unqualified opinion, the accountant must explain in detail the reasons for the qualifications, disclaimers, or opinions, including recommendations for changes that could make future unqualified opinions possible. The State may also audit MEDCO's books, records, and accounts.

State and Local Laws Applicable to MEDCO

MEDCO is subject to the Public Information Act and MEDCO, its officers, and its employees are subject to the Public Ethics Law. MEDCO, its officers, and its employees are also subject to Title 12, Subtitle 4 of the State Finance and Procurement Article, which requires all State units exempt from general State procurement law to have written policies and procedures for procurements. MEDCO is subject to the same State and local regulatory requirements as any private corporation. A MEDCO project is subject to the zoning and subdivision regulations of the jurisdiction where it is located.

Operations

Start-up Funding

MEDCO received a $450,000 loan for start-up funding in 1984 from the State, which was partially repaid in 1989 and fully repaid in 1990. Adjusting for inflation, this is equivalent to about $1.2 million in 2016.

Personnel

The board must appoint an executive director, who serves at the pleasure of the board and at a salary the board determines. Under the MEDCO statute, the board must employ any additional professional and clerical staff as necessary and may retain accountants, engineers, lawyers, financial advisors, or other consultants as necessary. Unlike State agencies and some other instrumentalities, such as the Maryland Technology Development Corporation (TEDCO), the Attorney General does not provide legal services to MEDCO.

MEDCO has nine full-time employees and one part-time employee, including an executive director, accountants, bond specialists, and administrative support staff. Although individual salary information is not publicly available, according to its 2015 audited financial statements MEDCO paid nearly $1.2 million in compensation and benefits in fiscal 2015. It also paid $84,021 in rent during that same period.

Generally, MEDCO may carry out its corporate purposes without the consent of any State unit. MEDCO is not a "State agency," and thus MEDCO is not subject to a number of laws that typically govern State agencies, including:

- Title 12, Subtitles 1 through 3 of the Economic Development Article (Economic Development Revenue Bond Act, Tax Increment Financing Act, and the Redevelopment Bond Act);

- the following provisions of the State Finance and Procurement Article:

    - Title 2, Subtitles 2 (Gifts and Grants), 4 (Water and Sewerage Systems), and 5 (Facilities for the Handicapped);
    - Title 3 (Budget and Management);
    - Title 4 (Department of General Services);
    - Title 5A (Division of Historical and Cultural Programs);
    - Title 6, Subtitle 1 (Studies and Estimates);
    - Title 7, Subtitles 1 (State Operating Budget), 2 (Disbursements and Expenditures), and 3 (Unspent Balances);
    - §§ 8-127, 8-128, and 8-129 (certain restrictions on State general obligation bonds);
    - Title 8, Subtitle 1, Part V (State Revenue Anticipation Notes);
    - Title 10 (Board of Public Works – Miscellaneous Provisions); and
    - Division II (General Procurement Law);

- the following provisions of the State Government Article:

    - Title 9, Subtitles 10 (State Archives and Artistic Property) and 17 (Maryland State Employees Surety Bond Committee); and
    - Title 11 (Consolidated Procedures for Development Permits); and

- §§ 3-301 and 3-303 of the General Provisions Article (certain open meetings provisions, the requirement to hold them, and the requirement that the public be entitled to attend).

Further, MEDCO's officers and employees are not subject to (1) Division II of the State Personnel and Pensions Article or (2) the provisions of Division I of the State Personnel and Pensions Article that govern the State Personnel Management System.

Budget

MEDCO Net Assets in a Negative Position, Operating Revenues Continue to Exceed Operating Expenses

MEDCO is not funded through the State budget process and does not administer any State special funds. MEDCO typically maintains a net asset/net income deficit position while its operating revenues exceed its operating expenses. The net asset deficit began to grow dramatically in fiscal 2003 and is largely the result of adding new operating real estate projects. MEDCO operating projects often have net income deficits, and with the addition of each project, a net income deficit is added to the accounts, which in turn adds to the overall net assets deficit.

Each year, when MEDCO experiences a net income deficit, its equity position declines. As shown in **Exhibit 1**, when both operating and nonoperating revenues and expenses are accounted for, MEDCO's fiscal 2015 net income deficit was $7.4 million. Its net asset deficit, which represents the cumulative effect of year-over-year net income deficits, was $228.3 million – a slight increase from the year before.

MEDCO reports that a growing net asset deficit is not a significant concern as long as operating revenues exceed cash operating expenses. MEDCO reports that net losses and net asset deficits are not uncommon for real estate companies. With these companies, the market value of the assets generally exceeds the book value, and MEDCO says that real estate investors look at market value or, more specifically, cash flow coverage rather than book value. Accordingly, MEDCO's operating position (operating revenues exceeding expenses) continues to be positive. Fiscal 2015 operating revenues ($132.4 million) exceeded operating expenses ($114.6 million) by $17.7 million – a continuation of a multi-year trend.

Exhibit 1
Maryland Economic Development Corporation Financial Statement
Fiscal 2013-2015
($ in Thousands)

	2013	2014	2015	Change 2014-2015
Total Assets	$631,678	$604,463	$625,928	$21,465
Total Liabilities	833,412	825,353	854,245	28,892
Net Assets (Deficit)	**-$201,734**	**-$220,890**	**-$228,317**	**-$7,427**
Total Operating Revenue	$127,855	$128,312	$132,352	$4,040
Total Operating Expenses	115,868	115,541	114,608	-933
Operating Income Subtotal	**$11,987**	**$12,771**	**$17,744**	**$4,973**
Non-operating Revenues and Expenses	$16,041	-$31,926	-$25,171	$6,755
Net Income (Deficit)	**$28,028**	**-$19,155**	**-$7,427**	**$11,728**

Note: Other operations are comprised of property and equipment rental and consultant and management fees.

Source: Maryland Economic Development Corporation financial statements

Contributions to Net Asset Deficit and Operating Position by Individual Projects

As mentioned above, MEDCO has been involved in 294 projects through fiscal 2016. Of these, MEDCO currently owns and operates 14 as operating facilities, meaning that MEDCO is involved in management decisions and has a hand in ensuring successful daily operations. **Exhibits 2** and **3** provide further detail on the contributions to MEDCO's overall net asset deficit and operating position by individual projects.

Exhibit 2 shows the increases and decreases in MEDCO net assets by project. Operating facilities' net assets declined by $7.1 million in fiscal 2015 and, as discussed above, that is not uncommon in the real estate sector. Exhibit 3 shows MEDCO operating income and loss by project. The data indicates where projects are bringing in enough revenues to cover annual operating expenses. Operating facilities' net income increased to $16.7 million in fiscal 2015 compared to $12.4 million in fiscal 2014. Revenues increased largely due to improvements in occupancy rates at several of MEDCO's student housing projects. Additionally, declines in operating expenses at the Chesapeake Bay Conference Center drove the overall decline in operating expenses.

Exhibit 2
MEDCO Increase/Decrease in Net Assets by Project
Fiscal 2013-2015

	2013	2014	2015	Total Net Assets/Deficit at End of 2015
University Student Housing				
Morgan State University	-$270,791	$169,999	$419,282	-$6,983,253
Bowie State University	-396,311	-49,501	451,217	-5,501,747
Frostburg State University	-608,304	11,951	130,461	-4,331,227
Salisbury University	294,175	-674,715	272,916	-4,063,602
Towson West	-221,081	-491,396	-114,755	-4,839,894
University of Maryland, Baltimore	-380,896	-415,702	-596,563	-11,699,094
University of Maryland Baltimore County	152,626	281,042	457,798	-2,317,063
University of Maryland, College Park Housing	-3,044,343	-1,249,917	-1,461,522	-25,051,914
University Village at Sheppard Pratt	-146,973	554,797	459,380	-10,489,951
Subtotal	**-$4,621,898**	**-$1,863,442**	**$18,214**	**-$75,277,745**
Other Facilities				
Chesapeake Bay Conference Center (Hyatt Cambridge)	-$15,581,030	-$16,495,684	-$13,844,214	-$165,048,523
Shady Grove Innovation Center	12,135	-192,196	7,184,742	11,980,933
Rockville Innovation Center	-147,757	-210,927	-598,027	-1,175,035
Metro Centre		-1,077,749	-1,092,369	-2,170,118
Rocky Gap Golf Resort	59,970,699	0	0	0
University of Maryland, College Park Energy	607,246	1,059,271	1,196,106	5,272,753
Subtotal	**$44,861,293**	**-$16,917,285**	**-$7,153,762**	**-$151,139,990**
Subtotal Operating Facilities	**$40,239,395**	**-$18,780,727**	**-$7,135,548**	**-$226,417,735**
MEDCO Exclusive of Operating Facilities	**-$11,271,036**	**-$403,190**	**-$319,838**	**-$1,266,285**
Elimination (Accounting Adjustment)	**$28,364**	**$28,364**	**$28,364**	**-$632,675**
Grand Total	**$28,996,723**	**-$19,155,553**	**-$7,427,022**	**-$228,316,695**

MEDCO: Maryland Economic Development Corporation

Source: Maryland Economic Development Corporation

Exhibit 3
MEDCO Operating Income/Loss by Project
Fiscal 2013-2015

	2013	2014	2015
University Student Housing			
Morgan State University	$1,434,152	$1,531,807	$1,743,410
Bowie State University	668,185	998,861	1,721,021
Frostburg State University	355,184	619,670	766,322
Salisbury University	1,448,194	293,709	1,214,666
Towson West	2,027,330	2,013,652	2,140,757
University of Maryland, Baltimore	1,420,285	1,329,044	1,456,664
University of Maryland Baltimore County	1,397,647	1,444,739	1,681,944
University of Maryland, College Park Housing	5,500,544	6,373,669	6,267,049
University Village at Sheppard Pratt	1,293,828	1,709,212	1,566,242
Subtotal	**$15,545,349**	**$16,314,363**	**$18,558,075**
Other Facilities			
Chesapeake Bay Conference Center (Hyatt Cambridge)	-$5,557,686	-$6,104,479	-$3,476,038
Natl. Cybersecurity Center of Excellence	-142,991	-388,158	-228,934
Rockville Innovation Center	-412,810	-374,393	-466,367
Metro Center	0	0	-598,775
Rocky Gap Golf Resort	-279,027	0	0
University of Maryland, College Park Energy	2,948,845	2,950,144	2,945,018
Subtotal	**-$3,443,669**	**-$3,916,886**	**-$1,825,096**
Subtotal Operating Facilities	**$12,101,680**	**$12,397,477**	**$16,732,979**
MEDCO Exclusive of Operating Facilities	**-$143,432**	**$403,756**	**$983,029**
Elimination (Accounting Adjustment)	**$28,364**	**-$30,684**	**$28,364**

MEDCO: Maryland Economic Development Corporation

Source: Maryland Economic Development Corporation

Projects

Historically, MEDCO has been involved in two types of projects (1) operating projects – where MEDCO is involved in management decisions and has a hand in ensuring successful daily operations; and (2) conduit projects – where MEDCO generally serves only as an arm's length financing entity. However, recent projects require MEDCO to have property ownership (like operating projects), but no management duties (like conduit projects). MEDCO financing has supported institutions of higher education, business incubators, State agencies and programs, and nonprofits, among others.

Operating Projects

As noted above, MEDCO currently operates 14 projects, which can be broadly divided into university housing projects and all other projects. MEDCO became involved in university housing projects in 1999 and currently operates 9 such projects. MEDCO believes that university housing is a good fit for its financing, and it plans to continue to become involved in such projects. MEDCO reports that the universities, in some instances, do not want to own and operate the facilities themselves; yet, a university campus is not necessarily an ideal environment for a traditional private real estate entity. MEDCO operates five other projects: the Chesapeake Bay Conference Center (Hyatt Cambridge), the National Cybersecurity Center of Excellence, the Rockville Innovation Center, the Metro Center, and the University of Maryland College Park Energy.

Conduit Projects

MEDCO also participates in conduit projects, where it issues bonds on behalf of an entity and does not retain property ownership. MEDCO provides this service to a variety government and nongovernment entities. For example, in June 2016 MEDCO issued $313.0 million in nonrecourse, private activity revenue bonds for the Purple Line Light Rail Project. Bond proceeds were loaned to Purple Line Transit Partners, LLC, a Delaware company formed to design, build, finance, operate, and maintain the Purple Line Light Rail Project. According to MEDCO's 2016 *Annual Activities Report*, the company will use the bond proceeds to (1) finance a portion of the eligible costs of designing and constructing the project; (2) pay a portion of the interest payable on the 2016 bonds during construction of the project; (3) fund a debt service reserve fund; and (4) pay the costs of bond issuance. The bonds have varying maturities based on their pledged sources of repayment.

Hybrid Projects

As noted above, recent projects require MEDCO to have property ownership (like operating projects) but not management duties (like conduit projects). For example, in 2014, MEDCO entered into a property arrangement with the Maryland State Archives (MSA). MSA was in need of additional long-term storage. MEDCO provided the financing to acquire land and a facility previously used by the U.S. Social Security Administration as a record retention facility. MEDCO is the owner of the facility and leases it to MSA. MSA will make payments to MEDCO to cover the debt service and MEDCO expenses. The bonds that financed the project are secured by the project and payments under the lease. MSA, and not MEDCO, will be responsible for the day-to-day operations, unlike MEDCO operating projects. But also unlike its conduit issuances, MEDCO does retain property ownership for these projects.

Maryland Environmental Service (MES)

Overview

The Maryland Environmental Service (MES) was established as a unit within the Department of Natural Resources (DNR) in 1970 as an independent State agency to provide water supply, wastewater treatment, and waste management services to State agencies, local governments, and private entities. During the 1993 session, the General Assembly adopted legislation that transformed MES into an instrumentality of the State and a public corporation independent of DNR. The organization's primary goals are to improve the environment, work more safely, and provide excellent customer service and satisfaction. MES is located at 259 Najoles Rd, Millersville. Its website address is http://www.menv.com/.

Purposes/Mission

Mission Statement

To provide operational and technical services to protect and enhance the environment for the people of Maryland.

Vision Statement

An innovative and leading edge solver of environmental problems, a responsible and successful manager of environmental operations, and a great place to work.

General Authority

MES functions as a fee-for-service public corporation. MES provides technical services to clients for engineering, design, financing, construction and project management, and operation of environmental facilities. These technical services support water supply, wastewater treatment, and solid waste management for State agencies, counties, municipal corporations, and private entities. Among other things, MES may exercise eminent domain, and establish and collect rates, fees, and charges for certain projects, products, and services.

The MES statute, Title 3, Subtitle 1 of the Natural Resources Article, was adopted in 1970. It gave MES the authorization to carry out certain responsibilities relating to the environment, but very little if any regulatory authority. Executive Order 01.01.1971.11, directing MES to assume responsibility for State owned facilities was executed in 1971, and the Policy Statement Concerning State-Owned Water, Wastewater, and Solid Waste Management Facilities was approved by the Board of Public Works (BPW) on January 3, 1979. These documents help define the relationship of MES with its clients, such as State agencies that budget reimbursement for MES services in their operating budgets. MES also enters into contracts and memorandums of understanding with a number of State agencies, federal agencies, local governments, and private sector entities. MES's overall operations are organized into four main areas: water/wastewater, environmental operations, technical and environmental services, and administration.

Oversight

MES has four officers and a board of directors as specified in §3-103 of the Natural Resources Article. The four officers are the director, deputy director, secretary, and treasurer. The director is appointed by the Governor, with the advice and consent of the Senate; the deputy director, secretary, and treasurer are appointed by the director with the approval of the Governor. The director is both the administrative head of MES and the presiding officer of the board.

The nine-member board consists of the four officers; three public-sector members representing water, wastewater, or solid waste management services; and two private-sector members with technical, financial, development, or legal experience related to water, wastewater, or solid waste management.

Operations

Start-up Funding

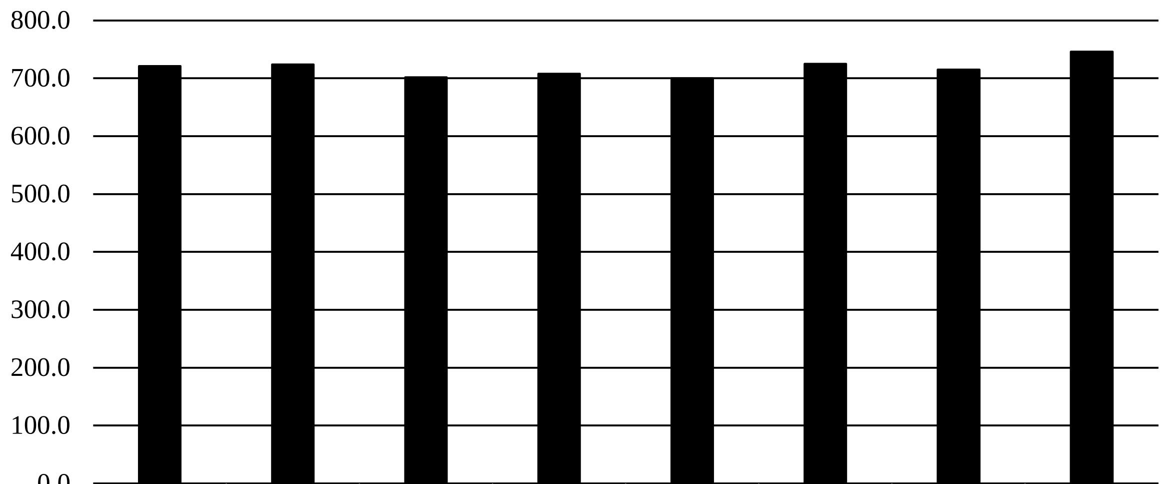
According to MES, it is unclear if MES received start-up funding. Contributed capital appears in the earliest available financial statements (1970's). There are accounting entries from various sources totaling almost $7.5 million. It is possible these entries relate to equipment MES was using at the time MES became an independent agency.

Personnel

MES has an independent personnel system that is based on merit and that compensates employees based on performance. MES may determine employee qualifications, appointment and removal procedures, terms of employment (including compensation, benefits, holiday schedules, and leave policies), and any other matter concerning employees. If State employees in general are authorized to enter into binding arbitration or binding collective bargaining agreements establishing wages, hours, pension rights, or working conditions for State employees, MES may enter into the same type of agreements for its employees. MES does not have the same holidays and leave policies as State employees. For instance, State employees receive three additional holidays, eight additional sick days, and three additional bereavement days beyond those available to MES employees. MES offers employees a 401(k) plan with employer contributions. Currently, MES has very limited participation in the Maryland State Retirement and Pension System.

MES's personnel complement varies with the contract needs of clients and the type of work to be performed. **Exhibit 1** reflects MES's positions between fiscal 2010 and 2017. The number of positions has fluctuated between 700 and 750 over the time period shown.

Exhibit 1
Maryland Environmental Service Positions
Fiscal 2010 to 2017



	2010 Actual	2011 Actual	2012 Actual	2013 Actual	2014 Actual	2015 Actual	2016 Working Appropriation	2017 Legislative Appropriation
Positions	721.0	724.0	701.9	707.9	700.4	725.0	715.4	746.0

Source: Department of Budget and Management

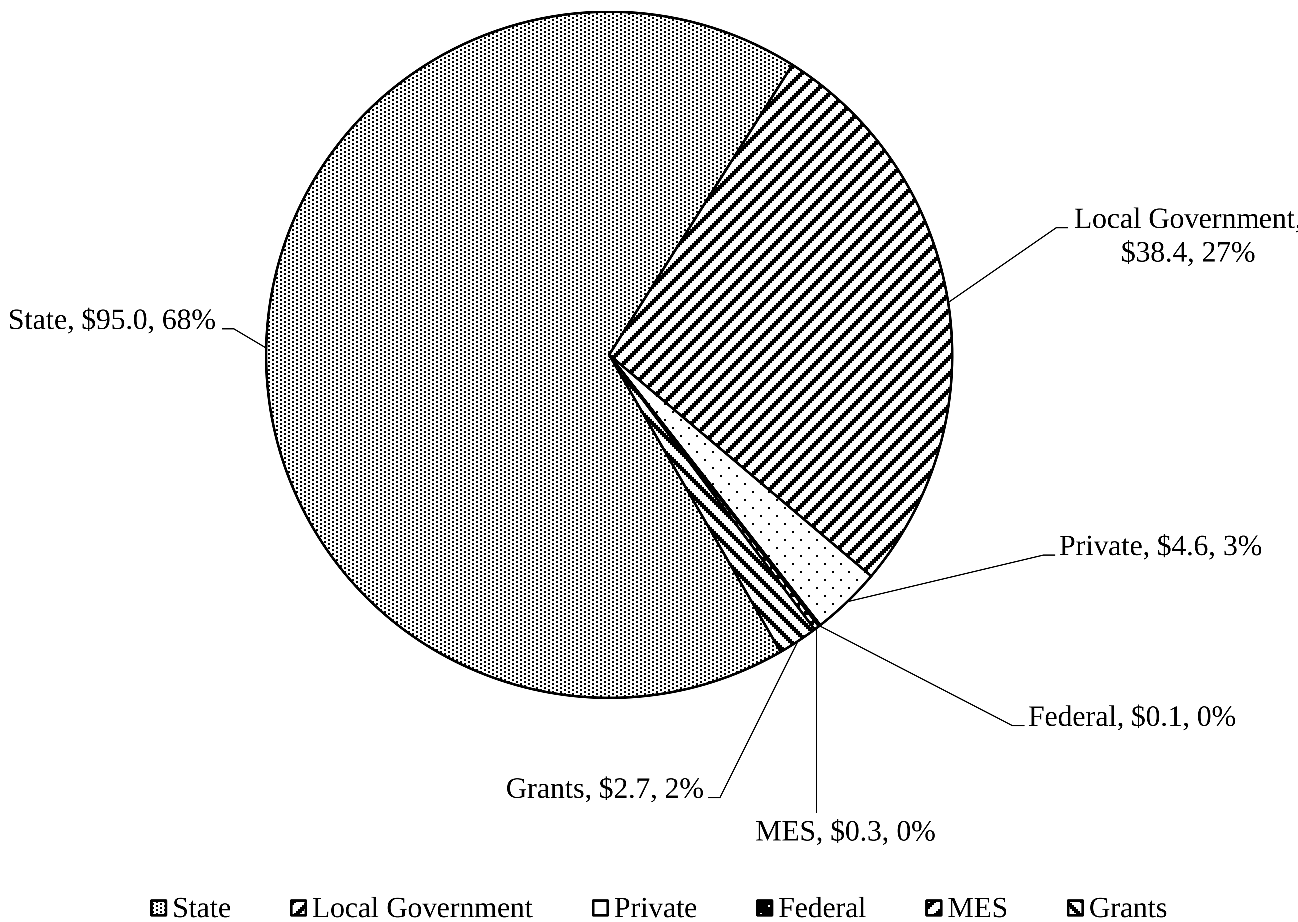
Budget

MES receives no direct operating appropriation. As a non-appropriated agency, MES performs work that it is hired to do. It does not independently initiate work because it has no funding to do so. MES follows a business model that enables it to recover project costs from its clients. MES recovers all direct expenses that it incurs, such as employees' hourly labor rates, by charging them to the client. Indirect overhead expenses, such as fringe benefits and general administrative costs, are calculated annually as a percentage of labor performed. This overhead percentage is applied to the total labor charges on each project invoice, so MES is able to recover costs that cannot be directly identified to a project, such as health insurance and rent. Other expenses, such as contractual services and technical fees for work performed by the private sector are included in the client invoice.

MES's Fiscal 2015 Financial Position

MES breaks down its revenue by fund sources and types of business activity. **Exhibit 2** provides an overview of fiscal 2015 revenue by fund source and shows that approximately 95% of MES's revenue came from State and local government. As noted above, MES's relationship with the State involves two arrangements (1) reimbursable projects under related to the MES statute, Executive Order 01.01.1971.11, and the Board of Public Works (BPW) directive that MES operate wastewater and drinking water plants for State agencies; and (2) contractual projects for which MES has a contract with a State agency or other client to perform services.

Exhibit 2
MES Revenue by Fund Source
Fiscal 2015
($ in Millions)

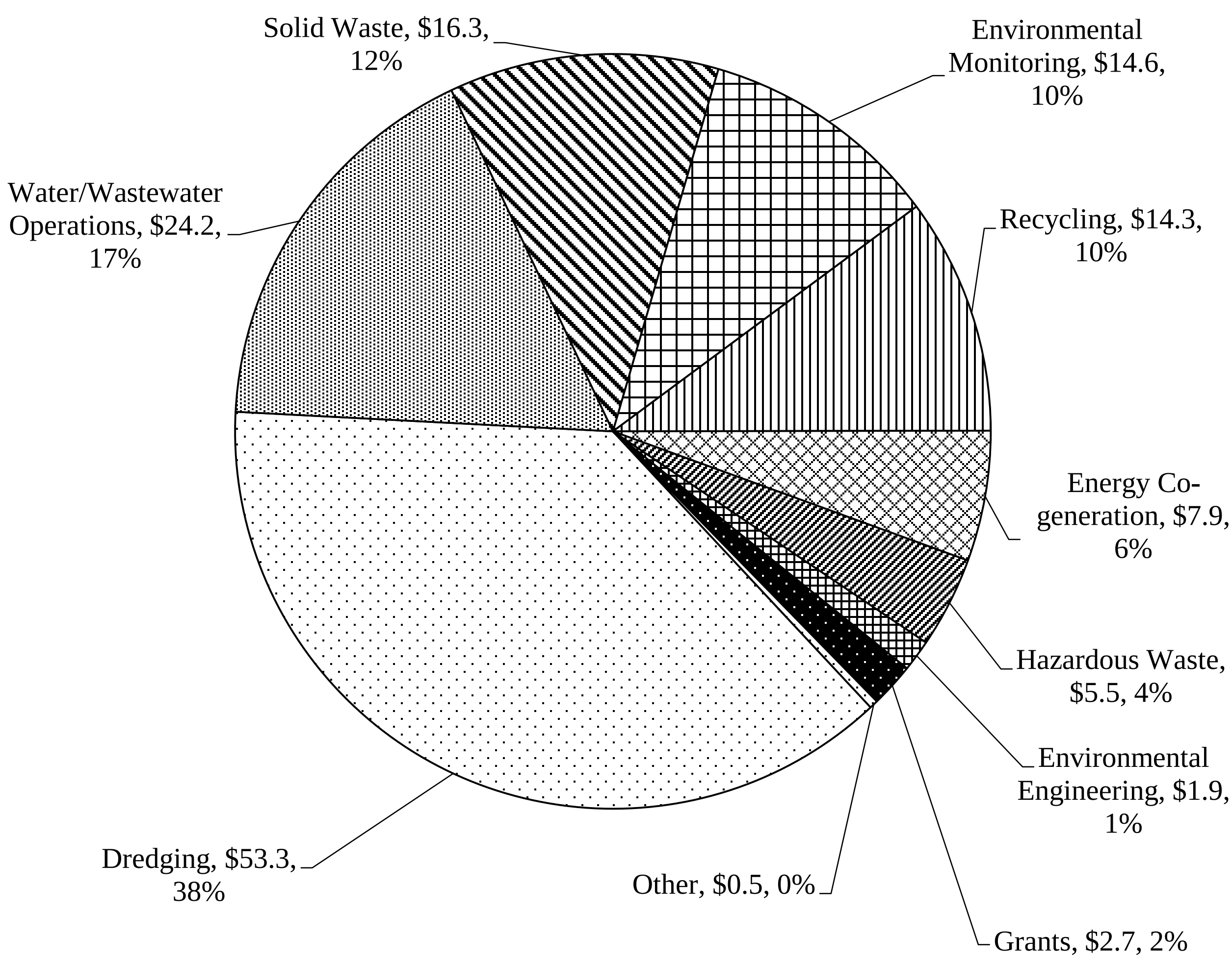


MES: Maryland Environmental Service

Source: Maryland Environmental Service

Exhibit 3 provides an overview of MES's fiscal 2015 revenue by business activity type. The largest two categories were dredging and water/wastewater operations. These two business activity types accounted for 55% of MES's revenue. In recent years, MES was authorized to undertake energy projects by Chapter 183 of 2009.

Exhibit 3
MES Revenue by Business Activity Type
Fiscal 2015
($ in Thousands)



MES: Maryland Environmental Service

Source: Maryland Environmental Service

Financial Changes

MES's operating income increased by $30.9 million between fiscal 2014 and 2015. This was primarily due to an increase of $22.1 million in environmental dredging and restoration projects revenue, which came from the Masonville Dredged Material Containment Facility construction project. MES performed this work on behalf of the Maryland Port Authority. Other increases included $1.7 million in environmental monitoring primarily related to the Oyster Restoration Project with the Department of Natural Resources and an E-reporting project with the Department of Natural Resources and Hawkins Point; $1.7 million in recycling due to an increase for the Montgomery County Yard Waste program; $1.6 million in energy co-generation due to an upgrade to the Eastern Correctional Institution Cogeneration Plant; and $1.4 million in water/wastewater operations due to the continuation of upgrades to the Freedom District plant and other smaller plants across the State. Expenses increased by $30.4 million across a number of MES's spending categories commensurate with the revenues dedicated to the projects noted above. Revenues by business type activity are shown in **Exhibit 4**; and expenses by object are shown in **Exhibit 5**.

Exhibit 4
Revenues by Business Type Activity
Fiscal 2011 to 2015
($ in Thousands)

Business Type Activity	**2011**	**2012**	**2013**	**2014**	**2015**	**Change 2013-2014**	**Change 2014-2015**
Environmental Dredging and Restoration	$28,063	$23,924	$20,816	$31,222	$53,325	$10,406	$22,103
Hazardous Waste Treatment	$5,034	$5,846	$4,881	$5,175	$5,500	$294	$325
Recycling	$15,225	$16,817	$12,139	$12,599	$14,295	$460	$1,696
Water/Wastewater Operations	$21,825	$21,920	$21,839	$22,753	$24,196	$914	$1,443
Environmental Monitoring	$16,758	$15,015	$11,888	$12,879	$14,596	$991	$1,717
Energy Co-generation	$6,371	$6,666	$6,162	$6,264	$7,891	$102	$1,627
Environmental Engineering	$2,170	$2,303	$2,244	$2,048	$1,908	-$196	-$140
Solid Waste Management	$8,379	$11,363	$12,118	$15,831	$16,289	$3,713	$458
Grants	$4,717	$1,666	$1,215	$1,050	$2,663	-$165	$1,613
Other	$220	$384	$621	$496	$510	-$125	$14
Total Revenues by Business Type Activity	**$108,762**	**$105,904**	**$93,923**	**$110,317**	**$141,173**	**$16,394**	**$30,856**

Source: Maryland Environmental Service

Exhibit 5
Operating Expenses
Fiscal 2011 to 2015
($ in Thousands)

Operating Expense	2011	2012	2013	2014	2015	Change 2013-2014	Change 2014-2015
Land, structures, and equipment	$10,387	$4,950	$2,918	$5,674	$17,527	$2,756	$11,853
Contractual services	$19,715	$22,108	$14,752	$17,845	$29,719	$3,093	$11,874
Salaries and benefits	$38,466	$40,270	$39,545	$42,421	$44,340	$2,876	$1,919
Technical fees	$6,764	$5,901	$6,747	$9,797	$10,342	$3,050	$545
Other	$497	$502	$318	$248	$911	-$70	$663
General and administrative	$12,283	$11,928	$11,859	$12,676	$13,746	$817	$1,070
Utilities	$4,439	$4,205	$4,550	$4,590	$4,622	$40	$32
Depreciation	$1,646	$1,702	$1,732	$1,871	$1,866	$139	-$5
Materials and supplies	$6,262	$6,898	$5,831	$9,668	$12,189	$3,837	$2,521
Repairs and maintenance	$6,076	$4,729	$4,464	$4,166	$4,073	-$298	-$93
Total operating expenses	**$106,535**	**$103,193**	**$92,716**	**$108,956**	**$139,335**	**$16,240**	**$30,379**

Source: Maryland Environmental Service

Other Types of MES Operations

MES's business type activities can be viewed as fee-for-service, cost-recovery, and net-revenue-generating activities. Revenue-generating activities can be further divided into products and services. MES is contracted by two local governments to produce a product called Leafgro. Leafgro is soil conditioner made from grass clippings and leaves that is produced under the contracts that MES has to operate composting facilities for Montgomery and Prince George's counties; thus, the two counties receive the revenues from sales. MES performs three other revenue-generating services: yard waste grinding, waste oil collection, and geographic information system services.

MES also participates in the Clean Water Partnership, a Prince George's County P3 initiative for storm water management. MES acts as the third-party inspector of record and maintenance monitor and provides other support functions as requested.

Projects

As of February 2016, MES operates and maintains 963 projects. An individual facility may have multiple projects going on at any given time. Some of the 963 projects are at 261 State-owned facilities, such as the Poplar Island Environmental Restoration Project; the Hart-Miller Island Dredged Material Containment Facility; Cox Creek Dredged Material Containment Facility; recyclable material processing facilities in Baltimore, Montgomery and Prince George's counties; two municipal solid waste transfer facilities in Baltimore County; yard waste composting facilities in Montgomery and Prince George's counties; the Midshore I and II regional landfills; and the Hawkins Point Hazardous Waste Landfill (now in post-closure monitoring phase).

MES's contract projects are shown in **Exhibit 6**. For energy projects, MES provides the following energy services: energy audits, feasibility studies, energy use footprint analysis, technology assessments and the assessment of design, installation and operation of wind energy, solar, geothermal, and biomass processes. One example of its renewable energy work is the support of documentation and tracking of the Department of Housing and Community Development's Customer Investment Fund Targeted and Enhanced Weatherization Program, which helps low-income Marylanders correct health and safety hazards in the home and allow for energy-efficient upgrades to be installed. Additionally, MES has interacted with the Maryland Clean Energy Center, providing such services as the setup of accounting functions during its start-up; and has continued to provide payroll, benefit services, and human resource functions since September 2013.

Exhibit 6
MES's Project Examples
2015 Annual Report

Group	**Subgroup/Subgrouping**	**Activity**
Technical and Environmental Services	Environmental Dredging and Restoration	Operations, maintenance, environmental and engineering services for Poplar Island, Cox Creek, Hart-Miller Island, and Masonville; dredged material containment facilities; confined aquatic Disposal dredging; Seagirt-Dundalk access channel dredging; Fairfield Marine Terminal – wet basin; Pearce Creek; outreach and data tracking; Lake Linganore assessment for dredging; Hawkins Point hazardous waste landfill; Dundalk Marine Terminal environmental managements services; Baltimore Washington International and Martin State Airports environmental management system services; wetland delineation and forest stand services; geotechnical inspection services, stormwater design, maintenance and structure inspections; and invasive species identification and remediation services
	Environmental Monitoring	Water quality services; environmental management services; renewable energy; field operations and maintenance services; geospatial and engineering services
Water and Wastewater Services		Water treatment at schools; enhanced nutrient removal upgrades; new stormwater permit requirements; St. Mary's County stormwater services; biosolids management; Rocky Gap State Park; Ssatewide water/wastewater maintenance
Environmental Operations	Recycling	Montgomery County; Baltimore County Central Acceptance Facility; Prince George's County; Midshore Recycling; Recycling program marketing, evaluation, and training
	Solid Waste Transfer Stations	Baltimore County Central Acceptance Facility; Baltimore County Western Acceptance Facility; Talbot County Transfer Station
	Composting	Montgomery County Dickerson Facility; Prince George's County Composting Facility at Western Branch; Food Waste Composting at Western Branch; Harford County Composting; Poultry Litter Composting Demonstration Project; 2015 Maryland Agricultural Phosphorus Initiative
	Midshore Regional Landfill	Midshore II Regional Landfill; Midshore I Regional Landfill; Midshore I Landfill Gas to Energy
	Solid Waste Engineering	Design and construction of landfills, landfill cells, landfill closure caps, landfill gas collection and gas waste to energy systems,sSolid waste transfer stations, and materials recycling facilities
	Additional Activity on the Eastern Shore	Old Beulah landfill closure; Hobbs Road Landfill Gas Collection and Flare Installation; Ackerman Farm Wetlands
	Scrap Tires	Scrap tire collections; scrap tire dump cleanups
	Integrated Solid Waste Management	Harford County

	Innovative Solid Waste Programs	Used oil program; beneficial use of landfill gas; environmental monitoring; environmental remediation; Eastern Correctional Institution; Maryland Correctional Institution – Hagerstown Steam Plant Management; combined heat and power system; Leachage hauling; mobile tub grinding services and chlorofluorocarbon (CFC) recovery

Source: Maryland Environmental Service

As noted above, MES was authorized to undertake energy projects by Chapter 183 of 2009. The projects envisioned by MES are primarily focused on leveraging current projects, directly implementing smaller-scale renewable projects, and assisting public or private entities with larger energy projects. These projects can include the use of poultry litter as a fuel source, landfill gas recapture, and waste-to-energy projects associated with various waste and waste treatment facilities across the State. Smaller scale solar- and wind-based projects could also be undertaken by MES. MES recently attempted to develop an anaerobic digester utilizing poultry litter, but the project was canceled when the private firm which had been procured to implement much of the project was unable to obtain financing.

Chapter 183 also allowed MES to construct, own, and operate transmission lines that would be necessary to connect this energy to the existing infrastructure. The fiscal note for Chapter 183 stated that it was unclear to what extent this would result in large scale power plant development or MES's acquisition of power plants then in operation in the State without the direct request for assistance by current plant owners. While it was the intention of the bill to stimulate new power generation development in the State, MES could acquire an existing power generating project through a negotiated purchase or by exercise of its governmental authority.

List of Programs Providing and Proposed, Including Financing Programs – How They Are Evaluated and Whether Desired Results Are Achieved

MES has the following performance measures for State reimbursable projects:

- Improve the environment through Maryland Environmental Service activities;

  Objective 1.1 – Manage liquid waste products to reduce the nutrient problems in the Chesapeake Bay.

- improve infrastructure to convey and treat water and wastewater in the State;

  Objective 2.1 – Obligate 75% of appropriated capital funding annually.

- work more safely and

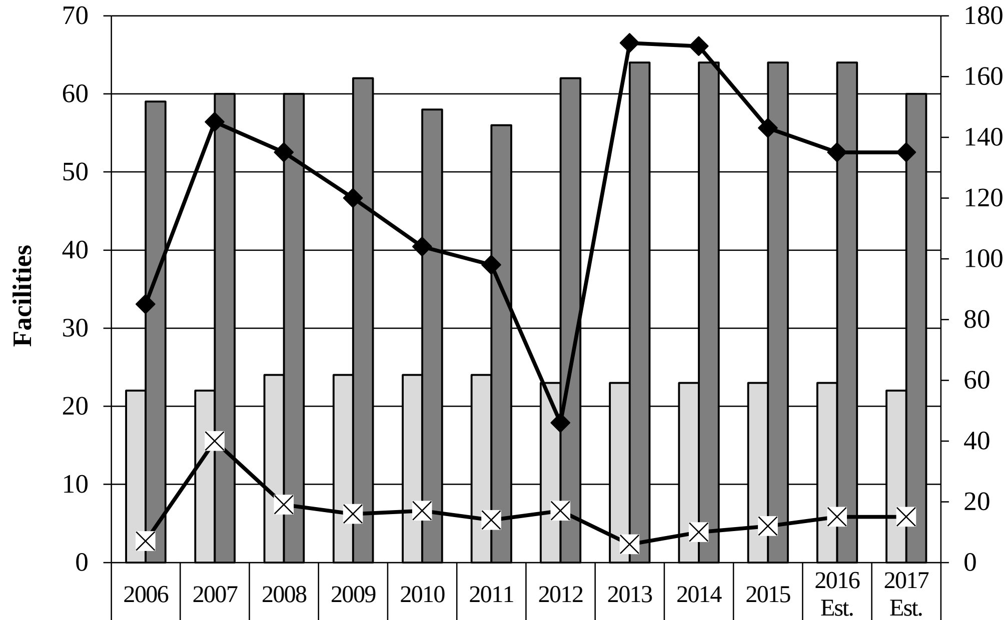
  Objective 3.1 – Improve safety performance by limiting accidents and related lost work time and by reducing the number of preventable vehicle accidents.

- provide excellent customer service and satisfaction.

Objective 4.1 – MES will achieve a client satisfaction result of 75% or more.

The MES performance measures relate to three goals, one of which is to improve the environment through MES activities. One desired outcome is a reduction in the number of local/corporate and State National Pollutant Discharge Elimination System violations at wastewater treatment plant facilities. **Exhibit 7** shows that MES has a greater number of local/corporate facilities than State facilities and that, in general, local/corporate discharge permit violations are a higher percentage of overall violations than would be indicated by their share of the total number of facilities. Previously, this measure specified only National Pollutant Discharge Elimination System violations, but MES notes that the violations include groundwater discharges as well and so the more general category of discharge permits is used instead. The number of local/corporate facility violations increased substantially between fiscal 2012 (46) and 2013 (171). MES indicates that the increase in the number of local/corporate facility violations in recent years is primarily due to two troublesome facilities. MES notes that construction has been completed at one of the troublesome facilities and the other facility is no longer being operated by MES. As a result, the number of local/corporate facility violations has decreased in fiscal 2015 (143).

Exhibit 7
Local/Corporate and State Discharge Permit Violations
Fiscal 2006 to 2017 Est.



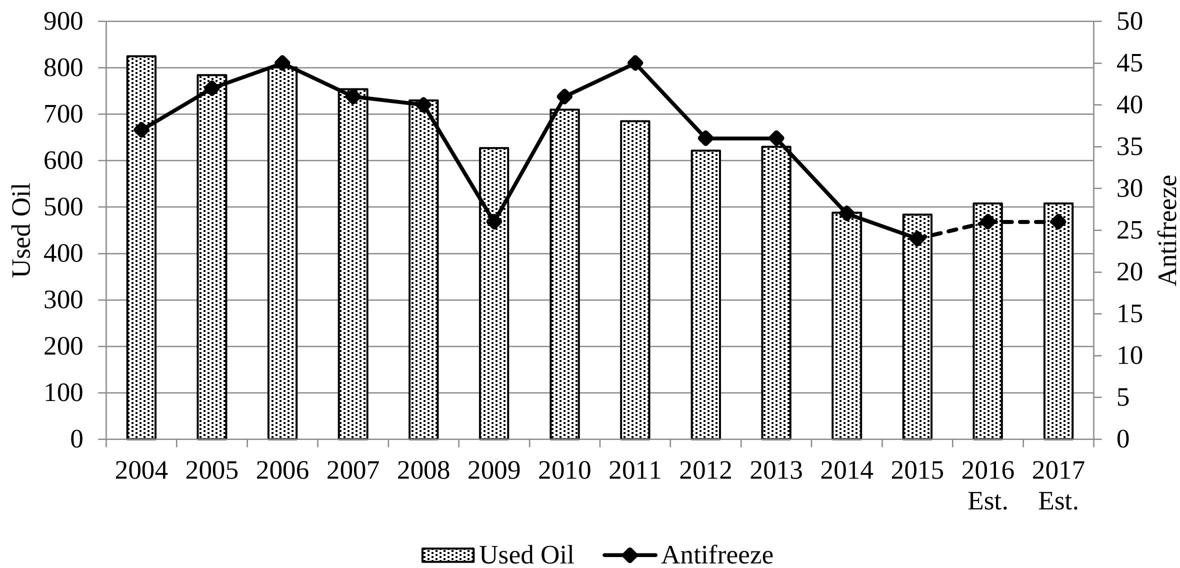
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 Est.	2017 Est.
No. of State Facilities	22	22	24	24	24	24	23	23	23	23	23	22
No. of Local/Corporate Facilities	59	60	60	62	58	56	62	64	64	64	64	60
Discharge Permit Violations for State Facilities	7	40	19	16	17	14	17	6	10	12	15	15
Discharge Permit Violations for Local/Corporate Facilities	85	145	135	120	104	98	46	171	170	143	135	135
Compliance Level					99.8%	99.8%	99.9%	99.8%	99.8%	99.8%	99.9%	99.9%

Source: Governor’s Budget Books, Fiscal 2007-2016; Maryland Environmental Service

Between fiscal 2006 and the 2017 estimate, State facilities have averaged 12% of the total violations while accounting for 27% of the facilities handled by MES. MES has indicated in the past that the reason for this low percentage of violations at State facilities is the inclusion of facility upgrades in the State Capital Improvement Plan. In contrast, MES depends on its non-State clients, including small municipalities, to fund improvements, which they may not always have the resources to do.

A second desired outcome under MES’s goal of improving the environment is to recycle used oil and antifreeze as part of the Maryland Used Motor Oil Recycling Program, which MES administers through an intergovernmental agency agreement with the Maryland Department of the Environment. There has been a steady decline in the amount of used oil recycled between fiscal 2004 and 2015, as shown in **Exhibit 8**, which MES has attributed to a steady increase in used oil prices in recent years and subsequent withdrawal of counties from the program to run their own programs. Other reasons for the decline include the increased use of longer lasting synthetic oils, commercial establishments offering recycling services, and auto service centers specializing in oil changes and routine maintenance that are convenient and reasonably priced. One countervailing trend is the possibility that used oil collection may increase as a result of lower gasoline prices encouraging more driving. The gallons of used antifreeze recycled has fluctuated more randomly over the same time period.

Exhibit 8
Gallons of Used Oil and Antifreeze Recycled
Fiscal 2004 to 2017 Est.
(Thousands of Gallons)



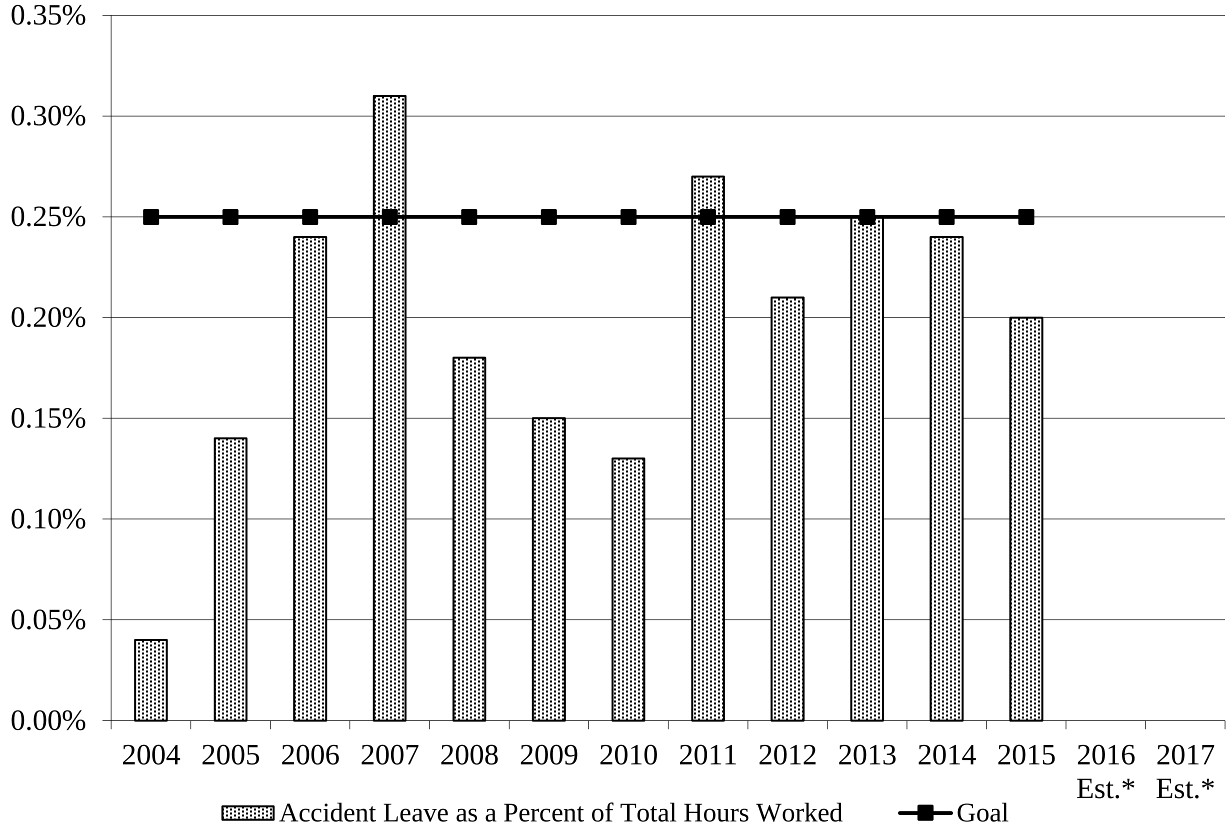
Source: Governor's Budget Books, Fiscal 2007-2016; Department of Budget and Management

Another MES goal is to work more safely. One measure related to this goal is accident leave as a percent of total hours worked, which is derived by dividing the total number of accident leave hours by the total billable hours for MES. MES's goal for this measure is to have accident leave be less than 0.25% of total hours worked, or less than one accident for every 400 hours worked. By this standard, MES met its goal in fiscal 2014 with accident leave of 0.24% and again in fiscal 2015 with accident leave of 0.20% as shown in **Exhibit 9**.

Exhibit 9

Accident Leave as a Percent of Total Hours Worked

Fiscal 2004 to 2017 Est.



*Fiscal 2016 and 2017 estimates for accident leave as a percent of hours worked are for less than 0.25%.

Source: Governor's Budget Books, Fiscal 2007-2016; Department of Budget and Management

In the past, MES has noted that it tracks, investigates, and analyzes all safety incidents as well as accidents; provides monthly training at each work location on specific relevant topics; conducts quarterly safety meetings and communicates extensively to all employees about safety-related issues. MES also has a Building Excellence and Success Together (BEST) Program that provides incentives to all employees if the agency's safety goals and objectives are met for the year.

Investments

MES primarily invests the cash balances that are temporarily idle between the time revenue is collected and the time expenses are disbursed. Investments are made according to the State law and the State Treasurer's Investment Policy.

Bond Funding

MES has the authority to issue bonds or notes as a general obligation to the Service which are limited to terms not exceeding 40 years. Historically, MES has issued bonds to support client projects. The Midshore Service Agreements for example, are binding, long term commitments to MES for the disposal of solid waste generated within the boundaries of the Mid-Shore Counties. MES has outstanding bond issues for the landfill project. The Midshore Regional Landfill Private Purpose Trust Fund accounts for the creation, operation, closure and post closure monitoring of the Midshore Regional Landfills, which are located in Talbot County and Caroline County and provide services to Caroline, Kent, Queen Anne's, and Talbot Counties. Ongoing bond activity for the project is reported in the trust, as debt service payments are funded by tipping fees at the landfill.

Exhibit 10 shows MES's total debt outstanding on an annual basis. This debt consists of both bonds and other acceptable debt such as equipment financing or capital leases.

Exhibit 10
Maryland Environmental Service Debt Outstanding
Fiscal 2005 to 2015
($ in Millions)

2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change 2005-2015	Average Annual % Change 2005-2015
$30.5	$24.5	$19.6	$18.7	$19.8	$28.5	$31.2	$27.5	$25.2	$27.9	$26.4	-$4.1	-1.4 %

Source: Department of Budget and Management

State Financing (loans/grants) at Inception and Beyond for Operating and Program Assistance

As noted above, MES is an independent State agency functioning as a fee-for-service public corporation that receives no direct operating appropriation. Instead, MES follows a business model that enables it to recover project costs. Payment for MES services performed for

State clients (reimbursable or contractual) are not directly appropriated to MES; rather the agency receiving the service includes the amount in its operating budget. In addition, MES receives State general obligation bond funding for capital projects on State lands through the State's capital budget.

MES notes that contributed capital appears in the earliest available financial statements: an entry in an old accounting system, which was the second system used by MES. There are entries in that old accounting system about the time MES became an independent agency for amounts from various sources totaling almost $7.5 million. Most of this was depreciated over the next five years, which leads MES to believe the funding was for equipment.

In 2010 MES was approved for Water Quality Revolving Loan Fund funds for the closure of the Hobbs Road Landfill. The project, approved at $3.5 million, was funded by the program. The Maryland Water Quality Financing Administration forgave up to $1.5 million of the expenses, and MES is paying the debt service on the remaining $2.0 million at a reduced interest rate because the operation was in a low income area. MES recognized the loan forgiveness as capital grant income in its fiscal 2011 financial statements.

In addition, MES received a loan from the Maryland Water Quality Revolving Loan Fund for the Garner/Brandywine scrap tire cleanup. MES currently pays principal and interest payments, and is reimbursed by Maryland Department of Environment from the scrap tire fund. The current plan has 88% repayment and 12% loan forgiveness.

Statutory Funds and their Purpose

The State Water and Sewer Infrastructure Improvement Fund was established to provide for capital improvements of State-owned and operated water treatment and wastewater treatment plants (WWTP); water distribution and sewer collection systems; and water towers. Since fiscal 1999, funding for capital maintenance projects relating to water and WWTPs has been budgeted under MES. Before this, the State budgeted capital maintenance funds for these projects in the Facilities Renewal Program of the Department of General Services. Facilities renewal funds pay for major rehabilitation activities at State-owned facilities. This change was made in order to display more clearly the capital cost of MES-operated State facilities.

General obligation debt is scheduled for the State Water and Sewer Infrastructure Improvement Fund in the 2016 *Capital Improvement Program* for fiscal 2017 through 2021. The schedule is shown in **Exhibit 11**.

Exhibit 11
State Water and Sewer Infrastructure Improvement Fund
General Obligation Bond Request
Fiscal 2017 to 2021
($ in Millions)

2017	2018	2019	2020	2021
$24.8	$18.1	$13.7	$16.0	$13.4

Source: 2016 Capital Improvement Program

Project Reserve Funds

MES has the authority to create project reserve funds under § 3-103(h) of the Natural Resources Article. The General Assembly created specific project reserve funds with caps under Chapter 397 of 2011, the Budget Reconciliation and Financing Act of 2011. **Exhibit 12** reflects the recent project reserve fund history.

Exhibit 12
Project Reserve Fund Status
December 31, 2015

Project Reserve Fund Activity	Amount	Cap	Difference
State Reimbursable Project Contingency Fund			
Beginning Balance (June 30, 2015)	$726,342	0	0
Approved Retainage	$250,000	0	0
Interest Earned	$359	0	0
Current Balance	**$976,701**	**$1,000,000**	**$23,299**
ECI Correctional Institution Steam Turbine Contingency Fund			
Beginning Balance (June 30, 2015)	$705,757	0	0
Approved Retainage	$300,000	0	0
Interest Earned	$460	0	0
Current Balance	**$1,006,217**	**$1,500,000**	**-$493,783**
DNR Project Contingency Fund			
Beginning Balance (June 30, 2015)	$3,380	0	0
Approved Additions	$0	0	0
Funds Used	$0	0	0
Interest Earned	$1	0	0
Current Balance	**$3,381**	**$500,000**	**-$496,619**

DNR: Department of Natural Resources
ECI: Eastern Correctional Institution

Source: Maryland Environmental Service

Maryland Health and Higher Educational Facilities Authority (MHHEFA)

Overview

The Maryland Health and Higher Educational Facilities Authority (MHHEFA) was chartered by Chapter 408 of 1970, which enacted Article 43C of the Annotated Code of Maryland as the "Maryland Health and Higher Educational Facilities Authority Act." The Act established MHHEFA as a body politic and corporate and an instrumentality of the State. MHHEFA is located in downtown Baltimore at 401 E. Pratt Street, Suite 1224. Its website address is http://www.mhhefa.org/.

Findings and Purposes

Chapters 306 and 307 of the Acts of 2008 recodified Article 43C without substantive change as Title 10, Subtitle 3 of the Economic Development Article (the "MHHEFA statute"). There have been no subsequent changes to the MHHEFA statute.

Under the MHHEFA statute, the General Assembly finds that, for the benefit of the people of the State, the increase of their commerce, welfare, and prosperity, and the improvement of their health and living conditions, that:

- it is essential that: people have the fullest opportunity to learn and to develop intellectual capacities; educational institutions in the State have the appropriate means to assist people in achieving required levels of learning and development of intellectual capacities; health care institutions in the State have appropriate means to expand and establish hospitals and related health care facilities; and educational institutions and health care institutions in the State are able to finance projects at the least cost to their users;
- existing facilities for education and health care and existing financing vehicles available to these institutions are insufficient to meet these needs; and
- these institutions are not able with present means to improve and adequately finance sufficient facilities, in order to provide the facilities at the least cost to their users.

Accordingly, the purposes of MHHEFA are to:

- assist educational institutions and health care institutions in the acquisition, improvement, and financing of projects and
- provide assistance that enables educational institutions and health care institutions to finance, at the least cost to their users, the facilities and structures that are needed to accomplish the purposes of the Act.

General Authority

Under the MHHEFA statute, MHHEFA may:

- adopt bylaws for the conduct of its business;
- sue and be sued;
- adopt a seal;
- maintain an office at a place it designates;
- issue bonds in accordance with the act;
- accept a grant, loan, or other assistance in any form from any public or private source, subject to the provisions of the act;
- charge to and equitably allocate among participating institutions the administrative costs and expenses of carrying out this its duties under the act; and
- do all things necessary or convenient to carry out the powers expressly granted by the Act.

Further, MHHEFA may:

- acquire, directly or through a participating institution acting as its agent, by purchase, gift, or devise, any property, franchises, and other interests in land, including submerged land and riparian rights, located in or outside the State, as necessary or convenient to construct, acquire, or operate a project, on terms and at prices MHHEFA considers reasonable;
- take title to the property in the name of MHHEFA or the participating institution as its designated agent;
- determine the location and character of a project to be financed under the act, or designate a participating institution as its agent to do so;
- directly, or through a participating institution acting as its designated agent, acquire, improve, maintain, operate, lease as lessee or lessor, and regulate a project, and enter into contracts for any of these purposes and for the management of a project;
- fix and collect rates, rentals, fees, and charges for services and facilities that a project provides or makes available;
- directly, or through a participating institution acting as its designated agent, establish rules and regulations for the use of a project;
- mortgage, pledge, or otherwise encumber a project and its site or hold a mortgage or other encumbrance on a project and its site for the benefit of the holders of bonds issued to finance the project; and
- make a loan to a participating institution to: improve or acquire a project in accordance with an agreement between MHHEFA and the participating institution; refinance any part of a project; and refund or repay bonds, mortgages, advances, loans, or other obligations of the participating institution to MHHEFA, any person, or any unit of federal, State, or local government incurred to finance any part of a project.

MHHEFA may undertake a joint project for two or more participating institutions. A loan from MHHEFA to a participating institution may not exceed the total cost of the project as determined by the participating institution and approved by MHHEFA.

MHHEFA is exempt from federal and State income taxes. MHHEFA has no taxing power.

Oversight

MHHEFA's board of directors consists of nine members. The treasurer of the State of Maryland (or a deputy treasurer designated by the treasurer) serves *ex-officio*. The other eight members shall be residents of the State appointed by the Governor. Each year, the Governor designates one member as chair and one as vice-chair. The term of an appointed member is five years. All members serve without compensation but are entitled to reimbursement for actual and necessary expenses incurred in the performance of their duties. MHHEFA meets on the first Tuesday of each month.

MHEFFA must have its books audited each year by a certified public accountant. The independent auditor is Cohn Reznick, LLP. Each October 1, MHHEFA is required to report to the Governor on its activities for the preceding fiscal year.

Under § 11-203 of the State Finance and Procurement Article, the State procurement law does not apply to MHHEFA if no State money is to be spent on a procurement contract. However, MHHEFA must follow State procedures to obtain, for internal administrative functions, office space, supplies, facilities, materials, equipment, and professional services.

Operations

Start-Up Funding

MHHEFA received $75,000 in start-up funding from the State. This amount was fully paid after MHHEFA's first financing. MHHEFA does not receive any on-going governmental funding assistance.

Personnel

Subject to the approval of the Governor, MHHEFA appoints an executive director for day-to-day general management of MHHEFA's affairs.

MHHEFA may appoint a full-time or part-time general counsel. MHHEFA may appoint additional officers and may employ professional and other staff and retain engineers, architects, accountants, construction and financial experts, managers, and other professionals that it considers necessary.

MHHEFA sets the compensation of the executive director, the general counsel, any additional officers, and staff. Other staff include: an assistant director; an accounting and compliance officer; a senior account manager; two account managers; an executive assistant; and an administrative assistant. Consultants include two financial advisors (Public Financial Management, Inc. and Fairmount Capital Advisors, Inc.); bond counsel (McKennon Shelton Henn LLP); and a management consultant (Management Consulting Services).

MHHEFA employees are exempt from several provisions of State law:

- Division I of the State Personnel and Pension Article (personnel);
- Title 10 of the State Finance and Procurement Article (Board of Public Works miscellaneous provisions);
- Division II of the State Finance and Procurement Article (general procurement law);
- Title 12, Subtitle 4 of the State Finance and Procurement Article (policies/procedures for exempt units);
- Title 14, Subtitle 3 of the State Finance and Procurement Article (minority business enterprises);
- Sections 3-301 and 3-303 of the General Provisions Article (Open Meetings Act);
- Title 4 of the General Provisions Article (Public Information Act); and
- Title 5 of the General Provisions Article (Public Ethics Law).

Budget

MHHEFA is a self-sustaining nonbudgeted agency. MHHEFA generates funding and income through the fees paid by participating institutions for MHHEFA's financing services of projects.

Exhibit 1 provides the balance sheet and net income statement for MHHEFA for fiscal 2013 to 2015.

Exhibit 1

Balance Sheet and Net Income

Fiscal 2013 to 2015

(In Thousands of Dollars)

	June 30, 2015	**June 30, 2104**	**June 30, 2013**
Assets	$24,242	$23,212	$22,144
Liabilities	755	$262	$249
Net Position	$23,487	$22,950	$21,895
Total	$24,242	$23,212	$22,144
Operating Revenues	$2,733	$2,693	$2,641
Operating Expenses	1,942	$1,921	$2,018
Operating Income	$791	$772	$623
Non-Operating Revenues	$193	$283	$(28)
Increase in Net Position	$984	$1,055	

Note: Net position represents the residual interest in MHHEFA's assets after liabilities are deducted.

Exhibit 2 states the leasing expenses of MHHEFA from fiscal 2014 to 2020. MHHEFA has a lease commitment for office space through July 31, 2020.

Exhibit 2
Lease for Office Space Expenses
Fiscal 2014 to 2020

2014	$84,042
2015	$94,736
2016	$98,063
2017	$101,483
2018	$105,025
2019	$108,567
2020	$120,268

Bond Issuing Authority

Under §§ 10-323 through 10-337 of Title 10 of the Economic Development Article, MHHEFA may periodically issue bonds for any corporate purpose, including operating expenses; refund those bonds; purchase its bonds with any funds available; and hold, pledge, cancel, or resell bonds.

By resolution, MHHEFA may authorize the chair, vice chair, one of its members, or a committee of its members to determine, provide for, or approve any matters relating to bonds that MHHEFA considers appropriate. These include specifying, determining, prescribing, and approving matters, documents, and procedures that relate to the authorization, sale, security, issuance, delivery, and payment of and for the bonds; creating security for the bonds; providing for the administration of bond issues; and taking other actions it considers appropriate concerning the bonds.

The Maryland Hospital Bond Program, under §§ 10-340 to 10-353 of the Economic Development Article, applies when the payment of public obligations of a closed or delicensed hospital could seriously impair the ability of health care facilities and State and local governments to secure subsequent financing through the issuance of tax exempt bonds. This program is intended to preserve the access of health care facilities in the State to adequate financing by facilitating the refinancing and payment of public obligations of a closed or delicensed hospital.

Neither the State of Maryland, nor any subdivision, nor MHHEFA shall be obligated to pay principal or interest on bonds and notes issued by MHHEFA except from payments from participating institutions and revenues of the related projects. Neither the faith and credit nor the taxing power of the State of Maryland or any subdivision, or MHHEFA is pledged to the payment of principal or interest on outstanding bonds and notes.

MHHEFA does not require the approval of the legislature or any State agency to issue bonds.

Programs

MHHEFA was established to assist nonprofit health and educational institutions and related institutions in the financing of capital projects. It is the only Maryland issuer of conduit revenue bonds that is charged by statute with financing projects at the least cost to its users. MHHEFA keeps abreast of ever-changing capital market conditions and federal tax and securities law developments in order to provide participants with timely advice on current market conditions and requirements. MHHEFA partners with participants to develop and implement financing strategies for meeting their capital needs, for preserving maximum flexibility, and for assuring borrowers of the least cost while meeting the requirements of the various capital markets in order to maintain credit quality and strong market reception for MHHEFA bonds.

MHHEFA mainly serves as a project manager and receives fee revenues from its clients. It issues little debt.

MHHEFA is authorized to perform a variety of functions on behalf of its clients, including:

- issuing fixed and variable rate bonds and notes, including commercial paper;
- financing construction, renovation and equipping of facilities for nonprofit hospitals, colleges, universities, noncollegiate schools, retirement communities, nursing homes, assisted living facilities, and other long-term care facilities;
- entering into leases and subleases of projects and contracts for the operation and management of projects for institutions;
- making loans to participating institutions to finance projects, including hospital facilities, ambulatory care centers and other outpatient facilities, parking garages, research facilities, academic buildings, dormitories, dining halls, libraries and athletic facilities; and
- establishing and administering pooled loan programs to reduce financing costs and provide enhanced access to the capital markets.

MHHEFA arranges financing to meet the specific needs of each institution that applies for financing. Financing tailored to meet the specific needs of each individual project is available through public offerings, private placements, MHHEFA's Pooled Loan Programs, and equipment leases. MHHEFA established several Pooled Loan Programs. Grouping several loans together into a single bond issue allows participants access to the capital markets at an affordable cost.

Exhibit 3 shows the amount and number of bonds issued during fiscal 2011 to 2016.

Exhibit 3
Bonds Issued During Fiscal Year
Fiscal 2011 to 2016
(In Thousands of Dollars)

Fiscal Year Ending	Public Issues	Private Placements	Total	Number of Bond Issues	% of $ Refinanced/ % of $ New Money
2011	$329,150	$170,532	$499,682	18	54%/46%
2012	$838,370	$558,785	$1,397,155	27	79%/21%
2013	$1,273,070	$647,413	$1,920,483	29	71%/29%
2014	$1,273,070	$261,986	$542,161	10	41%/59%
2015	$1,190,340	$147,428	$1,337,768	14	96%/4%
2016	$636,580	$333,385	$969,965	17	92%/8%

Source: MHHEFA

Exhibit 4 depicts the amount of bonds issued by type of financing during fiscal 2014 to 2016.

Exhibit 4
Bonds Issued by Type of Financing
Fiscal 2014 to 2016
(In Thousands of Dollars)

During Fiscal 2014

Instuitution	Amount	Type of Financing
Healthcare Financings		
Kennedy Krieger Institute	$16,730	private: refund bonds
Calvert Health System	$31,185	public: refund bonds
The Johns Hopkins Health System	$238,000	public: finance campus development at 2 hospitals
Mercy Medical Center	$18,065	private: refund bonds
Adventist HealthCare	$25,000	private: finance equipment

		acquisition/facilities
Family Services, Inc.	$4,430	private: finance acquisition/refinance loan
Higher Education Institution Financings		
Stevenson University	$147,670	private: finance improvements/refund bonds
Retirement Community Financings		
Augsburg Lutheran Home	$18,966	private: refund bonds
Non-Collegiate School Financings		
City Neighbor Charters	$10,990	public: finance acquisition/ construction of facility
Our Lady of Good Counsel	$31,125	public: finance acquisition/construction of facility
Total	$542,161	

During Fiscal 2015

Institution	Amount	Type
Healthcare Financings		
Annapolis Life Care	$41,950	private: refund bonds
Western Maryland MD Health Sys.	$236,170	public: refund bonds
Anne Arundel Health System	$127,305	public: refund bonds
Union Hospital of Cecil County	$30,778	private: refund bonds
Peninsula Regional Medical Center	$126,665	public: finance capital improvements/refund bonds
MedStar Health	$357,205	public: refund bonds
The Johns Hopkins Health System	$11,000	private: finance capital improvements
The Johns Hopkins Health System	$182,980	public: refund bonds
The Johns Hopkins Med. Insti. Util.	$19,505	public: refund bonds
University of MD Medical System	$80,145	public: refund bonds
Higher Education Institution Financings		
Loyola University Maryland	$60,365	public: refund bonds
Non-Collegiate School Financings		
Gilman School	$35,500	private: finance

		improvements /refund bonds
DeMatha Catholic High School	$17,750	private: finance improvements/refund bonds
Our Lady of Good Counsel	$10,450	private: finance construction of arts center
Total	$1,337,768	

<u>During Fiscal 2016</u>

Institution	**Amount**	**Type**
Healthcare Financings		
Meritus Medical Center	$257,300	public: refund bonds/finance new projects
LifeBridge Health	$159,685	public: refund bonds/finance new projects
Calvert Memorial Hospital	$21,000	private: finance expansion and information system
Johns Hopkins Health System	$35,315	public: taxable: restructure escrow
University of Maryland Faculty Phy	$12,615	private: refund bonds
Johns Hopkins Health System	$9,000	private: finance capital improvements
Mercy Medical Center	$135,250	public: refund bonds
Mercy Medical Center	$35,055	private: refund bonds
Mercy Medical Center	$65,450	private: refund bonds
Johns Hopkins Health System	$48,565	private: refund bonds
Johns Hopkins Health System	$48,245	private: refund bonds
Doctors Community Hospital	$31,945	private: refund bonds
Retirement Community Financings		
King Farm Presbyterian Retire. Com.	$33,000	private: finance capital improvements
Edenwald	$49,030	public: refund bonds/finance capital projects
Non-Collegiate School Financings		
Indian Creek School	$12,810	private: refund bonds
Friends Community School	$4,900	private: refund bonds
Bishop McNamara High School	$10,800	private: refund bonds
Total	$969,965	

MHHEFA 2016 Annual Report is posted on its website.

Source: MHHEFA

Exhibit 5 shows the amount of outstanding debt for MHHEFA at the end of fiscal 2011 to 2015.

Exhibit 5
Outstanding Debt at End of Fiscal Year
Fiscal 2001 to 2015
(In Thousands of Dollars)

Fiscal Year	Public Offerings	Private Placements/ Limited Offerings	Total
2011	$7,277,035	$1,379,326	$8,656,361
2012	$7,182,759	$1,730,301	$8,913,060
2013	$6,814,080	$2,021,204	$8,835,284
2014	$6,694,503	$2,142,696	$8,837,199
2015	$6,694,618	$2,084,915	$8,779,533
2016	$6,543,316	$2,120,708	$8,664,024

Source: MHHEFA

Maryland Industrial Development Financing Authority (MIDFA)

Overview

The Maryland Industrial Development Financing Authority (MIDFA) was chartered by Chapter 714 of 1965, which established MIDFA as a body politic and corporate and an instrumentality of the State. Housed in the Department of Commerce, MIDFA promotes significant economic development by providing financing support to manufacturing, industrial, and technology businesses located in or moving to Maryland. MIDFA is the State's largest and most established financing program. It facilitates access to capital by issuing private activity revenue bonds for small and midsize companies and can reduce lenders' risk by providing credit insurance in the form of a deficiency guarantee.

Purposes

Title 5, Subtitle 4 of the Economic Development Article details the purpose and parameters of MIDFA, including the Industrial Development Fund. Through consolidation in Chapter 305 of 2000, the Industrial Development Fund replaced the Day Care Loan Facilities Loan Guarantee Fund, the Maryland Enterprise Incentive Deposit Fund, and its own Authorized Purpose Fund and Bond Insurance Fund.

Under the MIDFA statute, MIDFA's purposes are to:

- relieve unemployment in the State;
- encourage the increase of industry and commerce and a balanced economy in the State;
- help retain and attract industry and commerce through measures including port development; the control, reduction, or abatement of environmental pollution; and the utilization and disposal of wastes;
- promote economic development;
- protect natural resources and encourage resource recovery;
- encourage the creation and expansion of day care facilities in the State; and
- promote the health, safety, and welfare of residents throughout the State.

General Authority

Under its statute, MIDFA is authorized to:

- adopt bylaws for the conduct of its business and adopt a seal;
- maintain offices in the State;

- sue and be sued;
- retain consultants;
- use the services of other governmental agencies;
- contract for and accept loans or grants from the federal or State government, a local government, or any of their units or instrumentalities;
- acquire, improve, manage, operate, dispose of, or otherwise deal with property; take assignments of rentals and leases; and make contracts, leases, agreements, and arrangements that are necessary or incidental to the performance of MIDFA's duties, on the terms and conditions that it may consider advisable;
- acquire or receive assignment of a document executed, obtained, or delivered in connection with financial assistance under the statute;
- subject to any outstanding agreement MIDFA makes under the statute, make a covenant or other agreement regarding MIDFA's insurance funds, establish within them accounts to carry out the statute, and allocate revenue and receipts among the accounts;
- fix, charge, and collect a premium, fee, cost, or other expense related to financial assistance under the statute, including an application fee, commitment fee, program fee, finance charge, and publication fee;
- authorize the chair, vice chair, or executive director to perform, on behalf of MIDFA, a duty or prescribe, specify, determine, or approve a detail, document, procedure, or a matter that MIDFA, in its sole discretion, determines appropriate to carry out the statute; and
- do all things necessary or convenient to carry out the powers granted by the statute.

Oversight

MIDFA has a nine-member board who must carry out the powers and duties of MIDFA – 7 appointed members and 2 *ex officio* members. MIDFA's 9 members also serve as the board for the Maryland Economic Development Assistance Authority (MEDAA). MIDFA board members may act concurrently in their capacities as members of MIDFA and MEDAA and must carry out the powers and duties of MIDFA whether acting (1) concurrently as members of MIDFA or MEDAA; or (2) as members of either authority alone.

The Governor selects the seven appointed members with the advice and consent of the Senate. The term of an appointed member is five years and an appointed member must have substantial experience in business or economic development. The Secretary of Commerce, and either the State Treasurer or Comptroller of Maryland as the Governor designates, serve *ex officio*. The Governor may remove an appointed member with or without cause.

Operations

Personnel

With the approval of the Secretary of Commerce, MIDFA appoints an executive director who serves as MIDFA's secretary. Staff from the Department of Commerce administer MIDFA's programs and projects.

Budget

The operating expenses of MIDFA are funded through the interest earned on the fund balances, bond issuance fees, and annual premiums of 0.5% of all insured transactions, unless waived in "qualified distressed counties" (One Maryland jurisdictions). MIDFA does not provide direct loans, but instead provides insurance for transactions resulting in reduced credit risks and enabling better terms from private institutions.

The Industrial Development Fund (IDF) is used to pay expenses of MIDFA related to insurance, insurance of bonds and authorized purpose obligations and funding of reserves, or providing other financial assistance under the MIDFA statute.

Exhibit 1 provides the balance sheet and net income statement for MIDFA for fiscal 2015.

Exhibit 1
Balance Sheet and Net Income
Fiscal 2015

Assets	$34.7 million
Liabilities	$2.1 million
Net Position	$32.6 million
Operating Revenues	$437,045
Operating Expenses	$1,680,274
Net Operating Loss	($1,243,229)
Net Non-Operating Revenue	$192,595
Change in Net Position	($1,050,634)

Bond Issuing Authority, Bond-related Insurance, and Authorized Purpose Obligation Insurance

Under § 5-436 of the Economic Development Article, MIDFA may issue and sell bonds in accordance with Title 12, Subtitle 1 of the Economic Development Article, the Economic Development Revenue Bond Act. MIDFA may issue its bonds without the consent of any other unit of State government, any proceedings, or the occurrence of any conditions other than those expressly required by the MIDFA statute. Before MIDFA issues bonds, MIDFA must notify the Board of Public Works of its intention to issue the bonds up to a stated amount. That board may coordinate the issuance of the bonds with any issuance of bonds of the State or its units or instrumentalities.

Under §§ 5-430 and 5-431 of the Economic Development Article, MIDFA may use IDF to:

- insure the payment of any of the principal of redemption or prepayment premiums or penalties on, and interest on (1) bonds; (2) any instrument executed, obtained, or delivered in connection with the issuance and sale of bonds; and (3) authorized purpose obligations and

- pay or insure the payment of fees or premiums for insurance, guarantees, or other credit support in connection with financial assistance under the MIDFA statute.

Based on factors it considers relevant, MIDFA shall determine, in its sole discretion, whether the economic impact of the transaction will be substantial. Financial assistance for bonds from IDF may not exceed an aggregate amount of $7.5 million for a single facility. Financial assistance for authorized purpose obligations from IDF may not exceed an aggregate amount of $2.5 million for a single transaction.

Programs

MIDFA issues private activity revenue bonds to facilitate access to capital and provides credit insurance in the form of a loan guaranty to reduce lenders' risk. All projects must be in a Priority Funding Area. While the transaction size is generally not limited, the credit enhancement is subject to the applicable program limits.

There are two types of private activity revenue bonds MIDFA issues:

- Taxable Bond: provides access to long-term capital markets primarily for fixed asset financing and

- Tax-Exempt Bond: provides access to long-term capital markets for fixed asset financing at tax-exempt rates. Federal tax law limits eligibility to § 501(c)(3) nonprofit organizations, manufacturing facilities, and certain solid waste projects. Additional limitations apply to the specific transaction type.

In addition to the issuance of private activity revenue bonds, MIDFA provides credit insurance through two programs:

- Bond Program: insures bonds up to 100%, not to exceed $7.5 million of taxable or tax-exempt bonds and

- Conventional Program: insures up to 80%, not to exceed $2.5 million of a transactions made by a financial institution. Export transactions may be insured up to 90%.

As of October 2016, MIDFA participated in 893 loans and bonds, totaling $2,626,823,913. Currently, 44 transactions remain active, with principal balances totaling $327,958,021 insured for $15,491,733. **Exhibit 2** outlines settled transactions under MIDFA over the last five fiscal years.

Exhibit 2
MIDFA Program Activity Settled Transactions
Fiscal 2012 to 2016

Fiscal Year	Transactions	Amount	Insured
2012	13	$77,930,765	$4,520,525
2013	9	$41,245,417	$7,223,800
2014	6	$15,879,000	$1,047,063
2015	8	$54,112,200	$10,185,120
2016	1	$5,104,706	$183,769
Total	**37**	**$194,272,088**	**$23,160,277**

Source: Department of Commerce

During fiscal 2015, MIDFA settled 8 transactions to 5 businesses, totaling $54,112,200, insured for $10,185,120. The projects included a commercial bakery expansion, 3 manufacturing expansions, and an education provider. The companies reported 227 new jobs, 586 retained jobs, and project costs of $80 million.

Under §§ 5-444 through 5-448 of the Economic Development Article, MIDFA may also award financial assistance for certain energy projects. Section 5-444 requires MIDFA to participate in financial assistance programs for federal energy projects under the federal Energy Security Act of 1996, and deems MIDFA to be a “nonprofit organization” for purposes of certain hydropower projects under federal law. Generally, a project qualifies as an energy project if it relates to energy conservation or to solar energy, wind, or other renewable fuel. Section 5-446 requires MIDFA to:

- promote programs of financial assistance for energy projects established under the MIDFA statute;
- inform consumers, the private sector, and financial institutions about these programs and actively seek their participation;
- develop and disseminate descriptions of its programs of financial assistance for energy projects; and
- serve as a clearinghouse for information on federal and State programs of financial assistance for energy projects.

Assessment of Program Success

MIDFA reports data each year on the number of jobs created, the number of jobs retained, the estimated amount of State revenue generated, and any additional information required by the department through regulation. The department includes the data in the annual Consolidated Incentives Report as required by the Maryland Jobs Development Act. This employment information, along with other information regarding MIDFA activity, can be used to evaluate program success.

Maryland Technology Development Corporation (TEDCO)

Overview

The Maryland Technology Development Corporation (TEDCO) was chartered in 1998 to help commercialize the results of scientific research and development conducted by higher education institutions, federal laboratories, and private-sector organizations. TEDCO also aims to promote new research activity and investments that lead to business development in Maryland. TEDCO is codified in Title 10, Subtitle 4 of the Economic Development Article as a body politic and corporate and is an instrumentality of the State. TEDCO is located at 7021 Columbia Gateway Drive #200, Columbia. Its website address is http://tedco.md/.

Purposes

The purposes of TEDCO are to (1) assist in transferring to the private sector the results and products of scientific research and development conducted by colleges and universities; (2) assist in commercializing those results and products; (3) assist in commercializing technology developed in the private sector; (4) foster the commercialization of research and development conducted by colleges, universities, and the private sector to create and sustain businesses throughout all regions of the State; and (5) generally assist earlystage and start-up businesses in the State.

General Authority

Statutorily, the powers of TEDCO are to (1) adopt bylaws for the conduct of its business; (2) adopt a seal; (3) maintain offices at a place it designates in the State; (4) accept loans, grants, or assistance of any kind from the federal or State government, a local government, a college or university, or a private source; (5) enter into contracts and other legal instruments; (6) sue or be sued; (7) acquire, purchase, hold, lease as lessee, and use certain intellectual property and interests, including franchises, patents, or licenses, and other mixed, tangible, or intangible property; (8) sell, lease as lessor, transfer, license, assign, or dispose of property or a property interest that it acquires; (9) fix and collect rates, rentals, fees, royalties, and charges for services and resources it provides or makes available; (10) create, own, control, or be a member of a corporation, limited liability company, partnership, or other entity, whether operated for profit or not for profit; (11) exercise power usually possessed by a private corporation in performing similar functions unless to do so would conflict with State law; and (12) do all things necessary or convenient to carry out the powers granted by the statute.

To achieve its goals, TEDCO provides nonequity investments to early stage technology businesses and funds the development and patenting of new technologies at research universities. TEDCO also develops linkages with federal research facilities in the State and helps companies pursue research funds from federal and other sources. As a quasi-public entity, TEDCO has greater flexibility than a State agency and is eligible for federal grants to manage programs to help improve Maryland's technology economy.

Oversight

TEDCO is governed by a board of directors consisting of the Secretary of the Department of Commerce or the Secretary's designee and 14 members appointed by the Governor with the advice and consent of the Senate: 2 representing the not–for–profit research sector of the State; 2 with expertise in venture capital financing; 5 with experience in technology-based businesses; 2 representing colleges and universities; and 3 members of the general public.

TEDCO is subject to the Public Information Act, and its board and employees are subject to Public Ethics Laws. Additionally, TEDCO is subject to legislative audits. However, the officers and employees are not subject to state employee and pension laws. Further, TEDCO is exempt from State and local taxes.

Operations

Start-up Funding

TEDCO was first funded by general fund appropriation within the Department of Commerce in fiscal 2000.

Personnel

TEDCO does not report personnel data through the State budget system because its employees are not State employees. However, TEDCO reports that it has 21 full-time positions and 6 part-time positions. This includes 6 positions that were added in fiscal 2016 due to the transfer of additional responsibilities to TEDCO, as discussed below.

The statute allows TEDCO an executive director and provides that the Attorney General is its legal advisor. Further, TEDCO may retain any necessary accountants, engineers, financial advisors, or other consultants.

Budget

As shown in **Exhibit 1**, the fiscal 2017 budget for TEDCO includes general funds of approximately $19.5 million, a small decrease of $200,000. There were small reductions to several of TEDCO's programs for cost containment purposes. Special funds totaling $7.3 million were included in the fiscal 2017 budget due to the transfer of the Maryland Venture Fund (MVF) from the Department of Commerce.

Exhibit 1

TEDCO Budget

Fiscal 2015 to 2017

($ in Thousands)

	2015	--Working 2016	Allowance-- 2017	Change
General Funds				
Operations				
Salaries and Wages	$1,757	$1,417	$2,052	$635
Contractual Services	45	45	41	-3
Equipment	12	12	17	5
Other Operational Costs	887	637	63	-574
Operations Subtotal	***$2,701***	***$2,110***	***$2,173***	***$63***
Programs				
Maryland Technology Commercialization Fund	$490	$663	$600	-$63
Technology Validation Program	0	0	0	0
Maryland Industrial Partnership Program	400	350	300	-50
Rural Business	0	500	500	0
Cybersecurity Investment Fund	800	900	900	0
BioMaryland Grants	0	1,151	1,101	-50
Maryland Innovation Initiative	4,900	4,900	4,800	-100
Stem Cell Research Fund	9,400	9,093	9,093	
Programs Subtotal	***$15,990***	***$17,557***	***$17,294***	***-$263***
General Fund Total	**$18,691**	**$19,668**	**$19,467**	**-$200**
Special Funds				
Enterprise Fund		$15,055	$6,000	-$9,055
Enterprise Fund Administration		1,332	1,345	12
Special Fund Total		**$16,387**	**$7,345**	**-$9,043**
Grand Total	**$18,691**	**$36,055**	**$26,812**	**-$9,243**

Source: Maryland Technology Development Corporation

Bond Issuing Authority

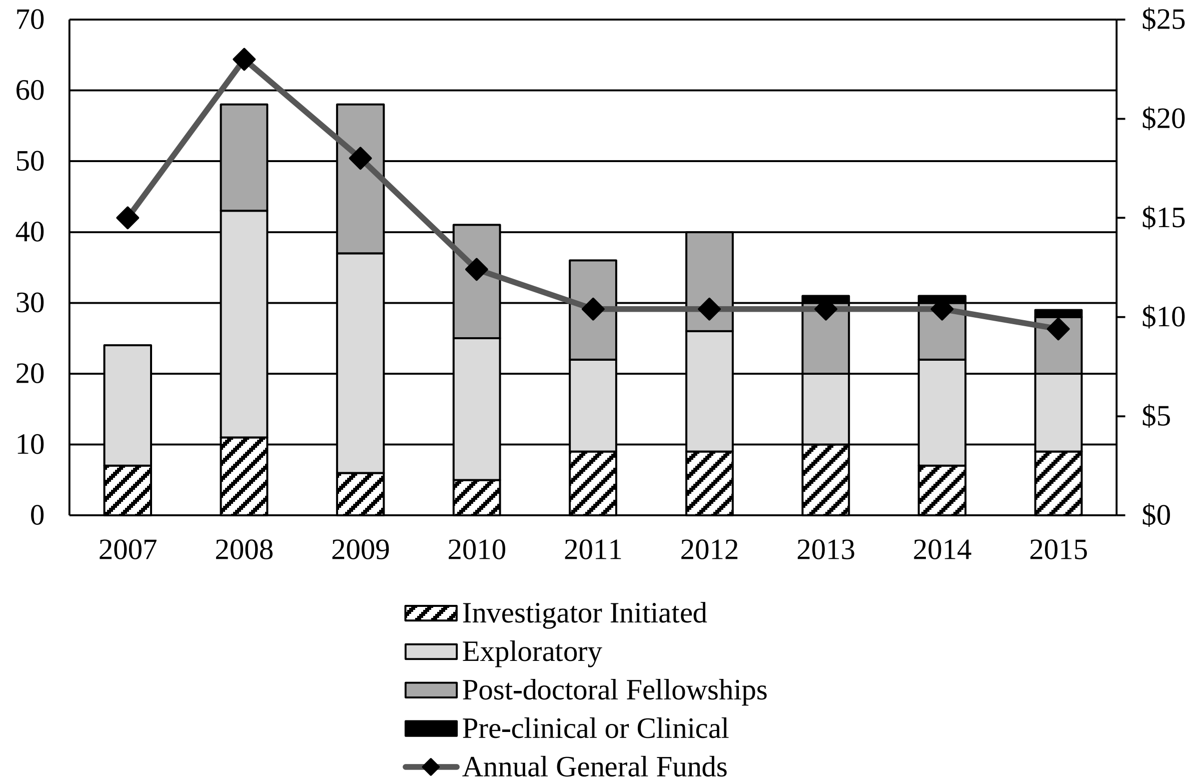
TEDCO does not have the authority to issue bonds.

Programs

Research Programs

In fiscal 2007, TEDCO received an initial $15 million appropriation to capitalize a new Maryland Stem Cell Research Fund. The fund supports stem cell research and development at Maryland research institutions and private-sector research companies. In subsequent years, State funding has varied; through fiscal 2013, the program provided more than $100 million in grants to nearly 300 different research projects. The Stem Cell Research Commission must contract with an independent scientific peer review committee to evaluate stem cell research proposals for the commission. An applicant for State-funded stem cell research must first obtain an institutional review board's approval before receiving funding. **Exhibit 2** details the history and type of awards under the program.

Exhibit 2
Stem Cell Research
History of Funded Awards
Fiscal 2007-2015
($ in Millions)



Source: Maryland Technology Development Corporation

Commercialization Programs

The Technology Validation Program, formerly the University Technology Investment Fund, provides funding to validate a technology for a specific application or to validate the market opportunity for a technology. The validation of a technology for a specific application generally involves a small proof-of-principle study to demonstrate that the technology works as intended. Eligible program recipients include entrepreneurs considering the creation of a Maryland-based start-up company relying on a technology from an eligible university, a university or not-for-profit research institution in Maryland, or a federal laboratory in Maryland. Initial awards may be up to $50,000. General funds for the program ceased in fiscal 2010; however, TEDCO has advised that it supports the program with its own nonbudgeted funds.

The Maryland Innovation Initiative (MII) was established by the General Assembly in 2012 as a partnership between the State and five Maryland academic research institutions: Johns Hopkins University; Morgan State University; University of Maryland, College Park; University of Maryland, Baltimore; and University of Maryland, Baltimore County. MII is designed to combine the technology transfer expertise of the corporation and the research expertise of universities to speed commercialization opportunities, promote commercialization of research conducted in the partnership universities, and leverage each institution's strengths.

MII receives general funds that may be used to (1) provide grant funding to a qualifying university, a qualifying university-based entrepreneur, or another start-up entity to promote the commercialization of technology developed wholly or partly by a qualifying university; (2) pursue grant funding for the initiative or its qualifying universities; (3) develop and implement guidelines for technology transfer; and (4) identify projects at qualifying universities that may be viable for commercialization.

TEDCO also administers the Patent Assistance Program and the Rural Business Innovation Initiative. The Patent Assistance Program provides matching funds to help start-up companies pay ongoing patent expenses for technologies licensed from Maryland's universities or the National Institutes of Health. The Rural Business Innovation Initiative provides technical and business assistance to small companies and early stage technology-based companies in rural Maryland as defined by the Rural Maryland Council. The initiative offers professional ongoing mentoring and targeted projects to help companies succeed at no cost to the company.

Investment Programs

The Technology Commercialization Fund, formerly known as the Maryland Technology Transfer and Commercialization Fund, provides seed investments to early stage technology companies that are economically viable but do not yet have the scope for a venture capital investment. To be eligible, a company must partner with a university in Maryland or a federal laboratory, must be a tenant in a technology incubator, or must be a participant in TEDCO's Rural Business Innovation Initiative. Awardee companies must (1) be for-profit entities that employ 16 or fewer full-time employees and (2) be pre-revenue or have received less than an aggregate of $500,000 in equity investments from sophisticated investors. Awards are up to $100,000 in nonequity investments per company. The companies serve as a "farm team" for the Department of Commerce Challenge Program, which targets businesses at a later stage of development. Awardee companies also often go on to participate in the Maryland Industrial Partnerships Program at the University of Maryland, College Park.

One of TEDCO's other activities is the Incubator Assistance Program, which provides services and infrastructure for fledgling companies. TEDCO provides small operating grants but has in the past awarded capital funds to local governments and nonprofit organizations for incubator development. TEDCO also administers the Cybersecurity Investment Fund, a fund the legislature established in 2014 to provide seed and early stage funding for emerging technology companies in the State focused on cybersecurity and cybersecurity product development.

In fiscal 2014, the President of the Senate and the Speaker of the House appointed a private-sector commission to examine the structure, funding, and efficacy of the State's current economic development activities. The Maryland Economic Development and Business Climate Commission (Augustine Commission) had a charge to make policy and funding recommendations to improve the State's business climate and competitiveness. The commission recommended that State programs to assist early stage companies be aligned within TEDCO.

Chapter 141 of 2015 implemented that recommendation and transferred these programs to TEDCO's supervision. Specifically, by budget amendment in fiscal 2016, MVF (also known as the Enterprise Fund) was transferred from the then Department of Business and Economic Development to TEDCO. MVF provides capital through equity purchases for start-up companies that are developing innovative technologies. Investments are limited to 25% of the company's total equity and require a three-to-one outside investor match. Individual investments, except those made in venture capital limited liability companies, are limited to $500,000 and may not exceed 15 years in duration. Beginning in fiscal 2013, this program became the means to implement the InvestMaryland program. This is a State-supported venture capital program that was funded through an auction of a tax credit against the insurance premium tax for insurance companies. A portion of these funds was invested in-house, and a portion was invested by private venture funds on behalf of the State. To date, no significant returns on these investments have accrued back to the fund. The fund balance worksheet for the program shows equity returns of $1.5 million in fiscal 2016.

Entrepreneurship Support

In 2012, TEDCO launched the Maryland Entrepreneurs Resource List, which provides a list of entrepreneurs who are available to mentor or provide leadership to early stage companies or other resource list entrepreneurs based on their experience. The resource list features more than 85 mentors and is queried on a regular basis. TEDCO also provides portfolio mentorship and support, assists in pitch preparations, organizes business plan competitions, and coordinates the Entrepreneurship Expo and the Innovation, Corporate Excellence, and Entrepreneurship Awards program.

Appendix 3. Comparison Chart

Financing Capability Agencies Comparison

	Maryland Clean Energy Center (MCEC)	Maryland Environmental Service (MES)	Maryland Economic Development Corporation (MEDCO)	Maryland Technology Development Corp. (TEDCO)	Maryland Industrial Development Financing Authority (MIDFA)	Maryland Health and Higher Education Facility Authority (MHHEFA)
Creation, Structure, and Oversight						
Purpose/ Mission	Promote economic development and jobs in the clean energy industry sector; promote the deployment of clean energy technology; serve as an incubator for the development of the clean energy center; collect, analyze, and disseminate industry data; and provide outreach and technical support to further the clean energy industry.	Provide operational and technical services to protect and enhance the environment for the people of Maryland.	Relieve unemployment in the State; encourage the increase of business activity and commerce and a balanced economy in the State; help retain and attract business activity and commerce in the State promote economic development; and promote the health, safety, right of gainful employment, and welfare of residents of the State.	Assist in transferring to the private sector the results and products of scientific research and development conducted by colleges and universities; assist in commercializing those results and products; assist in commercializing technology developed in the private sector; and foster the commercialization.	Relieve unemployment in the State; encourage the increase of industry and commerce and a balanced economy in the State; help retain and attract industry and commerce through measures including: (i) port development; (ii) the control, reduction, or abatement of environmental pollution; and (iii) the utilization and disposal of wastes; promote economic development protect natural resources and encourage resource recovery; encourage the creation and expansion of day care facilities in the State; and promote the health, safety, and welfare of residents throughout the State.	Assist educational institutions and health care institutions in the acquisition, improvement, and financing of projects; and provide assistance that enables educational institutions and health care institutions to finance, at the least cost to their users, the facilities and structures that are needed to accomplish the purposes of the act.

	Maryland Clean Energy Center (MCEC)	**Maryland Environmental Service (MES)**	**Maryland Economic Development Corporation (MEDCO)**	**Maryland Technology Development Corp. (TEDCO)**	**Maryland Industrial Development Financing Authority (MIDFA)**	**Maryland Health and Higher Education Facility Authority (MHHEFA)**
State Agency	Body politic and corporate, instrumentality of the State	Body politic and corporate, instrumentality of the State	Body politic and corporate, instrumentality of the State	Body politic and corporate, instrumentality of the State	Under Department of Commerce	Body politic and corporate, instrumentality of the State
Chapter Law and Year Created	Created by General Assembly in 2008 (Chapter 137)	Created by General Assembly in 1970 (Chapter 240) as a unit in DNR; in 1993, made independent (Chapter 196)	Created by General Assembly in 1984	Created by General Assembly in 1998 (Chapter 661)	Created by General Assembly 1965 (Chapter 714)	Created by General Assembly in 1970 (Chapter 408)
Current Statute	Title 10, Subtitle 8, Economic Development Article	Title 3, Subtitle 1, Natural Resources Article	Title 10, Subtitle 1, Economic Development Article	Title 10, Subtitle 4, Economic Development Article	Title 5, Subtitle 4, Economic Development Article	Title 10, Subtitle 3, Economic Development Article
Headquarters Location	Annapolis	Millersville	Baltimore City	Columbia	Baltimore City	Baltimore City

	Maryland Clean Energy Center (MCEC)	Maryland Environmental Service (MES)	Maryland Economic Development Corporation (MEDCO)	Maryland Technology Development Corp. (TEDCO)	Maryland Industrial Development Financing Authority (MIDFA)	Maryland Health and Higher Education Facility Authority (MHHEFA)
Governing Body Structure	9-member board 1 is MEA Director and 8 are appointed by the Governor with advice and consent of Senate (2 nonprofit clean energy research sector, 2 venture capital financing, 2 clean energy industry, 2 general public).	9-member board, director, deputy director, secretary, treasurer 4 are MES officers (director, deputy director, secretary, and treasurer), 3 public sector (in positions responsible for water, wastewater, or solid waste management), 2 private sector (with technical, financial, development, or legal experience related to water, wastewater, or solid waste management).	12-member board Includes the Secretaries of Commerce and Transportation as *ex-officio* voting members. Remaining 10 board members are appointed by the Governor with the advice and consent of the Senate: 2 representatives of local government, 3 members who are knowledgeable in real estate or commercial financing, 3 members who are knowledgeable in industrial development or industrial relations, and 2 members of the general public.	15-member board Includes the Secretary of Commerce and 14 members appointed by the Governor including: 2 representing the not for-profit research sector; 2 with expertise in venture financing; 5 with experience in technology-based businesses; 2 representing colleges and universities; and 3 members of the general public.	9-member board 7 members are appointed by the Governor. Secretary of Commerce, and either the State Treasurer or Comptroller of Maryland (as designated by the Governor) serve *ex officio*. MIDFAs 9 members also serve on the Maryland Economic Development Assistance Authority. MIDFA appoints the executive director who serves as the MIDFA's Secretary.	9-member board 1 is Treasurer of Maryland (*ex officio*) and 8 reside in the State (appointed by the Governor).
Governing Body Term Limits	4-year term	4-year term for non-officers	4-year term	4-year term	5-year term	5-year term

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Governing Body Compensation	Board members are entitled to reimbursement for expenses under the standard State travel regulations.	Non-officer board members are entitled to a per diem compensation as established by the board and to reimbursement for expenses under standard State travel regulations.	Board members are entitled to reimbursement for expenses under the standard State travel regulations (per MEDCO).	Board members are entitled to reimbursement for expenses under the standard State travel regulations.	Board members are entitled to reimbursement for expenses under the standard State travel regulations.	Board members are entitled to reimbursement for expenses under the standard State travel regulations.
Advisory Committee	Composition determined by board; 2016 committee has 81 members.	No	No	No	No	No
Subject to Public Information Act (1)	Yes	(No mention in statute)	Yes	Yes	Yes	Exempt
Subject to Open Meetings Act (2)	Exempt	(No mention in statute)	Exempt	No	Yes	Exempt
Subject to Administrative Procedures Act (3)		Yes	Yes	No	Yes	
Subject to MD Tort Claims Act (4)	Yes	Yes	Yes	Yes	Yes	Yes
Subject to MD Public Ethics Law (5)	Yes	(No mention in statute)	Yes	Yes	Yes	Exempt

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Subject to Whistle Blower Law (6)	No (exempt from all provisions of Division I of the State Personnel and Pensions Article).	No (exempt from all provisions of Division I of the State Personnel and Pensions Article).	Exempt (per MEDCO). MEDCO's officers and employees are not subject to the provisions of Division I of the State Personnel and Pensions Article that govern the State Personnel Management System.	No	Yes	
Subject to State Procurement Law (7)		Exempt from Title 4, Subtitles 3, 4, 5, and 7.	Exempt from Division II except: subject to Title 12, Subtitle 4, which requires all State units exempt from general State procurement law to have written policies and procedures for procurements.	Exempt from Division II except: subject to Title 12, Subtitle 4, which requires all State units exempt from general State procurement law to have written policies and procedures for procurements.	Yes, but exempt from Title 17, Subtitle 1 of the State Finance and Procurement Article (security for construction projects).	Exempt
Division I (State Finance)						Does not apply to MHHEFA if no State money is going to be spent on a procurement contract (MHHEFA does not receive any government funds).
Division II (General Procurement)	Exempt from Division II, except: subject to Title 12, Subtitle 4 and Title 14, Subtitle 3.	Exempt from Division II, except: subject to Title 12, Subtitle 4; Title 14, Subtitle 3; Title 16, and Title 17.				Must follow State procedures to obtain, for internal administrative functions, office space, supplies, facilities, materials, equipment, and professional services.

	Maryland Clean Energy Center (MCEC)	Maryland Environmental Service (MES)	Maryland Economic Development Corporation (MEDCO)	Maryland Technology Development Corp. (TEDCO)	Maryland Industrial Development Financing Authority (MIDFA)	Maryland Health and Higher Education Facility Authority (MHHEFA)
Subject to Board Public Works (8) (BPW)	Exempt	(No mention in statute)	Exempt	Exempt	Yes MIDFA must notify BPW of its intention to issue bonds up to a stated amount MIDFA must send a written request to BPW for additional money if more money is needed to keep the reserves of the fund at an adequate level.	Exempt
Subject to Legislative Audits	Subject to audit at any time by the State and Annual independent audit.	Subject to independent audit as soon as practical after the closing of the fiscal year. Subject to audit by the State, including the Legislative Auditor.	Yes Annual independent audit.	Yes Annual independent audit.	Yes	No Annual independent audit.
Personnel						
Executive Director/ President	Board appoints executive director with approval of Governor.	Governor appoints director, with advice and consent of Senate.	Board appoints executive director, serves at the pleasure of the board.	Board appoints executive director, serves at the pleasure of the board.	Board appoints executive director, with approval of Secretary of Commerce, and serves at the pleasure of the board.	Board appoints executive director with approval of Governor.

	Maryland Clean Energy Center (MCEC)	**Maryland Environmental Service (MES)**	**Maryland Economic Development Corporation (MEDCO)**	**Maryland Technology Development Corp. (TEDCO)**	**Maryland Industrial Development Financing Authority (MIDFA)**	**Maryland Health and Higher Education Facility Authority (MHHEFA)**
State Employees	No	No Director appoints deputy director, secretary, and treasurer with the approval of the Governor solely with regard to the qualifications for the duties of the office.	No	No	Yes	Yes MHHEFA may: • appoint officers (serve at the pleasure of MHHEFA) and • employ professional and other staff and retain engineers, architects, accountants, construction and financial experts, managers, and other professionals.
Current Number of Employees	3 plus 1 part time. FY17 – plan to have 6.	746 positions for fiscal 2017.	9 plus 1 part time.	21 full time positions plus 6 part-time positions.	Currently 0 Department of Commerce staff share the responsibility of MIDFA.	8
Employees under State Personnel and Pension System (9)	No Board determines compensation of executive director.	No Board determines compensation of director, deputy director, secretary, and treasurer.	No Board determined compensation of executive director.	No	Yes	No MHHEFA determines compensation of general counsel, other officers, and professional and other staff.

	Maryland Clean Energy Center (MCEC)	**Maryland Environmental Service (MES)**	**Maryland Economic Development Corporation (MEDCO)**	**Maryland Technology Development Corp. (TEDCO)**	**Maryland Industrial Development Financing Authority (MIDFA)**	**Maryland Health and Higher Education Facility Authority (MHHEFA)**
Employee Position Breakout	Executive – 1; Administrative Manager – 1; Director of Financing Programs – 1; and Communications – part-time. For FY 17: Hire 1 Finance and Account Manager; 1 Project Development Manager; and change PT Communications to FT.	746 positions for fiscal 2017.	Executive – 1; Accountants – 2; Controllers – 2; Bond specialist – 2; Asst. Director of Development – 1; and Administrative Assistants – 2.		N/A	Executive – 1; Accounting/Compliance Manager – 1; Senior Account Manager – 1; Account Managers – 2; Executive Assistance – 1; Administrative Assistant – 1; and General Counsel – 1. Consultants: Financial Advisors – 2; Bond Counsel – 1; and Management Consultant – 1.
Attorney General Representation	Attorney General is the legal advisor, but with the approval of the Attorney General MCEC may retain outside counsel.	Attorney General of Maryland.	No (uses private counsel).	Attorney General of Maryland.	Attorney General of Maryland.	MHHEFA may appoint a full-time or part-time general counsel (services at the pleasure of MHHEFA).

	Maryland Clean Energy Center (MCEC)	Maryland Environmental Service (MES)	Maryland Economic Development Corporation (MEDCO)	Maryland Technology Development Corp. (TEDCO)	Maryland Industrial Development Financing Authority (MIDFA)	Maryland Health and Higher Education Facility Authority (MHHEFA)
Operations						
General Functions	Promote economic development and clean energy primarily through financing programs. Uses third party (private financing) to support some programs. Issues bonds.	Operate water supply, solid waste, wastewater purification, and energy projects. Issue bonds to support client projects.	Assist business and governmental entities through ownership, financing, and development of real and personal property projects.	Promote the commercialization of research and technology-based innovations through financial incentive.	Issue private activity revenue bonds for small and midsize companies to facilitate access to capital by issuing. Provide credit insurance to reduce lenders' risk.	Client based. Assists health care and educational facilities with financing for construction, site acquisition, and capital equipment; also assists retirement communities. Mainly financing of projects – try to get the least cost financing (reserve the right to manage projects). -issue bonds -financing and loans -enter into leases -contract for operation/management of projects.
Provides Grants	Yes	No	Yes	Yes	No	
Makes Loans	Yes	No	Yes	Yes	Yes	Yes
Makes Loan Guarantees	Yes	No	Yes	No	Yes	
Supports Incubator Operation/Management	Yes	No	Yes	Yes	No	
Invests in Innovation	Yes	Yes	No	Yes	No	
Enters into P3 Structures	Yes	Yes	Yes	No	No	

	Maryland Clean Energy Center (MCEC)	Maryland Environmental Service (MES)	Maryland Economic Development Corporation (MEDCO)	Maryland Technology Development Corp. (TEDCO)	Maryland Industrial Development Financing Authority (MIDFA)	Maryland Health and Higher Education Facility Authority (MHHEFA)
Creates Other Business Entities/ Structures	Yes	Yes	Yes	Yes	No	
Bond Issuing Authority	MCEC may: -issue bonds for any corporate purpose, including operating expenses. -refund the bonds; -purchase its bonds with any funds available. -hold, pledge, cancel, or resell bonds. MCEC does not require approval of the legislature to issue bonds. Bonds issued to date have been privately placed.	MES may: -borrow money and issue bonds or notes for the purpose of paying all or any part of the cost of any one or more projects or for any other purpose of MES. MES does not require approval of the legislature to issue bonds.	MEDCO may: -borrow money and issue bonds to finance any part of the cost of a project or for any other corporate purpose of MEDCO. -secure the payment of any portion of the borrowing by pledge of or mortgage or deed of trust on property or revenues of MEDCO. -combine projects for financing, make agreements with or for the benefit of the bondholders or with others in connection with the issuance or future issuance of bonds, as MEDCO considers advisable. -otherwise provide for the security of bonds and the rights of bondholders.	None	MIDFA may: -issue and sell bonds in accordance with the Maryland Economic Development Revenue Bond Act) and the MIDFA statute to accomplish the purposes of the MIDFA statute. MIDFA does not require approval of legislature or any State agency to issue bonds.	MHHEFA may: -issue bonds for any corporate purpose, including operating expenses; -refund those bonds; -purchase its bonds with any funds available; and -hold, pledge, cancel, or resell bonds. MHHEFA does not require approval of legislature or any State agency to issue bonds.

	Maryland Clean Energy Center (MCEC)	Maryland Environmental Service (MES)	Maryland Economic Development Corporation (MEDCO)	Maryland Technology Development Corp. (TEDCO)	Maryland Industrial Development Financing Authority (MIDFA)	Maryland Health and Higher Education Facility Authority (MHHEFA)
Programs	Commercial property assessed financing; residential home energy efficiency loan program (includes interest rate buy down, subsidy); clean energy capital for municipal, nonprofit, school market energy efficiency market paid through savings; and assist local governments in financing projects using Qualified Energy Conservation bonds.	MES's overall operations are organized into an administrative group and three operations groups: Water/Wastewater Statewide water/wastewater maintenance; Environmental Operations: recycling, solid waste transfer stations, composting, scrap tires; and Technical and environmental services: environmental dredging and restoration and environmental monitoring.	Currently owns and operates 14 as operating facilities, meaning MEDCO is involved in management decisions and has a hand in ensuring successful daily operations. For most other projects, MEDCO generally serves as an arms-length financing entity. Recently MEDCO also has begun to be involved in a third type of project – where MEDCO owns a property and collects rent or other fees but is not involved in the management of the facility.	Multiple programs that provide financing and/or guidance to early stage technology companies. These programs aim to: advance the technology transferred from research labs to commercial businesses; provide start-ups and early stage venture companies funding and resources to launch new businesses; and assist existing companies to advance to the next stage of commercial viability.	Taxable Bonds - provides access to long-term capital markets primarily for fixed asset financing. Tax-Exempt Bonds - Provides access to long-term capital markets for fixed asset financing at tax-exempt rates. Federal tax law limits eligibility to 501(c)(3) non-profit organizations, manufacturing facilities, and certain solid waste projects. Bond Program -Insures bonds up to 100%, not to exceed $7.5 million of taxable or tax-exempt bonds. Conventional Program insures up to 80%, not to exceed $2.5 million of transactions made by a financial institution. Export transactions may be insured up to 90%.	Administers pooled loan programs, public offerings, private placement, and equipment leasing.

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Financial Operations						
Government Start- Up Funds	Fiscal 2009 loan $400,000 from MEA. 1 payment made 1 overdue.	MES notes that contributed capital appears in the earliest available financial statements (1970s), about the time MES became an independent agency, and consisted of funding from various sources totaling almost $7.5 million. Most of this was depreciated over the next five years, which leads MES to believe the funding was for equipment.	Received $450,000 loan for start-up funding in 1984 from the State, which was partially repaid in 1989 and fully repaid in 1990. Adjusting for inflation, this is equivalent to $1.2 million today.	First funded by general fund appropriation within the Department of Commerce.		$75,000 in 1970 Repaid.
State's Investment and Relation to the State	In addition to start-up funding, operating support from MEA: -fiscal 2014 loan $140,000; -fiscal 2015 loans $960,000; -fiscal 2016 grant $212,000; - Program funding of $1.0 million for Local Funding	In 2010 MES was approved for Water Quality Revolving Loan Fund funds for the closure of the Hobbs Road Landfill. The project, approved at $3.5 million, was funded by the program. The Maryland Water Quality Financing Administration forgave up to	A bond issued by MEDCO is not a debt, liability, or a pledge of the full faith and credit of the State or a governmental unit; and is payable solely from revenues of the related projects. The issuance of a bond is not directly, indirectly, or contingently a moral or other obligation of the	TEDCO investments are largely subject to the annual State appropriation. The corporation will supplement the State appropriation with its own nonbudgeted funds.	Bonds issued by MIDFA and the interest on them are not debts or charges against the general credit or taxing power of the State, the Department, or the Authority. The bonds issued are not a debt to which the full faith and credit of the State, the	Neither the State of Maryland, nor any subdivision, nor MHHEFA shall be obligated to pay principal or interest on bonds and notes issued by MHHEFA except from payments from participating institutions and revenues of the related projects. Neither the faith and credit nor the taxing

	Maryland Clean Energy Center **(MCEC)**	Maryland Environmental Service **(MES)**	Maryland Economic Development Corporation **(MEDCO)**	Maryland Technology Development Corp. **(TEDCO)**	Maryland Industrial Development Financing Authority **(MIDFA)**	Maryland Health and Higher Education Facility Authority **(MHHEFA)**
	Assistance and Education from MEA; and -Program funding of $3.4 million for residential energy efficiency loan from MEA. Section 3 of Chapter 137 of 2008 expresses legislative intent that MCEC not rely on funding from appropriation made from the General Fund, but does not limit the ability of MCEC to seek funding from State agencies. Bonds are not a debt or liability of the State or political subdivision of the State and is not a pledge of the faith and credit of the state or a political	$1.5 million of the expenses, and MES is paying the debt service on the remaining $2.0 million at a reduced interest rate because the operation was in a low income area. MES recognized the loan forgiveness as capital grant income in its fiscal 2011 financial statements. MES received a loan from the Maryland Water Quality Revolving Loan Fund for the Garner/Brandywine scrap tire cleanup. MES currently pays principal and interest payments, and are reimbursed by Maryland Department of Environment by way of the scrap tire fund. There is an 88% repayment, and 12% loan forgiveness currently in place.	State or a governmental unit to levy or pledge any tax or to make an appropriation to pay the bond. Neither the State nor any governmental unit is obliged to pay the principal of or interest on the bond, except from revenues pledged to payment of the bond and neither the full faith and credit nor the taxing power of the State or a governmental unit is pledged to the payment of the principal of or interest on the bond.		Department, or the Authority is pledged.	power of the State of Maryland or any subdivision, or MHHEFA is pledged to the payment of principal or interest on bonds and notes outstanding.

	Maryland Clean Energy Center (MCEC)	**Maryland Environmental Service (MES)**	**Maryland Economic Development Corporation (MEDCO)**	**Maryland Technology Development Corp. (TEDCO)**	**Maryland Industrial Development Financing Authority (MIDFA)**	**Maryland Health and Higher Education Facility Authority (MHHEFA)**
	subdivision of the State.	Bonds or notes issued under the provisions of this subtitle shall not be deemed to constitute or create a debt or a pledge of the faith and credit of the State or of any political subdivision.				
Budget Appropriation and Other State Revenue	No Non-budgeted agency	No Non-budgeted agency MES is self-supporting.	No Non-budgeted agency MEDCO is self-supporting.	Yes, the corporation receives an annual general fund and special fund appropriation. It also earns its own income through investments, grants, events, and sponsorships.	Yes, the authority may receive appropriations; however it is generally self-supporting.	No Non-budgeted agency MHHEFA is self-supporting.

	Maryland Clean Energy Center (MCEC)	**Maryland Environmental Service (MES)**	**Maryland Economic Development Corporation (MEDCO)**	**Maryland Technology Development Corp. (TEDCO)**	**Maryland Industrial Development Financing Authority (MIDFA)**	**Maryland Health and Higher Education Facility Authority (MHHEFA)**
Sources of Income	Grants – vary but have included from Montgomery County and the Town Creek Foundation. Fees associated with financing projects. Sponsorships for events. Energy Savings Revenue. Interest.	State government, local government, private, federal government, MES product revenues, and federal grants.	Self-supporting, primarily through revenues at the facilities it operates.	TEDCO investments are largely subject to the annual State appropriation. The corporation will supplement the State appropriation with its own nonbudgeted funds. It earns investment proceeds, can receive federal grants, and earns income through events and sponsorships.	State appropriations, federal funding, interest, fees and premiums associated with financing projects, and proceeds from the sale or lease of MIDFA property.	Fees paid by participating institutions for financing services of projects.
Net Income	Fiscal 2015: Operating Revenues $593,132; Operating Expenses $1.2 million; and Operating Loss $611,632. Non-operating revenue $1.1 million;	Fiscal 2015: Operating Revenues $141.173 million; Operating Expenses $139.335 million; and Net non-operating expense - $0.388 million. Change in Net Position $1.450 million	Fiscal 2015: Operating revenues $132.4 million; Operating expenses $114.6 million; and Non-operating revenues and expenses $25.2 million. Net income $7.4 million.	Fiscal 2015: Operating Revenues $22.3 million; Operating expenses $22.0 million; and Net operating income $351,689. Change in net position $668,647.	Fiscal 2015: Operating Revenues $437,045; Operating Expenses $1,680,274; and Net Operating loss ($1,243,229). Net Non-operating revenue $192,595. Change in net position ($1,050,634).	Fiscal 2015: Operating Revenue $2.733 million; Operating Expenses $1.942 million; and Operating Income $791,000. Non-operating Revenue $193,000. Increase in Net Position $984,000.

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	Non-operating expense $805,918; and Non-operating Income $318,102.					
Balance Sheet	As of June 30, 2015: Assets - $11.85 million Liabilities - $12.31 million Net Assets - $461,623	As of June 30, 2015: Assets - $104.411 million Liabilities - $82.495 million Net Deferred Inflows/Outflows Related to Pensions - $0.101 million Net Position - $22.017 million	As of June 30, 2015: Assets - $625.9 million Liabilities - $854.2 million Net Assets - $228.3 million	As of June 30, 2015: Assets - $29.9 million Liabilities - $21.7 million Net positions - $29.9 million	As of June 30, 2015: Assets - $34.7 million Liabilities- $2.1 million Net Position - $32.6 million	As of June 30, 2015: Assets - $24.242 million Liabilities - $755,000 Net Position - $23.487 million
State and Other Taxes and Fees	Exempt MCEC Tax exempt status can be extended to or utilized by private sector entities in an agency or lease arrangement or transaction.	Exempt Tax exempt status cannot benefit others.	Exempt Tax exempt status cannot benefit others.	Exempt Tax exempt status cannot benefit others.	Exempt Tax exempt status cannot benefit others.	Exempt Tax exempt status cannot benefit others.
Federal Taxes and Fees		Exempt	Exempt	Exempt	Exempt	Exempt

	Maryland Clean Energy Center (MCEC)	**Maryland Environmental Service (MES)**	**Maryland Economic Development Corporation (MEDCO)**	**Maryland Technology Development Corp. (TEDCO)**	**Maryland Industrial Development Financing Authority (MIDFA)**	**Maryland Health and Higher Education Facility Authority (MHHEFA)**
Reporting	Each October 1 to Governor, MEA, and General Assembly.	Within the first 90 days of each fiscal year to the Governor and General Assembly.	Each October 1 to Governor, Maryland Economic Development Commission (MEDC), and General Assembly.	Each October 1 to Governor, Maryland Economic Development Commission (MEDC), and General Assembly.	Each December 31 to Governor, General Assembly, and Joint Audit Committee.	Each October 1 to Governor.

(1) Title 4, General Provisions Article
(2) Title 3, General Provisions Article
(3) Title 10, Subtitles 1-3, State Government Article
(4) Title 12, State Government Article
(5) Title 5, General Provisions Article
(6) Title 5, Subtitle 3, State Personnel and Pensions Article
(7) Division I State Finance; Division II General Procurement, including: Title 11 (General), Title 12 (Organization and Supervision), and Title 14 (Preferences), State Finance and Procurement Article
(8) Title 10, Miscellaneous, State Finance and Procurement Article
(9) Division I, State Personnel and Pensions Article

Appendix 4. Legislation

Chapter 577

(Senate Bill 726)

AN ACT concerning

Maryland Clean Energy Center – ~~Clean Energy Technology Funding~~ Task Force

FOR the purpose of ~~expanding certain findings of the General Assembly concerning the Maryland Clean Energy Center; expanding the purposes of the Center; altering the membership of the Board of Directors of the Center; requiring the Center to establish a Credit Investment Advisory Committee for certain purposes; providing that Committee members are subject to the Public Ethics Law for certain purposes; altering the authority of the Center to provide certain financing for clean energy technology–based businesses; establishing a Clean Energy Technology Financing Fund in the Center for certain purposes; providing for the sources and administration of the Fund; providing for the purposes of the Fund; clarifying the application of certain provisions under the Maryland Clean Energy Technology Incubator Program; defining a certain term; altering certain definitions; providing for the application of this Act; providing for the transfer of certain funds from the Maryland Strategic Energy Investment Fund to the Center in certain fiscal years for certain purposes; providing for the transfer of certain funds from the Maryland Strategic Energy Investment Fund to the Clean Energy Technology Financing Fund by a certain date for certain purposes; stating the intent of the General Assembly concerning certain funding; making this Act an emergency measure~~ establishing the Task Force on the Maryland Clean Energy Center; providing for the composition, chair, and staffing of the Task Force; prohibiting a member of the Task Force from receiving certain compensation, but authorizing the reimbursement of certain expenses; specifying the charge of the Task Force; requiring the Task Force to assess certain programs, review certain State financing instrumentalities, identify certain resources, review certain cost–effective opportunities, and make certain determinations; requiring the Task Force to report its findings and recommendations to the General Assembly on or before a certain date; ~~requiring the Office of Legislative Audits to conduct a certain performance audit;~~ providing for the termination of this Act; and generally relating to the Maryland Clean Energy Center ~~and project funding~~.

~~BY repealing and reenacting, with amendments,~~
~~Article – Economic Development~~
~~Section 10–801, 10–802, 10–806, 10–807, 10–810, 10–814, 10–820, 10–833, 10–834(a), 10–835, and 10–837~~
~~Annotated Code of Maryland~~
~~(2008 Volume and 2015 Supplement)~~

~~BY repealing and reenacting, without amendments,~~
~~Article – Economic Development~~
~~Section 10–816, 10–817, 10–821, 10–822, 10–825, and 10–826~~

~~Annotated Code of Maryland~~
~~(2008 Volume and 2015 Supplement)~~

~~BY adding to~~
~~Article – Economic Development~~
~~Section 10–817.1~~
~~Annotated Code of Maryland~~
~~(2008 Volume and 2015 Supplement)~~

~~BY repealing and reenacting, with amendments,~~
~~Article – State Government~~
~~Section 9–20B–05~~
~~Annotated Code of Maryland~~
~~(2014 Replacement Volume and 2015 Supplement)~~

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That ~~the Laws of Maryland read as follows~~:

(a) There is a Task Force on the Maryland Clean Energy Center.

(b) The Task Force consists of the following members:

(1) three members of the Senate of Maryland, appointed by the President of the Senate;

(2) three members of the House of Delegates, appointed by the Speaker of the House;

(3) the Secretary of the Department of Economic Competitiveness and Commerce, or the Secretary's designee;

(4) the Director of the Maryland Energy Administration, or the Director's designee;

(5) the Executive Director of the Maryland Economic Development Corporation, or the Executive Director's designee;

(6) the Executive Director of the Maryland Technology Development Corporation, or the Executive Director's designee;

(7) the Executive Director of the Maryland Clean Energy Center, or the Executive Director's designee;

(8) the Executive Director of the Maryland Industrial Development Finance Authority, or the Executive Director's designee; and

(9) the Executive Director of the Maryland Environmental Service, or the Executive Director's designee.

(c) The presiding officers shall designate the cochairs of the Task Force from the members of the General Assembly appointed by the presiding officers.

(d) The Department of Legislative Services, in consultation with the Department of Economic Competitiveness and Commerce, shall provide staff for the Task Force.

(e) A member of the Task Force:

(1) may not receive compensation as a member of the Task Force; but

(2) is entitled to reimbursement for expenses under the Standard State Travel Regulations, as provided in the State budget.

(f) The Task Force is charged with determining how best to make the Center self–sustaining without deviating from the Center's mission and charge to:

(1) encourage the development of the clean energy industry and deployment of clean energy technologies in the State;

(2) help retain and attract business activity and commerce in the clean energy technology industry sectors in the State; and

(3) promote economic development and the health, safety, and welfare of residents of the State.

(g) The Task Force shall:

(1) assess the programs currently provided by the Center and the programs that, within its mission, charge, and structure, may be provided by the Center, including the establishment of a green bank;

(2) review existing State financing instrumentalities that may have similar financing capabilities for purposes of determining whether there are advantages to the Center to coordinate or partner with those State financing instrumentalities on financing programs;

(3) identify the availability of resource capacity in State financing instrumentalities for purposes of determining whether there are cost–effective opportunities for the Center to share resources with those State financing instrumentalities on financing programs;

(4) review other cost–effective opportunities, including having the Center co–locate with another State financing instrumentality or State agency, that may assist the Center during the time when the Center is working toward becoming self–sustaining;

(5) determine whether the outstanding balance of loans initiated in fiscal year 2009 from the Maryland Energy Administration should be converted to a grant and considered as start–up funds as a way in assisting the Center to become self–sustaining;

(6) determine an appropriate amount of State annual grant funding that the Center should receive for operating and program assistance as the Center works toward becoming self–sustaining and in no further need of operating and program support from the Maryland Strategic Energy Investment Fund or any other State money; and

(7) consider any other related matter that the Task Force determines appropriate.

(h) On or before December 1, 2016, the Task Force shall report its findings and recommendations to the Governor and, in accordance with § 2–1246 of the State Government Article, the General Assembly.

~~Article – Economic Development~~

~~10–801.~~

~~(a) In this subtitle the following words have the meanings indicated.~~

~~(b) "Administration" means the Maryland Energy Administration.~~

~~(c) "Board" means the Board of Directors of the Center.~~

~~(d) (1) "Bond" means a bond issued by the Center under this subtitle.~~

~~(2) "Bond" includes a revenue bond, a revenue refunding bond, a note, and any other obligation, whether a general or limited obligation of the Center.~~

~~(e) "Center" means the Maryland Clean Energy Center.~~

~~(f) "Clean energy" includes:~~

~~(1) solar photovoltaic technology;~~

~~(2) solar heating;~~

~~(3) geothermal;~~

~~(4) wind;~~

~~(5) biofuels;~~

~~(6) ethanol;~~

~~(7) other qualifying biomass as defined in § 7–701 of the Public Utilities Article;~~

~~(8) ocean, including energy from waves, tides, currents, and thermal differences;~~

~~(9) a fuel cell that produces energy from biofuels, ethanol, or other qualifying biomass;~~

~~(10) energy efficiency and conservation;~~

~~(11) any other technology or service that the Center determines will contribute directly or indirectly to the production of energy from renewable or sustainable sources, or to the improvement of efficiency in the use of energy; and~~

~~(12) deployment of any of the technologies or services listed in items (1) through (11) of this subsection.~~

~~(g) "Cost", with respect to a project financed under this subtitle, includes:~~

~~(1) the purchase price of a project;~~

~~(2) the cost to acquire any right, title, or interest in a project;~~

~~(3) the cost of any improvement;~~

~~(4) the cost of any property, right, easement, and franchise;~~

~~(5) the cost of demolition, removal, or relocation of structures;~~

~~(6) the cost of acquiring land to which the structures may be moved;~~

~~(7) the cost of equipment;~~

~~(8) financing charges;~~

~~(9) interest before and during construction and, if the Center determines, for a limited period after the completion of construction;~~

~~(10) reserves for principal and interest and for improvements;~~

~~(11) the cost of revenue and cost estimates, architectural, engineering, financial, and legal services, plans, specifications, studies, surveys, and other expenses necessary or incident to determining the feasibility of improving a project; and~~

~~(12) other expenses as necessary or incident to:~~

~~(i) financing a project;~~

~~(ii) acquiring and improving a project; and~~

~~(iii) placing a project in operation.~~

~~(h) "Director" means the Director of the Administration.~~

~~(i) "Executive Director" means the Executive Director of the Maryland Clean Energy Center.~~

~~(j) **(1)** **"FINANCE" MEANS TO PROVIDE FOR A PROJECT:**~~

~~**(I) A LOAN;**~~

~~**(II) A GRANT;**~~

~~**(III) AN INVESTMENT;**~~

~~**(IV) A LOAN GUARANTEE;**~~

~~**(V) DEBT SECURITIZATION; OR**~~

~~**(VI) ANY OTHER FORM OF FINANCIAL SUPPORT OR RISK MANAGEMENT.**~~

~~**(2)** "Finance" includes refinance.~~

~~**(K) "FUND" MEANS THE CLEAN ENERGY TECHNOLOGY FINANCING FUND ESTABLISHED UNDER § 10–817.1 OF THIS SUBTITLE.**~~

~~**[**(k)**] (L)** "Governmental unit" means:~~

~~(1) a county;~~

~~(2) a municipal corporation;~~

~~(3) a State unit;~~

~~(4) a local unit; or~~

~~(5) any other public body or unit established in accordance with a State or local law, ordinance, or resolution.~~

~~**[**(l)**] (M)** "Improve" means to add, alter, construct, equip, expand, extend, improve, install, reconstruct, rehabilitate, remodel, or repair.~~

~~**[**(m)**] (N)** "Improvement" means addition, alteration, construction, equipping, expansion, extension, improvement, installation, reconstruction, rehabilitation, remodeling, or repair.~~

~~**[**(n)**] (O)** (1) "Project" means any property, the acquisition or improvement of which the Board, in its sole discretion, determines by resolution will accomplish at least one of the purposes listed in § 10–802(b) of this subtitle, whether or not the property:~~

~~(i) is or will be used or operated for profit or not for profit;~~

~~(ii) is or will be located on a single site or multiple sites; or~~

~~(iii) may be financed by bonds, the interest on which is exempt from income taxation under federal law.~~

~~(2) "Project" includes:~~

~~(i) land or an interest in land;~~

~~(ii) structures, equipment, furnishings, rail or motor vehicles, barges, and boats;~~

~~(iii) property and rights related to property, appurtenances, rights–of–way, franchises, and easements;~~

~~(iv) property that is functionally related and subordinate to a project; **[**and**]**~~

~~(v) patents, licenses, and other rights necessary or useful in the improvement or operation of a project**; AND**~~

~~**(VI) INVESTMENT IN A CLEAN ENERGY TECHNOLOGY OR A CLEAN ENERGY BUSINESS.**~~

~~**[**(o)**] (P)** (1) "Revenues" means the income, revenue, and other money the Center receives from or in connection with a project, and all other income of the Center.~~

~~(2) “Revenues” includes grants, rentals, rates, fees, and charges for the use of the services furnished or available.~~

[~~(p)~~**]** ~~**(Q)**~~ ~~(1) “Trust agreement” means an agreement entered into by the Center to secure a bond.~~

~~(2) “Trust agreement” may include a bond contract, bond resolution, or other contract with or for the benefit of a bondholder.~~

~~10–802.~~

~~(a) The General Assembly finds that:~~

~~(1) the United States as a whole, and the State in particular, are facing increased energy costs based on many factors, including rising fuel costs, limited investment in generation and transmission facilities, and a complex combination of market–based and other regulatory mechanisms that balance environmental, economic, health, and welfare interests;~~

~~(2) continued exclusive reliance on traditional forms of electricity supply entrenches the State’s dependence on fossil fuels, working against the State’s policy of decreasing greenhouse gas production, as evidenced by the State’s accession to the Regional Greenhouse Gas Initiative;~~

~~(3) “clean energy”, a broad term that includes a wide and varied mixture of strategies and techniques to produce useful energy from renewable and sustainable sources in a manner that minimizes fossil fuel use and harmful emissions, and to increase the efficient use of energy derived from all sources, offers many different opportunities for residents of the State to succeed in entrepreneurial and other commercial activity, to the overall economic and environmental benefit of the entire State, as measured in improved air and water quality, moderated energy expenditures, and increased State and local tax receipts;~~

~~(4) many individuals and businesses in the State possess talents and interest in the clean energy technology sector, which may form the basis for encouraging development and deployment of sustainable and renewable energy technologies in the State, the nation, and the world;~~

~~(5) the State will benefit from a targeted effort to establish and incubate clean energy industries in the State, including financial assistance, information sharing, and technical support for entrepreneurs in the manufacture and installation of clean energy technology~~~~**;**~~ **[**~~and~~**]**

~~**(6) THE STATE BENEFITS FROM A STATEWIDE FINANCING ENTITY THAT IS FOCUSED ON:**~~

~~**(I) PROVIDING EFFICIENT, LOW–COST CAPITAL FINANCING AT SCALE AND WITH SUBSTANTIAL PRIVATE–SECTOR PARTICIPATION FOR QUALIFYING PROJECTS;**~~

~~**(II) FACILITATING PRIVATE INVESTMENT IN CLEAN ENERGY PROJECTS AND TECHNOLOGIES TO PROVIDE SIGNIFICANT LEVERAGING OF PRIVATE CAPITAL; AND**~~

~~**(III) INCREASING PRIVATE INVESTMENT IN CLEAN ENERGY PROJECTS THAT ARE NOT CURRENTLY ABLE TO OBTAIN FINANCING IN TRADITIONAL CAPITAL MARKETS AT A REASONABLE COST BY PROVIDING A VARIETY OF FINANCIAL TOOLS TO STIMULATE PRIVATE INVESTMENT; AND**~~

~~**[**(6)**] (7)** it is in the public interest to establish a public corporation to undertake the tasks of promoting clean energy industries in the State, developing incubators for those industries, providing financial assistance, and also providing information sharing and technical assistance.~~

~~(b) The purposes of this subtitle are to:~~

~~(1) encourage the development of clean energy industries in the State;~~

~~(2) encourage the deployment of clean energy technologies in the State;~~

~~(3) help retain and attract business activity and commerce in the clean energy technology industry sector in the State;~~

~~(4) promote economic development**; [**and**]**~~

~~**(5) PROMOTE PRIVATE CAPITAL INVESTMENT IN PROJECTS; AND**~~

~~**[**(5)**] (6)** promote the health, safety, and welfare of residents of the State.~~

~~(c) The General Assembly intends that:~~

~~(1) the Center operate and exercise its corporate powers in all areas of the State;~~

~~(2) without limiting its authority to otherwise exercise its corporate powers, the Center exercise its corporate powers to assist governmental units and State and local economic development agencies to contribute to the expansion, modernization, and retention of existing enterprises in the State as well as the attraction of new business to the State;~~

~~(3) the Center cooperate with private industries and local governments in maximizing new economic opportunities for residents of the State; and~~

~~(4) the Center accomplish at least one of the purposes listed in subsection (b) of this section and complement existing State marketing and financial assistance programs by:~~

~~(i) owning projects;~~

~~(ii) leasing projects to other persons; or~~

~~(iii) lending the proceeds of bonds to other persons to finance the costs of acquiring or improving projects that the persons own or will own.~~

~~10–806.~~

~~(a) There is a Maryland Clean Energy Center.~~

~~(b) The Center is a body politic and corporate and is an instrumentality of the State.~~

~~(c) The exercise by the Center of the powers conferred by this subtitle is the performance of an essential governmental function.~~

~~(d) The purposes of the Center are to:~~

~~(1) promote economic development and jobs in the clean energy industry sector in the State;~~

~~(2) promote the deployment of clean energy technology in the State;~~

~~(3) serve as an incubator for the development of clean energy industry in the State;~~

~~(4) collect, analyze, and disseminate industry data;~~ **[**~~and~~**]**

~~(5) provide outreach and technical support to further the clean energy industry in the State~~**~~; AND~~**

~~(6) LEVERAGE PRIVATE CAPITAL INVESTMENTS WITH PUBLIC FUNDS TO FINANCE THE COSTS OF ACQUIRING OR IMPROVING PROJECTS~~.

~~(e) The Center shall coordinate with the Maryland Energy Administration and may not duplicate the programs or activities of the Administration without consent of the Administration.~~

~~10–807.~~

~~(a) A Board of Directors shall manage the Center and exercise its corporate powers.~~

~~(b) The Board consists of the following **[**nine**] 11** members:~~

~~(1) the Director, or the Director's designee**; [**and**]**~~

~~**(2) THE STATE TREASURER, OR THE TREASURER'S DESIGNEE;**~~

~~**(3) THE SECRETARY, OR THE SECRETARY'S DESIGNEE; AND**~~

~~**[**(2)**] (4)** eight members appointed by the Governor with the advice and consent of the Senate:~~

~~(i) two representing the not–for–profit clean energy research sector of the State;~~

~~(ii) two with expertise in venture capital financing;~~

~~(iii) two representing clean energy industries in the State; and~~

~~(iv) two members of the general public.~~

~~(c) A member of the Board shall reside in the State.~~

~~(d) In making appointments to the Board, the Governor shall consider:~~

~~(1) diversity; and~~

~~(2) all geographic regions of the State.~~

~~(e) A member of the Board:~~

~~(1) may not receive compensation as a member of the Board; but~~

~~(2) is entitled to reimbursement for expenses under the Standard State Travel Regulations, as provided in the State budget.~~

~~(f) (1) The term of an appointed member is 4 years and begins on July 1.~~

~~(2) The terms of the appointed members are staggered as required by the terms provided for members on October 1, 2008.~~

~~(3) At the end of a term, an appointed member continues to serve until a successor is appointed and qualifies.~~

~~(4) A member who is appointed after a term has begun serves only for the rest of the term and until a successor is appointed and qualifies.~~

~~(g) The Governor may remove an appointed member for incompetence, misconduct, or failure to perform the duties of the position.~~

~~10–810.~~

~~(a) (1) The Board shall establish an Advisory Committee.~~

~~(2) The Advisory Committee consists of individuals that the Board considers will assist the Center in studying and developing policies to further the purposes of this subtitle.~~

~~(b)~~ **~~(1) THE CENTER SHALL ESTABLISH A CREDIT INVESTMENT ADVISORY COMMITTEE.~~**

~~(2) THE CREDIT INVESTMENT ADVISORY COMMITTEE CONSISTS OF INDIVIDUALS WITH KNOWLEDGE AND EXPERTISE IN FINANCING MATTERS RELEVANT TO BORROWER ELIGIBILITY, TERMS AND CONDITIONS OF SUPPORT, AND OTHER FINANCING EVALUATION CRITERIA OF THE CENTER.~~

~~(3) BEFORE THE CENTER PROVIDES FINANCING FOR A PROJECT FROM THE FUND, THE CREDIT INVESTMENT ADVISORY COMMITTEE SHALL REVIEW AND MAKE RECOMMENDATIONS TO THE BOARD FOR QUALIFYING PROJECT APPLICANTS.~~

~~(C)~~ ~~The Board may establish other committees as appropriate.~~

[~~(c)~~**] ~~(D)~~** ~~(1) The membership of a committee may include individuals who are not Board members.~~

~~(2) The Board may establish the term and manner of selection of the membership of a committee.~~

~~10–814.~~

~~(a) Except as provided in subsections (b), (c), and (e) of this section, the Center is exempt from:~~

~~(1) Title 10 and Division II of the State Finance and Procurement Article; and~~

~~(2) §§ 3–301 and 3–303 of the General Provisions Article.~~

~~(b) The Center is subject to the Public Information Act.~~

~~(c)~~ ~~**(1)**~~ ~~The Board and the officers and employees of the Center are subject to the Public Ethics Law.~~

~~**(2) THE MEMBERS OF THE CREDIT INVESTMENT ADVISORY COMMITTEE ARE SUBJECT TO THE PUBLIC ETHICS LAW ONLY WITH RESPECT TO ACTIVITIES AS MEMBERS OF THE COMMITTEE.**~~

~~(d) The officers and employees of the Center are not subject to the provisions of Division I of the State Personnel and Pensions Article that govern the State Personnel Management System.~~

~~(e) The Center, its Board, and employees are subject to Title 12, Subtitle 4 and Title 14, Subtitle 3 of the State Finance and Procurement Article.~~

~~(f) The Center is a public body under Title 5, Subtitle 4 of this article, the Maryland Industrial Development Financing Authority Act, for purposes of applying for, receiving, and making agreements in connection with:~~

~~(1) a loan;~~

~~(2) a grant;~~

~~(3) insurance; or~~

~~(4) any other form of financial assistance.~~

~~10–816.~~

~~(a) The Center shall establish a system of financial accounting, controls, audits, and reports.~~

~~(b) The fiscal year of the Center begins on July 1 and ends on the following June 30.~~

~~10–817.~~

~~(a) The Center may create and administer the accounts that it requires.~~

~~(b) The Center shall deposit its money into a State or national bank or a federally insured savings and loan association that has a total paid–in capital of at least $1,000,000.~~

~~(c) The Center may designate the trust department of a State bank, national bank, or savings and loan association as a depository to receive securities that the Center owns or acquires.~~

~~(d) Unless an agreement or covenant between the Center and the holders of its obligations limits classes of investments, the Center may invest its money in bonds or other obligations of, or guaranteed as to principal and interest by, the United States, the State, or a governmental unit.~~

~~10–817.1.~~

~~(A) THERE IS A CLEAN ENERGY TECHNOLOGY FINANCING FUND IN THE CENTER.~~

~~(B) THE PURPOSES OF THE FUND ARE TO:~~

~~(1) EVALUATE AND COORDINATE FINANCING FOR QUALIFIED PROJECTS AND CLEAN ENERGY TECHNOLOGIES;~~

~~(2) PROVIDE FINANCING FOR QUALIFIED PROJECTS;~~

~~(3) FACILITATE:~~

~~(I) EFFICIENT TAX EQUITY MARKETS FOR QUALIFIED ENERGY PROJECTS; AND~~

~~(II) FINANCING OF LONG–TERM CLEAN ENERGY PURCHASING BY GOVERNMENTAL AND NONGOVERNMENTAL NOT–FOR–PROFIT ENTITIES; AND~~

~~(4) SECURE PRIVATE INVESTMENT CAPITAL FOR PROJECT FINANCING.~~

~~(C) THE CENTER SHALL ADMINISTER THE FUND.~~

~~(D) THE FUND CONSISTS OF:~~

~~(1) MONEY TRANSFERRED FROM THE MARYLAND STRATEGIC ENERGY INVESTMENT FUND UNDER § 9–20B–05 OF THE STATE GOVERNMENT ARTICLE;~~

~~(2) MONEY APPROPRIATED IN THE STATE BUDGET TO THE FUND;~~

~~(3) MONEY MADE AVAILABLE TO THE FUND THROUGH FEDERAL PROGRAMS, GRANTS, OR PRIVATE CONTRIBUTIONS;~~

~~(4) PROCEEDS FROM THE SALE, DISPOSITION, LEASE, OR RENTAL OF COLLATERAL RELATED TO A FINANCING MADE FROM THE FUND;~~

~~(5) REPAYMENT OF FINANCING MADE FROM THE FUND;~~

~~(6) RETURNS FROM OR RECOVERY OF ANY FINANCING MADE FROM THE FUND;~~

~~(7) PROCEEDS FROM THE SALE OF ANY FINANCING MADE, OR ASSET ACQUIRED WITH PROCEEDS, FROM THE FUND;~~

~~(8) INTEREST EARNINGS ON MONEY IN THE FUND; AND~~

~~(9) ANY OTHER MONEY FROM ANY OTHER SOURCE ACCEPTED FOR THE BENEFIT OF THE FUND.~~

~~(E) THE FUND MAY BE USED ONLY TO:~~

~~(1) EVALUATE AND COORDINATE FINANCING FOR QUALIFIED PROJECTS AND CLEAN ENERGY TECHNOLOGIES;~~

~~(2) PROVIDE FINANCING FOR QUALIFIED PROJECTS;~~

~~(3) FACILITATE:~~

~~(I) EFFICIENT TAX EQUITY MARKETS FOR QUALIFIED ENERGY PROJECTS; AND~~

~~(II) FINANCING OF LONG–TERM CLEAN ENERGY PURCHASING BY GOVERNMENTAL AND NONGOVERNMENTAL NOT–FOR–PROFIT ENTITIES;~~

~~(4) SECURE PRIVATE INVESTMENT CAPITAL FOR PROJECT FINANCING; AND~~

~~(5) ADMINISTER THE FUND AND ACTIVITIES OF THE CENTER IN CARRYING OUT THIS SUBTITLE.~~

~~(F) EXPENDITURES FROM THE FUND MAY BE MADE ONLY WITH THE APPROVAL OF THE BOARD.~~

~~10–820.~~

~~The Center may **[**make grants to or provide equity investment**]** **PROVIDE** financing for clean energy technology–based businesses.~~

~~10–821.~~

~~The Center may:~~

~~(1) acquire, develop, improve, manage, market, license, sublicense, maintain, lease as lessor or lessee, or operate a project in the State to carry out its purposes;~~

~~(2) acquire, directly or indirectly, from a person or governmental unit, by purchase, gift, or devise any property, rights–of–way, franchises, easements, or other interests in land, including submerged land and riparian rights:~~

~~(i) as necessary or convenient to improve or operate a project to carry out its purposes; and~~

~~(ii) on the terms and at the prices that it considers reasonable; and~~

~~(3) enter into a project with a manufacturer to carry out its purposes.~~

~~10–822.~~

~~The Center may:~~

~~(1) borrow money and issue bonds to finance any part of the cost of a project or for any other corporate purpose of the Center;~~

~~(2) secure the payment of any portion of the borrowing by pledge of or mortgage or deed of trust on property or revenues of the Center;~~

~~(3) combine projects for financing, make agreements with or for the benefit of the bondholders or with others in connection with the issuance or future issuance of bonds, as the Center considers advisable; and~~

~~(4) otherwise provide for the security of bonds and the rights of bondholders.~~

~~10–825.~~

~~The books and records of the Center are subject to audit:~~

~~(1) at any time by the State; and~~

~~(2) each year by an independent auditor that the Office of Legislative Audits approves.~~

~~10–826.~~

~~(a) On or before October 1 of each year, the Center shall report to the Governor, the Administration, and, in accordance with § 2–1246 of the State Government Article, the General Assembly.~~

~~(b) The report shall include a complete operating and financial statement covering the Center's operations and a summary of the Center's activities during the preceding fiscal year.~~

~~10–833.~~

~~The Center may award financial assistance **UNDER THIS PART** using money provided by the federal government, the State, a governmental unit, or any person.~~

~~10–834.~~

~~(a) After consulting with the Director, the Center shall adopt standards to award financial assistance **UNDER THIS PART**.~~

~~10–835.~~

~~The Center may award financial assistance **UNDER THIS PART** to:~~

~~(1) a local government;~~

~~(2) an agency, instrumentality, or not–for–profit corporation that the local government designates;~~

~~(3) a public or private college or university;~~

~~(4) the Maryland Economic Development Corporation; or~~

~~(5) a not–for–profit entity operating an incubator in the State.~~

~~10–837.~~

~~Unless two–thirds of the membership of the Board approve, the Center may not award financial assistance **UNDER THIS PART** within a single county under § 10–834(b)(3) of this subtitle that exceeds a total of $1,000,000 in a single fiscal year.~~

~~Article – State Government~~

~~9–20B–05.~~

~~(a) There is a Maryland Strategic Energy Investment Fund.~~

~~(b) The purpose of the Fund is to implement the Strategic Energy Investment Program.~~

~~(c) The Administration shall administer the Fund.~~

~~(d) (1) The Fund is a special, nonlapsing fund that is not subject to § 7–302 of the State Finance and Procurement Article.~~

~~(2) The Treasurer shall hold the Fund separately and the Comptroller shall account for the Fund.~~

~~(e) The Fund consists of:~~

~~(1) all of the proceeds from the sale of allowances under § 2–1002(g) of the Environment Article;~~

~~(2) money appropriated in the State budget to the Program;~~

~~(3) repayments and prepayments of principal and interest on loans made from the Fund;~~

~~(4) interest and investment earnings on the Fund;~~

~~(5) compliance fees paid under § 7–705 of the Public Utilities Article;~~

~~(6) money received from any public or private source for the benefit of the Fund; and~~

~~(7) money transferred from the Public Service Commission under § 7–207.2(c)(3) of the Public Utilities Article.~~

~~(f) The Administration shall use the Fund:~~

~~(1) to invest in the promotion, development, and implementation of:~~

~~(i) cost–effective energy efficiency and conservation programs, projects, or activities, including measurement and verification of energy savings;~~

~~(ii) renewable and clean energy resources;~~

~~(iii) climate change programs directly related to reducing or mitigating the effects of climate change; and~~

~~(iv) demand response programs that are designed to promote changes in electric usage by customers in response to:~~

~~1. changes in the price of electricity over time; or~~

~~2. incentives designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized;~~

~~(2) to provide targeted programs, projects, activities, and investments to reduce electricity consumption by customers in the low–income and moderate–income residential sectors;~~

~~(3) to provide supplemental funds for low–income energy assistance through the Electric Universal Service Program established under § 7–512.1 of the Public Utilities Article and other electric assistance programs in the Department of Human Resources;~~

~~(4) to provide rate relief by offsetting electricity rates of residential customers, including an offset of surcharges imposed on ratepayers under § 7–211 of the Public Utilities Article;~~

~~(5) to provide grants, loans, and other assistance and investment as necessary and appropriate to implement the purposes of the Program as set forth in § 9–20B–03 of this subtitle;~~

~~**(6) TO PROVIDE GRANTS TO THE MARYLAND CLEAN ENERGY CENTER UNDER TITLE 10, SUBTITLE 8 OF THE ECONOMIC DEVELOPMENT ARTICLE, FOR THE ANNUAL OPERATING SUPPORT AND ASSISTANCE OF THE CENTER, AS FOLLOWS:**~~

~~**(I) FOR FISCAL YEAR 2016, $3,400,000;**~~

~~**(II) FOR FISCAL YEAR 2017, $2,300,000;**~~

~~**(III) FOR FISCAL YEAR 2018, $2,000,000;**~~

~~**(IV) FOR FISCAL YEAR 2019, $1,300,000; AND**~~

~~**(V) FOR FISCAL YEAR 2020, $1,000,000;**~~

~~**[**(6)**] (7)** to implement energy–related public education and outreach initiatives regarding reducing energy consumption and greenhouse gas emissions;~~

~~**[**(7)**] (8)** to provide rebates under the Electric Vehicle Recharging Equipment Rebate Program established under § 9–2009 of this title;~~

[~~(8)~~**] (9)** ~~to provide grants to encourage combined heat and power projects at industrial facilities; and~~

[~~(9)~~**] (10)** ~~to pay the expenses of the Program.~~

~~(g) Proceeds received by the Fund from the sale of allowances under § 2–1002(g) of the Environment Article shall be allocated as follows:~~

~~(1) at least 50% shall be credited to an energy assistance account to be used for the Electric Universal Service Program and other electricity assistance programs in the Department of Human Resources;~~

~~(2) at least 20% shall be credited to a low and moderate income efficiency and conservation programs account and to a general efficiency and conservation programs account for energy efficiency and conservation programs, projects, or activities and demand response programs, of which at least one–half shall be targeted to the low and moderate income efficiency and conservation programs account for:~~

~~(i) the low–income residential sector at no cost to the participants of the programs, projects, or activities; and~~

~~(ii) the moderate–income residential sector;~~

~~(3) at least 20% shall be credited to a renewable and clean energy programs account for:~~

~~(i) renewable and clean energy programs and initiatives;~~

~~(ii) energy–related public education and outreach; and~~

~~(iii) climate change and resiliency programs; and~~

~~(4) up to 10%, but not more than $5,000,000, shall be credited to an administrative expense account for costs related to the administration of the Fund, including the review of electric company plans for achieving electricity savings and demand reductions that the electric companies are required under law to submit to the Administration.~~

~~(h) (1) Energy efficiency and conservation programs under subsection (g)(2) of this section include:~~

~~(i) low–income energy efficiency programs;~~

~~(ii) residential and small business energy efficiency programs;~~

~~(iii) commercial and industrial energy efficiency programs;~~

~~(iv) State and local energy efficiency programs;~~

~~(v) demand response programs;~~

~~(vi) loan programs and alternative financing mechanisms; and~~

~~(vii) grants to training funds and other organizations supporting job training for deployment of energy efficiency and energy conservation technology and equipment.~~

~~(2) Energy–related public education and outreach and renewable and clean energy programs and initiatives under subsection (g)(3)(i) and (ii) of this section include:~~

~~(i) production incentives for specified renewable energy sources;~~

~~(ii) expansion of existing grant programs for solar, geothermal, and wind programs;~~

~~(iii) loan programs and alternative financing mechanisms; and~~

~~(iv) consumer education and outreach programs that are designed to reach low–income communities.~~

~~(i) (1) Except as provided in paragraph (2) of this subsection, compliance fees paid under § 7–705(b) of the Public Utilities Article may be used only to make loans and grants to support the creation of new Tier 1 renewable energy sources in the State.~~

~~(2) Compliance fees paid under § 7–705(b)(2)(i)2 of the Public Utilities Article shall be accounted for separately within the Fund and may be used only to make loans and grants to support the creation of new solar energy sources in the State.~~

~~(j) (1) The Treasurer shall invest the money of the Fund in the same manner as other State money may be invested.~~

~~(2) Any investment earnings of the Fund shall be paid into an administrative expense account within the Fund.~~

~~(3) Any repayment of principal and interest on loans made from the Fund shall be paid into the Fund.~~

~~(4) Balances in the Fund shall be held for the benefit of the Program, shall be expended solely for the purposes of the Program, and may not be used for the general obligations of government.~~

~~(k) Expenditures from the Fund shall be made by:~~

~~(1) an appropriation in the annual State budget; or~~

~~(2) a budget amendment in accordance with § 7–209 of the State Finance and Procurement Article.~~

~~(l) An expenditure by budget amendment may be made under subsection (k) of this section only after:~~

~~(1) the Administration has submitted the proposed budget amendment and supporting documentation to the Senate Budget and Taxation Committee, Senate Finance Committee, House Appropriations Committee, and House Economic Matters Committee; and~~

~~(2) the committees have had 45 days for review and comment.~~

~~SECTION 2. AND BE IT FURTHER ENACTED, That, notwithstanding any other provision of law, on or before July 1, 2016, the State Treasurer shall transfer $30,000,000 from the unappropriated fund balance within the Maryland Strategic Energy Investment Fund under § 9–20B–05 of the State Government Article, as enacted by Section 1 of this Act, to the Maryland Clean Energy Center for deposit in and credit to the Clean Energy Technology Financing Fund established under § 10–817.1 of the Economic Development Article, as enacted by Section 1 of this Act.~~

~~SECTION 3. AND BE IT FURTHER ENACTED, That it is the intent of the General Assembly that:~~

~~(1) State annual grant funding for operating assistance for the Maryland Clean Energy Center, in accordance with § 9–20B–05(f)(6) of the State Government Article, as enacted by Section 1 of this Act, should be provided from the unappropriated balance of the Maryland Strategic Energy Investment Fund; and~~

~~(2) the Maryland Clean Energy Center shall conduct its financial affairs so that, by fiscal year 2020, it is self–sufficient and in no further need of operating support from the Maryland Strategic Energy Investment Fund or any other State money.~~

~~SECTION 4. AND BE IT FURTHER ENACTED, That this Act is an emergency measure, is necessary for the immediate preservation of the public health or safety, has been passed by a yea and nay vote supported by three–fifths of all the members elected to each of the two Houses of the General Assembly, and shall take effect from the date it is enacted.~~

~~SECTION 2. AND BE IT FURTHER ENACTED, That the Office of Legislative Audits shall conduct a performance audit of the Maryland Clean Energy Center.~~

SECTION ~~3.~~ *2.* AND BE IT FURTHER ENACTED, That this Act shall take effect June 1, 2016. It shall remain effective for a period of 1 year and 1 month and, at the end of June 30, 2017, with no further action required by the General Assembly, this Act shall be abrogated and of no further force and effect.

Approved by the Governor, May 19, 2016.

Chapter 364

(Senate Bill 313)
(House Bill 410)

AN ACT concerning

Economic Development – Maryland Energy Innovation Institute

FOR the purpose of establishing a Maryland Energy Innovation Institute for certain purposes; providing that the Institute is a part of the A. James Clark School of Engineering of the University of Maryland; providing that the School shall manage the Institute according to certain policies with advice of the Advisory Board of the Institute; establishing the purposes of the Institute; providing that the exercise of certain powers by the Institute is an essential governmental function; establishing an Advisory Board of the Institute for certain purposes; providing for the membership, ~~terms,~~ powers, and officers of the Institute Board; providing that the Director of the University of Maryland Energy Research Center is the Director of the Institute; providing for the appointment of an Associate Director; establishing the duties of the Institute Director; authorizing the Institute to retain certain staff and consultants; establishing the powers of the Institute; establishing the Maryland Energy Innovation Fund as a special, nonlapsing revolving fund in the University System of Maryland to be used by the Institute and the Maryland Clean Energy Center; specifying the purposes and uses of the Fund; providing that the Institute shall manage and supervise the Fund; requiring the State Treasurer to hold the Fund and the Comptroller to account for the Fund; specifying the contents of the Fund; providing for the investment of money in the Fund; requiring interest earnings of the Fund to be credited to the Fund; providing for the audit of the books and records of the Institute in a certain manner; providing that the Institute and the Center are independent entities that are not responsible for each other's debts, liabilities, bonds, or obligations; requiring the Institute to report each year to the Governor, the Maryland Energy Administration, and the General Assembly on certain matters; stating the intent of the General Assembly regarding coordination of functions and avoidance of duplication of effort between the Center and the Administration; altering the purposes of the Maryland Clean Energy Center; altering the membership of the Board of Directors of the Center; providing that the Governor shall appoint the chair of the Board; ~~repealing the function of~~ requiring the Board to establish a Financing Investment Advisory Committee for certain purposes; providing for the membership of the Advisory Committee; requiring the Advisory Committee to review certain matters and make certain recommendations; authorizing certain State economic development units to provide representatives, resources, and expertise to the Advisory Committee for certain purposes; authorizing the Center to disseminate, rather than to act as a clearinghouse, for certain information and materials for certain purposes; providing that the Center ~~shall~~ may consult with the Administration when cooperating with certain entities and coordinating certain activities with certain programs and persons; requiring certain State economic development units to cooperate with the Center and authorizing those units to provide certain resources and expertise for certain purposes; requiring the Center to publish certain audits on its Web site; repealing the Maryland Clean Energy Technology Incubator Program in the Center; exempting the Fund from a certain provision of law requiring interest earnings of State money to accrue to the General Fund of the State; providing that the Institute is exempt from State and local taxes; providing for the transfer of certain funds in each of certain fiscal years to the Fund from the Strategic Energy Investment Fund; ~~providing for the initial terms of the members of the Institute Board~~ requiring the Center to prepare a certain work plan for certain purposes; requiring the Center to report to the Governor, the Administration, and the General Assembly on certain matters on or before a certain date; requiring the Institute to conduct a certain study and report on its findings and recommendations to the Governor, the Administration, and the General Assembly on or before a certain date; defining certain terms; providing that certain obligations or contracts may not be impaired by this Act; providing that certain loan obligations be converted to grants from the Administration to the Center; and generally relating to the Maryland Energy Innovation Institute, the Maryland Clean Energy Center, and economic development.

BY repealing
Article – Economic Development
Section 10–829 through 10–837 and the part "Part III. Maryland Clean Energy Technology Incubator Program"
Annotated Code of Maryland
(2008 Volume and 2016 Supplement)

BY repealing and reenacting, without amendments,
Article – Economic Development
Section 10–801(a), (b), (c), (e), (f), (h), and (i)
Annotated Code of Maryland
(2008 Volume and 2016 Supplement)

BY repealing and reenacting, with amendments,
Article – Economic Development
Section 10–806, 10–807, 10–808, 10–810, 10–823, and 10–825
Annotated Code of Maryland
(2008 Volume and 2016 Supplement)

BY adding to
Article – Economic Development
Section 10–828 through ~~10–838~~ 10–839 to be under the new part "Part III. Maryland Energy Innovation Institute"
Annotated Code of Maryland
(2008 Volume and 2016 Supplement)
(As enacted by Section 1 of this Act)

BY repealing and reenacting, without amendments,
Article – State Finance and Procurement

Section 6–226(a)(2)(i)
Annotated Code of Maryland
(2015 Replacement Volume and 2016 Supplement)

BY repealing and reenacting, with amendments,
Article – State Finance and Procurement
Section 6–226(a)(2)(ii)94. and 95.
Annotated Code of Maryland
(2015 Replacement Volume and 2016 Supplement)

BY adding to
Article – State Finance and Procurement
Section 6–226(a)(2)(ii)96.
Annotated Code of Maryland
(2015 Replacement Volume and 2016 Supplement)

SECTION 1. BE IT ENACTED BY THE GENERAL ASSEMBLY OF MARYLAND, That Section(s) 10–829 through 10–837 and the part "Part III. Maryland Clean Energy Technology Incubator Program" of Article – Economic Development of the Annotated Code of Maryland be repealed.

SECTION 2. AND BE IT FURTHER ENACTED, That the Laws of Maryland read as follows:

Article – Economic Development

10–801.

(a) In this subtitle the following words have the meanings indicated.

(b) "Administration" means the Maryland Energy Administration.

(c) "Board" means the Board of Directors of the Center.

(e) "Center" means the Maryland Clean Energy Center.

(f) "Clean energy" includes:

(1) solar photovoltaic technology;

(2) solar heating;

(3) geothermal;

(4) wind;

(5) biofuels;

(6) ethanol;

(7) other qualifying biomass as defined in § 7–701 of the Public Utilities Article;

(8) ocean, including energy from waves, tides, currents, and thermal differences;

(9) a fuel cell that produces energy from biofuels, ethanol, or other qualifying biomass;

(10) energy efficiency and conservation;

(11) any other technology or service that the Center determines will contribute directly or indirectly to the production of energy from renewable or sustainable sources, or to the improvement of efficiency in the use of energy; and

(12) deployment of any of the technologies or services listed in items (1) through (11) of this subsection.

(h) "Director" means the Director of the Administration.

(i) "Executive Director" means the Executive Director of the Maryland Clean Energy Center.

10–806.

(a) There is a Maryland Clean Energy Center.

(b) The Center is a body politic and corporate and is an instrumentality of the State.

(c) The exercise by the Center of the powers conferred by this subtitle is the performance of an essential governmental function.

(d) The purposes of the Center are to:

(1) promote economic development and jobs in the clean energy industry sector in the State;

(2) promote the deployment of clean energy technology in the State;

(3) serve as an incubator for the development of clean energy industry in the State;

(4) **IN COLLABORATION WITH THE ADMINISTRATION,** collect, analyze, and disseminate industry data; and

(5) provide outreach and technical support to further the clean energy industry in the State.

(e) ~~The Center shall coordinate with the Maryland Energy Administration and may not duplicate the programs or activities of the Administration without consent of the Administration~~ **IT IS THE INTENT OF THE GENERAL ASSEMBLY THAT, AS THE CENTER DEVELOPS PROGRAMS AND ACTIVITIES UNDER THIS SUBTITLE, THE CENTER AND THE ADMINISTRATION SHALL WORK COLLABORATIVELY TOGETHER, AS APPROPRIATE, IN ORDER TO COORDINATE SHARED–INTEREST FUNCTIONS AND AVOID DUPLICATION OF EFFORTS**.

10–807.

(a) A Board of Directors shall manage the Center and exercise its corporate powers.

(b) The Board consists of the following ~~[~~nine~~]~~ ~~11~~ members:

(1) the Director, or the Director's designee;

~~**(2) THE DIRECTOR OF THE MARYLAND ECONOMIC DEVELOPMENT CORPORATION;**~~

~~**(3) THE DIRECTOR OF THE MARYLAND HEALTH AND HIGHER EDUCATION FACILITIES AUTHORITY;**~~ and

~~[~~(2)~~]~~ ~~**(4)**~~ eight members appointed by the Governor with the advice and consent of the Senate:

(i) two representing the not–for–profit clean energy research sector of the State;

(ii) two with expertise in venture capital financing;

(iii) two representing clean energy industries in the State; **[**and**]**

(iv) **[**two members**]** **ONE CONSUMER MEMBER; AND**

(V) ONE MEMBER of the general public.

(c) A member of the Board shall reside in the State.

(d) In making appointments to the Board, the Governor shall consider:

(1) diversity; and

(2) all geographic regions of the State.

(e) A member of the Board:

(1) may not receive compensation as a member of the Board; but

(2) is entitled to reimbursement for expenses under the Standard State Travel Regulations, as provided in the State budget.

(f) (1) The term of an appointed member is 4 years and begins on July 1.

(2) The terms of the appointed members are staggered as required by the terms provided for members on October 1, 2008.

(3) At the end of a term, an appointed member continues to serve until a successor is appointed and qualifies.

(4) A member who is appointed after a term has begun serves only for the rest of the term and until a successor is appointed and qualifies.

(g) The Governor may remove an appointed member for incompetence, misconduct, or failure to perform the duties of the position.

10–808.

From among **[**its**]** **THE** members**[**,**]** **OF** the Board **[**shall elect**]:**

(1) **THE GOVERNOR SHALL APPOINT** a chair**[**,**]; AND**

(2) **THE BOARD SHALL ELECT** a vice chair**[**,**]** and a treasurer.

10–810.

(a) (1) The Board shall establish an Advisory Committee.

(2) The Advisory Committee consists of individuals that the Board considers will assist the Center in studying and developing policies to further the purposes of this subtitle.

(b) **(1)** **THE BOARD SHALL ESTABLISH A FINANCING INVESTMENT ADVISORY COMMITTEE.**

(2) THE FINANCING INVESTMENT ADVISORY COMMITTEE CONSISTS OF INDIVIDUALS WITH KNOWLEDGE AND EXPERTISE IN FINANCING MATTERS RELEVANT TO BORROWER ELIGIBILITY, TERMS AND CONDITIONS OF SUPPORT, AND OTHER FINANCING EVALUATION CRITERIA OF THE CENTER.

(3) BEFORE THE CENTER PROVIDES FINANCING FOR A PROJECT, INCLUDING A PROJECT TO BE FUNDED BY THE MARYLAND ENERGY INNOVATION FUND UNDER § 10–835 OF THIS SUBTITLE, THE FINANCING INVESTMENT ADVISORY COMMITTEE SHALL REVIEW AND MAKE RECOMMENDATIONS TO THE BOARD FOR QUALIFYING PROJECT APPLICANTS.

(4) THE MARYLAND ECONOMIC DEVELOPMENT CORPORATION AND OTHER STATE ECONOMIC DEVELOPMENT UNITS MAY PROVIDE RESOURCES AND EXPERTISE TO THE FINANCING INVESTMENT ADVISORY COMMITTEE AND THE CENTER TO ASSIST IN EVALUATING PROJECTS, COORDINATING FINANCING FOR PROJECTS, AND OTHER MATTERS.

(C) The Board may establish other committees as appropriate.

[(c)**] (D)** (1) The membership of a committee may include individuals who are not Board members.

(2) The Board may establish the term and manner of selection of the membership of a committee.

10–823.

(a) [The Center ~~shall serve as a clearinghouse for~~ **MAY DISSEMINATE** information and materials ~~that may be~~ pertinent to clean energy technology, ~~education, and deployment~~ **FINANCING, AND DEVELOPMENT** in the State, for persons engaged in the clean energy industry as developers, manufacturers, and installers, as well as for consumers and financial institutions, including information on available federal, State, and private financial assistance and technical assistance.

(b)] The Center may:

(1) cooperate with and provide assistance to local governments, instrumentalities, and research entities in the State; and

(2) coordinate clean energy technology development, education, and deployment activities with programs of the federal government and of governmental units and public and private entities in and outside the State.

~~(B)~~ (C) THE CENTER ~~SHALL~~ MAY CONDUCT THE ACTIVITIES UNDER THIS SECTION IN CONSULTATION WITH THE ADMINISTRATION.

(D) THE MARYLAND ENVIRONMENTAL SERVICE, THE MARYLAND ECONOMIC DEVELOPMENT CORPORATION, AND OTHER STATE ECONOMIC DEVELOPMENT UNITS SHALL COOPERATE WITH THE CENTER AND MAY MAKE AVAILABLE TO THE CENTER RESOURCES AND EXPERTISE FOR THE EVALUATION OF PROJECT FINANCING AND COORDINATION OF FINANCING BETWEEN THE CENTER AND OTHER ECONOMIC DEVELOPMENT UNITS.

10–825.

(A) The books and records of the Center are subject to audit:

(1) at any time by the State; and

(2) each year by an independent auditor.

(B) THE CENTER SHALL PUBLISH ITS ANNUAL AUDITS ON ITS WEB SITE.

PART III. MARYLAND ENERGY INNOVATION INSTITUTE.

10–828.

(A) IN THIS PART THE FOLLOWING WORDS HAVE THE MEANINGS INDICATED.

(B) "ACADEMIC INSTITUTION" MEANS A PUBLIC SENIOR HIGHER EDUCATION INSTITUTION OR AN INDEPENDENT INSTITUTION OF HIGHER EDUCATION IN THE STATE, AS THOSE TERMS ARE DEFINED IN § 10–101 OF THE EDUCATION ARTICLE.

(C) "FUND" MEANS THE MARYLAND ENERGY INNOVATION FUND.

(D) "INSTITUTE" MEANS THE MARYLAND ENERGY INNOVATION INSTITUTE.

(E) "INSTITUTE BOARD" MEANS THE ADVISORY BOARD OF THE MARYLAND ENERGY INNOVATION INSTITUTE.

(F) "INSTITUTE DIRECTOR" MEANS THE DIRECTOR OF THE MARYLAND ENERGY INNOVATION INSTITUTE.

10–829.

(A) THERE IS A MARYLAND ENERGY INNOVATION INSTITUTE.

(B) THE INSTITUTE IS A PART OF THE A. JAMES CLARK SCHOOL OF ENGINEERING OF THE UNIVERSITY OF MARYLAND.

(C) THE A. JAMES CLARK SCHOOL OF ENGINEERING SHALL MANAGE THE INSTITUTE ACCORDING TO THE POLICIES OF THE UNIVERSITY OF MARYLAND AND THE UNIVERSITY SYSTEM OF MARYLAND WITH THE ADVICE OF THE INSTITUTE BOARD.

(D) THE PURPOSES OF THE INSTITUTE ARE TO:

(1) COLLABORATE WITH ACADEMIC INSTITUTIONS IN THE STATE TO PARTICIPATE IN CLEAN ENERGY PROGRAMS; AND

(2) DEVELOP AND ATTRACT PRIVATE INVESTMENT IN CLEAN ENERGY INNOVATION AND COMMERCIALIZATION IN THE STATE.

(E) THE EXERCISE BY THE INSTITUTE OF THE POWERS CONFERRED BY THIS PART IS THE PERFORMANCE OF AN ESSENTIAL GOVERNMENTAL FUNCTION.

10–830.

(A) (1) THERE IS AN ADVISORY BOARD OF THE INSTITUTE.

(2) THE INSTITUTE BOARD ADVISES THE UNIVERSITY OF MARYLAND ON THE MANAGEMENT OF THE INSTITUTE.

(B) THE INSTITUTE BOARD CONSISTS OF THE FOLLOWING NINE MEMBERS:

(1) THE CHAIR OF THE BOARD OF DIRECTORS OF THE MARYLAND CLEAN ENERGY CENTER;

(2) THE DIRECTOR; AND

(3) SEVEN MEMBERS SELECTED BY THE UNIVERSITY OF MARYLAND BASED ON EXPERTISE IN ENERGY TECHNOLOGY COMMERCIALIZATION, THE CLEAN ENERGY INDUSTRY, VENTURE CAPITAL FINANCING, AND ENERGY RESEARCH.

(C) A MEMBER OF THE INSTITUTE BOARD:

(1) MAY NOT RECEIVE COMPENSATION AS A MEMBER OF THE INSTITUTE BOARD; BUT

(2) IS ENTITLED TO REIMBURSEMENT FOR EXPENSES UNDER THE STANDARD STATE TRAVEL REGULATIONS, AS PROVIDED IN THE STATE BUDGET.

(D) ~~(1) THE TERM OF AN APPOINTED MEMBER IS 4 YEARS AND BEGINS ON JULY 1.~~

~~(2) THE TERMS OF THE APPOINTED MEMBERS ARE STAGGERED AS REQUIRED BY THE TERMS PROVIDED FOR MEMBERS ON JULY 1, 2017.~~

~~(3) AT THE END OF A TERM, AN APPOINTED MEMBER CONTINUES TO SERVE UNTIL A SUCCESSOR IS APPOINTED.~~

~~(4) A MEMBER WHO IS APPOINTED AFTER A TERM HAS BEGUN SERVES ONLY FOR THE REMAINDER OF THE TERM AND UNTIL A SUCCESSOR IS APPOINTED.~~

~~(E)~~ FROM AMONG ITS MEMBERS, THE INSTITUTE BOARD SHALL ELECT A CHAIR AND A VICE CHAIR.

10–831.

(A) THE INSTITUTE BOARD SHALL DETERMINE THE TIMES AND PLACES OF ITS MEETINGS.

(B) (1) SEVEN MEMBERS OF THE INSTITUTE BOARD ARE A QUORUM.

(2) THE INSTITUTE BOARD MAY ACT WITH AN AFFIRMATIVE VOTE OF FIVE MEMBERS.

10–832.

(A) (1) THE DIRECTOR OF THE UNIVERSITY OF MARYLAND ENERGY RESEARCH CENTER, A UNIVERSITY OF MARYLAND FACULTY MEMBER, SHALL BE THE DIRECTOR OF THE INSTITUTE.

(2) THE INSTITUTE DIRECTOR SHALL APPOINT AN ASSOCIATE DIRECTOR WHO SHALL BE A UNIVERSITY OF MARYLAND FACULTY MEMBER.

(B) THE INSTITUTE DIRECTOR, OR THE INSTITUTE DIRECTOR'S DESIGNEE, SHALL:

(1) ATTEND ALL MEETINGS OF THE INSTITUTE BOARD;

(2) ACT AS SECRETARY TO THE INSTITUTE BOARD;

(3) KEEP MINUTES OF ALL PROCEEDINGS OF THE INSTITUTE BOARD;

(4) APPROVE ALL SALARIES, PER DIEM PAYMENTS, AND ALLOWABLE EXPENSES OF THE INSTITUTE, ITS EMPLOYEES, AND ITS CONSULTANTS;

(5) APPROVE ANY EXPENSES INCIDENTAL TO THE OPERATION OF THE INSTITUTE; AND

(6) PERFORM THE OTHER DUTIES THE INSTITUTE BOARD DIRECTS IN CARRYING OUT THIS PART.

10–833.

THE INSTITUTE MAY RETAIN ANY STAFF OR CONSULTANTS.

10–834.

THE INSTITUTE MAY:

(1) MAINTAIN OFFICES AT THE UNIVERSITY OF MARYLAND, COLLEGE PARK;

(2) COORDINATE AND PROMOTE ENERGY RESEARCH AND EDUCATION AT THE UNIVERSITY OF MARYLAND, COLLEGE PARK, INCLUDING ITS RELEVANT ENERGY CENTERS, AS WELL AS AT OTHER ACADEMIC INSTITUTIONS;

(3) PROVIDE ENERGY POLICY <u>INNOVATION</u> ADVICE TO STATE AND FEDERAL UNITS;

(4) COLLABORATE WITH OTHER ACADEMIC INSTITUTIONS, GOVERNMENTAL UNITS, FOUNDATIONS, AND INDUSTRIAL COMPANIES FOR CLEAN ENERGY RESEARCH AND INNOVATION;

(5) PURSUE GRANTS, OTHER FUNDS, AND IN–KIND CONTRIBUTIONS FOR CLEAN ENERGY RESEARCH AND INNOVATION;

(6) PROVIDE SEED GRANT FUNDING TO ACADEMIC INSTITUTION–BASED ENTREPRENEURS OR ENTITIES, IN ORDER TO PROMOTE THE COMMERCIALIZATION OF CLEAN ENERGY TECHNOLOGIES DEVELOPED WHOLLY OR PARTLY BY AN ACADEMIC INSTITUTION<u>, BUT NOT DUPLICATE EXISTING SEED GRANTS MADE THROUGH THE MARYLAND TECHNOLOGY DEVELOPMENT CORPORATION</u>;

(7) **WORK WITH THE MARYLAND TECHNOLOGY ENTERPRISE INSTITUTE TO JOINTLY MANAGE, OPERATE, AND MAINTAIN FACILITIES FOR A CLEAN ENERGY INCUBATOR AT THE UNIVERSITY OF MARYLAND, COLLEGE PARK;**

(8) WORK WITH THE MARYLAND TECHNOLOGY ENTERPRISE INSTITUTE TO EXPAND MARYLAND INDUSTRIAL PARTNERSHIP AWARDS TO PROMOTE THE COMMERCIALIZATION OF CLEAN ENERGY TECHNOLOGIES DEVELOPED WHOLLY OR PARTLY BY AN ACADEMIC INSTITUTION;

(9) WORK WITH THE MARYLAND TECHNOLOGY ENTERPRISE INSTITUTE AND THE UNIVERSITY OF MARYLAND OFFICE OF TECHNOLOGY COMMERCIALIZATION TO:

(I) IDENTIFY ENERGY TECHNOLOGIES AT ACADEMIC INSTITUTIONS THAT MAY BE VIABLE FOR COMMERCIALIZATION; AND

(II) PROVIDE GRANT FUNDING AND INVESTMENT FINANCING TO COVER PATENT, FACILITIES, AND OTHER COSTS NOT ALLOWED UNDER FEDERAL OR STATE RESEARCH GRANTS TO AN ACADEMIC INSTITUTION–BASED ENTREPRENEUR OR ENTITY, IN ORDER TO PROMOTE THE COMMERCIALIZATION OF CLEAN ENERGY TECHNOLOGIES DEVELOPED WHOLLY OR PARTLY BY AN ACADEMIC INSTITUTION;

(10) COORDINATE INCUBATION AND POTENTIAL FINANCING OF ACADEMIC INSTITUTION–BASED ENTREPRENEURS OR ENTITIES WITH RESOURCES PROVIDED BY THE CENTER;

(11) WORK CLOSELY WITH STATE UNITS, INDUSTRIAL PARTNERS, NONGOVERNMENTAL ORGANIZATIONS, AND FEDERAL AGENCIES AND LABORATORIES TO ENSURE EFFECTIVE IMPLEMENTATION AND EXECUTION OF THE STATE'S ENERGY MISSION AND VISION<u>, IN COLLABORATION WITH THE ADMINISTRATION</u>;

(12) UNDERGO PERIODIC REVIEWS EVERY 5 YEARS CONSISTENT WITH UNIVERSITY SYSTEM OF MARYLAND POLICIES; AND

(13) DO ALL THINGS NECESSARY OR CONVENIENT TO CARRY OUT THE POWERS GRANTED BY THIS PART.

10–835.

(A) (1) THERE IS A MARYLAND ENERGY INNOVATION FUND IN THE UNIVERSITY SYSTEM OF MARYLAND.

(2) THE FUND SHALL BE USED BY THE INSTITUTE AND THE CENTER.

(B) (1) THE INSTITUTE:

(I) MAY USE THE FUND TO:

1. CARRY OUT THE PURPOSES OF THIS SUBTITLE, INCLUDING THE PURPOSES LISTED IN § 10–834 OF THIS SUBTITLE;

2. PURCHASE ADVISORY SERVICES AND TECHNICAL ASSISTANCE TO BETTER SUPPORT ECONOMIC DEVELOPMENT; AND

3. PAY THE ADMINISTRATIVE, LEGAL, AND ACTUARIAL EXPENSES OF THE INSTITUTE; AND

(II) SHALL USE THE FUND FOR THE ADMINISTRATIVE AND OPERATING COSTS OF THE CENTER.

(2) THE CENTER MAY USE THE FUND TO:

(I) MAKE A GRANT OR A LOAN UNDER THIS SUBTITLE, AT THE RATE OF INTEREST THE CENTER SETS;

(II) PROVIDE EQUITY INVESTMENT FINANCING FOR A BUSINESS ENTERPRISE UNDER THIS SUBTITLE; AND

(III) GUARANTEE A LOAN, AN EQUITY, AN INVESTMENT, OR ANY OTHER PRIVATE FINANCING TO EXPAND THE CAPITAL RESOURCES OF A BUSINESS ENTERPRISE UNDER THIS SUBTITLE.

(C) THE INSTITUTE SHALL MANAGE AND SUPERVISE THE FUND.

(D) (1) THE FUND IS A SPECIAL, NONLAPSING REVOLVING FUND THAT IS NOT SUBJECT TO REVERSION UNDER § 7–302 OF THE STATE FINANCE AND PROCUREMENT ARTICLE.

(2) THE STATE TREASURER SHALL HOLD THE FUND SEPARATELY, AND THE COMPTROLLER SHALL ACCOUNT FOR THE FUND.

(E) THE FUND CONSISTS OF:

(1) MONEY APPROPRIATED BY THE STATE TO THE FUND;

(2) MONEY ~~MADE AVAILABLE~~ CONTRIBUTED TO THE FUND THROUGH FEDERAL PROGRAMS OR PRIVATE ~~CONTRIBUTIONS~~ ENTITIES;

(3) REPAYMENT OF PRINCIPAL OF A LOAN MADE FROM THE FUND;

(4) PAYMENT OF INTEREST ON A LOAN MADE FROM THE FUND;

(5) PROCEEDS FROM THE SALE, DISPOSITION, LEASE, OR RENTAL BY THE CENTER OF COLLATERAL RELATED TO FINANCING THAT THE CENTER PROVIDES ~~UNDER THIS PART~~ FROM THE FUND;

(6) PREMIUMS, FEES, ROYALTIES, INTEREST, REPAYMENTS OF PRINCIPAL, AND RETURNS ON INVESTMENTS PAID TO THE CENTER BY OR ON BEHALF OF:

(I) A BUSINESS ENTERPRISE IN WHICH THE CENTER HAS MADE AN INVESTMENT ~~UNDER THIS PART~~ FROM THE FUND; OR

(II) AN INVESTOR PROVIDING AN INVESTMENT GUARANTEED BY THE CENTER ~~UNDER THIS PART~~ FROM THE FUND;

(7) RECOVERY OF AN INVESTMENT MADE BY THE CENTER IN A BUSINESS ENTERPRISE ~~UNDER THIS SUBTITLE~~ FROM THE FUND, INCLUDING AN ARRANGEMENT UNDER WHICH THE CENTER'S INVESTMENT IN THE BUSINESS ENTERPRISE IS RECOVERED THROUGH:

(I) A REQUIREMENT THAT THE FUND RECEIVE A PROPORTION OF CASH FLOW, COMMISSION, ROYALTY, OR PAYMENT ON A PATENT; OR

(II) THE REPURCHASE FROM THE CENTER OF ANY EVIDENCE OF INDEBTEDNESS OR OTHER FINANCIAL PARTICIPATION MADE FROM THE FUND, INCLUDING A NOTE, STOCK, BOND, OR DEBENTURE;

(8) REPAYMENT OF A CONDITIONAL GRANT EXTENDED BY THE CENTER FROM THE FUND; AND

(9) ANY OTHER MONEY MADE AVAILABLE TO THE INSTITUTE FOR THE FUND.

(F) (1) THE STATE TREASURER SHALL INVEST THE MONEY IN THE SAME MANNER AS OTHER STATE MONEY MAY BE INVESTED.

(2) ANY INTEREST EARNINGS OF THE FUND SHALL BE CREDITED TO THE FUND.

(G) MONEY EXPENDED FROM THE FUND UNDER THIS SUBTITLE IS SUPPLEMENTAL TO AND IS NOT INTENDED TO TAKE THE PLACE OF FUNDING THAT OTHERWISE WOULD BE APPROPRIATED FOR THE CENTER, THE INSTITUTE, OR ANY PART OF THE UNIVERSITY SYSTEM OF MARYLAND.

10–836.

THE INSTITUTE IS EXEMPT FROM STATE AND LOCAL TAXES.

10–837.

THE BOOKS AND RECORDS OF THE INSTITUTE ARE SUBJECT TO AUDIT:

(1) AT ANY TIME BY THE STATE; AND

(2) EACH YEAR BY AN INDEPENDENT AUDITOR THAT THE OFFICE OF LEGISLATIVE AUDITS APPROVES.

10–838.

<u>**THE INSTITUTE AND THE CENTER ARE INDEPENDENT ENTITIES THAT ARE NOT LIABLE OR RESPONSIBLE FOR EACH OTHER'S DEBTS, LIABILITIES, BONDS, OR OBLIGATIONS.**</u>

<u>**10–839.**</u>

(A) ON OR BEFORE OCTOBER 1 EACH YEAR, THE INSTITUTE SHALL REPORT TO THE GOVERNOR, THE ADMINISTRATION, AND, IN ACCORDANCE WITH § 2–1246 OF THE STATE GOVERNMENT ARTICLE, THE GENERAL ASSEMBLY.

(B) THE REPORT SHALL INCLUDE A COMPLETE OPERATING AND FINANCIAL STATEMENT COVERING THE INSTITUTE'S OPERATIONS AND A SUMMARY OF THE INSTITUTE'S ACTIVITIES DURING THE PRECEDING FISCAL YEAR.

Article – State Finance and Procurement

6–226.

(a) (2) (i) Notwithstanding any other provision of law, and unless inconsistent with a federal law, grant agreement, or other federal requirement or with the terms of a gift or settlement agreement, net interest on all State money allocated by the

State Treasurer under this section to special funds or accounts, and otherwise entitled to receive interest earnings, as accounted for by the Comptroller, shall accrue to the General Fund of the State.

(ii) The provisions of subparagraph (i) of this paragraph do not apply to the following funds:

94. the Community Program Fund; **[**and**]**

95. the Maryland Corps Program Fund**; AND**

96. THE MARYLAND ENERGY INNOVATION FUND.

SECTION 3. AND BE IT FURTHER ENACTED, That for fiscal years 2018, 2019, 2020, 2021, and 2022, in each year, $1,500,000 shall be transferred from the Strategic Energy Investment Fund established under § 9–20B–05 of the State Government Article to the Maryland Energy Innovation Fund established under § 10–835 of the Economic Development Article, as enacted by Section 2 of this Act.

SECTION 4. AND BE IT FURTHER ENACTED, That the ~~terms of the initial members of the Advisory Board of the Maryland Energy Innovation Institute shall expire as follows:~~

~~(1) two members in 2019;~~

~~(2) two members in 2020; and~~

~~(3) three members in 2021~~ Maryland Clean Energy Center shall:

(1) establish a work plan to become self–sustaining within 5 years after the effective date of this Act using funding provided under this Act and other funding that the Center may obtain, and projected revenues from project financing activities of the Center under Title 10, Subtitle 8 of the Economic Development Article; and

(2) submit a report, which may be part of its annual report, on or before December 1, 2019, to the Governor and, in accordance with § 2–1246 of the State Government Article, the General Assembly on the Center's:

(i) progress since enactment of this Act to become self–sustaining with its current activities and funding and revenue levels; and

(ii) recommendations for changes, including additional necessary funding, to continue on the trajectory path to reach the goal to become self–sustaining within 5 years.

SECTION 5. AND BE IT FURTHER ENACTED, That:

(1) the Maryland Energy Innovation Institute, established by Section 2 of this Act, shall study and evaluate:

(i) the availability and efficiency of the use of funds for the development and deployment of clean energy technology in the State and the commercialization of that technology, including funds from the Strategic Energy Investment Fund, and other practical forms of financing;

(ii) the forecast need, if any, for additional funding or financing options for these purposes; and

(iii) appropriate sources and levels of funding and financing options for these purposes; and

(2) on or before December 1, 2019, the Institute shall submit a report of its findings and recommendations under this section to the Governor, the Maryland Energy Administration, and, in accordance with § 2–1246 of the State Government Article, the General Assembly.

SECTION 6. AND BE IT FURTHER ENACTED, That the existing outstanding loan obligations to the Maryland Energy Administration by the Maryland Clean Energy Center as of the effective date of this Act shall be converted to a grant from the Maryland Energy Administration to the Maryland Clean Energy Center.

SECTION ~~6.~~ 7. AND BE IT FURTHER ENACTED, That a presently existing obligation or contract right may not be impaired in any way by this Act.

SECTION ~~7.~~ 8. AND BE IT FURTHER ENACTED, That this Act shall take effect July 1, 2017.

Approved by the Governor, May 4, 2017.

SB 313

Department of Legislative Services

Maryland General Assembly
2017 Session

FISCAL AND POLICY NOTE
Third Reader - Revised

Senate Bill 313 (The President, *et al.*) (By Request - Administration)
Finance Economic Matters and Appropriations

Economic Development - Maryland Energy Innovation Institute

This Administration bill establishes the Maryland Energy Innovation Institute in the A. James Clark School of Engineering at the University of Maryland, College Park Campus (UMCP). The Maryland Energy Innovation Fund (MEIF) is established as a special fund in the University System of Maryland (USM) for use by the institute and the Maryland Clean Energy Center (MCEC) for specified related purposes. For fiscal 2018 through 2022, $1.5 million annually must be transferred from the Strategic Energy Investment Fund (SEIF) to MEIF. The role of MCEC as a clearinghouse of energy information and materials is altered, the MCEC governing board must establish a financing investment advisory committee, and a specified incubator program is repealed. Previous loans made by the Maryland Energy Administration (MEA) to MCEC are converted into grants, and MCEC must establish a work plan to become self-sustaining within five years.

The bill takes effect July 1, 2017.

Fiscal Summary

State Effect: Special fund expenditures for SEIF increase by $1.5 million annually from FY 2018 through 2022 due to the mandated transfer of funds to MEIF. Special fund revenues and expenditures for MEIF increase correspondingly for authorized uses by the institute and MCEC. MEIF revenues and expenditures further increase beginning as early as FY 2018 from earnings generated by the institute and MCEC. The FY 2018 budget includes a $1.5 million transfer from SEIF to MEIF, contingent upon enactment of the bill. **This bill establishes a mandated appropriation for FY 2019 through 2022.**

($ in millions)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
SF Revenue	$1.5	$1.5	$1.5	$1.5	$1.5
SF Expenditure	$3.0	$3.0	$3.0	$3.0	$3.0
Net Effect	($1.5)	($1.5)	($1.5)	($1.5)	($1.5)

Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease

Local Effect: The bill does not materially affect local government finances or operations.

Small Business Effect: The Administration has determined that this bill has a meaningful impact on small business (attached). The Department of Legislative Services concurs with this assessment. (The attached assessment does not reflect amendments to the bill.)

Analysis

Bill Summary:

Maryland Energy Innovation Institute

The Maryland Energy Innovation Institute is established as a part of and managed by the A. James Clark School of Engineering at UMCP. The purposes of the institute are to (1) collaborate with academic institutions (public and private, nonprofit four-year institutions) in the State to participate in clean energy programs and (2) develop and attract private investment in clean energy innovation and commercialization in the State.

A board is established in the institute to advise the university on the management of the institute. The bill establishes provisions governing board membership and board meetings. A member of the board may not receive compensation but is entitled to reimbursement for travel expenses. The school of engineering must manage the institute according to UMCP and USM policies with the advice of the institute board.

The director of the University of Maryland Energy Research Center (UMERC), a University of Maryland faculty member, must be the director of the institute. The director must appoint an associate director, who also must be a University of Maryland faculty member. The director, or the director's designee, must (1) attend all meetings; (2) act as board secretary; (3) keep board minutes; (4) approve all salaries, per diem payments, and allowable expenses of the institute, its employees, and its consultants; (5) approve any incidental expenses; and (6) perform other duties the board directs in carrying out the bill.

Generally, the institute may do all things necessary or convenient to carry out the powers granted to it by the bill. Specific powers enumerated in the bill include, among others:

- maintain offices at UMCP and retain any staff or consultants;
- coordinate and promote energy research and education, as specified;
- provide energy policy innovation advice to State and federal units and work closely with State and federal agencies, among others, to ensure effective implementation and execution of the State's energy mission and vision;

- collaborate with specified entities and pursue grants, other funds, and in-kind contributions for clean energy research and innovation;
- provide seed grant funding to academic institution-based entrepreneurs or entities in order to promote the commercialization of clean energy technologies developed wholly or partly by an academic institution, but not duplicate existing seed grants made through the Maryland Technology Development Corporation;
- work with the Maryland Technology Enterprise Institute and the University of Maryland Office of Technology Commercialization to (1) identify energy technologies at academic institutions that may be viable for commercialization and (2) provide grant funding and investment financing to cover patent, facilities, and other costs, as specified, in order to promote the commercialization of clean energy technologies developed wholly or partly by an academic institution;
- work with the Maryland Technology Enterprise Institute to jointly manage, operate, and maintain facilities for a clean energy incubator at UMCP; and
- coordinate incubation and potential financing of academic institution-based entrepreneurs or entities with resources provided by MCEC.

The institute is exempt from State and local taxes. The books and records of the institute are subject to audit at any time by the State and each year by an independent auditor that the Office of Legislative Audits approves.

The institute and MCEC are independent entities that are not liable or responsible for each other's debts, liabilities, bonds, or obligations.

The institute must report annually to the Governor, MEA, and the General Assembly; the report must include a complete operating and financial statement covering the institute's operations and a summary of the institute's activities during the preceding fiscal year. In addition to the annual report, the institute must study and evaluate aspects of funding for clean energy technology in the State and submit a report of its findings and recommendations to the Governor, MEA, and the General Assembly by December 1, 2019.

Maryland Energy Innovation Fund

MEIF is established as a special, nonlapsing fund in USM. The institute must manage and supervise the fund, which consists of money appropriated by the State to the fund and other specified sources, including (1) repayment of principal and payment of interest of a loan made from the fund; (2) recovery of an investment made by MCEC in a business enterprise from the fund; and (3) repayment of a conditional grant made by MCEC from the fund. Interest earnings are credited to the fund. For fiscal 2018 through 2022, $1.5 million annually must be transferred from SEIF to MEIF.

The fund is used by the institute and MCEC for their administrative and operating costs, and MCEC may use the fund to provide certain types of financial assistance. Specifically, the institute may use the fund to (1) carry out the purposes of the bill; (2) purchase advisory services and technical assistance to better support economic development; and (3) pay the institute's administrative, legal, and actuarial expenses. The institute also *must* use the fund for the administrative and operating costs of MCEC.

MCEC may use the fund to (1) make a grant or a loan, at the rate of interest MCEC sets; (2) provide equity investment financing for a business enterprise; and (3) guarantee a loan, an equity, an investment, or any other private financing to expand the capital resources of a business enterprise.

Money expended from the fund is supplemental to and is not intended to take the place of funding that otherwise would be appropriated for MCEC, the institute, or any part of USM.

Maryland Clean Energy Center

The Governor, not the MCEC board of directors, must appoint the chair of the MCEC board. The board must elect a vice chair and a treasurer. In addition to an existing advisory committee, the board must establish a financing investment advisory committee, consisting of individuals with knowledge and expertise in financing matters relevant to borrower eligibility, terms and conditions of support, and other financing evaluation criteria. Before MCEC provides financing for a project, including a project to be funded from MEIF, the committee must review and make recommendations to the board for qualifying project applicants. The Maryland Economic Development Corporation (MEDCO) and other State economic development units may provide resources and expertise to the committee and MCEC to assist in evaluating projects, coordinating financing for projects, and other matters.

MCEC may disseminate information and materials pertinent to clean energy technology, financing, and development in the State, for persons engaged in the clean energy industry, as specified.

It is the intent of the General Assembly that, as MCEC develops programs and activities for which it is authorized, MCEC and MEA work collaboratively together, as appropriate, in order to coordinate shared-interest functions and avoid duplication of efforts. MCEC is authorized to conduct its activities in consultation with MEA. In addition, MCEC must collaborate with MEA when collecting, analyzing, and disseminating industry data.

MCEC must establish a work plan to become self-sustaining within five years after the effective date of the bill using funding provided by the bill, other funding that MCEC may obtain, and projected revenues from project financing activities. By December 1, 2019, MCEC must submit a report to the Governor and the General Assembly on (1) its progress since enactment of the bill to become self-sustaining with its current activities, funding, and revenue levels and (2) recommendations for changes, including additional necessary funding, to become self-sustaining within five years. The report may be part of MCEC's annual report.

The existing outstanding loan obligations to MEA by MCEC as of the effective date of the bill are converted to a grant from MEA to MCEC.

Other State Economic Development Units

MEDCO, the Maryland Environmental Service, and other State economic development units must cooperate with MCEC and may make resources and expertise available to MCEC for the evaluation of project financing and coordination of financing between MCEC and other economic development units.

Current Law/Background:

Maryland Clean Energy Center

MCEC was established by Chapter 137 of 2008 as a body politic and corporate and an instrumentality of the State. The purpose of MCEC is to (1) promote economic development and jobs in the clean energy industry sector; (2) promote the deployment of clean energy technology; (3) serve as an incubator for the development of the clean energy industry; (4) collect, analyze, and disseminate industry data; and (5) provide outreach and technical support to further the clean energy industry. MCEC operates four financing programs:

- *Maryland Home Energy Loan Program:* Began operations in fiscal 2011 with funds provided by MEA. In the first two years of the program, MCEC operated the program as a direct lending program. During fiscal 2012, MCEC revised the program and partnered with Mariner Finance. Since that time, Mariner Finance has been the provider of loans, with MCEC providing a loan loss reserve and an interest rate subsidy.

- *Maryland Clean Energy Capital Program (MCAP):* Works with governmental and nonprofit partners on energy savings projects. MCEC issues bonds on behalf of the entity to finance projects.

- *Commercial Property Assessed Clean Energy (PACE) Financing:* Under a PACE program, the clean energy and conservation measures are financed and repaid through a tax assessment associated with the property. MCEC offers businesses financing for these projects through an equity partnership with Pace Financial Services. MCEC indicates one project had been financed under this program as of the end of January 2017.

- *Maryland SAVES:* Maryland SAVES was established in the summer of 2016. Under this program, MCEC works with a third-party administrator to assist local governments in financing renewable energy, energy efficiency, and alternative fuel vehicle and infrastructure projects using Qualified Energy Conservation Bonds awarded to the jurisdiction but not yet issued. However, no projects had been undertaken in this program as of the end of January 2017.

In addition to financing programs, MCEC has engaged at times in a number of nonfinancing activities. For example, MCEC initially was involved in an incubator project with the Maryland Clean Energy Technology Incubator Network, although the network is no longer operational. MCEC also conducts education and outreach efforts, including in-person and webinar training, and has convened various events to bring energy stakeholders together, including clean energy summits, legislative receptions, hosting workgroups, and coordinating meetings and holding receptions for visiting international groups.

MCEC has also conducted several studies at the request of the General Assembly, including reviewing the opportunities for a green bank and residential clean energy program financing.

Maryland Clean Energy Center Funding Sustainability

MCEC was established as a nonbudgeted entity. Chapter 137 did not establish a funding mechanism for MCEC for either start-up costs or ongoing activities. MCEC has the ability to charge fees for the programs that it offers and receives revenue or could potentially receive revenue from its MCAP, Commercial PACE, and Maryland SAVES programs. Due to limited activity and the new nature of some of these programs, revenue from these sources has been limited. MCEC has operated with an operating loss from fiscal 2013 through 2016 and, in three of those four years, had operating revenue of less than $300,000.

MCEC received an initial start-up loan, as well as subsequent loans and grants, from MEA for operating support. Through fiscal 2016, MCEC received loans in three fiscal years totaling $1.3 million from MEA. MCEC also received a grant of $212,000 in fiscal 2016 for operating costs. While the loans for operating support have allowed MCEC to continue to operate, the loans are expected to be repaid. To date, MCEC has made one payment on the start-up loan ($50,000), in fiscal 2014. The other loans are not expected to begin repayment until fiscal 2018.

The fiscal 2017 budget bill restricted $3.3 million of funding from MEA's budget to be used as a grant to MCEC for operating support and assistance. This grant would have provided funding for both administrative activities and additional programmatic activities. These funds are not being released by the Governor. However, MEA has agreed to provide a smaller grant (totaling $485,000) to MCEC to allow the entity to continue operations through the fiscal year, while future funding options are under discussion.

Task Force on the Maryland Clean Energy Center

Chapter 577 of 2016 established a task force to review a variety of issues related to MCEC. The full task force met twice during the 2016 interim to review the work of various State financing instrumentalities, including MCEC, and how the instrumentalities could assist MCEC. Other small group meetings were also held to continue discussions. The task force report was due December 1, 2016; however, the task force requested an extension of the report's due date until January 30, 2017, because it had not completed its work. The task force was still specifically considering whether the outstanding balance of the fiscal 2009 loans from MEA should be converted to a grant and determining an appropriate amount of State annual grant funding for MCEC as it works toward becoming self-sustaining.

The task force also met on February 7, 2017, to discuss this bill and to hear comments from the Administration, MCEC, and UMCP. The task force submitted a preliminary report to the General Assembly on February 13, 2017, which indicated support, in concept, of this bill (as introduced). The preliminary report made several recommendations related to this bill, including (1) that the relevant State agencies work collaboratively together, coordinate shared-interest functions, and avoid duplication of efforts; (2) that there be an annual evaluation of the institute to determine how successful the bill is in moving MCEC toward becoming self-sustaining; and (3) specifying that UMERC and MCEC are independent entities that are not liable or responsible for the debts, liabilities, bonds, or obligations of each other. The task force anticipates issuing a final report by April 30, 2017.

Strategic Energy Investment Fund and Revenue Allocation

Chapters 127 and 128 of 2008 established SEIF primarily to receive revenue from Regional Greenhouse Gas Initiative (RGGI) carbon dioxide emission allowance auctions. The Acts also established an allocation formula for the distribution of SEIF revenue from the auctions. Generally, RGGI funds in SEIF are allocated through a formula to support:

- energy assistance programs (at least 50%);
- low- and moderate-income energy efficiency and other energy efficiency programs (at least 10% each);

- renewable energy, climate change, resiliency, and energy education programs (at least 20%); and
- MEA's administrative costs (up to 10%, no more than $5.0 million).

The Governor's proposed fiscal 2018 budget includes $75.2 million for these RGGI-supported programs, which uses $28.2 million in available SEIF fund balance and interest earnings and $47.0 million in anticipated RGGI revenues. The projected fiscal 2018 ending SIEF fund balance for RGGI-supported programs is $12.1 million, a significant decrease from the fiscal 2016 ending fund balance of $63.4 million. This is largely due to lower-than-expected RGGI auction revenues.

Historically, if SEIF funds from RGGI revenues are transferred to other funds instead of allocated to the programs listed above, then that transfer occurs prior to the distribution to the various programs, meaning that all the programs are affected to some extent by the transfer.

SEIF revenue from other sources, such as money from the Exelon Corporation and Constellation Energy Group merger, is not subject to the allocation formula.

Research Centers and the Maryland Energy Innovation Institute

The research center referenced in the bill, UMERC, is an interdisciplinary initiative in the A. James Clark School of Engineering, which also involves faculty from the College of Computer, Mathematical, and Physical Sciences; the College of Agriculture and Natural Resources; and the School of Public Policy. The mission of UMERC is to (1) develop energy-efficient and environmentally sustainable technologies and practices; (2) educate the public about energy and environmental technologies; (3) inform the policy debate on issues of sustainable energy and the environment; and (4) improve energy security by developing indigenous and sustainable energy resources and promoting policies with a positive environmental impact. UMERC has approximately 100 affiliated faculty.

UMCP has several energy research centers that focus on different aspects of energy research. These centers solicit research funding through various federal and private sources, which pays for graduate research assistants, a portion of research professor salaries, equipment, etc. The centers may be loosely affiliated with each other but do not necessarily benefit from a centralized coordination of their activities.

While the bill does not require it, UMERC advises that the intent of the bill is to integrate MCEC and the energy research centers at UMCP (and more broadly, at other institutions of higher education across the State) under the general structure of the institute. The institute is intended to provide centralized services to the research centers, including assistance in seeking additional research funding and providing a dedicated energy policy resource. These centralized services will be funded through MEIF and also from assessments on participating research centers.

UMERC indicates that many of the details of governing the operation of the institute will be established in a separate "institute proposal" that will be submitted to the USM Board of Regents for approval.

State Fiscal Effect: Many of the details of the bill's fiscal effect are not fully known at this time. For example, it is unclear how funding will be allocated between the institute and MCEC. The institute manages and supervises MEIF, but is required to use the fund for the administrative and operating costs of MCEC. There are ongoing discussions between the affected parties, but at this point, nothing has been formally decided. Other details that are not fully known at this time include:

- whether or not MCEC must relocate to UMCP (although this appears to be a likely outcome of the bill);
- whether or not earnings generated by MCEC from activities *not* funded through MEIF, either before or after enactment of the bill, accrue to MEIF or MCEC; and
- whether or not the institute and/or MCEC will be self-funded by fiscal 2023.

Regardless, the bill requires that $1.5 million be transferred annually from SEIF to MEIF from fiscal 2018 through 2022, and the fiscal 2018 operating budget (as passed by both houses) includes a $1.5 million transfer from SEIF to MEIF, contingent upon the enactment of this bill or its cross file. Therefore, special fund expenditures for SEIF increase by $1.5 million annually from fiscal 2018 through 2022 to transfer funds to MEIF. This money is no longer available for future use by other SEIF programs supported with RGGI funds, as discussed above.

Special fund revenues and expenditures for MEIF increase correspondingly to provide funding for authorized uses by the institute and MCEC, although the proportion of funding for each entity is unknown at this time. This assumes that the institute and MCEC expend the entirety of available MEIF funding each year.

Many of the authorized uses for MEIF funds can reasonably be expected to generate revenue at a later date. Therefore, MEIF special fund revenues further increase beginning as early as fiscal 2018 from any earnings generated from the use of MEIF funds by the institute and MCEC. MEIF special fund expenditures increase correspondingly, as the additional earnings are used by the institute and MCEC for eligible purposes. It is unclear if non-MEIF activity by the institute or MCEC generates revenue for MEIF.

Absent the bill or another appropriation from the State, MCEC operations are likely to cease at the end of fiscal 2017 due to a lack of available funds, after which it is unlikely that MEA receives any of the $1.25 million in loan payments still owed to it by MCEC. Therefore, converting the loans to grants likely has no effect on SEIF finances. To the extent that MEA would have received loan repayments from MCEC in the absence of the bill, the bill reduces SEIF revenues from loan repayments that would have been available for other SEIF programs.

Removal of provisions related to a technology incubator program administered by MCEC has no effect, as the incubator program is no longer active.

Additional Information

Prior Introductions: None.

Cross File: HB 410 (The Speaker, *et al.*) (By Request - Administration) - Economic Matters and Appropriations.

Information Source(s): Maryland Energy Administration; Comptroller's Office; University System of Maryland; Morgan State University; St. Mary's College of Maryland; University of Maryland Energy Research Center; Maryland Clean Energy Center; Maryland Economic Development Corporation; Department of Legislative Services

Fiscal Note History: First Reader - February 12, 2017
mm/rhh Third Reader - March 23, 2017
Revised - Amendment(s) - March 23, 2017
Revised - Clarification - March 23, 2017
Revised - Updated Information - March 23, 2017
Revised - Budget Information - March 23, 2017

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ANALYSIS OF ECONOMIC IMPACT ON SMALL BUSINESSES

TITLE OF BILL: Economic Development – Maryland Energy Innovation Institute

BILL NUMBER: SB 313/HB 410

PREPARED BY: Mathew Palmer

PART A. ECONOMIC IMPACT RATING

This agency estimates that the proposed bill:

__ WILL HAVE MINIMAL OR NO ECONOMIC IMPACT ON MARYLAND SMALL BUSINESS

OR

__X__ WILL HAVE MEANINGFUL ECONOMIC IMPACT ON MARYLAND SMALL BUSINESSES

PART B. ECONOMIC IMPACT ANALYSIS

This legislation may have a meaningful impact on small business through the creation of and investment in small energy and innovation businesses. The commercialization and financing opportunities created by this legislation are specifically targeted to create business and job growth in the renewable energy industry sector.