

Department of Legislative Services  
 Maryland General Assembly  
 2017 Session

FISCAL AND POLICY NOTE  
 Third Reader - Revised

Senate Bill 313  
 Finance

(The President, *et al.*) (By Request - Administration)

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the MCEC governing board must establish a financing investment advisory committee, and a specified incubator program is repealed.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, UMER, 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 UMER 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. UMER 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, UMER 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

---

Analysis by: Stephen M. Ross

Direct Inquiries to:  
(410) 946-5510  
(301) 970-5510

**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

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.