

InventWood Support Letter for SB 460 & HB 419 (202

Uploaded by: Cable, Josh

Position: FAV

Feb 1, 2021

FAVORABLE SUPPORT REQUESTED for SB460/HB419

Dear Senate Finance and House Economic Matters Committee Members,

I am writing to **request your favorable support for SB 460 / HB 419- Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.**

InventWood is an innovator of advanced wood materials that are higher performance, lower cost, and more sustainable than commonly used alternatives like metals and plastics. We are a faculty-led spin-off of the University of Maryland, and we are headquartered on the College Park Campus.

I strongly support the development of an advanced energy economy in Maryland and believe that the state is making a smart investment through the Maryland Energy Innovation Institute (MEII). This investment simultaneously advances clean energy technologies developed in our academic institutions while promoting economic development through the innovation and commercialization of those technologies in the state.

In our case, MEII helped us raise \$4M from the US Department of Energy (DOE) Advanced Research Projects - Energy (ARPA-E) that is enabling us to take our MettleWood material from a lab concept to a commercially viable product.

We recently began our participation in MEII's Maryland Energy Innovation Accelerator (MEIA), which has already helped us tremendously in guiding our commercial and investor strategy. They are also identifying and recruiting experienced professionals with manufacturing and industrial engineering expertise, as we work to scale-up our material production.

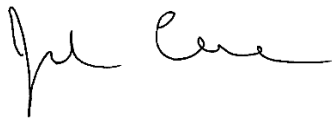
We also recently applied to MEII's Seed Grant program, which will enable us to fund our tech-to-market efforts in developing prototypes for engaged prospective customers, which has been a key hurdle to commercialization.

To date with the assistance of MEII, we have begun validation projects with key customers around the world with the intention of selling commercial products this year. We currently employ three highly skilled professionals in Maryland, and we are planning to rapidly expand hiring in the coming 24 months. We were also recently identified as one of the "Maryland Future 20" companies by Governor Hogan and the Maryland Department of Commerce.

For our success to be replicated for other Maryland university spin-offs, MEII must have a stable definitive commitment of revenue to help support its operation. This legislation calls for such a commitment which I believe is a worthy investment.

Your consideration and **favorable support of SB 460 and HB 419** will be much appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "Josh Cable". The signature is fluid and cursive, with the first name "Josh" and last name "Cable" clearly distinguishable.

Josh Cable, CFA
Chief Executive Officer
InventWood, LLC



SB0460_PFS_Support.pdf

Uploaded by: Coleman, Jessa

Position: FAV



Jessa Coleman
Senior Manager of Programs
jcoleman@paceservicing.com
202-844-9504

PACE Financial Servicing (PFS) is program administrator of the Maryland Commercial Property Assessed Clean Energy (MD-PACE) program, which is sponsored by the Maryland Clean Energy Center (MCEC).

PFS is led by the award-winning team who created the country's most successful PACE program and its leadership team has advised or worked with virtually every commercial PACE program nationally. With more experience in commercial PACE administration than anyone in the country, PFS offers unparalleled service to its public sector partners. PFS has leveraged its PACE experience and technology to help develop a highly efficient PACE administration and servicing platform, all of which has earned PFS national recognition as the gold standard in PACE financing. PFS makes PACE easy: its goal is to build PACE programs that seamlessly connect PACE capital to interested building owners. The result is increased economic activity, reduced environmental pollution, and new jobs.

SB0460 – Economic Development - Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives

Hearing Date: February 16th, 2021
Committee: Finance

Recommendation: Support

Dear Senate Finance and House Economic Matters Committee Members,

I am writing to **request your favorable support for Senate Bill 460 / House Bill 419: Economic Development - Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.**

PACE Financial Servicing (PFS) is program administrator of the Maryland Commercial Property Assessed Clean Energy (MD-PACE) program, which is sponsored by the Maryland Clean Energy Center (MCEC). The MD-PACE program allows Maryland business owners to access attractive private capital for investments in energy efficiency and clean energy improvements to their real property. This bill is important to PFS because PFS is an active player in the advanced energy economy in Maryland.

I believe that the state is making a smart investment in the Maryland Clean Energy Center (MCEC) and its subsidiary the Maryland Energy Innovation Accelerator (MEIA), as a way to encourage the successful adoption of clean energy generation, energy efficiency measures, and innovative emerging energy technologies.

As an instrumentality, MCEC provides significant value to grow the industry sector through innovative finance and technical expertise. In leveraging capital to achieve its mission, MCEC has the capability and flexibility to do what the public sector cannot and the private sector will not. MCEC successfully facilitates partnerships and relationships to create business and employment opportunities.

Having worked with MCEC for many years to administer the MD-PACE program, I can speak confidently to MCEC's positive impact on Maryland's clean energy economy. Thanks to MCEC's leadership, the MD-PACE program has facilitated over \$44 million of C-PACE investment across the state in the past four years that would not otherwise have been deployed.

To date, MCEC has leveraged private investment at ratio of approximately 10 to 1 for every public dollar spent, to succeed at its statute directed mission. This includes advancing adoption of clean energy and energy efficiency products, services, and innovative new technologies which support thousands of jobs in Maryland.

For this success to continue MCEC must have a stable definitive commitment of revenue to help support its operation, and signal to project partners and capital providers that they can predictably count on MCEC for investment transactions. This legislation calls for such a commitment, which PFS believes is a worthy investment.

Your consideration and **favorable support of SB 460 and HB 419** will be much appreciated.

Sincerely,

Jessa Coleman
Senior Manager of Programs
PACE Financial Servicing, LLC

SB0460 Merkaba Group FAV.pdf

Uploaded by: Desrosiers, Erik

Position: FAV

February 12, 2021

Senator Delores G. Kelley
Chair, Finance Committee
3 East
Miller Senate Office Building
Annapolis, MD 21401

Dear Senator Kelley:

I am writing to request your favorable support for SB 0460 “Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.”

My name is Erik Desrosiers and I’m a consultant in the renewable energy industry with over a decade of experience in government, utilities, and building startups.

In 2020, I participated in a Maryland Clean Energy Center program called the Maryland Energy Innovation Accelerator (MEIA). This unique program accelerates the commercialization of new technologies created in Maryland-based universities and Federal Labs with the goal of creating new Maryland-based technology and manufacturing businesses that will have a positive impact on Maryland’s climate goals.

The innovation ecosystem in Maryland and the surrounding region is bursting at the seams and resources to support technical founders with their ventures are relatively limited. I’ve witnessed first-hand how MEIA supports these emerging businesses to hone their go-to-market strategies, find their first customers, raise private funding, and attract the right employees.

This legislation provides baseline funding for the Maryland Clean Energy Center so that the Maryland Energy Innovation Accelerator can continue to accelerate Maryland-based technology and manufacturing businesses.

Your consideration and favorable support of SB 0460 will be much appreciated.

Sincerely,



Erik Desrosiers
Founder
Merkaba Group
4210 13th Street NE, Washington DC 20017
erik@merkaba.group | 215.490.4354

SB460_Montgomery County Green Bank_FAV.pdf

Uploaded by: Deyo, Tom

Position: FAV



Montgomery County
GreenBank

Your partner for clean energy™

January 29, 2021

Re: FAVORABLE SUPPORT REQUESTED for SB460 / HB419

Dear Senate Finance and House Economic Matters Committee Members,

The Montgomery County Green Bank is writing to **request your favorable support for Senate Bill 460 / House Bill 419: Economic Development - Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.**

The Montgomery County Green Bank has worked extensively with the Maryland Clean Energy Center over the last several years. We recognize the Maryland Clean Energy Center as a critical entity to partner and collaborate with on energy savings initiatives that benefit the state, including Montgomery County.

As a local green bank, the Montgomery County Green Bank brings valuable benefits to its businesses and residents through the effective leverage of its limited capital with private capital. The structure and identification of the Montgomery County Green Bank as a green bank draws interest, investment, and financial market partnerships that build the resources available to the County to undertake efforts to support the County's ambitious greenhouse gas reduction goals. The green bank identification aids the Montgomery County Green Bank as it seeks sources of federal, state, and local funds and private capital that support green bank efforts.

The Maryland Clean Energy Center's identification as a green bank would similarly aid the Maryland Clean Energy Center's ability to attract such green bank national or other resources and then to leverage that resource to bring more private capital to the state. This effort would provide more energy saving, affordable financing offerings to statewide residents and businesses. The Montgomery County Green Bank sees collaborating with statewide entities a benefit to our continued work as a green bank in Montgomery County.

Your consideration and **favorable support of SB 460 and HB 419** will be much appreciated.

Sincerely,

Tom Deyo
CEO

Montgomery County Green Bank
240-453-9000



SB 460 - Advanced Clean Energy.pdf

Uploaded by: Edwards, Donna

Position: FAV



MARYLAND STATE & D.C. AFL-CIO

AFFILIATED WITH NATIONAL AFL-CIO

7 School Street • Annapolis, Maryland 21401-2096

Office. (410) 269-1940 • Fax (410) 280-2956

President

Donna S. Edwards

Secretary-Treasurer

Gerald W. Jackson

**SB 460 – Economic Development – Advanced Clean Energy and Clean Energy Innovation
Investments and Initiatives
Senate Finance Committee
February 16, 2021**

SUPPORT

Donna S. Edwards

President

Maryland State and DC AFL-CIO

Madam Chair and members of the Committee thank you for the opportunity to provide testimony in support of SB 460 – Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives. My name is Donna S. Edwards, and I am the President of the Maryland State and DC AFL-CIO. On behalf of the 340,000 union members in the state of Maryland, I offer the following comments.

SB 460 really digs into the next generation of clean energy development. Instead of banning certain forms of energy without having a back-up plan to produce enough clean energy for the needs of Marylanders, the bill attacks climate change, head-on, by addressing our current lack of clean energy solutions. From investing in fuel cell technology, to grid modernization; from tidal power to nuclear; from tackling transportation to energy storage and battery technology, SB 460 is a solid step in the right direction for addressing climate change through advanced clean energy technologies.

We have an opportunity to truly invest in our future in a way that will create good paying jobs in Maryland, advance manufacturing for clean energy technologies, and set the State up to be a leader in clean energy innovation, allowing other states to follow suit. We cannot ban our way to a clean energy future. We must invest in the new technologies, and, more importantly, the new family-sustaining jobs that can be created, to support a clean energy future in Maryland.

For these reasons, we ask for a favorable report on SB 460.

SB0460 RRGSS FAV.pdf

Uploaded by: Gatte, Robert

Position: FAV

February 12, 2021

Senator Delores G. Kelley
Chair, Finance Committee
3 East
Miller Senate Office Building
Annapolis, MD 21401

Dear Senator Kelley:

I am writing to request your favorable support for SB 0460 “Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.”

I am currently a business and strategy consultant, who provides support for start-up enterprises with unique technology platforms, but whose founders require guidance regarding operations and product commercialization. Previously, I had a 30-year career working for W. R. Grace & Co. of Columbia, MD, where I was responsible for some of their largest catalyst businesses, as well as their technology development, strategy and product commercialization.

In 2020, I participated in a Maryland Clean Energy Center program called the Maryland Energy Innovation Accelerator. This unique program accelerates the commercialization of new technologies created in Maryland-based universities and Federal Labs with the goal of creating new Maryland-based technology and manufacturing businesses that will have a positive impact on Maryland’s climate goals.

For the past several months, I have been engaged by MEIA as an Executive in Residence, providing strategic guidance for HighT-Tech, LLC, a start-up organization that is currently receiving MEIA support. The company’s founders are professors at Johns Hopkins and UMD-College Park, where they have developed a unique technology with the potential to provide a variety of solutions for low-energy manufacturing of specialty materials, which will have applications as catalysts, battery components, specialized membranes, etc. All will have a positive impact on the environment, reducing carbon footprint and potentially enabling development of high-performance batteries.

This legislation provides baseline funding for the Maryland Clean Energy Center so that the Maryland Energy Innovation Accelerator can continue to accelerate Maryland-based technology and manufacturing businesses.

Your consideration and favorable support of SB 0460 will be much appreciated.

Sincerely,



Robert R. Gatte
Principal, RRG Strategic Services, LLC
309 Redbay Rd., Elgin, SC 29045
443-280-3779
bob.gatte@gmail.com

MEII Support Letter - ISS.pdf

Uploaded by: Girma, Gedielem

Position: FAV



Ion Storage Systems, Inc.
5000 College Ave, Suite 3122
College Park, MD 20740

February 2, 2021

Re: FAVORABLE SUPPORT REQUESTED for SB460/HB419

Dear Senate Finance and House Economic Matters Committee Members,

I am writing to **request your favorable support for SB 460/ HB 419- Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.**

Ion Storage Systems, Inc. is located in Maryland Legislative District 21. Ion Storage Systems' Lithium Metal battery technology is poised to propel domestic energy storage to previously unreachable levels of safety, performance and temperature operating ranges. This revolutionary technology will help position the US to energize a new domestic energy storage industry that can overtake the traditional Lithium-Ion manufactured overseas—bringing jobs and economic growth back to the US. With our core technology being initially designed and developed at the University of Maryland (UMD), ISS is now engaged in commercializing its next generation Lithium Metal technology choosing Prince George's county as the home of its newest R&D and manufacturing headquarters. This 20,000 sq ft facility the first of its kind in the state of Maryland will house Ion's initial commercial production footprint with state-of-the-art battery manufacturing, quality control and research and development tools and an increasing staff to support our growth.

I strongly support the development of an advanced energy economy in Maryland and believe that the state is making a smart investment through the Maryland Energy Innovation Institute (MEII). This investment simultaneously advances clean energy technologies developed in our academic institutions while promoting economic development through the innovation and commercialization of those technologies in the state.

MEII's Energy Incubator provided our company's first location to set up business in the state enabling us to launch off from a strong foundation to become the leading battery company in Maryland that we are today.

MEII's early support was absolutely critical in funding the development of this technology and generating venture capital interest

To date with the assistance of MEII we have received \$3.6M in federal and industry contracts and \$5.1M in private VC funding, currently employ 12 people in Maryland, and based on these successes have a plan for rapid growth. In recognition of this we were identified as one of the "Maryland Future 20" companies by Governor Hogan and the Maryland Department of Commerce.

For our success to be replicated in other Maryland university spin-offs MEII must have a stable definitive commitment of revenue to help support its operation. This legislation calls for such a commitment which my organization believes is a worthy investment.

Your consideration and **favorable support of SB 460 and HB 419** will be much appreciated.

Sincerely,

Richard Hanna

Richard Hanna
CEO, Ion Storage Systems, Inc.

SB460_BIO_Harrington_Fav.pdf

Uploaded by: Harrington, Gene

Position: FAV



To: The Honorable Delores Kelley, Chair
Members, Senate Finance Committee
The Honorable Brian Feldman

From: Gene Harrington

Date: February 12, 2021

Re: Support – SB 460 – Economic Development – Advanced Clean Energy and
Clean Energy Innovation Investments and Initiatives

My name is Gene Harrington, and I am the Director of State Government Affairs for Food and Agriculture for the Biotechnology Innovation Organization (BIO). I am also a lifelong Marylander, having been born in Montgomery County, raised in Prince George's County, and lived in Howard County for the last 20 years. I testify today on behalf of BIO – the world's largest trade group for the biotechnology sector – in strong support of SB 460 and respectfully urge the members of the Senate Finance Committee to give the legislation a favorable report.

SB 460 directs the Maryland Clean Energy Innovation Institute and Maryland Clean Energy Center to support state-based technology companies engaged in clean energy innovation including businesses engaged in the production of clean fuels and biotechnology for the reduction of direct and indirect agricultural emissions. BIO applauds Senator Feldman and Delegate Qi for crafting and sponsoring SB 460 and for their longstanding support of the biotechnology sector in Montgomery County and throughout the state. We also encourage Senator Feldman and Delegate Qi to add "renewable chemical production" to the definition of "advanced clean energy technology," so that entities engaged in such work – which will allow us to replace petroleum-based containers and packaging - can be eligible for support from the Institute and Center.

Two subsectors of the biotechnology industry - research, testing and medical labs and drugs and pharmaceutical – have especially deep footprints in Maryland. (According to 2020 BIO/TEconomy jobs report, Maryland's biotechnology industry is comprised of 2,483 entities, employing 39,710 people, with an average annual salary of \$118,664.) Montgomery County's technology corridor exemplifies these deep roots. SB 460 builds on the work the state has done to attract and keep those businesses by extending assistance to entrepreneurs in the agriculture and environmental biotechnology spaces. These incentives will hopefully help biotechnology businesses get established in other parts of the state such as Western Maryland and the Eastern Shore.

Thank you for your time and attention and please support SB 460 and give the measure a favorable report.

SB460_ACTIVECHARGE_Kohli FAV.pdf

Uploaded by: Kohli, Pranay

Position: FAV

ACTIVEcharge, LLC
1450 S Rolling Rd
Halethorpe, MD 21227



February 9, 2021

Senator Delores G. Kelley
Chair, Finance Committee
Miller Senate Office Building, 3 East
Annapolis, MD 21401

Dear Senator Kelley:

I am writing in favorable support for SB460 “Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.”

My name is Pranay Kohli and I am Chief Executive Officer of ACTIVEcharge. ACTIVEcharge is commercializing a wireless, self-powered sensor node that monitors the structural integrity and performance of wind turbine blades for both on-shore and off-shore turbines. Our solution lowers the costs of wind energy to the benefit of consumers and the environment. The core technology for ACTIVEcharge was developed by Professor Soobum Lee, who is a Professor of Mechanical Engineering at UMBC. Professor Lee and I are co-founders of the company, which is based at BWTech, a premier technology innovation incubator established by the state of Maryland and University system of Maryland on the UMBC campus.

In 2020, I participated in a Maryland Clean Energy Center program called the Maryland Energy Innovation Accelerator, or MEIA. This unique program accelerates the commercialization of new technologies created in Maryland-based universities and Federal Labs with the goal of creating new Maryland-based technology and manufacturing businesses that will have a positive impact on Maryland’s climate goals.

MEIA helped me in four important ways:

1. MEIA introduced me to Exelon, which operates wind generation assets. MEIA then facilitated a \$25,000 grant from Exelon to help with general operating expenses. I now meet regularly with Exelon Wind Generation to obtain feedback and advice on product features and my company’s value proposition, and I hope to launch a pilot program with Exelon soon.
2. MEIA funded the work of an Energy Executive named Erik Desrosiers, who built a detailed financial model for my business that caused me to re-think my business model and go-to-market strategy.
3. MEIA’s Summer 2020 pitch finale event exposed me to real seed investors, and MEIA continues to support my fundraising and federal grant writing efforts.

4. MEIA helped ACTIVEcharge apply for and win a Maryland Industrial Partnerships (MIPS) award.

I strongly believe that inventors such as Dr. Lee and early-stage startups like ACTIVEcharge benefit tremendously from MEIA's focus on advancing clean energy technologies. MEIA accelerated ACTIVEcharge's commercialization by providing us expert advice, by facilitating a Strategic Partnership with Exelon, and by continuing to be a partner focused on our success.

I urge you to support House Bill 419, which provides baseline funding for the Maryland Clean Energy Center so that the Maryland Energy Innovation Accelerator can continue to accelerate Maryland-based clean energy businesses.

Your consideration and favorable support of HB 0419 will be much appreciated.

Sincerely,



Pranay Kohli
Chief Executive Officer
ACTIVEcharge LLC
1450 S Rolling Rd.
Halethorpe, MD 21227
www.activecharge.us

SB 460 HB 419 CGC Testimony Favorable.pdf

Uploaded by: Kragie, Alex

Position: FAV

February 2, 2021

Jeffrey Schub
Executive Director
Coalition for Green Capital
1875 Connecticut Ave NW, 10th Floor
Washington, DC 20009

Re: FAVORABLE SUPPORT REQUESTED for SB460 / HB419

Dear Senate Finance and House Economic Matters Committee Members,

I am writing to **request your favorable support for Senate Bill 460 / House Bill 419: Economic Development - Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.**

The Coalition for Green Capital (CGC) is a non-profit with a mission to halt climate change by accelerating investment in clean energy technologies. CGC achieves this by advocating for, creating, and implementing green bank finance institutions. Green banks are a proven finance model that uses public and philanthropic funds to mobilize private investment in renewable energy, energy efficiency and other decarbonization technologies. For over a decade, CGC has led the green bank movement, working at the federal, state and local level in the U.S. and in countries around the world.

Our organization has been at the forefront of the green bank movement, and we believe this bill is important for establishing a reliably state-funded green bank in Maryland, which in turn will support the development of the advanced energy economy in Maryland. We believe that the state is making a smart investment in the Maryland Clean Energy Center (MCEC) and its subsidiary the Maryland Energy Innovation Accelerator (MEIA), as a way to encourage the successful adoption of clean energy generation, energy efficiency measures, and innovative emerging energy technologies.

Our organization currently runs the American Green Bank Consortium (which MCEC is a member of), a national trade association composed of 20 green banks in 14 states and the District. We have worked with the Maryland Clean Energy Center on numerous green bank initiatives and we are confident that this bill will allow Maryland to achieve an even greater leadership position in the US green bank movement. Maryland Senator Chris Van Hollen has been the national leader on green banks since the movement's inception in 2009. A well-funded Maryland Clean Energy Center, operating as a statewide green bank in partnership with its fellow Maryland green banks (The Climate Access Fund and the Montgomery County Green Bank), will drive investment in decarbonization technologies across the state. Senator Van Hollen is currently championing the creation of a Clean Energy and Sustainability Accelerator, a national green bank which would provide funding for state and local green banks across the country. Maryland should do all it can to position itself to receive and rapidly deploy this funding.

As an instrumentality, MCEC provides significant value to grow the clean energy industry through innovative finance and technical expertise. By leveraging capital to achieve its mission, MCEC has the capability and flexibility to do what the public sector may struggle to do directly and what the private sector is hesitant to do on its own. MCEC successfully facilitates partnerships and relationships to create business and employment opportunities.

MCEC has leveraged approximately 10 private dollars of investment for each public dollar spent. This investment goes towards achieving its mission, which includes the adoption of clean energy and energy efficiency products, services, and innovative technologies which support thousands of jobs in Maryland.

For this success to continue MCEC must have a stable commitment of funds to help support its operation, and signal to project partners and capital providers that they can predictably count on MCEC for investment transactions. This legislation calls for such a commitment, which the Coalition for Green Capital believes is a worthy investment.

Your consideration and favorable support of SB 460 and HB 419 will be much appreciated.

Sincerely,



Jeffrey Schub, Executive Director
Coalition for Green Capital
jeff@coalitionforgreencapital.com

SB0460 PulseIQ FAV.pdf

Uploaded by: Landsman, Adam

Position: FAV

February 12, 2021

Senator Delores G. Kelley
Chair, Finance Committee
Miller Senate Office Building, 3 East
Annapolis, MD 21401

Dear Senator Kelley:

I am writing to request your favorable support for SB 0460 “Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.”

I lead PulseIQ, an innovative energy management and information service focused on master-meter multifamily properties. We also manufacture a unique smart thermostat right here in Maryland.

In 2020, I participated in a Maryland Clean Energy Center program called the Maryland Energy Innovation Accelerator. This unique program accelerates the commercialization of new technologies created in Maryland-based universities and Federal Labs with the goal of creating new Maryland-based technology and manufacturing businesses that will have a positive impact on Maryland’s climate goals.

The MEIA connected us with a range of experts and service providers that helped us take our company from demonstration to commercialization. Together they helped us to develop a customer service contract, develop a financial plan, create sales collateral and marketing materials, and hone our value proposition. The MEIA also connected us with what became our first paying client in Maryland; a 250-unit high rise condominium building.

This legislation provides baseline funding for the Maryland Clean Energy Center so that the Maryland Energy Innovation Accelerator can continue to accelerate Maryland-based technology and manufacturing businesses.

Your consideration and favorable support of SB 0460 will be much appreciated.

Sincerely,

Adam Landsman, CEM, AMS, CMCA
President
Pulse IQ!, LLC

SB 0460 Tenley Consulting FAV.pdf

Uploaded by: Leifman, Michael

Position: FAV



February 12, 2021

Senator Delores G. Kelley
Chair, Finance Committee
3 East
Miller Senate Office Building
Annapolis, MD 21401

Dear Senator Kelley:

I am writing to request your favorable support for SB 0460 “Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.”

I am the president and owner of Tenley Consulting, a firm specializing in clean energy and technology innovation. My clients include small startups, large energy companies, NGOs, and multilateral development banks; in various ways I see and interact with multiple parts of the innovation ecosystem.

In 2020, I participated in a Maryland Clean Energy Center program called the Maryland Energy Innovation Accelerator. This unique program accelerates the commercialization of new technologies created in Maryland-based universities and Federal Labs with the goal of creating new Maryland-based technology and manufacturing businesses that will have a positive impact on Maryland’s climate goals.

I had the privilege of working with two separate startups through MEIA, one whose focus is to improve the efficiency and economics of tidal power and another whose focus is to improve the efficiency and economics of small, distributed windpower. Both areas are underdeveloped and will be important facets of our transition to a clean energy economy.

This legislation provides baseline funding for the Maryland Clean Energy Center so that the Maryland Energy Innovation Accelerator can continue to accelerate Maryland-based technology and manufacturing businesses.

Your consideration and favorable support of SB 0460 will be much appreciated.

Sincerely,

Michael M. Leifman
President, Tenley Consulting
3709 Alton Place, NW/ Washington, DC 20016
202-910-6868

MCEC MEIA Brief on HB 419-SB 460 2021.pdf

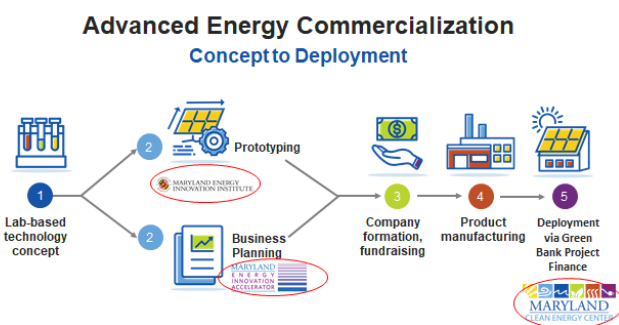
Uploaded by: Magruder, Katherine

Position: FAV

HB 419/ SB 460- Economic Development - Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives

Language included in the legislation:

- Broadens the definition of clean energy to include advanced energy and grid modernization technologies
- Clarifies the capability of MCEC to serve as the state Green Bank and to finance energy measures on state facilities
- Ensures a predictable, consistent annual appropriation of \$2.1 M to support the energy technology innovation activities of the Maryland Energy Innovation Institute, the work of the Maryland Clean Energy Center, and the Maryland Energy Innovation Accelerator
- Directs the transfer of funds from the SEIF to Maryland Energy Innovation Fund using RGGI proceeds.
- Alters the composition of the MCEC Board of Directors to include an ex officio seat for the Director of MEII



Background:
Maryland Energy Innovation Institute (MEI²);

Maryland Clean Energy Center (MCEC); and

Maryland Energy Innovation Accelerator (MEIA)
Work together to move advanced energy technologies from the lab to market adoption.

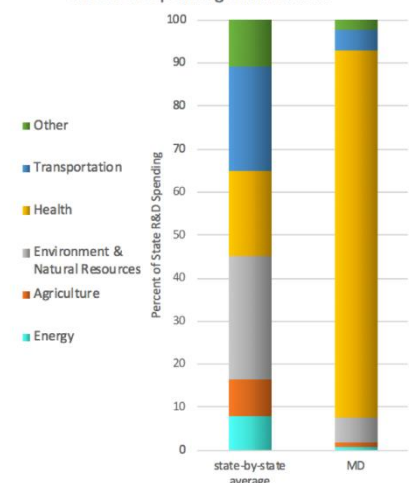
It will take more financial resources than public funds available to achieve state climate goals and grow the innovation economy in Maryland. MEI² and MCEC are crowding in federal and private capital for every state dollar spent to address the need faster and more efficiently.

With Maryland's energy research leadership and appropriate innovation infrastructure this could be major growth area for the Maryland economy. However, Maryland is last (#50) among all states in diversity of technology support for economic development, and there was no Maryland focused early stage energy investment in Maryland until MEI².

MEI² Funding Supports Innovation Seed Grants to bridge the gap between transformative academic research and VC-Ready Proof-of-Concept. In first three years 14 seed grants were awarded to University of Maryland College Park (UMCP), University of Maryland Baltimore County (UMBC), University of Maryland Eastern Shore (UMES), Johns Hopkins University (JHU), and Morgan State University (MSU). Demand for these seed grants has grown rapidly far exceeding current budget to support.

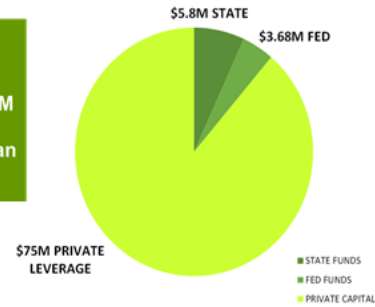
MEI² Funding helps grow Maryland's federal energy research funding and to date has provided a 20X ROI for the State.

State R&D Spending Distributions



MCEC Financing Programs crowd in private capital for Municipal, University, School, Not-for Profit, Small Business, Commercial, Industrial, Agricultural and Residential consumers deploy clean energy technologies.

\$9.48M investment of public funds generated approximately \$75M in private capital investment for clean energy solutions.



MEIA, a program of MCEC, facilitates translation of emerging energy technologies from research to market by wrapping business expertise around licensable discoveries to pull them toward commercialization.

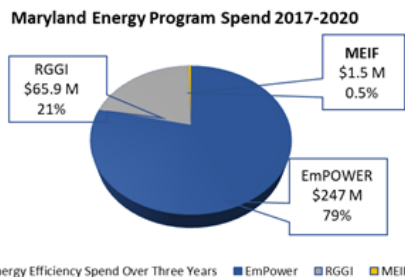
Without a predictable commitment of operating capital MCEC will be unable to continue successfully helping create new companies and financing energy cost saving measures for consumers.

Public funding for state energy programs and investments averaged \$314M in the past three years, and RGGI revenue trended to grow for the past three years; but the commitment to the Maryland Energy Innovation Fund, to support MEI² and MCEC has been only 0.5% of that total for the same period.

EmPOWER surcharge and RGGI proceeds combined expenditures averaged approximately \$314M/ yr.

MEIF state funding for the last three years has been less than 0.5% of that total

It will only be 0.6% with added funding.

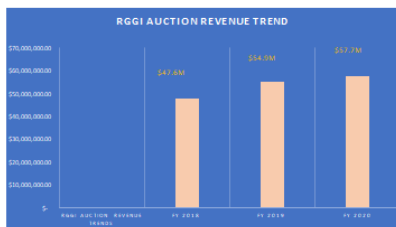


\$1.5M of RGGI proceeds funding for the MEIF has been included in the budget for spending the Strategic Energy Innovation Fund since 2017. HB 419/ SB460 Seeks to continue the investment with a minor increase in the future.

*RGGI for FY18, 19 & 20 EmPOWER for Calendar 2017, 2018 & 2019

RGGI Revenue Trending Upward from FY18-20

RGGI REVENUE avg. \$50M/yr.



FY20 Strategic Energy Investment Fund Actual Expenditures

APPENDIX A: SEIF Funding Details

SEIF Expenditures and Appropriations	FY2020 Actual	FY2021 Appropriation
Maryland Department of the Environment - RGGI Inc. Dues	353,985	500,000
Maryland Department of the Environment - Energy Water Infrastructure Program	3,105,033	
Maryland Department of the Environment - Climate Change	2,850,000	2,500,000
University of Maryland (Maryland Energy Innovation Fund)	1,500,000	1,500,000
Department of Human Services - Energy Bill Assistance	19,942,824	19,850,329
Department of General Services	505,000	500,000
Department of Health - Energy Performance Contracting Requirements	2,039,087	2,037,973
Maryland Energy Administration - Energy Efficiency - Low-to-Moderate Income	6,000,000	6,700,000
Maryland Energy Administration - Renewable Energy, Transportation, and Resiliency	3,865,110	5,000,000
Maryland Energy Administration - Admin	14,722,565	22,369,721
Maryland Energy Administration - Other	4,427,858	4,883,187
Maryland Energy Administration - Offshore Wind Development	1,991,832	1,500,000
Department of Commerce		200,000
Maryland Department of Labor	542,832	400,000
Department of Natural Resources		500,000
Dept. Housing and Community Development	574,776	
Maryland General Fund - State agency electric vehicles	2,368,958	2,250,000
Maryland Department of Agriculture	1,381,668	
Motor Vehicle Administration - Electric Vehicle Tax Credit reimbursement	6,993,583	0
TOTAL	\$71,217,609	\$70,641,210

\$1.5 M was included in the SEIF appropriation for MEIF sub-grantees.

Bill calls for an increase of \$600,000 in the future.

Source: MEA Strategic Investment Fund Activities for FY2020

Contact us:

Dr. Eric Wachsman, Director; Maryland Energy Innovation Institute ewachs@umd.edu

Kathy Magruder, Executive Director; Maryland Clean Energy Center ikm@mdcleanenergy.org

MCEC Testimony FAV SB 460 1.25.21.pdf

Uploaded by: Magruder, Katherine

Position: FAV



January 25, 2021

The Honorable Delores Kelley, Chair
Members of the Senate Finance Committee
3 East Miller Senate Office Building
11 Bladen Street
Annapolis, Maryland 21401

**Re: FAVORABLE SUPPORT FOR SB 460
“Economic Development- Advanced Clean Energy & Clean Energy Innovation Investments and Initiatives”**

As members of the Board of Directors of the Maryland Clean Energy Center, we are writing to request your favorable support for SB 460; “Economic Development- Advanced Clean Energy & Clean Energy Innovation Investments and Initiatives”.

This legislation focuses on providing financial support for the commercialization of advanced energy technologies and innovation, as well as a commitment of consistent, predictable and acceptable amount of baseline operating capital to allow MCEC to operate in the marketplace with certainty.

Since its inception MCEC has leveraged over \$75M in private capital against the total amount of state funds invested, resulting in approximately a 10 to 1 return on investment. However, unlike successful green banks set up in statute by other states, MCEC has never had a dedicated source of operating or leveraging funds, consequently the impact envisioned for its mission has been limited.

In 2017 statute directed \$1.5M per year to the MEIF with subsequent distribution of approximately \$900K to MCEC and \$600K for research supporting grants to Maryland Energy Innovation Institute (MEI²). Funds flow through the Maryland Energy Investment Fund (MEIF), created by statute in 2017, to MCEC and the MEI², housed at the University of Maryland Energy Research Center at UM College Park. This current funding commitment is scheduled to sunset in FY22.

SB 460 would direct \$2.1M of funding, from RGGI proceeds housed in the Strategic Energy Investment Fund (SEIF), annually to keep MCEC in operation, and signal capital providers that partnering with the instrumentality for clean energy project delivery is a worthwhile investment. RGGI auction proceeds collected by Maryland overall have been averaging \$80M annually consequently, should that trajectory continue, the investment of those proceeds in MEIF proposed in this bill would be less than 3% overall.

The increase of funding is largely intended to be used for additional research grants, and technical support being provided by MCEC through the Maryland Energy Innovation Accelerator (MEIA) to rapidly move advanced energy technologies from concept to the market. This tech transfer initiative will create companies, jobs and revenue for the Maryland economy.

Page 2/ MCEC Testimony SB 460

The bill calls for an ex-officio seat to be created for the Director of the Maryland Energy Innovation Institute on the Board of Directors of the Maryland Clean Energy Center, to facilitate cooperation and communication between both entities.

In SB 460, MCEC is seeking official designation as the statewide green bank, as intended when the instrumentality was created. MCEC is well positioned with its statutory capabilities, to be the conduit for Federal investment in the Clean Energy & Sustainability Accelerator currently proposed in congressional legislation supported by the Biden Administration to flow to Maryland. MCEC can facilitate expeditious deployment of funds, combined with private investment to install clean energy and energy efficiency measures desired by various consumer stakeholders in the state.

We are requesting your favorable support for this legislation, which will help MCEC and MEI² crowd in even more private investment per public dollar spent. We believe the funding requested in SB 460 is a sound investment of publically managed funds to do more to help create and retain jobs in the energy sector, reduce energy costs for consumers, and mitigate the impact of climate change as a broader but related goal.

SB 460_MCEC_Magruder_FAV.pdf

Uploaded by: Magruder, Katherine

Position: FAV

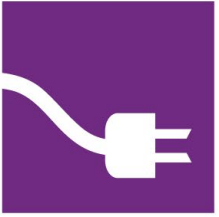


Katherine Magruder, Executive Director
Testimony for HB 419 / SB460

February 16, 2021

FEB 16, 2021

created with an economic development mission



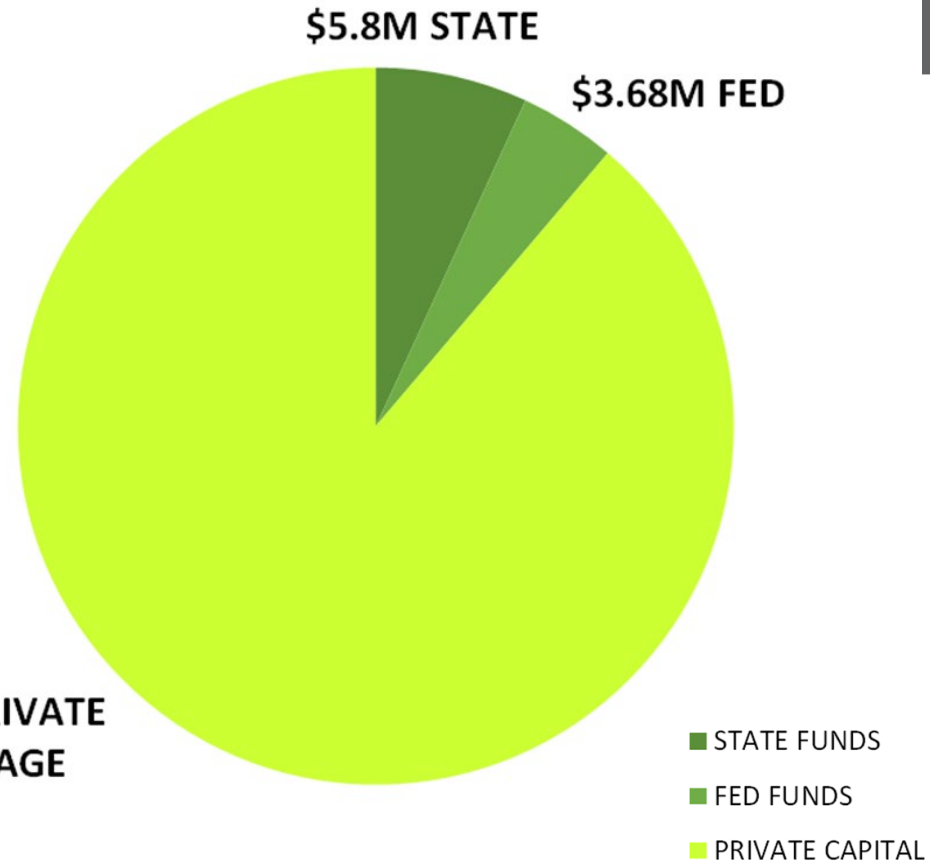
“MCEC bridges the gap between what the public sector can’t do and what the private sector doesn’t do.”

Geoff Oxnam
Founder & CEO American Microgrid Solutions
MCEC Board Chair



Financing Programs Crowd in Private Capital

**\$9.48M investment
of public funds
generated
approximately \$75M
in private capital
investment for clean
energy solutions.**



**\$75M PRIVATE
LEVERAGE**



a program of MCEC launched in 2019



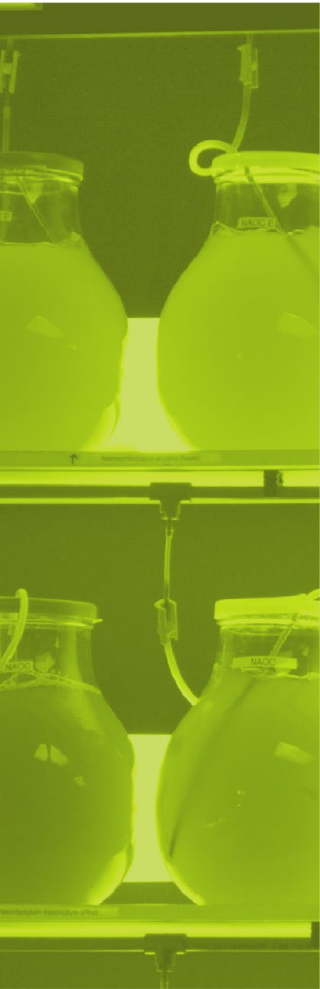
MEIA is building new industry and enhancing the energy innovation eco-system in the state.

MEIA facilitates translation of emerging energy technologies from research to market by wrapping business expertise around licensable discoveries to pull them toward commercialization.



Maryland has aggressive energy and greenhouse gas reduction goals, and municipalities are concerned about resilience and environmental justice.

It will take more financial resources than public funds available to achieve state climate goals and grow the innovation economy in Maryland.



FY20 Strategic Energy Investment Fund Actual Expenditures

APPENDIX A: SEIF Funding Details

Table 13

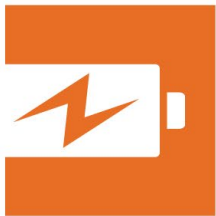
SEIF Expenditures and Appropriations		
	FY2020 Actual	FY2021 Appropriation
Maryland Department of the Environment - RGGI Inc. Dues	353,585	550,000
Maryland Department of the Environment - Energy-Water Infrastructure Program	3,105,033	
Maryland Department of the Environment - Climate Change	2,850,000	2,550,000
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Maryland Energy Administration - Renewable Energy, Transportation, and Resiliency	14,722,565	22,369,721
Maryland Energy Administration - Admin	4,427,658	4,683,187
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Department of Commerce		200,000
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Dept. Housing and Community Development	574,776	
Maryland General Fund - State agency electric vehicles	2,366,956	2,250,000
Maryland Department of Agriculture	1,381,668	
Motor Vehicle Administration - Electric Vehicle Tax Credit reimbursement	5,993,583	0
TOTAL	\$71,217,609	\$70,641,210



\$1.5 M was included in the SEIF appropriation for MEIF sub-grantees.

Bill calls for an increase of \$600,000 in the future.

Source: MEA Strategic Investment Fund Activities for FY2020



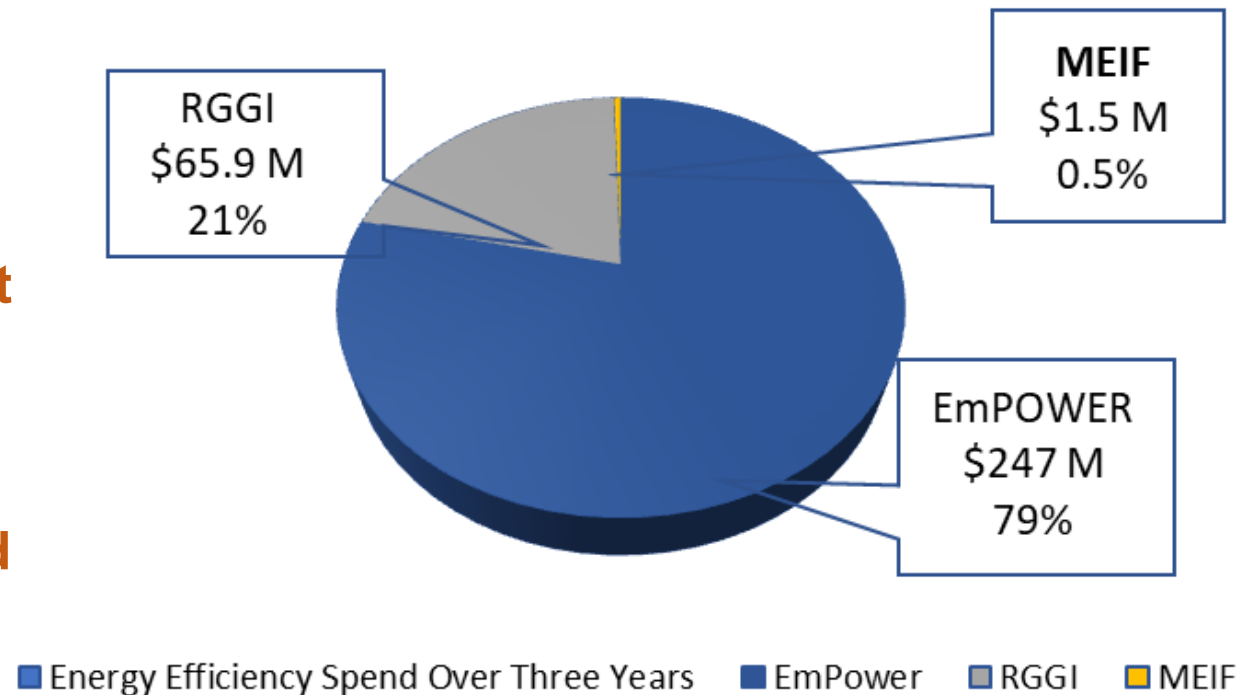
How funding requested may impact State programs and investments?

EmPOWER surcharge and RGGI proceeds combined expenditures averaged approximately \$314M/ yr.

MEIF state funding for the last three years has been less than 0.5% of that total

It will only be 0.6% with added funding.

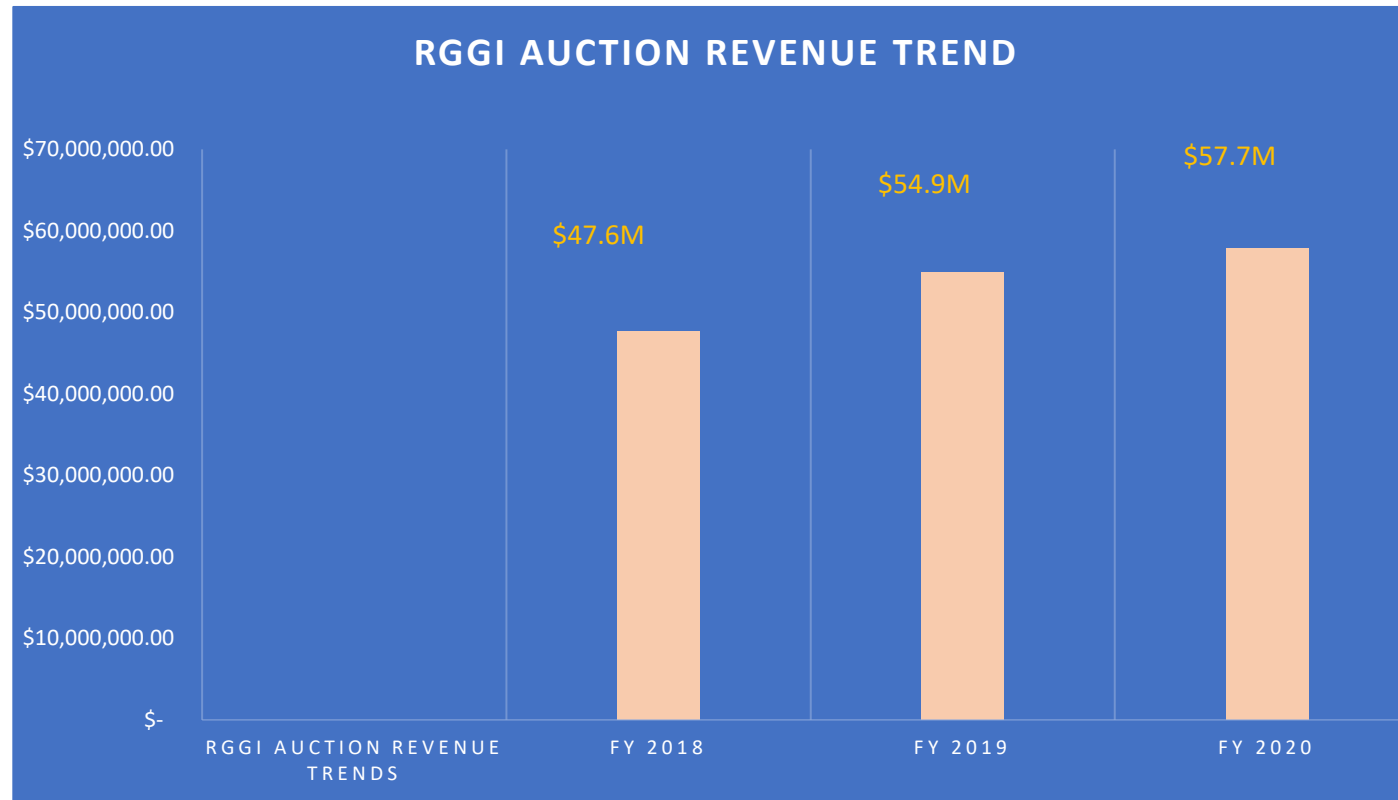
Maryland Energy Program Spend 2017-2020





RGGI Revenue Trending Upward from FY18-20

RGGI REVENUE avg. \$50M/yr.



SB0460 Genseed LLC FAV.pdf

Uploaded by: Margolis, Benjamin

Position: FAV

February 12, 2021

Senator Delores G. Kelley
Chair, Finance Committee
3 East Miller Senate Office Building
Annapolis, MD 21401

Dear Senator Kelley:

I am writing to request your favorable support for SB 0460 “Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.”

I am currently the Principal at genseed advisors (www.genseed.co), a consulting firm that focuses on advising start-ups in the advanced clean energy space. I am a graduate of the University of Maryland, College Park that has been involved in the clean energy space in this region for over a decade. Maryland has a history of innovation in the clean energy industry, at one point home to the largest solar panel manufacturer in the world. Maryland also has a history of exporting the innovation as other states have stepped in to support both early-stage innovation and later stage deployment of the technologies.

In 2020, I supported the Maryland Clean Energy Center program called the Maryland Energy Innovation Accelerator, acting as the Commercialization Manager. This unique program accelerates the commercialization of new technologies created in Maryland-based universities and Federal Labs with the goal of creating new Maryland-based technology and manufacturing businesses that will have a positive impact on Maryland’s climate goals.

This bill is important to me because I support the development of the advanced energy economy in Maryland. The Maryland Energy Innovation Accelerator is playing a key role in fusing the energy innovation ecosystem into a point of incredible pride for the state of Maryland. I believe that the state is making a smart investment in the Maryland Clean Energy Center to encourage the successful adoption of clean energy generation, energy efficiency measures and innovative emerging energy technologies. It is equally important to expand the Maryland Clean Energy Center’s role in innovation to grow Maryland’s budding energy innovation ecosystem into the economic powerhouse that it can become.

This legislation provides baseline funding for the Maryland Clean Energy Center so that the Maryland Energy Innovation Accelerator can continue to accelerate Maryland-based technology and manufacturing businesses.

Your consideration and favorable support of SB 0460 will be much appreciated.

Sincerely,



Ben Margolis
Principal, Genseed LLC
11405 Monterrey Drive, Silver Spring, 20902
(240) 763-0185

test.pdf

Uploaded by: Mehta, Nikki

Position: FAV

February 12, 2021

Senator Delores G. Kelley
Chair, Finance Committee
3 East
Miller Senate Office Building
Annapolis, MD 21401

Dear Senator Kelley:

I am writing to request your favorable support for SB 0460 “Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.”

My name is Nikki Mehta and I have my own business, Mehta Consulting Services. My company helps clean energy technology companies commercialize their innovations and overcome barriers that might lead to failure. I have tenured career in product management and marketing with technology companies including Cisco Systems, Deltek, and Textura.

In 2020, I participated in a Maryland Clean Energy Center program called the Maryland Energy Innovation Accelerator. This unique program accelerates the commercialization of new technologies created in Maryland-based universities and Federal Labs with the goal of creating new Maryland-based technology and manufacturing businesses that will have a positive impact on Maryland’s climate goals.

The MEIA gave me a unique opportunity to coach and mentor entrepreneurs who had very unique innovations to reduce our carbon emissions. The process that MEIA established allowed each team within six months to determine the best commercial path. We went through a rigorous process of customer discovery, defining the business model, determining product market fit, eliminating markets where the barriers would be too high, and then working on go to market strategy (company name, value proposition, funding possibilities, etc). This allowed me to establish credibility and I know have several contracts with clean energy technology companies in the DC area.

MEIA is critical program needed to ensure that we continue to innovate and commercialize clean energy technology. Your consideration and favorable support of SB 0460 will be much appreciated.

Sincerely,

Nikki Mehta
Mehta Consulting Services
703-439-4115

SB460 CHESSA FAV.pdf

Uploaded by: Murray, David

Position: FAV



**Before the General Assembly of the State of Maryland
Senate Finance Committee
February 16, 2021**

**Testimony of David W. Murray
Executive Director
Chesapeake Solar & Storage Association
SB 460: Economic Development - Advanced Clean Energy and Clean Energy Innovation
Investments and Initiatives
FAVORABLE**

On behalf of the Maryland solar industry, I am writing to request your favorable support for Senate Bill 460. We applaud Senator Feldman for his leadership in making a smart investment in the Maryland Clean Energy Center (MCEC) and its subsidiary the Maryland Energy Innovation Accelerator (MEIA). This will support the successful adoption of solar energy generation and energy storage technologies.

MCEC provides significant value to the solar industry through innovative finance and technical expertise. By leveraging capital where the private market otherwise would not, MCEC plays a vital role in financing innovative renewable energy projects. In addition to financing, MCEC supports key partnerships and relationships to create business and employment opportunities.

Throughout my tenure as Executive Director, I have appreciated working alongside Kathy Magruder, Pamela Powers, and Sabrina Bachmann and participating in legislative review sessions, networking events, and conferences. The institution serves as a hub for clean energy and efficiency issues for the state, the SB460 would solidify this role in the long term.

To date, MCEC has leveraged private investment at ratio of approximately 10 to 1 for every public dollar spent, to succeed at its statute directed mission. This includes advancing adoption of clean energy and energy efficiency products, services, and innovative new technologies which support thousands of jobs in Maryland. For this success to continue MCEC must have a stable definitive commitment of revenue to help support its operation, and signal to project partners and capital providers that they can predictably count on MCEC for investment transactions.

The Chesapeake Solar & Storage Association recommends a favorable vote on SB 460.

Sincerely,

David Murray
Executive Director
Chesapeake Solar & Storage Association (CHESSA, formerly MDV-SEIA)

SB 460_Favorable_Stanek.pdf

Uploaded by: Stanek, Jason

Position: FAV

STATE OF MARYLAND

OFFICE OF THE
CHAIRMAN

JASON M. STANEK



PUBLIC SERVICE COMMISSION

February 12, 2021

Chair Delores G. Kelley
Senate Finance Committee
3 East, Miller Senate Office Building
Annapolis, MD 21401

RE: SB 460 – Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives – [FAVORABLE]

Dear Chair Kelley, Vice Chair Feldman, and Committee Members:

I offer this letter of support for Senate Bill 460, which in my view would ensure that the Maryland Clean Energy Center (MCEC) and the Maryland Energy Innovation Institute (MEII) are well positioned to help secure Maryland’s clean energy future. Together, MCEC and MEII already lead cutting-edge work in the development of advanced clean energy technology, energy efficient products and services. MCEC serves as an incubator for Maryland’s clean energy industry, promoting jobs, driving economic business development in local communities, and assisting in the commercialization of innovative technologies. Likewise, MEII facilitates the transition of impactful research into new technology, tackling global and local energy problems and bringing together science and industry to advance innovation with a focus on locally-based entrepreneurship.

SB 460 requires MCEC and MEII to implement an accelerator program for Maryland-based clean energy technology companies and provide them with seed funding, training, and developmental support. This is a logical “next step” for Maryland-based start-up companies that need resources and tools to scale growth. SB 460 also designates MCEC as the State’s green bank and further clarifies its financing authority for clean energy projects on State-owned or leased property. Importantly, to support MCEC’s program efforts, SB 460 establishes additional funding for MCEC and MEII, through the Maryland Strategic Energy Investment Fund (SEIF), which will be critical for program success. A significant source of SEIF proceeds comes from Regional Greenhouse Gas Initiative (RGGI) auctions. In the past two years, Maryland’s RGGI auction proceeds have increased annually—19.8% in 2019 and 31.72% in 2020—compared to 2018 proceeds, even though the State’s total CO₂ allowances sold continue to decrease under the RGGI allowance cap. To the extent the recent increases in CO₂ allowance prices are due in part

WILLIAM DONALD SCHAEFER TOWER • 6 ST. PAUL STREET • BALTIMORE, MARYLAND 21202-6806

410-767-8000

Toll Free: 1-800-492-0474

FAX: 410-333-6495

MDRS: 1-800-735-2258 (TTY/Voice)

Website: www.psc.state.md.us

to New Jersey' recent re-entry in RGGI, the addition of Virginia's participation in RGGI beginning this spring and Pennsylvania's expected participation next year could see sustained levels of RGGI proceeds for Maryland in the years to come.

Clean energy innovation and deployment remains a core strategy for mitigating and reversing the harmful effects of anthropogenic climate change. However, clean energy should not be viewed through a monodisciplinary lens; rather, cross-sector strategies and solutions are needed to reach Maryland's aggressive clean air and clean energy goals. MCEC and MEII are leading the charge on promoting the development of advanced clean energy technologies and new approaches to reducing greenhouse gas emissions in the State. Senate Bill 460 would, among other things, provide MCEC and MEII with the resources needed to support and promote the success of Maryland-based clean energy technology companies. For the above reasons, I respectfully request that the Committee grant a favorable report for Senate Bill 460.

Sincerely,



Jason M. Stanek
Chairman

SB0460-603526-01.pdf

Uploaded by: Struse, Frederica

Position: FAV



SB0460/603526/1

AMENDMENTS
PREPARED
BY THE
DEPT. OF LEGISLATIVE
SERVICES

03 FEB 21
12:16:21

BY: Senator Feldman
(To be offered in the Finance Committee)

AMENDMENT TO SENATE BILL 460

(First Reading File Bill)

On page 13, in line 15, strike “AND”; and in the same line, after “COMPANIES” insert “, AND PILOT PROJECTS FOCUSED ON ON-SITE CLEAN ENERGY GENERATION FOR BUILDINGS”.

SB0460-653622-01.pdf

Uploaded by: Struse, Frederica

Position: FAV



SB0460/653622/1

AMENDMENTS
PREPARED
BY THE
DEPT. OF LEGISLATIVE
SERVICES

04 FEB 21
16:53:36

BY: Senator Feldman
(To be offered in the Finance Committee)

AMENDMENT TO SENATE BILL 460
(First Reading File Bill)

On page 7, in line 21, after “AS” insert “A GREEN BANK FOR”; in line 22, strike “GREEN BANK”; in the same line, strike “AND”; and in line 23, after “(6)” insert “ENCOURAGE THE MARYLAND CLEAN ENERGY CENTER TO WORK IN CONJUNCTION WITH OTHER LOCAL AND PRIVATE GREEN BANKS; AND

(7)”.

On page 8, strike line 22 in its entirety and substitute:

“(6) WORK IN CONJUNCTION WITH LOCAL AND PRIVATE GREEN BANKS.”.

SB0460 Carbontech Toll FAV.pdf

Uploaded by: Toll, Brian

Position: FAV



CARBON TECHNOLOGY INSTITUTE

February 12, 2021

Senator Delores G. Kelley
Chair, Finance Committee
Miller Senate Office Building, 3 East
Annapolis, MD 21401

Dear Senator Kelley:

I am writing to request your favorable support for SB 0460 “Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.”

I am Managing Director of Carbon Technology Institute (www.carbontech.org), a consulting firm located in Chevy Chase, Maryland that assists Maryland-based startups with technology commercialization. CTI currently supports the Maryland Energy Innovation Accelerator in a consulting capacity.

The Maryland Clean Energy Center operates a program called the Maryland Energy Innovation Accelerator (MEIA). This unique program accelerates the commercialization of new clean energy and climate technologies created in Maryland-based universities and Federal Labs with the goal of creating new Maryland-based technology and manufacturing businesses.

This program provides incremental, specialized support to increase the likelihood of success including matching to experience energy executives, wraparound professional services, and project management by MEIA’s experienced staff. After just one year, this program has helped 8 startups explore product-market fit. There are many more exceptional technologies in progress at Maryland’s top tier research universities that MEIA is ready to support.

This legislation provides baseline funding for the Maryland Clean Energy Center so that the Maryland Energy Innovation Accelerator can continue to accelerate Maryland-based technology and manufacturing businesses. **Your consideration and favorable support of SB 0460 will be much appreciated.**

Sincerely,

Brian Toll
Managing Director
brian@carbontech.org

SB 460_MEII_Wachsman_FAV.pdf

Uploaded by: Wachsman, Eric

Position: FAV

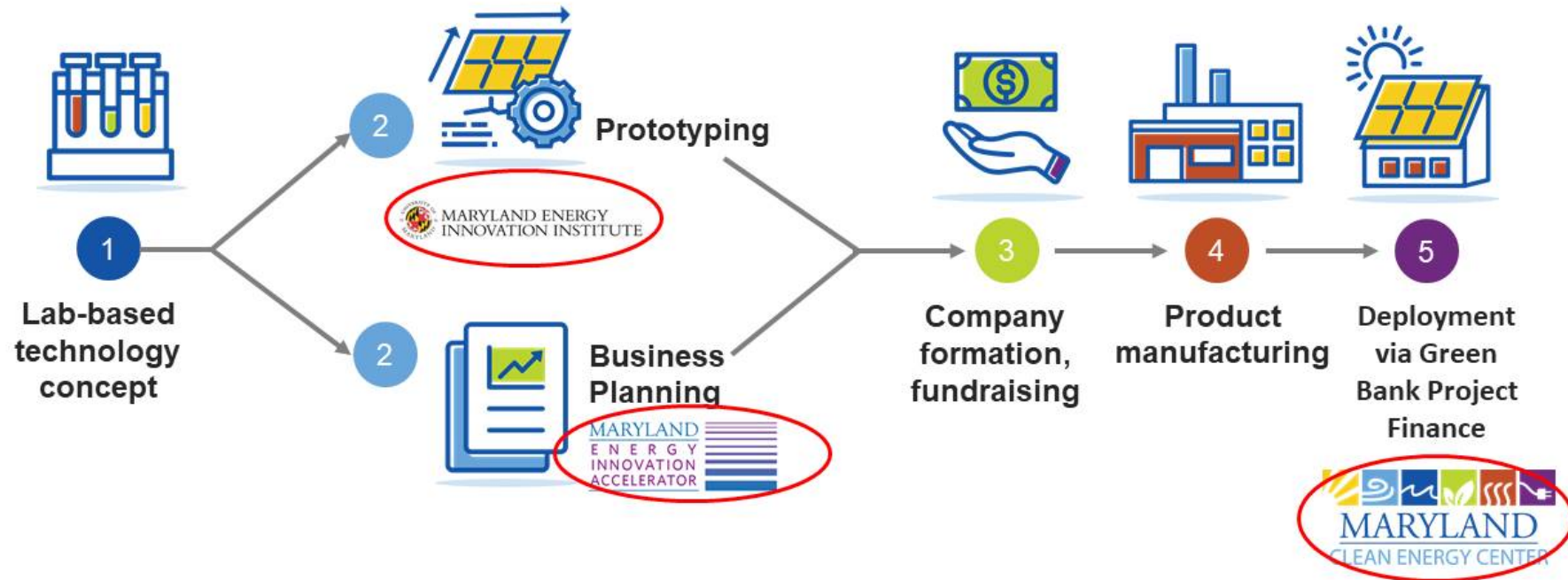
Maryland Energy Innovation Institute

Eric D. Wachsman, Director MEI²

www.energy.umd.edu

Senate Finance Committee Testimony for HB419 / SB460

Advanced Energy Commercialization Concept to Deployment



MEI² Energy Research

Maryland an academic powerhouse in energy research:



DOE BES Energy Frontier Research Center, \$29M



Bi-National Center on Solid State Batteries, \$18.4M



Transformational Army Batteries, \$7.2M + \$10M (FY21)



- UMD leads the nation in DOE ARPA-E Awards (*2nd only to MIT*), leading or participating in 28 awards for \$64M in research funding since 2009 *ARPA-E is the only DOE agency focused on energy innovation and economic development*
- Since its creation in 2017 MEI² has helped obtain \$55M in federal funding for the State of Maryland economy
- **MEI² has provided a 23X rate of return on Maryland's investment** based on its share of the SEIF (\$2.4M to date)

Transforming MEI² Research to Innovation



MEI² legislation (HB410 / SB313) mandated report to Governor and General Assembly on development, deployment, and commercialization of clean energy technology from SEIF and other forms of financing and any need for additional funding for these purposes.

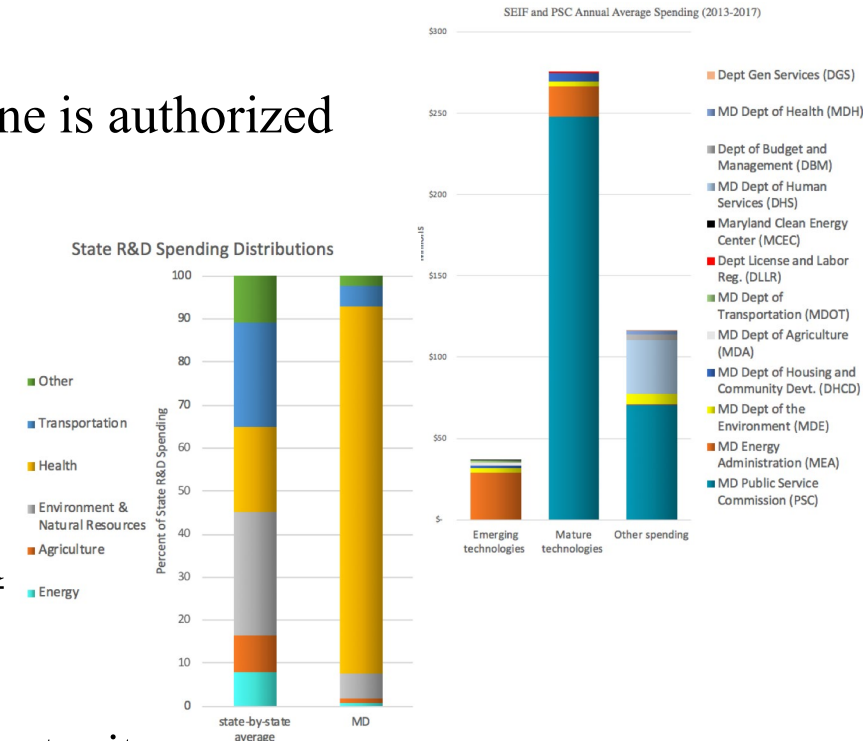
Report Findings include:

- With Maryland's energy research leadership and appropriate innovation infrastructure this could be major growth area for the Maryland economy.

- Maryland spends over \$400M/yr on energy-related programs. However, none is authorized to support in-state development of clean energy firms.
- Maryland is last (#50) among all states in diversity of technology support for economic development
- Health-related R&D accounts for on average 85% of Maryland's total investment
- There was no Maryland focused early stage energy investment in Maryland until MEI²

Report Recommendations include:

- Designate clean energy an economic development opportunity
- Expand seed funding and developmental support for clean energy innovation (**HB419 / SB460**)



Transforming MEI² Research to Innovation

MEI² Innovation Seed Grants

- Bridge the gap between transformative academic research and VC-Ready Proof-of-Concept
- Advance energy technology and economic growth of Maryland university spin-off company. Must have appropriate IP protection and commercialization plan.
- In first three years 14 seed grants were awarded to University of Maryland College Park (UMCP), University of Maryland Baltimore County (UMBC), University of Maryland Eastern Shore (UMES), Johns Hopkins University (JHU), and Morgan State University (MSU).
- Demand for these seed grants has grown rapidly far exceeding current budget to support.
- Several have resulted in follow on private investment.

MEI² Investment Committee

Ellen Williams, UMD Distinguished University Professor, Former Director ARPA-E (DOE)

Julie Lenzer, Assoc. Vice-President for Economic Development, UM Ventures

Eric Chapman, Asst. Vice-President of Research, UMD

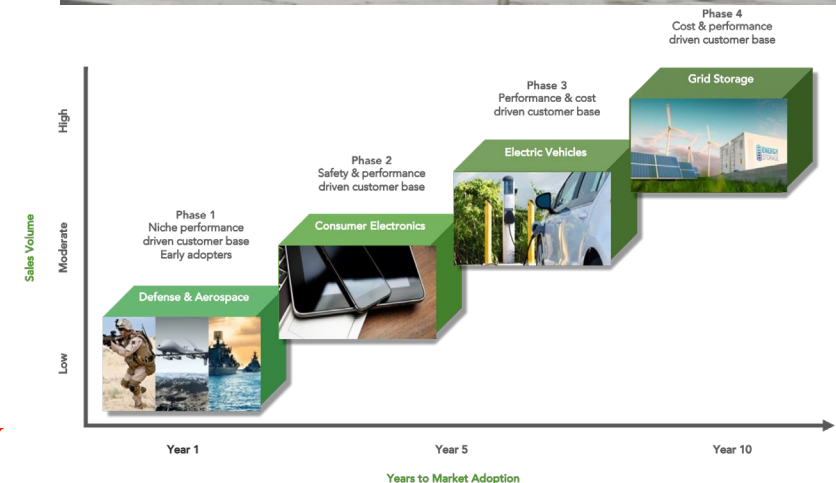
Rob Briber, Interim Dean, A. James Clark School of Engineering

Arti Santhanam, Exec. Director Innovation Initiative, TEDCO

Transforming MEI² Innovation to Jobs

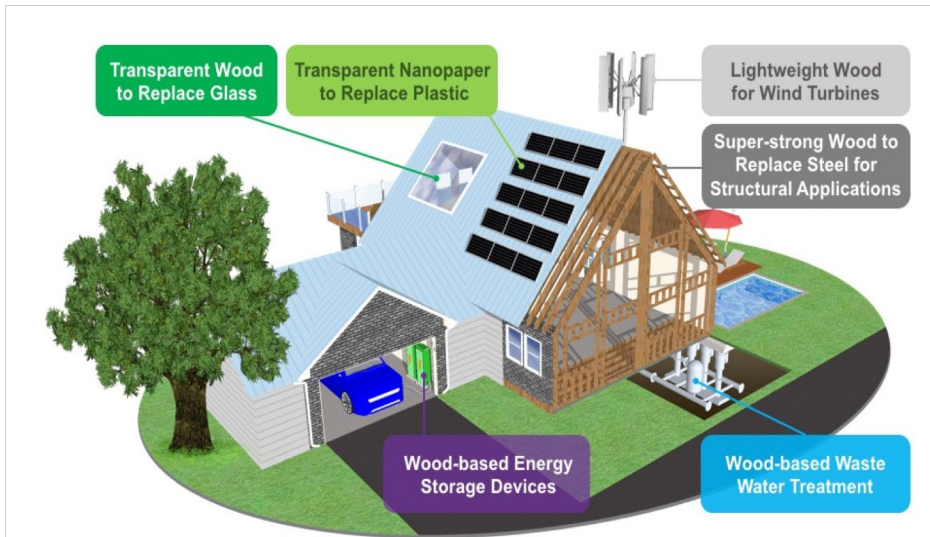


- Commercializing next generation batteries developed at UMD
- Over \$20M in R&D funding       
- \$8M investment lead by Alsop Louie Partners 
- 17 Employees and growing
- CEO, *former Exec Director Battery Operations - Apple*
- Moving into 20,000 ft² facility
- Scaling to 10 MWh/yr production
- Commercial prototypes available Q1 2021
- First product in defense market due to higher margin at lower volume
- Moving to higher volume markets as scale production
- Selected as “*Maryland Future 20*” company



Transforming MEI² Innovation to Jobs

InventWood™
From Nature | For the Future



Revolutionary Technology, Millions of Years Old

InventWood is transforming the world by developing cellulose-based materials that are high-quality, cost-effective, and environmentally-sustainable. Our proprietary technologies offer superior alternatives to the most commonly-used materials today while providing solutions to some of the world's most intractable environmental challenges.

Revolutionizing Sustainable Building Materials

MettleWood™



An extremely strong and tough material that is stronger, lighter, and cheaper than titanium and carbon fiber. It also offers numerous safety benefits over alternatives, and it is responsibly created and biodegradable.

Potential uses:



Insulating Wood



A bright-white material that is stronger than natural wood and insulates against both heat loss and impacts better than commercially available alternatives. It is also biodegradable and eco-friendly.

Potential uses:



Transparent Wood



A clear wood material that is lighter and tougher than glass, with up to 3x better thermal insulation. It also offers benefits in terms of both light channeling (to reduce glare) and far more environmental sustainable.

Potential uses:



• Selected as “*Maryland Future 20*” company

SB460 Testimony.pdf

Uploaded by: Wachsman, Eric

Position: FAV



UNIVERSITY OF MARYLAND

GLENN L. MARTIN INSTITUTE OF TECHNOLOGY
A. JAMES CLARK SCHOOL OF ENGINEERING

Building 089
College Park, Maryland 20742-2115
301.405.8193 TEL 301.314.2029 FAX
ewach@umd.edu
www.energy.umd.edu

Maryland Energy Innovation Institute

Eric D. Wachsman, Director

Maryland Energy Innovation Institute (MEI²) was created in 2017 through an Economic Development Act (HB410/SB313) of the Maryland General Assembly. MEI² works in partnership with academic institutions across the state to help attract federal and private support of Maryland energy research and innovation, with the specific economic development goal of commercializing emerging and transformative advanced clean energy technologies in Maryland.

Bill Number: SB 460

Title: Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives

Hearing Date: February 16, 2021

Committee: Senate Finance Committee

Recommendation: FAVORABLE SUPPORT REQUESTED

Maryland universities are established leaders in energy research and innovation. The University of Maryland, College Park, leads multiple large \geq \$10M federally (e.g., DOE Energy Frontier Research Center - efrc.umd.edu, DOD Center for Research on Extreme Batteries - creb.umd.edu, and the Binational Industrial Research and Development (BIRD) Foundation Energy Storage Center - <https://us-isr-energycenter.org/energy-storage>) and industry (e.g., Center for Environmental Energy Engineering - cee.umd.edu) supported energy research centers. Moreover, UMCP leads the nation (2nd only to MIT among all US universities) in DOE Advanced Research Projects Agency – Energy (ARPA-E - arpa-e.energy.gov) awards (28 awards for \$64M) specifically for energy innovation and commercialization.

MEI² is the only entity focused on translating Maryland’s energy research leadership to commercial success. Maryland spent \$400M/year on average for last 5 years on EmPOWER and Strategic Energy Investment Fund, but other than MEI² none of it was focused to support commercial development of in-state clean energy technologies. Compared to rest of nation, Maryland is 50th (last) in diversity of State R&D spending with 85% of it going to health-related R&D and <1% going to energy.

MEI² leverages small Maryland investment to increase federal and private investment to grow the advanced energy economy in the State. Since its creation in 2017 MEI² has leveraged a small State investment (MEI² portion to date is \$2.4M) to obtain over \$55M in federal funding, a factor of **>20X return on investment (ROI)** to the Maryland economy. In addition, MEI² has accelerated innovation company progress toward commercial success, a few examples being:

- Mobile Comfort’s \$300K seed grant enabled them to translate their high efficiency air conditioning technology into the prototype necessary for them to attract private funding and launch a worldwide consumer product.
- NanoDirect in partnership with Johns Hopkins University has contributed significantly to the COVID-19 response by converting their nanofabrication equipment, developed from their \$100K seed grant, to make filtration materials for PPE masks, hiring 18 engineers and rapidly increasing production from about 3 ft² of material per day to about 200 ft² per day with 24/7 operation.

- InventWood leveraged MEI² resources to attract ARPA-E for its sustainable wood technologies and launch its company in the MEI² incubator.
- Ion Storage Systems leveraged their \$100K seed grant for packaging of their advanced battery technology, to obtain \$8M in private VC funding, enabling them to move into a 20,000 ft² manufacturing facility in Beltsville, MD, and hire 17 employee.

Note, both Ion Storage Systems and InventWood were recognized as “*Maryland Future 20*” companies by Governor Hogan and the Maryland Department of Commerce.

Since inception, MEI² has:

- Leveraged a small State investment to help obtain over \$55M in federal funding a factor of **>20X return on investment (ROI)** to the Maryland economy.
- Provided innovation seed grants to assist spin-off companies translate university research to commercially relevant products. In the initial three years 14 seed grants were awarded to UMCP, University of Maryland Baltimore County (UMBC), Johns Hopkins University (JHU), University of Maryland Eastern Shore (UMES), and Morgan State University, and have resulted in follow on private investment. - *Demand for these seed grants far exceeds current budget to support.*
- Helped launch multiple companies in State attracting private investment and creating jobs.

MEI² is providing a worthwhile return on investment. To date MEI² has assisted in obtaining a 20 to 1 federal to state leveraging of its funding and assisted multiple companies in obtaining private capital to commercialize their energy technologies, and in so doing achieve its statute directed mission.

For this success to continue MEI² must have a stable, definitive commitment of revenue to help support its operation. This legislation calls for such investment to enable MEI² to continue to be a positive impact on the Maryland economy.

Senate Bill 460 will:

- Broaden the definition clean energy to include advanced energy and grid modernization technologies, and
- Provide \$2.1 M to fund the energy technology research and innovation activities of the Maryland Energy Innovation Institute and the capitalization and deployment work of the Maryland Clean Energy Center.

On behalf of the Maryland Energy Innovation Institute (MEI²) and the University of Maryland (UMD), I **respectfully request that the committee members give a FAVORABLE REPORT to SB 460**, and continue to fund the worthy enterprise MEI² has proven to be for our state.



Eric D. Wachsman, Ph.D.
 Director, Maryland Energy Innovation Institute
 William L. Crentz Centennial Chair in Energy Research
 University of Maryland

SB0460 support-HighT-Tech.pdf

Uploaded by: Wang, Chengwei

Position: FAV



HighT-Tech LLC

4467 Technology Dr,
#3104, College Park,
Maryland 20742
480.395.1552 TEL
contact@hight-tech.com

February 12, 2021

Senator Delores G. Kelley
Chair, Finance Committee
3 East
Miller Senate Office Building
Annapolis, MD 21401

Dear Senator Kelley:

I am writing to request your favorable support for SB 0460 “Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.”

I am the CEO and Co-founder of High-T Tech LLC, a corporation organized and existing under the laws of the State of _Maryland_ and having a primary location of 4467 Technology Dr,# 3104 College Park, Maryland 20742, in Maryland Legislative District 21.

In 2020, I participated in a Maryland Clean Energy Center program called the Maryland Energy Innovation Accelerator. This unique program accelerates the commercialization of new technologies created in Maryland-based universities and Federal Labs with the goal of creating new Maryland-based technology and manufacturing businesses that will have a positive impact on Maryland’s climate goals.

As a Maryland-based startup, High-T Tech LLC provides disruptive materials science based technologies and solutions for energy-related applications, particularly in the fields of catalysis and ceramic membranes. Our team of PhD scientists are working on deploying materials with unique properties and unmatched performance for the chemical, energy, transportation, and environmental sectors. Th MEIA team has provided us great help on developing a marketable product, refining the production method, finding manufacturing and distribution partners, and developing a go-to-market strategy could be accomplished in the following 3 - 5 years. With MEIA’s help, we have hired two senior employees and an experienced industrial advisor.

This legislation provides baseline funding for the Maryland Clean Energy Center so that the Maryland Energy Innovation Accelerator can continue to accelerate Maryland-based technology and manufacturing businesses.

Your consideration and favorable support of SB 0460 will be much appreciated.

Sincerely,

Chengwei Wang
Chief Executive Officer
4467 Technology Dr, #3104, College Park, Maryland 20742
TEL: 480.395.1552
Email: chengwei.wang@hight-tech.com

SB0460 Letter of Support - Manta Biofuel.pdf

Uploaded by: Wills, Andrew

Position: FAV

February 12, 2021

Senator Delores G. Kelley
Chair, Finance Committee
3 East
Miller Senate Office Building
Annapolis, MD 21401

Dear Senator Kelley:

I am writing to request your favorable support for SB 0460 “Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives.”

My name is Andrew Wills, I am the Director of Finance at Manta Biofuel. Headquartered in an Opportunity Zone in Maryland Legislative District 11, we produce cost competitive renewable crude oil from algae.

In 2020, I participated in a Maryland Clean Energy Center program called the Maryland Energy Innovation Accelerator (MEIA). This unique program accelerates the commercialization of new technologies created in Maryland-based universities and Federal Labs with the goal of creating new Maryland-based technology and manufacturing businesses that will have a positive impact on Maryland’s climate goals.

During my time with MEIA, program leaders Brian Toll and Ben Margolis have created immense value for our company through strategic advising, introductions to customers and key stakeholders, and through the Executive in Residence program that they administer. In addition, during our time in the accelerator, Manta Biofuel has gone on to raise over \$1 million in financing.

SB 0460 provides baseline funding for the Maryland Clean Energy Center so that the Maryland Energy Innovation Accelerator can continue to accelerate Maryland-based technology and manufacturing businesses.

Your consideration and favorable support of SB 0460 will be much appreciated.

Sincerely,



Andrew Wills
Director of Finance, Manta Biofuel
Cell: 301-525-2805
Email: andrew@mantabiofuel.com

SB460-Fav TestimonyjusticeWing-GreenBank.pdf

Uploaded by: Younts, Diana

Position: FAV



Committee: Finance
Testimony on: SB460 Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives
Organization: MLC Climate Justice Wing
Submitted by: Diana Younts, co-chair
Position: Favorable
Hearing Date: February 16, 2021

M. Chair and Members of the Committee,

Thank you for allowing our testimony today in support of SB460. MLC’s Climate Justice Wing is a statewide coalition of over 50 grassroots and grasstops organizations focused on getting State level climate justice legislation passed. SB460 establishes the Maryland Clean Energy Center (MCEC) as Maryland’s Green Bank with access to sufficient capital to support its operations and expands the mandate of the MCEC and the Maryland Energy Innovation Institute to support *advanced* clean energy and *clean energy innovation*, as defined in the bill.

Maryland needs a green bank to support the large-scale investment required for its rapid transition to a net-zero economy. Financing is critical to rapid clean energy deployment, and green banks are a powerful tool to accelerate clean energy financing and investment. Unlike most other forms of public finance, green banks can use limited public dollars to leverage significantly greater levels of private investment in the transition to a clean energy economy. Green banks utilize finance tools such as green bonds, credit enhancements, preferential loans, aggregation, and more to reduce risks to private investors, lower the cost of capital, and accelerate clean energy deployment. In providing these services, green banks do not compete with the private sector; rather, they fill niches that the private sector does not and provide tools that can unleash private-sector dollars. Thus, they can actually expand opportunities for private sector investment.

Currently, there are 15 green banks in the U.S., and more are being planned and created. In 2018, Washington, DC became the first city in the United States to establish a green bank. At last tally (the end of 2019), green banks leveraged \$3.60 in overall investment in the American clean energy economy for every \$1 of green bank investment.

In Maryland, the Montgomery County Green Bank has done even better, leveraging private dollars at a 7:1 ratio through a range of renewable energy and energy efficiency programs for homeowners, renters, nonprofits, businesses, multifamily residences, condominiums, and industrial facilities.

In 2019, as required by the General Assembly, MCEC released a study of how to improve its sustainability and enhance its impact. The MCEC is required by law to “establish a work plan to become self-sustaining within 5 years after [its establishment].” Of utmost importance, the study found that “(t)o ultimately be successful, and self-sustainable, MCEC requires a stable source of capital to support operations and to invest in financing models that will generate revenue.” The funding for MCEC provided by SB460 is essential, not only to enable it to become Maryland’s green bank, but for its continued existence.

For these reasons we urge you to vote favorably for SB460.

MLC Climate Justice Wing:

Maryland Legislative Coalition
MD Campaign for Environmental Human Rights
Chesapeake Climate Action Network
WISE
Frack Free Frostburg
Mountain Maryland Movement
Clean Water Action
Maryland Sierra Club
Howard County Indivisible
Howard County Sierra Club
Columbia Association Climate change and sustainability advisory committee
HoCo Climate Action
CHEER
Climate XChange - Maryland
Mid-Atlantic Field Representative/
National Parks Conservation Association
350 MoCo
Glen Echo Heights Mobilization
The Climate Mobilization Montgomery County
Montgomery County Faith Alliance for Climate Solutions
Montgomery Countryside Alliance
Takoma Park Mobilization Environment Committee
Audubon Naturalist Society
Cedar Lane Unitarian Universalist Church

Environmental Justice Ministry
350 Baltimore
Coalition For Smarter Growth
DoTheMostGood Montgomery County
MCPS Clean Energy Campaign
MoCo DCC
Potomac Conservancy
Casa de Maryland
Nuclear Information & Resource Service
Clean Air Prince Georges
Laurel Resist
Greenbelt Climate Action Network
Maryland League of Conservation Voters
MD Campaign for Environmental Human Rights
Unitarian Universalist Legislative Ministry of Maryland
Concerned Citizens Against Industrial Cafos
Wicomico NAACP
Chesapeake Physicians for Social Responsibility
Chispa MD
Climate Law & Policy Project
Poor Peoples Campaign
Labor for Sustainability
The Nature Conservancy
Clean Air Prince Georges

SB460-Fav-TPMEC-GreenBank.pdf

Uploaded by: Younts, Diana

Position: FAV

TAKOMA PARK MOBILIZATION

Environment Committee

Committee: Finance
Testimony on: SB0460 Economic Development – Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives
Organization: Takoma Park Mobilization Environment Committee
Submitted by: Diana Younts, co-chair
Position: Favorable
Hearing Date: February 16, 2021

M. Chair and Members of the Committee,

Thank you for allowing our testimony today in support of SB0460, which establishes the Maryland Clean Energy Center (MCEC) as Maryland’s Green Bank with access to sufficient capital to support its operations and expands the mandate of the MCEC and the Maryland Energy Innovation Institute to support *advanced* clean energy and *clean energy innovation*, as defined in the bill. This bill builds on Montgomery County’s Highly successful green bank model.

Maryland needs a green bank to support the large-scale investment required for its rapid transition to a net-zero economy. Financing is critical to rapid clean energy deployment, and green banks are a powerful tool to accelerate clean energy financing and investment. Unlike most other forms of public finance, green banks can use limited public dollars to leverage significantly greater levels of private investment in the transition to a clean energy economy. Green banks utilize finance tools such as green bonds, credit enhancements, preferential loans, aggregation, and more to reduce risks to private investors, lower the cost of capital, and accelerate clean energy deployment. In providing these services, green banks do not compete with the private sector; rather, they fill niches that the private sector does not and provide tools that can unleash private-sector dollars. Thus, they can actually expand opportunities for private sector investment.

Currently, there are 15 green banks in the U.S., and more are being planned and created. In 2018, Washington, DC became the first city in the United States to establish a green bank. At last tally (the end of 2019), green banks leveraged \$3.60 in overall investment in the American clean energy economy for every \$1 of green bank investment.

Montgomery County Green Bank is Highly Successful. In Maryland, the Montgomery County Green Bank has done even better than other green banks, leveraging private dollars at a 7:1 ratio through a range of renewable energy and energy efficiency programs for homeowners, renters, nonprofits, businesses, multifamily residences, condominiums, and industrial facilities. [See the](#)

[Report here.](#) Montgomery County's green bank projects have avoided 638 tons of greenhouse gas emissions annually, and have leveraged funds for solar projects to assist low and moderate income families.

SB0460 Will Make MCEC Self-Sustaining. In 2019, as required by the General Assembly, MCEC released a study of how to improve its sustainability and enhance its impact. The MCEC is required by law to “establish a work plan to become self-sustaining within 5 years after [its establishment].” Of utmost importance, the study found that “[t]o ultimately be successful, and self-sustainable, MCEC requires a stable source of capital to support operations and to invest in financing models that will generate revenue.” The funding for MCEC provided by SB0460 is essential, not only to enable it to become Maryland's green bank, but for its continued existence.

For these reasons we urge you to vote favorably for SB0460.

SB460_FWA_testimony_Pavlak_2021.pdf

Uploaded by: Pavlak, Alex

Position: FWA

SB460 Favorable with Amendment

SB460 is a sound bill with a serious deficiency.

The bill should be amended to list nuclear power as the #1 Advanced Clean Energy Technology.

[SB460](#) provides stable financial support for the Maryland Clean Energy Center (MCEC), an Instrumentality of the State of Maryland with an independent board. MCEC has the capability and flexibility to do what the public sector cannot, and the private sector will not. MCEC facilitates partnerships and relationships to create business and employment opportunities.

#18 ON SB460'S definition of "ADVANCED CLEAN ENERGY" is: §10-1801 (C) (18) NEW CONCEPTS TO IMPROVE SAFETY AND REDUCE THE COST OF NUCLEAR POWER. SB460 fails to recognize that existing nuclear fission technology is safe and cheap and Maryland's only proven option for reliable electric power with no greenhouse gas (GHG) emissions.

Regarding safety, the World Nuclear Association quantifies safety as deaths per kWh of electricity generation. On this basis [nuclear power](#) is the safest form of electric power generation. Nobody died at Three Mile Island, 60 deaths can be attributed to Chernobyl, and no reactor related deaths at Fukushima.

Nuclear's low system cost is evidenced by the fact that the [8 largest grids in the world with very low carbon emissions](#) (France, Quebec, Ontario, Sweden, Norway, British Columbia, Paraguay, and Switzerland) employ some combination of nuclear and hydro for 80% or more of the power. While hydro may be cheaper than nuclear, hydro is a geographic blessing and has many environmental constraints. New construction in the West is 3x the cost in Asia because Asia has a mature industry, the West does not.

The public loves the idea of wind and solar as a "pure" solution. The technology is renewable clean, and cheap and the public understands how it works Intermittent generators can reduce emissions on today's dirty grid. Whenever the wind blows or the sun shines, throttle down a fossil fuel plant. *But intermittent generators are not reliable and contribute little value to a reliable clean grid.* The out-of-market cost (backup capacity, storage, transmission, regulation) for maintaining the reliability of systems with large amounts of intermittent generation can far exceed the cost of generation. [Wincharger](#) demonstrates that the cost of maintaining system reliability is the concept challenge for intermittent generation.

While nuclear fission is cheap, clean, and safe, the technology will require investment to make it more user friendly. We need R&D to enable Small Modular Reactors (SMRs) to be installed locally in industrial parks. We will need breeder reactors with spent fuel recycling to be sustainable. And we will need to overcome first mover cost while reconstructing the industry. Using advanced fuel cycles, the planet has enough fuel to [power all of civilization's energy needs almost indefinitely.](#)

I favor SB460 after amending the list of Advanced Clean Energy Technology by moving nuclear power to the top of the list, deleting the safety and cost qualifications.

*Dr. Alex Pavlak, from Severna Park, holds a PhD in mechanical engineering, a Professional Engineering license in the State of Pennsylvania, is a member of the Board of Directors of the Maryland Clean Energy Center, the Chairman of the Future of Energy Initiative, and a member of an informal group: Zero Carbon Nuclear Advocates.



SB0460 (HB0419) - LOI.pdf

Uploaded by: Fahrig, Landon

Position: INFO



Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor
Mary Beth Tung, Director

TO: Members, Senate Finance Committee
FROM: Mary Beth Tung – Director, MEA
SUBJECT: SB0460 (HB0419) – Economic Development - Advanced Clean Energy and Clean Energy Innovation Investments and Initiatives
DATE: February 16, 2021

MEA POSITION: Letter of Information

The proposed legislation will have a significant impact on Strategic Energy Investment Fund (SEIF) programs operated by the Maryland Energy Administration (MEA). The bill requires an annual transfer of \$2,100,000 from the SEIF in perpetuity.

MEA FY20 programs will help garner over 43.9 million kWh of generated or avoided electricity, 159,000 therms of natural gas savings, 28,000 kW of new solar photovoltaic capacity, 1,100 tons of new ground source heat pump capacity, 14,000 gallons of gasoline saved and an additional 1,250 gallons of diesel saved.¹

Fiscal Impacts For FY22 and beyond:

- \$1.05 million less per year will be available for the Department of Human Services energy bill assistance program;
- \$420K less will be available for energy efficiency programs, of which at least \$210K is for low-to-moderate income energy efficiency;
- \$420K less will be available for renewable and clean energy programs.

MEA also notes that the SEIF resources being diverted from bill assistance and low-to-moderate income (LMI) programs by this bill will be used instead to subsidize MCEC and MEII within the A. James Clark School of Engineering within the University of Maryland at College Park. These initiatives are highly speculative and, though they may have value, are more properly funded through other means. MEA notes that if either MCEC or MEII are able to profit from their respective endeavors (as both are designed to do), there is no return guaranteed for the State or the SEIF to replenish those losses to LMI programs. The funds would presumably be retained by the A. James Clark School of Engineering and the University of Maryland at College Park.

Funds diverted from DHS and MEA are funds diverted from agencies with existing infrastructure to deploy resources in an effective and cost-efficient manner while ensuring, documenting, and reporting tangible results.

¹ FY20 programs total estimated benefits.

Lastly, the bill would add the Director of MEII to the MCEC board. MEII and MCEC have different goals and purposes, and this may lead to the codifying of a permanent conflict of interest. MEA notes that there is other legislation this session aimed at limiting the involvement and powers of the Maryland Environmental Service officers; a semi-governmental agency that operates under authorizing statute similar to that of MCEC.

We ask the Members to consider the information provided above while deliberating the merits of Senate Bill 460.