



Maryland
Energy
Administration

**STRATEGIC
ENERGY
INVESTMENT
FUND**

Activities for Fiscal Year 2022

Volume 1

Table of Contents

A. Introduction	4
B. Low-to-Moderate Income Energy Efficiency Grant Program	7
C. Maryland Smart Energy Communities	8
D. Commercial, Industrial, and Agriculture Grant Program	10
E. Combined Heat and Power Program	12
F. Streetlight and Outdoor Lighting Energy Efficiency program (New FY22 Program)	14
G. Decarbonizing Public Schools Program (New FY22 Program)	16
H. Resilient Maryland	18
I. Resilient Maryland Capital Development Pilot Program (New FY22 Program)	21
J. Solar Resiliency Hubs	22
K. Clean Energy Rebate Program	24
L. Solar Canopy Program	26
M. Community Solar Program	28
N. Public Facility Solar Grant Program	30
O. Low Income Solar Grant Program (New FY22 Program)	32
P. Offshore Wind Programs	34
Q. Electric Vehicle Supply Equipment Program	36
R. Clean Fuels Incentive Program	38
S. Maryland Energy Infrastructure Program	40
T. OPEN Energy Program (New FY22 Program)	42
U. Municipal LED Streetlight Program	44
V. Communications and Marketing	45
W. Energy Technical Support	46
X. Administration	47
Y. Maryland Department of the Environment - Climate Change Program	48
Z. Maryland Department of the Environment- Energy-Water Infrastructure Program	49

AA. Maryland Energy Innovation Institute	50
BB. Department of Labor- EARN Maryland	51
CC. Department of Budget and Management- State Fleet Electric Vehicle Program	52
DD. Maryland Department of Transportation	53
EE. Department of Commerce	54
FF. Department of General Services	55
GG. Department of Human Services- Energy Universal Service Program Bill Assistance	56
HH. Department of Health - Energy Performance Contract Repayments	57
II. Department of Agriculture	58
JJ. SEIF Planning FY22	59
Appendix A: SEIF Financials	65
• SEIF Expenditures and Active Commitments for FY22 with FY23 Appropriations	
• SEIF Revenues by Source	
• RGGI Results & Projections by Auction and Fiscal Year	
Appendix B: FY22 Grantees Receiving Multiple SEIF Awards¹	
Appendix C: FY22 Grantees By Program	

¹ Due to the number of SEIF award recipients in FY22, Appendixes B and C are located in Volume 2 of the FY22 SEIF report.

A. Introduction

The purpose of the Strategic Energy Investment program is to decrease energy demand and increase energy supply to promote affordable, reliable, and clean energy to fuel Maryland's future prosperity. On behalf of the state, the Maryland Energy Administration (MEA) administers the Strategic Energy Investment Fund (SEIF), implements SEIF-funded programs that support Maryland's energy policies, and monitors SEIF-funded programs being implemented by other state agencies.

Programs funded by SEIF can help reduce energy bills, minimize energy waste, create jobs, improve reliability and resiliency, address energy access and equity issues, help attract and retain businesses, and promote energy independence. Importantly, SEIF-funded programs can also address global climate change concerns by decreasing carbon dioxide (CO₂) emissions.

Background

Pursuant to Section 9-20B-12 of the State Government Article, MEA is required to prepare an annual report to the Governor, General Assembly, and the SEIF board members. This report, among other things, describes the expenditures of the SEIF; grants awarded by MEA; energy savings estimated; and programs, projects and activities conducted. The data in this report demonstrates achievements being made toward promoting affordable, cleaner, and reliable energy for the benefit of all Marylanders.

SEIF Expenditures and Commitments

A relative distribution of the fiscal year 2022 (FY22) SEIF expenditures and commitments across all state agencies from all funding sources is shown in Appendix A, Chart 4. In addition to programs implemented by MEA, in FY22 SEIF funding was also provided to the Maryland Department of the Environment (MDE), the Maryland Energy Innovation Fund at the University of Maryland, the Maryland Department of General Services (DGS), the Maryland Department of Human Services (DHS), and the Maryland Department of Health (MDH), as well as several others.

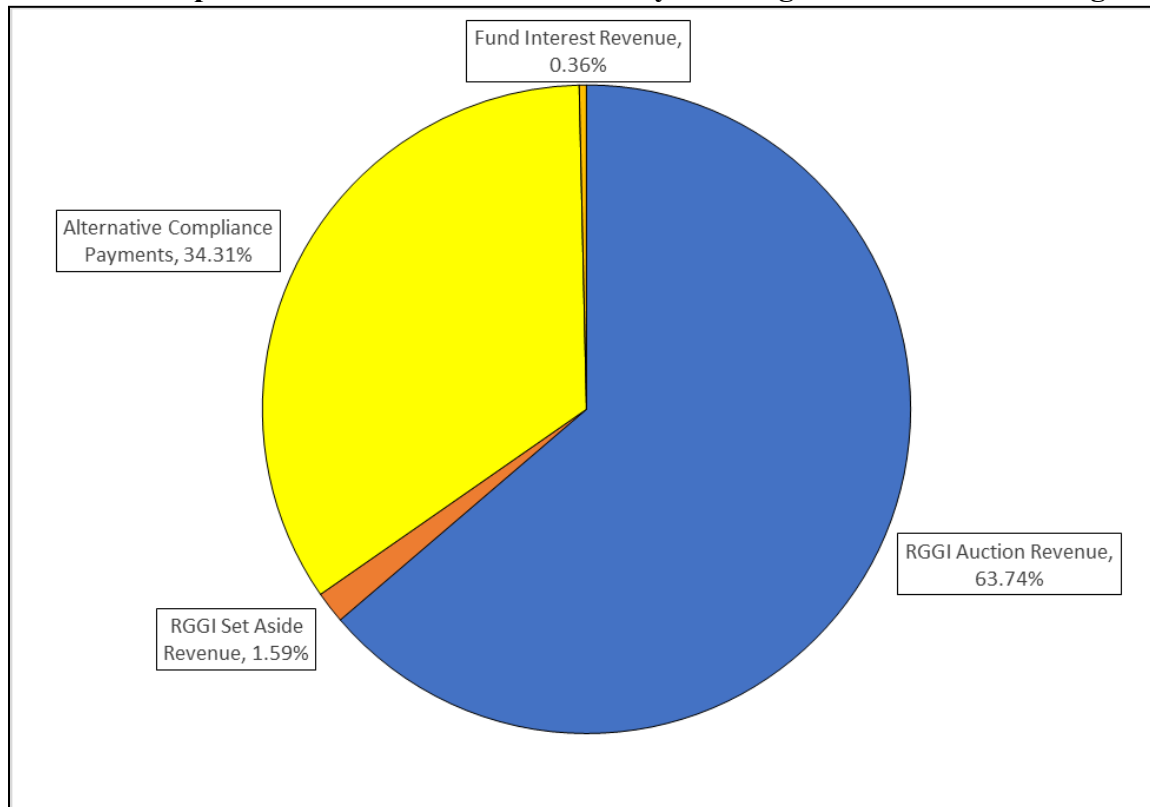
SEIF Proceeds

SEIF proceeds increased substantially in FY22, more than doubling the proceeds received in FY21. The increase in annual SEIF proceeds in FY22 was a result of more robust RGGI auctions coupled with an influx of solar-related alternative compliance payments under Maryland's Renewable Portfolio Standard.

The main source of SEIF proceeds, on a percentage basis, has historically been from the Regional Greenhouse Gas Initiative (RGGI). This was true again in FY22, but to a lesser extent than prior years, due to an infusion of alternative compliance payments occurring late in FY22.

- In FY22, the overall percentage of SEIF revenues from RGGI decreased to just over 65%; in comparison, 99% of FY21 SEIF revenues came from RGGI;
- Alternative compliance payments from Maryland's Renewable Portfolio Standard (RPS) increased substantially in FY22 and represented 34% of all FY22 SEIF proceeds, in comparison to just 0.06 % of FY21 SEIF proceeds.

Chart 1: Composition of FY22 SEIF Proceeds by Funding Source on a Percentage Basis



A summary of overall revenues into the SEIF for the last three years can be found in Appendix A, Chart 5. Appendix A also contains Chart 6 which provides information on each RGGI allowance auction, and includes the number of allowances sold, allowance price, and total RGGI revenue by allowance auction.

New Programs

In fiscal year 2022, MEA successfully launched five new programs, all helping to address unmet needs in Maryland’s energy landscape.

- The **Low Income Solar Program** helps install solar energy systems on single family homes owned by low income residents.
- The **Streetlight and Outdoor Lighting Energy Efficiency Program** provided incentives for locally-owned streetlight energy efficiency upgrades.
- The **Decarbonizing Public Schools Program** provided one-time funding to local education agencies to help jump start energy benchmarking, along with energy efficiency and renewable energy deployment.
- The **OPEN Energy Program** provided a mechanism to fund innovative, energy-related initiatives that are consistent with the state’s energy and greenhouse gas goals, but may not fit well within MEA’s existing portfolio of energy programs.
- The **Resilient Maryland Capital Development Pilot Program** built on MEA’s existing Resilient Maryland program by providing financial incentives to help offset the cost of equipment and installation for microgrids.

Additional details on these new energy programs can be found within the body of the report.

Summary

In FY22, over \$51 million of FY22 SEIF funding was committed to programs or initiatives benefiting low or moderate income Maryland residents. Internal to MEA, these initiatives included the Low-to-Moderate Income Energy Efficiency program, the Community Solar program, and the Low Income Solar Program; all of these initiatives are described in greater detail later in this report. External to MEA, SEIF funds were also used to enable energy bill assistance implemented by the DHS.

Multiple state agencies implement climate and energy-related programs and initiatives funded through the SEIF. While MEA is the administrator of the SEIF, in FY22 programs implemented by MEA total only 55.5% of Maryland's total FY22 SEIF expenditures and active commitments.

Within MEA, the sheer volume of SEIF-funded awards increased significantly in FY22. MEA made more than 6,400 awards in FY22, in comparison to more than 4,500 in FY21. SEIF awards made by MEA in FY22 are anticipated to ultimately help incentivize over 56,000 kW of new or future solar projects, which includes over 3,800 residential solar projects. From a transportation perspective, FY22 SEIF is helping to incentivize more than 2,000 electric vehicle charging stations and 127 alternative fuel vehicles, including electric concrete mixer trucks and Class 8 electric tractors that are expected to be the first such deployments in Maryland.

Details describing activities funded through the SEIF in FY22 are provided in the narratives and charts that follow. Appendix B in Volume 2 of this report provides a list of FY22 grantees receiving multiple SEIF-funded awards from MEA, while Appendix C contains the name of the FY22 SEIF award recipient by MEA program.

SEIF-Funded Initiatives Implemented by MEA

B. Low-to-Moderate Income Energy Efficiency Grant Program

FY22 SEIF Expenditures and Encumbrances: \$14.683 million²

Beneficiaries

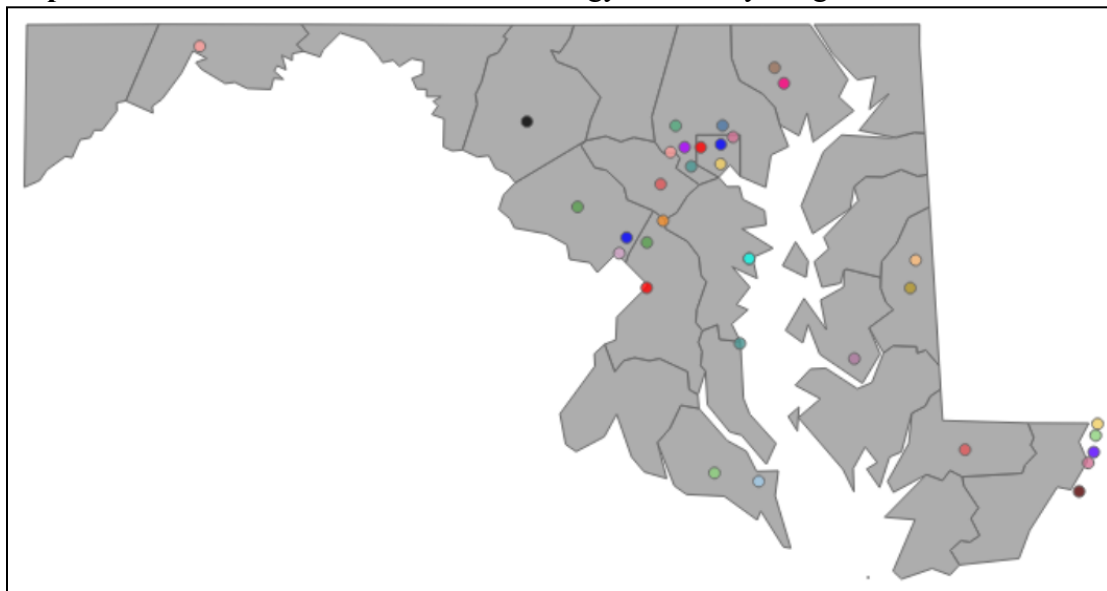
Nonprofit organizations and local governments can receive funding from this Program to implement energy efficiency measures that benefit low-to-moderate income (LMI) Marylanders. Past awardees include nonprofit organizations, community action agencies, housing authorities, and county and local governments.

Description

Grants were awarded to projects that generate significant energy savings through energy efficiency, with the benefits of the energy savings being passed on to Maryland's LMI residents. Priority was given to projects that maximize energy savings and the number of residents that benefit from the measures. Starting in FY19, MEA has been first allocating grant funds by formula on a regional basis to ensure a fair distribution of funds across the state, before then making awards competitively within each region.

Past projects include energy efficiency upgrades to residential and non-residential buildings that serve LMI Marylanders. Through the program, energy efficiency upgrades have been completed in previous years at community centers and homeless shelters, as well as on residential homes.

Map 1: FY22 Low-to-Moderate Income Energy Efficiency Program Awards



² This reflects the awards made in FY22 and does not include financial transactions for awards from prior fiscal years that impacted FY22 accounting.

Arundel Community Development Services - \$115,000
Building Change, Inc. - \$1,150,000
Building Change, Inc. - \$287,500
Building Change, Inc. - \$862,500
Cedar Lane Senior Living Community I, Inc. - \$42,980
Choptank Electric Cooperative - \$345,000
City of Baltimore - \$519,924
Civic Works, Inc. - \$345,000
Civic Works, Inc. - \$805,000
Community Action Council of Howard County - \$900,000
Diversified Housing Development (DHD) - \$690,000
Diversified Housing Development - \$230,000
Diversified Housing Development - \$690,000
Frederick County Government - \$460,000
Green and Healthy Homes Initiative - \$345,000
Green and Healthy Homes Initiative - \$230,000
Habitat for Humanity Choptank - \$201,250
Habitat for Humanity Metro - \$115,000
Habitat for Humanity Metro - \$287,500
Habitat for Humanity Susquehanna - \$102,350
Healthy Neighborhoods - \$431,411
Housing Authority of St. Mary's County - \$115,000
Housing Authority of the City of Annapolis - \$678,500
Maryland Rural Development Corporation - \$115,000
Rebuilding Together Montgomery County - \$172,500
SAFE Housing Inc. - \$575,000
SAFE Housing, Inc - \$575,000
SAFE Housing, Inc - \$805,000
SAFE Housing, Inc. - \$805,000
SAFE Housing, Inc. - \$575,000
Town of North Beach - \$115,000
United Communities Against Poverty - \$230,000
Wicomico County Housing Authority - \$341,550
YMCA of Cumberland - \$84,500

Several of the grantees listed in Map 1 are working in more than one geographical area of the state. Map 1 typically depicts the grantee's office location; however, the majority of grant awards fund residential upgrades in multiple locations. As an example, while all of Safe Housing's awards are mapped to the location of the awardee's headquarters, the grantee will be completing residential energy efficiency upgrades in western, central, eastern, and southern Maryland.

FY22 projects are still being installed. For this reason, the anticipated total estimates for FY22 are based on results from previous fiscal years. Some energy measures may be benefitting from other leveraged funding sources. Actual energy and environmental benefits will not accrue until the individual projects have been completed.

Program Accomplishments

Fiscal Year	FY22
# of grants issued	34
Anticipated annual kWh savings	4,975,000
Anticipated annual fuel savings (MMBTU) ^{3,4}	26,000
Anticipated CO2 avoided (metric tons CO2/year)	2,825

³ Million British Thermal Units.

⁴ May include natural gas, propane, or #2 fuel oil.

C. Maryland Smart Energy Communities

SEIF Expenditures and Encumbrances: \$1.156 million⁵

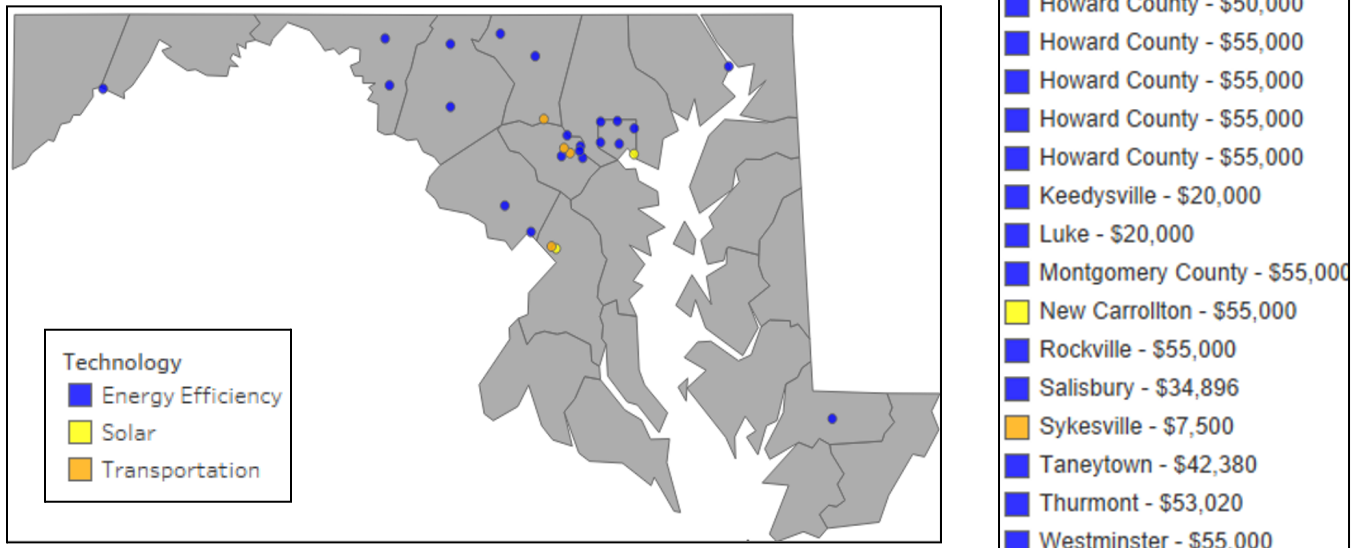
Participants

This program benefits local incorporated governments (i.e., towns, cities, and counties) in Maryland. In FY22, the Maryland Smart Energy Communities (MSEC) program provided 27 awards to 16 communities. Three of the FY22 awards went to new communities (i.e., Havre de Grace, Keedysville, and Luke) that are participating in the MSEC program for the first time.

Description

The goal of the program is to support local governments as they adopt clean energy policies. Communities benefit from sustained reduction of energy usage, cost savings, and opportunities for renewable energy development. Once active in the program, a local government adopts energy goals and develops an energy baseline. After a local government has successfully adopted at least two out of three clean energy policies (i.e., energy efficiency, renewable energy, and transportation fuel reduction), it can leverage program funding to assist with projects toward achieving its energy goals. MSEC participants gain a better understanding of their energy usage, enabling them to reduce energy costs and contribute to the state’s energy and environmental goals.

Map 2: FY22 Maryland Smart Energy Communities awardees



⁵ This reflects the awards made in FY22 and does not include financial transactions for awards from prior fiscal years that impacted FY22 accounting.

Program Details

Projects selected for MSEC funding in FY22 include HVAC retrocommissioning, exterior lighting retrofits, electric vehicle replacements for existing gasoline vehicles, and solar photovoltaic systems being installed on a multipurpose center and a municipal center.

Energy savings estimates shown below are based only on the FY22 awards to existing MSEC communities for energy projects identified in their respective grant agreements. Savings from other energy projects that contribute to the MSEC energy goals, but do not receive direct MSEC funding, are not included in the estimates below.

Some projects have lead times and therefore are still being installed. The FY22 annual savings estimates shown below reflect the initial projections. In addition, the new MSEC communities participating in the FY22 program will still be developing their specific clean energy projects so these project savings are not included below.

MSEC Program	FY22
# of MSEC awards to municipal governments	12
# of MSEC awards to county governments (or county equivalent)	15
# of new MSEC communities	3
Estimated annual reductions (in kWh) anticipated from projects for existing MSEC communities	4,010,413
Estimated kWh of annual solar generation	264,142
Estimated annual avoided gasoline (gallons)	2,452
Estimated annual avoided natural gas use (MMBTU)	7,564
Anticipated annual CO2 avoided (metric tons CO2/year)	1,667

D. Commercial, Industrial, and Agriculture Grant Program

SEIF Expenditures and Encumbrances: \$1.547 million⁶

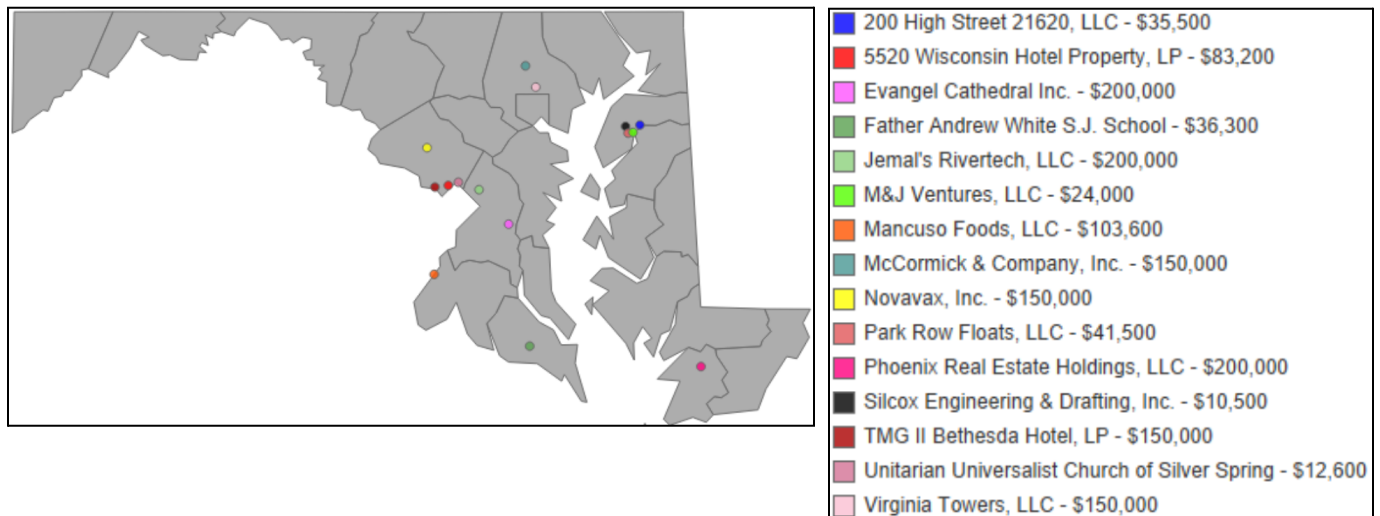
Beneficiaries

In FY22, the Commercial, Industrial, and Agriculture (CI&A) Grant Program offers financial incentives to Maryland's commercial, industrial, and agricultural sectors. In the past, agricultural awards were previously offered under a standalone agricultural program.

Description

This year the CI&A grant program provided 15 grants to increase the energy efficiency of electric and non-electric fuel consumption of existing facilities, or dedicated spaces within buildings. Possible energy efficiency measures include building insulation; envelope improvements; lighting and controls; motors and variable frequency drives (VFDs); heating, ventilation, and air conditioning (HVAC) upgrades; refrigeration; retro-commissioning; and, energy data analytics and operational changes to improve energy efficiency.

Map 3: FY22 Commercial, Industrial, and Agriculture Grant Program awards



Program Accomplishments

Many projects have long lead times and therefore are still being installed. FY22 annual savings estimates below reflect the initial projections of the energy reductions that are anticipated to accrue from program-funded projects, but are subject to change. The summary report below shows anticipated total project savings, including energy savings from any measures that may be benefitting from other funding sources, including utility incentives and financing through a Jane E. Lawton Conservation loan.

⁶ This reflects the awards made in FY22 and does not include financial transactions for awards from prior fiscal years that impacted FY22 accounting.

Fiscal Year	FY22
# of grant awards	15
Annual electricity savings (kWh)	14,458,008
Annual natural gas savings (therms)	130,897
Annual propane savings (gallons)	2,264
Anticipated annual CO2 avoided (metric tons CO2/year)	4,917

E. Combined Heat and Power Program

SEIF Expenditures and Encumbrances: \$0.550 million⁷

Beneficiaries

Facilities that can benefit from onsite electricity generation and increased resiliency, and have coincident onsite thermal loads that can utilize the waste heat from the electricity generation process.

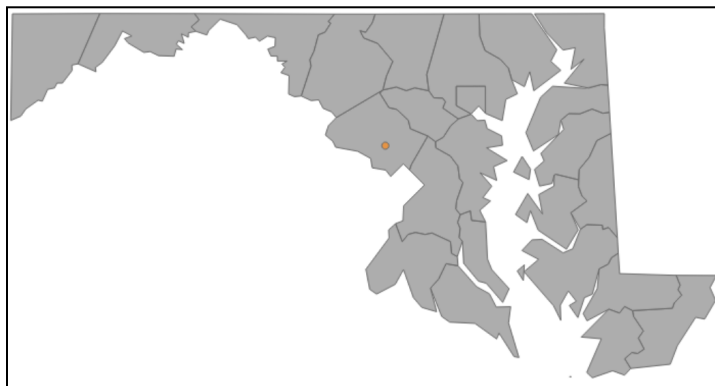
Description

In FY15, MEA launched this program to encourage Combined Heat and Power (CHP) development, initially targeting healthcare and publicly-owned wastewater treatment facilities because of their inherent requirement for enhanced electricity resiliency. The CHP program has since been expanded to include critical infrastructure, fuel cells, and commercial, industrial, and institutional facilities. The program also targets projects that leverage biogas, biomass, or other innovative clean energy fuels as a fuel source.

By generating electricity on site, CHP systems avoid electric line losses that would otherwise occur between the centralized power plant and the electricity end user. Waste heat from the electricity generation process can be captured to help meet onsite thermal loads, thereby reducing the demand for heat energy from more traditional combustion sources and improving overall building efficiency. The installation of CHP systems can help reduce greenhouse gas emissions, lower operational costs, and provide resiliency to crucial facilities or other organizations that value highly reliable power supply.

One project received an award in FY22, and the project has not yet been installed. For this reason, the program accomplishments reflect estimated project metrics and benefits associated with the FY22 award, which are subject to change.

Map 4: FY22 Combined Heat and Power Program Projects



TCR2 Therapeutics, Inc. - \$550,000

⁷This reflects the awards made in FY22 and does not include financial transactions for awards from prior fiscal years that impacted FY22 accounting.

Program Accomplishments

Fiscal Year	FY22
# of awards	1
Anticipated CHP capacity (kW)	1,000
Anticipated CHP generation (kWH/year)	8,618,000
Annual avoided utility fuel savings (MMBTU/year)	-11,364
Annual thermal fuel savings (MMBTU/year)	17,822
Anticipated annual CO2 avoided (metric tons CO2/year) ⁸	1,938

⁸ The FY22 project is not anticipated to fully use the available thermal energy energy from the CHP plant initially. Should thermal demand increase in the facility in the future, fuel usage will improve and avoided CO2 savings will increase further.

F. Streetlight and Outdoor Lighting Energy Efficiency program (New FY22 Program)

SEIF Expenditures and Encumbrances: \$1.609 million⁹

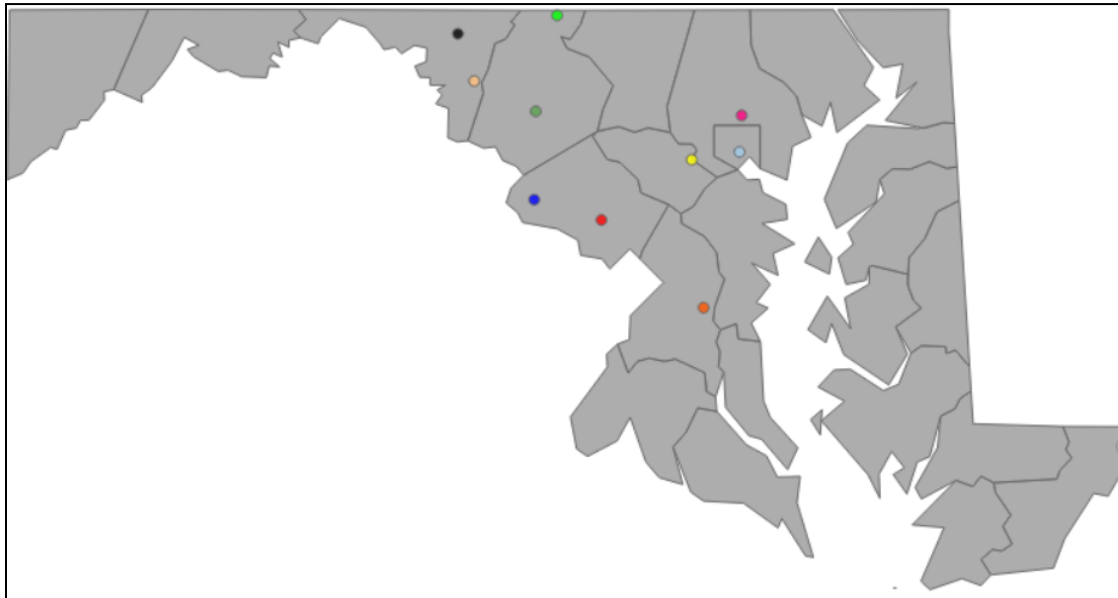
Beneficiaries

Potential participants include Maryland non-profit organizations, state agencies, local governments and incorporated cities, public and private schools, and community colleges.

Description

Offered for the first time in FY22, the Streetlight and Outdoor Lighting Efficiency Grant Program makes grants available to eligible entities to defray the cost of replacing outdated, less efficient pole-mounted fixtures that are used for street lighting, parking lot illumination, parks, athletic fields, and other outdoor lighting systems, along with implementing certain lighting controls.

Map 5: FY22 Streetlight and Outdoor Energy Efficiency Program Grantees by Location



Program Accomplishments

Fiscal Year	FY22
# of grant awards	10
Annual electricity savings (kWh)	2,364,479

⁹ Two additional applicants signed a grant commitment letter but did not ultimately enter into a grant agreement with MEA.

Anticipated lights to be retrofitted	5,499
Anticipated annual CO2 avoided (metric tons CO2/year)	688

G. Decarbonizing Public Schools Program (New FY22 Program)

SEIF Expenditures and Encumbrances: \$0.611 million ¹⁰

Beneficiaries

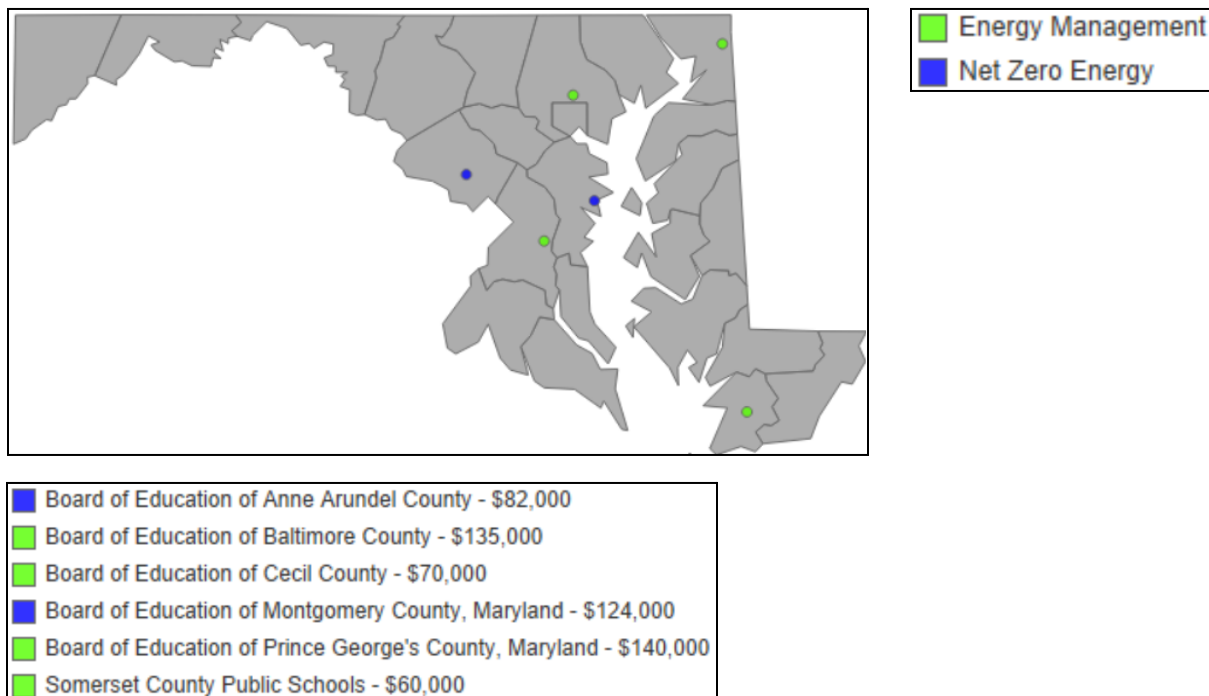
Maryland local education agencies¹¹ (LEAs) are eligible to participate.

Description

Offered for the first time in FY22, the Decarbonizing Public Schools Program makes grants available to expand the capacity of LEAs to manage energy data, reduce operating costs, and incorporate energy performance criteria into capital improvement planning. The Program's overall intent is to enhance energy efficiency and reduce lifecycle costs of school facilities, while reducing greenhouse gas emissions, on a portfolio-wide basis. LEAs could opt to apply for funding to help defray the cost of energy management and the use of ENERGY STAR Portfolio Manager[®] software, as well as to incorporate net zero energy design principles into facility development portfolios and long-term capital plans.

The Decarbonizing Public Schools Program complements Chapter 608 of the 2021 Laws of Maryland that required each Maryland LEA to adopt or update an energy policy for its elementary and secondary school facilities.

Map 6: FY22 Decarbonizing Public Schools Program Awardees



¹⁰ One additional applicant signed a grant commitment letter, but did not ultimately enter into an award with MEA.

¹¹ In Maryland, local education agencies correspond with the county, or county-equivalent, public school system.

Program Accomplishments

The Decarbonizing Public Schools Program is a capacity-building program that helps LEAs to perform energy data management and innovative energy planning for future facility development, rather than a direct subsidy to construction.

Fiscal Year	FY22
# of grant awards	6
# of LEAs receiving an award to help defray the cost of energy management and ENERGY STAR Portfolio Manager deployment	4
# of LEAs receiving an award to cover the cost of incorporating net zero energy design principles into LEA facility development portfolios	2

H. Resilient Maryland

SEIF Expenditures and Encumbrances: \$0.847 million¹²

Beneficiaries

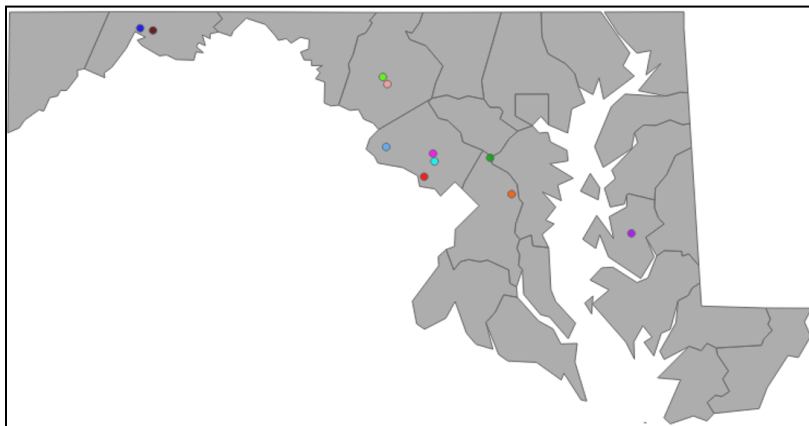
Potential applicants include businesses, critical infrastructure facilities, local governments, nonprofit organizations, healthcare facilities, multifamily housing, regional planning organizations, state agencies, agriculture, food production and supply chain, and hotels

Description

Resilient Maryland is aimed at driving growth in the adoption of microgrids and other distributed energy resource (DER) systems, that enhance the facility resiliency, sustainability, and efficiency. Solar photovoltaics, advanced combined heat and power, energy storage systems, grid-interactive energy efficiency technologies, and many other DERs can be strategically combined to provide long-term affordable energy and resilient power solutions that bolster essential infrastructure, vulnerable communities, and businesses and organizations sensitive to energy disruption. The FY22 program covered three different areas of interest (AOI) in FY22:

- AOI 1 focuses on feasibility analyses, planning, preliminary designs, financial analyses, greenhouse gas reduction projections, analyses on barriers to system implementation, and other pre-construction activities for community and campus-scale microgrids and other innovative configurations.
- AOI 2 focuses on similar activities as AOI I, but instead focuses on just a single facility.
- AOI 3 incentivizes the design of resiliency hubs, which are community locations fitted with a solar photovoltaic and battery storage system for community members to safely congregate, sized to power essential loads during an electricity grid outage. AOI 3 complements MEA's Resiliency Hub program which incentivizes capital construction.

Map 7: FY22 Projects funded through Resilient Maryland



¹² This reflects the awards made in FY22 and does not include financial transactions for awards from prior fiscal years that impacted FY22 accounting.

■	Allegany Community College - \$100,000
■	AquaCon Maryland LLC - \$100,000
■	Bowie State University - \$100,000
■	Capitol Technology University - \$43,100
■	Frederick County Government - \$25,000
■	Frederick County Government - \$25,000
■	Groundswell, Inc. - \$159,065
■	Mayor & City Council of Cumberland, MD - \$100,000
■	Montgomery County - \$100,000
■	Poolesville - \$24,000
■	Washington Suburban Sanitary Commission - \$100,000

Program Accomplishments

Fiscal Year	FY22
# of projects receiving an award in FY22	11

I. Resilient Maryland Capital Development Pilot Program (New FY22 Program)

SEIF Expenditures and Encumbrances: \$0.750 million

Beneficiaries

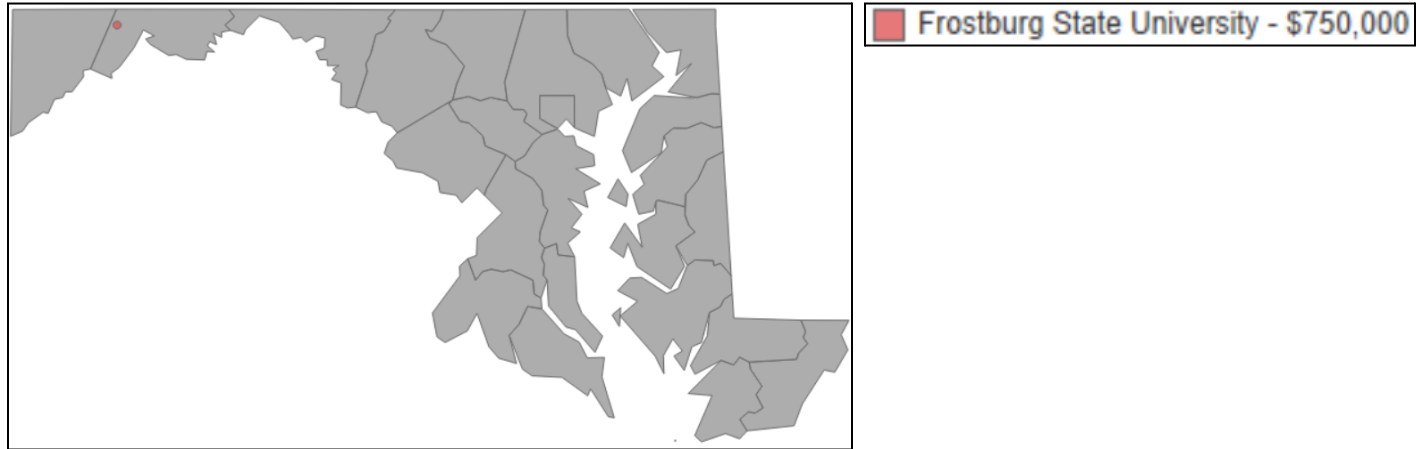
Potential applicants include businesses; critical infrastructure facilities; local and state governments; nonprofit organizations; healthcare facilities; multifamily housing; regional planning organizations; agriculture; food production and supply chain; hotels, and utilities, cooperatives, and municipal utilities implementing microgrids to improve community resilience.

Description

Offered for the first time in FY22, the Resilient Maryland Capital Development Pilot Program (RMCD Pilot Program) builds on the MEA Resilient Maryland Program. The new competitive grant program helps offset the costs of equipment and installation of the distributed energy resources (DERs) and the associated wiring and communication infrastructure comprising the microgrid. The RMCD Pilot Program can help incentivize microgrid development, enhance the resilience of essential public facilities and infrastructure, improve socioeconomic equity of historically underserved and unserved Marylanders, encourage economic development, and provide educational and workforce development opportunities for clean energy careers.

One project was funded under the RMCD Pilot Program in FY22, at Frostburg State University. This project was a follow-up grant that received project design funding in FY20.

Map 8: FY22 Resilient Maryland Capital Development Pilot Program Awardee Location



Program Accomplishments

Fiscal Year	FY22
# of projects receiving an award in FY22	1

J. Solar Resiliency Hubs

SEIF Expenditures and Encumbrances: \$0.754 million¹³

Beneficiaries

Businesses, non-profits, state agencies, and local governments (including public universities, community colleges, and schools) may apply, with incentives going to the resiliency hub developer. If a developer does not own the property where the hub will be located, the property owner must partner with the developer on the project.

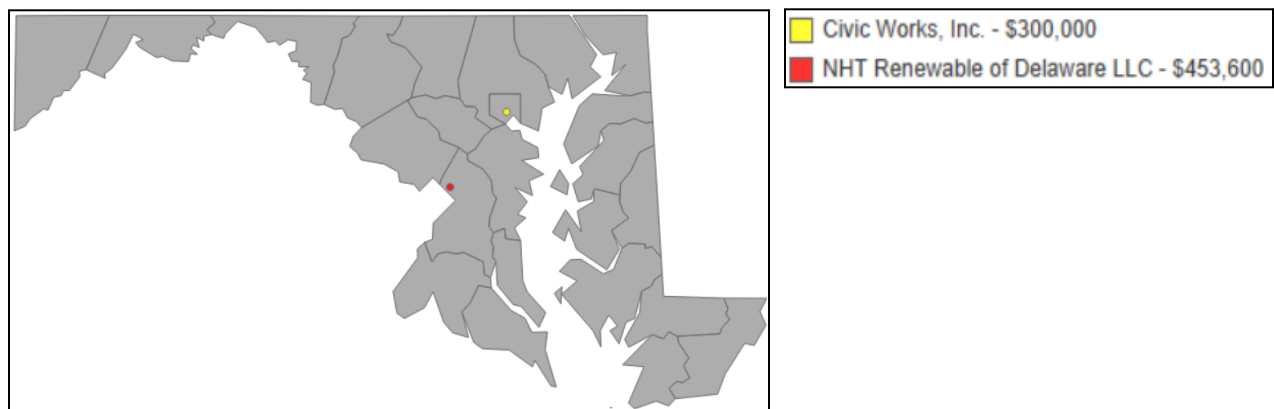
Downstream beneficiaries of MEA’s Solar Resiliency Hub program are LMI Maryland residents near the proposed resiliency hub during periods of grid outage. In addition, during normal grid operation, the solar and energy storage resources may be operated to reduce the cost of electricity to the hosting site.

Description

Funding is provided to partially compensate solar microgrid developers for costs incurred in the development and construction of eligible combined solar and energy storage systems. Incentivized systems will independently run and maintain electrical power even if power from the electrical grid fails, to serve as “resiliency hubs” supporting neighborhoods with significant numbers of LMI residents.

During grid outage, the solar plus energy storage system will provide important resources for the surrounding community. A resiliency hub is envisioned as a venue where a solar plus energy storage system has been installed, with the system designed to provide energy to meet important electricity needs (e.g., emergency heating and cooling, refrigeration of medications, and plug power for cell phones). When the electric grid is operational, the solar plus storage system may be used to provide solar energy and peak shaving to the facility where the hub is located.

Map 9: FY22 Projects funded through the Solar Resiliency Hub program



¹³ This reflects the awards made in FY22 and does not include financial transactions for awards from prior fiscal years that impacted FY22 accounting.

FY22 projects are still being developed and are not yet installed. Estimates for these future installations are included below, but are subject to change.

Program Accomplishments

Fiscal Year	FY22
# of projects receiving an award	2
Total PV capacity associated with the resiliency hubs (kW)	251
Anticipated energy storage capacity (kWh)	665
Estimated amount of new electricity generation (kWh-ac/year)	326,560
Anticipated annual CO2 avoided (metric tons CO2/year)	95

K. Clean Energy Rebate Program

SEIF Expenditures and Encumbrances: \$4.483 million (residential) and \$0.521 million (commercial)

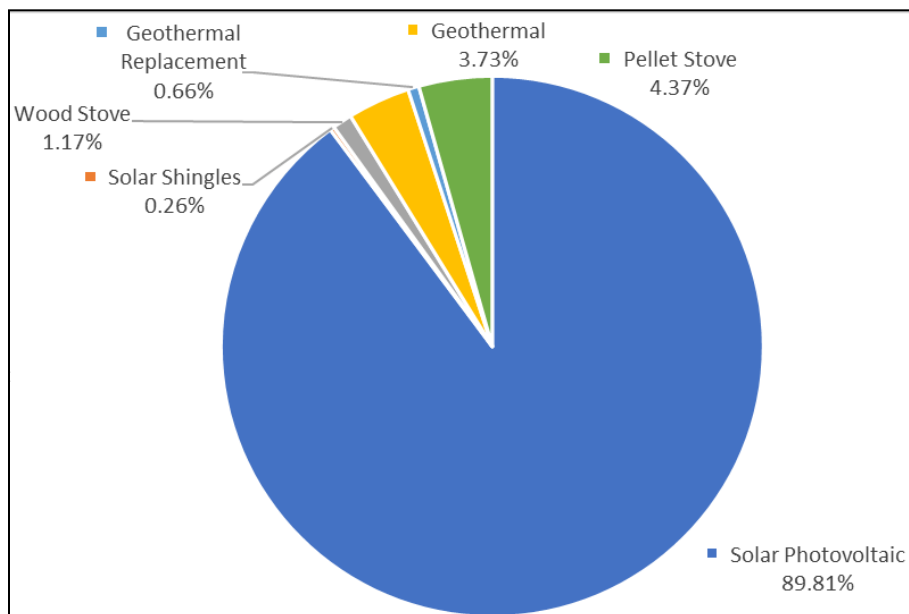
Beneficiaries

Beneficiaries can include homeowners, businesses, nonprofit organizations, and state and local government entities that install eligible renewable energy systems.

Description

The Clean Energy Rebate Program (CERP) was designed to support renewable energy installations across the state, and offers incentives for both residential and commercial projects. CERP initially provided incentives for solar photovoltaic (PV), solar water heating, geothermal heating and cooling, and wind energy systems. Wood and pellet stoves were later added as eligible residential technologies. The solar photovoltaic category has expanded to also include solar shingles, where the solar photovoltaic technology is installed as part of a building's roof. As shown in Chart 2 below, solar photovoltaic is the most popular technology by far, representing over 3,800 awards and approximately 90% of FY22 residential CERP applications.

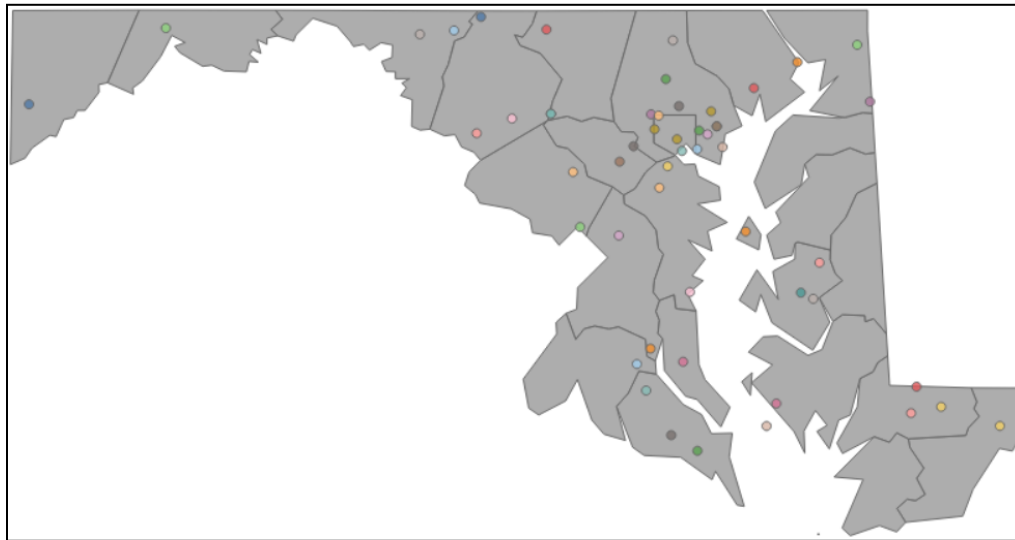
Chart 2: FY22 Residential Clean Energy Rebate Program Awards by Technology



In FY22, residential CERP applications far exceeded commercial applications in both the number of awards made and total dollar amount of awards issued.

There were also a total of 53 commercial CERP projects in FY22, all of which involved solar technology. In FY22, commercial projects occurred across the state, in twenty-one of Maryland's counties.

Map 10: FY22 Commercial CERP Project Locations¹⁴



Residential CERP incentive levels are set at a prescribed amount per technology installation (e.g., \$1000 per solar photovoltaic award, \$3000 per geothermal heat pump) while commercial incentive levels are calculated based on the size and type of renewable energy system. By offering incentives for multiple technologies, potential program participants have options to help suit their cost and/or geographical requirements.

Some FY22 commercial projects are still underway. Estimates for these projects are included in the program details below, but are subject to change.

Program Accomplishments

Fiscal Year	FY22
Total # of awards	4,313
Estimated new electricity generated <u>or</u> avoided incentivized by CERP (kWh/year)	53,660,000
Estimated MMBTU/year avoided due to projects receiving CERP incentives	4,700
Overall Solar PV ¹⁵ (kW)	43,742
Solar Thermal (sq. ft.)	0
Capacity of new Geothermal installed (Ton)	786
# of wood and pellet stove installations	236
Anticipated annual CO2 avoided (metric tons CO2/year)	15,736

¹⁴ A list of awardees can be found in Appendix C.

¹⁵ Includes residential solar photovoltaic shingles.

L. Solar Canopy Program

SEIF Expenditures and Encumbrances: \$1.228 million

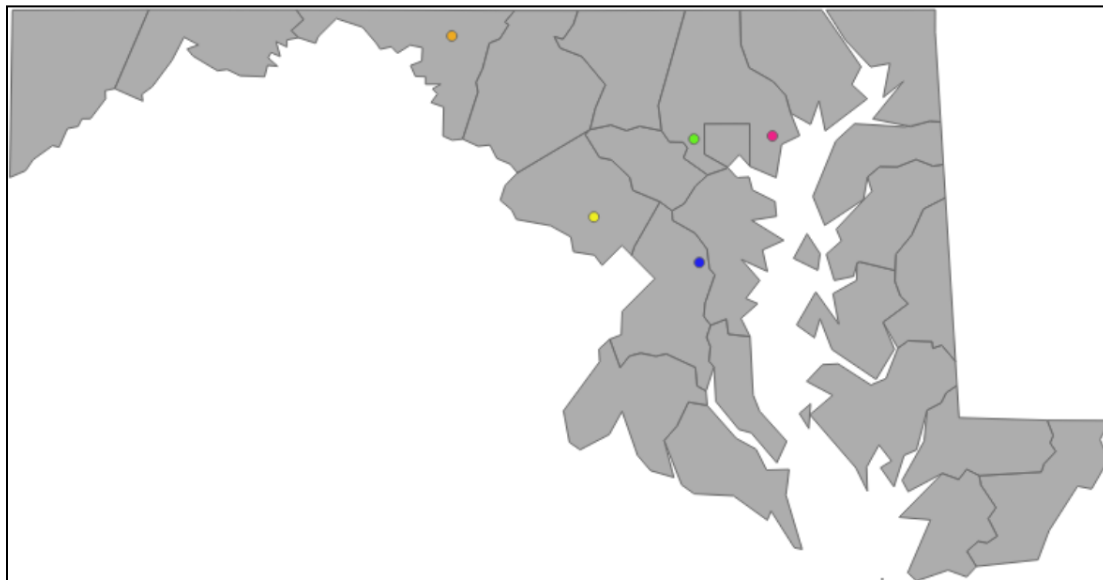
Beneficiaries

Potential applicants include businesses, state and local governments, and non-profit organizations

Description

This competitive program, previously referred to as the Parking Lot Solar Canopy with Electric Vehicle Charger program, has been offered by MEA since 2014. Eligible projects must consist of at least 75 kW of solar photovoltaic panels mounted on a canopy-type structure over a parking lot or parking garage roof, and at least four Level 2 or Level 3 EV charging stations must be installed in conjunction with the canopy system. Participating parking lot properties can help support the state's electric vehicle adoption, Renewable Portfolio Standard, and greenhouse gas reduction goals all while performing the facility's primary function of providing parking access. As ancillary benefits of these projects, vehicles parked underneath the canopies are protected during inclement weather and kept shaded, and thus cooler, during the summer months.

Map 11: FY22 Solar Canopy Program Awards



Orange square	Hagerstown Community College - \$250,000
Pink square	Saint John Properties - \$228,000
Blue square	Saint John Properties - \$250,000
Green square	Saint John Properties - \$250,000
Yellow square	SSI DevCo, LLC - \$250,000

Many of the parking lot solar canopy projects are in fairly visible locations, helping to increase the visibility of solar to the public at large. As examples, this year solar canopy projects will be installed at Hagerstown Community College, a Montgomery County public high school, and apartment complexes in Prince George’s and Baltimore counties.

FY22 projects are still being developed and are not yet installed. Anticipated system capacity estimates for these projects are included below, but are subject to change.

Program Accomplishments

Fiscal Year	FY22
# of projects receiving an award	5
Solar capacity (kW) resulting from the parking lot canopy projects	3,490
Electric vehicle charging stations	20
Anticipated annual generation (kWh)	4,537,130
Anticipated annual CO2 avoided (metric tons CO2/year)	1,321

M. Community Solar Program¹⁹

SEIF Expenditures and Encumbrances: \$2.389 million¹⁶

Beneficiaries

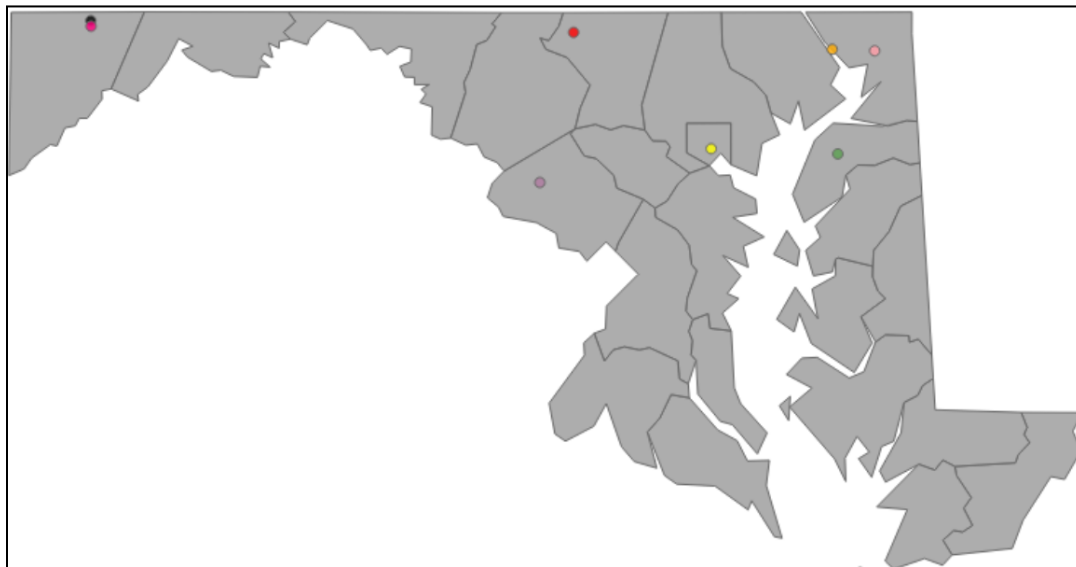
The ultimate beneficiaries of MEA’s Community Solar program are LMI residents who are now more likely and able to participate in a community solar project in the Maryland Public Service Commission (PSC) pilot program.

Community solar helps improve energy equity by expanding the pool of Maryland residents who can potentially participate in solar projects, opening up solar to rental households that make up 32% of Maryland’s housing units¹⁷ and households who may not have the financial resources (e.g., upfront capital, credit history) to otherwise access solar technologies.

Description

Community solar allows Maryland residents to purchase subscriptions for electricity produced from local community solar arrays, thereby gaining some of the same economic advantages as having solar modules directly on a residence, while avoiding possible obstacles to participation in solar that may exist (e.g., roof age, property ownership, roof orientation, or shading). The incentives offered by MEA are designed to help enable LMI Marylanders to participate in the larger, statutorily-created Community Solar pilot program being overseen by the PSC.

Map 12: FY22 Community Solar Array Locations



¹⁶ This reflects the awards made in FY22 and does not include financial transactions for awards from prior fiscal years that impacted FY22 accounting.

¹⁷ U.S. Census Bureau, <https://data.census.gov/table?q=maryland+housing&tid=ACSST1Y2021.S1101>, accessed 1/22/2023.

100A Swiss Dale Farm, LLC - \$333,633
4000 Brown, LLC - \$219,703
17291 Bittinger, LLC - \$228,752
25809a Still Pond Neck, LLC - \$168,228
CAF CS 1 LLC - \$128,821
GEMM COM Limited - \$433,092
Meeting House Solar LLC - \$500,000
RER MD Community Solar 57 LLC - \$376,841

The community solar arrays incentivized in FY22 are power purchase agreement (PPA) projects, in which subscribers agree to purchase the electricity produced by the community solar project, rather than purchase a portion of the community solar array itself. In FY22, incentives for subscriber organizations enable terms and conditions to be offered in the community solar subscription agreement (i.e., a contract by which a customer agrees to participate in a community solar project) that will increase cost savings, and provide more

lenient entry and exit subscription contract terms for LMI residents.

FY22 projects are still being developed and are not yet installed. Generation and capacity estimates for these future installations are included below, but are subject to change.

Program Accomplishments

Fiscal Year	FY22
Total # of grant awards	8
Estimated total new electricity generation of all community solar projects receiving LMI incentives(kWh-ac/year) from MEA	29,473,089
Overall total capacity of community solar PV (kW) projects receiving LMI incentives from MEA	18,426
Estimated amount of new electricity generation from the incentivized community solar projects directed specifically to the LMI community (kWh-ac/year) ¹⁸	13,286,080
Capacity of the incentivized community solar projects that is directed specifically to the LMI community (kW)	8,305
Anticipated annual CO2 avoided from the LMI portions of the incentivized Community Solar projects (metric tons CO2/year)	3,870

¹⁸ The generation capacity and corresponding electricity generation directed specifically to LMI participants is a subset of each participating community solar project.

N. Public Facility Solar Grant Program

SEIF Expenditures and Encumbrances: \$0.961 million¹⁹

Beneficiaries

State, county, or municipal government entities

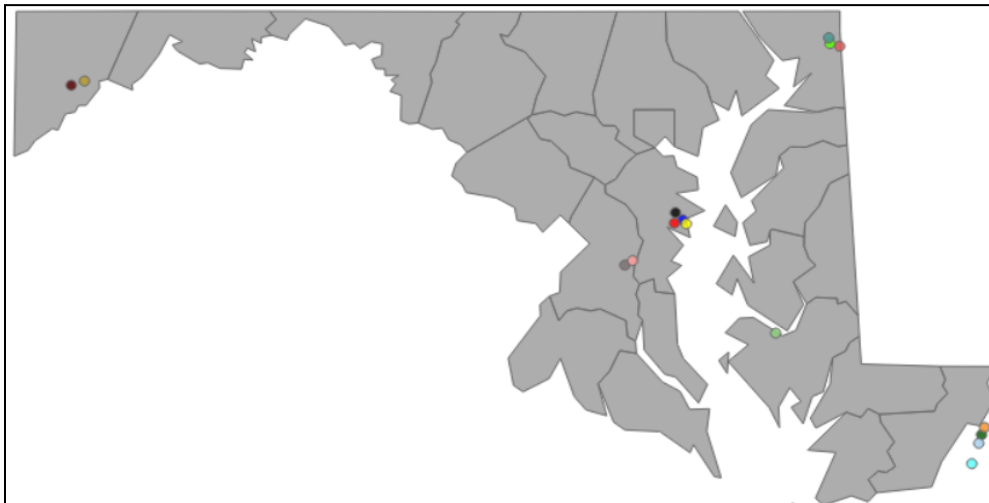
Description

First offered in FY21, the program provides grant funding on a competitive basis to state, county, or municipal government entities to support the planning and installation of solar arrays on existing infrastructure of public facilities. Installation may occur through the direct purchase and installation of solar modules by the public entity, or through a PPA with a third party for installation of a solar array on a public facility or incorporated into a public facility's existing infrastructure.

Government facilities receiving solar arrays through the FY22 program include a number of highly visible state park facilities managed by the Maryland Department of Natural Resources, including projects at Assateague State Park, Deep Creek State Park, and Sandy Point State Park, as well as the Fair Hill Natural Resources Management Area and the Merkle Wildlife Management Area. The City of Cambridge will also be participating in the Program with the City's Public Safety Building.

FY22 projects are still being developed and are not yet installed. Anticipated system capacity and generation estimates for these projects are included below, but are subject to change.

Map 13: FY22 Public Facility Solar Grant Program²⁰



¹⁹ This reflects the awards made in FY22 and does not include financial transactions for awards from prior fiscal years that impacted FY22 accounting.

²⁰ Each building location is being mapped separately, as each represents a separate grant agreement. The Maryland Department of Natural Resources is the grantee for all but one of the FY22 awards.

Assateague State Park - Carpentry - \$115,125
Assateague State Park - Day Use Building 1 - \$33,800
Assateague State Park - Day Use Building 3 - \$61,363
Assateague State Park - Dormitory - \$30,148
City of Cambridge - Public Safety Building - \$125,000
Deep Creek Lake State Park - Cold Storage - \$44,188
Deep Creek Lake State Park - Discovery Center - \$95,025
Fair Hill Natural Resources Management Area - Horse Barn #2 - \$37,500
Fair Hill Natural Resources Management Area - Para-Mutuel Building - \$25,625
Fair Hill Natural Resources Management Area - Walls Hall - \$125,000
Merkle Wildlife Management Area - \$27,500
Merkle Wildlife Management Area - Visitors Center - \$58,125
Sandy Point State Park - Park Office - \$52,000
Sandy Point State Park - South Beach Bathhouse - \$29,164
Sandy Point State Park - South Beach Concession - \$70,250
Sandy Point State Park - Tower Comfort Station - \$30,765

Program Accomplishments

Fiscal Year	FY22
# of projects receiving an award	16
# of participating entities receiving an award	2
Solar capacity (in kW(DC))	386.6
Anticipated annual solar generation (kWh/year)	476,096
Anticipated annual CO2 avoided (metric tons CO2/year)	138

O. Low Income Solar Grant Program (New in FY22)

SEIF Expenditures and Encumbrances: \$1.50 million

Beneficiaries

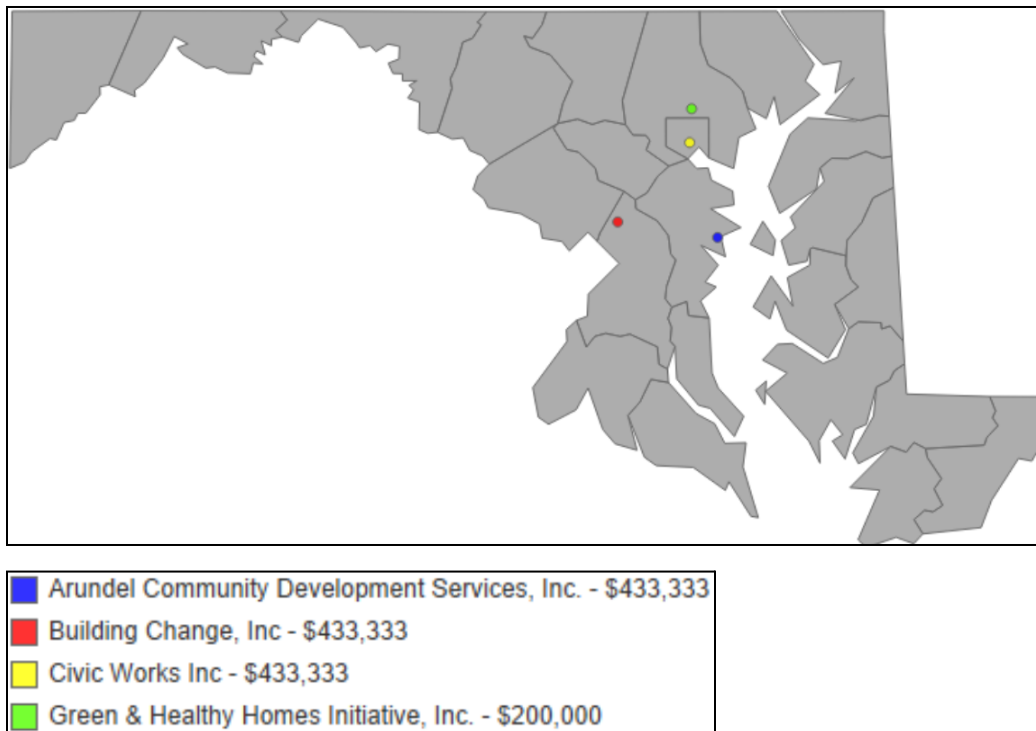
Non profit and local governments

Description

Offered for the first time in FY22, this program provides grant funding on a competitive basis for the design and installation of solar energy systems for single family homes owned by low income residents. Participating households will have already received an energy audit and weatherization-type energy efficiency upgrades as part of MEA's Low-to-Moderate Income Energy Efficiency Grant Program. The Low Income Solar Grant Program makes available up to 100% of the cost for the design and installation of a solar PV system, with a funding cap of \$25,000 per home.

FY22 projects may not yet be installed. Anticipated system capacity and generation estimates for these projects are included below, but are subject to change.

Map 14: FY22 Low Income Solar Grant Program Awardees



Map 13 depicts the grantee's location, rather than the location of the participating homes.

Program Accomplishments

Fiscal Year	FY22
# of projects receiving an award	4
# of low income solar households anticipated to participate	59
Estimated Solar capacity (in kW(DC))	295
Anticipated annual solar generation (kWh/year)	354,000
Anticipated annual CO2 avoided (metric tons CO2/year)	103

P. Offshore Wind Programs

SEIF Expenditures and Encumbrances: *\$2.068 million*

Non-SEIF Expenditures and Encumbrances: *\$1.993 million*^{21,22}

Beneficiaries

Maryland emerging businesses; nonprofit organizations; and state, local, and municipal governments and their agencies/institutions.

Description

The Offshore Wind program includes both the Offshore Wind Development Fund (OSWDF) within the SEIF and the Offshore Wind Business Development Fund (OSWBDF) outside of the SEIF. Respectively, these funds are used for the research efforts of offshore wind projects and the creation of a business supply chain in Maryland.

The OSWDF has historically been used for research initiatives including environmental surveys and wind resource characterization campaigns. The OSWDF is currently being used to enable Maryland to participate in a national consortium funded by the U.S. Department of Energy and other participating states to focus on offshore wind technology challenges in the United States.

The OSWBDF is used to help prepare Maryland's workforce and emerging businesses, including minority-owned emerging businesses, to enter the offshore wind industry. In FY22, the OSWBDF was used to offer the Maryland Offshore Wind Capital Expenditure program (Capital Expenditure Program) and the Maryland Offshore Wind Workforce Training program (Workforce Training Program).

- The Capital Expenditure Program provides support to emerging Maryland businesses that are interested in participating in the global offshore wind industry.
- The Workforce Training Program provides funding to ensure Maryland has a ready and able workforce capable of contributing to the construction, installation, operations, and maintenance of an offshore wind energy project.

OSWDF Program Accomplishments

In FY22, OSWDF funds were again used for a grant to the National Offshore Wind Research and Development Consortium to provide competitive grant funding for research and development projects focused on addressing offshore wind technology advancement; wind power resource and physical site characterization; installation, operations and maintenance; and

²¹ The Maryland Offshore Wind Energy Act of 2013 created the Offshore Wind Business Development Fund outside the SEIF. MEA has included expenditures from the Offshore Wind Business Development Fund in annual SEIF reports in the past. For consistency, MEA is including this information again for FY22.

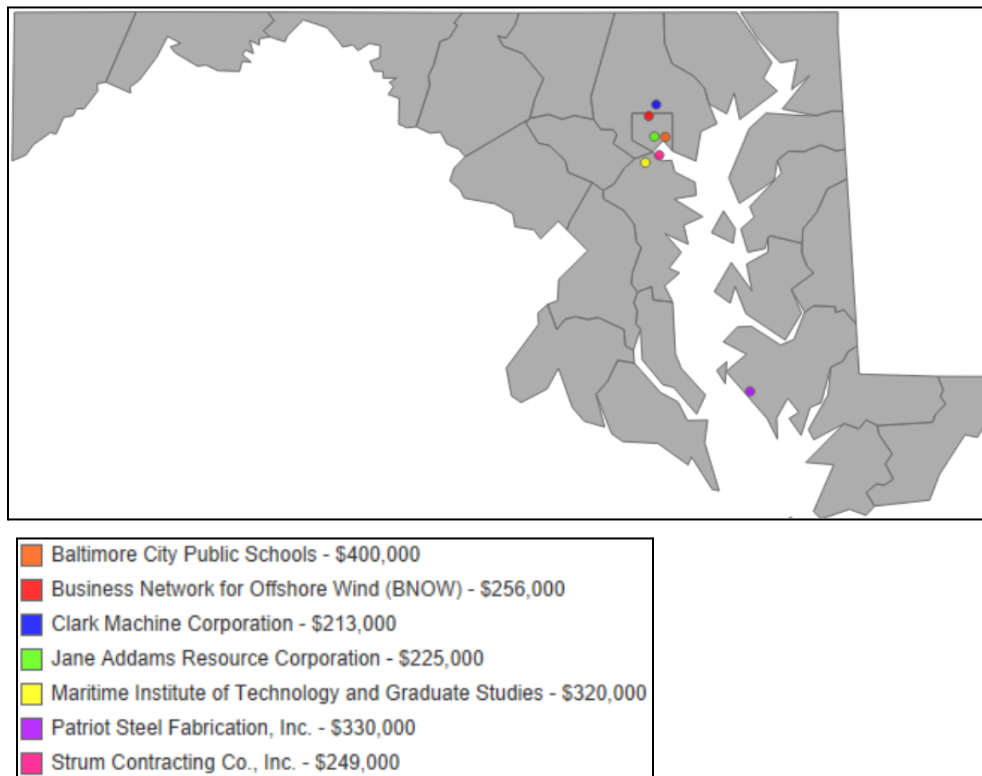
²² This reflects the awards made in FY22 and does not include financial transactions for awards from prior fiscal years that impacted FY22 accounting.

supply chain technology solutions.

OSWBDF Program Accomplishments

In FY22, the OSWBDF funded three projects under the Maryland Offshore Wind Workforce Training Grant Program and three additional projects under the Maryland Offshore Wind Capital Expenditure Grant Program. The OSWBDF also continued funding a grant with the Business Network for Offshore Wind²³ to develop educational resources intended for Maryland’s offshore wind supply chain and the general public of Maryland.

Map 15: Offshore Wind Business Development Fund Grant Locations



Fiscal Year	FY22
# of OSWDF grant awards	1
# of OSWBDF grant awards	7
Estimated # of existing jobs that will be supported via the Capital Expenditure Program	87
Estimated # of new jobs anticipated to be created via the Capital Expenditure Program	34
Estimated # of individual anticipated to be trained via the Workforce Training Program	332

²³ This is a multiple year award.

Q. Electric Vehicle Supply Equipment Program

SEIF Expenditures and Encumbrances: \$1.799 million

Beneficiaries

Electric Vehicle Supply Equipment (EVSE) Rebate Program participants can include homeowners, businesses, nonprofit organizations, and state and local government entities that install eligible electric vehicle charging equipment. Entities purchasing and installing EVSE for non-exclusive individual use in a multi-unit dwelling development (e.g., apartments, condominiums, homeowners associations, etc.) may also participate.

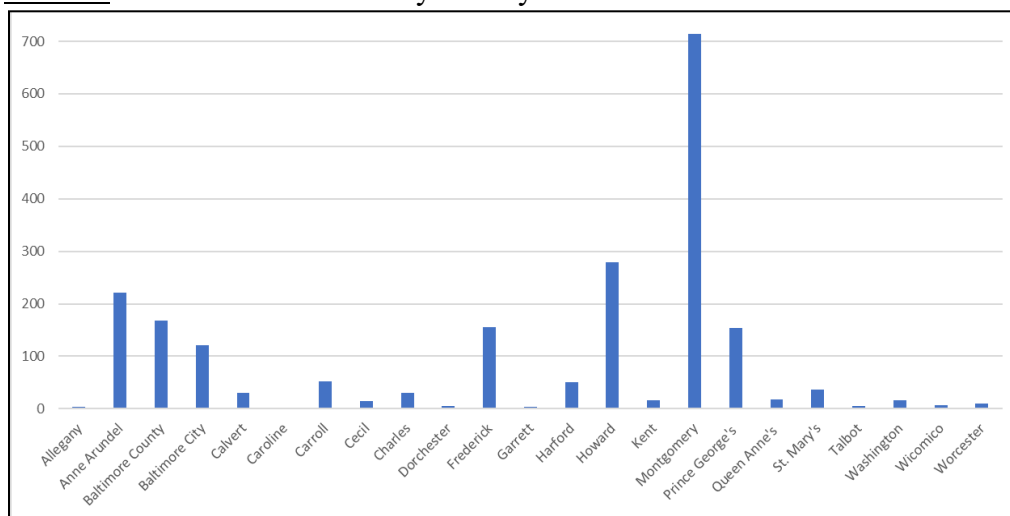
Description

The EVSE Program aims to reduce the financial burden of acquiring and installing electric vehicle charging stations, in order to increase electric vehicle (EV) adoption in support of Maryland's EV deployment and greenhouse gas (GHG) reduction goals.

Over 2,000 EVSE rebates were funded through SEIF in FY22, including both residential and commercial EVSE installations. While each residential EVSE award typically corresponds to one charger, the commercial EVSE program allows for rebates for multiple chargers to be included on the same award application and therefore can result in larger award amounts.²⁴

In FY22, approximately 63% of rebate funds went to Maryland residents, with the remaining rebate funds going to eligible commercial entities.

Chart 3: FY22 EVSE Awards by County²⁵



²⁴ The SEIF report provides a list of participants at the awardee, rather than individual rebate, level. With this in mind, a commercial EVSE participant receiving multiple rebates as part of the same application is listed as one award.

²⁵ This is the county where the charger was installed, which may be different from the mailing address of the rebate applicant.

As illustrated by Chart 3, it can be seen that in FY22 the highest number of rebates were incentivizing chargers installed along the Interstate I-95 corridor, as well as in Montgomery, Anne Arundel, and Frederick counties. In FY22, there were EVSE program participants in every Maryland county (or county equivalent).

In addition to numerous Maryland residents, FY22 EVSE commercial program participants include apartment complexes, condominium associations, and businesses. Commercial awards in FY22 have also gone to entities, such as the Electric Vehicle Institute and Volta Charging, working to build out the public EV charging network in the state.

Program Accomplishments

Fiscal Year	FY22
# of total EVSE rebate awards made	2,003

R. Clean Fuels Incentive Program

SEIF Expenditures and Encumbrances: \$5.47 million²⁶

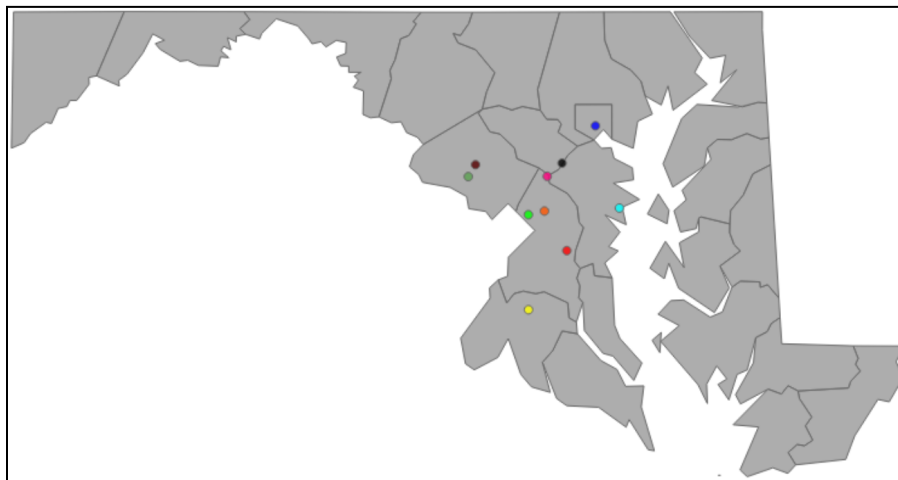
Beneficiaries

Applicants must be a fleet vehicle operator or a fleet vehicle purchaser. Eligible applicants include school districts, local governments, businesses, and non-profit organizations.

Description

This competitive program provides financial assistance for the purchase of new and converted alternative fueled fleet vehicles registered in Maryland. Specifically, the program provides funding to support the incremental cost to purchase alternative fuel fleet vehicles, or to convert new fleet vehicles to utilize alternative fuel. The program establishes a maximum grant award per vehicle, based on the different types of alternative fuel (i.e., all electric, natural gas, propane, biodiesel, and hydrogen) and vehicle class.

Map 16: FY22 Clean Fuels Incentive Program



■	Baltimore Gas and Electric Company - \$60,000
■	Blue Triton Brands, Inc - \$554,275
■	Chaney Enterprises Limited Partnership - \$900,000
■	Ecology Services Inc - \$986,160
■	K Neal International Trucks, Inc. - \$90,000
■	Montgomery County, MD - \$80,000
■	Swann Transportation, Inc. - \$80,000
■	Sysco Baltimore, LLC - \$1,500,000
■	United Parcel Service, Inc. - \$500,000
■	Waste Management of Maryland, Inc. - \$300,000

²⁶ This reflects the awards made in FY22 and does not include financial transactions for awards from prior fiscal years that impacted FY22 accounting.

Program Accomplishments

In FY22, vehicles funded through the Clean Fuels Incentive Program included six electric concrete mixer trucks and ten Class 8 electric tractors, both of which are expected to be the first such deployments in Maryland.

Fiscal Year	FY22
# of projects receiving an award ²⁷	10
# of vehicles anticipated to be incentivized	127
Anticipated annual GHG avoided (metric tons of GHG/year) ²⁸	1,886

²⁷ One additional awardee initially signed a grant agreement but then opted to use a different funding source before funding was committed.

²⁸ Avoided GHG estimates have been derived from the Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool developed by Argonne National Lab (ANL). This tool estimates overall avoided GHG emissions, which may include gases other than just carbon dioxide.

S. Maryland Energy Infrastructure Program

SEIF Expenditures and Encumbrances: \$7.50 million

Beneficiaries

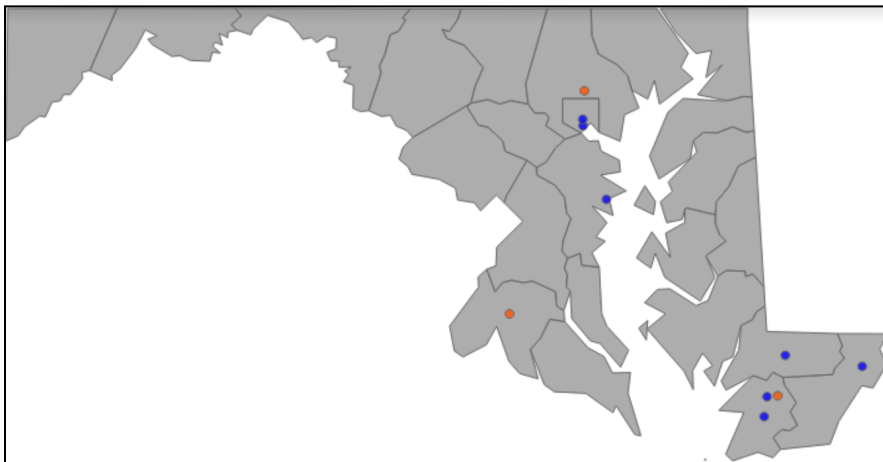
Maryland utilities, local government agencies, and institutions

Description

The Maryland Energy Infrastructure Program (MEIP) includes the Maryland Anchor Customer (Anchor Customer) and the Maryland Local Distribution Company (LDC) subprograms. These initiatives provide funding to assist with energy projects that promote natural gas infrastructure across the state. The SEIF received funds as a result of PSC Order #88631, a part of the PSC case (Case No. 9449) ultimately approving the Merger of AltaGas, Ltd., Washington Gas, and WGL Holdings. The conditions of that Merger, agreed upon by the settling parties, required the creation of the Maryland Gas Expansion Fund (MGEF) and required that that fund be used for the specific purpose of promoting natural gas infrastructure across the state.

- The Anchor Customer subprogram issues grants to commercial, industrial, state agencies, local governments, and nonprofit energy consumers in Maryland. The purpose of the Anchor Customer subprogram is to assist with energy projects that help promote natural gas distribution, including investments in assets that assist customers in converting their operations to natural gas; reintegrate previous natural gas customers who no longer possess natural gas infrastructure or functional natural gas infrastructure; and benefit existing customers not presently utilizing their natural gas infrastructure and/or are seeking to expand their energy demands.
- The LDC subprogram provides matching grants to licensed LDCs to aid in natural gas infrastructure expansion in Maryland. The purpose of the LDC subprogram is to invest in assets that distribute natural gas to new customers, reintegrate previous customers who no longer use natural gas service, and benefit existing customers who are not presently utilizing their natural gas infrastructure.

Map 17: Maryland Energy Infrastructure Program awardees



- Baltimore City Public Schools - \$1,250,000
- Baltimore Gas & Electric - \$500,000
- Berlin Municipal Electric Utility - \$425,000
- Board of Education of Anne Arundel County - \$1,250,000
- Chesapeake Utilities - \$1,000,000
- Clean Energy Corporation - \$300,000
- Maryland Environmental Services - \$525,000
- University of Maryland Eastern Shore - \$750,000
- Washington Gas & Light - \$1,000,000
- Wicomico County Government - \$500,000

- Local Distribution Company (LDC)
- Maryland Anchor Customer Program (MACP)

Some FY22 projects are still being implemented.

Program Accomplishments

Fiscal Year	FY22
# of grants issued	10

T. OPEN Energy Program (New in FY22)

SEIF Expenditures and Encumbrances: \$1.40 million

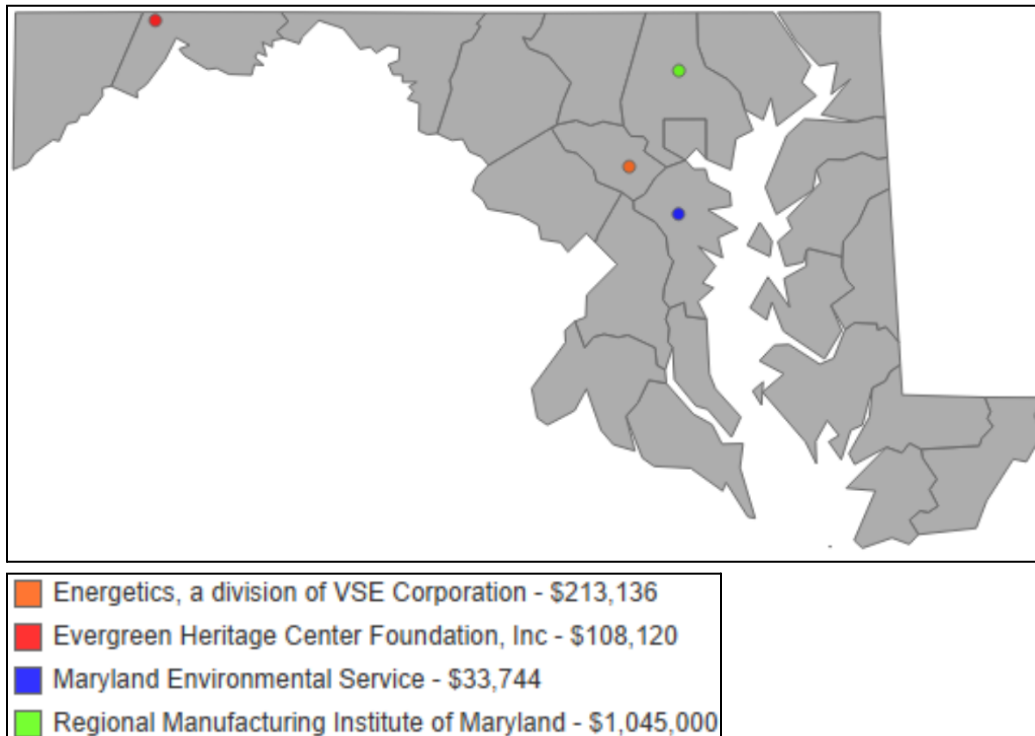
Beneficiaries

Participants must be located, or registered to do business, in Maryland.

Description

MEA occasionally receives proposals for energy projects and initiatives outside of the agency's suite of established technology and sector-specific energy programs offered in a given fiscal year. MEA acknowledges that these types of proposals can potentially help advance the state's energy goals and agency mission in innovative ways while also being responsive to evolving energy issues and engaging a broad range of stakeholders. Offered for the first time in FY22, MEA's OPEN Energy Program (OPEN Energy) provides an avenue for the agency to consider these proposals for funding. Applications under OPEN Energy should be efforts that have the potential to be replicated or provide a public benefit beyond a single project or activity.

Map 18: FY22 OPEN Energy awards



Program Accomplishments

The scope of OPEN ENERGY is by design broad in nature, to allow for innovation in the energy space. Projects funded since the launch of the program in FY22 include:

- a demonstration project to show that low methane content biogas from a landfill can be used to generate electricity;
- an initiative to demonstrate and educate on the use of alternative energy technologies in rural settings;
- a project to expand outreach and services to manufacturing companies to adopt energy efficiency, renewable energy, and green transportation technologies, as well as to prepare to enter the offshore wind supply chain; and,
- an assessment for electrifying fishing and marine vessels.

Fiscal Year	FY22
# of grant awards	4

U. Municipal LED Streetlight Program

SEIF Expenditures and Encumbrances: \$0.019 million

Beneficiaries

Local governments and Maryland residents

Description

MEA, along with several project partners, received a competitive grant from the U.S. Department of Energy to help facilitate the conversion of streetlights by local governments to more efficient LED technologies.²⁹

²⁹ More information on the effort can be found at <https://energy.maryland.gov/govt/Pages/municipal-streetlight-grant.aspx>.

V. Communications and Marketing

SEIF Expenditures and Encumbrances: \$0.031 million

Beneficiaries

All Marylanders

Description

Funds under the Communications and Marketing budget are used to promote MEA energy programs and awareness to Maryland residents, businesses, nonprofits and local governments. The majority of FY22 communication and marketing funding was used for an underwriting promotion for Maryland Public Television (MPT) programs. As an example, the sponsorship highlighted MEA's Resiliency Maryland program during several MPT evening programs.

W. Energy Technical Support

SEIF Expenditures and Encumbrances: \$2.143 million

Beneficiaries

Maryland residents, businesses, nonprofit organizations, and local governments.

Description

MEA funded technical support for efforts that support the state's energy efficiency, renewable energy, and energy-related transportation initiatives, as well as energy reliability and resiliency.

Program Accomplishments

Energy programs receiving technical implementation support using FY22 funding include the LMI Energy Efficiency Program, the Maryland Smart Energy Communities Program, and the Resilient Maryland Capital Development Program. Technical assistance was also used for third-party evaluation of an animal waste-to-energy project.

In addition, MEA leveraged outside technical services in support of several statutorily-established energy priorities. In FY22, this included:

- an update to Maryland's emergency liquid fuel plan, consistent with §9-2005(1) of the State Government Article which requires contingency plans for mitigating the impact of severe shortages of diesel, motor gasoline, residual fuel oil, and propane gas;
- a technical study of geothermal heating and cooling systems, as required under Section 2 of Chapter 164 of the Acts of the Maryland General Assembly of 2021;
- research and analysis on how other states are implementing appliance energy standards, such as those passed in Chapter 564 of the Acts of the Maryland General Assembly of 2022; and,
- an update to Maryland's energy security plan.³⁰

MEA also funded several studies and data analyses in FY22. SEIF funds were used to provide an evaluation and assessment of Maryland's inventory of landfills, rubble fills, brownfields, and similar sites for solar development potential; an assessment of community energy vulnerabilities and key infrastructure; and engagement in a future study of locational value for Maryland's electric distribution grid, in support of MEA's efforts supporting the Distribution System Planning Working Group at the Maryland Public Service Commission.³¹

³⁰ As the state energy office for Maryland, MEA receives an annual State Energy Program (SEP) award from the U.S. Department of Energy. Section 40108 of the Infrastructure Investment and Jobs Act (IIJA) requires states receiving SEP funding to submit a State energy security plan.

³¹ Maryland Public Service Commission, Case 9665.

X. Administration

SEIF Expenditures and Encumbrances: \$4.838 million

Beneficiaries

All Marylanders benefit from the efforts that occur under the SEIF.

Description

In order to help the state meet its energy goals, MEA implements numerous energy programs and helps develop energy policy, as well as financially administers the Strategic Energy Investment Fund. As MEA does not receive any General Funds, the majority of MEA's funding for staffing of energy programs, energy policy and planning efforts, and general operational expenses come from Regional Greenhouse Gas Initiative proceeds.

Program Accomplishments

During FY22, funding under the Administration Program enabled:

- MEA to execute a number of the state's energy programs described throughout this report, including activities related to energy emergency planning;
- Travel in support of the execution of the SEIF and the state's energy goals, such as visits to grant-funded project sites and participation at Maryland Association of Counties events;
- Energy policy and planning activity, many of which involve legislative-style hearings before the Maryland Public Service Commission (PSC), to support policy efforts involving:
 - EmPOWER Maryland;
 - community solar; and,
 - offshore wind.

Further, during FY22, MEA participated in various collaborative efforts such as the Zero Emission Electric Vehicle Infrastructure Council, the Maryland Green Buildings Council, the National Offshore Wind Research and Development Council, the Maryland Clean Energy Center Executive Board, the Maryland Commission on Climate Change, and the Chesapeake Bay Subcabinet. Nationally, MEA has participated in events organized by the National Association of State Energy Officials.

SEIF-Funded Initiatives Implemented by State Entities other than MEA

Y. Maryland Department of the Environment - Climate Change Program

FY22 Appropriation: \$2.950 million

FY22 Expenditures and Encumbrances: \$2.915 million

Program Beneficiaries and Participants

The State of Maryland.

Description

As required by §9-20B-04 of the State Government Article, monies are provided from SEIF to the Clean Air Fund managed by the Maryland Department of the Environment (MDE). SEIF is used to fund the costs of MDE's programs to reduce or mitigate the effects of climate change. MDE used SEIF to fund staffing and operating costs across MDE's Air and Radiation Administration, including efforts related to climate change, air quality planning, the Director's Office, permits, and compliance. Further expenditures include contractual assistance for tasks beyond the expertise of the staff, such as emissions modeling and economic analyses, and for securing, as necessary, additional resources to assist in implementing the Greenhouse Gas Emissions Reduction Act (GGRA).

SEIF is also used by MDE to pay annual dues for Maryland's membership in RGGI, Inc. RGGI, Inc. is a regional organization that assists the member states with the operational aspects of the program. The member states are required to pay dues to RGGI, Inc. for their share of the operational costs of the auction platform, as well as for other implementation costs.

Z. Maryland Department of the Environment- Energy-Water Infrastructure Program

Awards made by MDE during FY22 utilizing SEIF from prior fiscal years: \$4.171 million³²

SEIF funds transferred in FY22 to MDE: \$4.709 million³³

Beneficiaries

Maryland water and wastewater treatment plant owners.

Description

The Energy-Water Infrastructure program (EWIP) provides capital grant funds to water and wastewater treatment plant owners to develop energy efficient and resilient projects, including CHP systems and other alternative or green energy sources, and for replacement of aging equipment with newer, more energy efficient technologies. The program focuses on promoting onsite waste-to-energy power generation by commissioning new combined heat and power systems, more efficient pumps, energy efficiency measures, or other alternative/green energy sources.

Program Accomplishments

In FY22, MDE reports awarding prior fiscal year funding to three projects.³⁴ Projects include:

- Anne Arundel County - renewable energy at the utility operations complex (solar photovoltaic array)³⁵
- Allegany County - Braddock Pump Station³⁶
- Town of Federalsburg -wastewater treatment plant upgrade (solar panel system)³⁷

³² As reported by MDE to MEA on 10/6/22 via email.

³³ Unlike the majority of other SEIF-funded programs in this report, MDE's EWIP is a capital program with multiple year funding appropriation. All EWIP funding was appropriated in previous fiscal years (i.e., FY17, FY18 and FY19).

³⁴ All of these projects are reported as having been allocated or awarded funds from prior fiscal year appropriation, rather than FY22 appropriation as is typically listed in this report.

³⁵ <https://bpw.maryland.gov/MeetingDocs/2021-Aug-11-Agenda.pdf?csf=1&e=TcWlJh>, page 7.

³⁶ <https://bpw.maryland.gov/MeetingDocs/2021-Aug-11-Agenda.pdf?csf=1&e=TcWlJh>, page 9.

³⁷ <https://bpw.maryland.gov/MeetingDocs/2021-Nov-3-Agenda.pdf>, page 11.

AA. Maryland Energy Innovation Institute

SEIF FY22 Transfers to the Maryland Energy Investment Fund: \$2.1 million

Summary

As required by Chapter 13 of the Acts of the General Assembly of 2021, \$2.1 million in SEIF funds were transferred to the Maryland Energy Innovation Fund (MEIF) in FY22. The Maryland Energy Innovation Institute (MEII) that manages the MEIF has produced an annual report of FY22 MEII activity.³⁸

In the MEII's Annual Report FY22, MEII reports an FY22 budget of \$1,531,000 with actual expenditure of \$2,035,999.³⁹ The Maryland Clean Energy Center (MCEC), which in previous years received funding directly from the SEIF, received more than half of the FY22 SEIF funds provided to the MEIF via a subaward from MEII. The MEII Annual Report indicates that MCEC received \$1,188,446 through a subaward from MEII in FY22.

³⁸ Maryland Energy Innovation Institute Annual Report FY2022, <https://energy.umd.edu/sites/energy.umd.edu/files/SB460FY2022.pdf>.

³⁹ Maryland Energy Innovation Institute Annual Report FY2022, Appendix 1, page 30.

BB. Department of Labor- EARN Maryland

SEIF FY22 Appropriated Budget: \$1 million

SEIF FY22 Expenditures and Encumbrances by the Department of Labor: \$0

Beneficiaries

Maryland businesses and workers

FY22 Program Accomplishments

In FY22, the Department of Labor (Labor) did not make new awards under the Employment Advancement Right Now (EARN) Maryland Green Jobs Initiative.⁴⁰

Prior Year Program Accomplishments

While no new awards using SEIF were made in FY21 or FY22 by Labor, Labor reports that three grantees awarded funds in FY20 wrapped up implementation in 2022.

- The Solar Installation Training Partnership, led by Civic Works, submitted their final reporting in May of 2022. The partnership delivered training to unemployed, underemployed and incumbent workers. Entry-level training focuses on foundational technical skills, certifications, and job readiness skills while incumbent training includes solar installer training and leadership skills.
- Led by Power52, the Clean Energy Training Partnership wrapped up programming funded with SEIF dollars in January of 2022. The partnership works closely with nearly 30 employer partners to provide training to unemployed and underemployed Marylanders with barriers to employment in preparation for employment in the renewable energy industry. Following classroom instruction, in which participants earn OSHA certifications and are prepared for the North American Board of Certified Energy Practitioners certification, participants receive hands-on field training in the installation of solar panels and battery storage.
- The Wor-Wic Welding Partnership wrapped up training in June of 2022. Students have the opportunity to enroll in two different training tracks. The first is an 18-week welding course that teaches stick, flux core, MIG, and TIG welding. The newly-implemented 14-week metal fabrication course prepares students to earn up to ten OSHA certifications.

⁴⁰ Chapter 757 of the 2019 Acts of the Maryland General Assembly will ultimately provide eight million dollars over multiple years to Labor, starting in FY21. This funding is to be used to support clean energy job development through the utilization of registered apprenticeships, pre-apprenticeships, and youth apprenticeships via the Clean Energy Workforce Account. Labor indicates that a Solicitation for Implementation Grants was released in December 2021. Though 18 applications were received, none met the legislatively mandated requirements of the CEJA funding and therefore no SEIF funds were awarded by Labor in FY22.

CC. Department of Budget and Management- State Fleet Electric Vehicle Program

FY22 SEIF appropriation: \$2.25 million

Description

In FY22, the purchase of state fleet electric vehicles was again coordinated by the Department of Budget and Management.

DD. Maryland Department of Transportation

FY22 SEIF appropriation: \$8.185 million

FY22 SEIF funding transferred amount: \$0⁴¹

Description

Maryland's Zero Emission Vehicle Tax Credit program is administered by the Maryland Vehicle Administration, which is a business unit of the Maryland Department of Transportation. Chapter 670 of the Acts of the Maryland General Assembly of 2021 requires MEA to transfer the lesser of \$10,000,000 or the actual total outstanding amount of the credit allowed against the excise tax credit from the Strategic Energy Investment Fund to the Transportation Trust Fund. The transfer will offset the reduction in revenues from the vehicle excise tax credit for qualified plug-in electric drive vehicles and fuel cell electric vehicles under §13-815 of the Transportation Article that were applied for before July 1, 2020.

⁴¹ MEA did not yet receive a SEIF transfer request related to the vehicle excise tax credit in FY22.

EE. Department of Commerce

FY22 SEIF appropriation: \$0.500 million

FY22 SEIF committed funding: \$0 million

Program Description

For fiscal years 2021 through 2028, section §9-20B-05 of the State Government Article requires monies from the SEIF, in prescribed annual amounts, to be provided as funding for access to capital for small, minority, women-owned, and veteran-owned businesses in the clean energy industry. As required by statute, \$0.5 million in SEIF was committed to the Department of Commerce (Commerce) for fiscal year 2022 via a memorandum of understanding between MEA and Commerce.

Program Outcomes

In the annual report submitted by Commerce to MEA regarding the use of SEIF funds, Commerce indicated that there was no program activity during fiscal year 2022. Commerce further indicates that it “does not expect to utilize any of the SEIF Funds” and that “Commerce has not received any inquiries from businesses in this sector regarding the SEIF Funds”.⁴²

⁴² Annual Financial Status Report, State Government Article, Maryland Department of Commerce, June 30, 2022.

FF. Department of General Services

SEIF FY22 Appropriated Budget: \$3.5 million

SEIF FY22 Expenditures as of 6/30/22: \$0.5 million

SEIF FY22 Encumbrances of 6/30/22: \$3.0 million

Beneficiaries

State agencies and Maryland taxpayers benefit from this program.

Description

Within the Department of General Services (DGS), the Office of Energy and Sustainability (Energy Office) provides professional, managerial and technical services to reduce energy consumption and costs by identifying state agency energy reduction opportunities. Some of the initiatives being undertaken by the DGS Energy Office include energy performance contracting (EPC), energy use tracking, renewable energy sourcing, and demand response.

SEIF funds were used to support the energy performance contracting (EPC) program, to support staff time to work on an executive order related to energy savings goals for state government, to install energy efficient lighting, and to improve and update data in the statewide utility database. During FY22, the DGS Energy Office continued to work on developing EPCs with Maryland Department of Health (MDH), the Maryland Transit Administration, and the Maryland Department of Public Safety and Correctional Services. The DGS Energy Office also hired a third-party measurement and verification (M&V) firm to help develop energy baselines and to review the annual M&V reports submitted by energy service companies on current projects.

The DGS Energy Office, working with project managers from the Facilities Engineering and Design office at DGS, is using \$3,000,000 in SEIF funds in FY22 to install nearly 14,000 LED light fixtures and controls in several DGS and MDH buildings covering more than 1.4 million square feet. Total annual project savings are expected to be 3,566 MWH of electricity, avoidance of \$716,724 in annual operating expenses, and yearly avoidance of 2,671 metric tons of CO₂. SEIF funds were used for project expenses including installation and materials.

Work on the energy database included tracking and reporting energy use data. The DGS Energy Office continues to work with the contractor that manages the database to add functionality to the database to take in submeter data, and to make it a more useful tool.

GG. Department of Human Services- Energy Universal Service Program Bill Assistance

SEIF FY22 Budget Appropriation: \$31.948 million

SEIF FY22 Disbursements by MEA to DHS: \$31.948 million

SEIF FY22 Expenditures by DHS: \$30.961 million⁴³

Beneficiaries

The Office of Home Energy Programs (OHEP) within the Maryland Department of Human Services (DHS) provides electric utility payment assistance to eligible low-income Maryland households.⁴⁴

Description

SEIF funds are used for Electric Universal Service program (EUSP) Bill Assistance and Arrearage Retirement Assistance program benefits. Bill payment assistance benefits make ongoing electric bills more affordable by paying part of a household’s monthly electric bill. Benefit amounts are based on electric usage, household size, and income. Funds generated through the EUSP utility ratepayer service charge provide the majority of funding for bill assistance, with SEIF funds fulfilling benefits when ratepayer funds are exhausted.

Electric Arrearage Retirement Assistance benefits retire past due bills up to \$2,000. An arrearage retirement benefit is available once every five years, with certain exceptions for vulnerable populations. Benefits are paid directly to electric utilities on behalf of the program applicant.

Program Accomplishments

The EUSP bill assistance and electric arrearage retirement assistance benefits administered by OHEP prevent and resolve utility disconnections. The electric arrearage retirement assistance benefit directly prevents or resolves disconnections that may result in life-threatening health and safety concerns, or result in households becoming homeless. Bill assistance keeps bills at an affordable level so that customers do not end up in a utility crisis in the first place.

FY22 Outcomes	Households Served	Total Benefits Paid	SEIF Benefits Paid
Bill Assistance	80,077	\$ 61,750,557.48	\$24,294,731
Arrearage Retirement Assistance ⁴⁵	20,890	\$ 21,090,755.09	\$6,666,154.71
Total	80,077	\$ 82,841,312.57	\$30,960,885.71

⁴³ As reported by DHS to MEA.

⁴⁴ Eligibility requires income equal to or less than 175% of the federal poverty level.

⁴⁵ Arrearage recipients are a subset of EUSP Bill Assistance recipients.

HH. Department of Health - Energy Performance Contract Repayments

FY22 SEIF Transfer: \$2.036 million⁴⁶

Description

In Maryland, General Funds typically pay for state agencies' energy bills. To lower energy bills, many state agencies participate in EPC agreements. EPC agreements are intended to be self-funded with the state borrowing funds to pay for the energy improvements, and the annual energy savings from those improvements guaranteed to be more than enough to repay the borrowed funds. However, for some past MDH energy performance contracting agreements, the state has chosen to use RGGI-derived SEIF funds allocated for energy efficiency to repay the loans.

⁴⁶ DHS requested the FY22 transfer in FY23.

II. Department of Agriculture

FY22 SEIF appropriation: \$0

FY22 SEIF funds transferred: \$1.00 million

Description

SEIF funds were transferred to the Maryland Department of Agriculture (MDA) for innovative animal waste technology projects that involved an energy-related component, as well as for third-party monitoring of one of the projects.

JJ. SEIF Planning FY22

Introduction

§9-20B-12 of the State Government article requires MEA to report annually on the status of SEIF expenditures during the current fiscal year, as well as provide an update on the possible or expected program initiatives and changes in future years. Consistent with §9-20B-12, this section of the FY22 SEIF report constitutes MEA's planning update for SEIF in future fiscal years.

Background on SEIF

Historically, SEIF has been primarily funded through RGGI proceeds. RGGI-derived SEIF proceeds fluctuate with the RGGI auction prices, which are impacted by many external factors. Since its inception, SEIF has also received funding from multiple non-RGGI sources. The amount of SEIF revenues received by source in FY20, FY21, and FY22 are shown in Appendix A, Chart 5.

In the past, the majority of non-RGGI contributions to SEIF came by order of the PSC, and in most cases were not known in advance and thus not predictable. Funds from these PSC proceedings came with strictly prescribed allowable uses that, in some cases, are similar to the prescriptive uses of funds derived from the RGGI auctions. Funds from PSC proceedings are typically restricted to distinct purposes, and possibly specific areas of the state.

Alternative compliance payments made under Maryland's Renewable Portfolio Standard are also deposited into the SEIF. Alternative compliance payments increased significantly between FY21 and FY22, as described further in the *Fund Source Availability* section below.

Looking forward, long-term SEIF proceed forecasting over multiple years can be challenging. Forecasting RGGI-derived proceeds several auctions out is difficult, as the RGGI auction price is market-based and thus dynamic, similar to a stock price. Changes in statute can also impact available SEIF proceeds, such as changes to the RPS statute.

Statutory changes can also impact the amount of SEIF proceeds available for programmatic initiatives from year-to-year. As new uses of SEIF funds are contemplated, the existing uses of SEIF also need to be considered to ensure existing energy programs effectively serving Maryland are not inadvertently impacted in an adverse way.

With these considerations in mind, MEA provides the following discussion of funding source availability and forecast of potential future SEIF programming. All future SEIF uses must be consistent with the SEIF statute, and SEIF can not be used for the general obligations of the state.

Finally, §9-20B-07 of the State Government article establishes a Strategic Energy Investment Advisory Board. An update on the Strategic Energy Investment Advisory Board is provided at the end of this section.

Fund Source Availability

Regional Greenhouse Gas Initiative

Revenues from RGGI auctions have historically been volatile, sensitive to both market fundamentals and changes in local and national policy. Since the first auction, auction clearing prices have varied from \$1.86 to \$13.90 per allowance.⁴⁷ All the while, the CO2 allowance budget has decreased from 188.1 million allowances in CY09⁴⁸ to 97.0 million allowances in CY22.⁴⁹

As a result of the dramatic drop of clearance prices and revenues that followed RGGI Auction #30 in December 2015, MEA adopted a conservative approach to the projection of RGGI revenues in the state's budget. Under this approach, auction revenues were projected at the auction floor price, assuming all available allowances sold. This conservative approach built a definitive revenue base in the face of the RGGI volatility and allowed for the proper budgeting of revenue over the auction floor price in a subsequent budget cycle. Proceeds received above the auction floor price were then budgeted in a future fiscal year cycle. However, this methodology resulted in fund balances accruing in the SEIF while awaiting the next budget cycle, if the RGGI auction price was higher than the floor.

With this in mind, MEA has amended the RGGI proceeds budgeting process to now instead be based on a rolling average of the clearing prices of the most recent eight RGGI auctions. In this way, budget forecasts are now based on more recent RGGI activity and should generally allow a greater share of RGGI proceeds to be budgeted more quickly, while still in a fairly conservative manner based on the average auction price results of the last two years. Similar to the prior method of budgeting, any RGGI proceeds received above the rolling average of the clearing prices of the most recent eight RGGI auctions, rather than the auction floor price that was used in the past, will then be budgeted in a future fiscal year cycle.

RGGI Formula

As required by §9-20B-12 of the State Government article, MEA is required to report on recommendations for changes to the allocation of RGGI-derived SEIF funds. As the goal of the RGGI initiative is to reduce greenhouse gas emissions, MEA supports the use of RGGI funds for energy projects that enable greenhouse gas emission reductions, while also supporting state energy goals and investments.

A significant majority of MEA's funding for staffing of energy programs, energy policy and planning efforts, and general operational expenses come from Regional Greenhouse Gas Initiative proceeds under §9–20B–05 of the State Government article. §9–20B–05 caps the allocation of funds credited for these purposes under the formula at up to 10%,

⁴⁷ <https://www.rggi.org/Auctions/Auction-Results/Prices-Volumes>.

⁴⁸ https://www.rggi.org/sites/default/files/Uploads/Allowance-Tracking/2009_Allowance-Distribution.xlsx.

⁴⁹ This is the CO2 allowance adjusted budget. See https://www.rggi.org/sites/default/files/Uploads/Allowance-Tracking/2022_Allowance-Distribution.xlsx.

but not more than \$5 million. MEA does not receive any General Funds. Additionally, MEA does not have a mechanism to be able to obtain resources for program-related implementation and administration from non-RGGI proceeds into SEIF. As a result, during times of higher RGGI proceeds or financial infusions into SEIF from other sources (e.g., increased RPS alternative compliance payments), MEA is left with a structural challenge of having to administer a more robust Strategic Energy Investment Fund and manage larger energy programs that deploy greater amounts of funding with limited administrative resources.

To better align the level of effort required to manage the SEIF and implement effective SEIF-funded energy programs, an adjustment could be considered to the SEIF statute to either remove the \$5 million maximum from the RGGI formula or alternatively, at least increase the cap. In order to ensure effective and efficient deployment of SEIF resources, the administrative allocation cap should be more reflective of the level of proceeds coming into the SEIF and the commensurate level of effort and resources that are required to successfully design, implement, and oversee the SEIF and SEIF-funded initiatives.

Alternative Compliance Payments

During fiscal year 2022, the SEIF experienced an influx of solar alternative compliance payments (ACP), resulting from statutory changes made to Maryland's RPS in 2019.⁵⁰ In addition to requiring all new ACP payments moving forward be used to incentivize projects that are owned or benefit low-income Marylanders, the statutory changes in 2019 also increased the RPS solar carve-out.⁵¹ As a result of the larger RPS solar carve-out, approximately all of the available sRECs were used for compliance in RPS compliance year 2021. Once available sRECs were depleted, the only way for suppliers to comply with the solar carveout portion of the RPS for compliance year 2021⁵² was to pay the solar alternative compliance payment. This development resulted in ACP for compliance year 2021 being a more significant portion of new proceeds into the SEIF during FY22 than in prior years, with the new ACP funds restricted to solar projects that are owned by or directly benefit low-income residents.

Other SEIF sources from Prior Years

Fund balances from several non-RGGI fund sources originating in prior years remain in the SEIF.⁵³ All SEIF fund balances must be used consistent with the respective funding source's allowable use(s), and subject to all necessary concurrences and approvals by the Governor and the General Assembly.

⁵⁰ Chapter 516 of the Acts of the Maryland General Assembly of 2019.

⁵¹ Additional information on Maryland's Renewable Portfolio Standard can be found in the [Renewable Energy Portfolio Standard Report With Data for Calendar Year 2021](#) produced by the Public Service Commission of Maryland.

⁵² The ACP proceeds accrued in the spring of 2022, corresponding to the time that RPS supplier certification reports and alternative compliance payments are due to the Maryland Public Service Commission, which regulates Maryland's RPS program.

⁵³ End of year SEIF fund balances are included annually in the Maryland Budget Highlights document.

Current SEIF-Funded Energy Programs (FY22)

Maryland Energy Administration

In FY22, MEA is offering a number of energy programs funded through SEIF that focus on energy efficiency, renewable energy, alternative transportation fuels, and/or energy resiliency. Depending on the nature of an incentive program, if applicable, and the eligible technology, some programs are implemented competitively while other programs are first-come, first-served. MEA's programs are outlined in greater detail in the beginning of this report.

SEIF-Funded Programs Implemented by other State Agencies

State agencies other than MEA also implement initiatives funded through SEIF. Other Maryland state agencies allocated SEIF in fiscal year 2022 include the Department of Human Services, the Department of General Services, the Maryland Department of the Environment, the Department of Commerce, the Department of Labor, and the Department of Budget and Management. Additionally, SEIF funds were transferred, as required by statute, to the Maryland Energy Innovation Fund for the Maryland Energy Innovation Institute at the University of Maryland, College Park which provides a subaward to the Maryland Clean Energy Center.

Information on FY22 expenditures and FY23 appropriations to other state agencies can be found in Appendix A, Chart 4.

Future SEIF Programs

Looking forward, the existing portfolio of MEA programs outlined above is generally anticipated to continue serving all sectors of the economy and providing benefits across communities in Maryland. The types of energy programs being offered by MEA are highly dependent on the overall magnitude of funding available, as well as the allowable uses of each fund source.

With that in mind, MEA sees a continued opportunity to potentially bundle energy programs under “umbrella” or “portfolio” programs, to help with program marketing and help interested parties find their relevant programs more quickly and easily. MEA was able to successfully deploy this concept in fiscal year 2023 to MEA's portfolio of resiliency-related programs from prior years, integrating the previous Resilient Maryland Program for planning support with the Resilient Maryland Capital Development and Resiliency Hub Grant Programs. This combined program framework enables more centralized energy resiliency planning efforts and creates an array of incentives to assist projects from conception through installation and operation. Similarly, the Data Center Energy Efficiency Program was consolidated into the Commercial, Industrial, and Agriculture Program for energy efficiency in FY23.

The most significant development in SEIF in FY22 was a result of the influx of new solar ACP proceeds that were injected into the SEIF late in the fiscal year. By statute, the new

ACP funds can only be used for solar projects that are owned by or benefit low-income Maryland residents. MEA had prepared for the potentially higher levels of solar-related ACP by implementing a low-income solar pilot in fiscal year 2022. Moving forward, MEA will be developing opportunities for new and expanded program offerings that help develop solar projects benefiting low-income Marylanders.

Finally, MEA anticipates possibly making SEIF program adjustments to align with the funding opportunities for energy initiatives that will be available under the federal Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA).

- MEA has proposed to use federal IIJA State Energy Program funding to develop a multiple year plan for MEA's portfolio of SEIF-funded energy programs. If approved by DOE, this effort will collectively analyze MEA's portfolio of energy programs; review the program portfolio from a lens of diversity, equity, and inclusion; and help identify ways to expand our portfolio of outreach partners to reach key market segments and demographics.
- As Maryland's state energy office, MEA will also be the recipient for the home energy rebates being provided under Sections 50121 and 50122 of the IRA. While the specific details of these programs are still being developed by the U.S. Department of Energy, the sheer magnitude of these multiple year programs will require coordination with many of Maryland's energy programs, both internal and external to MEA, including SEIF-funded programs.

Conclusion

In conclusion, MEA envisions that the SEIF will continue to be used to enable energy efficiency, renewable energy, alternative transportation fuels, or energy resiliency programs and initiatives. MEA continues to work to develop the most impactful programs, leverage new technologies, and track national trends as well as emerging federal opportunities. As in past years, MEA intends to continue to evaluate energy programs for both efficacy and affordability. All potential programmatic activity is subject to all necessary concurrences and approvals by the Governor and the General Assembly.

SEIF Board update

A Strategic Energy Investment Advisory Board (Board) was created to advise the MEA on the uses and expenditures of the SEIF under § 9-20B-07 of the State Government Article. MEA continues to meet with the Board regularly to inform that body on the status of the RGGI program and MEA programs. Additionally, MEA has a dedicated webpage⁵⁴ that contains the 2022 Board meeting history, as well as presentations presented to the Board.

The Board staff provided by MEA has more recently utilized the regular Board meetings as an educational opportunity. In addition to the status of SEIF-related expenditures,

⁵⁴ <https://energy.maryland.gov/Pages/Strategic-Energy-Investment-Fund-Board.aspx>.

revenues, balances, and programs, a recent meeting focussed on diversity, equity, and inclusion (DEI) efforts. Future topics are expected to include resiliency.

Appendix A: SEIF Financials

Chart 4: SEIF Expenditures and Active Commitments for FY22 with FY23 Appropriations

	FY2022 Actual	FY2023 Appropriation
Maryland Department of the Environment - RGGI Inc. Dues	365,032	300,000
Maryland Department of the Environment - Energy-Water Infrastructure Program ⁵⁵	0	0
Maryland Department of the Environment - Climate Change	2,550,000	3,550,000
University of Maryland (Maryland Energy Innovation Fund)	2,100,000	2,100,000
Department of Human Services - Energy Bill Assistance	31,947,519	82,817,693
Department of General Services	3,500,000	3,850,000
Department of Health - Energy Performance Contracting Repayments	2,036,843	1,087,344
Maryland Energy Administration - Energy Efficiency - Low-to Moderate Income	15,642,172	20,000,000
Maryland Energy Administration - Energy Efficiency - Other	7,792,593	15,925,000
Maryland Energy Administration - Renewable Energy, Transportation, and Resiliency	39,663,396	89,550,000
Maryland Energy Administration - Admin	4,838,215	5,080,708
Department of Commerce ⁵⁶	500,000	500,000
Department of Labor ⁵⁷	1,000,000	1,000,000
Department of Budget and Management -State agency electric vehicles	2,250,000	2,250,000
Motor Vehicle Administration - Electric Vehicle Tax Credit reimbursement ⁵⁸	8,185,070	0
TOTAL	122,370,840	228,010,745

⁵⁵ MDE encumbered \$4.171M in SEIF funds during FY22 using prior year capital appropriation authority.

⁵⁶ \$500,000 of SEIF was appropriated in FY22 for this program and MEA entered into a MOU with Commerce for this amount, consistent with §9-20B-05 of the State Government Article. Commerce has reported to MEA that no eligible applications were received in FY22 and therefore no funds were encumbered in FY22. The financials reported in Chart 4 reflect what was provided to MEA by DBM for Commerce in FY22.

⁵⁷ \$1,000,000 of SEIF was appropriated in FY22 for this program and MEA entered into a MOU with Labor for this amount, consistent with §9-20B-05 of the State Government Article. Labor has reported to MEA that no SEIF funds were encumbered for this purpose in FY22. The financials reported in Chart 4 reflect what was provided to MEA by DBM.

⁵⁸ This reflects the FY22 appropriation amount. MEA did not receive a request for these funds to be transferred during FY22.

Chart 5: SEIF Revenues Received by Source

Source	FY 2020	FY 2021	FY 2022
RGGI Auction Revenue	\$54,804,407	\$77,812,461	\$143,396,452
RGGI Set Aside Allowance Revenue	\$2,963,293	\$3,096,825	\$3,575,067
Alternative Compliance Payment Revenue	\$41,089	\$52,240	\$77,182,625
Fund Interest Revenue	\$3,077,621	\$728,892	\$810,395
TOTAL	\$60,886,410	\$81,690,418	\$224,964,539

Chart 6: RGGI Results & Projections by Auction and Fiscal Year

RGGI Auction	Allowances Sold	Allowance Price	Total RGGI Revenue	Fiscal Year 2022	Fiscal Year 2023	Fiscal Year 2024
53	2,851,783	\$9.30	\$26,521,582	\$26,521,582		
54	3,401,257	\$13.00	\$44,216,341	\$44,216,341		
55	2,477,283	\$13.50	\$33,443,321	\$33,443,321		
56	2,821,238	\$13.90	\$39,215,208	\$39,215,208		
57	2,821,238	\$13.45	\$37,945,651		\$37,945,651	
58	2,821,238	\$12.99	\$36,647,882		\$36,647,882	
59	2,596,685	\$9.94	\$25,811,049		\$25,811,049	
60	2,596,685	\$9.94	\$25,811,049		\$25,811,049	
61	2,596,685	\$9.94	\$25,811,049			\$25,811,049
62	2,596,685	\$9.94	\$25,811,049			\$25,811,049
63	2,469,486	\$9.94	\$24,546,691			\$24,546,691
64	2,469,486	\$9.94	\$24,546,691			\$24,546,691
<i>Italicized Numbers are estimates.</i>			RGGI Auction Revenue	<i>\$143,396,452</i>	<i>\$126,215,631</i>	<i>\$100,715,479</i>
<i>Note: Due to high revenue attainment, the base allowance price is assumed at an average of the prior 2 years auctions.</i>			RGGI Set Aside Allowances Revenue	\$3,575,067	\$3,976,469	\$3,750,000
			Total:	\$146,971,519	\$130,192,100	\$104,465,479