Strategic Energy Investment Fund
Program Report

FY 2010 – FY2012
INTRODUCTION

During the 2008 legislative session, the Maryland General Assembly passed SB 268 and HB 368 (Chapter 127 of 2008) establishing the Maryland Strategic Energy Investment Program (SEIF) in the Maryland Energy Administration (MEA). The SEIF program is a special fund consisting of the proceeds from the auction of carbon emission allowances to power plants under the Regional Greenhouse Gas Initiative. The statute requires MEA “to develop a plan for expenditures covering the next 3 fiscal years.”

Thus far, Maryland has been aggressive in its implementation of the SEIF program. By leveraging federal, state, and private investments, the investments made by MEA and its partners in just this fiscal year alone will save Maryland families and businesses over $370 million on energy costs over the life of the investments, create over 560 new green collar jobs, and reduce CO2 emissions by over 2,000,000 tons, which is equivalent to taking nearly 360,000 cars off the road. These investments will save each year an estimated 70,000 MWh of electricity, produce over 20,000 MWh of renewable energy and displace 2.4 million gallons of conventional gasoline. In addition, SEIF has returned millions of dollars to Maryland consumers in direct rate relief and assisted tens of thousands of low income families in paying their electric bills.

Looking forward, MEA has developed a four-pronged approach to promote affordable, reliable and clean energy using monies from SEIF and the federal American Recovery and Reinvestment Act (ARRA). Specifically, MEA will offer incentives and resources directly to Maryland consumers, businesses and communities to (1) expand energy efficiency, (2) promote renewable generation, (3) finance clean energy innovation; and (4) provide consumers energy information. Evaluation, measurement and verification are a part of all programs run through MEA. SEIF funds also pay for the administrative costs of running these programs. As part of Governor’s O’Malley “Smart, Green and Growing” initiative, these programs will help reduce household bills, create new green collar jobs, address global climate change, and promote energy independence.
RESIDENTIAL RATE RELIEF AND NON-MEA SEIF PROGRAMS

Residential Rate Relief Program: This program provides direct rate relief for customers. Working through the utility companies, to date over $14 million has been paid out to provide rate relief to the citizens of Maryland.

Electric Universal Service Program: This program assists low-income customers that may have difficulty paying their electric bills. These funds are allocated through the existing Electric Universal Service Program administered by the Department of Human Resources (DHR) to help those most in need of energy assistance funds.

Department of General Services: Many State agencies are pursuing clean energy programs and projects, but have difficulty with the initial upfront costs of these activities. The Department of General Services (DGS), the State agency responsible for state building and facility management, is taking the lead on statewide energy savings programs. MEA provided $100,000 in grant support to assist the DGS energy savings program in FY09 and roughly $410,000 in FY10.

State Energy Performance Fund Swap: State agencies are currently participating in energy performance contracting, a financing mechanism that allows energy and water conservation projects to be implemented in state agencies without additional capital investment. This self-funded mechanism is repaid over time through the agency’s energy savings. This program would make the FY 2010 project repayments to the State’s Master Lease for those agencies participating in energy performance contracting. MEA has allocated the full amount of $3,373,183 in February 2009 and roughly $4.4 million in fiscal year 2010.

Maryland Department of the Environment’s Climate Change Program: The Climate Change Program administered by the Maryland Department of the Environment (MDE) supports the implementation of the Regional Greenhouse Gas Initiative (RGGI) to develop and implement climate change programs. Each RGGI state is responsible for a percentage of RGGI Inc.’s operating costs based on the amount of emissions from that state. To support this effort, MEA transferred $1 million to MDE in February, 2009 and $2.5 million in fiscal year 2010.
GOAL 1 - EXPAND ENERGY EFFICIENCY

A. Multi-Family Housing Retrofits for Low and Moderate Income Families

A significant portion of low and moderate income families are renters, yet apartments and condominiums have not been included in the traditional weatherization programs. In coordination with the Department of Housing and Community Development (DHCD) and housing nonprofit organizations, MEA will conduct energy efficiency retrofits in apartment units to reduce energy bills for low and moderate income families, focusing primarily on apartment buildings undergoing significant rehabilitation efforts as well as properties needing energy efficiency upgrades. Some new construction projects may also be served. Recruitment of potential buildings will be conducted through DCHD and other existing state and local affordable housing agencies, utilities and building management associations. MEA will leverage funds with DHCD to pay a portion of incremental cost for energy efficiency measures for new or rehabilitated multifamily buildings already under going DHCD rehabilitation.

B. Industrial/Commercial Loans and Assessments

The industrial/commercial sector represents approximately 30% of electricity consumption in Maryland. MEA will reach out to this market sector by providing financial assistance to help Maryland businesses and institutions implement energy efficiency upgrades. Using the existing Jane Lawton Conservation loan program, MEA will offer a low interest rate revolving loan program to help finance the cost of energy efficiency projects. By operating this program as a revolving loan fund, MEA will ensure that financial assistance is available for commercial, industrial, and institutional energy efficiency projects in future years as well. In addition, MEA has designed the Commercial and Industrial Energy Assessment Program to meet the needs of commercial and industrial customers not being served through existing EmPOWER Maryland programs. MEA will partner with the Maryland Technology Extension Service (MTES) to provide energy assessment services to these customers. The energy assessment services will include a site visit by MTES to evaluate energy use at the commercial or industrial facility, identify opportunities for energy efficiency improvements, and report the assessment findings and recommendations.

C. State Agency Loan Program (SALP)

SALP is a revolving loan program administered by MEA that provides zero interest loans to state agencies for energy efficiency improvements. MEA plans to expand the almost $1 million allocated to SALP through SEIF with ARRA funding. In FY 2009 MEA provided $1.8 million in new loans from the SEIF program, and since 1991, the program has issued 61 loans totaling $16,535,262. The additional funding will enable Maryland to initiate additional projects to further reduce state energy consumption. State agencies pay zero
percent interest on the loan and a one percent administration fee. The majority of funds will be linked with Energy Performance Contracts (EPCs) developed by state agencies in coordination with the Department of General Services and MEA. Up to 20% of the funds will be available through a MEA solicitation process for smaller energy projects for which the EPC process is not appropriate.

D. EmPOWERing Clean Energy Communities

The EmPOWER Clean Energy Communities program is designed to assist local governments and nonprofits fund energy efficiency and renewable energy projects. The grants and zero-interest loans, overseen by MEA, awarded $7.3 million in FY 09 to local governments and nonprofits Maryland. The grants and loans awarded will assist eligible organizations with improvements that will jumpstart energy savings and decrease their monthly electricity bills. A portion of the funding under both programs is dedicated specifically for projects that help low and moderate income households. In FY 09, MEA provided a total of 64 grants and loans to Maryland counties, municipalities and non-profits. Chosen through a competitive bidding process, in which 114 applications were submitted with funding requests in excess of $30 million, the awards fell into three categories: grants for energy efficiency totaling $4.5 million, of which $3.5 million is dedicated to low/moderate income households, zero-interest energy efficiency loans, totaling $2.6 million, of which $1.5 million is for low/moderate income households, and renewable energy grants totaling $193,000. Together, these projects will result in overall energy savings estimated at 12.2 million kilowatt hours annually, which is the equivalent of over $1.6 million in energy savings each year.

E. Farm Energy Technical Assistance & Incentives

Maryland’s 12,000 farms spent about $26 million on electricity in 2008. In 1997, the most recent year for which itemized data are available, Maryland farms spent about $33 million on petroleum products, gasoline, diesel fuel, natural gas, LP gas, kerosene, fuel oil, and other fuels. This statewide project will provide energy assessments to Maryland farms, and will offer cash rebates for the installation of qualifying farm energy efficiency measures. This project is the extension of the successful Maryland Farm Energy Site Assessment Program, Phases I and II, which were funded in part by MEA.

This statewide program will have a two-tiered approach to capture energy savings for Maryland agricultural producers. Tier 1 will offer technical assistance and/or rebates on energy efficient equipment. Tier 2 will offer farm energy assessments to qualifying producers who have substantial potential energy savings, and/or rebates on energy efficient equipment. Services offered will include technical assistance, energy assessments, and rebates. All Maryland farms that use a minimum of 10,000 kWh per year will be eligible to receive technical assistance; all Maryland farms will be able to receive rebates provided their project meets a minimum energy savings threshold.
GOAL 2 - PROMOTE RENEWABLE ENERGY GENERATION

A. Residential Renewable Energy Grants

Maryland residents understand that residential solar, geothermal and wind power can significantly reduce their energy bills and reduce the state’s carbon footprint. Soaring demand for MEA’s grant program has resulted in hundreds of Maryland households still remaining on the wait list for a solar, geothermal or residential wind grant. Using these funds, MEA will help thousands of households take control of their energy future by putting a renewable system on their home. MEA will use ARRA funds to supplement existing grant programs in order to serve the people currently on the waiting list and additional applications as they come forward. Contractors market the program heavily and demand for renewable grants is high.

B. Renewable Systems on Commercial and Government Buildings

This grant program provides financial incentives for the installation of small renewable energy systems in Maryland businesses and government buildings. These renewable energy systems reduce the need to get electricity from the grid. They provide price stability, alleviate congestion on the grid, and are a reliable source of pollution-free energy. MEA will provide support for midsize renewable energy installations (i.e. between 10kW - 100 kW) on public buildings. For government buildings, for example, MEA will work with the Department of General Services (DGS) to install solar and other renewable energy systems on state buildings, perhaps by buying down the rate of a long term Power Purchasing Agreement (PPA).

C. Alternative Transportation Fuel and Infrastructure Grants

The transportation sector is responsible for 30 percent of Maryland’s greenhouse gas emissions. Existing and new technologies will help us meet our transportation needs while also reducing these emissions. Alternative fuels for use in transportation play a critical part in advancing Maryland’s sustainability and energy independence goals. MEA commissioned a study that identified fuels, electric hybrids, and consumer behavior programs as the three top areas with the greatest potential to reduce emissions from this sector in Maryland. MEA plans to expand the existing alternative fuel grant program by providing grants to local governments and businesses that are focusing on these three strategic areas.

D. Generating Clean Horizons

This initiative will jump start commercial scale renewable generation in Maryland. MEA will work with DGS, the University System of Maryland, and/or interested county and local governments to establish contracts with these entities for clean energy projects that will enable commercial scale clean energy to be built in Maryland with a guaranteed source of
power purchasing through the partner entities. Overall expenditure of state funds will be
determined by scope and terms of contracts as well as any involvement of additional power
purchasers. The University of Maryland, College Park is working jointly with the State of
Maryland to solicit proposals from clean energy projects for a long-term PPA. A Request for
Expressions of Interest (REOI) was issued, and there are a number of projects in Maryland
and adjoining states that may be able to move forward with a long term PPA from credit
worthy counterparties such as USM and state agencies, as well as Maryland counties, cities
and municipalities and other institutions of higher education.

E. Off-Shore Wind Power Generation

This initiative will assist in facilitating partnerships between commercial offshore wind
developers and utilities. MEA has initiated a Request for Expression of Information and
Interest to engage business and industry leaders with expertise in the installation and
development of offshore wind energy. This request reaches out to U.S. and European
developers to begin a constructive dialogue on strategies for facilitating a long-term offshore
wind energy strategy for Maryland. Simultaneously, MEA is launching a study to evaluate
opportunities for offshore wind energy on Maryland’s Atlantic coast and Outer Continental
Shelf. This study will assess the viability of offshore wind energy generation and build on
important marine spatial planning work being currently developed by the Maryland
Department of Natural Resources and The Nature Conservancy. Marine Spatial Planning has
been employed to guide uses of our State’s ocean ecosystem in ways that reduce potential
environmental impacts. The results of this study will give the state, its citizens, and potential
wind energy development partners significant guidance on the physical characteristics of
Maryland’s offshore resources. MEA also plans extensive community outreach to ensure
that any project address local concerns and enjoys broad support. Ultimately, MEA plans to
work closely with the federal Minerals Management Service, the Public Service Commission
and developers to facilitate a commercial lease and Power Purchase Agreement (PPA) for
installation of offshore wind turbines.
GOAL 3 – FINANCING CLEAN ENERGY INNOVATION

A. EmPOWERing Financing (EF) Initiative

This initiative will leverage public funds with private capital to offer local governments a voluntary clean energy loan program for their citizens. Based on the EZ Annapolis and the Montgomery County Home Energy Loan Program (HELP), the EF initiative will offer localities a program whereby interested Marylanders could voluntarily obtain a clean energy loan secured through the locality (e.g., collected on water bills, property taxes, etc). MEA will partner with the Maryland Clean Energy Center to create a “program in a box” that enables municipalities to offer energy efficiency and renewable energy financing quickly and effectively. This “program in a box” will include: model local ordinances, standard contracts, development for software to assist with the application process, and marketing concepts.

B. Clean Energy Economic Development Initiative (CEEDI)

As Maryland moves to quickly build a vibrant clean energy sector and strives to create 100,000 “green-collar” jobs by 2015, MEA has created the Clean Energy Economic Development Initiative (CEEDI) program to assist in the growth of a clean energy industry throughout the State. In partnership with the Department of Business and Economic Development (DBED) and the Maryland Clean Energy Center (MCEC), MEA will aggressively seek to expand and attract emerging clean energy companies, such as thin film solar and wind turbine manufacturers, by providing economic development loans and grants. To implement this program, MEA plans to partner with DBED's financing programs, as well as MCEC programs. Furthermore, MEA plans to extend the attraction to manufacturers of components within the clean energy supply chain for all clean energy technologies used within the state and region.

C. Clean Energy Job Training and Building Code Technical Assistance

The ARRA funding provides states with building code technical assistance to assist jurisdictions in becoming 90 percent energy code compliant. In addition, job training dollars are provided for by ARRA. MEA will develop programs to assist with code compliance and will partner with state agencies and academic institutions to provide job training in the clean energy field. Funds will be used to provide job training to assist the green businesses that are supporting the energy efficiency and renewable initiatives. MEA will work as appropriate, with DHCD, DLLR, GWIB, community colleges, universities and the Maryland Clean Energy Center to provide technical and business training. For building code technical assistance, MEA will, in coordination with the Building Codes division in DHCD, develop a series of strategies to ensure 90 percent code compliance by county and city planning offices.
GOAL 4 - PROVIDE CONSUMER ENERGY INFORMATION

A. Maryland Energy Outlook

Understanding Maryland’s energy issues and planning for its energy future is critical for achieving the goals of affordable, reliable clean energy resources for every Maryland citizen. MEA, energy consumers and suppliers, state agencies and citizens will be invited to participate in state energy planning efforts designed to focus attention on unique Maryland energy issues and to propose solutions for fostering improvements to Maryland’s energy future. The Maryland Energy Outlook will help formulate the appropriate policies and direction that ensures a stable and secure energy future for Maryland. The report will also be used to develop strategies for reducing the state’s greenhouse gas emissions, consistent with the 2008 Maryland Climate Commission’s recommendations. MEA will conduct a transparent and open review of Maryland energy supply and demand issues, to identify concerns and questions needing resolution and to formulate recommended directions and policies that support a future of affordable, reliable and clean energy. MEA will work with a knowledgeable consultant to develop its Maryland Energy Outlook.

B. Maryland’s Energy Information System

Providing a Maryland Energy Information System where energy consumers can find important information specific to Maryland’s circumstances is a critical element in helping all energy consumers save money and use energy efficiently. Knowledge of Maryland’s energy systems, where the energy comes from and how it’s used, provides opportunities for all citizens to join efforts to save energy and achieve related goals. MEA will develop an energy information database, establish website access and provide more sophisticated analytical capability in a three-phase work effort supported by various external vendors. The site will track on-going energy efforts and act as a portal for a broad array of state specific energy information.

C. Consumer Awareness - Educational Outreach Programs

MEA oversees the State’s educational outreach efforts related to energy efficiency and clean energy, as well as the marketing of all related programs available through MEA. MEA is focusing on promoting general energy awareness, in connection with practical, low and no-cost energy saving tips for consumers, while tying all messaging back to our State goal of EmPOWER Maryland: 15% energy reduction by 2015. MEA will create relevant and impactful campaigns and community partnerships which will reinforce the resources available through the MEA to assist Marylanders in making smart energy decisions. Traditional media outlets are utilized through a mix of transit, outdoor, print, and web advertisements, as well as, local public/commercial radio messaging, informational posters and brochures. In addition, MEA is working in partnership with students at the Center for
Design Practice at the Maryland Institute College of Art (MICA). Earned media will stem from routine press releases, newsletters and community educational events, such as MEA speaker participation at community and group events, as well as presence at local fairs and festivals.

MARYLAND'S RETURN ON INVESTMENT

As referenced above, by leveraging federal, state, and private investments, the investments made by MEA and its partners in just this fiscal year alone will save Maryland families and businesses over $370 million on energy costs over the life of the investments, create over 560 new green collar jobs, and reduce CO2 emissions by over 2,000,000 tons, which is equivalent to taking nearly 360,000 cars off the road. These investments will save each year an estimated 70,000 MWh of electricity, produce over 20,000 MWh of renewable energy and displace 2.4 million gallons of conventional gasoline.

Looking forward, MEA will use the SEIF fund to promote affordable, reliable and clean energy by (1) expanding energy efficiency, (2) accelerating renewable generation, (3) financing clean energy innovation; and (4) providing consumers energy information. As part of Governor’s O’Malley “Smart, Green and Growing” initiative, these programs will help reduce household bills, create new green collar jobs, address global climate change, and promote energy independence.

We hope that this information will assist you in understanding how MEA will continue to support programs and policies that reach the O’Malley Administration’s goals of reducing energy consumption statewide 15% by 2015 and increasing the amount of renewable energy in Maryland 20% by 2022.