

Maryland Strategic Energy Investment Fund Regional Greenhouse Gas Initiative

To reduce consumers' bills, the Strategic Energy Investment Fund provides both short-term rate relief and as well as a long-term strategy to increase supply and decrease demand. This approach will save households' money, help avoid electricity blackouts predicted as soon as summer 2011, and minimize the State's carbon footprint.

Due to increasing demand for electricity, PJM has warned that Maryland faces the risk of rolling blackouts on any hot summer afternoon, starting in 2011. This bill reduces the threat of rolling blackouts by decreasing demand through energy efficiency, the fastest and least expensive way to keep our lights on, and increasing supply by promoting clean, renewable power.

Bill's Provisions

The Maryland Strategic Energy Investment Fund was created with the proceeds from the upcoming auction of carbon allowances to electric power plants under the Regional Greenhouse Gas Initiative (RGGI). MDE estimates that auction will generate between \$80 and \$140 million annually.

- The Maryland Strategic Energy Investment Fund will not rely on general funds or a surcharge on ratepayers.
- Maryland joined RGGI in 2006 as part of the Healthy Air Act.

Maximizes Rate Relief by Combining Direct Bill Credits with Energy Efficiency

This bill will provide consumers' credits each month to offset their utility bills and invest in Maryland's energy future to decrease demand and increase supply.

- The average Marylander would receive a credit of \$1.28 to pay down the cost of utility energy efficiency programs, plus an extra \$7.46 through energy efficiency programs, thus saving roughly \$8.74 a month (assuming \$140 million in proceeds from the RGGI auction).

Targeted Assistance for Low and Moderate Income Households

- Guarantees 17% of the auction proceeds for bill payment assistance to low income customers through the Electric Universal Service Program (EUSP);
- Provides a consumer bill credit per household so that all Marylanders' benefit;
- Requires the Maryland Energy Administration to spend half of the funds dedicated to energy efficiency to help low and moderate income households. Such programs are required to be offered at no charge to low income families.
- Examples of "low income best practice" programs in other states include:
 - window air conditioner and refrigerator exchange programs; and
 - home energy retrofits for high energy use homes.

Promotes Climate Change Mitigation

By investing in both energy efficiency and renewable energy, the investment fund will promote the "early action items" recommended by Maryland's Climate Commission to reduce the State's greenhouse gas emissions.

Codify the EmPOWER Maryland Energy Efficiency Initiative

Decreasing electricity demand is the fastest and cheapest way to reduce consumers' bills, address Maryland's looming electricity shortage and lessen the state's carbon footprint.

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Achievable Targets

The Administration's bill codified the *EmPOWER Maryland* initiative that aims to reduce statewide per-capita consumption and peak demand by 15% by 2015.

- The average California household consumes 42% less electricity than the average Maryland household.
- Proven technologies are as close as your local hardware store, including ENERGY STAR appliances, such as clothes washers and refrigerators, programmable thermostats and compact fluorescent light bulbs.

Energy Efficiency Far Cheaper Than New Generation

The cheapest kilowatt is the one not needed. Technological advances have made energy efficiency the fastest way to reduce consumers' electricity bills.

- While Marylanders pay about 11-13 cents per kilowatt, BGE has proposed an energy efficiency plan that costs about 2.5 cents per kilowatt.
- Massachusetts reports that every dollar they have invested in energy efficiency will create an estimated \$2.84 in benefits over the life of the installed measures, the equivalent to a 184% return on investment.

Programs Will Save Consumers' Money

The EmPOWER Maryland legislation will save Maryland households on average \$16 a month or \$190 each year when fully implemented. (Maryland PSC 2008)

To meet the bill's targets, utilities are expected to establish a range of cost-effective programs to reduce consumer bills, such as

- rebates for the purchase of ENERGY STAR appliances,
- incentives for home energy audits and improvements,
- voluntary seasonal payments for the use of interruptible load devices on air conditioners, and
- incentives to construct more energy efficient homes.

Estimated Benefits

When EmPOWER Maryland is successfully implemented, it will:

- Generate \$5.7 billion in total electricity savings for Maryland households (ACEEE Report on Maryland February 2008);
- Avoid using 10 billion kWh of electricity in 2015, which is enough to power one-third of Maryland's homes that year;
- Prevent the need to build at least three new large power plants, which reduces the state's carbon footprint and avoids billions of dollars in new costs;
- Add 8,000 new "green collar" jobs to the Maryland economy by 2015 (ACEEE Report on Maryland February 2008). This is the equivalent of 100 new manufacturing plants relocating to Maryland, without the costs for infrastructure.

Maryland Ranks 47th in Nation in Energy Efficiency Spending by Utilities

State	2004 Total Spending (\$1000)	Per Capita Spending	Ranking by Spending per Capita
Vermont	14,000	\$22.54	1
Massachusetts	133,326	\$20.81	2
Connecticut	58,098	\$16.60	4
New Hampshire	15,120	\$11.64	7
New Jersey	92,753	\$10.68	9
California	380,009	\$10.60	10
Wisconsin	53,734	\$9.76	12
New York	147,193	\$7.63	15
Florida	72,014	\$4.14	19
District of Columbia	2,200	\$3.97	20
Tennessee	10,937	\$1.86	25
South Carolina	4,920	\$1.17	27
West Virginia	992	\$0.55	34
Pennsylvania	3,446	\$0.28	37
Maryland	50	\$0.01	47

Source: State Energy Efficiency Scorecard for 2006, ACEEE, June 2007.

Energy Efficiency Examples

- An ENERGY STAR clothes washer saves \$550 in operating costs over its lifetime compared to a regular clothes washer.
- ENERGY STAR refrigerators use 40% less energy than the conventional models sold in 2001.
- Compact fluorescent light bulbs use 75% less energy than traditional bulbs, saving consumers roughly \$15 annually per bulb if used 4 hours a day.
- Homeowners can save up to 20% on heating and cooling costs through proper sealing and insulation.
- Programmable thermostats can save \$150 per year on utility bills.

Renewable Portfolio Standard Promoting Renewable Power on Maryland's Electric Grid

Promoting renewable power will help Maryland:

- Diversify our power supply;
- Transition to a cleaner, more “green” economy;
- Increase electricity supply on Maryland’s grid.

Bill’s Provisions

- Doubles the Renewable Portfolio Standard (RPS) requirement from 9.5% to 20% by 2022;
- Limits the geographic scope to generation resources located within the PJM regional transmission organization to promote generation on Maryland’s grid; and
- Increases the Alternative Compliance Payment (penalty for failure to comply) to ensure that the RPS will be effective.

Benefits of Diversification

Today, 90% of our electricity comes from coal and nuclear. The bill would begin to diversify our generation resources so that, by 2022, at least 20% of Maryland’s power comes from renewable fuel sources.

A diverse generation portfolio mitigates price spikes that may occur to any one fuel source. Transitioning to renewable energy also minimizes the potential price hikes that might occur from federal legislative efforts to reduce the carbon dioxide emissions from coal and natural gas plants.

Renewable Energy Benefits the Environment and Our Air Quality

Clean, renewable energy sources, such as wind and solar, do not emit nitrogen oxides, sulfur dioxide, mercury or particulate matter to generate electricity. This is particularly important in Maryland, where, according to the Department of Health and Mental Hygiene, about 13 percent of adults and children have asthma.

Clean, renewable power is also critical to any long-term strategy to address global climate change. The Maryland Climate Change Commission recommended updating the State’s RPS to begin transitioning to a more sustainable, lower carbon economy.

Comparisons to Other States

Other states in the region such as Delaware and New Jersey have already set 20% RPS requirements. Maryland lagged significantly at only 9.5%.

State Requirements

New Jersey	22.5%	2021
Delaware	20%	2019
Pennsylvania	18%	2020
District of Columbia	11%	2022
Maryland	9.5%	2022

RPS Policies Have Minimal Ratepayer Cost Impacts

An analysis by the US Department of Energy on all state RPS targets estimates that retail rate impacts will be approximately 1% or less.

Maryland's New RPS Is More Effective

The former RPS does little to create new renewable generation because of the broad geographic area from which generation can come from. The geographic eligibility is also inconsistent with other states in the region. Limiting the geographic eligibility to PJM, as in the legislation passed this session, will ensure that the new generation will be put onto the PJM transmission system, where Maryland receives its electricity.

Renewable Resource Potential Is Large

An expert from the US Department of Energy's National Renewable Energy Lab, testified that our region has a large technical potential of renewable resources, far more than is necessary to meet the proposed Maryland RPS.

Maryland's Alternative Compliance Payment Is Now on Par with the Region

To ensure that the law will be effective in stimulating new investment in new renewable generation, the penalty for not complying with the law was increased. The previous RPS had an alternative compliance payment (the penalty) that was far below that of most states in the region. The problem is that electricity suppliers have an economic incentive to comply in states with higher penalties, and simply pay the penalty for non-compliance in Maryland.

New Jersey	\$50
Delaware	\$50
Pennsylvania	\$45
District of Columbia	\$25
Maryland	\$20 \$40

Contact: Brandon Farris, Maryland Energy Administration, 410-260-7655