

**Department of Legislative Services**  
 Maryland General Assembly  
 2017 Session

**FISCAL AND POLICY NOTE**  
**Third Reader - Revised**

House Bill 490  
 Ways and Means

(Delegate Reznik, *et al.*)

Budget and Taxation

**Income Tax Credit - Energy Storage Systems**

This bill creates a credit against the State income tax for the costs of installing an energy storage system. The value of the credit is equal to 30% of the costs, not to exceed \$5,000 for a residential system or \$150,000 for a commercial system. The credit may be claimed for qualified systems installed between January 1, 2018, and December 31, 2022. The Maryland Energy Administration (MEA) may award a total of \$750,000 in credits in each tax year.

The bill takes effect July 1, 2017, and applies to tax year 2018 and beyond.

**Fiscal Summary**

**State Effect:** General fund revenues decrease by \$634,100 in FY 2019 due to credits claimed against the personal and corporate income tax. Transportation Trust Fund (TTF) revenues decrease by \$82,100 and Higher Education Investment Fund (HEIF) revenues decrease by \$33,800 beginning in FY 2019 due to credits claimed against the corporate income tax. General fund expenditures increase by \$32,000 in FY 2019 due to one-time implementation costs at the Comptroller’s Office.

(in dollars)	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
GF Revenue	\$0	(\$634,100)	(\$634,100)	(\$634,100)	(\$634,100)
SF Revenue	\$0	(\$115,900)	(\$115,900)	(\$115,900)	(\$115,900)
GF Expenditure	\$0	\$32,000	\$0	\$0	\$0
Net Effect	\$0	(\$782,000)	(\$750,000)	(\$750,000)	(\$750,000)

*Note:() = decrease; GF = general funds; FF = federal funds; SF = special funds; - = indeterminate increase; (-) = indeterminate decrease*

**Local Effect:** Local highway user revenues distributed from the corporate income tax decrease by \$7,900 annually in FY 2019 through 2023. Local expenditures are not affected.

**Small Business Effect:** Minimal.

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## Analysis

**Bill Summary:** An energy storage system is a system used to store electrical energy, or mechanical, chemical, or thermal energy that was once electrical energy, for use as electrical energy at a later time or in a process that offsets electricity use at peak times. The amount of the tax credit may not exceed the tax liability imposed in the year, and any unused amount may not be carried forward to any other tax year.

**Current Law:** No similar State tax credit exists. Businesses can generally deduct the cost of installing energy storage systems, which typically lowers federal and State income tax liabilities.

**Background:** Energy storage systems reflect emerging technologies that allow individuals, businesses, and utilities to store energy for later use. Energy storage ensures a constant source of electricity and can shift energy consumption away from peak-demand periods, thereby improving grid efficiency and providing energy savings. Battery storage and pumped hydroelectric storage are currently the more cost-effective and marketable products. A market research firm recently estimated that total U.S. energy storage capacity will increase significantly from about 0.3 gigawatts in 2012 to about 40.0 gigawatts in 2022.

Residential energy storage systems that use batteries can either be paired with a solar electric system or can be used as a standalone system. Several companies currently sell these products, including the Powerwall home battery produced by Tesla Motors. These battery systems retail for between \$3,000 and \$3,500 and the company also has developed a more powerful version for businesses. The company is increasing production as some analysts estimate the company recently received a total of \$800 million in reservations for its energy storage products.

The Maryland Energy Administration completed a [study](#) in January 2016 that addressed various considerations for energy storage in Maryland, including background on the types of storage systems and a discussion of significant regulatory and market barriers and ways other states have addressed those barriers. The report found that energy storage can provide a variety of functions in the electricity system, from supporting the efficient operation of the electric grid to providing backup power in emergency situations. The report also noted

that, notwithstanding the benefits, “the high costs of energy storage systems have made it difficult for broad deployment.”

The federal investment tax credit under Section 48 of the Internal Revenue Code provides a tax credit for the costs of installing designated renewable energy generation equipment. Pursuant to regulations that will be adopted, the Internal Revenue Service recently requested comments on whether energy storage devices should qualify for the credit.

**State Revenues:** Tax credits may be claimed beginning in tax year 2018. It is assumed that the maximum amount of credits is awarded in each tax year, with 75% of all credits claimed against the corporate income tax and 25% against the personal income tax. As a result, general fund revenues decrease by \$634,100 annually in fiscal 2019 through 2023. TTF revenues decrease by \$82,100 annually and HEIF revenues decrease by \$33,800 annually in fiscal 2019 through 2023. To the extent fewer credits are awarded in each year, revenue losses will be less than estimated.

**State Expenditures:** The Comptroller’s Office reports that it will incur a one-time expenditure increase of \$32,000 in fiscal 2019 to add the new tax credit. This amount includes data processing changes to the SMART income tax return processing and imaging systems and systems testing.

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### Additional Information

**Prior Introductions:** SB 834 of 2016, a similar bill, received a hearing in the Senate Budget and Taxation Committee, but no further action was taken. Its cross file, HB 386, received a hearing in the House Ways and Means Committee, but no further action was taken.

**Cross File:** SB 758 (Senator Guzzone) - Budget and Taxation.

**Information Source(s):** Comptroller’s Office; Internal Revenue Service; Maryland Energy Administration; Department of Legislative Services

**Fiscal Note History:** First Reader - February 21, 2017  
kb/jrb Third Reader - May 9, 2017  
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