

Department of Legislative Services
 Maryland General Assembly
 2016 Session

FISCAL AND POLICY NOTE
First Reader

Senate Bill 834 (Senator Guzzone)
 Budget and Taxation

Income Tax Credit - Energy Storage Systems

This bill creates a tax 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, 2016, and December 31, 2020.

The bill takes effect July 1, 2016, and applies to tax year 2016 and beyond.

Fiscal Summary

State Effect: General fund revenues decrease beginning in FY 2017 due to credits claimed against the personal and corporate income tax. Transportation Trust Fund (TTF) and Higher Education Investment Fund (HEIF) revenues decrease beginning in FY 2017 due to credits claimed against the corporate income tax. General fund expenditures increase by \$32,000 in FY 2017 due to one-time implementation costs at the Comptroller’s Office.

(in dollars)	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
GF/SF Rev.	(-)	(-)	(-)	(-)	(-)
GF Expenditure	\$32,000	\$0	\$0	\$0	\$0
Net Effect	(\$32,000)	\$0	\$0	\$0	\$0

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

Local Effect: Local highway user revenues distributed from the corporate income tax decrease beginning in FY 2017. Local expenditures are not affected.

Small Business Effect: Minimal.

Analysis

Bill Summary: An energy storage system is a system used to store 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. A taxpayer claiming the credit must attach documentation of the qualified installation costs.

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 liability.

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.”

State Revenues: Tax credits may be claimed beginning in tax year 2016. As a result, general fund, TTF, and HEIF revenues may decrease beginning in fiscal 2017. The amount of the revenue loss depends on the number of qualifying systems purchased and installation costs. Given a lack of data on current sales and that the systems reflect emerging

technologies, the revenue loss in each year cannot be accurately predicted. However, based on the current demand for eligible products and forecasted growth in U.S. energy storage, State revenues could decrease by approximately \$200,000 in fiscal 2017, rising to \$3.0 million by fiscal 2021.

State Expenditures: The Comptroller's Office reports that it will incur a one-time expenditure of \$32,000 in fiscal 2017 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.

Additional Information

Prior Introductions: None.

Cross File: HB 386 (Delegate Reznik, *et al.*) - Ways and Means.

Information Source(s): Comptroller's Office, Maryland Energy Administration, Department of Legislative Services

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Analysis by: Robert J. Rehrmann

Direct Inquiries to:
(410) 946-5510
(301) 970-5510