

February 1, 2023

	<b>Yes</b>	<b>No</b>
DOR Administrative Costs/Savings	X	

Department of Revenue  
Analysis of H.F. 810 (Brand), As Proposed to be Amended (H0810A3)

	<b>Fund Impact</b>			
	<b><u>F.Y. 2024</u></b>	<b><u>F.Y. 2025</u></b>	<b><u>F.Y. 2026</u></b>	<b><u>F.Y. 2027</u></b>
	(000's)			
General Fund	(\$48,800)	(\$50,200)	(\$62,400)	(\$78,100)

Effective for tax years 2023 through 2027.

**EXPLANATION OF THE BILL**

**Current Law:** Federal law offers several tax incentives for energy efficient home improvements, electric vehicles, and residential renewable energy. The Residential Energy Efficient Tax Credit is a nonrefundable tax credit equal to 30% of qualifying expenditures on residential solar energy production, solar water heaters and geothermal heat pumps. The Nonbusiness Energy Property Credit is a nonrefundable tax credit equal to 10% of expenditures on qualified energy efficiency improvements, such as insulation and other components designed to control heat loss or heat gain. The Nonbusiness Energy Property Credit also provides up to \$300 for expenditures on energy-efficient building properties, such as energy-efficient heat pumps and energy-efficient water heaters. The New Qualified Plug-In Electric Drive Motor Vehicle Credit is a nonrefundable credit of \$2,500 for an electric vehicle purchase, with a larger credit provided for vehicles with higher battery capacities, up to \$7,500 total. The Alternative Fuel Vehicle Refueling Property Credit provides a nonrefundable credit of the smaller of either \$1,000 or 30% of the cost of an electric car charging station.

Minnesota does not provide any similar tax benefits for individual income taxpayers.

**Proposed Law:** The bill would create a new refundable income tax credit equal to 100% of qualified “climate action expenditures,” up to a total of \$2,000. Qualified expenditures fall into one of three categories, with a limit of \$1,000 of eligible expenses for each expenditure category: (1) qualifying appliance expenditures, (2) qualifying energy efficiency measure expenditures, and (3) qualifying large improvement expenditures.

Appliance expenditures include spending on certain electric vehicle residential chargers, heat pump water heaters, induction ranges, and smart thermostats. Expenditures on specific appliances are limited to \$100, \$250, \$200, and \$100 for electric vehicle residential chargers, heat pump water heaters, induction ranges, and smart thermostats, respectively.

Energy efficiency measures include any insulation or component designed to reduce the heat loss or heat gain of a residence.

Qualifying large improvement expenditures include air-source heat pumps, ductless mini-split heat pumps, electrical service panel upgrades, electric vehicles, energy storage systems, ground-source heat pumps, photovoltaic devices, and solar water heaters.

## **EXPLANATION OF THE BILL (Cont.)**

The maximum credit is reduced by \$1 for every \$30 of federal adjusted gross income (FAGI) in excess of \$150,000 for married couples filing jointly, or \$1 for every \$15 of FAGI in excess of \$75,000 for other filers. Married couples filing separately may not each claim the credit for the same expenditures.

For part-year residents and nonresidents, the credit is apportioned based on the percentage of the taxpayer's income that is attributable from Minnesota. For nonresidents, the credit is nonrefundable.

The credit would expire at the end of tax year 2027.

## **REVENUE ANALYSIS DETAIL**

- The estimate is based on Internal Revenue Service statistics on expenditures used to claim the federal credits in 2019 and other information.
- Of the 13 line-item expenditures covered by the proposal, seven have exact or near-exact parallels with line-item expenditures specifically covered by federal tax credits: electric vehicle residential chargers, energy efficiency measures, electric vehicles, energy storage systems, ground-source heat pumps, photovoltaic devices, and solar water heaters.
- Another three line-item expenditures of this proposal are included in aggregated expenditures covered by federal tax credits. These line items are heat pump water heaters, air-source heat pumps, and ductless mini-split heat pumps.
- The final three expenditure line items of this proposal are not covered by federal tax incentives: induction ranges, smart thermostats, and electrical service panel upgrades.
- The methodology for this analysis varied depending on the extent of federal data for these expenditures.
- All expenditure estimates were estimated using the most recent available data and then limited to their allowable expenses under this proposal.

### *Line Items with Federal Parallels*

- For expenditures with parallel federal line items, the 2019 Individual Income Tax Returns Line Item Estimates from the IRS's Statistics of Income were used to generate an estimate of qualifying expenditures with Minnesota's allocation based on Minnesota's share of Form 5695 filers, which is used to claim the Residential Energy Efficient Tax Credit and the Nonbusiness Energy Property Credit.
- The line item for "qualified solar electric property costs," line 1 of Form 5695, includes amounts spent on both photovoltaic devices and energy storage systems for photovoltaic devices. This analysis assumes expenditures on energy storage systems for purposes other than storing solar energy are negligible.
- 2019 expenditure amounts were grown through subsequent years using the average growth rate of each expenditure line item from 2013 to 2019 according to the IRS's Line Item Estimates.

## REVENUE ANALYSIS DETAIL (Cont.)

### *Line Items Included in Federal Aggregates*

- Where expenditures are included in broader aggregated line items of federal credits, the 2019 IRS Line Item Estimates were also used, with a percentage of these line item estimates imputed to apply to the specific expenditures and grown using the same methodology described above.
- Heat pump water heaters, air-source heat pumps, and ductless mini-split heat pumps are all eligible expenditures for the “energy-efficient building property” line item of the Nonbusiness Energy Property Credit. However, this line item also covers energy-efficient central air conditioners, energy-efficient natural gas, propane, or oil boilers, and biomass fuel stoves.
- Heat pump water heaters, air-source heat pumps and ductless mini-split heat pumps are assumed to make up 15%, 3% and 27% percent of this expenditure category, respectively.

### *Line Items with No Federal Data*

- Induction ranges, smart thermostats and electrical service panel upgrades are not currently eligible for federal tax credits, and therefore no IRS Line Item Estimates exist for these expenditures.
- Market research data from Forbes Magazine, Statista, Grand View Research, ENERGY STAR and Global Market Insights provides figures on the number of units sold and annual growth rates for these items.
- Pricing data was gathered from online retailers. This analysis assumes that labor costs for electrical panel upgrades generally exceed the \$1,000 expenditure maximum. In all other cases, average prices exceed the proposed maximum eligible expenditures.
- As with the other expenditure line items, national estimates for these expenditures are allocated to Minnesota based on Minnesota’s share of Form 5695 filers.
- The estimate was reduced by 14% to account for taxpayers claiming expenses across multiple categories up to the \$2,000 maximum.
- The estimate was further reduced to account for the income phase-out, based on the FAGI of returns claiming the federal energy credit.
- The estimate was increased by 4% in the second year and 7% in later years to account for new expenditures induced by the credit.
- Tax year impacts are allocated for the following fiscal year.

**Number of Taxpayers:** About 171,730 tax returns would be affected in tax year 2023. The average decrease in tax would be \$284.

Minnesota Department of Revenue  
Tax Research Division  
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