SB 22-051

Legislative Council Staff

Nonpartisan Services for Colorado's Legislature

Final Fiscal Note

Drafting Number:	LLS 22-0675	**Date:**	September 16, 2022
Prime Sponsors:	Sen. Hansen Rep. Sirota	**Bill Status:**	Signed into Law
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Bill Topic: **POLICIES TO REDUCE EMISSIONS FROM THE BUILT ENVIRONMENT**

Summary of Fiscal Impact:

☒ State Revenue
☒ State Expenditure
☐ State Transfer
☒ TABOR Refund
☒ Local Government
☐ Statutory Public Entity

The bill exempts air-source heat pumps, ground-source heat pumps, heat pump water heaters, residential energy storage systems, and certain building materials from sales and use taxes. The bill also creates refundable income tax credits for the purchase of the above heat pump and residential energy storage systems. From FY 2022-23 through FY 2033-34, the bill decreases state revenue from sales and use tax and income tax, decreases local government revenue, and increases state expenditures on an ongoing basis.

Appropriation Summary: No appropriation is required.

Fiscal Note Status: The fiscal note reflects the enacted bill.

Table 1
State Fiscal Impacts Under SB 22-051

		Budget Year FY 2022-23	Out Year FY 2023-24	Out Year FY 2024-25
Revenue	General Fund	($2.1 million)	($4.3 million)	($5.8 million)
	Total Revenue	**($2.1 million)**	**($4.3 million)**	**($5.8 million)**
Expenditures	General Fund	-	$203,784	$120,767
	Centrally Appropriated	-	$26,898	$26,898
	Total Expenditures	-	**$230,682**	**$147,665**
	Total FTE	**-**	**1.7 FTE**	**1.7 FTE**
Transfers		-	-	-
Other Budget Impacts	TABOR Refund	($2.1 million)	($4.3 million)	Not estimated
	General Fund Reserve	-	$30,568	$18,115

Summary of Legislation

Beginning January 1, 2023, purchases of air-source heat pumps, ground-source heat pumps, and heat pump water heaters, and residential energy storage systems will be exempt from sales and use tax until January 1, 2033. For tax years 2023 and 2024, the bill also creates refundable income tax credits for the purchase of these heat pump, necessary electrical panel upgrades, and residential energy storage systems. The bill also exempts purchases of decarbonizing building materials from sales and use tax from July 1, 2024 through July 1, 2034. For decarbonizing building materials, the bill requires the Office of the State Architect within the Department of Personnel and Administration to review environmental product designations from manufacturers to certify eligible materials for the sales and use tax exemption, a list of which will be given to the Department of Revenue. Lastly, the bill allows an investor-owned utility to apply to the Public Utilities Commission to use either fuel commodity units or energy services provided for billing purposes.

Background

Decarbonizing building materials. The Buy Clean Colorado Act, passed with House Bill 21-1303, required the Office of the State Architect to establish maximum acceptable global warming potential standards for building material categories used in public projects such as asphalt, cement and concrete, glass, wood, and steel. The Office of the State Architect is required to develop its criteria by January 1, 2024. The definition of decarbonizing building materials in the bill will be based on these standards.

State Revenue

The bill is expected to decrease General Fund revenue by $2.1 million in FY 2022-23, $4.3 million FY 2023-24, and $5.8 million in FY 2024-25, with similar impacts in subsequent years. In the first two years, FY 2022-23 and FY 2023-24, the revenue impact is based on the sales and use tax exemption for heat pumps and residential energy storage systems, and income tax credits for these systems only. Starting in FY 2024-25, the revenue impact also includes a preliminary estimate of the sales and use tax exemption for decarbonizing building materials. State sales and use tax revenue is subject to TABOR. Additional detail on these impacts is provided below.

Heat pump and residential energy storage systems sales and use tax exemption. Potential heat pump unit sales that are exempt under the bill were estimated from national Energy Star shipments and data on residential energy consumption from the Energy Information Administration (EIA). The U.S. Environmental Protection Agency catalogued an average of about 1,528,000 air-source and ground-source heat pump units and 94,000 heat pump water heater units shipped nationwide from 2019 to 2020. Assuming heat pump shipments increase at a similar rate as recorded from 2010 to 2020, national shipments could total between 1,767,000 and 1,870,000 in FY 2022-23 and FY 2023-24. Data from the EIA's 2015 residential energy consumption survey indicate that the Mountain North region, including Colorado, accounted for about 0.6 percent of the nation's installed heat pumps. Assuming heat pump prevalence for the nation's housing represents the share of heat pumps sent to the Mountain North region, and based on Colorado's 47 percent share of housing units within this region from U.S. Census Bureau estimates, the analysis assumes an estimated 0.3 percent of the Energy Star shipments could be for use by Colorado purchasers each year. Based on the above assumptions, the bill's sales and use tax exemption will apply to an estimated 2,558 units in FY 2022-23 (half-year impact), and 5,415 units in FY 2023-24.

Based on EIA data on battery storage trends in the United States, Colorado utilities reported about 115 residential customers with distributed energy storage systems associated with solar energy in 2020, up from 38 systems reported in 2018. Assuming these systems represent half of those installed in the state, and based on estimated growth in installations, the analysis assumes an estimated 110 systems will be installed in 2023 and 130 in 2024.

The analysis assumes an average price of about $6,000 for air-source heat pump equipment, $20,000 for ground-source heat pump equipment, $3,000 for heat pump water heaters, and between $11,500 and $11,800 for a residential energy storage system. Based on the price estimates and data above, total exempt sales are projected to be $15.3 million in FY 2022-23 and $32.5 million in FY 2023-24. Using the state sales and use tax rate of 2.9 percent, exempting these sales will reduce General Fund revenue by $461,000 in FY 2022-23 and by $988,000 in FY 2023-24, with similar impacts in future years.

Income tax credit for heat pumps and residential energy storage systems. Beginning in tax year 2023, the bill creates a refundable income tax credit equal to 10 percent of the purchase price of heat pump systems and necessary electrical panel upgrades, and residential energy storage systems as described above. Based on potential purchases, the income tax credits will reduce General Fund revenue by $1.6 million in FY 2022-23 (half-year impact), by $3.3 million in FY 2023-24 (full-year impact), and $1.6 million in FY 2024-25 (half-year impact). To the extent that electrical panel upgrades are needed to facilitate the installation of a heat pump or heat pump water heater system, the state revenue reduction may be greater than estimated. The impact of electrical panel upgrades will be determined by many factors including the age and size of the existing panel, appliances, machinery, and electronics, factors that are not estimated due to data availability.

Decarbonizing building material sales and use tax exemption. While the range of products that meet the criteria for decarbonizing building materials is not yet determined, net taxable sales of construction and building materials is significant. In FY 2020-21, net taxable sales for the construction industry and retail trade for building materials and garden equipment stores totaled $10.9 billion, with estimated sales tax of about $316 million. This fiscal note assumes that exempt decarbonizing building materials comprise 1.0 percent of these sales, which would decrease revenue by an estimated $3.2 million beginning in FY 2024-25. However, criteria on what materials will be considered exempt are not yet available. To the extent decarbonizing building materials criteria results in a higher or lower percent of these sales, the revenue impact will also vary.

State Expenditures

The bill increases state expenditures by $230,682 in FY 2023-24 and by $147,665 in FY 2024-25 and future years, paid from the General Fund. Expenditures are shown in Table 2 and detailed below.

Table 2
Expenditures Under SB 22-051

Cost Components	FY 2022-23	FY 2023-24	FY 2024-25
Department of Revenue			
Personal Services	-	$36,461	$36,461
Standard Operating	-	$945	$945
Capital Outlay	-	$4,340	-
Computer and User Acceptance Testing	-	$61,302	$1,496
GenTax Computer Programming	-	$11,250	-
Office of Research and Analysis	-	$7,520	$6,400
Tax Form Changes	-	$845	$544
Centrally Appropriated Costs[1]	-	$10,280	$10,280
FTE – Personal Services	-	0.7 FTE	0.7 FTE
DOR Subtotal	**-**	**$132,943**	**$56,126**
Department of Personnel and Administration			
Personal Services	-	$73,571	$73,571
Standard Operating	-	$1,350	$1,350
Capital Outlay	-	$6,200	-
Centrally Appropriated Costs[1]	-	$16,618	$16,618
FTE – Personal Services	-	1.0 FTE	1.0 FTE
DPA Subtotal	-	**$97,739**	**$91,539**
Total	**-**	**$230,682**	**$147,665**
Total FTE	**-**	**1.7 FTE**	**1.7 FTE**

[1] *Centrally appropriated costs are not included in the bill's appropriation.*

Department of Revenue. The Department of Revenue (DOR) will have costs for staff, data systems, and other expenses starting in FY 2023-24, as described below.

- *Staff and contract services.* The DOR require 0.7 FTE tax examiners starting in FY 2023-24. The tax examiners are necessary to process and review additional returns claiming the new income tax credits and to resolve errors in returns.

- *Tax system modifications.* The bill will require GenTax computer programming changes that will require 50 hours of work billed at a contractor rate of $225 per hour. Computer and user acceptance testing associated with the programming changes will result in an additional cost of $61,302 in FY 2023-24, with an ongoing cost of $1,496 in FY 2024-25 and subsequent years. Lastly, the DOR will require tax form changes, which will require a reappropriation to the Department of Personnel and Administration.

- *Reporting and analysis.* The DOR is also required under the bill to create a model report and agreement related to the income tax credits in consultation with the Colorado Energy Office. The Office of Research and Analysis will also incur additional costs, an estimated $7,520 in FY 2023-24 and $6,400 in FY 2024-25 and subsequent years.

Department of Personnel and Administration. Beginning in FY 2023-24, the Office of the State Architect in the Department of Personnel and Administration will require an additional 1.0 FTE for an Analyst IV position to review environmental product declarations from manufacturers to certify eligible decarbonizing building materials that meet the office's maximum acceptable global warming potential for material categories per House Bill 21-1303. Data on eligible materials and associated manufacturers will be compiled and used by the Department of Revenue to administer the sales and use tax exemption. The Office of the State Architect is also required to provide assistance to the Office of the State Auditor for evaluating the tax expenditure, workload that is assumed to be accommodated within existing appropriations.

Other agencies. The bill requires the Colorado Energy Office to support the Office of the State Auditor with data and guidance when examining the exemption and to consult with the Department of Revenue for a model report related to the income tax credits in the bill. Additionally, the bill allows investor-owned utilities to apply to the Public Utilities Commission to use either fuel commodity units or energy services provided for billing purposes. The fiscal note assumes that these workload impacts can be accommodated within existing appropriations.

Other Budget Impacts

TABOR refunds. The bill is expected to decrease the amount of state revenue required to be refunded to taxpayers by the amounts shown in the State Revenue section. This estimate assumes the March 2022 Legislative Council Staff revenue forecast. A forecast of state revenue subject to TABOR is not available beyond FY 2023-24. Because TABOR refunds are paid from the General Fund, decreased General Fund revenue will lower the TABOR refund obligation, but result in no net change to the amount of General Fund otherwise available to spend or save.

General Fund reserve. Under current law, an amount equal to 15 percent of General Fund appropriations must be set aside in the General Fund statutory reserve beginning in FY 2022-23. Based on this fiscal note, the bill is expected to increase the amount of General Fund held in reserve by the amounts shown in Table 1, which will decrease the amount of General Fund available for other purposes.

Local Government

Sales and use tax. Sales and use tax exemptions for heat pump systems, residential energy storage systems, and eligible decarbonizing building materials will decrease sales and use tax revenue for state-collected local governments and special districts that conform to the state tax base. The bill includes the exemptions among other optional sales and use tax exemptions for state-collected local governments. The distribution of potential heat pump systems and building materials, and implementation of the exemption for local governments and special districts cannot be estimated due to data availability.

Effective Date

The bill was signed into law by the Governor on June 2, 2022, and it took effect on August 9, 2022, except that the provisions relating to the sales and use tax exemptions on heat pumps and the bill's income tax credits take effect on January 1, 2023, and the provisions relating to the sales and use tax exemption on decarbonizing building materials take effect on July 1, 2024.

State and Local Government Contacts

Colorado Energy Office
Counties
County Assessors
Information Technology
Labor
Municipalities
Personnel
Property Tax Division - Local Affairs
Regional Transportation District
Regulatory Agencies
Revenue
Special Districts
State Auditor