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Revised Fiscal Note

(replaces fiscal note dated March 28, 2022)

Drafting Number:	LLS 22-0335	Date:	April 7, 2022
Prime Sponsors:	Sen. Hansen Rep. Valdez A.	Bill Status:	Senate Appropriations
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Bill Topic: REDUCE GREENHOUSE GAS EMISSIONS IN COLORADO

Summary of Fiscal Impact:	<input checked="" type="checkbox"/> State Revenue	<input checked="" type="checkbox"/> TABOR Refund
	<input checked="" type="checkbox"/> State Expenditure	<input checked="" type="checkbox"/> Local Government
	<input type="checkbox"/> State Diversion	<input checked="" type="checkbox"/> Statutory Public Entity

This bill creates a state income tax credit for electric-powered small off-road equipment, requires PERA and insurance companies to study climate risks to their investment portfolios, authorizes the Department of Natural Resources to regulate Class VI injection wells, and requires the Department of Agriculture to study carbon sequestration opportunities in the agriculture sector. Beginning in FY 2022-23, the bill reduces state revenue and increases state, local government and statutory public entity expenditures.

Appropriation Summary: For FY 2022-23, the bill requires an appropriation of \$227,218 to multiple state agencies and includes an appropriation of \$2.2 million to the Department of Agriculture.

Fiscal Note Status: The fiscal note reflects the introduced bill as amended by the Senate Transportation and Energy Committee and Senate Finance Committee.

**Table 1
State Fiscal Impacts Under SB 22-138**

		Budget Year FY 2022-23	Out Year FY 2023-24
Revenue	General Fund	(\$4.6 million)	(\$9.3 million)
	Total Revenue	(\$4.6 million)	(\$9.3 million)
Expenditures	General Fund	\$2,345,789	\$135,184
	Cash Funds	\$1,881,429	\$1,915,028
	Centrally Appropriated	\$82,761	\$95,623
	Total Expenditures	\$4,309,979	\$2,145,835
	Total FTE	3.1 FTE	3.3 FTE
Transfer	General Fund	(\$1,800,000)	(\$1,800,000)
	Cash Funds	\$1,800,000	\$1,800,000
	Net Transfer	\$0	\$0
Other Budget Impacts	TABOR Refund	(\$4.6 million)	(\$9.3 million)
	General Fund Reserve	\$351,868	\$129,035

Summary of Legislation

The bill includes a number of provisions to reduce greenhouse gas (GHG) emissions in the state. It bill creates a 30 percent state income tax credit for electric-powered small off-road equipment, including lawn mowers, leaf blowers, and trimmers for tax years 2023 through 2029. The credit amount will be provided to purchasers as a discount from the purchase price of the equipment and then claimed by the seller as credit against their taxes owed. In addition, the bill:

- establishes GHG reduction goals of 40 percent by 2028, 65 percent by 2035, and 75 percent by 2040;
- requires insurance companies that report more than \$100 million to complete an annual climate risk disclosure;
- requires the Public Employees' Retirement Association (PERA) to include climate-risk assessments in its annual investment stewardship report;
- specifies that wastewater thermal energy equipment is a type of pollution control device that may be certified as pollution control equipment;
- requires the Air Quality Control Commission (AQCC) to adopt rules to reduce greenhouse gas emissions from the industrial and manufacturing sector by August 1, 2023;
- authorizes the Colorado Oil and Gas Conservation Commission (COGCC) to regulate Class VI Injection Wells after publically determining that COGCC has the necessary resources to ensure the safe and effective regulation of these wells;
- requires the Department of Agriculture (CDA) to study carbon reduction and sequestration opportunities in the agricultural sector and in land management and report recommendations by October 1, 2024, and makes a \$2.2 million appropriation for this purpose in FY 2022-23;
- authorizes the CDA to finance agricultural research on the use of agrivoltaics and their impact on wildlife, allows the CDA to seek, accept, and expend gifts, grants, and donations for such projects and requires that \$1.8 million per year be transferred from the General Fund to a program cash fund for five years, from FY 2022-23 to FY 2027-28;
- adds wastewater thermal energy to the definition of a clean heat resource; and
- amends the definition of agrivoltaics concerning allowable co-location activities and property tax valuation.

Background

GHG Emissions Reduction Targets. House Bill 19-1261, the Climate Action Plan to Reduce Pollution, establishes goals to reduce GHG emissions by 26 percent by 2025, 50 percent by 2030, and 90 percent by 2050, measured relative to the 2005 baseline emissions. This bill adds intermediary GHG reduction goals for 2028 (40 percent), 2035 (65 percent), and 2040 (75 percent).

House Bill 21-1266, the Environmental Justice Act, required the AQCC to adopt rules to reduce statewide GHG emissions in the oil and gas sector by January 1, 2022, that reduces emissions by at least 36 percent by 2025, and 60 percent by 2030 below the 2005 baseline. The bill also directed the AQCC to adopt rules to reduce statewide GHG emissions from the industrial and manufacturing sector by at least 20 percent by 2030 below the 2015 baseline, with realized emissions reductions beginning no later than September 30, 2024. This bill requires the AQCC to adopt rules to meet these industrial and manufacturing targets by August 31, 2023.

Class VI Geologic Sequestration Wells. Class VI wells are used for the geologic sequestration and long-term storage of carbon dioxide in deep rock formations. Class VI injection permits are designed to protect underground drinking water sources and are regulated by the U.S. Environmental Protection Agency (EPA), in states, including Colorado, that have not enacted their own regulatory process for these permits. Senate Bill 21-264 required the Department of Natural Resources (DNR) to study the resource needed to safely and effectively regulate greenhouse gas sequestration. A copy of the report can be found here:

<https://cogcc.state.co.us/documents/library/Technical/UIC/COGCC Class VI Report.pdf>

This bill authorizes the COGCC to issue Class VI injection permits, which will require the COGCC to pursue Class VI primacy with the EPA. The COGCC currently only has primacy for Class II wells, which are used for the injection of fluids associated with oil and natural gas production. North Dakota and Wyoming are the only states to have primacy for permitting Class VI wells.

As of February 2022, only two Class VI wells, both in Illinois, are currently permitted by the EPA.¹ Geologic sequestration is regulated under the federal Safe Drinking Water Act for the purpose of protecting underground sources of drinking water.

State Revenue

This bill will decrease state income tax revenue by \$4.6 million in FY 2022-23 (half-year impact) and by \$9.3 million in FY 2023-24 and subsequent years through FY 2029-30. The bill reduces income tax revenue to the General Fund, which is subject to TABOR.

The fiscal note assumes that the new tax credit will be used for the purchase of 193,663 pieces of electric lawn or garden equipment in 2023, and 196,955 pieces in 2024. This estimate is based on sales of electric lawn and garden equipment in California, adjusted for the smaller population of Colorado. Further, the fiscal note assumes that the tax credit will be used for 95 percent of qualifying electric lawn and garden equipment purchases, as the large majority of retailers are expected to utilize the tax credit. To the extent that some taxpayers do not have sufficient tax liability to claim the full credit, the reduction in revenue will be delayed or reduced entirely if taxpayers cannot claim the full credit within the five-year carry-forward period.

State Transfer

The bill transfers \$1.8 million per year from the General Fund to the Agriculture Value-Added Cash Fund, from FY 2022-23 through FY 2027-28. The first transfer occurs on the effective date of this bill, which is assumed to occur in FY 2022-23; the remaining annual transfers will occur on July 1 of each year. The Agriculture Value-Added Cash Fund is continuously appropriated to the Colorado Agricultural Value-Added Development Board for financial and technical assistance to agricultural projects, project concepts, and research as approved by the board.

¹ Class VI Wells Permitted by EPA. Last updated February 15, 2022. Available at: <https://www.epa.gov/uic/class-vi-wells-permitted-epa>.

State Expenditures

The bill increases state expenditures by \$4,208,763 in FY 2022-23 and \$2,247,051 in FY 2023-24 and future years, paid from the General Fund and the Oil and Gas Conservation Cash Fund. These costs, which are in multiple agencies, are detailed in Table 2 and described below.

**Table 2
 State Expenditures Under SB 22-138**

Cost Components	FY 2022-23	FY 2023-24
Department of Natural Resources		
Personal Services	\$72,649	\$87,178
Operating Expenses	\$1,080	\$1,350
Capital Outlay Costs	\$6,200	-
Training	\$1,500	\$1,500
Computer Software	-	\$25,000
Centrally Appropriated Costs ¹	\$18,558	\$23,523
FTE – Personal Services	0.8 FTE	1.0 FTE
DNR Subtotal	\$99,987	\$138,551
Department of Agriculture²		
Personal Services	\$74,900	\$99,866
Operating Expenses	\$1,080	\$1,350
Capital Outlay Costs	\$6,200	-
Carbon Sequestration Study Contract	\$2,016,604	-
Agrivoltaic Research Project Funding	\$1,800,000	\$1,800,000
Centrally Appropriated Costs ¹	\$31,641	\$39,803
FTE – Personal Services	0.8 FTE	1.0 FTE
CDA Subtotal	\$3,930,425	\$1,941,019
Department of Public Health and Environment		
Personal Services	\$131,094	\$107,628
Operating Expenses	\$2,295	\$1,755
Capital Outlay Costs	\$12,400	-
Public Outreach and Communication	-	\$4,500
Centrally Appropriated Costs ¹	\$32,562	\$32,297
FTE – Personal Services	1.5 FTE	1.3 FTE
CDPHE Subtotal	\$178,351	\$146,180
Department of Revenue		
Computer Programming and Testing	-	\$14,543
Document Management	-	\$358
Data Reporting	-	\$6,400
DOR Subtotal	-	\$21,301
Total	\$4,208,763	\$2,247,051
Total FTE	3.1 FTE	3.3 FTE

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

² Personal services and operating expenses in the CDA in FY 2023-24 are assumed to be paid from \$2.2 million appropriation to the department in FY 2022-23, included in the bill.

Department of Natural Resources. Beginning in FY 2022-23, the DNR requires staff and other resources to develop and administer an Underground Injection Control Program for Class VI injection wells, as outlined in the [COGCC Class VI Report](#). These resources align with other states that have primacy to regulate Class VI wells. This fiscal note assumes funds will be appropriated from the Oil and Gas Conservation Cash Fund. The recently enacted federal Infrastructure Investment and Jobs Act included a grant program pertaining to Class VI wells and, if funding is made available to Colorado, the need for state funds may be reduced.

- *Primacy staff.* Beginning in FY 2022-23, in order to assume permitting and enforcement authority, the COGCC will hire a Class VI Coordinator to oversee the application for primacy with the EPA, which is anticipated to take approximately two years to complete, and then oversee the regulatory program beginning in FY 2024-25. As Class VI wells are an emerging technology, the new staff will require annual training costs of \$1,500 to attend relevant conferences, seminars, and workshops related to geological carbon sequestration.
- *Regulatory staff.* After assuming primacy, COGCC staff will require an additional 2.0 FTE beginning in FY 2024-25 and ongoing to implement all aspects of the program under EPA guidance, including reviewing permits, reporting to the EPA, communicating with operators and the public about projects, and ensuring compliance with permit conditions and Class VI well rules. The DNR will pursue additional federal funds to support this program, which may reduce these cash fund requirements in future fiscal years. In addition, hydrogeology staff will review injection well permit applications to ensure underground drinking water sources will not be impacted by injection operation, which can be accommodated with existing resources.
- *Computer software and hardware.* In addition to staff to regulate Class VI wells, DNR will purchase computer hardware and software to model underground reservoirs and simulate the effects of GHG injections. Based on costs in another state that recently attained primacy, the DNR will have costs for an annual license fee of \$10,000 for simulation software beginning in FY 2023-24, and one-time costs of \$15,000 in FY 2023-24 for the purchase of a server.

Department of Agriculture. The bill appropriates \$2.2 million in FY 2022-23 to CDA to study carbon reduction and sequestration opportunities in the agriculture and land management sectors, including the feasibility of a certified carbon offset and credit training program. The CDA requires 1.0 FTE for a project manager with subject matter expertise to direct and complete the study, and to manage a grant contract with an Institute of Higher Education to produce this research. Costs reflect a September 1 start date and include capital outlay and operating expenses. The Colorado Energy Office and the Air Quality Control Commission in the CDPHE will incur absorbable workload impacts to consult on the study. The study must be submitted by October 1, 2024. This fiscal note assumes that the money appropriated in FY 2022-23 will require roll-forward spending authority throughout the duration of the study. If roll forward spending authority is not authorized, the CDA will require an appropriation in FY 2023-24 for staff costs. The bill authorizes CDA to adopt rules to implement the recommendations included in the report, so long as no legislative changes are required. This fiscal note assumes that should the CDA decide to adopt rules implementing these recommendations, any additional resources needed will be requested through the annual budget process.

The bill also annually transfers \$1.8 million in General Funds to the Agriculture Value Added Cash Fund to make investments in agrivoltaics research. The CDA will have increased workload to support these investments, which can be accommodated with existing staff resources. The Department of Natural Resources will have workload impacts to consult with recipients regarding wildlife impacts of agrivoltaics use. The Agriculture Value Added Cash Fund is continuously appropriated to the CDA. The fiscal note assumes the entire \$1.8 million transferred annually will be used each year, but the timing of actual expenditures may differ.

Department of Regulatory Agencies. In FY 2022-23, the Department of Revenue will have additional workload to support rulemaking by the Commissioner of Insurance that requires insurers to participate in the NAIC's annual survey, and to email insurers that meet the threshold requirements established in the bill with the survey and instructions. This workload can be accomplished within existing resources.

Department of Public Health and Environment. The CDPHE will require additional staff from September 1, 2022, through December 31, 2023, to develop and adopt rules for GHG emission reductions from the industrial and manufacturing sector to achieve at least a 20 percent emissions savings by 2030, below the 2015 baseline. To accommodate the expedited nature of rulemaking, the CDPHE will require an additional 2.0 FTE for environmental protection specialists. In addition, 0.3 FTE marketing and communication specialist will be needed in the first half of FY 2023-24 to support enhanced community engagement once the proposed rules have been prepared, in addition to \$4,500 in costs for facilities rental, childcare services, and participant incentives. Staff costs are prorated to reflect the General Fund pay date shift in FY 2022-23, and includes standard capital outlay and operating expense. This fiscal note assumes that no additional rulemaking is required to achieve the intermediary GHG reduction targets for 2028 and 2040. Should the CDPHE determine that additional rulemaking is required to achieve those targets, additional resources will be requested through the annual budget process.

Department of Revenue. In FY 2023-24, expenditures will increase in the Department of Revenue by \$21,301, with ongoing expenditures of \$6,400 in subsequent years. These expenditures are necessary to implement the new tax credit included in the bill.

- *Computer programming and testing.* For FY 2023-24 only, the bill requires changes to the DOR's GenTax system and additional computer and user acceptance testing. Approximately 12 hours of computer programming will be required to make changes in the GenTax system, totaling \$2,700. Additional computer and user acceptance testing are required to ensure programming changes are functioning properly, resulting in an additional \$11,843.
- *Document Management.* The bill requires an additional \$358 in expenditures to implement tax form changes in FY 2023-24. These expenditures will take place in the Department of Personnel and Administration using reappropriated funds.
- *Data reporting.* Beginning in FY 2023-24, the Office of Research and Analysis within the DOR will expend \$6,400 each year to collect and report data on the new tax credit.

Centrally appropriated costs. Pursuant to a Joint Budget Committee policy, certain costs associated with this bill are addressed through the annual budget process and centrally appropriated in the Long Bill or supplemental appropriations bills, rather than in this bill. These costs, which include employee insurance and supplemental employee retirement payments, are shown in Table 2.

Other Budget Impacts

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.

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 above. This estimate assumes the December 2021 LCS 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.

Statutory Public Entity

The Public Employees' Retirement Association (PERA) currently publishes an Investment Stewardship Report <https://www.copera.org/files/e281fe352/5-169.pdf> that explains how PERA's investment philosophy addresses climate-related risks. The bill requires PERA to include additional detail on the process for identifying climate-related risks and assessing and addressing risks to its investment portfolio. PERA will incur workload impacts to accommodate these additional requirements.

Effective Date

The bill takes effect 90 days following adjournment of the General Assembly sine die, assuming no referendum petition is filed.

State Appropriations

For FY 2022-23, the bill requires the following appropriations:

- \$81,429 to the Department of Natural Resources, from the Oil and Gas Conservation Cash Fund and 0.8 FTE; and
- \$145,789 to the Department of Public Health and Environment from the General Fund, and 1.5 FTE.

For FY 2022-23, the bill includes an appropriation of \$2.2 million from the General Fund to the Colorado Department of Agriculture. In addition, it is assumed that the CDA requires roll-forward spending authority through FY 2023-24 through the expected completion date of this study.

State and Local Government Contacts

Agriculture	Colorado Energy Office	Information Technology
Local Affairs	Natural Resources	PERA
Personnel	Public Health and Environment	Regulatory Agencies
Revenue	Law	