

ENERGY USED FOR INDUSTRIAL & MANUFACTURING PURPOSES EXEMPTION EVALUATION SUMMARY



JULY 2019
2019-TE20

THIS EVALUATION WILL BE INCLUDED IN COMPILATION REPORT SEPTEMBER 2019

YEAR ENACTED	1935
REPEAL/EXPIRATION DATE	None
REVENUE IMPACT	\$35.2 to \$87.9 million TAX YEAR 2017
NUMBER OF TAXPAYERS	Could not determine
AVERAGE TAXPAYER BENEFIT	Could not determine
IS IT MEETING ITS PURPOSE?	Yes

WHAT DOES THIS TAX EXPENDITURE DO?

The Energy Used for Industrial & Manufacturing Purposes Exemption (Industrial Energy Exemption) exempts sales or purchases of electricity, coal, gas, fuel oil, steam, coke, or nuclear fuel used for industrial or manufacturing purposes from state sales tax.

WHAT IS THE PURPOSE OF THIS TAX EXPENDITURE?

Statute does not explicitly state a purpose for the Industrial Energy Exemption. Based on our review of statute, legislative history, and other states' tax expenditure provisions, we inferred that the purpose is to ensure that the State's sales tax is only applied to purchases made by final consumers. This helps ensure even tax treatment of businesses regardless of the cost of inputs to their products.

WHAT DID THE EVALUATION FIND?

We determined that the Industrial Energy Exemption is accomplishing its purpose because it is used by most eligible taxpayers.

WHAT POLICY CONSIDERATIONS DID THE EVALUATION IDENTIFY?

Taxpayers may lack adequate guidance on how to claim the exemption and calculate the exempt amount. Specifically, the Department of Revenue no longer provides detailed guidance on how to claim it, although its staff reported efforts to improve guidance in the future. Alternatively, the General Assembly may want to consider simplifying the administration of the Industrial Energy Exemption by allowing taxpayers to claim a flat percentage of their total energy use.

ENERGY USED FOR INDUSTRIAL & MANUFACTURING PURPOSES EXEMPTION

EVALUATION RESULTS

WHAT IS THE TAX EXPENDITURE?

The Energy Used for Industrial & Manufacturing Purposes Exemption (Industrial Energy Exemption) exempts sales and purchases of electricity, gas, fuel oil, steam, coal, coke, or nuclear fuel used for industrial or manufacturing purposes from state sales tax [Section 39-26-102(21)(a), C.R.S.]. Eligible energy purchases are also exempt from local sales taxes for purchases made in local taxing jurisdictions, such as statutory cities and counties, which have their local sales taxes collected by the State on their behalf. Statute [Section 29-2-105(1)(d)(I), C.R.S.] mandates that these local governments apply most of the State's sales tax exemptions, including the Industrial Energy Exemption. Home-rule cities established under Article XX, Section 6 of the Colorado Constitution, which have the authority to set their own tax policies independent from the State, are not required to exempt industrial energy sales from their local sales tax.

The Industrial Energy Exemption was originally introduced in 1935 on a temporary basis as part of the Emergency Retail Sales Tax Act, and was made permanent in 1937. The statutory language for the exemption has remained largely unchanged, except for the addition of exempt energy sources, such as fuel oil, coke, steam, and nuclear fuel, as technology changed. The exemption was temporarily repealed from March 1, 2010, until June 30, 2012, with the exception of diesel fuel purchased for off-road use, and certain fuels purchased for agricultural purposes or for generating electricity [House Bill 10-1190].

To qualify for the Industrial Energy Exemption, the energy purchased must be used for the specific industrial purposes as listed in statute and Department of Revenue Regulations, which include: processing (including food processing), manufacturing, mining, refining, irrigation, construction, telegraph, telephone, radio communication, street transportation services, and all industrial uses. According to Department of Revenue Regulation [1 C.C.R. 201-5, Special Regulation 19] and guidance, energy used by eligible taxpayers that does not directly contribute to the industrial or manufacturing process itself, such as the electricity used to heat or light break rooms, office spaces, and sales rooms, does not qualify for the exemption.

To claim the exemption, taxpayers must determine the amount of energy they used that qualifies. Taxpayers can use several methods to determine this amount, such as installing separate utility meters for different areas of their facilities, making estimates based on facility square footage dedicated to industrial use, or installing sub-meters for specific machinery. If taxpayers' energy usage qualifying for the exemption is under 75 percent of their total energy use, they must pay the sales tax to their energy provider on the full amount of their energy purchases and then apply for a refund from the Department of Revenue for the exempt amount. To claim a refund, taxpayers must file a Claim for Refund of Tax Paid to Vendors (Form DR 0137B) or Retailer's Use Tax Return (Form DR 0173) and complete a Sales Tax Exempt Certificate Electricity and Gas for Industrial Use (Form DR 1666) to document the amount of their energy consumption that was exempted.

Taxpayers that estimate that 75 percent or more of their energy consumption is exempt can file Form DR 1666 with their energy providers. The energy providers then do not collect any sales taxes from these taxpayers for their eligible energy purchases. Energy providers report the amount they exempted from these customers using the Department of Revenue's Colorado Retail Sales Tax Return (Form DR 0100). If less than 100 percent of these taxpayers' energy use is exempt, they are responsible for remitting sales taxes on the non-exempt portion using DR 0100.

In addition, Department of Revenue regulations establish a separate process for restaurants claiming the exemption. Specifically, taxpayers with sales of food for immediate consumption that exceed 25 percent of total sales revenue can receive the exemption for 55 percent of the sales tax they paid on their gas and electricity purchases. Taxpayers with sales of food for immediate consumption that are 25 percent or less of their total sales revenue can claim the exemption for an amount equivalent to 0.5 percent of their total food sales. Taxpayers with qualifying food sales must pay the tax to their energy provider and can then deduct the appropriate amount from the amount of sales taxes owed on their Colorado Retail Sales Tax Return (Form DR 0100). They must also file a separate form, Retail Food Established Computation Worksheet for Sales Tax Deduction for Gas and/or Electricity (Form DR 1465), to report their energy use and amount exempt from sales tax.

WHO ARE THE INTENDED BENEFICIARIES OF THE TAX EXPENDITURE?

Statute does not specifically identify the intended beneficiaries of the Industrial Energy Exemption. Based on the statutory language, we inferred that the intended beneficiaries of the exemption are businesses involved in processing (including food processing), manufacturing, mining, refining, irrigation, construction, telegraph, telephone, radio communication, and street transportation services. In Calendar Year 2017, there were about 16,000 industrial energy customers in Colorado, according to U.S. Energy Information Administration data, all of whom could potentially be eligible for the exemption. In addition, we inferred that consumers of products sold by businesses that claim the exemption are indirect beneficiaries since some of the tax benefit may be passed on to consumers in the form of lower prices.

WHAT IS THE PURPOSE OF THE TAX EXPENDITURE?

Statute does not explicitly state a purpose for the Industrial Energy Exemption. Based on our review of statute, legislative history, and other states' tax expenditure provisions, we inferred that the purpose is to ensure that the State's sales tax is only applied to purchases made by

final consumers. Specifically, the exemption, which is a common structural provision in states with a sales tax, ensures that the sales tax is only applied once, to the final sale of tangible goods to a consumer, and not also applied to the inputs, such as energy, that are necessary to produce the product. This helps ensure even tax treatment of businesses regardless of the cost of inputs to their products.

IS THE TAX EXPENDITURE MEETING ITS PURPOSE AND WHAT PERFORMANCE MEASURES WERE USED TO MAKE THIS DETERMINATION?

We determined that the Industrial Energy Exemption is likely accomplishing its purpose because it is used by most eligible taxpayers. Statute does not provide quantifiable performance measures for this exemption. Therefore, we created and applied the following performance measure to determine the extent to which the Industrial Energy Exemption is meeting its inferred purpose:

PERFORMANCE MEASURE: *To what extent are eligible businesses claiming the Industrial Energy Exemption to avoid the payment of sales tax on energy used for industrial purposes?*

RESULT: We estimate that at least 10,400 of the 16,000 industrial energy consumers in the state claimed the exemption in Tax Year 2017. We based this estimate on Department of Revenue data, which provided a partial count of about 4,400 taxpayers who claimed the exemption, based on one of several lines that taxpayers may use to claim the exemption on their Colorado Retail Sales Tax Return (DR 0100). We added this total to the 6,000 customers that energy providers told us had filed a Form DR 1666 to claim the exemption (based on their reporting practices these should be in addition to those included in the Department of Revenue's count). Additionally, stakeholders and industry groups we contacted reported that most eligible taxpayers are aware of the Industrial Energy Exemption and how to claim it. However, stakeholders reported that smaller businesses and certain industries may be less aware of the exemption and may not claim it. For example, our discussions with industry groups indicated that radio and

television broadcasters, which based on an August 2016 general information letter issued by the Department of Revenue are both eligible for the exemption, may not have claimed the exemption due to a lack of awareness. In addition, several stakeholders indicated that smaller businesses who do not hire tax consultants or CPA firms may be less likely to claim it.

WHAT ARE THE ECONOMIC COSTS AND BENEFITS OF THE TAX EXPENDITURE?

We estimate that the Industrial Energy Exemption likely reduced state revenue by between \$35.2 and \$87.9 million in Tax Year 2017. Because the Department of Revenue could not provide complete data on the expenditure, we estimated this range using U.S. Energy Information Administration data on consumption rates for coal, natural gas, electricity, and petroleum in Colorado from Calendar Year 2017, as well as Colorado-specific price estimates from Calendar Year 2017 for each energy source. Specifically, we multiplied the amount consumed by the average price for each energy source to estimate that industrial energy consumers purchased about \$4 billion in energy during Calendar Year 2017. However, because only the portion of the energy that was used directly in the process of manufacturing tangible goods was eligible for the exemption and because we lacked information to estimate this amount, we have provided estimates assuming a range of eligible energy use between 30 and 75 percent of the total energy used, which is consistent with information we received from stakeholders on industrial energy usage. We multiplied the estimated eligible energy costs by the state sales tax rate of 2.9 percent and the average statewide population-weighted local tax rate for state-collected local governments of 1.7 percent to estimate the revenue impacts. EXHIBIT 1.1 shows our estimated state and local revenue impact for the exemption.

EXHIBIT 1.1. ESTIMATED INDUSTRIAL ENERGY EXEMPTION STATE AND LOCAL REVENUE IMPACT, TAX YEAR 2017

PERCENTAGE ENERGY USED FOR QUALIFYING INDUSTRIAL PURPOSES	ESTIMATED ENERGY COSTS ELIGIBLE FOR EXEMPTION	REVENUE IMPACT TO STATE ¹	REVENUE IMPACT TO LOCAL GOVERNMENTS ²	TOTAL REVENUE IMPACT
30%	\$1,212.5 million	\$35.2 million	\$20.6 million	\$55.8 million
50%	\$2,020.8 million	\$58.6 million	\$34.4 million	\$93 million
75%	\$3,031.1 million	\$87.9 million	\$51.6 million	\$139.5million

SOURCE: Office of the State Auditor analysis of data from 2017 U.S. Energy Information Administration consumption and price estimates.

¹ To estimate the revenue impact to the State, we multiplied the estimated energy costs eligible for the exemption by 2.9 percent, the state sales tax rate.

² To estimate the revenue impact to local governments, we multiplied the estimated energy costs eligible for the exemption by 1.7 percent, the statewide average population-weighted local tax rate for state-collected local governments.

WHAT IMPACT WOULD ELIMINATING THE TAX EXPENDITURE HAVE ON BENEFICIARIES?

Eliminating the Industrial Energy Exemption would cause a significant increase in the state and local sales taxes paid by manufacturers and other beneficiaries. Although we could not determine the average tax benefit for each beneficiary, the amount claimed could be substantial for some larger industrial energy consumers. For example, the beneficiaries we contacted reported they would pay as much as \$750,000 per year in additional sales taxes if the exemption were not in place. To the extent that businesses that currently benefit from this exemption pass the additional tax cost on to consumers of their products, eliminating the exemption would also increase the prices consumers pay. However, some industries, such as mining, oil, and gas operations, that sell their products at established commodity prices, would be forced to absorb the additional cost.

Stakeholders indicated that the exemption is important to businesses in a variety of industries, although they varied on what they reported the impact of eliminating the exemption would likely be. Some stakeholders, especially those in industries that use more energy as an

input, operate with lower profit margins, or for which products are sold at fixed market prices, reported that eliminating the exemption would have a more significant impact. Some stakeholders indicated that if they were forced to pay the additional cost, they might have to reduce employment or scale back operations in the state. Other stakeholders reported that they would be able to absorb the cost or pass it on to customers.

ARE THERE SIMILAR TAX EXPENDITURES IN OTHER STATES?

Of the 44 states (excluding Colorado) and the District of Columbia, with a sales tax, 31 states, provide a similar expenditure to decrease the sales tax liability for businesses that use energy in industrial and manufacturing industries, although states vary in how they calculate the exemption amount. For example, Maine exempts 95 percent of energy usage from sales tax for manufacturers, while Nebraska only allows the exemption for taxpayers if more than 50 percent of the energy they purchase is used for industrial purposes.

ARE THERE OTHER TAX EXPENDITURES OR PROGRAMS WITH A SIMILAR PURPOSE AVAILABLE IN THE STATE?

Similar to the Industrial Energy Exemption, the Wholesales Exemption [Section 39-26-102(19)(a) and (20), C.R.S.] provides a sales tax exemption for inputs that are used to manufacture or process tangible goods. Specifically, the Wholesales Exemption exempts ingredients and component parts that are incorporated into a manufactured product from state sales tax.

WHAT DATA CONSTRAINTS IMPACTED OUR ABILITY TO EVALUATE THE TAX EXPENDITURE?

The Department of Revenue could not provide us with complete data for the Industrial Energy Exemption due to the way the amount exempted is reported. The Department of Revenue was only able to provide aggregate information on the exemption for taxpayers who claimed it using Section A, Line 7 of the Colorado Retail Sales Tax Return (Form DR 0100), which is typically used by restaurants that claim it. However, some

taxpayers report the amount exempted using one of several other lines on Form DR 0100 or Form DR 0100A which are used to report multiple other exemptions and cannot be disaggregated.

Similarly, some taxpayers instead use the Claim for Refund for Tax Paid to Vendors Form (Form DR 0137B) to claim the exemption, and the amount reported on this form is also combined with other types of sales tax exemptions and cannot be separated out. Additionally, when energy companies report the amount exempted for their customers who filed a Form DR 1666, they only provide an aggregate amount exempted and do not report information specific to each customer. The amount reported as exempt by energy providers for these customers also may overstate the amount that is actually exempted since their customers are responsible for reporting and paying sales tax on the portion of their energy that was used for a non-exempt purpose. According to the Department of Revenue, it is not possible under any of these reporting methods to disaggregate the amounts reported to determine the number of taxpayers who claimed the Industrial Energy Exemption or the amounts claimed.

To determine the extent to which the Industrial Energy Exemption is being used, the Department of Revenue would have to create new reporting lines on Forms DR 0100, DR 0173, and DR 0137B and then capture and house the data collected on those lines in GenTax, the Department of Revenue's tax processing system, which would require additional resources (see the Tax Expenditures Overview Section of the Office of the State Auditor's *September 2018 Tax Expenditures Compilation Report* for additional details on the limitations of Department of Revenue data and the potential costs of addressing the limitations).

WHAT POLICY CONSIDERATIONS DID THE EVALUATION IDENTIFY?

SOME TAXPAYERS LACK ADEQUATE GUIDANCE ON HOW TO CLAIM THE INDUSTRIAL ENERGY EXEMPTION AND CALCULATE THE EXEMPT AMOUNT. Because statute limits eligibility for the exemption to energy used for specific industrial purposes and Department of Revenue regulations require taxpayers to estimate the amount of their total energy use for

eligible versus ineligible purposes, administration of the expenditure can be a complex process for taxpayers. Taxpayers must establish a process to estimate and document their energy use at each facility (or each part of a facility) to be able to break out eligible uses, such as electricity used to run a machine that processes tangible goods, from ineligible uses, such as electricity used to light office spaces in the facility. However, Department of Revenue guidance does not include detailed instructions on acceptable methods to measure and document eligible energy use. In prior years the Department of Revenue provided guidance on how to calculate the exemption through its *FYI 71: Sales Tax Exemption on Industrial Utility Usage*. However, the Department of Revenue no longer provides this guidance to taxpayers and removed it from its website. Stakeholders reported that there are many gray areas when determining what activities to include as exempt and that additional guidance would help them understand how to claim the exemption. Although stakeholders reported that taking the exemption is generally a routine process for larger businesses that use CPA or tax consultant firms, smaller businesses may have difficulty determining how to claim it properly. Department of Revenue staff indicated that they are aware of this issue and that they are currently working on additional guidance for taxpayers regarding the exemption.

Alternatively, the General Assembly may want to consider simplifying the administration of the Industrial Energy Exemption by allowing eligible taxpayers to claim a flat percentage of their total energy use. For example, we identified thirteen other states with similar exemptions that base the exemption amount on a percentage of the industrial users' total energy use, ranging from 50 to 100 percent. Structuring the tax expenditure in this manner could eliminate the complexity of estimating the actual percentage of energy that taxpayers used for an eligible purpose. However, depending on the rate, some taxpayers may not be able to claim the full amount used for an eligible purpose, while some may be able to claim more than what they actually used. This could also increase or decrease the revenue impact to the State, depending on the rate. However, the specific impact cannot be determined given the lack of data on this expenditure.