

PRIVATE AND PUBLIC EXPENDITURE ON ENVIRONMENTAL PROTECTION IN CANADA, 2023 EDITION: COMPARISONS BY INDUSTRY AND PROVINCE

Overview: Environmental spending in Canada

This Fact Sheet details spending on environmental protection by the oil and gas sector, other industries, and provincial governments. The comparisons are made using the most recent data from Statistics Canada.

As the data makes clear, Canada’s oil and gas sector spent more than any other industry in Canada on environmental protection—\$9.4 billion cumulatively from 2018 to 2020—accounting for 33 percent of total environmental protection expenditures made by business across Canada in those years.

As the data also shows, the Alberta government spent \$22.6 billion on environmental protection between 2008 and 2021.

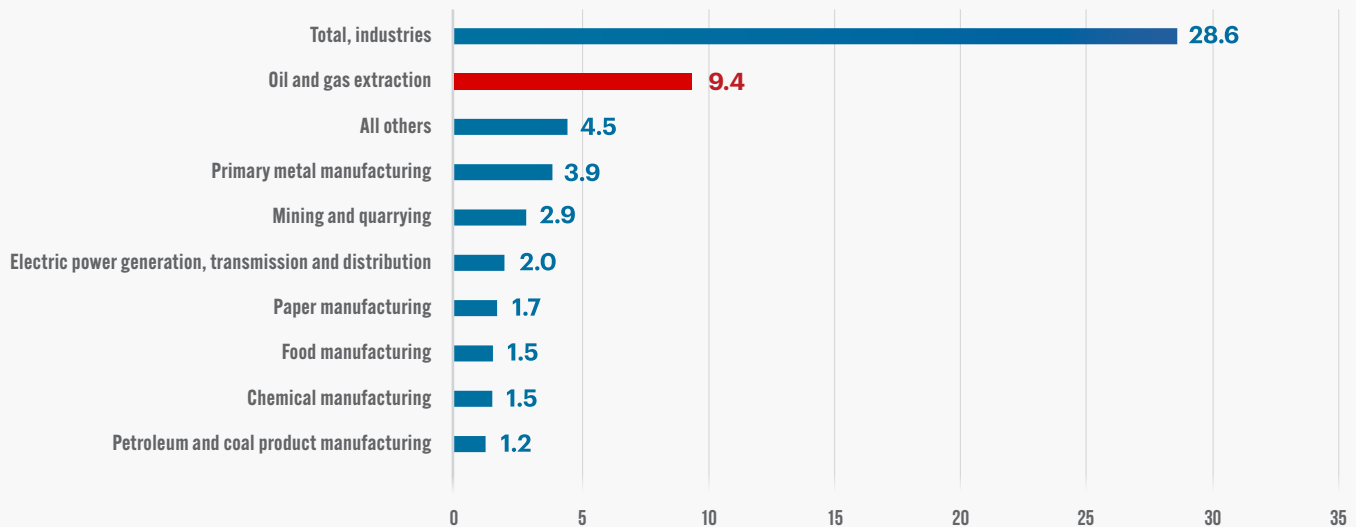
Environmental protection spending by industry

Figures 1 show that Canadian businesses spent \$28.6 billion on environmental protection between 2018 and 2020. When capital and operating expenses on environmental protection are combined, out of the \$28.6 billion spent between 2018 and 2020, the oil and gas sector spent \$9.4 billion.

Figure 1

Cumulative total environmental protection spending by industry from 2018-2020 for the top five industries plus all others

In \$ billions



Source: Derived from Statistics Canada, Table 38-10-0130-01.

In 2020, when capital and operating expenses on environmental protection are combined, the oil and gas sector spent \$2.7 billion, which constituted 27 percent of all Canadian business spending on the environment that year (see Figure 2).

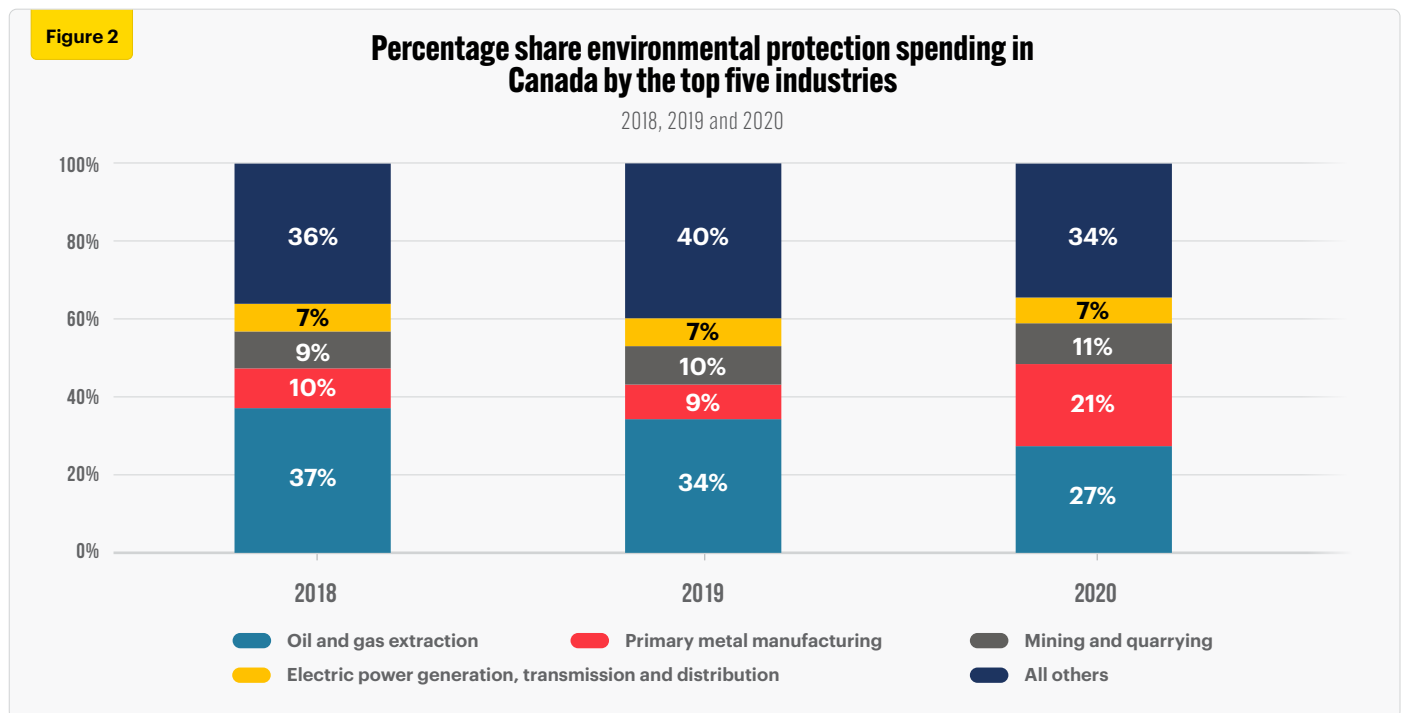
Other major industries also spent money on environmental protection including primary metal manufacturing (\$2.1 billion), mining and quarrying (about \$1 billion), electric power generation, transmission, and distribution (\$0.6 billion), and paper manufacturing (\$0.5 billion), and chemical manufacturing (also \$0.5 billion).

Breakdown by capital and operating spending

*Capital expenditures.*¹ In 2018, the oil and gas sector was responsible for 41 percent (\$1.5 billion) of all capital spending on environmental protection. All other industries combined spent 59 percent (\$2.2 billion). In 2019, the oil and

gas sector spent \$1.8 billion, 48 percent of the all-industry spending on environmental protection. In 2020, the oil and gas sector spent \$1.4 billion, 42 percent of the all-industry spending on environmental protection (see Table 1).

*Operating expenses.*² In 2018, the oil and gas sector was responsible for 34 percent (\$2 billion) of all operating expenditures allocated to environmental protection. All other industries combined spent 66 percent (\$3.8 billion) of the operating expenditures directed to environmental protection. For 2019, there was no data available on the oil and gas industry’s operating expenses on environmental protection. In 2020, the oil and gas sector was responsible for 20 percent (\$1.3 billion) of all operating expenditures for environmental protection.



Source: Derived from Statistics Canada, Table 38-10-0130-01.

1. Capital expenditure includes outlays on machinery and equipment and for the construction of non-residential facilities, among others.
 2. Operating expenses includes expenses incurred for labour, materials and supplies, and maintenance and repair, among others.

Table 1

Industry expenditures on environmental protection

\$ millions

	Capital Expenditures			Operating Expenses		
	2018	2019	2020	2018	2019	2020
Total, all industries	3,740.5	3,737.8	3,377.6	5,930.5	5,155.2	6,654.5
Oil and gas extraction	1,518.6	1,805.5	1,431.6	2,072.5	*	1,314.7
Mining and quarrying	465.3	306.7	503.7	449.6	574.9	552.3
Electric power generation, transmission, and distribution	240.3	282.7	249.0	449.4	354.6	413.8
Natural gas distribution	37.8	10.7	22.0	49.2	25.5	14.8
Petroleum and coal product manufacturing	169.4	172.8	83.4	250.9	328.1	233.3
Chemical manufacturing	193.1	180.4	200.6	271.2	325.1	342.4
Pipeline transportation	74.1	33.9	8.1	109.6	39.0	66.5

*Not available

Source: Derived from Statistics Canada, Table 38-10-0130-01.

Environmental spending by the provinces, 2008-2021

Industries are not alone in spending money on environmental protection; provincial governments do as well. Table 2 shows that total provincial government spending on environmental protection between 2008 and 2021 was nearly \$143.5 billion.

Alberta spent \$22.6 billion or 15.7 percent of all provincial expenditures on the environment, while its proportion of the national population was 11.6 percent in 2021. Ontario spent \$55.8 billion or 38 percent of all provincial expenditures, more or less in line with its 38.7 percent of the population in 2021. Nova Scotia and Saskatchewan spent a higher proportion on the environment relative to their share of the national population.

Two of the largest provinces spent less on the environment than their share of the national population: Quebec and British Columbia. Quebec's government spent \$27.2 billion or 18.9 percent of all provincial environmental expenditures between 2008 and 2021, significantly below its 22.5 percent share of the national population in 2021.

Table 2

Environmental spending by provincial governments

2008 to 2021

Province	Total environment spending, 2008-2021		Share of national population totals, 2021
	(\$ billions)	% of total	
Newfoundland and Labrador	1.4	1.0%	1.4%
Prince Edward Island	0.6	0.4%	0.4%
Nova Scotia	4.2	2.9%	2.6%
New Brunswick	2.1	1.5%	2.1%
Quebec	27.2	18.9%	22.5%
Ontario	55.8	38.9%	38.7%
Manitoba	4.1	2.9%	3.6%
Saskatchewan	4.6	3.2%	3.1%
Alberta	22.6	15.7%	11.6%
British Columbia	18.7	13.0%	13.6%
Yukon	1.1	0.8%	0.1%
Northwest Territories	0.9	0.6%	0.1%
Nunavut	0.3	0.2%	0.1%

Source: Statistics Canada, Tables 10-10-0005-01 and 17-10-0005-01; and authors' calculations.

Conclusion: Environmental spending highest by oil and gas industry, and highest by Alberta in relation to its population

Between 2018 and 2020, the oil and gas sector spent \$9.3 billion, or 33 percent of the amount spent by all businesses combined on environmental protection.

Data available from 2008 to 2021 show that Alberta's provincial government spent significantly more than its share of Canada's population (\$22.6 billion or 15.7 percent of all provincial spending even as its share of the national population was 11.6 percent).

Notes

This CEC Fact Sheet was compiled by Ven Venkatachalam and Lennie Kaplan at the Canadian Energy Centre: www.canadianenergycentre.ca. The authors and the Canadian Energy Centre would like to thank and acknowledge the assistance of two anonymous reviewers in reviewing the data and research for this Fact Sheet. All percentages in this report are calculated from the original data, which can run to multiple decimal points. They are not calculated using the rounded figures that may appear in charts and in the text, which are more reader friendly. Thus, calculations made from the rounded figures (and not the more precise source data) will differ from the more statistically precise percentages we arrive at using source data. Image credits: XXXXX.

References (All links live as of October 2, 2023)

Statistics Canada (2023), Table 38-10-0130-01: Capital and operating expenditures on environmental activities by industry <<https://bit.ly/3OERIKi>>;

Statistics Canada (2022), Table 10-10-0005-01: Canadian Classification of Functions of Government <<https://bit.ly/2ZEkp2W>>.

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