

Government Spending on Environmental Protection

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Research summary

Originally, OLW identified the ratio of government spending on ecosystem restoration to spending in support of resource extraction as its desired impact measure for "Government Financing for Restoration". The most likely source of the data required to compile this impact measure would be the public accounts compiled annually by the federal and provincial/territorial governments to document revenues and spending by their departments and agencies. These accounts provide detailed breakdown of revenues and spending by governments and are readily available to the public through government websites. Since they are guided by <u>public sector accounting standards</u>, there is a reasonably high degree of consistency in the accounts from one jurisdiction to another, making them an appropriate source of data for impact measure development.

A review of public accounts data revealed that the accounts are not sufficiently detailed for the purposes of compiling OLW's originally desired impact measure. Neither spending on ecosystem restoration nor spending in support of resource extraction are explicitly measured in public accounts data. The annex provides illustrative examples of the type of data on environmental spending readily available from public accounts from British Columbia and Ontario. As can be seen, the data are highly aggregated and do not provide the the level of detail needed to pinpoint spending on activities focused on ecosystem restoration or on resource extraction. The public accounts for other jurisdictions provide similar levels of detail.

Another potential source of data is the annual financial reports published by individual government departments; for example, the 2017-18 reports of the <u>British Columbia Ministry of Environment and Climate Change Strategy</u> and the <u>Ontario Ministry of Environment and Climate Change</u>. These too, however, present data that are too highly aggregated for use in compiling OLW's desired impact measure.

Given the lack of readily available data for compiling OLW's desired impact measure, the decision was made to focus on a slightly modified measure of **government spending on protection of biodiversity and landscapes** that may be compiled using data available from Statistics Canada's program on government finance statistics. Statistics Canada's figures measure spending at the national and provincial/territorial levels on:

activities relating to the protection of fauna and flora

¹ See, for example, the <u>federal public accounts</u> and the public accounts of <u>Ontario</u> and <u>British Columbia</u>. Similar accounts are compiled in all other provinces/territories.



- the protection of habitats (including the management of natural parks and reserves),
 and
- the protection and rehabilitation of landscapes (including abandoned mine sites) for their aesthetic value (International Monetary Fund, 2014).

To provide context for the modified impact measure, it was decided to focus on spending on fuel and energy programs as a comparator for spending on biodiversity and landscape protection. Spending on fuel and energy programs includes:

- administration of fuel and energy affairs and services
- conservation, discovery, development and rationalized exploitation of fuel and energy resources
- supervision and regulation of the extraction, processing, distribution and use of fuel and energy resources
- production and dissemination of general information, technical documentation and statistics on fuel and energy affairs, and
- grants, loans or subsidies to support the fuel and energy industry (International Monetary Fund, 2014).

Fuel and energy resources include coal and other solid mineral fuels; petroleum and natural gas; nuclear fuels; electricity; steam and other sources of heat; and other fuels (e.g., waste biomass).

While spending on fuel and energy programs does not capture all government spending on resource extraction (as desired by OLW), it is the closest to this available from Statistics Canada. Statistics Canada does measure government spending on other resource extraction activities (mining and forestry), but these expenditures are aggregated along with unrelated categories of spending in the agency's government finance statistics.² Though not perfect, use of fuel and energy program spending as a comparator for spending on biodiversity and landscape protection has the advantage of providing a consistent and clear basis of comparison over time.

Statistics Canada's data on government spending are available from the agency only in current dollar amounts; that is, in figures expressed using the prices prevailing in the reference year. In order to make comparison of spending over time meaningful, it is necessary to take account of the growth in prices (inflation). This has been done here by dividing annual current dollar spending by the implicit price index for general government final consumption expenditure.³

² For example, spending on mineral extraction is aggregated into the category "7044 - Mining, manufacturing and construction" in the <u>Canadian Classification of Functions of Government</u> (CCOFOG). While CCOFOG category 7044 is further broken down into several sub-categories, including "70441 – Mining of mineral resources other than mineral fuels", Statistics Canada does not release data at this level of detail because they are not considered fit for use due to concerns regarding their accuracy (Personal communication, Emory Muir, Unit Head, Public Sector Statistics Division, Statistics Canada).

³ The implicit price index for general government final consumption expenditure (IPI-GGFCE) is measured by Statistics Canada as the ratio of current to constant price estimates of general government final consumption expenditure from the *Canadian System of National Accounts*. It is preferred to the more well-known Consumer



This yields estimates of "real" spending (measured in 2012 prices) that can be meaningfully compared to one another both across time.

Since much of the difference in spending across provinces/territories is simply due to differences in the size of their populations (and, therefore, economies), it is useful as well to normalize provincial/territorial spending to make inter-jurisdictional comparisons more meaningful. This has been done here by dividing *per capita* spending (compiled as per above) by the size of the provincial/territorial population.⁴ Normalization by population is useful as well in *intra*-jurisdictional comparisons, since spending within a province/territory may also go up over time simply because of population (and related economic) growth. The combination of the adjustments for price increases and population growth yields "real *per capita*" figures.

The results of the impact measure compilation are presented in tables 1, 2 and 3. Table 1 presents the "raw" spending (that is, unadjusted for either price or population growth) from 2008 to 2017 (the longest time series for which Statistics Canada has on-line data available). The data are presented at both the "consolidated Canadian general government" level⁵ and for each province/territory.⁶ Table 2 presents the ratio of spending on biodiversity and landscape protection to spending on fuel and energy programs. Table 3 presents absolute spending data again, but in this case in real *per capita* figures adjusted for price and population growth as discussed above.

As can be seen from tables 1 and 2, current spending on both biodiversity and landscape protection and fuel and energy programs varies quite a lot across jurisdictions. Spending on biodiversity and landscape protection in 2017, for example, ranged from a low of \$2 million in PEI to a high of \$859 million in Ontario (Table 1). Consolidated spending of all Canadian governments on biodiversity and landscape protection in that year amounted to about \$2.1 billion. This compared with about \$6.3 billion in Canada-wide spending on fuel and energy programs. Jurisdictionally, spending on fuel and energy programs in 2008 ranged from a low of \$2 million in PEI to a high of \$3.7 billion in Alberta.

Price Index (CPI) as the basis for adjusting government spending for price growth, as the CPI is an economy-wide measure whereas the IPI-GGFCE is specific to government spending (Statistics Canada, *Implicit price indexes, gross domestic product, provincial and territorial.* Table: 36-10-0223-01. Retrieved from https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3610022301.)

⁴ Statistics Canada, *Population estimates on July 1st*, Table: 17-10-0005-01. Retrieved from https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1710000501.

⁵ Consolidated Canadian general governments include the federal government, provincial and territorial governments, health and social service institutions, universities and colleges, municipalities and other local public administrations and school boards. The data are termed "consolidated" because they have been adjusted to present statistics for a set of units as if they constituted a single unit. Consolidation involves the elimination of double counting of transactions that occur among the units being consolidated. For example, if the federal government transfers funds to a provincial government for the purpose of biodiversity protection, this spending is recorded only once rather than twice in the consolidated statistics.

⁶ Provincial/territorial spending Includes that of provincial and territorial governments, health and social service institutions, universities and colleges, municipalities and other local public administrations and school boards. Spending at the provincial/territorial and municipal levels is consolidated to avoid double counting.



Table 1 – Current spending on biodiversity and landscape protection and fuel and energy programs, Canada 1 and provinces/territories 2 , 2008-2017

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017		
		Million current dollars											
Pro	Canada	\$1,438	\$1,502	\$1,518	\$1,719	\$1,767	\$1,585	\$1,708	\$1,875	\$1,827	\$2,084		
otec	NFLD	\$11	\$12	\$10	\$10	\$11	\$9	\$11	\$9	\$8	\$8		
tio	PEI	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2	\$2		
n o	NS	\$36	\$38	\$34	\$38	\$34	\$32	\$33	\$27	\$22	\$21		
Protection of biodiversity and landscapes	NB	\$17	\$17	\$19	\$20	\$21	\$22	\$25	\$22	\$20	\$18		
odi	Quebec	\$41	\$43	\$42	\$40	\$41	\$38	\$54	\$53	\$50	\$128		
ver	Ontario	\$570	\$641	\$665	\$660	\$698	\$700	\$764	\$738	\$763	\$859		
sity	Manitoba	\$38	\$34	\$31	\$32	\$31	\$29	\$35	\$33	\$35	\$34		
an	Saskatchewan	\$18	\$17	\$18	\$16	\$17	\$19	\$18	\$19	\$17	\$19		
d la	Alberta	\$212	\$199	\$179	\$333	\$355	\$164	\$212	\$436	\$330	\$298		
nd	BC	\$76	\$36	\$41	\$37	\$38	\$33	\$33	\$33	\$33	\$52		
sca	Yukon	\$16	\$29	\$41	\$34	\$42	\$49	\$59	\$53	\$42	\$43		
pes	NWT	\$8	\$8	\$9	\$10	\$9	\$9	\$13	\$14	\$14	\$15		
	Nunavut	\$5	\$6	\$5	\$4	\$6	\$6	\$6	\$6	\$6	\$6		
		Million current dollars											
	Canada	\$4,158	\$5,273	\$5,760	\$6,033	\$5,369	\$5,867	\$5,739	\$5,446	\$5,669	\$6,256		
	NFLD	\$24	\$34	\$28	\$72	\$29	\$29	\$29	\$29	\$31	\$32		
Fu	PEI	\$4	\$3	\$3	\$5	\$5	\$2	\$3	\$2	\$2	\$2		
Fuel and	NS	\$11	\$6	\$16	\$47	\$68	\$69	\$85	\$67	\$56	\$68		
but	NB	\$14	\$13	\$12	\$10	\$15	\$16	\$16	\$15	\$20	\$8		
en	Quebec	\$161	\$154	\$144	\$157	\$170	\$157	\$154	\$147	\$144	\$150		
erg	Ontario	\$1,227	\$1,640	\$1,885	\$2,569	\$2,625	\$2,626	\$2,373	\$2,122	\$1,570	\$1,844		
γp	Manitoba	\$2	\$1	\$2	\$2	\$2	\$2	\$2	\$2	\$0	\$0		
rog	Saskatchewan	\$57	\$60	\$69	\$67	\$44	\$61	\$62	\$71	\$63	\$65		
energy programs	Alberta	\$1,644	\$2,105	\$2,343	\$1,920	\$2,004	\$2,428	\$2,492	\$2,458	\$3,286	\$3,651		
sn	BC	\$61	\$48	\$52	\$36	\$16	\$18	\$25	\$28	\$21	\$6		
	Yukon	\$20	\$12	\$60	\$6	\$6	\$6	\$9	\$10	\$12	\$12		
	NWT	\$33	\$32	\$35	\$39	\$47	\$48	\$81	\$78	\$33	\$34		
	Nunavut	\$203	\$159	\$172	\$211	\$190	\$231	\$238	\$214	\$183	\$187		

Notes:

1. Consolidated Canadian general governments.

Source: Statistics Canada, Canadian Classification of Functions of Government (CCOFOG) by consolidated government component, Table: 10-10-0005-01. Retrieved from https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1010000501.

As a share of spending on fuel and energy programs, biodiversity and landscape protection accounted for an average of 31% from 2008 to 2017 at the Canada-wide level (Table 2). Most provinces/territories spent less on biodiversity and landscape protection than on fuel and energy programs; only in Nova Scotia, New Brunswick, Manitoba, British Columbia and Yukon did average spending on biodiversity and landscape protection outstrip average spending on fuel and energy programs over the period. Alberta, the province with the largest total spending on fuel and energy programs (Table 1), spent 12% as much on biodiversity and landscape protection as on fuel and energy programs on average. Ontario, the province with the highest spending on biodiversity and landscape protection, spent an average of 36% as much on the latter as on fuel and energy programs.



Table 2 – Ratio of spending on biodiversity and landscape protection to spending on fuel and energy programs, Canada and provinces/territories, 2008-2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average (2008-2017)
Canada	35%	28%	26%	28%	33%	27%	30%	34%	32%	33%	31%
NFLD	46%	35%	36%	14%	38%	31%	38%	31%	26%	25%	32%
PEI	50%	67%	67%	40%	40%	100%	67%	100%	100%	100%	73%
NS	327%	633%	213%	81%	50%	46%	39%	40%	39%	31%	150%
NB	121%	131%	158%	200%	140%	138%	156%	147%	100%	225%	152%
Quebec	25%	28%	29%	25%	24%	24%	35%	36%	35%	85%	35%
Ontario	46%	39%	35%	26%	27%	27%	32%	35%	49%	47%	36%
Manitoba	1900%	3400%	1550%	1600%	1550%	1450%	1750%	1650%	n/a	n/a	1856%
Saskatchewan	32%	28%	26%	24%	39%	31%	29%	27%	27%	29%	29%
Alberta	13%	9%	8%	17%	18%	7%	9%	18%	10%	8%	12%
BC	125%	75%	79%	103%	238%	183%	132%	118%	157%	867%	208%
Yukon	80%	242%	68%	567%	700%	817%	656%	530%	350%	358%	437%
NWT	24%	25%	26%	26%	19%	19%	16%	18%	42%	44%	26%
Nunavut	2%	4%	3%	2%	3%	3%	3%	3%	3%	3%	3%

Notes:

- 1. Consolidated Canadian general governments.
- 2. Consolidated provincial/territorial and municipal governments.

Source: Author's calculations.

Turning to spending in real *per capita* terms, the situation changes considerably. Yukon was the jurisdiction with the highest spending in real *per capita* terms on biodiversity and landscape protection on average between 2008 and 2017 (\$1,101 *per capita* in 2012 prices); Quebec was the province with the lowest (\$6 per capita in 2012 prices), followed by British Columbia (\$9 per capital in 2012 prices). Eight of thirteen provinces/territories fell below the average consolidated Canada-wide spending of \$48 per capita: NL; PEI; Nova Scotia, New Brunswick, Quebec, Manitoba, Saskatchewan and British Columbia.

Manitoba was the jurisdiction with the lowest average spending on fuel and energy programs (\$1 per capita in 2012 prices) and Nunavut was that with the highest (about \$5,700). Average consolidated spending across the country was \$158 per capita in 2012 prices, a figure which was surpassed only in Alberta and the three territories.



Table 3 – Real per capita spending on biodiversity and landscape protection and fuel and energy programs, Canada 1 and provinces/territories 2 , 2008-2017

		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
		2000	2003	2010	2011	2012	2013	2014	2013	2010	2017	Average (2008-2017)
						2012 a	<i>lollars</i> per	capita				
Protection of biodiversity and landscapes	Canada	\$48	\$48	\$47	\$51	\$51	\$44	\$46	\$49	\$47	\$52	\$48
tec	NFLD	\$24	\$25	\$20	\$19	\$21	\$17	\$20	\$16	\$14	\$14	\$19
tio	PEI	\$16	\$15	\$15	\$14	\$14	\$13	\$13	\$13	\$13	\$12	\$14
9	NS	\$42	\$43	\$38	\$41	\$36	\$33	\$33	\$27	\$22	\$20	\$34
bi.	NB	\$25	\$25	\$27	\$27	\$28	\$28	\$31	\$27	\$25	\$22	\$27
odi	Quebec	\$6	\$6	\$6	\$5	\$5	\$4	\$6	\$6	\$6	\$14	\$6
/er:	Ontario	\$49	\$53	\$53	\$51	\$52	\$51	\$54	\$51	\$52	\$57	\$52
sity	Manitoba	\$35	\$30	\$26	\$26	\$25	\$22	\$26	\$23	\$24	\$23	\$26
an	Saskatchewan	\$20	\$18	\$18	\$15	\$16	\$17	\$15	\$16	\$14	\$15	\$16
d la	Alberta	\$65	\$58	\$51	\$90	\$92	\$40	\$49	\$98	\$73	\$64	\$68
nd	BC	\$19	\$8	\$9	\$8	\$8	\$7	\$7	\$6	\$6	\$10	\$9
sca	Yukon	\$534	\$948	\$1,274	\$992	\$1,159	\$1,303	\$1,509	\$1,302	\$1,010	\$984	\$1,101
pes	NWT	\$201	\$202	\$222	\$236	\$206	\$200	\$282	\$290	\$288	\$302	\$243
	Nunavut	\$178	\$206	\$164	\$122	\$173	\$160	\$153	\$150	\$144	\$140	\$159
		2012 dollars per capita										
	Canada	\$137	\$168	\$178	\$179	\$155	\$162	\$154	\$143	\$146	\$156	\$158
	NFLD	\$53	\$71	\$57	\$139	\$55	\$54	\$52	\$51	\$54	\$55	\$64
근	PEI	\$32	\$23	\$22	\$36	\$35	\$13	\$20	\$13	\$13	\$12	\$22
<u>e</u>	NS	\$13	\$7	\$18	\$51	\$72	\$71	\$86	\$67	\$56	\$66	\$51
but	NB	\$21	\$19	\$17	\$14	\$20	\$21	\$20	\$19	\$25	\$10	\$18
en	Quebec	\$23	\$21	\$19	\$20	\$21	\$19	\$18	\$17	\$16	\$16	\$19
Fuel and energy programs	Ontario	\$105	\$135	\$151	\$197	\$196	\$190	\$168	\$148	\$107	\$122	\$152
γp	Manitoba	\$2	\$1	\$2	\$2	\$2	\$2	\$1	\$1	\$0	\$0	\$1
rog	Saskatchewan	\$64	\$64	\$71	\$64	\$41	\$54	\$53	\$58	\$51	\$50	\$57
ran	Alberta	\$507	\$617	\$664	\$520	\$517	\$598	\$580	\$552	\$725	\$785	\$607
ns	BC	\$15	\$11	\$12	\$8	\$4	\$4	\$5	\$5	\$4	\$1	\$7
	Yukon	\$667	\$392	\$1,865	\$175	\$166	\$160	\$230	\$246	\$289	\$275	\$446
	NWT	\$830	\$807	\$862	\$919	\$1,077	\$1,068	\$1,760	\$1,616	\$680	\$684	\$1,030
	Nunavut	\$7,209	\$5,462	\$5,649	\$6,448	\$5,480	\$6,173	\$6,070	\$5,341	\$4,399	\$4,356	\$5,659
Notes												

Notes:

- 1. Consolidated Canadian general governments.
- 2. Consolidated provincial/territorial and municipal governments.

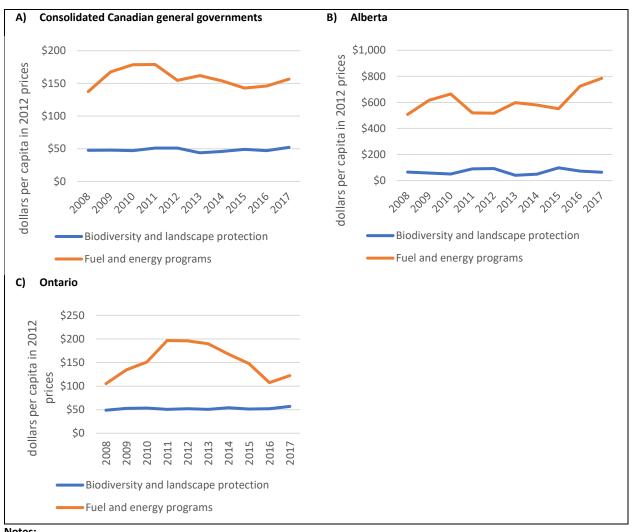
Source: Author's calculations.

Looking at trends over time, spending on biodiversity and landscape protection was relatively flat at the Canada-wide level from 2008 to 2017 while spending on fuel and energy programs showed substantial growth followed by a decline afterward (Figure 1, panel A). In Alberta, the jurisdiction with the highest total spending on fuel and energy programs (Table 1), real *per capita* spending on the latter generally trended upward over the period while real *per capita* spending on biodiversity and landscape protection was essentially flat (Figure 1, panel B). In Ontario, the province with the highest total spending on biodiversity and landscape protection, real *per capita* spending on the latter was also essentially flat over the period. Ontario's real *per*



capita spending on fuel and energy programs, for its part, rose rapidly after 2008 only to fall back to 2008 levels by the end of the time period (Figure 1, panel C).

Figure 1 – Real per capita spending on biodiversity and landscape protection and fuel and energy programs, Canada¹, Alberta² and Ontario², 2008-2017



Notes:

- Consolidated Canadian general governments.
- Consolidated provincial/territorial and municipal governments.

Source: Author's calculations.



References

International Monetary Fund, 2014. Government Finance Statistics Manual 2014. Washington D.C., International Monetary Fund. Retrieved from https://www.imf.org/external/Pubs/FT/GFS/Manual/2014/gfsfinal.pdf



Annex – Examples of environmental spending data available from public accounts

Two illustrative examples are presented below of the type of data on environmental spending available from public accounts data, the first from British Columbia and the second from Ontario. Similar levels of detail are available from the public accounts of other jurisdictions.

Figure A1 – Example of public accounts data on environmental spending, British Columbia

42 PROVINCE OF BRITISH COLUMBIA PUBLIC ACCOUNTS 2018/19

Ministry of Environment and Climate Change Strategy—(Unaudited)					
	———Total Appropriations———Other				
Description	Estimated	Authorizations	Total		
Description	\$	\$	\$		
Environmental Protection	*	*	*		
Voted Appropriation(s)					
Environmental Protection	11,801,000	615,000	12,416,000		
	11,801,000	615,000	12,416,000		
Environmental Sustainability					
Voted Appropriation(s) Environmental Sustainability	23 072 000		22 072 000		
Environmental Sustainability			23,972,000		
BC Parks	23,972,000	0	23,972,000		
Voted Appropriation(s)					
BC Parks	40,478,000	9,911,766	50,389,766		
	40,478,000	9,911,766	50,389,766		
Conservation Officer Service	. , ,	, ,	, , , ,		
Voted Appropriation(s)					
Conservation Officer Service			18,207,000		
Oliver And	18,207,000	0	18,207,000		
Climate Action Voted Appropriation(s)					
Climate Action	15,600,000	1,510,000	17,110,000		
	15,600,000	1,510,000	17,110,000		
Executive and Support Services	13,000,000	1,510,000	1,,110,000		
Voted Appropriation(s)					
Minister's Office			628,000		
Corporate Services			23,263,000		
F	23,891,000	0	23,891,000		
Environmental Assessment Office Voted Appropriation(s)					
Environmental Assessment Office	11,902,000	143,755	12,045,755		
	11,902,000	143,755	12,045,755		
Statutory	,,	,	,,		
Park Enhancement Fund special account					
Statutory Appropriation(s)	0.000.000		0.000.000		
Park Enhancement Fund special account			9,800,000		
Sustainable Environment Fund	9,800,000	0	9,800,000		
Statutory Appropriation(s)					
Sustainable Environment Fund	23,635,000		23,635,000		
	23,635,000	0	23,635,000		
	179,286,000	12,180,521	191,466,521		
Adjustment of Prior Year Accrual		,,	0		
Total Expense		12,180,521	191,466,521		
Breakdown of Other Authorizations—		, , ,	, , , , , ,		
Contingencies (All Ministries) and New Programs – General Programs	12,180,521				
	12,180,521				

Source: British Columbia Office of the Comptroller General, *Public Accounts 2018/19*. Retrieved from https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/government-finances/public-accounts/2018-19/public-accounts-2018-19.pdf.



Table A1 - Example of public accounts data on environmental spending, Ontario

Amount	Expenditure Category	Program Name
\$3,851,036	Capital Expense	Environmental Assessment and Permissions
\$12,226	Capital Expense	Environmental Compliance and Operations
\$1,958,590	Capital Expense	Environmental Science and Standards
\$981,836	Capital Expense	Environmental Science and Standards
\$631,573,083	Capital Expense	Greenhouse Gas Reduction Account Program
\$844,525	Operating Expense	Climate Change Policy and Programs
-\$223,346,576	Operating Expense	Climate Change Policy and Programs
\$6,164,084	Operating Expense	Climate Change Policy and Programs
\$4,314,009	Operating Expense	Climate Change Policy and Programs
\$36,197	Operating Expense	Climate Change Policy and Programs
\$9,208,238	Operating Expense	Climate Change Policy and Programs
\$202,707,939	Operating Expense	Climate Change Policy and Programs
\$71,584	Operating Expense	Climate Change Policy and Programs
\$3,181,852	Operating Expense	Environmental Assessment and Permissions
\$23,738,402	Operating Expense	Environmental Assessment and Permissions
\$1,438,991	Operating Expense	Environmental Assessment and Permissions
\$57,396	Operating Expense	Environmental Assessment and Permissions
\$257,191	Operating Expense	Environmental Assessment and Permissions
\$4,385,349	Operating Expense	Environmental Compliance and Operations
-\$68,308	Operating Expense	Environmental Compliance and Operations
\$31,385,190	Operating Expense	Environmental Compliance and Operations
\$5,792,160	Operating Expense	Environmental Compliance and Operations
\$95,084	Operating Expense	Environmental Compliance and Operations
\$4,267,332	Operating Expense	Environmental Compliance and Operations
\$68,308	Operating Expense	Environmental Compliance and Operations
\$541,734	Operating Expense	Environmental Compliance and Operations
\$93,298	Operating Expense	Environmental Compliance and Operations
\$676,485	Operating Expense	Environmental Compliance and Operations
\$126,582	Operating Expense	Environmental Compliance and Operations
\$5,361	Operating Expense	Environmental Compliance and Operations
\$63,563	Operating Expense	Environmental Compliance and Operations
\$110,256	Operating Expense	Environmental Compliance and Operations
\$8,566,126	Operating Expense	Environmental Compliance and Operations
\$55,279,789	Operating Expense	Environmental Compliance and Operations
\$2,235,044	Operating Expense	Environmental Compliance and Operations
\$642,817	Operating Expense	Environmental Compliance and Operations
\$885,136	Operating Expense	Environmental Compliance and Operations
\$1,205,251	Operating Expense	Environmental Compliance and Operations
\$435,657	Operating Expense	Environmental Economics and Analytics
\$3,145,088	Operating Expense	Environmental Economics and Analytics
\$17,765	Operating Expense	Environmental Economics and Analytics
\$8,985	Operating Expense	Environmental Economics and Analytics
\$24,959	Operating Expense	Environmental Economics and Analytics
\$1,051,658	Operating Expense	Environmental Policy and Programs
\$7,742,471	Operating Expense	Environmental Policy and Programs
\$265,379	Operating Expense	Environmental Policy and Programs
\$20,906	Operating Expense	Environmental Policy and Programs
\$230,550	Operating Expense	Environmental Policy and Programs
\$65,304	Operating Expense	Environmental Policy and Programs
\$1,861,546	Operating Expense	Environmental Policy and Programs
\$14,311,130	Operating Expense	Environmental Policy and Programs
\$11,914,100	Operating Expense	Environmental Policy and Programs



\$42,402	Operating Expense	Environmental Policy and Programs				
\$40,338,691	Operating Expense	Environmental Policy and Programs				
\$4,087,000	Operating Expense	Environmental Policy and Programs				
\$80,015	Operating Expense	Environmental Policy and Programs				
\$3,756,349	Operating Expense	Environmental Policy and Programs				
\$3,000,000	Operating Expense	Environmental Policy and Programs				
\$214,528	Operating Expense	Environmental Policy and Programs				
\$5,101,919	Operating Expense	Environmental Science and Standards				
\$33,615,047	Operating Expense	Environmental Science and Standards				
\$4,457,164	Operating Expense	Environmental Science and Standards				
\$3,018,722	Operating Expense	Environmental Science and Standards				
\$1,021,250	Operating Expense	Environmental Science and Standards				
\$1,998,666	Operating Expense	Environmental Science and Standards				
\$835,159	Operating Expense	Environmental Science and Standards				
\$381,393,301	Operating Expense	Greenhouse Gas Reduction Account Program				
\$198,225	Operating Expense	Ministry Administration Program				
\$560,522	Operating Expense	Ministry Administration Program				
\$4,163,531	Operating Expense	Ministry Administration Program				
\$334,793	Operating Expense	Ministry Administration Program				
\$19,752	Operating Expense	Ministry Administration Program				
\$65,966	Operating Expense	Ministry Administration Program				
\$971,991	Operating Expense	Ministry Administration Program				
-\$34,000	Operating Expense	Ministry Administration Program				
\$6,926,202	Operating Expense	Ministry Administration Program				
\$24,127,947	Operating Expense	Ministry Administration Program				
\$1,088,417	Operating Expense	Ministry Administration Program				
\$95,332	Operating Expense	Ministry Administration Program				
\$491,909	Operating Expense	Ministry Administration Program				
\$1,386,955	Operating Expense	Ministry Administration Program				
\$196,271	Operating Expense	Ministry Administration Program				
\$2,272	Operating Expense	Ministry Administration Program				
\$17,130	Operating Expense	Ministry Administration Program				
\$523,658	Operating Expense	Ministry Administration Program				
\$3,806,685	Operating Expense	Ministry Administration Program				
\$15,294,531	Operating Expense	Ministry Administration Program				
\$23,179	Operating Expense	Ministry Administration Program				
\$18,278	Operating Expense	Ministry Administration Program				
\$11,759,504	Operating Expense	Ministry Administration Program				
\$48,889	Operating Expense	Ministry Administration Program				
\$130,093	Operating Expense	Ministry Administration Program				
\$311,721	Operating Expense	Ministry Administration Program				
\$2,847,910	Operating Expense	Ministry Administration Program				
\$48,891	Operating Expense	Ministry Administration Program				
\$5,017	Operating Expense	Ministry Administration Program				
\$56,472	Operating Expense	Ministry Administration Program				
\$118,720	Operating Expense	Ministry Administration Program				
\$49,301	Operating Expense	Ministry Administration Program				
\$16,667	Operating Expense	Ministry Administration Program				
Source: Ontario Tragury Board Socretariat Public Accounts of Ontario 2019 2010: Volume 1						

Source: Ontario Treasury Board Secretariat, *Public Accounts of Ontario, 2018-2019: Volume 1 - Spending*. Retrieved from https://files.ontario.ca/tbs-public-accounts-volume-1-spending-2018-19.csv