

Data excludes OPG subsidiaries unless otherwise noted.

Indicator	2022	2021	2020	2019	2018
ENVIRONMENT					
REGULATORY COMPLIANCE					
Significant environmental events ¹	0	0	0	0	0
Environmental infractions ²	5	8	6	4	9
Environmental penalties ³	0	0	0	0	0
SCOPE 1 GREENHOUSE GAS EMISSIONS^{4,5,6}					
Includes emissions from stations operating under the subsidiary Atura Power.					
Total carbon dioxide equivalent (tonnes)	2,894,712	2,112,749	1,318,502	506,060	581,922
Thermal - Atikokan Generating Station	141,884	185,924	177,578	168,305	181,518
Thermal - Brighton Beach Generating Station	257,748	62,269	23,514	20,800	47,716
Thermal - Halton Hills Generating Station	956,352	740,815	255,043	-	-
Thermal - Lennox Generating Station	102,498	81,081	66,945	83,725	118,139
Thermal - Napanee Generating Station	794,812	404,196	481,194	-	-
Thermal - Portlands Energy Centre	613,275	618,258	303,966	224,256	219,738
Thermal - Thunder Bay Generating Station	-	-	-	1,102	2,697
Nuclear	17,802	10,201	8,606	7,872	12,115
Other facilities and sources	10,341	10,005	1,657	Not reported	Not reported
SCOPE 1 GREENHOUSE GAS EMISSION RATES					
Includes emissions from stations operating under the subsidiary Atura Power.					
Includes generation from all OPG-owned stations.					
Carbon dioxide equivalent (tonnes/GWh-net) - OPG	36.9	27.2	16.1	6.5	7.9
Carbon dioxide equivalent (tonnes/GWh-net) - Thermal	426	445	475	647	691
SCOPE 2 GREENHOUSE GAS EMISSIONS^{4,7}					
Includes emissions from stations operating under the subsidiary Atura Power.					
Carbon dioxide equivalent (tonnes)	16,197	4,250	3,986	3,478	Not reported
SULPHUR DIOXIDE EMISSIONS^{5,6}					
Includes emissions from stations operating under the subsidiary Atura Power.					
Total sulphur dioxide (tonnes)	103	92	117	111	225
Thermal - Atikokan Generating Station	0	0	0	0	0
Thermal - Brighton Beach Generating Station	0	0	0	0	0
Thermal - Halton Hills Generating Station	1	0	0	-	-
Thermal - Lennox Generating Station	101	73	107	110	222
Thermal - Napanee Generating Station	1	0	0	-	-
Thermal - Portlands Energy Centre	0	18	9	0	0
Thermal - Thunder Bay Generating Station	-	-	-	0	0
Nuclear	0	0	0	1	3
SULPHUR DIOXIDE EMISSION RATES					
Includes emissions from stations operating under the subsidiary Atura Power.					
Includes generation from all OPG-owned stations.					
Sulphur dioxide (tonnes/GWh-net) - OPG	0.001	0.001	0.001	0.001	0.003
Sulphur dioxide (tonnes/GWh-net) - Thermal	0.02	0.02	0.04	0.15	0.29

Indicator	2022	2021	2020	2019	2018
NITROGEN OXIDE EMISSIONS^{5,6}					
Includes emissions from stations operating under the subsidiary Atura Power.					
Total nitrogen oxides (tonnes, as nitrogen dioxide)	1,221	896	574	473	482
Thermal - Atikokan Generating Station	117	144	150	206	134
Thermal - Brighton Beach Generating Station	113	20	20	14	25
Thermal - Halton Hills Generating Station	249	245	84	-	-
Thermal - Lennox Generating Station	92	89	80	108	139
Thermal - Napanee Generating Station	74	51	64	-	-
Thermal - Portlands Energy Centre	509	299	135	110	119
Thermal - Thunder Bay Generating Station	-	-	-	1	2
Nuclear	68	48	42	35	64
NITROGEN OXIDE EMISSION RATES					
Includes emissions from stations operating under the subsidiary Atura Power.					
Includes generation from all OPG-owned stations.					
Nitrogen oxides (tonnes/GWh-net, as nitrogen dioxide) - OPG	0.016	0.012	0.007	0.006	0.007
Nitrogen oxides (tonnes/GWh-net, as nitrogen dioxide) - Thermal	0.17	0.18	0.19	0.57	0.52
OTHER AIR EMISSIONS					
PM10 - particulate matter <=10 micrometres (tonnes) ⁸	7.8	8.9	7.8	6.3	6.2
PM2.5 - particulate matter <=2.5 micrometres (tonnes) ⁸	7.7	8.8	8.1	6.3	6.5
Waste incinerator dioxins and furans toxicity equivalent emissions test result (pg TEQ/Rm ³) ⁹	14.7	21.1	14.2	Exempt from testing	Exempt from testing
RADIOLOGICAL EMISSIONS					
Tritium to air (curies)	19,292	21,084	22,631	20,458	22,430
Tritium to water (curies)	19,211	17,934	14,839	14,328	17,310
Carbon-14 to air (curies)	96	105	84	97	125
RADIOLOGICAL DOSE TO THE PUBLIC					
Darlington Nuclear critical group dose (microsieverts)	0.6	0.6	0.4	0.4	0.8
Pickering Nuclear critical group dose (microsieverts)	1.9	2.0	1.2	1.7	2.1
RADIOACTIVE WASTE MANAGEMENT					
Production of used fuel (tonnes of uranium)	1,424	1,369	1,403	1,624	1,486
Includes waste produced by Bruce Power.					
Used fuel in storage (tonnes of uranium)	55,790	54,372	53,002	51,375	49,878
Includes waste produced by Bruce Power.					
Used fuel bundles in storage at Darlington Nuclear	633,679	615,691	599,327	575,492	558,854
Used fuel bundles in storage at Pickering Nuclear	837,157	818,845	800,847	783,247	763,581
Low and intermediate level radioactive waste produced (m ³)	4,753	5,049	3,509	4,167	5,381
HAZARDOUS WASTE GENERATION					
Solids (tonnes)	103	291	181	165	171
Liquids (kilolitres)	947	1,107	1,737	4,084	1,069
REPORTABLE SPILLS TO THE ENVIRONMENT¹⁰					
Category A spills - very serious	0	0	0	0	0
Category B spills - serious	0	0	0	0	0
Category C spills - less serious	11	10	8	7	6
BIODIVERSITY AND WILDLIFE HABITAT					
Cumulative trees and shrubs planted since 2000 (million) ¹¹	8.8	8.4	7.1	7.1	6.9
Tree planting level (number of trees and shrubs planted)	343,000	325,000	68,000	Not reported	Not reported

Indicator	2022	2021	2020	2019	2018
ELECTRIFICATION					
Electric chargers installation level (number of chargers installed by OPG or its joint venture with Hydro One in the Province of Ontario) ¹²	81	76	53	Not reported	Not reported
WATER MANAGEMENT					
Hydroelectric turbine flows (million m ³)	455,558	402,713	438,359	430,207	427,596
Nuclear and Thermal non-consumptive cooling and service water use (million m ³)	7,498	8,461	8,577	8,558	8,289
Number of environmental infractions associated with water quantity and/or quality permits, standards, and regulations ²	3	8	6	4	8
INTERNAL ENERGY EFFICIENCY					
Internal energy saving – cumulative since 1994 (GWh/year)	2,564	2,564	2,564	2,559	2,558
Annual incremental energy saving (GWh/year)	0.2	0.1	5.3	0.5	0.9
SOCIAL					
INDIGENOUS RELATIONS					
Suppliers from Indigenous communities	34	30	28	4	10
Procurement from Indigenous businesses (millions of dollars)	56	Not reported	Not reported	Not reported	Not reported
Formal business partnerships with Indigenous communities	5	5	6	6	6
In-service generating capacity of facilities constructed in partnership with Indigenous communities (MW)	522	522	522	522	478
Revenues earned from facilities in partnership with Indigenous communities (millions of dollars) ¹³	325	312	312	315	314
WORKPLACE SAFETY					
Total recordable injury frequency (injuries per 200,000 hours)	0.31	0.21	0.31	0.35	0.51
Total recordable injury frequency including OPG's wholly-owned subsidiaries (injuries per 200,000 hours)	0.32	0.23	0.36	0.37	0.51
Serious injury incidence rate (serious injuries per 200,000 hours)	0.02	0.02	0.01	0.04	0.02
Fatalities	0	0	0	0	0
EMPLOYMENT					
Regular employees	9,565	9,325	9,226	8,751	9,067
Regular employees covered by collective bargaining agreements with the Power Workers' Union and the Society of United Professionals	8,190	7,992	7,979	7,482	7,826
Staff turnover due to attrition (per cent)	6.5	5.2	3.7	5.9	6.1
EQUITY, DIVERSITY AND INCLUSION					
Women (per cent)	23.7	23.5	22.3	Not reported	Not reported
Indigenous peoples (per cent)	2.2	2.2	1.8	Not reported	Not reported
Racialized people (per cent)	18.6	18.2	13.8	Not reported	Not reported
Persons with disabilities (per cent)	6.7	7.0	2.2	Not reported	Not reported
Supply chain diversity program spend (millions of dollars)	18.6	Not reported	Not reported	Not reported	Not reported
REPRESENTATION OF WOMEN IN LEADERSHIP					
Women on the Board of Directors (per cent)	55	55	40	30	29
Women executives (per cent) Includes Presidents, Vice Presidents and Chief Officers.	36	32	33	31	29
CORPORATE CITIZENSHIP					
Community investment donations and sponsorships (millions of dollars)	2.35	4.04	4.14	2.20	2.21

Indicator	2022	2021	2020	2019	2018
ECONOMIC					
ELECTRICITY GENERATING CAPACITY					
Includes capacity from all OPG-owned stations.					
Total in-service generating capacity (MW)	18,225	18,958	18,910	17,017	16,295
Hydroelectric	8,311	8,166	8,118	8,105	7,705
Nuclear	4,850	5,728	5,728	5,728	5,728
Thermal	5,020	5,020	5,020	3,140	2,860
Solar	44	44	44	44	-
Wind	-	-	-	-	2
RENEWABLE FACILITIES CAPACITY INCREASE					
Includes capacity from all OPG-owned stations.					
Renewable facilities capacity increase attributable to equipment efficiency gains, station redevelopment or rehabilitation projects (MW)	135	0	Not reported	Not reported	Not reported
Renewable facilities capacity increase attributable to acquisitions (MW)	13	48	Not reported	Not reported	Not reported
NET ELECTRICITY GENERATION					
Includes generation from all OPG-owned stations.					
Total electricity generation (GWh) ¹⁴	78,518	77,681	82,069	77,832	74,013
Hydroelectric	36,477	33,353	35,480	33,601	32,374
Nuclear	35,281	39,600	43,829	43,465	40,878
Thermal (net of consumption at retired stations)	6,681	4,650	2,685	708	759
Solar	79	78	75	58	-
Wind	-	-	-	-	2
OPERATING PERFORMANCE					
Darlington Nuclear unit capability factor (per cent) ¹⁵	87.0	82.7	93.1	87.4	88.6
Pickering Nuclear unit capability factor (per cent) ¹⁵	80.0	78.9	76.3	87.6	79.1
Hydroelectric availability (per cent) ¹⁶	87.1	88.3	87.9	85.3	85.0
Thermal equivalent forced outage rate (per cent) ¹⁷	1.6	1.4	5.3	2.6	2.5
FINANCIAL STRENGTH					
All OPG.					
Revenue (millions of dollars)	7,349	6,877	7,240	6,022	5,537
Net income (millions of dollars)	1,651	1,344	1,376	1,143	1,213
Net income attributable to the Province of Ontario (millions of dollars)	1,636	1,325	1,361	1,126	1,195
ECONOMIC CONTRIBUTIONS					
Spending on goods and services (billions of dollars)	3.2	3.1	2.7	2.7	2.7
Employee compensation (billions of dollars)	1.6	1.6	1.6	1.5	1.5
Payments to the Province of Ontario (millions of dollars) ¹⁸	677	570	623	608	489
ECOLOGO-CERTIFIED GREEN POWER					
Net electricity generation (GWh, net of Ecologo product sales) ¹⁹	378	7	3	29	242
CLEAN ENERGY CREDITS					
Total volume clean energy credit sales (TWh) ²⁰	1.9	4.1	2.8	1.1	0.0
GREEN BONDS					
Includes Lower Mattagami Energy, an entity owned by OPG.					
Green bond offerings (millions of dollars)	550	375	1,200	500	450

Notes

1. Significant environmental events are non-compliances that have a high potential for regulatory action or cause severe environmental or health impacts, or are determined to be significant by OPG's President and Chief Executive Officer.
2. Environmental infractions are non-compliances that have moderate potential for regulatory action and/or intrusive regulatory involvement, or cause moderate environmental or health impacts.
3. Environmental penalty orders are monetary penalties that companies in Ontario may be required to pay for environmental contraventions under key environmental statutes.
4. OPG continues to evaluate and enhance its Scope 1 and 2 greenhouse gas emission sources and quantification processes.
5. Total emissions may not equal the sum of subtotals due to rounding.
6. Emissions include OPG's proportionate share from co-owned facilities, as applicable. OPG acquired the remaining 50 per cent interest in Brighton Beach Generating Station in 2019 and acquired Halton Hills Generating Station, Napanee Generating Station and the remaining 50 per cent interest in the Portlands Energy Centre in 2020.
7. OPG's Scope 2 emissions are calculated using the consumption emissions intensity for Ontario from Canada's *National Inventory Report*, Part 3. An adjusted emissions intensity is used for grid electricity consumed at OPG's generation facilities to avoid double counting of emissions. This emissions intensity does not account for any environmental attribute sales.
8. For detailed information about OPG's releases to air, water and land, visit the Government of Canada's National Pollutant Release Inventory website. OPG has not reported lead or mercury air emissions since closing its coal-fired generating stations in 2014.
9. The results of annual emissions testing performed at OPG's Waste Volume Reduction Facility have indicated the facility is in compliance with Ontario air quality standards.
10. OPG classifies its spills to the environment that are reportable to a regulatory authority based on the actual or potential impacts to plants, animals, human health and safety, conduct of business, and use of property. OPG's spill categories align with Ontario Ministry of the Environment, Conservation and Parks regulatory requirements for the classification of contraventions.
11. OPG's cumulative tree and shrub planting total was increased by almost one million for 2021 to include additional data from past years' planting projects and biodiversity partnerships at OPG sites.
12. Includes level 2 charging ports and level 3 chargers. Level 2 chargers with two ports can charge two vehicles simultaneously.
13. Represents 100 per cent of revenue earned from facilities in partnership with Indigenous communities.
14. Total electricity generation may differ slightly from the value provided in OPG's financial reporting due to differences in rounding subtotals.
15. Nuclear unit capability factor measures the amount of energy that the units generated over a period of time, adjusted for externally imposed constraints such as transmission or demand limitations, as a percentage of the amount of energy that would have been produced over the same period had the units produced maximum generation.
16. Hydroelectric availability represents the percentage of time the generating unit is capable of providing service, whether or not it is actually generating electricity, compared to the total time for the respective period, weighted by unit capacity.
17. Equivalent forced outage rate is measured by the ratio of time a generating unit is forced out of service by unplanned events, including any forced deratings, compared to the amount of time the generating unit was available to operate.
18. Payments to the Province include payments in lieu of taxes, gross revenue charges, and current income tax payments.
19. Ecologo product sales consist of sales of environmental attributes.
20. Clean energy credit sales are from OPG's Ontario-sited Ecologo, large hydro and nuclear generation assets. The values reported are for sales volumes per vintage year.

Updated October 12, 2023.