

Imperial is committed to providing our shareholders and stakeholders with meaningful information about our business. Our sustainability performance table and metrics include environmental, social and governance data up to year-end 2021

2021 performance data

Environment ¹	2017	2018	2019	2020	2021
Air emissions					
Sulphur oxides (expressed as SO ₂ - thousand metric tonnes/year)	20.9	24.0	23.3	19.1	26
Nitrogen oxides (thousand metric tonnes/year)	16.5	17.7	18.3	16.4	17.5
Volatile organic compounds (thousand metric tonnes/year)	10.4	10.7	9.6	10.9	10.1
Particulate Matter (PM10) (thousand metric tonnes/year)	8.9	8.3	9.6	7.8	12.3
GHG emissions and energy consumption²					
Direct GHG emissions - including Cogeneration					
Downstream & Chemical (million metric tonnes of CO ₂ e)	4.7	4.7	4.4	4.6	4.9
Carbon dioxide emissions (million metric tonnes)	4.6	4.6	4.4	4.5	4.9
Methane emissions (million metric tonnes)	0.0011	0.0011	0.0012	0.0011	0.0012
Nitrous oxide emissions (million metric tonnes)	0.0001	0.0001	0.0001	0.0001	0.0001
Upstream (million metric tonnes of CO ₂ e)	8.4	8.4	8.7	8.4	8.9
Carbon dioxide emissions (million metric tonnes) ³	8.2	8.3	8.6	8.4	8.9
Methane emissions (million metric tonnes)	0.0018	0.0017	0.0020	0.0010	0.0012
Nitrous oxide emissions (million metric tonnes)	0.0003	0.0003	0.0001	0.0001	0.0001
Operated oil sands (million metric tonnes of CO ₂ e)	8.3	8.4	8.6	8.4	8.9
Carbon dioxide emissions (million metric tonnes) ³	8.2	8.3	8.5	8.3	8.8
Methane emissions (million metric tonnes)	0.0017	0.0016	0.0017	0.0010	0.0012
Nitrous oxide emissions (million metric tonnes)	0.0003	0.0003	0.0001	0.0001	0.0001
Imported electricity and associated indirect GHG emissions					
Downstream & Chemical - imported electricity (million MWhr)	1.04	1.09	1.09	1.07	0.82
Downstream & Chemical - associated indirect GHG emissions (million metric tonnes of CO ₂ e)	0.39	0.40	0.40	0.40	0.30
Upstream - imported electricity (million MWhr)	0.92	0.95	1.07	1.05	1.02
Upstream - associated indirect GHG emissions (million metric tonnes of CO ₂ e)	0.34	0.35	0.39	0.39	0.38
Operated oil sands - imported electricity (million MWhr)	0.92	0.94	1.07	1.05	1.02
Operated oil sands - associated indirect GHG emissions (million metric tonnes of CO ₂ e)	0.34	0.35	0.39	0.39	0.38

Exported electricity and associated GHG emissions					
Downstream & Chemical - exported electricity (<i>million MWhr</i>)	0	0	0	0.01	0
Downstream & Chemical - associated GHG emissions (<i>million metric tonnes of CO₂e</i>)	0	0	0	0	0
Upstream - exported electricity (<i>million MWhr</i>)	1.45	1.55	1.50	1.45	1.48
Upstream - associated GHG emissions (<i>million metric tonnes of CO₂e</i>)	0.54	0.57	0.56	0.54	0.55
Operated oil sands - exported electricity (<i>million MWhr</i>)	1.45	1.55	1.49	1.45	1.47
Operated oil sands - associated GHG emissions (<i>million metric tonnes of CO₂e</i>)	0.53	0.57	0.55	0.54	0.54
GHG emissions⁴					
Downstream & Chemical (<i>million metric tonnes of CO₂e</i>)	5.1	5.1	4.9	5.0	5.2
Upstream (<i>million metric tonnes of CO₂e</i>)	8.2	8.2	8.5	8.3	8.8
Operated oil sands (<i>million metric tonnes of CO₂e</i>)	8.2	8.2	8.4	8.2	8.7
Production/throughput					
Downstream & Chemical - refining throughput (<i>million m³</i>) ⁵	22	23	20	20	22
Upstream - production (<i>million m³</i>) ⁶	21	22	21	22	25
Operated oil sands - production (<i>million m³</i>) ⁷	21	21	21	22	24
GHG emissions intensity⁸					
Downstream & Chemical (<i>metric tonnes of CO₂e/m³ refining throughput</i>) ⁵	0.23	0.22	0.24	0.25	0.24
Upstream (<i>metric tonnes of CO₂e/m³ upstream production</i>) ⁶	0.39	0.38	0.40	0.38	0.35
Operated oil sands (<i>metric tonnes of CO₂e/m³ upstream production</i>) ⁷	0.39	0.38	0.40	0.38	0.36
Total energy use (<i>million gigajoules</i>)	223	227	227	225	236
Fuels refining Solomon EII® - normalized versus 1990 ⁹	0.804	0.79	0.809	0.822	0.804
Flaring and venting					
Hydrocarbon flaring - company total (<i>million cubic feet per day</i>)	5.5	5.9	6.2	4.9	4.7
Gas (hydrocarbon) flaring from oil production (<i>million cubic feet per day</i>)	3.5	3.1	2.8	2.6	2.2
Water consumption					
Freshwater consumption					
Downstream & Chemical (<i>million m³ of freshwater consumed</i>)	9.9	10.1	9.8	10.3	11.1
Upstream (<i>million m³ of fresh water consumed</i>)	32.6	35.2	39.3	43.0	26.5
Freshwater consumption intensity					
⁵ Downstream & Chemical (<i>m³ of freshwater consumed/m³ refining throughput</i>)	0.45	0.44	0.48	0.50	0.50
⁶ Upstream (<i>m³ of freshwater consumed/m³ upstream production</i>)	1.56	1.63	1.83	1.95	1.07
Compliance					

Oil and chemical spills (<i>total number</i>) > 1 barrel	4	13	10	7	6
Volume of product from oil and chemical spills (<i>barrels</i>)	114	231	402	136	39
Number of environmental exceedance incidents	9	9	11	18	11
Environmental fines and penalties (<i>thousands of dollars</i>) ¹⁰	\$813	\$812	\$406	\$0	\$0
Waste management					
Hazardous waste disposed from operations (<i>thousand tonnes</i>)	20.9	34.0	28.2	24.7	30.7
Hazardous waste - external beneficial reuse (<i>thousand tonnes</i>)	6.9	3.3	9.2	6.4	8.7
Investments					
Gross research expenditures, before credits (<i>millions of dollars</i>)	\$154	\$150	\$170	\$140	\$125
Environmental expenditures (<i>millions of dollars</i>)	\$600	\$600	\$800	\$600	\$1,100
Economic development					
Capital and exploration expenditures (<i>billions of dollars</i>)	\$0.7	\$1.4	\$1.8	\$0.9	\$1.1
Payments for goods and services (<i>billions of dollars, approximate</i>) ¹¹	\$5.50	\$4.72	\$5.26	\$3.29	\$3.80
Taxes and royalties to government (<i>billions of dollars</i>)	\$5.10	\$5.60*	\$6.14	\$4.30	\$6.83
Employment					
Number of regular employees at year end ¹²	5,523	5,687	6,049	5,967	5,572
Percentage of women at year end	25.1	24.0	23.8	23.3	22.6
Percentage of visible minorities at year end ¹³	11.2	12.8	12.8	13	13
Percentage of persons with disabilities at year end ¹³	0.9	2.4	3.8	3.4	3.6
Indigenous					
Spending with Indigenous businesses (direct and subcontracted) (<i>millions of dollars</i>)	\$200	\$250	\$370	\$335	\$447
Percentage of Indigenous Peoples at year end ¹³	3.9	3.6	3.6	3.7	3.9
Community engagement¹⁴					
Community investment (<i>millions of dollars</i>)	\$16.0	\$17.2	\$15.3	\$15.4	\$17.0
Hours volunteered ¹⁵	6,765	3,598	14,381	5,105	6,211
Contributions to United Way - Centraide campaigns (<i>millions of dollars</i>) ¹⁶	\$3.6	\$3.2	\$3.3	\$3.1	\$3.0
Safety					
Fatalities – employees and contractors	0	0	0	0	0
Lost-time incident frequency – employees per 200,000 hours worked	0.01	0.03	0.01	0.04	0.01
Lost-time incident frequency – contractors per 200,000 hours worked	0.04	0.03	0.05	0.05	0.03
Lost-time incident frequency - workforce per 200,000 hours worked	0.03	0.03	0.04	0.04	0.02
Total recordable incident frequency – employees per 200,000 hours worked	0.15	0.13	0.09	0.20	0.22
Total recordable incident frequency – contractors per 200,000 hours worked	0.36	0.36	0.34	0.34	0.45

Total recordable incident frequency - workforce per 200,000 hours worked	0.26	0.27	0.25	0.27	0.34
Tier 1 Process Safety event rate - per million hours worked	0	0.06	0.12	0.09	0.08
Tier 2 Process Safety event rate - per million hours worked	0.29	0.44	0.25	0.25	0.38
Corporate governance	2017	2018	2019	2020	2021
Corporate political contributions (<i>thousands of dollars</i>) ¹⁷	\$24	\$0	\$0	\$0	\$0
Common shares outstanding (<i>millions of shares</i>) ¹⁸	831	783	744	734	678
Dividends paid (<i>millions of dollars</i>) ¹⁸	\$524	\$572	\$631	\$649	\$706

Note: Adjustments may have been made to some data points to reflect internal updates. All references to financial information is in Canadian dollars.

(1) Some uncertainty exists in performance data, depending on measurement methods. Data in the report and performance data table represent the best available information at the time of publication. Data represents Imperial owned and operated assets (including 100% Kearl, Cold Lake and Norman Wells; excluding ExxonMobil Canada, XTO Canada and Syncrude). Retail stations (sold in 2016) and other assets that were divested between 2017-2021 are not included.

(2) Reported emissions, reductions, and avoidance performance data are based on a combination of measured and estimated emissions data. Greenhouse Gas (GHG) emissions were quantified based on applicable provincial and federal regulations. Imported/exported electricity GHG emission factor (0.37 tonnes CO₂e/MWhr). As required by provincial regulation in Alberta and Ontario, our greenhouse gas emissions are third-party verified. There is uncertainty associated with the emissions, reductions, and avoidance performance data due to variation in the processes and operations, the availability of sufficient data, quality of those data and methodology used for measurement and estimation. Performance data may include rounding of subcategories. Changes to the performance data may be reported as part of the company's annual publications as new or updated data and/or emission methodologies become available.

(3) Excluding CO₂ emissions from biomass.

(4) GHG emissions calculated as sum of direct emissions and emissions associated with imported electricity less (minus) emissions associated with exported electricity.

(5) Throughput basis: Refinery throughput is the volume of crude oil and feedstocks that is processed in the refinery atmospheric distillation units

(6) Production basis: Represents bitumen/crude production at Kearl, Cold lake and Norman wells; Kearl and Cold lake production basis same as reported under Alberta greenhouse gas emissions regulation.

(7) Production basis: Operated oil sands (Kearl and Cold lake) production basis same as reported under Alberta greenhouse gas emissions regulation.

(8) GHG emissions intensity is the ratio of GHG emissions to production or throughput.

(9) Solomon EII® is a measure of energy efficiency for petroleum refineries. A lower energy intensity index number indicates a more energy-efficient facility

(10) Environmental fines and penalties:

- 2017 penalty for 2014 release to air from flare line in Sarnia
- 2018 penalty for 2015 release to air incident in Sarnia
- 2019 penalty for 2016 release to the St. Clair river

(11) Includes spending for Imperial and ExxonMobil companies in Canada. 2018, 2019, 2020 and 2021 excludes spending for ExxonMobil Canada East.

(12) All Imperial employees as of December 31, 2021.

(13) Statistics are collected from self-identification questionnaires.

(14) Values reported using the London Benchmark Group Model - the global standard for measuring and reporting community investment.

(15) ImPACT program initiated in 2019 improving reporting capabilities. Imperial's 2021 volunteer hours impacted by COVID 19 restrictions

(16) Represents combined donations from the company, employees and retirees.

(17) Imperial no longer makes political contributions as of January 1, 2018.

(18) For complete disclosure and additional information, see the 2021 Annual financial statements and management discussion and analysis.