

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 2020

2020 performance data

Environment ¹	2016	2017	2018	2019	2020
Air emissions					
Sulphur oxides (expressed as SO ₂ - thousand metric tonnes/year)	21.4	20.9	24.0	23.3	19.1
Nitrogen oxides (thousand metric tonnes/year)	15.9	16.5	17.7	18.3	16.4
Volatile organic compounds (thousand metric tonnes/year)	10.5	10.4	10.7	9.6	10.9
Particulate Matter (PM10) (thousand metric tonnes/year)	5.9	8.9	8.3	9.6	7.8
GHG emissions and energy consumption²					
Direct GHG emissions - including Cogen					
Downstream & Chemical (million metric tonnes of CO ₂ e)	4.8	4.7	4.7	4.4	4.6
Carbon dioxide emissions (million metric tonnes)	4.8	4.6	4.6	4.4	4.5
Methane emissions (million metric tonnes)	0.001	0.0011	0.0011	0.0012	0.0011
Nitrous oxide emissions (million metric tonnes)	0.0001	0.0001	0.0001	0.0001	0.0001
Upstream (million metric tonnes of CO ₂ e)	8.2	8.4	8.4	8.7	8.4
Carbon dioxide emissions (million metric tonnes) ³	8	8.2	8.3	8.6	8.4
Methane emissions (million metric tonnes)	0.0023	0.0018	0.0017	0.0020	0.0010
Nitrous oxide emissions (million metric tonnes)	0.0003	0.0003	0.0003	0.0001	0.0001
Operated oil sands (million metric tonnes of CO ₂ e)	8.1	8.3	8.4	8.6	8.4
Carbon dioxide emissions (million metric tonnes) ³	8	8.2	8.3	8.5	8.3
Methane emissions (million metric tonnes)	0.002	0.0017	0.0016	0.0017	0.0010
Nitrous oxide emissions (million metric tonnes)	0.0003	0.0003	0.0003	0.0001	0.0001
Imported electricity and associated indirect GHG emissions					
Downstream & Chemical - imported electricity (million MWhr)	1.07	1.04	1.09	1.09	1.07
Downstream & Chemical - associated indirect GHG emissions (million metric tonnes of CO ₂ e)	0.39	0.39	0.40	0.40	0.40
Upstream - imported electricity (million MWhr)	0.83	0.92	0.95	1.07	1.05
Upstream - associated indirect GHG emissions (million metric tonnes of CO ₂ e)	0.31	0.34	0.35	0.39	0.39
Operated oil sands - imported electricity (million MWhr)	0.83	0.92	0.94	1.07	1.05
Operated oil sands - associated indirect GHG emissions (million metric tonnes of CO ₂ e)	0.31	0.34	0.35	0.39	0.39

Exported electricity and associated GHG emissions					
Downstream & Chemical - exported electricity (<i>million MWhr</i>)	0	0	0	0	0.01
Downstream & Chemical - associated GHG emissions (<i>million metric tonnes of CO₂e</i>)	0	0	0	0	0
Upstream - exported electricity (<i>million MWhr</i>)	1.48	1.45	1.55	1.50	1.45
Upstream - associated GHG emissions (<i>million metric tonnes of CO₂e</i>)	0.55	0.54	0.57	0.56	0.54
Operated oil sands - exported electricity (<i>million MWhr</i>)	1.47	1.45	1.55	1.49	1.45
Operated oil sands - associated GHG emissions (<i>million metric tonnes of CO₂e</i>)	0.55	0.53	0.57	0.55	0.54
GHG emissions⁴					
Downstream & Chemical (<i>million metric tonnes of CO₂e</i>)	5.2	5.1	5.1	4.9	5.0
Upstream (<i>million metric tonnes of CO₂e</i>)	7.9	8.2	8.2	8.5	8.3
Operated oil sands (<i>million metric tonnes of CO₂e</i>)	7.8	8.2	8.2	8.4	8.2
Production/throughput					
Downstream & Chemical - refining throughput (<i>million m³</i>) ⁵	21	22	23	20	20
Upstream - production (<i>million m³</i>) ⁶	21	21	22	21	22
Operated oil sands - production (<i>million m³</i>) ⁷	20	21	21	21	22
GHG emissions intensity⁸					
Downstream & Chemical (<i>metric tonnes of CO₂e/m³ refining throughput</i>) ⁵	0.25	0.23	0.22	0.24	0.25
Upstream (<i>metric tonnes of CO₂e/m³ upstream production</i>) ⁶	0.38	0.39	0.38	0.40	0.38
Operated oil sands (<i>metric tonnes of CO₂e/m³ upstream production</i>) ⁶	0.39	0.39	0.38	0.40	0.38
Total energy use (<i>million gigajoules</i>)	220	223	227	227	225
Fuels refining Solomon EII® - normalized versus 1990 ⁹	0.808	0.804	0.79	0.809	0.822
Flaring and venting					
Hydrocarbon flaring - company total (<i>million cubic feet per day</i>)	5.8	5.5	5.9	6.2	4.9
Gas (hydrocarbon) flaring from oil production (<i>million cubic feet per day</i>)	3.9	3.5	3.1	2.8	2.6
Water consumption					
Freshwater consumption					
Downstream & Chemical (<i>million m³ of fresh water consumed</i>)	10.4	9.9	10.1	9.8	9.8
Upstream (<i>million m³ of fresh water consumed</i>)	30.2	32.6	35.2	39.3	43.0
Fresh water consumption intensity					
⁵ Downstream & Chemical (<i>m³ of fresh water consumed/m³ refining throughput</i>)	0.49	0.45	0.44	0.48	0.50
⁶ Upstream (<i>m³ of fresh water consumed/m³ upstream production</i>)	1.46	1.56	1.63	1.83	1.95
Compliance					

Oil and chemical spills (<i>total number</i>) > 1 barrel	4	4	13	10	7
Volume of product from oil and chemical spills (<i>barrels</i>)	62	114	231	402	136
Number of environmental exceedance incidents	10	9	9	11	18
Environmental fines and penalties (<i>thousands of dollars</i>) ¹⁰	\$37	\$813	\$812	\$406	\$0
Waste management					
Hazardous waste disposed from operations (<i>thousand tonnes</i>)	10.8	20.9	34.0	28.2	24.7
Hazardous waste - external beneficial reuse (<i>thousand tonnes</i>)	5.1	6.9	3.3	9.2	6.4
Investments					
Gross research expenditures, before credits (<i>millions of dollars</i>)	\$195	\$154	\$150	\$170	\$140
Environmental expenditures (<i>millions of dollars</i>)	\$700	\$600	\$600	\$800	\$600
Economic development					
Capital and exploration expenditures (<i>billions of dollars</i>)	\$1.2	\$0.7	\$1.4	\$1.8	\$0.9
Payments for goods and services (<i>billions of dollars, approximate</i>) ¹¹	\$8.00	\$5.50	\$4.72	\$5.26	\$3.29
Taxes and royalties to government (<i>billions of dollars</i>)	\$5.20	\$5.10	\$5.60*	\$6.14	\$4.30
Employment					
Wages and benefits (<i>billions of dollars</i>)	\$1.40	\$1.40	\$1.38	\$1.48	\$1.56
Education assistance program (<i>thousands of dollars</i>)	\$685	\$588	\$588	\$760	\$603
Scholarships for employee dependents (<i>millions of dollars</i>)	\$1.90	\$2.00	\$1.88	\$1.85	\$1.97
Number of regular employees at year end ¹²	5,706	5,523	5,687	6,049	5,711
Percentage of women at year end	25.0	25.1	24.0	23.8	23.2
Percentage of visible minorities at year end ¹³	11.2	11.2	12.8	12.8	12.9
Percentage of persons with disabilities at year end ¹³	1.0	0.9	2.4	3.8	3.5
Indigenous					
Spending with Indigenous businesses (direct and subcontracted) (<i>millions of dollars</i>)	\$225	\$200	\$250	\$370	\$335
Percentage of Indigenous Peoples at year end ¹³	3.9	3.9	3.6	3.6	3.7
Community engagement¹⁴					
Community investment (<i>millions of dollars</i>)	\$21.2	\$16.0	\$17.2	\$15.3	\$15.4
Hours volunteered ¹⁵	7,927	6,765	3,598	14,381	5,105
Contributions to United Way - Centraide campaigns (<i>millions of dollars</i>) ¹⁶	\$4.2	\$3.6	\$3.2	\$3.3	\$3.1
Safety					
Fatalities – employees and contractors	0	0	0	0	0
Lost-time incident frequency – employees per 200,000 hours worked	0	0.01	0.03	0.01	0.04
Lost-time incident frequency – contractors per 200,000 hours worked	0.01	0.04	0.03	0.05	0.05

Lost-time incident frequency - workforce per 200,000 hours worked	0.01	0.03	0.03	0.04	0.04
Total recordable incident frequency – employees per 200,000 hours worked	0.08	0.15	0.13	0.09	0.20
Total recordable incident frequency – contractors per 200,000 hours worked	0.39	0.36	0.36	0.34	0.34
Total recordable incident frequency - workforce per 200,000 hours worked	0.26	0.26	0.27	0.25	0.27
Tier 1 Process Safety event rate - per million hours worked	0.21	0	0.06	0.12	0.09
Tier 2 Process Safety event rate - per million hours worked	0.31	0.29	0.44	0.25	0.25
Corporate governance	2016	2017	2018	2019	2020
Corporate political contributions (<i>thousands of dollars</i>) ¹⁷	\$61	\$24	\$0	\$0	\$0
Common shares outstanding (<i>millions of shares</i>) ¹⁸	848	831	783	744	734
Dividends paid (<i>millions of dollars</i>) ¹⁸	\$492	\$524	\$572	\$631	\$649

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% Kearn, Cold Lake and Norman Wells; excluding ExxonMobil Canada, XTO Canada and Syncrude). Retail stations (sold in 2016) and other assets that were divested between 2016–2020 are not included.

(2) Greenhouse Gas (GHG) emissions were quantified based on applicable provincial and federal regulations. Imported/exported electricity GHG emission factor (0.37 tonnes CO₂e/MWhr) consistent with the benchmark established for electricity from 2019 CCIR (Carbon Competitiveness Incentive Regulation) and OBPS (Output Based Pricing System)

(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 Kearn, Cold lake and Norman wells; Kearn and Cold lake production basis same as reported under Alberta greenhouse gas emissions regulation.

(7) Production basis: Operated oil sands (Kearn 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:

- 2016 penalty for release to the St. Clair river
- 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 and 2020 excludes spending for ExxonMobil Canada East.

(12) All Imperial employees as of December 31, 2020.

(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 2020 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 on January 1, 2018.

(18) For complete disclosure and additional information, see the 2020 Annual financial statements and management discussion and analysis.