

## 2017 performance data

Environment	2013	2014	2015	2016	2017
<b>1Air emissions</b>					
Sulphur oxides (expressed as SO <sub>2</sub> - thousand metric tonnes/year)	23.9	24.1	22.9	21.4	20.9
Nitrogen oxides (thousand metric tonnes/year)	12.0	13.1	15.5	15.9	16.5
Volatile organic compounds (thousand metric tonnes/year)	17.2	14.3	14.0	10.5	10.4
<b>1GHG emissions and energy consumption</b>					
Direct GHG emissions - including Cogen					
Downstream & Chemical (million metric tonnes of CO <sub>2</sub> e)	4.6	4.9	4.8	4.8	4.7
Carbon dioxide emissions (million metric tonnes)	4.5	4.8	4.8	4.8	4.6
Methane emissions (million metric tonnes)	0.0014	0.0024	0.0011	0.0010	0.0011
Nitrous oxide emissions (million metric tonnes)	0.0001	0.0001	0.0001	0.0001	0.0001
Upstream (million metric tonnes of CO <sub>2</sub> e)	5.5	5.8	8.0	8.2	8.4
2Carbon dioxide emissions (million metric tonnes)	5.4	5.7	7.8	8.0	8.2
Methane emissions (million metric tonnes)	0.0029	0.0016	0.0019	0.0023	0.0018
Nitrous oxide emissions (million metric tonnes)	0.0001	0.0002	0.0003	0.0003	0.0003
Operated oil sands (million metric tonnes of CO <sub>2</sub> e)	5.4	5.7	7.9	8.1	8.3
2Carbon dioxide emissions (million metric tonnes)	5.3	5.6	7.7	8.0	8.2
Methane emissions (million metric tonnes)	0.0023	0.0013	0.0016	0.0020	0.0017
Nitrous oxide emissions (million metric tonnes)	0.0001	0.0002	0.0003	0.0003	0.0003
3Imported electricity and associated indirect GHG emissions					
Downstream & Chemical - imported electricity (million MWhr)	1.08	1.17	1.10	1.07	1.04
Downstream & Chemical - associated indirect GHG emissions (million metric tonnes of CO <sub>2</sub> e)	0.40	0.43	0.41	0.39	0.39
Upstream - imported electricity (million MWhr)	0.29	0.55	0.70	0.83	0.92
Upstream - associated indirect GHG emissions (million metric tonnes of CO <sub>2</sub> e)	0.11	0.20	0.26	0.31	0.34
Operated oil sands - imported electricity (million MWhr)	0.29	0.55	0.70	0.83	0.92
Operated oil sands - associated indirect GHG emissions (million metric tonnes of CO <sub>2</sub> e)	0.11	0.20	0.26	0.31	0.34
3Exported electricity and associated GHG emissions					
Downstream & Chemical - exported electricity (million MWhr)	0	0	0	0	0
Downstream & Chemical - associated GHG emissions (million metric tonnes of CO <sub>2</sub> e)	0	0	0	0	0
Upstream - exported electricity (million MWhr)	0.28	0.33	1.25	1.48	1.45
Upstream - associated GHG emissions (million metric tonnes of CO <sub>2</sub> e)	0.10	0.12	0.46	0.55	0.54
Operated oil sands - exported electricity (million MWhr)	0.27	0.32	1.24	1.47	1.45
Operated oil sands - associated GHG emissions (million metric tonnes of CO <sub>2</sub> e)	0.10	0.12	0.46	0.55	0.53
4GHG emissions					
Downstream & Chemical (million metric tonnes of CO <sub>2</sub> e)	5.0	5.4	5.2	5.2	5.1
Upstream (million metric tonnes of CO <sub>2</sub> e)	5.5	5.9	7.7	7.9	8.2
Operated oil sands (million metric tonnes of CO <sub>2</sub> e)	5.4	5.8	7.7	7.8	8.2
Production/throughput					
5Downstream & Chemical - refining throughput (million m <sup>3</sup> )	22	23	22	21	22
6Upstream - production (million m <sup>3</sup> )	11	14	20	21	21
7Operated oil sands - production (million m <sup>3</sup> )	10	13	19	20	21
8GHG emissions intensity					
5Downstream & Chemical (metric tonnes of CO <sub>2</sub> e/m <sup>3</sup> refining throughput)	0.23	0.23	0.23	0.25	0.23
6Upstream (metric tonnes of CO <sub>2</sub> e/m <sup>3</sup> upstream production)	0.50	0.42	0.40	0.38	0.39
7Operated oil sands (metric tonnes of CO <sub>2</sub> e/m <sup>3</sup> upstream production)	0.52	0.44	0.40	0.39	0.39
Total energy use (million gigajoules)	170	184	219	220	223
9Fuels refining energy intensity - normalized versus 1990	0.831	0.813	0.811	0.808	0.804
<b>1Flaring and venting</b>					
Hydrocarbon flaring - company total (hundred tonnes)	534	564	696	739	705
Gas (hydrocarbon) flaring from oil production (million cubic feet per day)	1.5	1.5	3.9	3.9	3.5
<b>1Water consumption</b>					
Freshwater consumption					
Downstream & Chemical (million m <sup>3</sup> of fresh water consumed)	9.2	9.7	10.5	10.4	9.9
Upstream (million m <sup>3</sup> of fresh water consumed)	10.6	15.6	41.0	30.2	32.6

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Fresh water consumption intensity					
5Downstream & Chemical (m <sup>3</sup> of fresh water consumed/m <sup>3</sup> refining throughput)	0.42	0.42	0.47	0.49	0.45
6Upstream (m <sup>3</sup> of fresh water consumed/m <sup>3</sup> upstream production)	0.96	1.12	2.10	1.46	1.56
<b>1Waste management</b>					
Hazardous waste disposed from operations (thousand tonnes)	18.7	14.1	9.7	10.9	20.9
Hazardous waste - external beneficial reuse (thousand tonnes)	3.2	2.8	7.6	5.1	6.9
<b>Investments</b>	2013	2014	2015	2016	2017
Gross research expenditures, before credits	\$199	\$175	\$195	\$195	\$154
Environmental expenditures (millions of dollars)	\$1,500	\$1,700	\$1,200	\$700	\$600
<b>Economic development</b>	2013	2014	2015	2016	2017
Capital and exploration expenditures (billions of dollars)	\$8.0	\$5.7	\$3.6	\$1.2	\$0.7
Payments for goods and services (billions of dollars, approximate) <sup>10</sup>	\$12.3	\$11.6	\$9.5	\$8.0	\$5.5
Taxes and royalties to government (billions of dollars)	\$5.7	\$6.0	\$5.4	\$5.2	\$5.1
<b>Employment</b>					
Wages and benefits (billions of dollars)	\$1.4	\$1.4	\$1.5	\$1.4	\$1.4
Education assistance program (thousands of dollars)	\$505	\$478	\$627	\$685	\$588
Scholarships for employee dependents (millions of dollars)	\$2.8	\$2.3	\$2.1	\$1.9	\$2.0
Number of regular employees at year end <sup>11</sup>	5,328	5,498	5,917	5,706	5,523
Percentage of women at year end	26.7	26.6	25.8	25.0	25.1
Percentage of visible minorities at year end <sup>12</sup>	11.1	11.5	10.9	11.2	11.2
Percentage of persons with disabilities at year end <sup>12</sup>	1.5	1.5	1.2	1.0	0.9
<b>Indigenous</b>					
Spending with Indigenous businesses (direct and subcontracted) (millions of dollars)	\$350	\$433	\$329	\$225	\$200
Percentage of Indigenous Peoples at year end <sup>12</sup>	3.3	3.5	3.7	3.9	3.9
<b>Community engagement</b>	2013	2014	2015	2016	2017
Community investment (millions of dollars) <sup>13</sup>	\$17.2	\$20.3	\$27.0	\$21.2	\$16.0
Contributions to United Way - Centraide campaigns (millions of dollars) <sup>14</sup>	\$4.5	\$4.7	\$4.8	\$4.2	\$3.6
<b>Safety</b>	2013	2014	2015	2016	2017
Fatalities - employees and contractors	0	0	0	0	0
Lost-time incident frequency - employees per 200,000 hours worked	0.02	0.05	0.03	0.00	0.01
Lost-time incident frequency - contractors per 200,000 hours worked	0.01	0.04	0.01	0.01	0.04
Total recordable incident frequency - employees per 200,000 hours worked	0.14	0.27	0.22	0.08	0.15
Total recordable incident frequency - contractors per 200,000 hours worked	0.39	0.33	0.30	0.39	0.36
Total recordable incident frequency - workforce per 200,000 hours worked	0.33	0.32	0.27	0.26	0.26
<b>Corporate governance</b>	2013	2014	2015	2016	2017
Corporate political contributions (thousands of dollars) <sup>15</sup>	\$67	\$70	\$65	\$61	\$24
Common shares outstanding (millions of shares) <sup>16</sup>	848	848	848	848	831
Dividends (millions of dollars) <sup>12</sup>	\$407	\$441	\$449	\$492	\$524

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

- Data represents Imperial owned and operated assets (including 100% Kearl; excluding ExxonMobil Canada, XTO Canada and Syncrude). Dartmouth refinery (shut down in 2013), retail stations (sold in 2016) and other assets that were divested between 2013-2017 are not included.
- Excluding CO<sub>2</sub> emissions from biomass.
- Imported/exported electricity GHG emission factor (0.37 tonnes CO<sub>2</sub>e/MWhr) consistent with the benchmark established for electricity from 2018 CCIR (Carbon Competitiveness Incentive Regulation) and draft OBPS (Output Based Pricing System) from Dec 2018.
- GHG emissions calculated as sum of direct emissions and emissions associated with imported electricity less (minus) emissions associated with exported electricity.
- Throughput basis: Refinery throughput is the volume of crude oil and feedstocks that is processed in the refinery atmospheric distillation units; excluding Dartmouth refinery (shut down in 2013).
- Production basis: Represents bitumen/crude production at Kearl, Cold lake and Norman wells; Kearl and Cold lake production basis same as reported under Alberta provincial regulation.
- Production basis: Operated oil sands (Kearl and Cold lake) production basis same as reported under Alberta provincial regulation.

- GHG emissions intensity is the ratio of GHG emissions to production or throughput.
- The energy intensity index is a measure of energy efficiency for petroleum refineries. A lower energy intensity index number indicates a more energy-efficient facility.
- Includes spending for Imperial and ExxonMobil companies in Canada.
- All Imperial employees as of December 31, 2017.
- Statistics are collected from self-identification questionnaires.
- Imperial's 2015 total value to community includes \$6.6 million in government contributions to the Institute for Oil Sands Innovation.
- Represents combined donations from the company, employees and retirees.
- Imperial no longer makes political contributions as on January 1, 2018.
- For complete disclosure and additional information, see the 2017 Annual financial statements and management discussion and analysis.

Our sustainability citizenship reporting is guided using the International Petroleum Industry Environmental Conservation Association's oil and gas industry guidance on voluntary sustainability reporting.