

**FREQUENTLY USED STATISTICS**
**NOVEMBER 2020**
**ECONOMICS**

Capital Investment (\$ billions)	2014	2016	2017	2018	2019	2020E
Conventional (included East Coast offshore)	47	23	29	27	26	17
Oil Sands	34	15	14	12	9	7
Canada	81	39	43	39	35	24
East Coast	5.3	5.6	3.2	2.7	2.8	1.5

Upstream sector largest private sector investor in Canada based on 2018 data (most recent).

Source: Statistics Canada/CAPP

Annual Revenue (\$ billions)*	2017-2019
Upstream oil and natural gas	116

\* average over 3 years ending 2019

Source: Statistics Canada

Payments to Governments (\$ billions) *	2017-2019
Canada	10

\* average of 3 years includes royalties, income tax, land sales, carbon, municipal and corporate taxes.

Source: CAPP

2016 lower with decrease in royalty revenue and land sales.

Real GDP Impact	2014	2015	2016	2017	2018	2019
Canada's Total GDP (\$ billions)	1 805	1 819	1 839	1 898	1 940	1 972
Conventional GDP (\$ billions)	50	47	46	49	52	54
Conventional GDP Share (%)	2.8	2.6	2.5	2.6	2.7	2.7
Oil Sands GDP (\$ billions)	40	46	48	52	56	56
Oil Sands GDP Share (%)	2.2	2.5	2.6	2.7	2.9	2.9
Upstream GDP (\$ billions)	90	93	94	101	108	110
Upstream GDP Share (%)	5.0	5.1	5.1	5.3	5.6	5.6

Source: Statistics Canada

Oil Sands Provincial Supply Chain (# suppliers and \$ spent in province)	2012-13		2014-15		2016-17	
	#	\$MM	#	\$MM	#	\$MM
British Columbia	698	1 050.8	813	929.4	528	592.2
Saskatchewan	293	212.9	494	403.5	220	136.4
Manitoba	65	26.0	95	110.8	41	56.3
Ontario	1263	1 816.6	1 646	3 432.1	1 162	1 893.9
Québec	195	386.8	394	1 012.0	199	319.5
Prince Edward Island	4	0.8	7	10.1	3	1.9
Nova Scotia	47	139.1	51	97.8	32	45.9
Newfoundland and Labrador	118	225.3	28	354.4	18	100.3
New Brunswick	30	15.0	30	36.4	24	9.4
Northwest Territories	5	20.6	8	4.0	3	1.0
Yukon Territories	-	-	5	1.6	-	-
<b>Total</b>	<b>2 718</b>	<b>3 894.0</b>	<b>3 571</b>	<b>6 392.0</b>	<b>2 230</b>	<b>3 157.0</b>

Source: CAPP 2019

Indigenous Supply Chain in Alberta	2013-14	2015-16
Companies	327	399
Communities	54	65
Growth Rate	n/a	4.1%

Source: CAPP 2018

Employment (thousands)	2014	2015	2016	2017	2018
Direct & indirect jobs o&g conv & offshore	383	357	267	323	331
Direct & indirect oil sands jobs	361	287	228	205	217
Total upstream	744	644	495	528	548

Source: CAPP based on data and analysis from Prism Economics and Statistics Canada

Oil and Gas Value on TSX (at year end)	2017	2018	2019	Nov-2020
Canadian producer companies trading on the TSX	10.0%	7.3%	6.5%	4.2%

Source: Stifel First Energy/CAPP

**ACTIVITY**

Drilling	2016	2017	2018	2019	2020E	2021F
# of Wells Drilled in W Canada	3 751	6 414	6 125	4 318	3 000	3 300

Source: CAPP

Production	2015	2016	2017	2018	2019	Jan-Sep 2020	2035 Forecast
<b>Crude Oil (Mb/d):</b>							
Alberta conv. & C5+	715	666	716	808	824	752	989
Saskatchewan conv.	487	461	487	491	490	430	464
WCSB Conv. & C5+	1 311	1 241	1 317	1 447	1 476	1 340	1 510
East Coast	172	210	221	230	262	324	91
Oil sands	2 383	2 415	2 675	2 914	2 950	2 746	4 253
Canada	3 876	3 867	4 213	4 592	4 687	4 410	5 855
<b>Natural Gas (Bcf/d):</b>							
Alberta	10.2	10.2	10.4	10.5	10.1	9.8	
British Columbia	4.4	4.6	4.7	5.4	5.5	5.9	
East Coast	0.2	0.2	0.1	0.1	0.0	0.0	
Canada	14.9	15.2	15.7	16.2	15.7	15.7	

Oil is ranked 5th and natural gas 5th in world production. Canada is ranked 3rd in crude oil reserves

Y= with Market Opportunity Source: CAPP; N=without Market Opportunity Source: CAPP

Source: Provinces

FREQUENTLY USED STATISTICS

NOVEMBER 2020

MARKETS							
Exports to U.S.	2014	2015	2016	2017	2018	2019	Jan-Sep 2020
Crude Oil (MMb/d)	2 855	3 046	3 101	3 325	3 597	3754	3559
Natural gas (Bcf/d)	7.6	7.6	7.9	8.3	7.8	7.2	6.5

Source: Statistics Canada

Foreign Imports	2015	2016	2017	2018	2019	Jan-Sep 2020
<b>Crude Oil (Mb/d):</b>						
Atlantic Canada	321	308	333	326	351	307
Ontario	26	90	95	48	21	41
Québec	296	214	158	153	202	152
Share of refinery capacity of Québec and Atlantic	79%	67%	63%	59%	67%	58%
<b>Natural Gas (Bcf/d):</b>						
Canada	1.9	2.1	2.4	2.2	2.5	2.2

Source: Statistics Canada

Global Energy Demand (Mtoe)*	2019	2040	Growth	2019	2040 Share
Coal	3 775	3 314	-12%	26%	19%
Oil	4 525	4 832	7%	31%	28%
Natural Gas	3 340	4 321	29%	23%	25%
Nuclear	727	896	23%	5%	5%
Hydro	370	509	37%	3%	3%
Bioenergy	1 354	1 816	34%	9%	11%
Other Renewables	314	1 396	344%	2%	8%
<b>Total Primary Energy Demand</b>	<b>14 406</b>	<b>17 085</b>	<b>19%</b>		

\* International Energy Agency World Energy Outlook 2020

Source: International Energy Agency 2020 World Energy Outlook, Stated Policies Scenario

ENVIRONMENT						
GHG Emissions (Mt CO <sub>2</sub> e) *	2015	2016	2017	2018	% Cdn	% Global
Oil Sands	74	75	80	84	12%	0.15%
Conventional Oil & Gas	84	78	78	79	11%	0.16%
Total Upstream	158	153	158	163	22%	0.31%
Total Canada	720	706	714	729		<1.5%

\*National Inventory Report megatonnes of CO<sub>2</sub> equivalent

Source: Environment & Climate Change Canada, 2019/WRI

Water Use	2014	2015	2016	2017	2018
<b>Non-saline water use (million m3)</b>					
Oil sands mining	172	181	182	206	246
Oil sands in situ	14	16	15	18	18
Enhanced oil recovery (EOR)	16	16	14	13	11
Hydraulic fracturing	10	10	11	23	28
<b>Non-saline water use intensity (barrels of non-saline make-up water used to produce one BOE)</b>					
Oil sands mining	2.57	2.41	2.45	2.50	2.59
Oil sands in situ	0.22	0.23	0.20	0.20	0.2
EOR	0.78	0.77	0.74	0.69	0.61
Hydraulic fracturing	0.27	0.35	0.46	0.56	0.52
<b>Recycled water use (% of total water used)</b>					
Oil sands mining	76%	77%	78%	75%	75%
Oil sands in situ	84%	84%	85%	87%	86%
EOR	93%	93%	93%	93%	94%
Hydraulic fracturing	5%	6%	4%	4%	2%

Source: AER

Land	
Share of boreal forest disturbed by oil sands mining	0.04%
Size of boreal forest (km <sup>2</sup> )	2 700 000
Land covering oil sands (km <sup>2</sup> )	142 000
Active mining footprint (km <sup>2</sup> )	1 030

Source: AER/AB Environment

## FREQUENTLY USED STATISTICS

NOVEMBER 2020

Prices	2014	2015	2016	2017	2018	2019	3Q2020
North Sea Brent (US\$/b)	99.02	52.36	43.55	54.23	71.00	64.33	40.19
WTI Nymex (US\$/b)	92.99	48.80	43.32	50.95	64.73	57.03	39.55
Cdn Heavy - WCS (US\$/b)	71.77	35.27	29.65	39.08	38.58	43.61	26.50
Henry Hub Gas US\$/mcf	4.38	2.63	2.55	3.02	3.07	2.53	2.01
AECO NIT (C\$/mcf)	4.19	2.68	2.22	2.38	1.55	1.64	2.12

Note: Numbers may not add due to rounding

Source: CAPP Statistical Handbook

### Legend

#### Abbreviation

#### Description

b/d	barrels per day
bbl	barrel
m3	cubic metre
Mm3	thousand cubic metres
MMm3	million cubic metres
Mb/d	thousand barrels per day
MMb	million barrels
MMb/d	million barrels per day
Bcf	billion cubic feet
Bcf/d	billion cubic feet per day
GJ	gigajoule
Mcf	thousand cubic feet
MMBtu	million British thermal units
MMcf	million cubic feet
BOE	barrels of oil equivalent
BOE/d	barrels of oil equivalent per day
CO2e	carbon dioxide equivalent
Mtoe	million tonnes of oil equivalent
E	estimate
F	forecast
GDP	gross domestic product