

FREQUENTLY USED STATISTICS
NOVEMBER 2021
ECONOMICS

Capital Investment (\$ billions)	2016	2017	2018	2019	2020	2021E
Conventional (included East Coast offshore)	23	29	27	26	14	16
Oil Sands	15	14	12	9	7	9
Canada	39	43	39	35	21	25
East Coast	5.6	3.2	2.7	2.8	1.5	1.5

Upstream sector second largest private sector investor in Canada based on 2019 data (most recent).

Source: Statistics Canada/CAPP

Annual Revenue (\$ billions)*	2018-2020
Upstream oil and natural gas	209

* average over 3 years ending 2020

Source: Statistics Canada

Payments to Governments (\$ billions) *	2018-2020
Canada	9

 * average of 3 years includes royalties, income tax, land sales, carbon, municipal and corporate taxes.
 2016 lower with decrease in royalty revenue and land sales.

Source: CAPP

Real GDP Impact	2016	2017	2018	2019	2020
Canada's Total GDP (\$ billions)	1 839	1 896	1 945	1 980	1 876
Conventional GDP (\$ billions)	46	49	54	55	52
Conventional GDP Share (%)	2.5	2.6	2.8	2.8	2.7
Oil Sands GDP (\$ billions)	48	53	57	57	53
Oil Sands GDP Share (%)	2.6	2.8	2.9	2.9	2.8
Upstream GDP (\$ billions)	94	102	110	112	105
Upstream GDP Share (%)	5.1	5.4	5.7	5.7	5.6

Source: Statistics Canada

Oil Sands Provincial Supply Chain Outside of Alberta						
# suppliers and \$ spent	2017		2018		2019	
	#	\$MM	#	\$MM	#	\$MM
British Columbia	572	430.1	541	468.5	513	534.7
Saskatchewan	214	86.4	189	118.0	167	130.7
Manitoba	58	43.7	50	58.0	55	68.6
Ontario	1665	1 936.0	1 339	2 087.4	1 302	2 427.9
Québec	680	465.4	592	577.7	585	760.0
Prince Edward Island	5	0.9	2	0.3	2	0.4
Nova Scotia	40	51.3	38	46.7	38	49.0
Newfoundland and Labrador	34	52.5	22	32.6	23	38.8
New Brunswick	29	11.1	25	22.4	19	18.8
Northwest Territories	1	2.3	1	0.9	4	0.4
Yukon Territories	3	2.9	3	0.8	3	0.1
Suppliers Outside of Alberta*	2 872	3 082.6	2 420	3 413.3	2 711	4 029.4

* Suppliers do not add due to suppliers in multiple provinces

Source: CAPP 2021

Indigenous Supply Chain in Alberta	2017	2018	2019
Spend on Suppliers (\$MM)		1 545	2 025
Number of Suppliers		263	275

Source: CAPP 2021

Employment (thousands)	2014	2015	2016	2017	2018	2019	2020
Direct & indirect jobs o&g conv & offshore	383	357	267	323	330	308	234
Direct & indirect oil sands jobs	361	287	228	205	217	214	166
Total upstream	744	644	495	528	546	522	399

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	2020	Nov-21
Canadian producer companies trading on the TSX	10.0%	7.3%	6.5%	4.2%	6.7%

Source: Stifel First Energy/CAPP

ACTIVITY

Drilling	2016	2017	2018	2019	2020	2021E
# of Wells Drilled in W Canada	3 751	6 414	6 125	4 318	3 000	4 200

Source: CAPP

Production	2016	2017	2018	2019	2020	2021 YTD	2035 Forecast
Crude Oil (Mb/d):							
Alberta conv. & C5+	666	716	808	824	754	764	989
Saskatchewan conv.	461	487	491	490	438	449	464
WCSB Conv. & C5+	1 241	1 317	1 449	1 477	1 348	1 364	1 510
East Coast	210	221	230	262	284	274	91
Oil sands	2 415	2 675	2 914	2 950	2 836	3 038	4 253
Canada	3 867	4 213	4 594	4 688	4 467	4 677	5 855
Natural Gas (Bcf/d):							
Alberta	10.2	10.4	10.5	10.1	9.6	9.9	
British Columbia	4.6	4.7	5.4	5.5	5.7	5.6	
East Coast	0.2	0.1	0.1	0.0	0.0	-	
Canada	15.2	15.7	16.2	15.7	15.4	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

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MARKETS							
Exports to U.S.	2015	2016	2017	2018	2019	2020	Jan-Sep 2021
Crude Oil (MMb/d)	3 046	3 101	3 320	3 431	3662	3608	3652
Natural gas (Bcf/d)	7.6	7.9	8.2	7.8	7.2	6.7	7.2

Source: Statistics Canada

Foreign Imports	2015	2016	2017	2018	2019	2020	Jan-Sep 2021
Crude Oil (Mb/d):							
Atlantic Canada	321	308	333	326	351	287	270
Ontario	26	90	95	48	21	32	59
Québec	296	214	158	153	203	170	136
Share of refinery capacity of Québec and Atlantic	79%	67%	63%	59%	67%	58%	52%
Natural Gas (Bcf/d):							
Canada	1.9	2.1	2.4	2.2	2.5	2.2	3.0

Source: Statistics Canada

Global Energy Supply (EJ)*	2020	2030	2040	2020-30 Growth	2020-40 Growth	2020 Share	2040 Share
Coal	156	150	134	-3%	-14%	26%	19%
Oil	171	199	200	16%	16%	29%	28%
Natural Gas	139	157	169	13%	22%	24%	24%
Nuclear	29	34	38	16%	31%	5%	5%
Hydro	16	18	21	17%	35%	3%	3%
Biomass	24	21	19	-13%	-21%	4%	3%
Other Renewables	53	91	132	71%	149%	9%	18%
Total Energy Supply	588	670	713	14%	21%	100%	100%

* International Energy Agency World Energy Outlook 2021

Source: International Energy Agency 2021 World Energy Outlook, Stated Policies Scenario

ENVIRONMENT							
GHG Emissions (Mt CO ₂ e) *	2015	2016	2017	2018	2019	% Cdn	% Global
Oil Sands	72	69	76	81	83	11%	0.15%
Conventional Oil & Gas	86	79	77	80	78	11%	0.16%
Total Upstream	169	160	163	172	172	24%	0.31%
Total Canada	723	707	716	728	730		<1.5%

* National Inventory Report megatonnes of CO₂ equivalent

Source: Environment & Climate Change Canada, 2019/WRI

Water Use	2014	2015	2016	2017	2018
Non-saline water use (million m3)					
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
Non-saline water use intensity (barrels of non-saline make-up water used to produce one BOE)					
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
Recycled water use (% of total water used)					
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 ²)	2 700 000
Land covering oil sands (km ²)	142 000
Active mining footprint (km ²)	1 030

Source: AER/AB Environment

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Prices	2016	2017	2018	2019	2020	2021 Jan-Oct
North Sea Brent (US\$/b)	43.55	54.23	71.00	64.33	41.74	69.21
WTI Nymex (US\$/b)	43.32	50.95	64.73	57.03	39.35	66.39
Cdn Heavy - WCS (US\$/b)	29.65	39.08	38.58	43.61	27.42	53.72
Henry Hub Gas US\$/mcf	2.55	3.02	3.07	2.53	2.13	3.56
AECO NIT (C\$/mcf)	2.22	2.38	1.55	1.64	2.23	3.47

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