Oil Extends Two-Year High as Saudis, Russia Back Prolonged Cuts

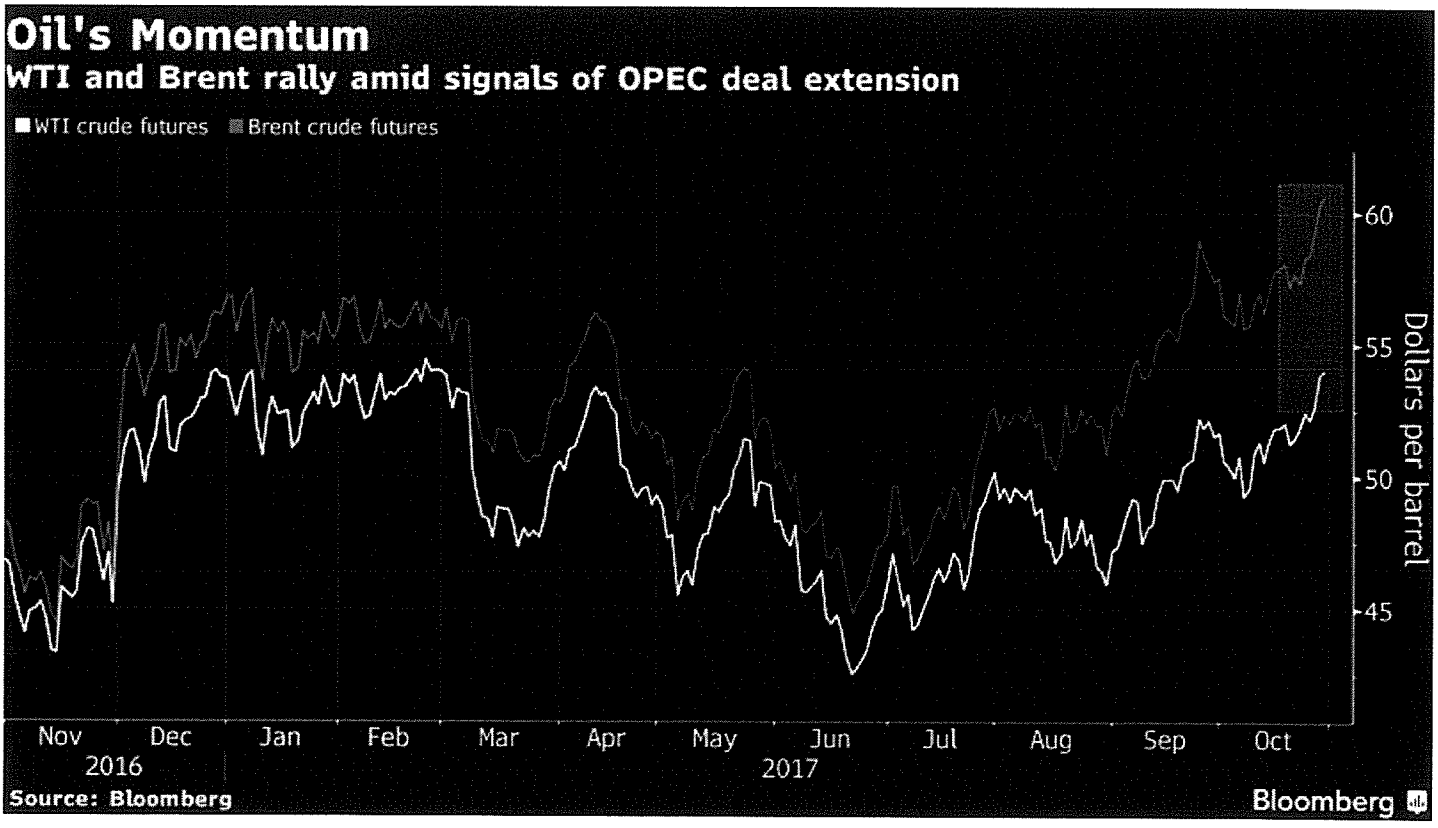
By **Jessica Summers**
October 29, 2017, 8:36 PM EDT
Updated on October 30, 2017, 3:32 PM EDT

- Saudi Prince showed support of output-cut deal beyond March
- Crude moving into overbought territory signals rally may stall

Brent crude extended its rally to a two-year high as OPEC and Russia signaled they'll prolong supply cuts, while instability in Iraq's Kurdish region persisted.

The global benchmark rose 0.8 percent, and West Texas Intermediate gained 0.5 percent, though both crudes pulled back from Monday's highs as they moved closer to levels that signal they might be overbought. Supporting the rally was Saudi Arabian Crown Prince Mohammed bin Salman last week backing an extension <https://www.bloomberg.com/news/articles/2017-10-26/saudi-crown-prince-backs-extending-opec-output-cuts-into-2018-j987r4ea> of production cuts by OPEC beyond March, following similar signals from Russian President Vladimir Putin.

"OPEC is doing a good job of talking up their position. That put a bid in the market coming into today," Bob Yawger, director of the futures division at Mizuho Securities USA Inc. in New York, said by telephone. The issues in Kurdistan have "not ended yet. There's still some potential bid from that."



Oil has climbed this month as investors wait to see whether OPEC will formally agree to an extension of its cuts at a meeting in November. On Monday, JPMorgan Chase & Co. raised both its Brent and WTI 2018 forecasts. Yet, both Brent and WTI's 14-day relative strength index

moved toward 70, indicating the commodity may be overbought.

"When you're in a range-bound market without a lot of really clear and definitive fundamental information, people tend to start trading off of technicals," Bill O'Grady, chief market strategist at Confluence Investment Management in St. Louis, said by telephone. "Momentum in oil has been pretty strong, so unless you've got something out there that tells you we are on a clear path to $60, you're going to want to see how the data plays out."

Brent for December settlement, which expires Tuesday, rose 46 cents to settle at $60.90 a barrel on the London-based ICE Futures Europe exchange, the highest close since July 2015. The global benchmark crude traded at a premium of $6.75 to WTI.

See also: Oil Investors Roll the Dice on OPEC as Saudi Prince Ups the Ante <https://www.bloomberg.com/news/articles/2017-10-27/oil-investors-roll-the-dice-on-opec-as-saudi-prince-ups-the-ante>

WTI for December delivery added 25 cents to end the session at $54.15 a barrel on the New York Mercantile Exchange, the highest level in eight months. Total volume traded was about 17 percent below the 100-day average.

Oil exports resumed from Iraq's Kurdish region after halting earlier Monday, a port agent said, highlighting uncertainty about pipeline shipments from OPEC's second-biggest producer.

The halt came days after Iraqi troops captured oil fields from Kurdish fighters in northern Iraq's disputed Kirkuk province. Shipments by pipeline averaged 264,000 barrels a day before the stoppage, less than half their normal daily level of 600,000 barrels. Exports from Kirkuk, which had been flowing through the same pipeline network to Ceyhan, remained halted as of Monday, the port agent said.

Oil-market news:

- Cushing, Oklahoma crude stockpiles declined 150,000 barrels last week, according to a forecast compiled by Bloomberg.
- Iraq added a fifth offshore crude-exporting facility with a capacity of 900,000 barrels a day to boost shipments by sea, the nation's oil ministry said in an emailed statement, citing Minister Jabbar al-Luaibi.
- The U.A.E. is disclosing oil allocations to customers every month, and other countries should follow suit, Energy Minister Suhail Al Mazrouei told reporters in Abu Dhabi.

— With assistance by Anthony Dipaola, Heesu Lee, and Grant Smith

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Oil Investors Roll the Dice on OPEC After Saudi Prince Ups the Ante

By **Jessica Summers**
October 27, 2017, 7:00 PM EDT
Updated on October 30, 2017, 12:47 PM EDT

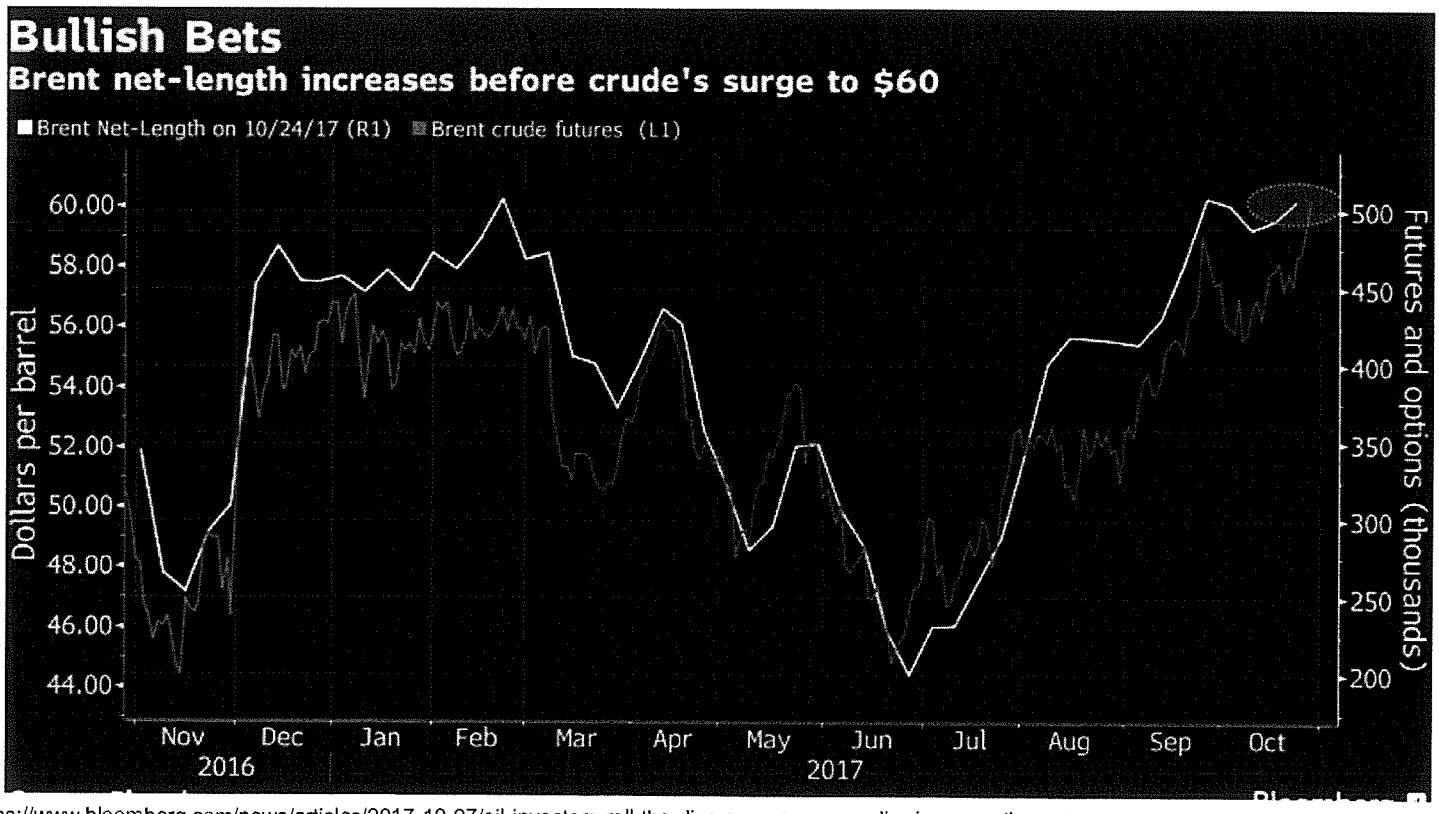
- Money managers' Brent short positions drop to eight-month low
- Prince Mohammed signals he supports extension of output cuts

The OPEC trade is back, and Saudi Arabia is in the driver's seat.

Just before the de facto OPEC leader doubled down on its plan to drain the oil glut, propelling Brent crude prices beyond $60 a barrel for the first time since 2015, hedge funds were almost as bullish on the global benchmark as they've ever been. Short-sellers retreated to levels last seen in February, when OPEC production cuts were fueling an oil-price surge.

Saudi Crown Prince Mohammed bin Salman said in an interview with Bloomberg that "of course" he wanted to prolong <https://www.bloomberg.com/news/articles/2017-10-26/saudi-crown-prince-backs-extending-opec-output-cuts-into-2018-j987r4ea> the Organization of Petroleum Exporting Countries' output-reduction deal into 2018. That was after Russia's President Vladimir Putin said an extension should run through at least the end of next year. With the leaders of the world's two biggest oil-exporting countries on board, an agreement is seen as all but certain at a meeting in Vienna next month.

"We have evidence that people are positioned long into OPEC in November; the consensus trade on the street is that they'll extend cuts," Chris Kettenmann, chief energy strategist at Macro Risk Advisors LLC, said in an interview in New York. The prince's support has led to more seriousness around a potential extension and "it makes it very hard to be aggressively short."



Source: Bloomberg Bloomberg

The fundamentals are looking brighter, too. U.S. crude inventories are near the lowest levels since January 2016. Saudi Arabia's minister of energy and industry, Khalid Al-Falih, said oil demand is more resilient than people think, and Statoil ASA <https://www.bloomberg.com/quote/STL:NO> 's Chief Executive Officer Eldar Saetre said the market is "definitely balancing."

There's a stronger belief that the "supply-demand set-up has turned the corner, particularly with the push by the Saudis to keep the deal going and to drain global inventories," said John Kilduff, a partner at Again Capital LLC, a New York-based hedge fund. "It's worth betting that prices will go higher."

For a story on OPEC's strategy for exiting the oil-cuts deal, click here <https://www.bloomberg.com/news/articles/2017-10-24/opec-is-said-to-work-on-exit-strategy-alongside-cuts-extension>

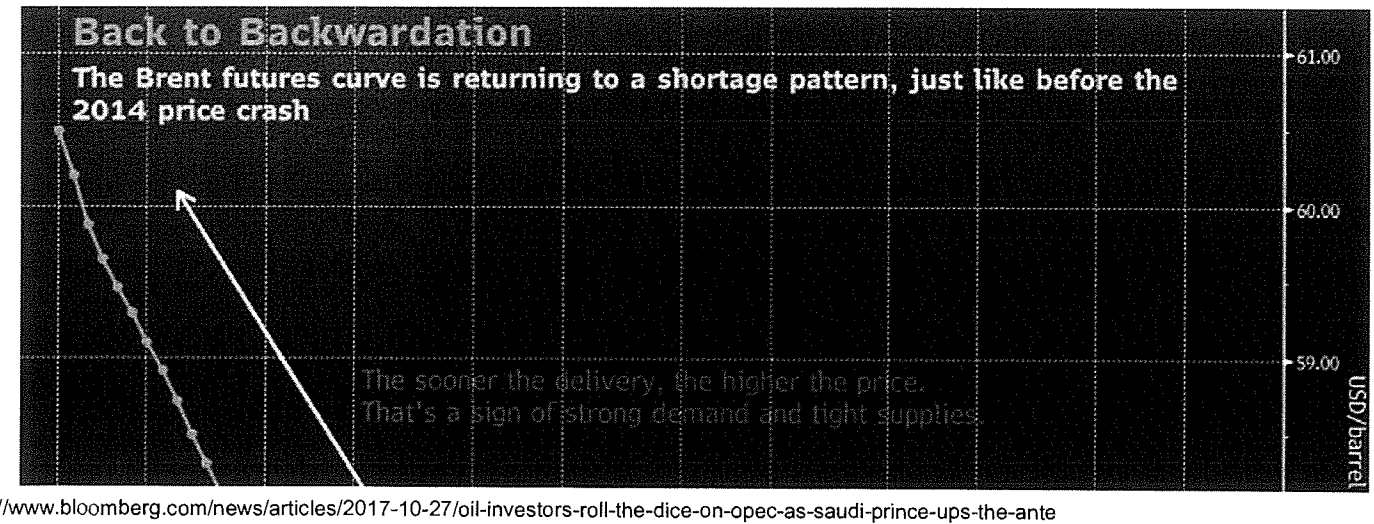
Things started going south in the oil market in March as concern over rising U.S. stockpiles overshadowed confidence in OPEC's efforts. Hedge-fund bets and rising futures indicate that the confidence is coming back.

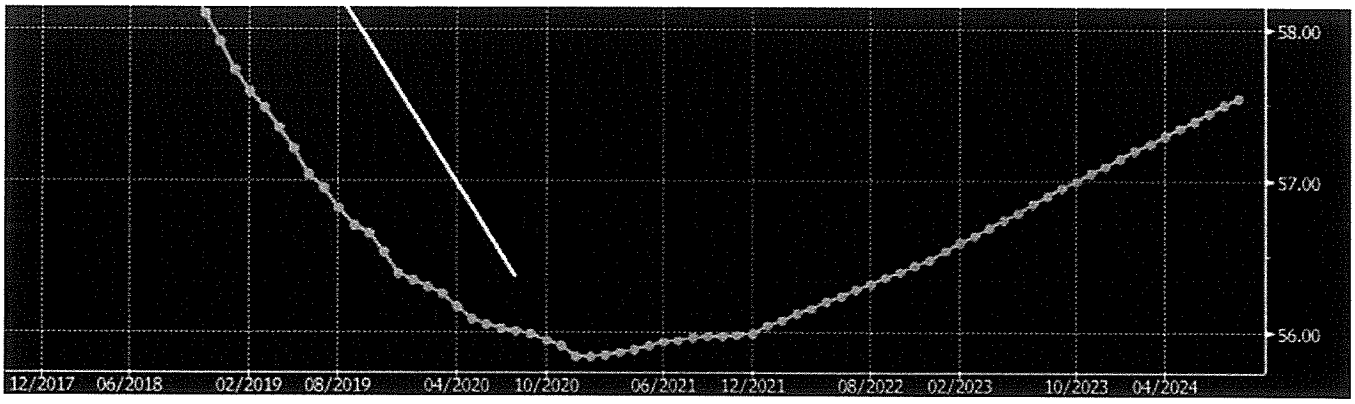
Hedge funds boosted their Brent net-long position -- the difference between bets on a price increase and wagers on a drop -- by 2.6 percent to 506,737 contracts in the week ended Oct. 24, according to data from ICE Futures Europe. That's close to a record at the end of September and the previous high in February. Longs increased by 1.5 percent, while shorts slid 6.6 percent to the lowest since February.

The West Texas Intermediate net-long position rose by 7.2 percent to 234,878 futures and options, the first increase in four weeks, according to data from the U.S. Commodity Futures Trading Commission. Shorts fell 4.2 percent, while longs climbed 2.7 percent to the highest level since April.

In the fuel market, money managers boosted their net-long position on benchmark U.S. gasoline by 11 percent, with long positions rising to the highest level in more than three years. Meanwhile, the net-bullish position on diesel increased 0.8 percent.

Front-month Brent contracts have been trading at a premium to later-dated ones, a market structure known as backwardation that indicates strong demand and tight supplies. That's a shift away from contango, typical of a glut, which had loomed over the market for the past two years. WTI is also in backwardation in some areas of the futures curve.





"People are starting to think that the global inventory situation is better than they thought," Michael Lynch, president of Strategic Energy & Economic Research in Winchester, Massachusetts, said by telephone. "The contango is getting very small, which suggests the markets perceive we're a lot closer to being rebalanced than people had thought earlier."

Brent futures for December delivery were little changed from Friday at $60.42 a barrel as of 4:30 p.m. in London, after reaching $61, the highest since July 2015. WTI rose to as high as $54.46 in New York, the highest since Feb. 27.

Yet optimism around surging oil prices comes with risks. U.S. crude output remains above 9.5 million barrels a day and rose by the most since 2012 in the week ended Oct. 20.

"My concern is what happens now that we're getting to these price-highs where we've typically seen a supply response," Rob Haworth, who helps oversee $142 billion in assets at U.S. Bank Wealth Management in Seattle, said by telephone. "Fundamentally, you should see a supply response and that's going to make it tougher for these bulls to hang in there."

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S&P Global
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Saudi crown prince reiterates backing for OPEC oil output cut extension

Singapore (Platts)--30 Oct 2017 808 am EDT/1208 GMT

Saudi Arabia's powerful crown prince Mohammed bin Salman reaffirmed his backing for an extension to OPEC's crude oil output cut beyond its current March 2018 deadline to rebalance the global market.

"The kingdom affirms its readiness to extend the production cut agreement, which proved its feasibility by rebalancing supply and demand," the crown prince said in a statement.

OPEC members and 10 non-OPEC producers led by Russia, have committed to cut a combined 1.8 million b/d from the market in a bid to lower record high crude oil inventories. The initial six-month deal was extended in May to March 2018.

Mohammed bin Salman, the son of the reigning monarch King Salman al-Saud is the key driver of the OPEC kingpin's oil policy.

"The high demand for oil has absorbed the increase in shale oil production," he added.

"The journey towards restoring balance to markets, led by the kingdom, is proving successful despite the challenges," he said.

While he has backed an extension, the details of any deal, including its length, allocations or any other new terms, will have to be negotiated before the coalition's next meeting November 30 in Vienna.

An agreement is far from certain. Russian energy minister Alexander Novak, who is due to meet Saudi oil minister Khalid al-Falih in Riyadh this week, has said he does not see a need to announce any extension at the November 30 meeting.

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--Edited by Irene Tang, irene.tang@spglobal.com

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Crude oil prices per the US EIA

Year	Month	Day	Date	Cushing, OK WTI Spot Price FOB (Dollars per Barrel)	Europe Brent Spot Price FOB (Dollars per Barrel)
2014	1	2	Jan 02, 2014	95.14	107.94
2014	1	3	Jan 03, 2014	93.66	106.57
2014	1	6	Jan 06, 2014	93.12	106.71
2014	1	7	Jan 07, 2014	93.31	107.01
2014	1	8	Jan 08, 2014	91.9	107.42
2014	1	9	Jan 09, 2014	91.36	107.49
2014	1	10	Jan 10, 2014	92.39	106.44
2014	1	13	Jan 13, 2014	91.45	108.02
2014	1	14	Jan 14, 2014	92.15	107.12
2014	1	15	Jan 15, 2014	93.78	108.09
2014	1	16	Jan 16, 2014	93.54	107.46
2014	1	17	Jan 17, 2014	93.96	108.45
2014	1	20	Jan 20, 2014		108.01
2014	1	21	Jan 21, 2014	94.51	109.17
2014	1	22	Jan 22, 2014	96.35	109.69
2014	1	23	Jan 23, 2014	97.23	109.69
2014	1	24	Jan 24, 2014	96.66	109.14
2014	1	27	Jan 27, 2014	95.82	108.72
2014	1	28	Jan 28, 2014	97.49	109.1
2014	1	29	Jan 29, 2014	97.34	108.83
2014	1	30	Jan 30, 2014	98.25	109.36
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2014	2	4	Feb 04, 2014	97.24	107.04
2014	2	5	Feb 05, 2014	97.4	106.81
2014	2	6	Feb 06, 2014	97.84	108.15
2014	2	7	Feb 07, 2014	99.98	110.12
2014	2	10	Feb 10, 2014	100.12	110.18
2014	2	11	Feb 11, 2014	99.96	109.21
2014	2	12	Feb 12, 2014	100.38	108.62
2014	2	13	Feb 13, 2014	100.27	108.98
2014	2	14	Feb 14, 2014	100.31	108.63
2014	2	18	Feb 18, 2014	102.54	110.14
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2014	12	2	Dec 02, 2014	66.99	71.13
2014	12	3	Dec 03, 2014	67.3	70.13
2014	12	4	Dec 04, 2014	66.73	68.48
2014	12	5	Dec 05, 2014	65.89	68
2014	12	8	Dec 08, 2014	63.13	65.64
2014	12	9	Dec 09, 2014	63.74	66.11
2014	12	10	Dec 10, 2014	60.99	63.32
2014	12	11	Dec 11, 2014	60.01	63.65
2014	12	12	Dec 12, 2014	57.81	61.67
2014	12	15	Dec 15, 2014	55.96	61.09
2014	12	16	Dec 16, 2014	55.97	60.26
2014	12	17	Dec 17, 2014	56.43	59.84
2014	12	18	Dec 18, 2014	54.18	58.81
2014	12	19	Dec 19, 2014	56.91	58.87
2014	12	22	Dec 22, 2014	55.25	58.31
2014	12	23	Dec 23, 2014	56.78	59.07
2014	12	24	Dec 24, 2014	55.7	58.67
2014	12	26	Dec 26, 2014	54.59	58.72
2014	12	29	Dec 29, 2014	53.46	57.86
2014	12	30	Dec 30, 2014	54.14	55.6
2014	12	31	Dec 31, 2014	53.45	55.27
2015	1	2	Jan 02, 2015	52.72	55.38

2015	1	5	Jan 05, 2015	50.05	51.08
2015	1	6	Jan 06, 2015	47.98	50.12
2015	1	7	Jan 07, 2015	48.69	49.06
2015	1	8	Jan 08, 2015	48.8	49.43
2015	1	9	Jan 09, 2015	48.35	47.64
2015	1	12	Jan 12, 2015	46.06	46.9
2015	1	13	Jan 13, 2015	45.92	45.13
2015	1	14	Jan 14, 2015	48.49	45.82
2015	1	15	Jan 15, 2015	46.37	47.66
2015	1	16	Jan 16, 2015	48.49	47.38
2015	1	20	Jan 20, 2015	46.79	46.49
2015	1	21	Jan 21, 2015	47.85	46.5
2015	1	22	Jan 22, 2015	45.93	46.09
2015	1	23	Jan 23, 2015	45.26	46.69
2015	1	26	Jan 26, 2015	44.8	46.07
2015	1	27	Jan 27, 2015	45.84	46.55
2015	1	28	Jan 28, 2015	44.08	47.07
2015	1	29	Jan 29, 2015	44.12	46.61
2015	1	30	Jan 30, 2015	47.79	47.52
2015	2	2	Feb 02, 2015	49.25	51.74
2015	2	3	Feb 03, 2015	53.04	54.41
2015	2	4	Feb 04, 2015	48.45	55.07
2015	2	5	Feb 05, 2015	50.48	55.98
2015	2	6	Feb 06, 2015	51.66	55.88
2015	2	9	Feb 09, 2015	52.99	57
2015	2	10	Feb 10, 2015	50.06	55.79
2015	2	11	Feb 11, 2015	48.8	53.48
2015	2	12	Feb 12, 2015	51.17	56.23
2015	2	13	Feb 13, 2015	52.66	60.33
2015	2	16	Feb 16, 2015		61.57
2015	2	17	Feb 17, 2015	53.56	60.78
2015	2	18	Feb 18, 2015	52.13	60.72
2015	2	19	Feb 19, 2015	51.12	58.78
2015	2	20	Feb 20, 2015	49.95	60.99
2015	2	23	Feb 23, 2015	49.56	59.78
2015	2	24	Feb 24, 2015	48.48	60.33
2015	2	25	Feb 25, 2015	50.25	59.77
2015	2	26	Feb 26, 2015	47.65	61.39
2015	2	27	Feb 27, 2015	49.84	61.89
2015	3	2	Mar 02, 2015	49.59	60.75
2015	3	3	Mar 03, 2015	50.43	61.18
2015	3	4	Mar 04, 2015	51.53	59.18
2015	3	5	Mar 05, 2015	50.76	60.33
2015	3	6	Mar 06, 2015	49.61	59.15
2015	3	9	Mar 09, 2015	49.95	58.67
2015	3	10	Mar 10, 2015	48.42	55.95
2015	3	11	Mar 11, 2015	48.06	56.46
2015	3	12	Mar 12, 2015	47.12	56.66
2015	3	13	Mar 13, 2015	44.88	54.8
2015	3	16	Mar 16, 2015	43.93	52
2015	3	17	Mar 17, 2015	43.39	52.17
2015	3	18	Mar 18, 2015	44.63	52.59

2015	3	19	Mar 19, 2015	44.02	52.96
2015	3	20	Mar 20, 2015	46	53.88
2015	3	23	Mar 23, 2015	47.4	53.82
2015	3	24	Mar 24, 2015	47.03	53.61
2015	3	25	Mar 25, 2015	48.75	54.18
2015	3	26	Mar 26, 2015	51.41	57.02
2015	3	27	Mar 27, 2015	48.83	56.44
2015	3	30	Mar 30, 2015	48.66	53.99
2015	3	31	Mar 31, 2015	47.72	53.69
2015	4	1	Apr 01, 2015	50.12	55.73
2015	4	2	Apr 02, 2015	49.13	55.73
2015	4	6	Apr 06, 2015	52.08	55.73
2015	4	7	Apr 07, 2015	53.95	57.55
2015	4	8	Apr 08, 2015	50.44	56.42
2015	4	9	Apr 09, 2015	50.79	56.04
2015	4	10	Apr 10, 2015	51.63	56.82
2015	4	13	Apr 13, 2015	51.95	57.14
2015	4	14	Apr 14, 2015	53.3	57.69
2015	4	15	Apr 15, 2015	56.25	59.32
2015	4	16	Apr 16, 2015	56.69	60.13
2015	4	17	Apr 17, 2015	55.71	61.31
2015	4	20	Apr 20, 2015	56.37	61.2
2015	4	21	Apr 21, 2015	55.58	60.12
2015	4	22	Apr 22, 2015	56.17	60.12
2015	4	23	Apr 23, 2015	56.59	62.66
2015	4	24	Apr 24, 2015	55.98	62.96
2015	4	27	Apr 27, 2015	55.56	62.86
2015	4	28	Apr 28, 2015	57.05	62.61
2015	4	29	Apr 29, 2015	58.55	63.97
2015	4	30	Apr 30, 2015	59.62	63.9
2015	5	1	May 01, 2015	59.1	64.13
2015	5	4	May 04, 2015	58.92	64.62
2015	5	5	May 05, 2015	60.38	65.44
2015	5	6	May 06, 2015	60.93	66.22
2015	5	7	May 07, 2015	58.99	64.93
2015	5	8	May 08, 2015	59.41	63.82
2015	5	11	May 11, 2015	59.23	62.82
2015	5	12	May 12, 2015	60.72	65.09
2015	5	13	May 13, 2015	60.5	66.33
2015	5	14	May 14, 2015	59.89	65.58
2015	5	15	May 15, 2015	59.73	64.69
2015	5	18	May 18, 2015	59.44	65.15
2015	5	19	May 19, 2015	57.3	63.48
2015	5	20	May 20, 2015	58.96	63.52
2015	5	21	May 21, 2015	60.18	64.7
2015	5	22	May 22, 2015	58.88	64.7
2015	5	26	May 26, 2015	57.29	61.65
2015	5	27	May 27, 2015	57.51	61.35
2015	5	28	May 28, 2015	57.69	60.12
2015	5	29	May 29, 2015	60.25	63.16
2015	6	1	Jun 01, 2015	60.24	62.87
2015	6	2	Jun 02, 2015	61.3	63.14

2015	6	3	Jun 03, 2015	59.67	62.78
2015	6	4	Jun 04, 2015	58	60.34
2015	6	5	Jun 05, 2015	59.11	60.36
2015	6	8	Jun 08, 2015	58.15	61.33
2015	6	9	Jun 09, 2015	60.15	63.23
2015	6	10	Jun 10, 2015	61.36	64.68
2015	6	11	Jun 11, 2015	60.74	63.76
2015	6	12	Jun 12, 2015	59.96	63.19
2015	6	15	Jun 15, 2015	59.53	60.99
2015	6	16	Jun 16, 2015	60.01	60.75
2015	6	17	Jun 17, 2015	59.89	60.75
2015	6	18	Jun 18, 2015	60.41	61.37
2015	6	19	Jun 19, 2015	59.62	59.41
2015	6	22	Jun 22, 2015	60.01	60.54
2015	6	23	Jun 23, 2015	61.05	61.67
2015	6	24	Jun 24, 2015	60.01	61.63
2015	6	25	Jun 25, 2015	59.59	60.24
2015	6	26	Jun 26, 2015	59.41	60.14
2015	6	29	Jun 29, 2015	58.34	59.03
2015	6	30	Jun 30, 2015	59.48	60.31
2015	7	1	Jul 01, 2015	56.94	61.65
2015	7	2	Jul 02, 2015	56.93	61.73
2015	7	3	Jul 03, 2015		59.06
2015	7	6	Jul 06, 2015	52.48	57.19
2015	7	7	Jul 07, 2015	52.33	54.72
2015	7	8	Jul 08, 2015	51.61	55.7
2015	7	9	Jul 09, 2015	52.76	57.83
2015	7	10	Jul 10, 2015	52.74	57.72
2015	7	13	Jul 13, 2015	52.19	57.63
2015	7	14	Jul 14, 2015	53.05	57.2
2015	7	15	Jul 15, 2015	51.4	57.34
2015	7	16	Jul 16, 2015	50.9	57.31
2015	7	17	Jul 17, 2015	50.88	56.38
2015	7	20	Jul 20, 2015	50.11	56.42
2015	7	21	Jul 21, 2015	50.59	55.94
2015	7	22	Jul 22, 2015	49.27	56.36
2015	7	23	Jul 23, 2015	48.11	55.76
2015	7	24	Jul 24, 2015	47.98	54.29
2015	7	27	Jul 27, 2015	47.17	54.07
2015	7	28	Jul 28, 2015	47.97	54.3
2015	7	29	Jul 29, 2015	48.77	54.73
2015	7	30	Jul 30, 2015	48.53	54.29
2015	7	31	Jul 31, 2015	47.11	53.29
2015	8	3	Aug 03, 2015	45.25	49.49
2015	8	4	Aug 04, 2015	45.75	49.08
2015	8	5	Aug 05, 2015	45.13	49.04
2015	8	6	Aug 06, 2015	44.69	47.8
2015	8	7	Aug 07, 2015	43.87	47.54
2015	8	10	Aug 10, 2015	44.94	48.3
2015	8	11	Aug 11, 2015	43.11	47.33
2015	8	12	Aug 12, 2015	43.22	48.29
2015	8	13	Aug 13, 2015	42.27	48.01

2015	8	14	Aug 14, 2015	42.45	47.79
2015	8	17	Aug 17, 2015	41.93	47.77
2015	8	18	Aug 18, 2015	42.58	47
2015	8	19	Aug 19, 2015	40.75	45.75
2015	8	20	Aug 20, 2015	41	45.63
2015	8	21	Aug 21, 2015	40.45	43.84
2015	8	24	Aug 24, 2015	38.22	41.59
2015	8	25	Aug 25, 2015	39.15	41.86
2015	8	26	Aug 26, 2015	38.5	41.76
2015	8	27	Aug 27, 2015	42.47	44.46
2015	8	28	Aug 28, 2015	45.29	47.97
2015	8	31	Aug 31, 2015	49.2	
2015	9	1	Sep 01, 2015	45.38	48.8
2015	9	2	Sep 02, 2015	46.3	47.67
2015	9	3	Sep 03, 2015	46.75	50.41
2015	9	4	Sep 04, 2015	46.02	48.59
2015	9	7	Sep 07, 2015		46.42
2015	9	8	Sep 08, 2015	45.92	48.88
2015	9	9	Sep 09, 2015	44.13	48.04
2015	9	10	Sep 10, 2015	45.85	47.77
2015	9	11	Sep 11, 2015	44.75	46.87
2015	9	14	Sep 14, 2015	44.07	45.87
2015	9	15	Sep 15, 2015	44.58	45.91
2015	9	16	Sep 16, 2015	47.12	49.35
2015	9	17	Sep 17, 2015	46.93	48.27
2015	9	18	Sep 18, 2015	44.71	47.28
2015	9	21	Sep 21, 2015	46.67	47.64
2015	9	22	Sep 22, 2015	46.17	46.69
2015	9	23	Sep 23, 2015	44.53	48
2015	9	24	Sep 24, 2015	44.94	47.06
2015	9	25	Sep 25, 2015	45.55	47.28
2015	9	28	Sep 28, 2015	44.4	46.04
2015	9	29	Sep 29, 2015	45.24	47.58
2015	9	30	Sep 30, 2015	45.06	47.29
2015	10	1	Oct 01, 2015	44.75	47.48
2015	10	2	Oct 02, 2015	45.54	46.55
2015	10	5	Oct 05, 2015	46.28	49.45
2015	10	6	Oct 06, 2015	48.53	51.34
2015	10	7	Oct 07, 2015	47.86	51.66
2015	10	8	Oct 08, 2015	49.46	52.13
2015	10	9	Oct 09, 2015	49.67	52.08
2015	10	12	Oct 12, 2015	47.09	50.95
2015	10	13	Oct 13, 2015	46.7	48.94
2015	10	14	Oct 14, 2015	46.63	48.25
2015	10	15	Oct 15, 2015	46.38	47.87
2015	10	16	Oct 16, 2015	47.3	48.96
2015	10	19	Oct 19, 2015	45.91	47.51
2015	10	20	Oct 20, 2015	45.84	46.93
2015	10	21	Oct 21, 2015	45.22	46.72
2015	10	22	Oct 22, 2015	44.9	46.59
2015	10	23	Oct 23, 2015	43.91	46.3
2015	10	26	Oct 26, 2015	43.19	46.57

2015	10	27	Oct 27, 2015	43.21	45.54
2015	10	28	Oct 28, 2015	45.93	47.6
2015	10	29	Oct 29, 2015	46.02	48.04
2015	10	30	Oct 30, 2015	46.6	48
2015	11	2	Nov 02, 2015	46.12	47.91
2015	11	3	Nov 03, 2015	47.88	48
2015	11	4	Nov 04, 2015	46.32	46.96
2015	11	5	Nov 05, 2015	45.27	47.19
2015	11	6	Nov 06, 2015	44.32	46.09
2015	11	9	Nov 09, 2015	43.87	45.38
2015	11	10	Nov 10, 2015	44.23	46.44
2015	11	11	Nov 11, 2015	42.95	44.98
2015	11	12	Nov 12, 2015	41.74	44.98
2015	11	13	Nov 13, 2015	40.69	41.98
2015	11	16	Nov 16, 2015	41.68	40.28
2015	11	17	Nov 17, 2015	40.73	41.28
2015	11	18	Nov 18, 2015	40.75	41.45
2015	11	19	Nov 19, 2015	40.55	42.22
2015	11	20	Nov 20, 2015	39.39	42.49
2015	11	23	Nov 23, 2015	39.27	43.7
2015	11	24	Nov 24, 2015	40.89	44.38
2015	11	25	Nov 25, 2015	41.22	43.56
2015	11	26	Nov 26, 2015		43.55
2015	11	27	Nov 27, 2015	40.57	43.07
2015	11	30	Nov 30, 2015	40.43	43.73
2015	12	1	Dec 01, 2015	40.58	42.97
2015	12	2	Dec 02, 2015	39.93	41.92
2015	12	3	Dec 03, 2015	41.08	42
2015	12	4	Dec 04, 2015	40	41.44
2015	12	7	Dec 07, 2015	37.64	39.69
2015	12	8	Dec 08, 2015	37.46	39.44
2015	12	9	Dec 09, 2015	37.16	39.04
2015	12	10	Dec 10, 2015	36.76	38.65
2015	12	11	Dec 11, 2015	35.65	36.99
2015	12	14	Dec 14, 2015	36.31	36.51
2015	12	15	Dec 15, 2015	37.32	37.66
2015	12	16	Dec 16, 2015	35.55	36.96
2015	12	17	Dec 17, 2015	34.98	36.29
2015	12	18	Dec 18, 2015	34.72	36.76
2015	12	21	Dec 21, 2015	34.55	35.34
2015	12	22	Dec 22, 2015	36.12	35.26
2015	12	23	Dec 23, 2015	36.76	35.79
2015	12	24	Dec 24, 2015	37.62	37.22
2015	12	28	Dec 28, 2015	36.36	37.08
2015	12	29	Dec 29, 2015	37.88	36.85
2015	12	30	Dec 30, 2015	36.59	35.65
2015	12	31	Dec 31, 2015	37.13	36.61
2016	1	4	Jan 04, 2016	36.81	36.28
2016	1	5	Jan 05, 2016	35.97	35.56
2016	1	6	Jan 06, 2016	33.97	33.89
2016	1	7	Jan 07, 2016	33.29	33.57
2016	1	8	Jan 08, 2016	33.2	31.67

2016	1	11	Jan 11, 2016	31.42	30.14
2016	1	12	Jan 12, 2016	30.42	29.14
2016	1	13	Jan 13, 2016	30.42	28.58
2016	1	14	Jan 14, 2016	31.22	28.84
2016	1	15	Jan 15, 2016	29.45	28.8
2016	1	18	Jan 18, 2016		27.36
2016	1	19	Jan 19, 2016	28.47	27.36
2016	1	20	Jan 20, 2016	26.68	26.01
2016	1	21	Jan 21, 2016	29.55	27.59
2016	1	22	Jan 22, 2016	32.07	30.46
2016	1	25	Jan 25, 2016	30.31	29.82
2016	1	26	Jan 26, 2016	29.54	30.94
2016	1	27	Jan 27, 2016	32.32	31.83
2016	1	28	Jan 28, 2016	33.21	33.01
2016	1	29	Jan 29, 2016	33.66	33.14
2016	2	1	Feb 01, 2016	31.62	32.45
2016	2	2	Feb 02, 2016	29.9	30.98
2016	2	3	Feb 03, 2016	32.29	32.38
2016	2	4	Feb 04, 2016	31.63	32.76
2016	2	5	Feb 05, 2016	30.86	32.35
2016	2	8	Feb 08, 2016	29.71	31.64
2016	2	9	Feb 09, 2016	27.96	30.15
2016	2	10	Feb 10, 2016	27.54	29.64
2016	2	11	Feb 11, 2016	26.19	28.82
2016	2	12	Feb 12, 2016	29.32	31.8
2016	2	16	Feb 16, 2016	29.05	31.09
2016	2	17	Feb 17, 2016	30.68	33.21
2016	2	18	Feb 18, 2016	30.77	33.2
2016	2	19	Feb 19, 2016	29.59	31.66
2016	2	22	Feb 22, 2016	31.37	33.59
2016	2	23	Feb 23, 2016	31.84	31.9
2016	2	24	Feb 24, 2016	30.35	31.5
2016	2	25	Feb 25, 2016	31.4	32.83
2016	2	26	Feb 26, 2016	31.65	35.76
2016	2	29	Feb 29, 2016	32.74	35.92
2016	3	1	Mar 01, 2016	34.39	35.73
2016	3	2	Mar 02, 2016	34.57	36.38
2016	3	3	Mar 03, 2016	34.56	35.75
2016	3	4	Mar 04, 2016	35.91	37.61
2016	3	7	Mar 07, 2016	37.9	39.02
2016	3	8	Mar 08, 2016	36.67	39.16
2016	3	9	Mar 09, 2016	37.62	40.26
2016	3	10	Mar 10, 2016	37.77	38.63
2016	3	11	Mar 11, 2016	38.51	39.41
2016	3	14	Mar 14, 2016	37.2	38.06
2016	3	15	Mar 15, 2016	36.32	37.49
2016	3	16	Mar 16, 2016	38.43	38.38
2016	3	17	Mar 17, 2016	40.17	39.29
2016	3	18	Mar 18, 2016	39.47	39.26
2016	3	21	Mar 21, 2016	39.91	39.91
2016	3	22	Mar 22, 2016	41.45	40.54
2016	3	23	Mar 23, 2016	38.28	38.84

2016	3	24	Mar 24, 2016	38.14	38.33
2016	3	28	Mar 28, 2016	37.99	38.33
2016	3	29	Mar 29, 2016	36.91	36.75
2016	3	30	Mar 30, 2016	36.91	36.75
2016	3	31	Mar 31, 2016	36.94	36.75
2016	4	1	Apr 01, 2016	35.36	36.42
2016	4	4	Apr 04, 2016	34.3	36.05
2016	4	5	Apr 05, 2016	34.52	35.88
2016	4	6	Apr 06, 2016	37.74	37.77
2016	4	7	Apr 07, 2016	37.3	37.15
2016	4	8	Apr 08, 2016	39.74	40.71
2016	4	11	Apr 11, 2016	40.46	41.58
2016	4	12	Apr 12, 2016	42.12	43.02
2016	4	13	Apr 13, 2016	41.7	42.81
2016	4	14	Apr 14, 2016	41.45	43.02
2016	4	15	Apr 15, 2016	40.4	41.32
2016	4	18	Apr 18, 2016	39.74	41.64
2016	4	19	Apr 19, 2016	40.88	43.02
2016	4	20	Apr 20, 2016	42.72	43.09
2016	4	21	Apr 21, 2016	43.18	43.48
2016	4	22	Apr 22, 2016	42.76	43.97
2016	4	25	Apr 25, 2016	41.67	42.97
2016	4	26	Apr 26, 2016	42.52	43.94
2016	4	27	Apr 27, 2016	45.29	44.17
2016	4	28	Apr 28, 2016	46.03	45.6
2016	4	29	Apr 29, 2016	45.98	45.64
2016	5	2	May 02, 2016	44.75	45.82
2016	5	3	May 03, 2016	43.65	43.09
2016	5	4	May 04, 2016	43.77	43.08
2016	5	5	May 05, 2016	44.33	44.39
2016	5	6	May 06, 2016	44.58	44.6
2016	5	9	May 09, 2016	43.45	42.43
2016	5	10	May 10, 2016	44.68	44.01
2016	5	11	May 11, 2016	46.21	46.08
2016	5	12	May 12, 2016	46.64	46.43
2016	5	13	May 13, 2016	46.22	47.05
2016	5	16	May 16, 2016	47.72	48.49
2016	5	17	May 17, 2016	48.29	48.71
2016	5	18	May 18, 2016	48.12	48.93
2016	5	19	May 19, 2016	48.16	47.01
2016	5	20	May 20, 2016	47.67	48.54
2016	5	23	May 23, 2016	48.12	47.77
2016	5	24	May 24, 2016	48.04	48.42
2016	5	25	May 25, 2016	49.1	48.87
2016	5	26	May 26, 2016	49	49.52
2016	5	27	May 27, 2016	49.36	49.09
2016	5	31	May 31, 2016	49.1	49.26
2016	6	1	Jun 01, 2016	49.07	48.81
2016	6	2	Jun 02, 2016	49.14	49.05
2016	6	3	Jun 03, 2016	48.69	48.5
2016	6	6	Jun 06, 2016	49.71	48.94
2016	6	7	Jun 07, 2016	50.37	49.76

2016	6	8	Jun 08, 2016	51.23	50.73
2016	6	9	Jun 09, 2016	50.52	50.59
2016	6	10	Jun 10, 2016	49.09	49.7
2016	6	13	Jun 13, 2016	48.89	49.36
2016	6	14	Jun 14, 2016	48.49	47.88
2016	6	15	Jun 15, 2016	47.92	47.47
2016	6	16	Jun 16, 2016	46.14	45.66
2016	6	17	Jun 17, 2016	48	46.57
2016	6	20	Jun 20, 2016	49.4	48.68
2016	6	21	Jun 21, 2016	48.95	48.18
2016	6	22	Jun 22, 2016	49.16	48.43
2016	6	23	Jun 23, 2016	49.34	48.63
2016	6	24	Jun 24, 2016	46.7	46.69
2016	6	27	Jun 27, 2016	45.8	45.07
2016	6	28	Jun 28, 2016	47.93	46.29
2016	6	29	Jun 29, 2016	49.85	48.4
2016	6	30	Jun 30, 2016	48.27	48.05
2016	7	1	Jul 01, 2016	49.02	47.65
2016	7	4	Jul 04, 2016		48.02
2016	7	5	Jul 05, 2016	46.73	45.64
2016	7	6	Jul 06, 2016	47.37	45.7
2016	7	7	Jul 07, 2016	45.22	45.93
2016	7	8	Jul 08, 2016	45.37	44.53
2016	7	11	Jul 11, 2016	44.73	44.04
2016	7	12	Jul 12, 2016	46.82	46.72
2016	7	13	Jul 13, 2016	44.87	44.67
2016	7	14	Jul 14, 2016	45.64	46.01
2016	7	15	Jul 15, 2016	45.93	46.25
2016	7	18	Jul 18, 2016	45.23	45.35
2016	7	19	Jul 19, 2016	44.64	45.7
2016	7	20	Jul 20, 2016	44.96	45.82
2016	7	21	Jul 21, 2016	43.96	44.99
2016	7	22	Jul 22, 2016	43.41	44.24
2016	7	25	Jul 25, 2016	42.4	43.76
2016	7	26	Jul 26, 2016	42.16	43.56
2016	7	27	Jul 27, 2016	41.9	42.78
2016	7	28	Jul 28, 2016	41.13	41.87
2016	7	29	Jul 29, 2016	41.54	40.76
2016	8	1	Aug 01, 2016	40.05	40.17
2016	8	2	Aug 02, 2016	39.5	40
2016	8	3	Aug 03, 2016	40.8	40.45
2016	8	4	Aug 04, 2016	41.92	41.33
2016	8	5	Aug 05, 2016	41.83	42.47
2016	8	8	Aug 08, 2016	43.06	43.24
2016	8	9	Aug 09, 2016	42.78	43.37
2016	8	10	Aug 10, 2016	41.75	42.19
2016	8	11	Aug 11, 2016	43.51	44.23
2016	8	12	Aug 12, 2016	44.47	45.12
2016	8	15	Aug 15, 2016	45.72	47.31
2016	8	16	Aug 16, 2016	46.57	48.27
2016	8	17	Aug 17, 2016	46.81	48.58
2016	8	18	Aug 18, 2016	48.2	49.46

2016	8	19	Aug 19, 2016	48.48	49.39
2016	8	22	Aug 22, 2016	46.8	48.1
2016	8	23	Aug 23, 2016	47.54	48.7
2016	8	24	Aug 24, 2016	46.29	47.56
2016	8	25	Aug 25, 2016	46.97	49.25
2016	8	26	Aug 26, 2016	47.64	49.66
2016	8	29	Aug 29, 2016	46.97	49.66
2016	8	30	Aug 30, 2016	46.32	47.94
2016	8	31	Aug 31, 2016	44.68	47.94
2016	9	1	Sep 01, 2016	43.17	45.05
2016	9	2	Sep 02, 2016	44.39	45.96
2016	9	5	Sep 05, 2016		46.72
2016	9	6	Sep 06, 2016	44.85	46.21
2016	9	7	Sep 07, 2016	45.47	47
2016	9	8	Sep 08, 2016	47.63	49.23
2016	9	9	Sep 09, 2016	45.88	48.37
2016	9	12	Sep 12, 2016	46.28	47.82
2016	9	13	Sep 13, 2016	44.91	46.48
2016	9	14	Sep 14, 2016	43.62	45.65
2016	9	15	Sep 15, 2016	43.85	45.83
2016	9	16	Sep 16, 2016	43.04	45.26
2016	9	19	Sep 19, 2016	43.34	46.04
2016	9	20	Sep 20, 2016	43.85	45.24
2016	9	21	Sep 21, 2016	45.33	45.99
2016	9	22	Sep 22, 2016	46.1	47.21
2016	9	23	Sep 23, 2016	44.36	46.71
2016	9	26	Sep 26, 2016	45.6	46.61
2016	9	27	Sep 27, 2016	44.65	44.95
2016	9	28	Sep 28, 2016	47.07	45.49
2016	9	29	Sep 29, 2016	47.72	48.43
2016	9	30	Sep 30, 2016	47.72	48.24
2016	10	3	Oct 03, 2016	48.8	48.61
2016	10	4	Oct 04, 2016	48.67	48.81
2016	10	5	Oct 05, 2016	49.75	49.57
2016	10	6	Oct 06, 2016	50.44	50.14
2016	10	7	Oct 07, 2016	49.76	50.49
2016	10	10	Oct 10, 2016	49.76	51.54
2016	10	11	Oct 11, 2016	50.72	50.48
2016	10	12	Oct 12, 2016	50.14	49.53
2016	10	13	Oct 13, 2016	50.47	49.29
2016	10	14	Oct 14, 2016	50.35	48.87
2016	10	17	Oct 17, 2016	49.97	49.31
2016	10	18	Oct 18, 2016	50.3	49.81
2016	10	19	Oct 19, 2016	51.59	51.85
2016	10	20	Oct 20, 2016	50.31	50.42
2016	10	21	Oct 21, 2016	50.61	50.28
2016	10	24	Oct 24, 2016	50.18	49.8
2016	10	25	Oct 25, 2016	49.45	49.08
2016	10	26	Oct 26, 2016	48.75	48.98
2016	10	27	Oct 27, 2016	49.71	49.13
2016	10	28	Oct 28, 2016	48.72	47.78
2016	10	31	Oct 31, 2016	46.83	46.2

2016	11	1	Nov 01, 2016	46.66	45.77
2016	11	2	Nov 02, 2016	45.32	44.26
2016	11	3	Nov 03, 2016	44.66	43.84
2016	11	4	Nov 04, 2016	44.07	43.06
2016	11	7	Nov 07, 2016	44.88	42.83
2016	11	8	Nov 08, 2016	44.96	43.47
2016	11	9	Nov 09, 2016	45.2	43.88
2016	11	10	Nov 10, 2016	44.62	43.67
2016	11	11	Nov 11, 2016	43.39	41.61
2016	11	14	Nov 14, 2016	43.29	41.83
2016	11	15	Nov 15, 2016	45.86	44.15
2016	11	16	Nov 16, 2016	45.56	45.07
2016	11	17	Nov 17, 2016	45.37	44.57
2016	11	18	Nov 18, 2016	45.69	44.41
2016	11	21	Nov 21, 2016	47.48	45.96
2016	11	22	Nov 22, 2016	48.07	46.1
2016	11	23	Nov 23, 2016	46.72	46.54
2016	11	24	Nov 24, 2016		47.54
2016	11	25	Nov 25, 2016	46.72	46.32
2016	11	28	Nov 28, 2016	45.66	46.64
2016	11	29	Nov 29, 2016	45.29	44.68
2016	11	30	Nov 30, 2016	49.41	47.95
2016	12	1	Dec 01, 2016	51.08	52.28
2016	12	2	Dec 02, 2016	51.7	52.35
2016	12	5	Dec 05, 2016	51.72	53.3
2016	12	6	Dec 06, 2016	50.95	52.31
2016	12	7	Dec 07, 2016	49.85	51.9
2016	12	8	Dec 08, 2016	50.84	51.6
2016	12	9	Dec 09, 2016	51.51	52.19
2016	12	12	Dec 12, 2016	52.74	53.99
2016	12	13	Dec 13, 2016	52.99	53.28
2016	12	14	Dec 14, 2016	51.01	53.15
2016	12	15	Dec 15, 2016	50.9	51.72
2016	12	16	Dec 16, 2016	51.93	54.15
2016	12	19	Dec 19, 2016	52.13	53.53
2016	12	20	Dec 20, 2016	52.22	54.56
2016	12	21	Dec 21, 2016	51.44	53.01
2016	12	22	Dec 22, 2016	51.98	54.04
2016	12	23	Dec 23, 2016	52.01	53.93
2016	12	27	Dec 27, 2016	52.82	
2016	12	28	Dec 28, 2016	54.01	54.95
2016	12	29	Dec 29, 2016	53.8	54.97
2016	12	30	Dec 30, 2016	53.75	54.96
2017	1	3	Jan 03, 2017	52.36	55.05
2017	1	4	Jan 04, 2017	53.26	54.57
2017	1	5	Jan 05, 2017	53.77	54.99
2017	1	6	Jan 06, 2017	53.98	55.9
2017	1	9	Jan 09, 2017	51.95	54.39
2017	1	10	Jan 10, 2017	50.82	53.2
2017	1	11	Jan 11, 2017	52.19	53.61
2017	1	12	Jan 12, 2017	53.01	54.51
2017	1	13	Jan 13, 2017	52.36	54.37

2017	1	16	Jan 16, 2017		54.3
2017	1	17	Jan 17, 2017	52.45	54.68
2017	1	18	Jan 18, 2017	51.12	53.77
2017	1	19	Jan 19, 2017	51.39	53.18
2017	1	20	Jan 20, 2017	52.33	55.04
2017	1	23	Jan 23, 2017	52.77	54.8
2017	1	24	Jan 24, 2017	52.38	54.7
2017	1	25	Jan 25, 2017	52.14	54.34
2017	1	26	Jan 26, 2017	53.24	55.89
2017	1	27	Jan 27, 2017	53.18	54.8
2017	1	30	Jan 30, 2017	52.63	54.77
2017	1	31	Jan 31, 2017	52.75	55.25
2017	2	1	Feb 01, 2017	53.9	55.79
2017	2	2	Feb 02, 2017	53.55	55.94
2017	2	3	Feb 03, 2017	53.81	55.92
2017	2	6	Feb 06, 2017	53.01	55.02
2017	2	7	Feb 07, 2017	52.19	53.79
2017	2	8	Feb 08, 2017	52.37	54.42
2017	2	9	Feb 09, 2017	52.99	53.98
2017	2	10	Feb 10, 2017	53.84	55.2
2017	2	13	Feb 13, 2017	52.96	54.15
2017	2	14	Feb 14, 2017	53.21	54.96
2017	2	15	Feb 15, 2017	53.11	54.57
2017	2	16	Feb 16, 2017	53.41	54.16
2017	2	17	Feb 17, 2017	53.41	54.48
2017	2	20	Feb 20, 2017		55.25
2017	2	21	Feb 21, 2017	54.02	56.34
2017	2	22	Feb 22, 2017	53.61	54.9
2017	2	23	Feb 23, 2017	54.48	55.82
2017	2	24	Feb 24, 2017	53.99	54.69
2017	2	27	Feb 27, 2017	54.04	54.65
2017	2	28	Feb 28, 2017	54	53.36
2017	3	1	Mar 01, 2017	53.82	55.72
2017	3	2	Mar 02, 2017	52.63	54.16
2017	3	3	Mar 03, 2017	53.33	54.12
2017	3	6	Mar 06, 2017	53.19	54.73
2017	3	7	Mar 07, 2017	52.68	54.61
2017	3	8	Mar 08, 2017	49.83	53.3
2017	3	9	Mar 09, 2017	48.75	50.65
2017	3	10	Mar 10, 2017	48.05	50.63
2017	3	13	Mar 13, 2017	47.95	50.1
2017	3	14	Mar 14, 2017	47.24	49.6
2017	3	15	Mar 15, 2017	48.34	50.63
2017	3	16	Mar 16, 2017	48.3	50.56
2017	3	17	Mar 17, 2017	48.34	50.58
2017	3	20	Mar 20, 2017	47.79	50.67
2017	3	21	Mar 21, 2017	47.02	50.14
2017	3	22	Mar 22, 2017	47.29	49.56
2017	3	23	Mar 23, 2017	47	50.17
2017	3	24	Mar 24, 2017	47.3	49.97
2017	3	27	Mar 27, 2017	47.02	50.12
2017	3	28	Mar 28, 2017	48.36	50.72

2017	3	29	Mar 29, 2017	49.47	51.36
2017	3	30	Mar 30, 2017	50.3	52.25
2017	3	31	Mar 31, 2017	50.54	52.2
2017	4	3	Apr 03, 2017	50.25	52.04
2017	4	4	Apr 04, 2017	50.99	53.08
2017	4	5	Apr 05, 2017	51.14	53.41
2017	4	6	Apr 06, 2017	51.69	53.62
2017	4	7	Apr 07, 2017	52.25	54.24
2017	4	10	Apr 10, 2017	53.06	54.79
2017	4	11	Apr 11, 2017	53.38	54.73
2017	4	12	Apr 12, 2017	53.12	54.75
2017	4	13	Apr 13, 2017	53.19	55.05
2017	4	17	Apr 17, 2017	52.62	54.79
2017	4	18	Apr 18, 2017	52.46	52.6
2017	4	19	Apr 19, 2017	50.49	52.43
2017	4	20	Apr 20, 2017	50.26	50.66
2017	4	21	Apr 21, 2017	49.64	49.93
2017	4	24	Apr 24, 2017	48.9	49.45
2017	4	25	Apr 25, 2017	49.22	49.37
2017	4	26	Apr 26, 2017	49.22	49.99
2017	4	27	Apr 27, 2017	48.96	49.46
2017	4	28	Apr 28, 2017	49.31	49.46
2017	5	1	May 01, 2017	48.83	50.41
2017	5	2	May 02, 2017	47.65	49.31
2017	5	3	May 03, 2017	47.79	48.82
2017	5	4	May 04, 2017	45.55	47.53
2017	5	5	May 05, 2017	46.23	47.45
2017	5	8	May 08, 2017	46.46	46.61
2017	5	9	May 09, 2017	45.84	47.06
2017	5	10	May 10, 2017	47.28	48.09
2017	5	11	May 11, 2017	47.81	49.18
2017	5	12	May 12, 2017	47.83	49.08
2017	5	15	May 15, 2017	48.86	51.29
2017	5	16	May 16, 2017	48.64	51.21
2017	5	17	May 17, 2017	49.04	51.76
2017	5	18	May 18, 2017	49.36	51.71
2017	5	19	May 19, 2017	50.32	52.78
2017	5	22	May 22, 2017	50.81	53.35
2017	5	23	May 23, 2017	51.12	53.19
2017	5	24	May 24, 2017	50.99	53.29
2017	5	25	May 25, 2017	48.57	52.25
2017	5	26	May 26, 2017	49.58	50.84
2017	5	29	May 29, 2017		52.25
2017	5	30	May 30, 2017	49.63	50.65
2017	5	31	May 31, 2017	48.29	49.4
2017	6	1	Jun 01, 2017	48.32	50.41
2017	6	2	Jun 02, 2017	47.68	48.46
2017	6	5	Jun 05, 2017	47.4	48.25
2017	6	6	Jun 06, 2017	48.13	48.11
2017	6	7	Jun 07, 2017	45.8	47.08
2017	6	8	Jun 08, 2017	45.68	46.3
2017	6	9	Jun 09, 2017	45.82	46.64

2017	6	12	Jun 12, 2017	46.1	47.18
2017	6	13	Jun 13, 2017	46.41	46.95
2017	6	14	Jun 14, 2017	44.79	45.47
2017	6	15	Jun 15, 2017	44.47	45.61
2017	6	16	Jun 16, 2017	44.73	45.7
2017	6	19	Jun 19, 2017	44.24	45.93
2017	6	20	Jun 20, 2017	43.34	43.98
2017	6	21	Jun 21, 2017	42.48	44.62
2017	6	22	Jun 22, 2017	42.53	44.46
2017	6	23	Jun 23, 2017	42.86	44.14
2017	6	26	Jun 26, 2017	43.24	44.09
2017	6	27	Jun 27, 2017	44.25	46.17
2017	6	28	Jun 28, 2017	44.74	46.45
2017	6	29	Jun 29, 2017	44.88	47.02
2017	6	30	Jun 30, 2017	46.02	47.08
2017	7	3	Jul 03, 2017		49.13
2017	7	4	Jul 04, 2017		49.15
2017	7	5	Jul 05, 2017	45.11	47.58
2017	7	6	Jul 06, 2017	45.52	48.53
2017	7	7	Jul 07, 2017	44.25	46.47
2017	7	10	Jul 10, 2017	44.4	46.57
2017	7	11	Jul 11, 2017	45.06	46.68
2017	7	12	Jul 12, 2017	45.48	46.73
2017	7	13	Jul 13, 2017	46.06	47.65
2017	7	14	Jul 14, 2017	46.53	47.89
2017	7	17	Jul 17, 2017	46.02	47.66
2017	7	18	Jul 18, 2017	46.4	47.92
2017	7	19	Jul 19, 2017	47.1	48.34
2017	7	20	Jul 20, 2017	46.73	48.54
2017	7	21	Jul 21, 2017	45.78	47.47
2017	7	24	Jul 24, 2017	46.21	47.81
2017	7	25	Jul 25, 2017	47.77	49.19
2017	7	26	Jul 26, 2017	48.58	50.08
2017	7	27	Jul 27, 2017	49.05	50.67
2017	7	28	Jul 28, 2017	49.72	52
2017	7	31	Jul 31, 2017	50.21	51.99
2017	8	1	Aug 01, 2017	49.19	50.77
2017	8	2	Aug 02, 2017	49.6	52.09
2017	8	3	Aug 03, 2017	49.03	52.88
2017	8	4	Aug 04, 2017	49.57	52.48
2017	8	7	Aug 07, 2017	49.37	51.42
2017	8	8	Aug 08, 2017	49.07	52.18
2017	8	9	Aug 09, 2017	49.59	52.16
2017	8	10	Aug 10, 2017	48.54	52.59
2017	8	11	Aug 11, 2017	48.81	51.47
2017	8	14	Aug 14, 2017	47.59	51.29
2017	8	15	Aug 15, 2017	47.57	49.9
2017	8	16	Aug 16, 2017	46.8	50.39
2017	8	17	Aug 17, 2017	47.07	50.37
2017	8	18	Aug 18, 2017	48.59	50.96
2017	8	21	Aug 21, 2017	47.39	51.94
2017	8	22	Aug 22, 2017	47.65	52.29

2017	8	23	Aug 23, 2017	48.45	52.31
2017	8	24	Aug 24, 2017	47.24	51.73
2017	8	25	Aug 25, 2017	47.65	51.87
2017	8	28	Aug 28, 2017	46.4	51.87
2017	8	29	Aug 29, 2017	46.46	51.64
2017	8	30	Aug 30, 2017	45.96	51.91
2017	8	31	Aug 31, 2017	47.26	52.69
2017	9	1	Sep 01, 2017	47.32	53.15
2017	9	4	Sep 04, 2017		52.6
2017	9	5	Sep 05, 2017	48.63	53.63
2017	9	6	Sep 06, 2017	49.13	54.48
2017	9	7	Sep 07, 2017	49.1	54.16
2017	9	8	Sep 08, 2017	47.44	54.55
2017	9	11	Sep 11, 2017	48.06	54.2
2017	9	12	Sep 12, 2017	48.21	55.06
2017	9	13	Sep 13, 2017	49.3	55.52
2017	9	14	Sep 14, 2017	49.86	56.76
2017	9	15	Sep 15, 2017	49.9	56.18
2017	9	18	Sep 18, 2017	49.88	55.5
2017	9	19	Sep 19, 2017	49.54	56.58
2017	9	20	Sep 20, 2017	50.29	57.2
2017	9	21	Sep 21, 2017	50.58	57.73
2017	9	22	Sep 22, 2017	50.33	58.16
2017	9	25	Sep 25, 2017	51.85	59.42
2017	9	26	Sep 26, 2017	51.59	59.77
2017	9	27	Sep 27, 2017	52.14	58.74
2017	9	28	Sep 28, 2017	51.62	58.8
2017	9	29	Sep 29, 2017	51.67	57.02
2017	10	2	Oct 02, 2017	50.59	55.67
2017	10	3	Oct 03, 2017	50.44	56.12
2017	10	4	Oct 04, 2017	50	56
2017	10	5	Oct 05, 2017	50.79	57.09
2017	10	6	Oct 06, 2017	49.34	55.5
2017	10	9	Oct 09, 2017	49.58	55.29
2017	10	10	Oct 10, 2017	50.93	56.62
2017	10	11	Oct 11, 2017	51.3	56.13
2017	10	12	Oct 12, 2017	50.61	56.13
2017	10	13	Oct 13, 2017	51.43	56.86
2017	10	16	Oct 16, 2017	51.86	57.49
2017	10	17	Oct 17, 2017	51.87	57.63
2017	10	18	Oct 18, 2017	52.05	58.05
2017	10	19	Oct 19, 2017	51.29	57.82
2017	10	20	Oct 20, 2017	51.63	57.89
2017	10	23	Oct 23, 2017	51.91	57.69

Source: US Energy Information Administration

Crude oil prices per the US EIA (monthly)

		Data	
Year	Month	Average of Cushing, OK WTI Spot Price FOB (USD per Barrel)	Average of Europe Brent Spot Price FOB (USD per Barrel)
2014	1	95	108
	2	101	109
	3	101	107
	4	102	108
	5	102	110
	6	106	112
	7	104	107
	8	97	102
	9	93	97
	10	84	87
	11	76	79
	12	59	62
2014 Total		93	99
2015	1	47	48
	2	51	58
	3	48	56
	4	54	60
	5	59	64
	6	60	61
	7	51	57
	8	43	47
	9	45	48
	10	46	48
	11	42	44
	12	37	38
2015 Total		49	52
2016	1	32	31
	2	30	32
	3	38	38
	4	41	42
	5	47	47
	6	49	48
	7	45	45
	8	45	46
	9	45	47
	10	50	50
	11	46	45
	12	52	53
2016 Total		43	44
2017	1	53	55
	2	53	55
	3	49	52
	4	51	52
	5	48	50
	6	45	46
	7	47	48
	8	48	52
	9	50	56
	10	51	57
2017 Total		49	52
Grand Total		59	62

Source: US Energy Information Administration

PSAC working energy

Leading Energy Services, Supply, Manufacturing and Innovation

2018 Canadian Drilling Activity Forecast

Mark Salkeld
President and CEO

October 31, 2017

Presentation Overview

- Canadian Petroleum Services Sector
- 2017 Canadian Drilling Activity Forecast Update
- 2018 Canadian Drilling Activity Forecast
- Industry Trends

PSAC working energy

2017 Commodity Price Assumptions

Original Forecast (November 2016)

• Average gas price (AECO)	CDN $2.50/mcf
• Average oil price (WTI)	US $52.00/ barrel
• Dollar (CAD$ vs USD$)	$0.76

Revised Forecast (October 2017)

• Average gas price (AECO)	CDN $2.35/mcf
• Average oil price (WTI)	US $49.00/ barrel
• Dollar (CAD$ vs USD$)	$0.79

PSAC working energy

2017 Canadian Drilling Activity Forecast

	Rigs Released
Original Forecast (Nov. 2016)	4,175
Revised Forecast (Oct. 2016)	7,550
Overall Change ⬆	3,375

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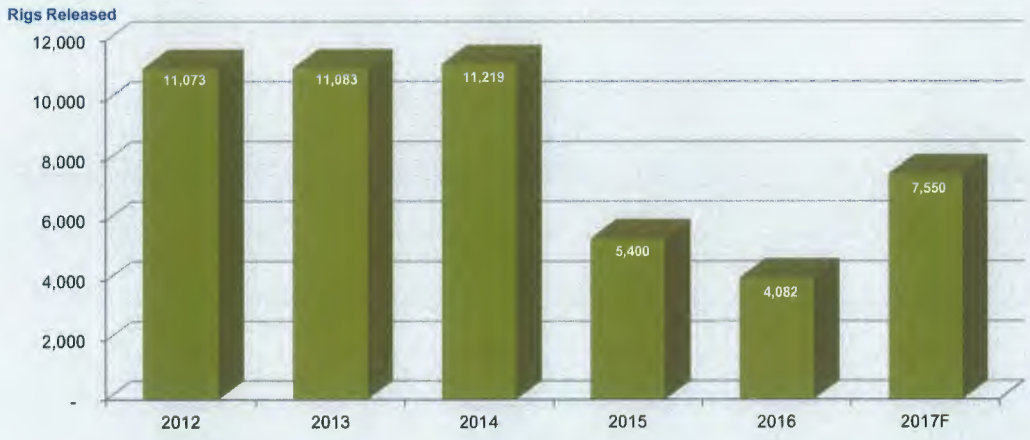
PSAC working energy

Wells Drilled By Year (2012 – 2017F)



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PSAC working energy

2017 Forecast vs 2016 by Province

	2016	2017F	Change
AB	2,013	3,846	1,833
SK	1,629	2,847	1,218
BC	344	612	268
MB	81	230	149
Other	15	15	0
Total	**4,082**	**7,550**	**3,486**

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PSAC working energy

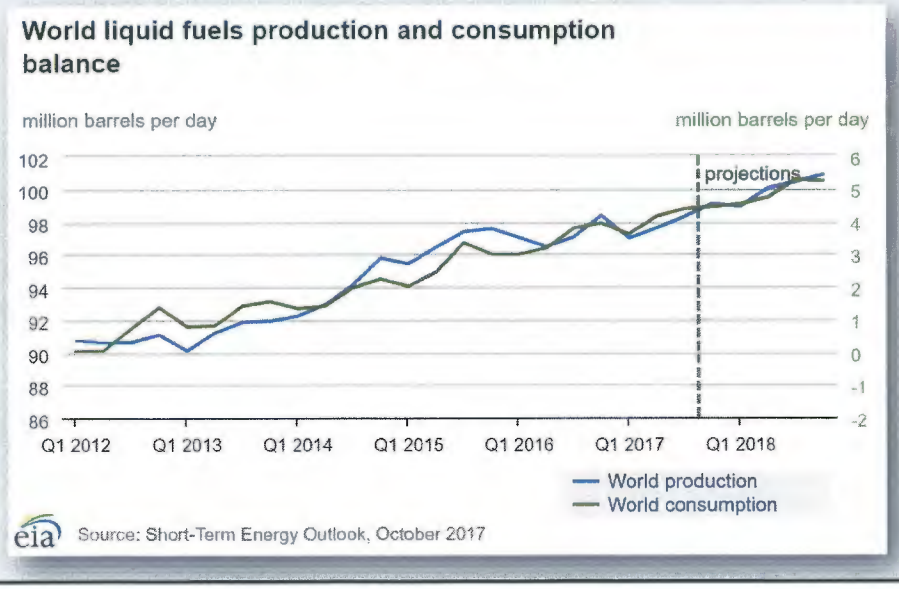
2018 Canadian Drilling Activity Forecast Update

Major Variables

- Commodity Prices
- Decline in Capital Investment
- North American Production
- Policy and Regulatory Uncertainty
- Canada's Global Competitiveness
- Market Access

PSAC working energy

Production and Consumption



PSAC working energy

2018 Commodity Price Assumptions

Average gas price (AECO)	CDN $2.50/ mcf
Average oil price (WTI)	US $53.00/ barrel
January – June:	US $50.00 - $53.00 / barrel
July – December:	US $53.00 - $56.00 / barrel
Dollar (CAD$ vs USD$)	$0.82

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PSAC working energy

2018 Canadian Drilling Activity Forecast

	Rigs Released
Final 2017 Forecast	7,550
2018 Forecast	7,900
Overall Change	↑ 350

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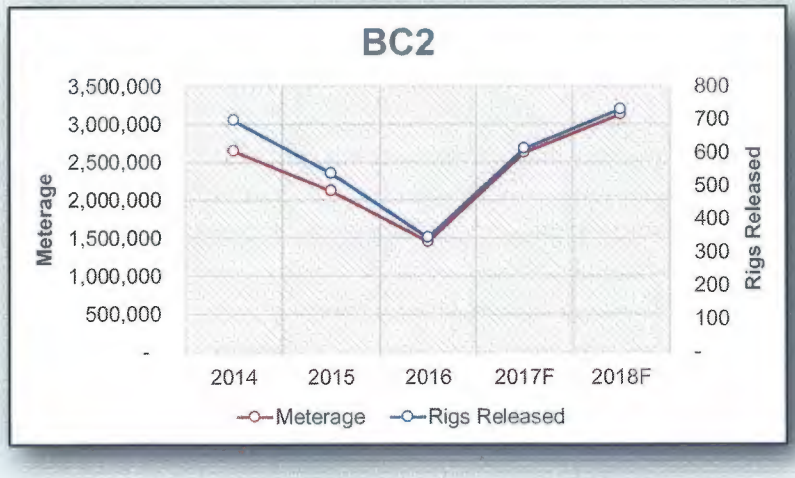
PSAC working energy

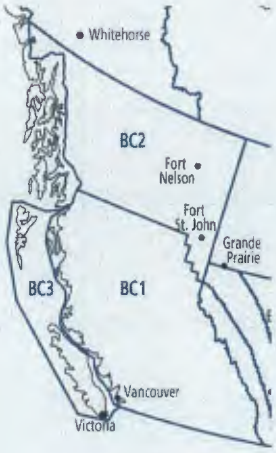
2018F vs 2017F Forecast by Province

	2017F	2018F	Change
AB	3,846	3,998	↑ 4.0%
SK	2,847	2,931	↑ 3.0%
BC	612	730	↑ 19.3%
MB	230	230	-
Other	15	11	↓ 26.7%
Total	**7,550**	**7,900**	↑ **4.6%**

PSAC working energy

Trends in British Columbia





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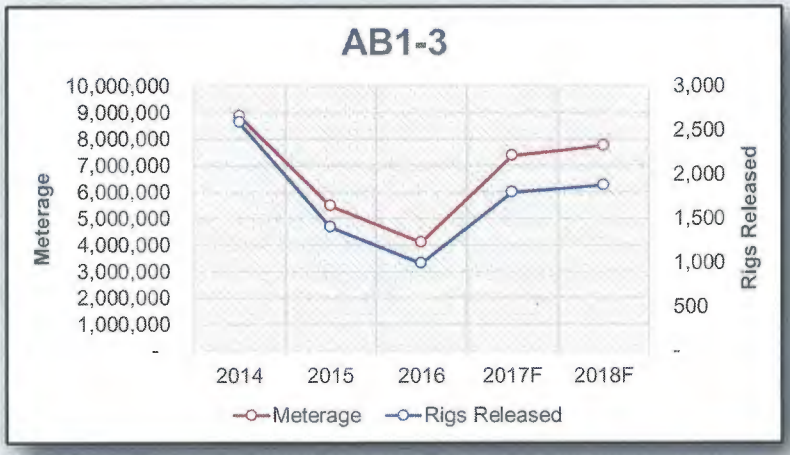
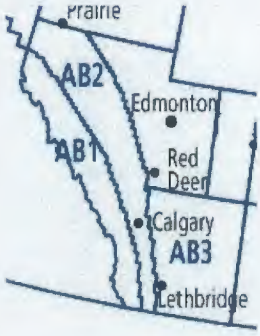
Trends in Alberta





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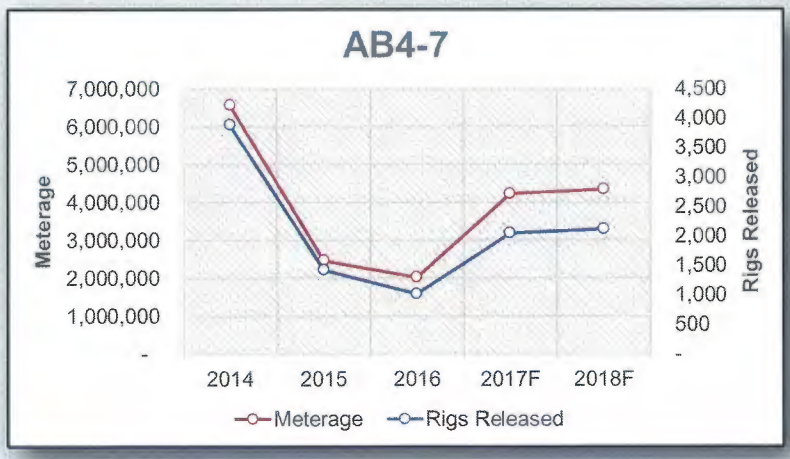
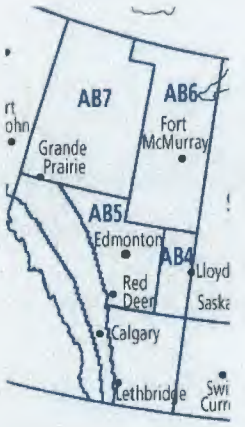
Trends in Alberta *(continued)*





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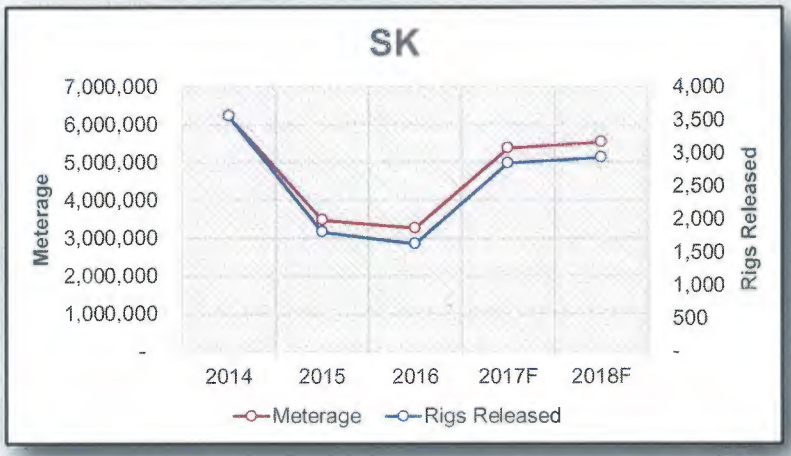
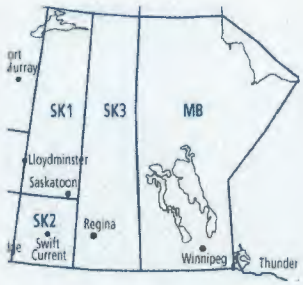
Trends in Saskatchewan





17

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Meterage

	Total Wells	Avg. m/Well	Total Meters
2014	11,219	2,247	25,209,000
2015	5,400	2,583	13,948,000
2016	4,082	2,703	11,034,000
2017F	7,550	2,653	20,030,000
2018F	7,900	2,678	21,156,000

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Meterage – Regional Stats, 2017 YTD

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Rig Operating Days (Western Canada)

	2014	2015	2016	2017F	2018F
BC	15,933	11,110	5,622	8,131	9,689
AB	66,730	32,243	21,015	42,643	44,524
SK	22,162	9,350	7,549	13,101	13,486
MB	2,960	1,185	440	1,189	1,189
Total	107,785	53,888	34,626	65,064	68,888
Days/Well	**9.6**	**10.0**	**8.5**	**8.6**	**8.7**

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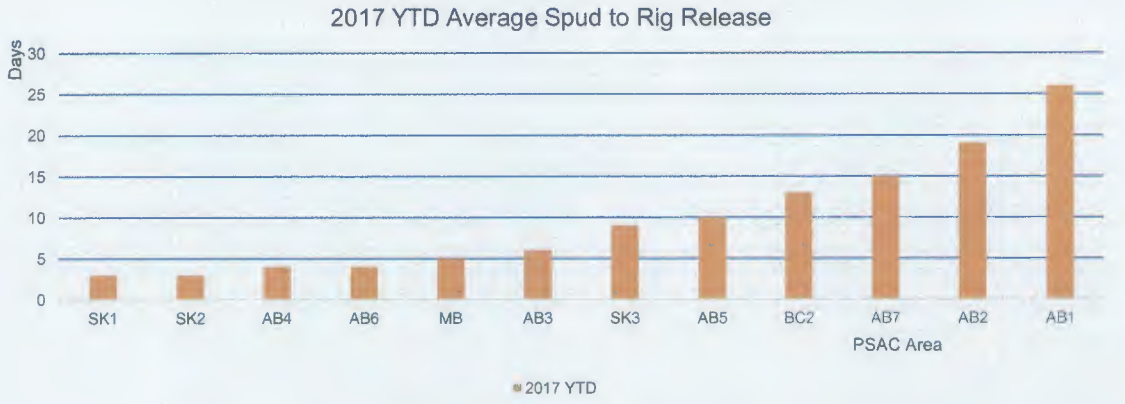
2017 YTD Average Spud to Rig Release



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Industry Trends & Analysis

Industry Trends

- Sector Adjustments and Forward Looking Trends
- Technology and Innovation – Clean Tech
- Well Decommissioning – Geo Thermal
- Looking elsewhere

PSAC working energy

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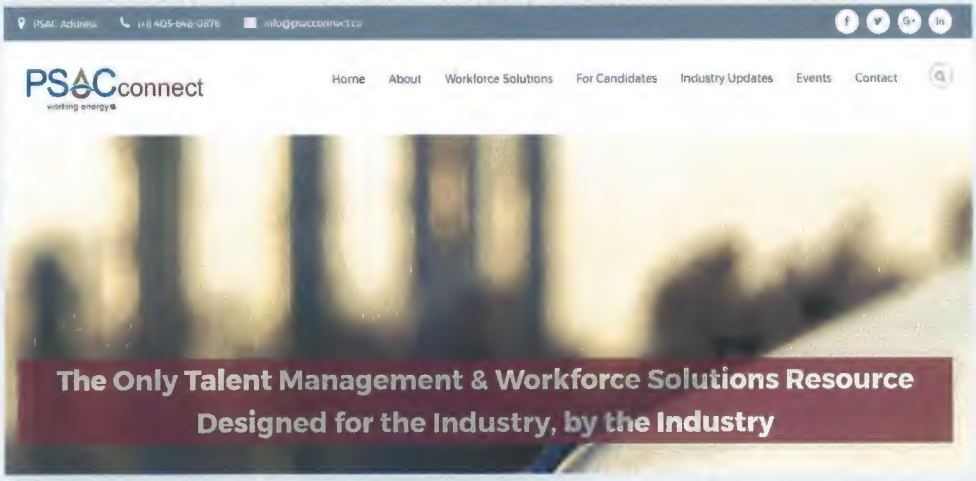

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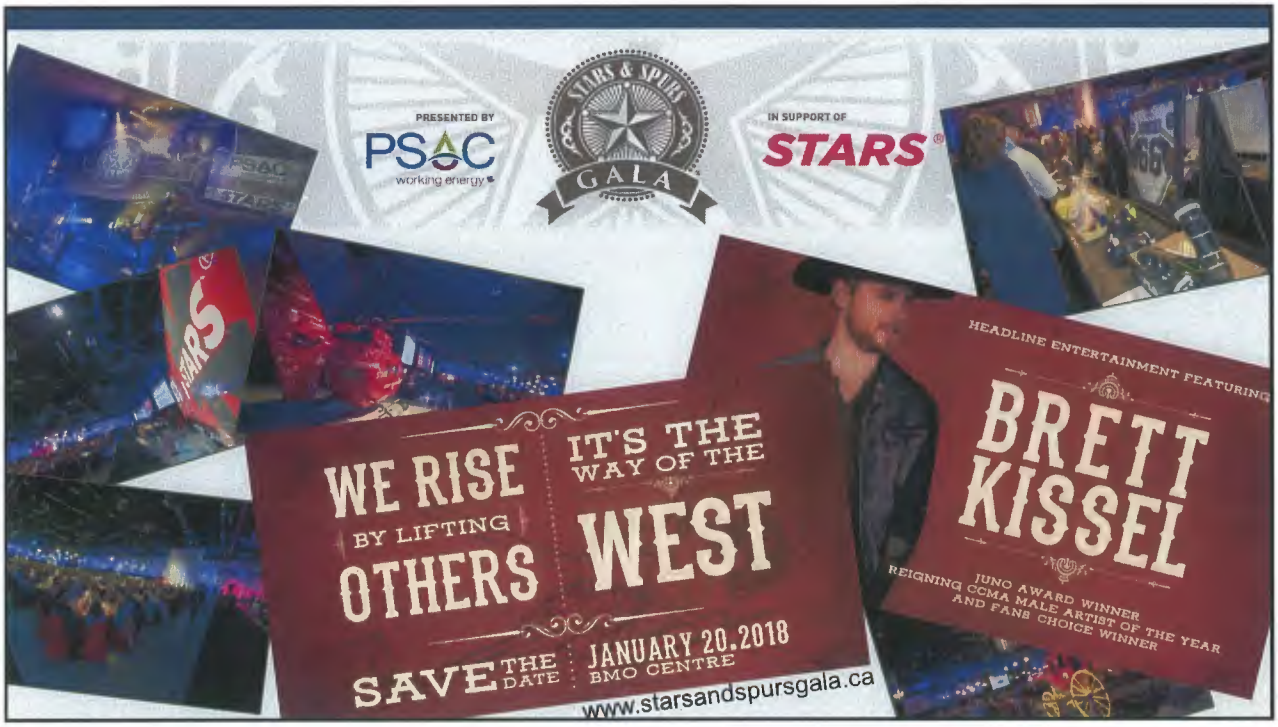
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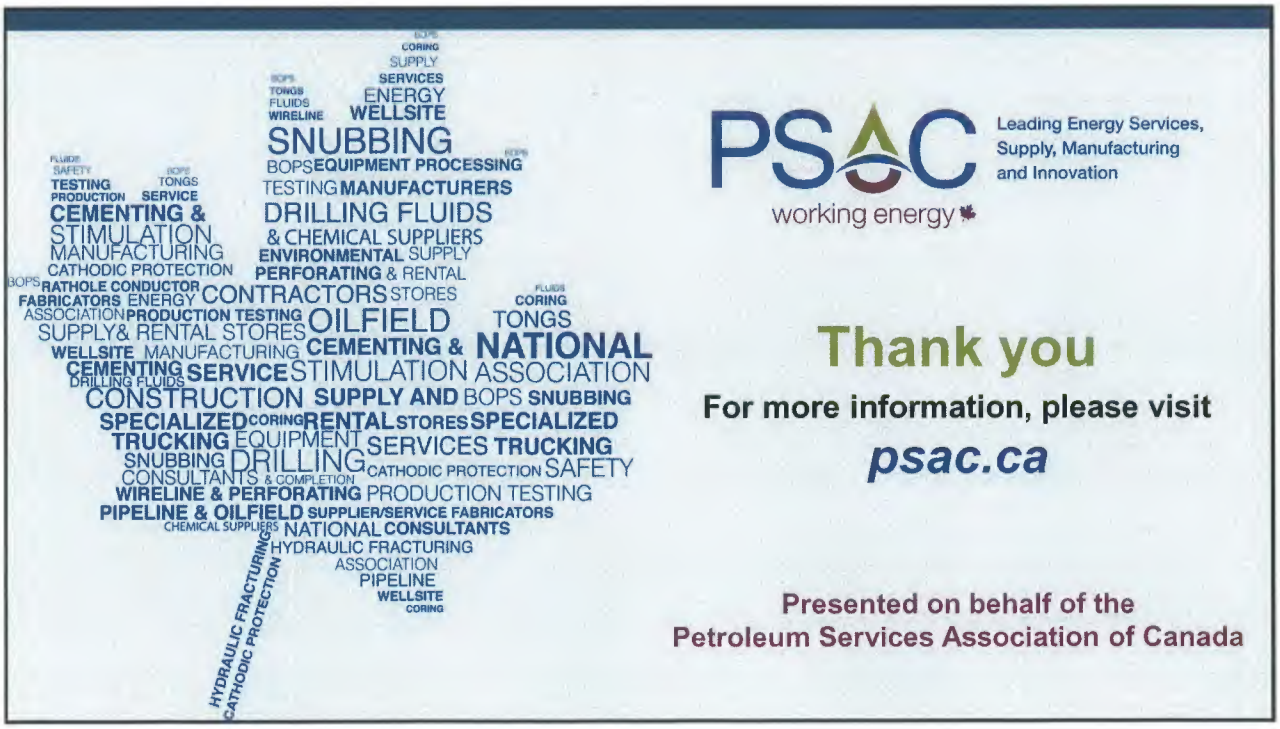
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DRILLING FLUIDS
& CHEMICAL SUPPLIERS
ENVIRONMENTAL SUPPLY
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STIMULATION
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Daily Oil Bulletin

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U.S. Production Growth Will Prevent Oil Price Recovery In 2018, Analyst Says

BY PAT ROCHE (/AUTHOR/PAT-ROCHE/) – SEPT. 8, 2017 – VIEW ISSUE (/HEADLINES/2017-09-08)

Surging United States crude output will keep prices in the US$45-$55 range next year, and a return to $60 oil is at least two years away.

That's the prediction **Sarp Ozkan**, manager of energy analytics at **Drillinginfo**, delivered at a well-attended **S&P Global Platts** oil and gas outlook lunch in Calgary on Thursday.

"We expect U.S. shale to grow by about a million barrels a day from December to December. The bulk of the growth is coming from the Permian Basin," Ozkan said, but added that U.S. output is also rising in areas such as the Gulf of Mexico where new projects are coming online.

"So the United States is poised to grow [by] a million barrels this year, and that growth is likely, at a $50-$52 sort of price level, going to be 1.2 million barrels a day next year, 1.2-1.3 million barrels a day next year." (All dollar amounts are U.S.)

With the OPEC production quotas set to expire at the end of the first quarter, Ozkan expects supply will continue to overwhelm demand.

"We don't really have the demand ... to soak up all that crude," he said. "So next year is likely a year where we can expect prices to stay in this $45-$50 ... $55 sort of band."

Ozkan said OPEC's adherence to its production quota agreements has been "phenomenal"— more than 80 per cent compliance versus about 50-55 per cent during past production quota agreements.

OPEC output up

However, total OPEC production has grown significantly since March because Nigeria and Libya—both of which are exempt from the production-cutting agreements—increased their combined output by 683,000 bbls a day, he said. Iraq, Saudi Arabia and other countries added another 300,000 bbls a day.

"And we're in a situation now where, if we just considered Nigeria and Libya—an increase of 683,000 barrels [a day]—that greatly undermines the OPEC cuts in the first place. That's half of the cuts to begin with," Ozkan said. "So the quotas have not really done to supply what we had hoped."

Meanwhile, production declines in non-OPEC countries "haven't been that great" as Russia and others failed to make promised cuts, he said. "They were getting better, but the 80 per cent level is probably where they'll stay. Russia and Kazakhstan are the two culprits."

However, the oil market watcher believes the new swing producer is causing the most concern.

"What's keeping a lid on prices and has the market worried more than OPEC compliance is U.S. production economics—at how low a price point they can extract hydrocarbons in the United States," Ozkan said. "And these favourable U.S. production economics have, of course, added to the rig count in a very rapid manner. Fifty per cent of those rigs have actually gone into the Permian."

However, he noted the other 50 per cent of the rigs went elsewhere in the U.S. "There are favourable production economics across all of the shale basins in the United States. The Permian isn't the only place we need to be worried about."

He said: "U.S. production is expected to grow by at least a million barrels a day from December to December this year. And that's mostly driven by Permian with more than 650,000 barrels a day of growth."

$60 'couple of years away'

On the demand side, there are forecasts of growth between one million and two million bbls a day, depending on the forecasters.

As a result, there's no chance that oil inventories will return to the five-year average,

exiting 2017, Ozkan said. "On the contrary, you don't even get close."

"So till we can do that, there's really no way towards a price recovery. ... That $60 price level ... is still a couple of years away, at least."

Adding to the glut are efficiency gains in U.S. drilling and completions.

"In the Permian and Anadarko basins that are the most active currently in the United States, we're seeing [initial production] rates are jumping, even when you normalize for the length of the lateral that they're drilling or the proppant they're pumping," Ozkan said.

And it isn't just the Permian that's economic at prices below $60.

"There's basins and fields across the whole country that are economic and continue to come into the money even at small $2, $3, $4 intervals," he said. "And those changes in prices up to the $50 ... $55 mark, are actually very, very important price thresholds for U.S. crude."

"At $50 we see a lot of hedging activity.... We see that at $50 a lot of companies can guarantee 15, 20, 25 per cent rates of return, and producers take advantage of that. And moving up to that $60 mark, there's still a lot of additional areas that will come into the money."

Drilled uncompleted wells

As the pace of U.S. drilling picks up, Ozkan said the backlog of drilled but uncompleted wells could become significant.

He is keeping an eye on the percentage of wells that remain uncompleted more than six months after they were drilled. The question is whether there are wells that are waiting on completions for reasons beyond the normal spud-to-production lag.

"It's going to become important once again," he said. "It was important about a year and a half ago when we had about 3,500 drilled uncompleted wells sitting waiting to be completed."

For that reason, when the U.S. rig utilization rate plunged last year, there was no corresponding drop in U.S. oil production. The backlog of uncompleted wells being brought onstream offset the drilling drop.

"That drilled uncompleted well inventory has been worked down significantly to just over 1,000," Ozkan said. "But moving forward, that drilled uncompleted well inventory is something we'll keep an eye on. Because if we start running into problems in terms of completions crews—because we are running at a much faster pace than we were before—it will show up in these numbers as wells that were drilled, but we don't have the crews to complete."

Takeaway capacity constraints could also swell the backlog of uncompleted wells, he added, noting the Permian, for example, "is growing at a very, very rapid pace."

So both completion crew shortages and transportation constraints could limit output from plays such as the Permian, at least temporarily.

SECTIONS: MARKET INTELLIGENCE (/SECTION/MARKET-INTELLIGENCE/), U.S. (/SECTION/US/)
CATEGORIES: OIL (/CATEGORY/OIL/), PRICES (/CATEGORY/PRICES/), PRODUCTION (/CATEGORY/PRODUCTION/)

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YOUR ATTENTION IS DIRECTED TO THE IMPORTANT DISCLOSURES IN APPENDIX A

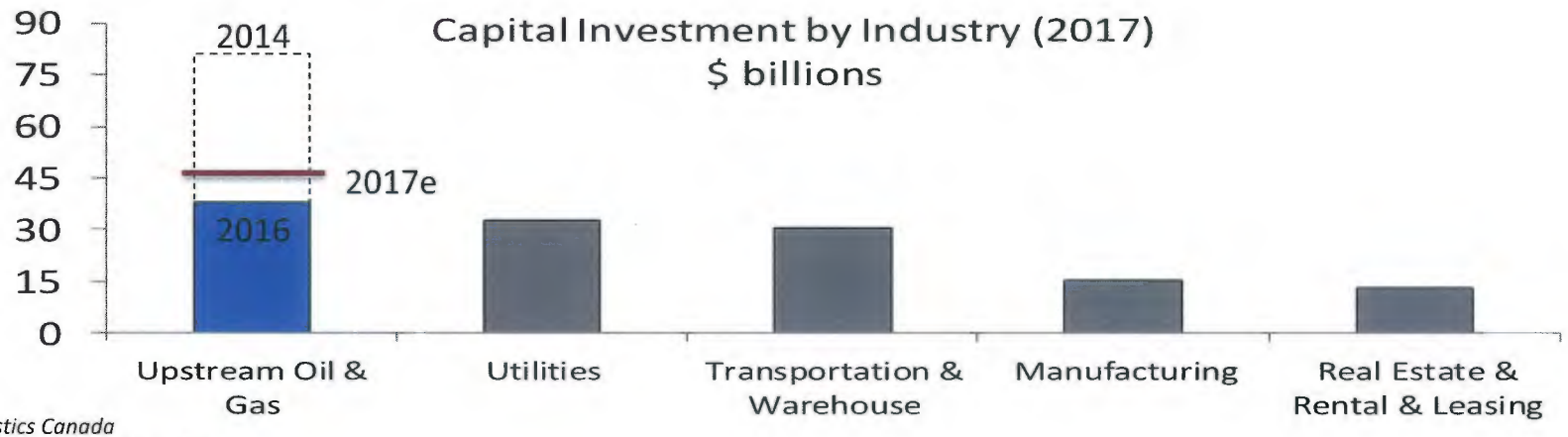
O CANADA!

Petroleum Services Association of Canada – October 31, 2017

Juan (JJ) Jarrah, P.Eng., CFA
403 299 3494
juan.jarrah@tdsecurities.com

Impact of Declining Commodity Prices - Capital Investment & Drilling

- Capital investment peaked at $81 billion in 2014
- In 2017 overall capital spending is estimated to be $45 billion, an increase of 19% from $38 billion in 2016
- Payments to governments average about $12 billion per year over a three year period ending in 2016
- Upstream sector largest private sector investor in Canada in 2016*



Source: Statistics Canada
** Last year for which data is available.*

Upstream Oil and Gas Industry Outlook
Presentation to the Petroleum Services Association of Canada (PSAC)

Ben Brunnen,
Vice President, Oil Sands, Fiscal & Economic Policy
October 31, 2017

CAPP CANADA'S OIL & NATURAL GAS PRODUCERS

Context: Global Energy Demand

Energy demand will increase as the global population and its middle class grows

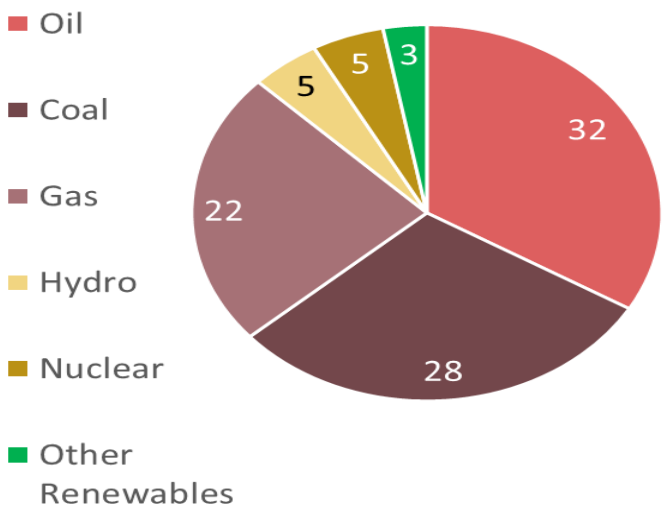
- By 2040, the United Nations estimates the world population to grow to 9.2 billion people.
- The International Monetary Fund forecasts global GDP growth to average 3.4 per cent annually
- The global middle class is expected to double

The World Bank: "It is essential that as developing countries strive to improve their standard of living, they have access to a reliable, stable energy portfolio."

Countries will be more urbanized, industrialized, and will consume energy at rates even higher than today, demanding roughly 30 per cent more energy than is currently consumed

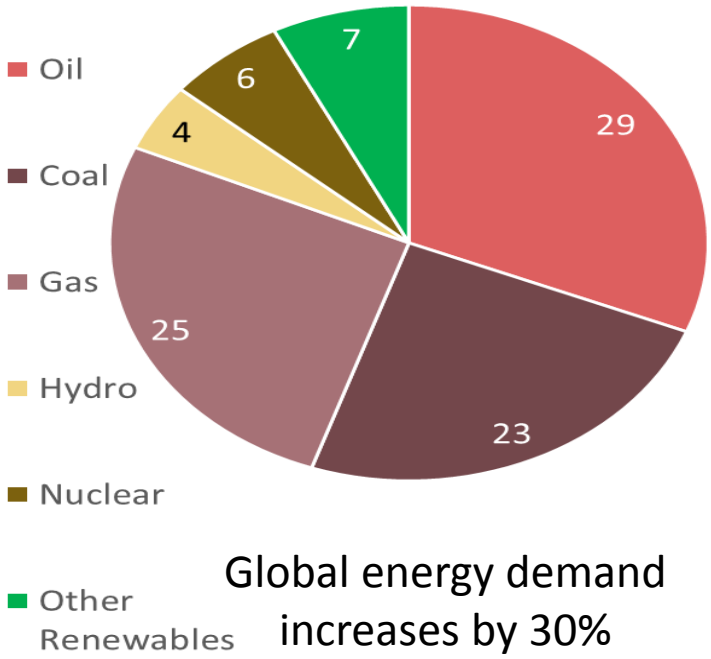
The energy mix will adjust, as coal is replaced by natural gas, renewables and oil consumption continues to grow

Current global energy mix: **percentage share** of total energy demanded by fuel type
(*average of Exxon, BP, IEA, IEEJ, WEC*



Growth to 2040

Future energy mix **percentage share** (*average of Exxon, BP, IEA, IEEJ, WEC forecasts)*



Global energy demand increases by 30%

Increase in demand by fuel type: oil growth 15%, coal 3%, natural gas 44%

Canada's Role in the Global Energy Mix

Canada has vast resources that have tremendous potential

- Canada has the third largest reserves of crude oil in the world and enough natural gas reserves to meet current national energy demand for 300 years

- The Alberta Energy Regulator (AER) estimates that Alberta has 1.7 billion barrels of established conventional crude oil reserves remaining as of December 31, 2016

- The Canada-Newfoundland and Labrador Offshore Petroleum Board estimates there are over 4 billion barrels in estimated reserves offshore Newfoundland

Oil & Gas Benefits to Canada (2015)

	2015
Investment	$55 billion
Canada-Wide Natural Resource Revenues (royalties, land sales, etc.)	$4.5 billion
Direct Federal Corporate Taxes	$0.7 billion
Federal Personal Income Tax (Direct, Indirect, & Induced)	$7.5 billion
Provincial Corporate Taxes	$0.6 billion
Provincial Personal Income Tax (Direct, Indirect, & Induced)	$3.3 billion
Municipal and Education Property Taxes	$1.7 billion
Direct, Indirect, and Induced Federal GDP	$160 billion
Total Direct & Indirect Employment (FTEs)*	~650,000

Source: Prism

Industry Supports Jobs Across the Country (2015 FTEs)

	Alberta	Ontario	British Columbia	Saskat-chewan	Quebec	Newfound-land & Labrador	Manitoba	Maritimes	Territories	Total
Direct & Indirect	412,817	76,223	59,167	35,145	21,586	20,546	9,180	8,164	754	643,582
Total, Direct, Indirect, & Induced	531,795	127,441	89,665	45,643	38,010	25,100	14,555	12,644	1,072	885,925

Source: Prism

2016 Oil Sands Canadian Supply Chain Survey:

3,408 suppliers, $7.5 billion in value

There were 20,343 oil and gas supported business in Alberta in 2015

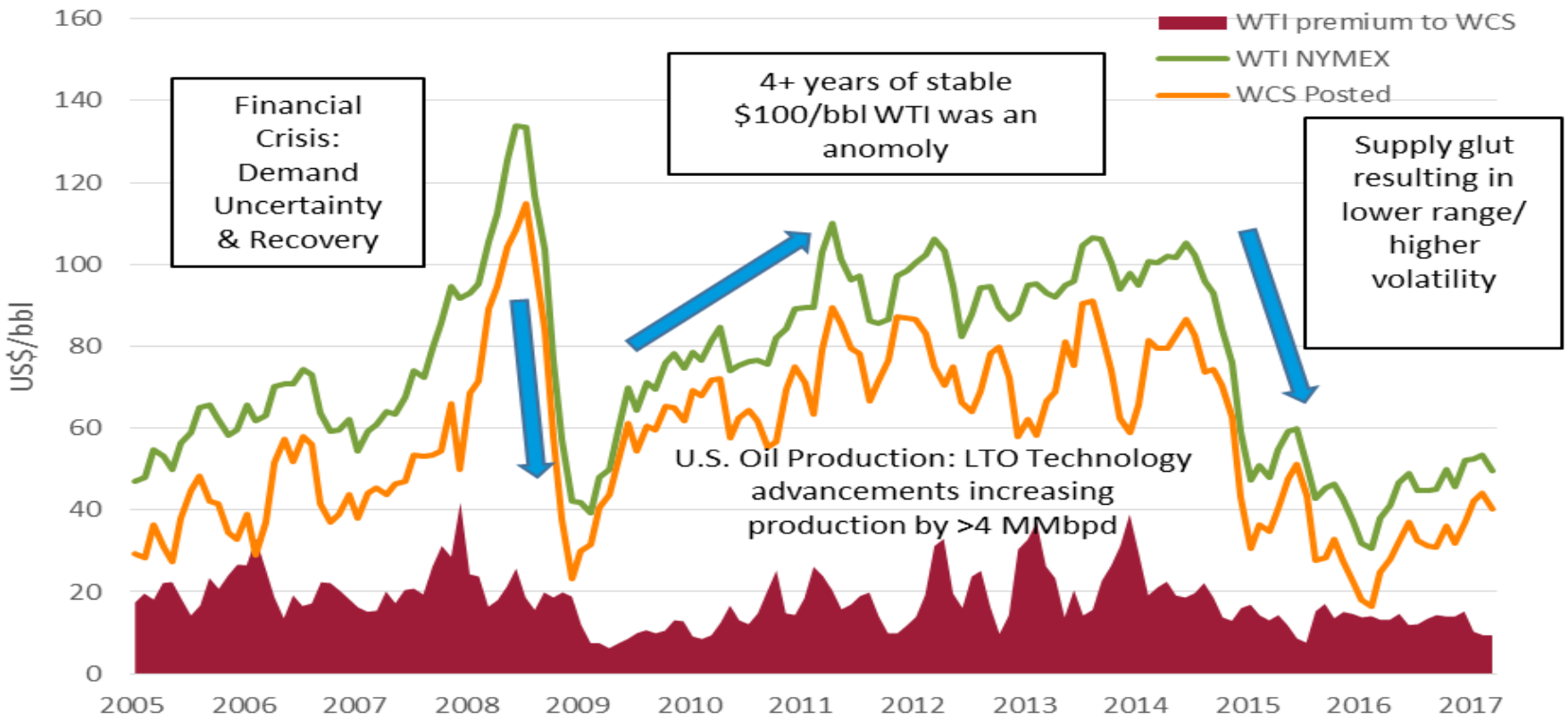
A Vision for Canada's Role in Global Oil and Natural Gas Markets

CAPP recommends that government take a leadership role in defining Canada's vision in global oil and natural gas markets – one that positions Canada as the supplier of choice to meet the world's growing oil and natural gas needs.

- **Requires a focus on**
  - innovation and climate leadership,
  - market access,
  - effective regulatory outcomes and
  - an enabling fiscal framework.

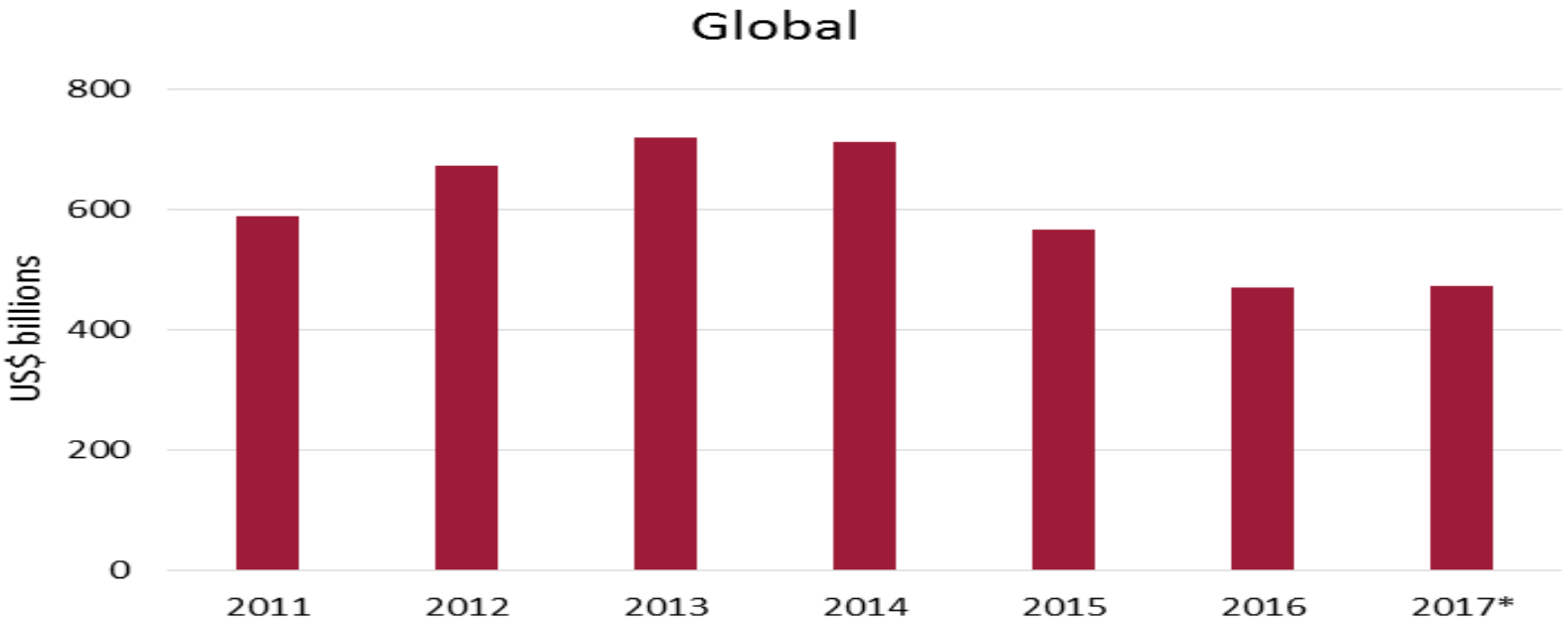
Investment Challenges Confronting the Sector

New Price Paradigm



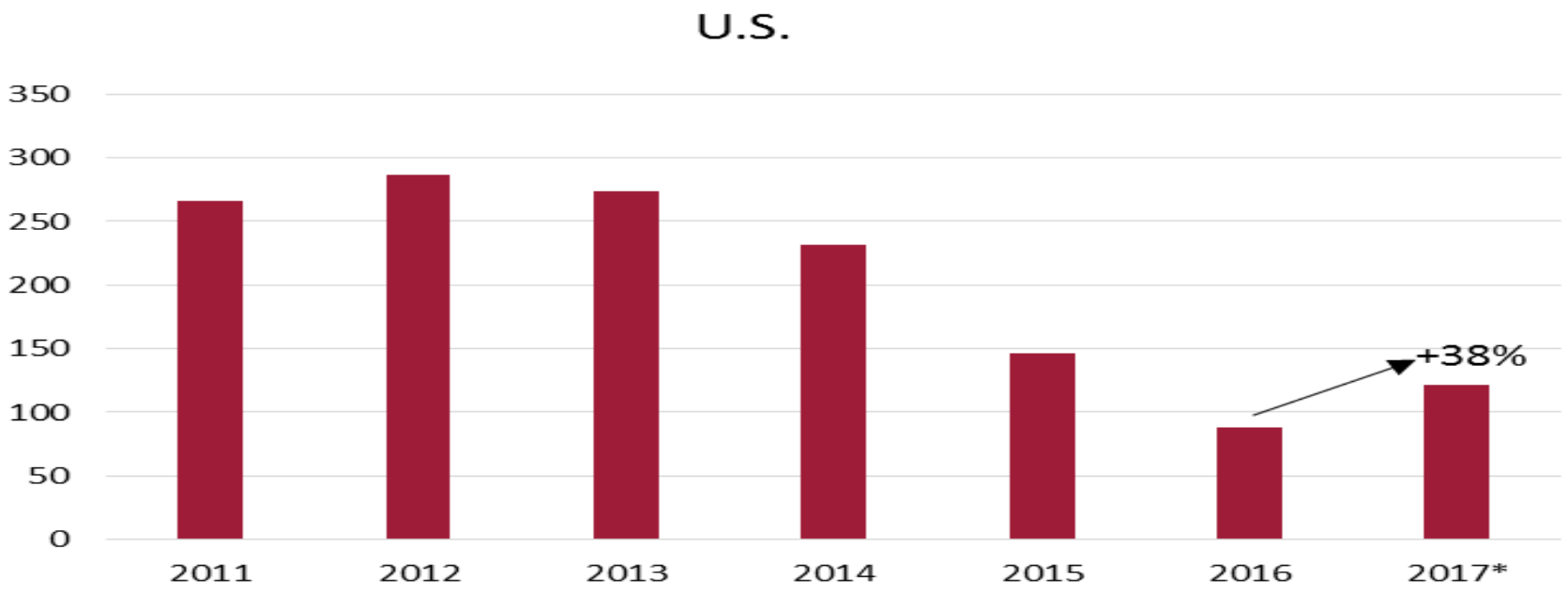
Source: CAPP

Global E&P Capex spending to flatten in 2017



Source: Bloomberg
*2017 is estimate

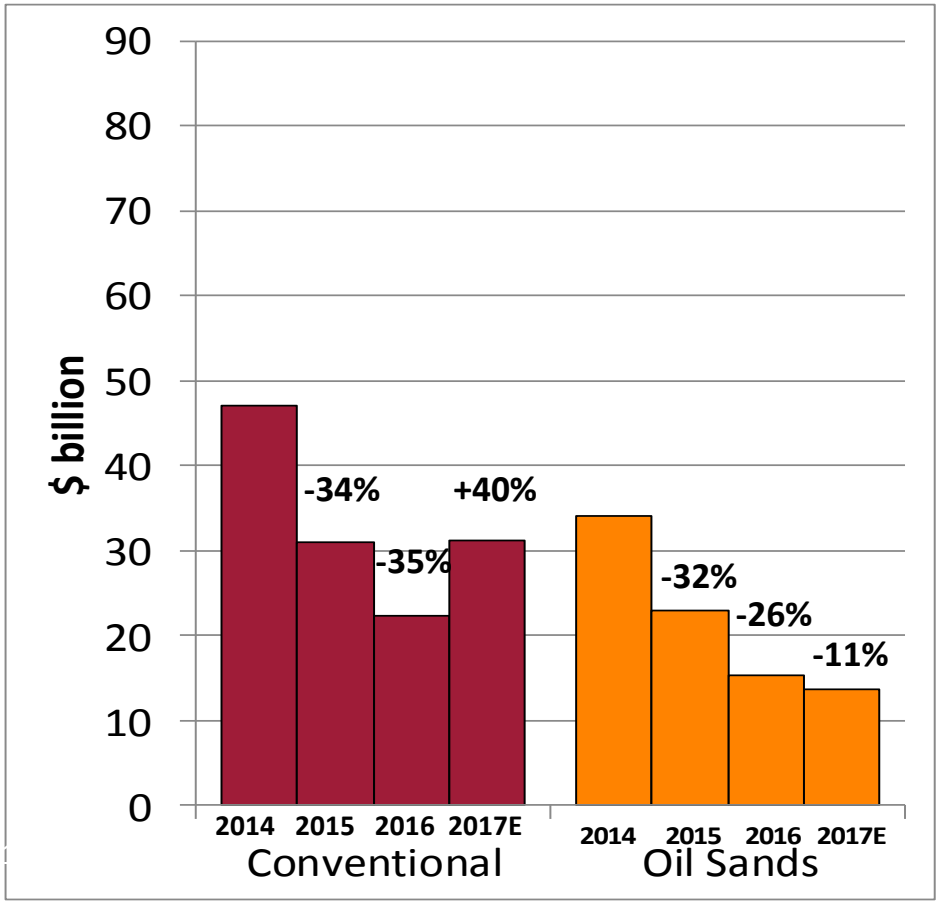
Capex spending in the U.S.



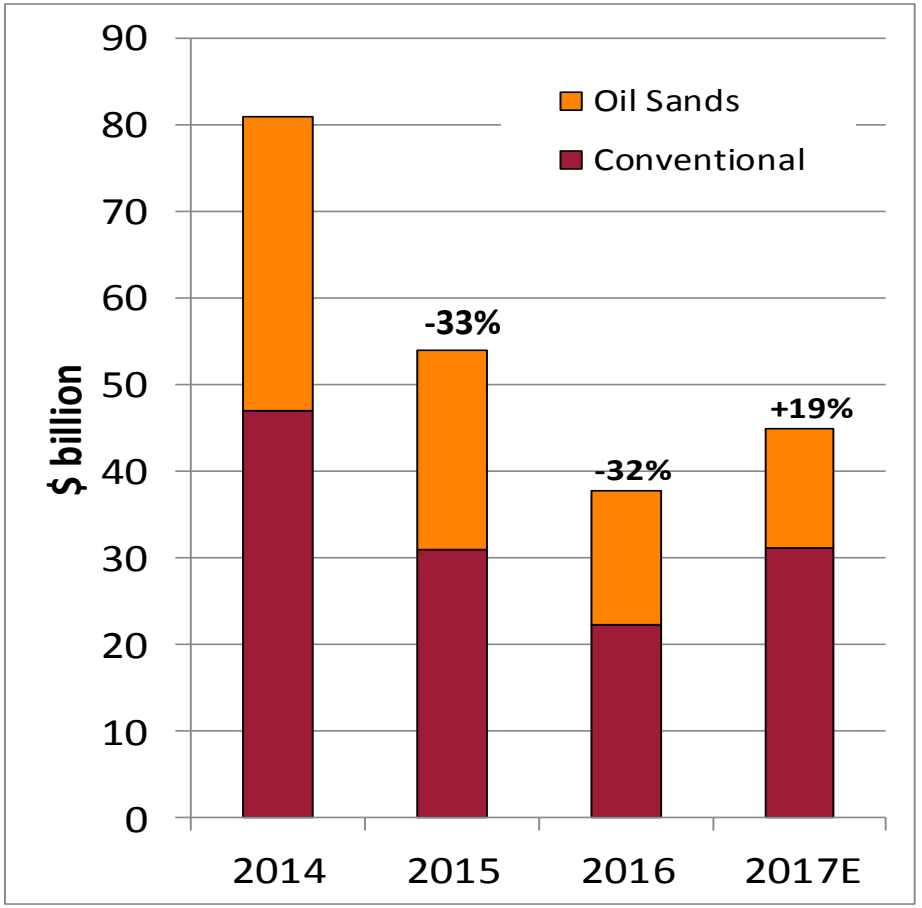
Source: Oil and Gas Journal
*2017 is estimate

Upstream Capital Investment in Canada

% = Year/year change



Combined Capital Investment



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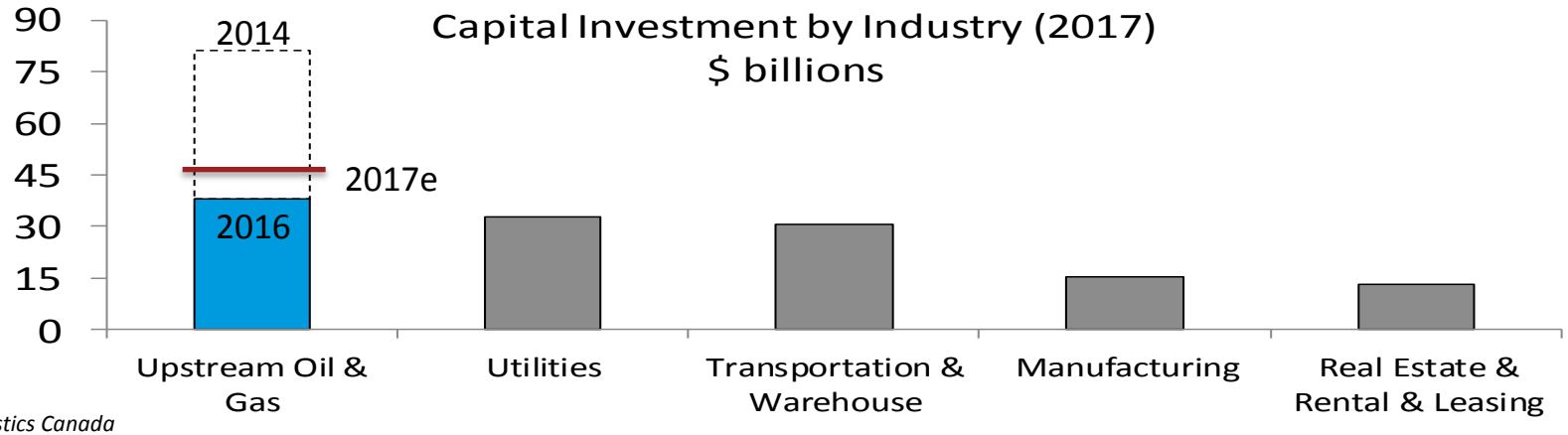
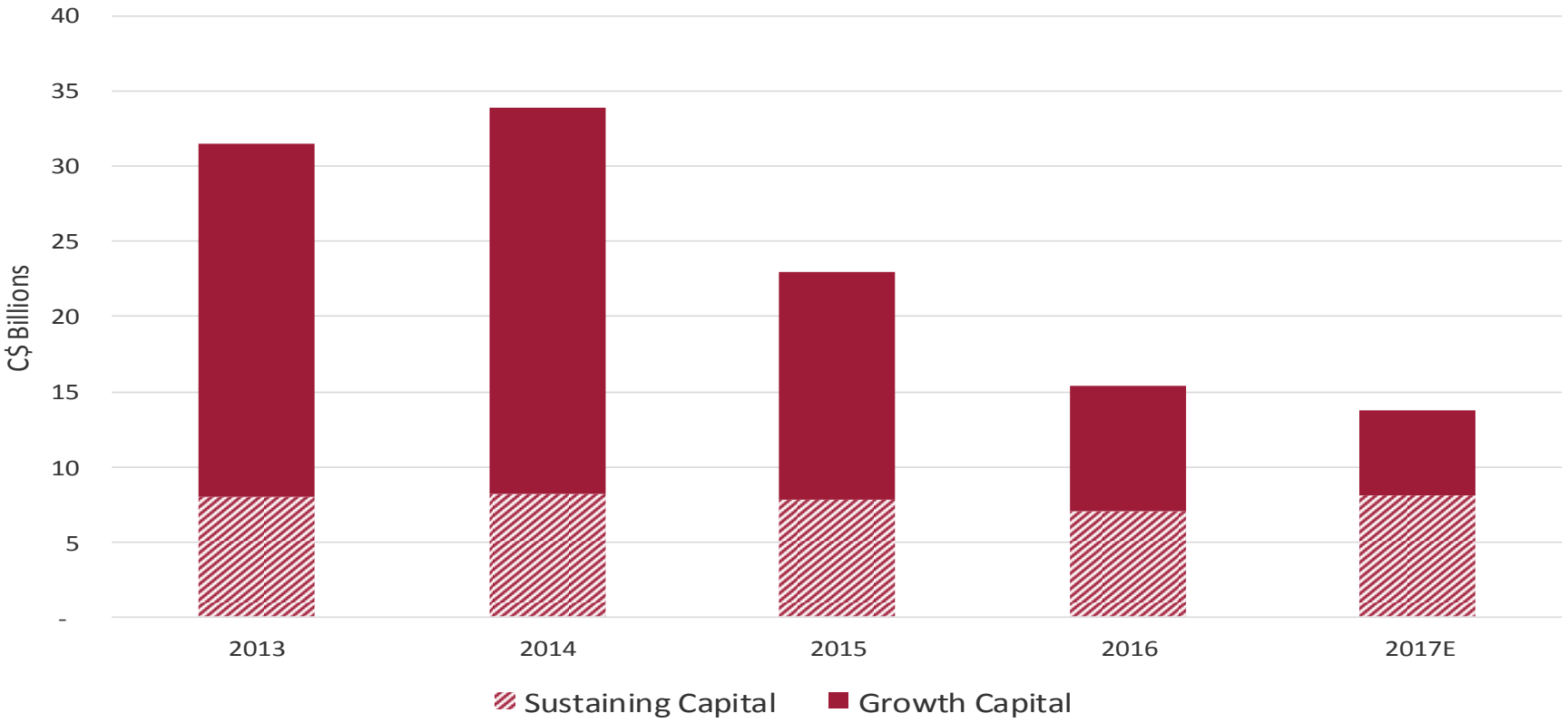


Source: Statistics Canada

** Last year for which data is available.*

Oil Sands Capital Expenditures: Sustaining Capital Split



Source: IHS Markit Briefing Report / CAPP

Industry Capital Spending Cdn $billions

Oil & Gas Investment Spending:

2015: $54 billion

2016: $38 billion

2017E: $45 billion

Northern Canada

2015	2016	2017E
$0.1	$0.05	$0.1

Oil Sands

2015	2016	2017E
$23	$15	$14

Western Canada

2015	2016	2017E
$27	$16.8	$28.7

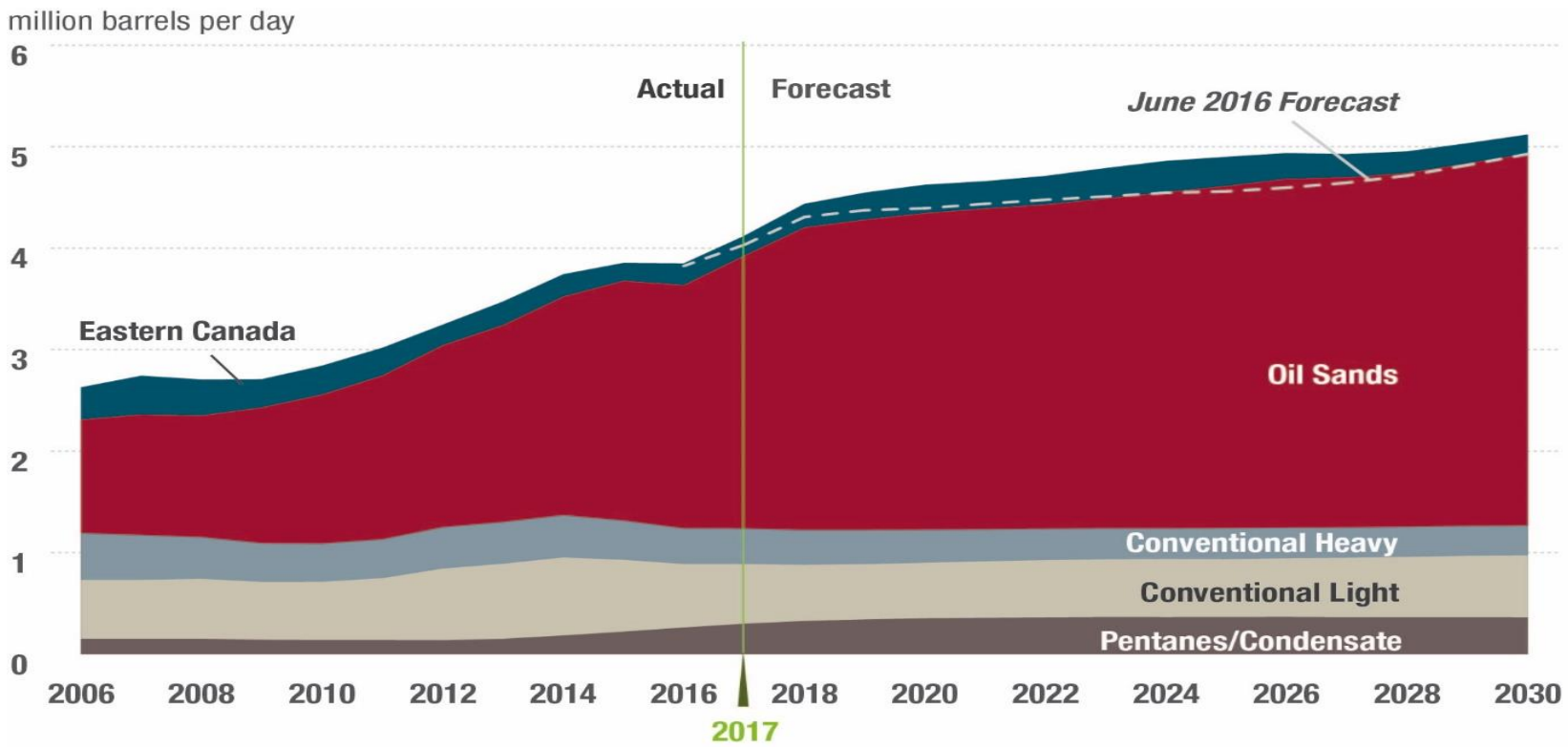
	'15	'16	'17E
AB	$17	$11.2	$19.1
BC	$5	$2.5	$4.3
SK	$4.4	$2.8	$4.8
MB	$0.5	$0.2	$0.4

East Coast Offshore

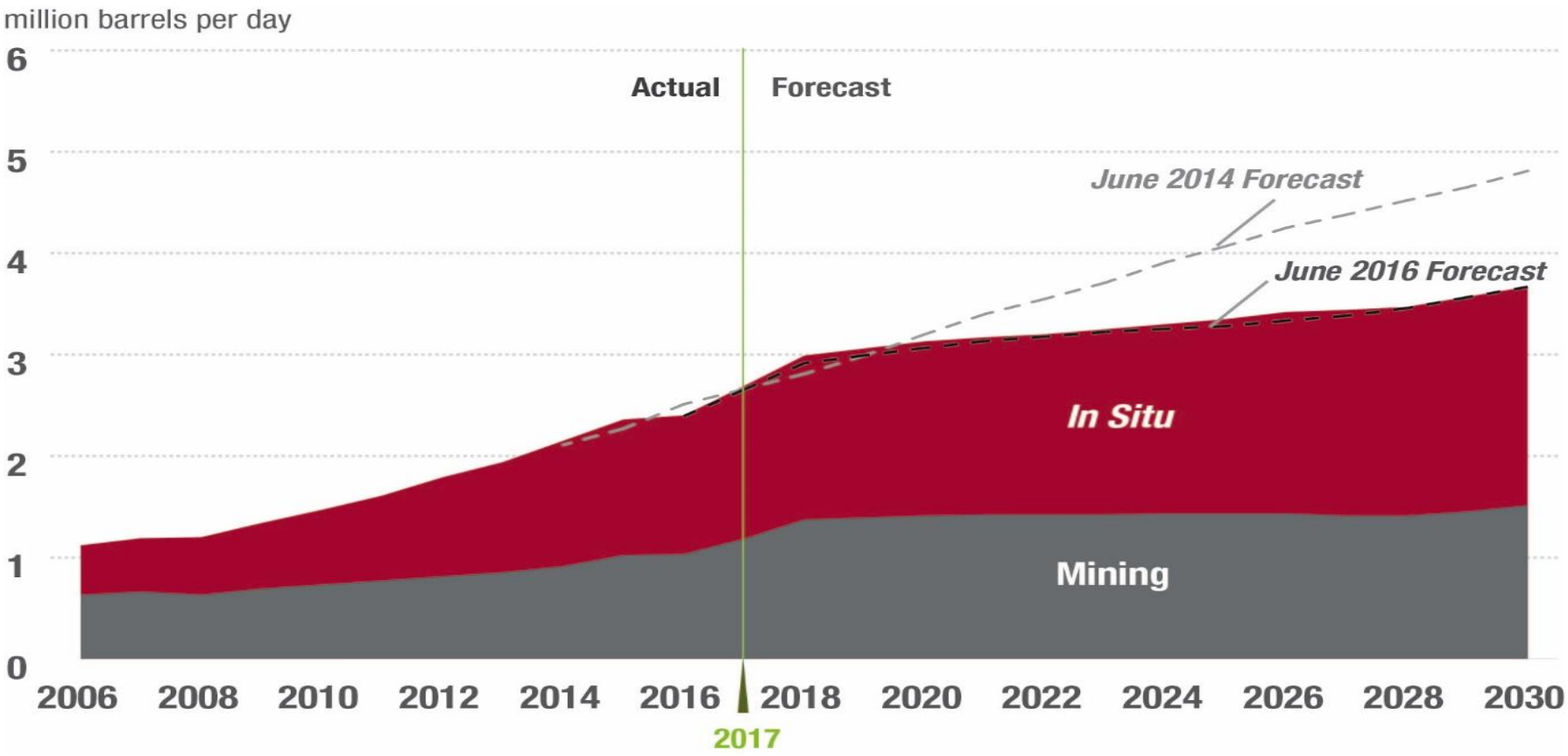
2015	2016	2017E
$3.8	$5.4	$2.5

Production and Drilling Outlook

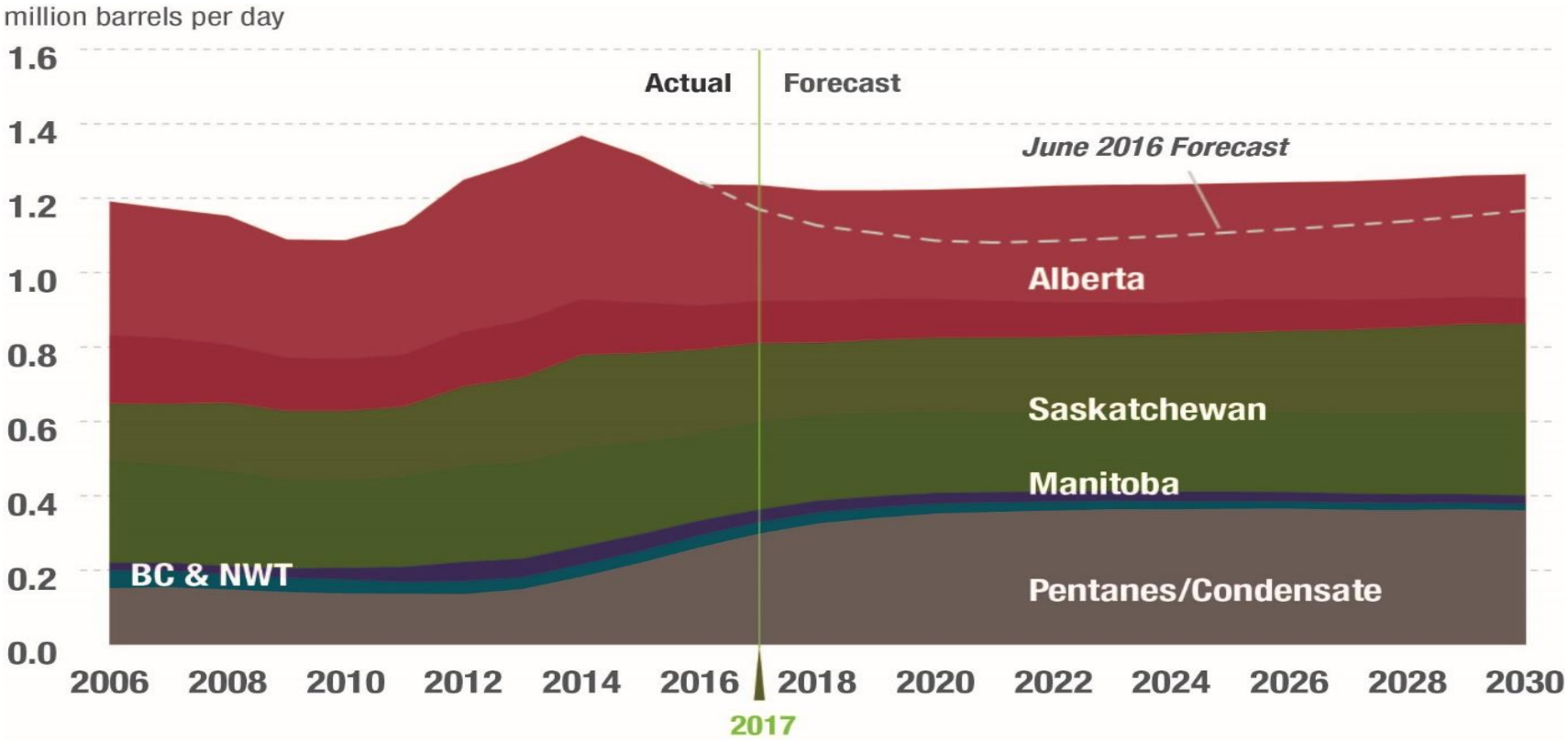
Canadian Oil Production



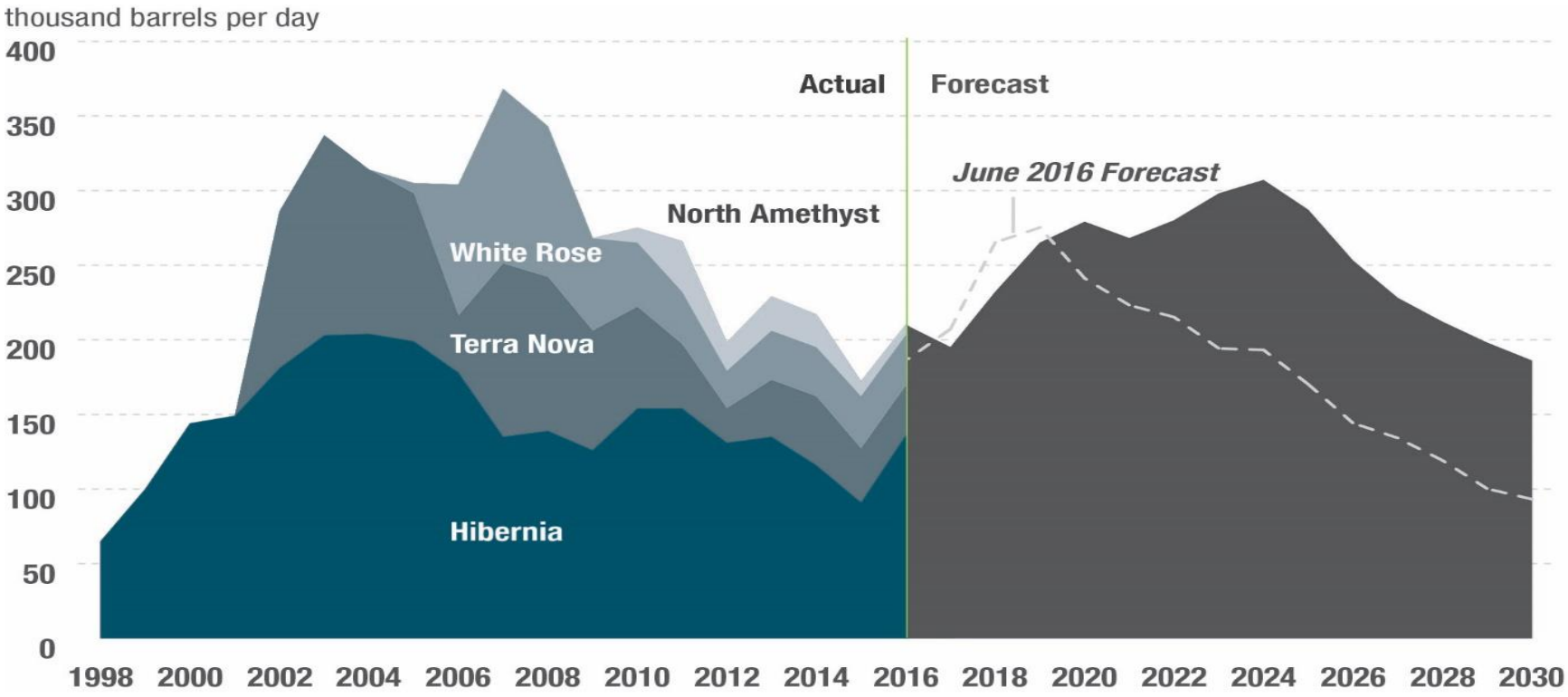
Western Canada Oil Sands Production



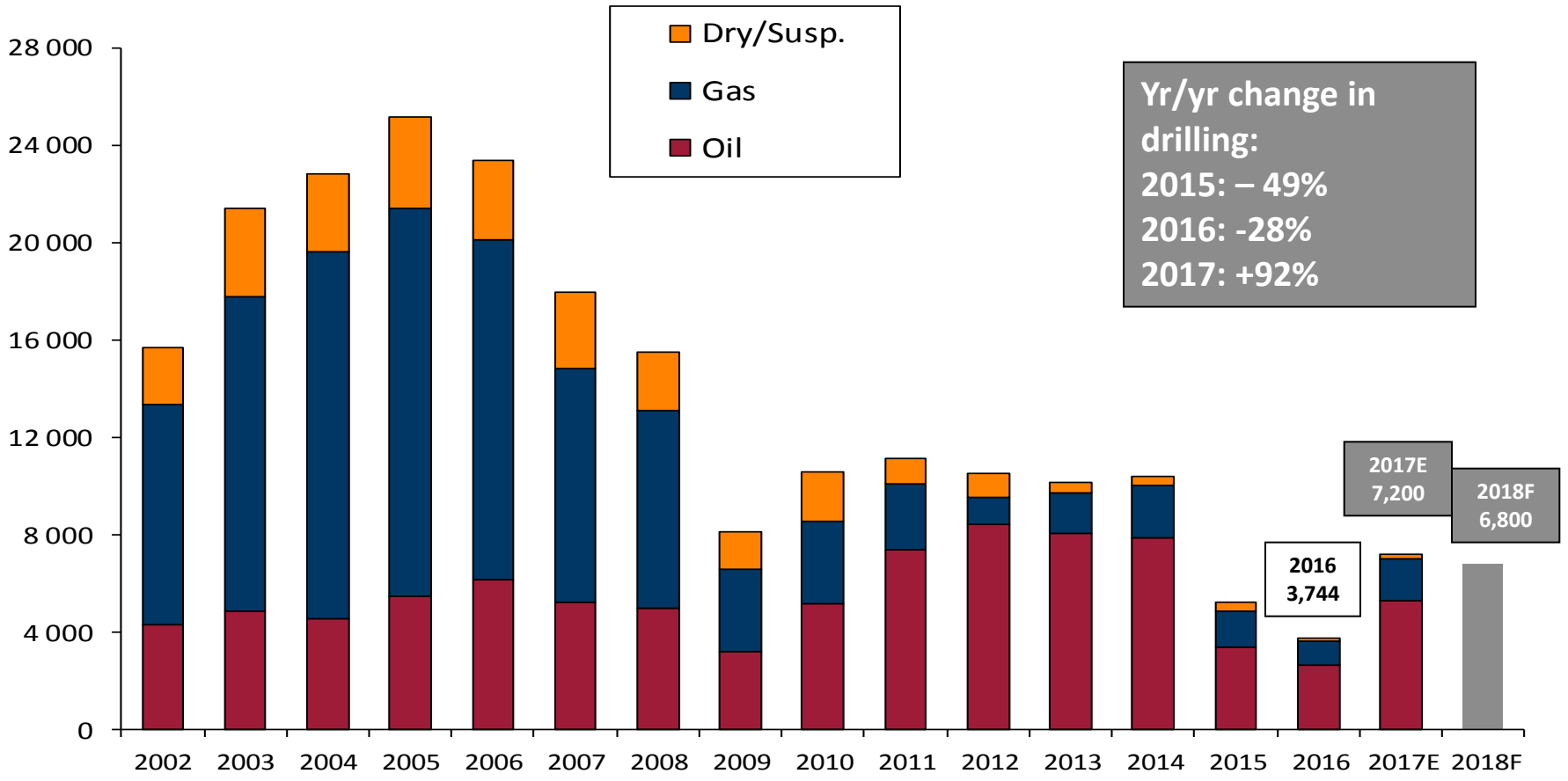
Western Canada Conventional Production



Atlantic Canada Offshore Production



Total Wells Drilled in Western Canada



Source – CAPP. Based on Rig Release

Discussion

CAPP CANADA'S OIL & NATURAL GAS PRODUCERS

Daily Oil Bulletin

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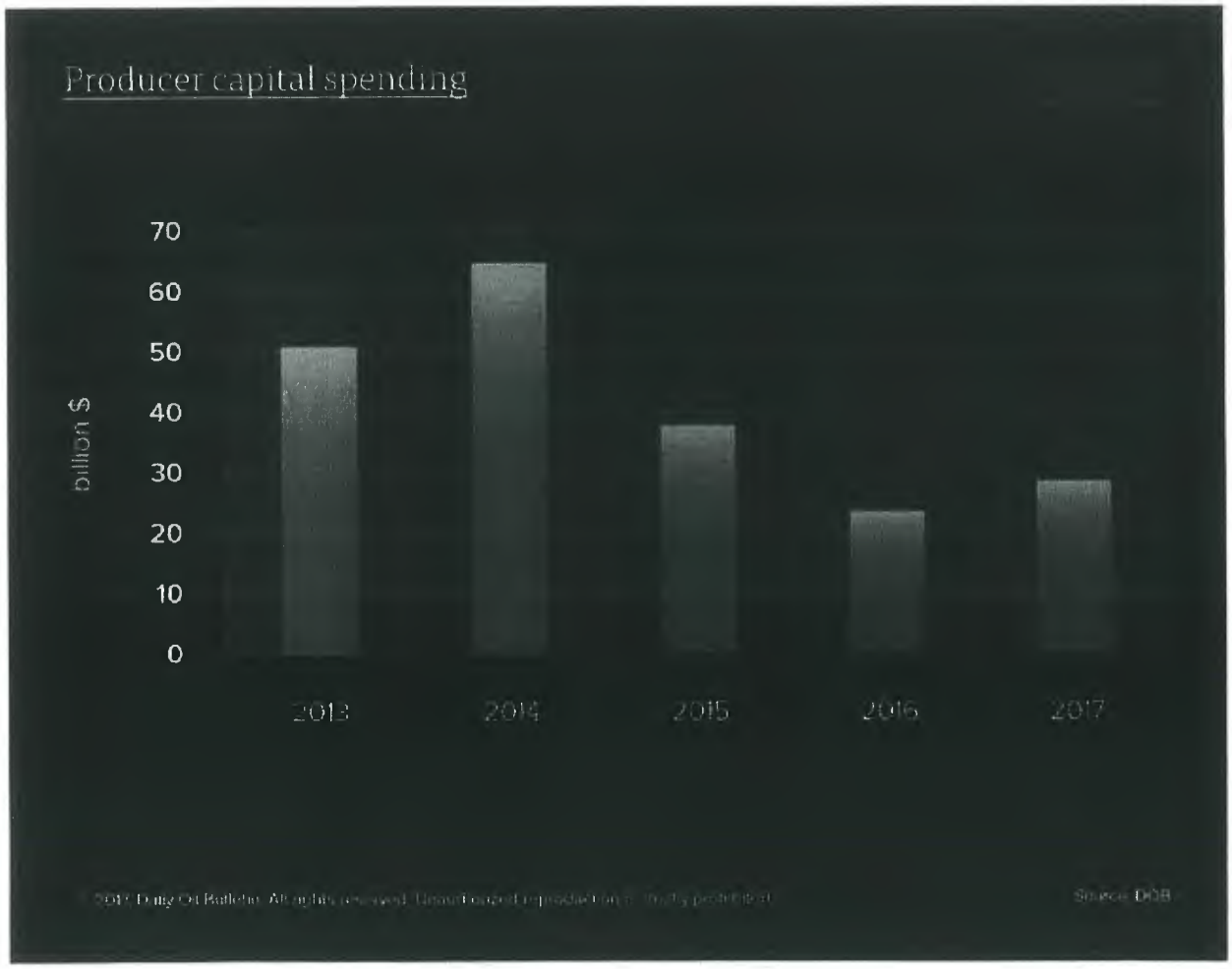
Producer Capital Spending Plans Up $1.13 Billion From Original Expectations

BY PAUL WELLS (/AUTHOR/PAUL-WELLS/) – AUG. 15, 2017 – VIEW ISSUE (/HEADLINES/2017-08-15)

Producers have bumped up capital spending plans by $1.13 billion when compared to original expectations, according to information from 64 companies tracked by the Daily Oil Bulletin.

With most of the major producers having released Q2 results, spending plans now total $29.6 billion, up from original expectations of roughly $28.45 billion. While that would be up roughly 25 per cent on 2016 spending, it's less than half the roughly $64.92 billion in capex for 2014 from 90 companies tracked by the Bulletin, and $50.93 billion from 91 companies for 2013.

During the Q2 earnings season, some producers lowered capital plans, others raised budgets, while most producers decided to stand pat. WTI prices have mostly been stuck just below US$50, while AECO prices have fluctuated wildly. Extreme daily lows tend to parallel outages on **TransCanada Corporation**'s pipeline system.



Some budget changes announced in Q2

In its second quarter release, **Husky Energy Inc.** said capital expenditures of $580 million in the second quarter remain in line with Husky's recently lowered guidance range of $2.5 billion to $2.6 billion for 2017.

As a result of continuing cost efficiencies, Husky CFO **Jon McKenzie** said May 31 that the company would cut its 2017 capital spending guidance by $100 million to $2.5 billion-$2.6 billion.

During the release of second quarter results, **Imperial Oil Limited** said full-year expenditures are now expected to be about $800 million, as the company maintains its focus on capital discipline and capturing market and productivity benefits in the current business environment. The company previously anticipated spending of $1 billion this year.

On the other side of the coin, **Vermillion Energy Inc.** will bump-up 2017 spending to $315 million from previous guidance of $295 million to accommodate an accelerated fourth quarter Canadian drilling and completions program that had been previously planned for 2018, the company announced July 26.

Anthony Marino, president and CEO, said the move will allow it to lock-in current services costs and avoid the pre-breakup service constraints it experienced during the first quarter of this year.

On July 26, **Suncor Energy Inc.** announced that its updated full-year outlook range for capital expenditures of $5.4 billion to $5.6 billion had increased from $4.8 billion to $5.2 billion to reflect an opportunity to accelerate the pace of work at Fort Hills, as well as increased costs at Syncrude related to the facility incident late in the first quarter of 2017 and its 2017 turnaround. The project cost estimate is on track with first oil expected at the end of 2017.

On July 27, **Cenovus Energy Inc.** announced it had cut its planned 2017 capital spending by about $200 million to $1.7 billion at the midpoint, with no expected impact to forecast production volumes.

Cenovus's new capital spending guidance is $1.6 - $1.8 billion.

On the company's second quarter results conference call, **Brian Ferguson**, Cenovus's president and CEO, said the updated spending guidance reflects new spending cuts and cost improvements.

"We have suspended our drilling program at Palliser for the balance of the year and reduced capital there by approximately $75 million," he said. "This capital reduction has no impact [on] production volumes for 2017."

"In addition, in our oilsands, we expect to realize capital reductions of approximately $80 million related to continued improvements in drilling performance, development planning and optimized scheduling of well startups."

Athabasca Oil Corporation's 2017 capital budget was unchanged at $210 million, but light oil capex was bumped up and thermal down (http://www.dailyoilbulletin.com/article/2017/7/28/athabasca-production-rises-q2-shifts-spending-ligh/).

In early August, **Baytex Energy Corp.** announced it had tightened its 2017 production guidance range to 69,000 to 70,000 boe per day (previously 68,000 to 70,000 boe per day) and exploration and development capital expenditures to $310 million to $330 million (previously $325 million to $350 million).

Given a re-sequencing of projects within **ARC Resources Ltd.**'s long-term plan, the board of directors approved an increase to its 2017 capital program to $830 million, from the $750 million previously announced.

The increased budget will accelerate initial investments in the Sunrise Phase II and Dawson Phase IV facilities, enter the demonstration stage at Attachie West with the addition of a multi-well pad to the 2017 drilling program, continue to advance ARC's understanding of the Lower Montney, which includes increased investment at Sunrise, and load-level drilling and completion operations at Tower in order to maintain crude oil production near facility capacity.

The increased budget will continue to focus on sustaining ARC's base businesses, improving capital and operating efficiencies, and will support the optionality and overall depth that exists within ARC's long-term plan.

Advantage Oil & Gas Ltd. boosted its 2017 capital budget by $29 million. The company's 2017 capital expenditure guidance has been increased from $205 million (range of $195 million to $215 million) to $234 million (range of $225 million to $242 million). The increase is comprised of $22 million for the delineation drilling program and $7 million for the successful land acquisitions in the first half of 2017.

Obsidian Energy Ltd. said Aug. 9 that it's curtailing planned spending. Responding to faltering oil prices and a less favourable Canada/U.S. exchange rate, the former **Penn West Petroleum Ltd.** said it has cut its 2017 capital budget by $20 million.

"About three-quarters of that reduction comes in the form of reduced development, including 19 fewer waterflood injectors and another one-quarter reduction in non-productive capital," French told an analyst conference call after Obsidian released its second quarter results.

The reduced capital budget is $160 million (including $15 million in decommissioning expenditures), down from $180 million (including $20 million for decommissioning).

Kelt Exploration Ltd. is increasing its 2017 capital expenditure budget by a net $10 million. Total exploration and development capital expenditures planned for 2017 are $191 million (previously $173 million) and proceeds from property dispositions are expected to be $111 million (previously $103 million), resulting in a net capital expenditure budget of $80 million (previously $70 million).

The increase in the capital expenditure budget reflects an additional $18 million for infrastructure expenditures and additional proceeds from minor property dispositions in the amount of $8 million ($3.3 million of which was already completed at June 30, 2017, and the balance is an estimate for further transactions expected to occur in the second half of 2017).

This year, **BlackPearl Resources Inc.** will spend $195 million to $200 million on its capital projects, which is up from a previous guidance of $185 million to $190 million.

Increased capital spending is the result of adjusting the timing of expenditures on the Onion Lake thermal expansion. The company's production should average between 10,000 and 11,000 boe per day in 2017.

Birchcliff Energy Ltd. increased its 2017 capital expenditure budget to approximately $404 million, from the $355 million that was previously announced in February of this year.

In its second quarter release issued Aug. 10, the company said net capital expenditures in 2017 are expected to be approximately $262 million. A significant portion of the expanded budget relates to bringing 2018 capital forward in order to ensure the efficient execution of Birchcliff's 2018 capital program.

SECTION: PRODUCER NEWS (/SECTION/PRODUCER-NEWS/)
CATEGORY: CAPITAL SPENDING (/CATEGORY/CAPITAL-SPENDING/)

CALGARY, ALBERTA--(Marketwired - Oct. 5, 2017) - News Release - TransCanada Corporation (TSX:TRP) (NYSE:TRP) (TransCanada) announced today it will no longer be proceeding with its proposed Energy East Pipeline and Eastern Mainline projects. Following is a statement from Tran...

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TransCanada Announces Termination of Energy East Pipeline and Eastern Mainline Projects

CALGARY, ALBERTA--(Marketwired - Oct. 5, 2017) - News Release - TransCanada Corporation (TSX:TRP) (NYSE:TRP) (TransCanada) announced today it will no longer be proceeding with its proposed Energy East Pipeline and Eastern Mainline projects.

Following is a statement from TransCanada President and Chief Executive Officer Russ Girling:

After careful review of changed circumstances, we will be informing the National Energy Board that we will no longer be proceeding with our Energy East and Eastern Mainline applications. TransCanada will also notify Quebec's Ministère du Developpement durable, de l'Environnement, et Lutte contre les changements climatiques that it is withdrawing the Energy East project from the environmental review process.

We appreciate and are thankful for the support of labour, business and manufacturing organizations, industry, our customers, Irving Oil, various governments, and the approximately 200 municipalities who passed resolutions in favour of the projects. Most of all, we thank Canadians across the country who contributed towards the development of these initiatives.

We will continue to focus on our $24 billion near-term capital program which is expected to generate growth in earnings and cash flow to support an expected annual dividend growth rate at the upper end of an eight to 10 per cent range through 2020.

As a result of its decision not to proceed with the proposed projects, TransCanada is reviewing its approximate $1.3 billion carrying value, including allowance for funds used during construction (AFUDC) capitalized since inception and expects an estimated $1 billion after-tax non-cash charge will be recorded in the company's fourth quarter results. TransCanada stopped capitalizing AFUDC on the project effective August 23, 2017, as disclosed on September 7, 2017. In light of the project's inability to reach a regulatory decision, no recoveries of costs from third parties are expected.

With more than 65 years' experience, TransCanada is a leader in the responsible development (/link/a99571c5160e48c6954b8f55c0554f5d.aspx) and reliable operation of North American energy infrastructure including natural gas and liquids pipelines, power generation and gas storage facilities. TransCanada operates one of the largest natural gas transmission networks that extends more than 91,500 kilometres (56,900 miles), tapping into virtually all major gas supply basins in North America. TransCanada is the continent's leading provider of gas storage and related services with 653 billion cubic feet of storage capacity. A large independent power producer, TransCanada currently owns or has interests in approximately 6,200 megawatts of power generation in Canada and the United States. TransCanada is also the developer and operator of one of North America's leading liquids pipeline systems that extends over 4,300 kilometres (2,700 miles), connecting growing continental oil supplies to key markets and refineries. TransCanada's common shares trade on the Toronto and New York stock exchanges under the symbol TRP. Visit TransCanada.com (/link/4c0238d0598d481aa6aef12c8887f75f.aspx) to learn more, or connect with us on social media (http://www.transcanada.com/6504.html) and 3BL Media (http://3blmedia.com/Profiles/TransCanada).

FORWARD LOOKING INFORMATION

This publication contains certain information that is forward-looking and is subject to important risks and uncertainties (such statements are usually accompanied by words such as "anticipate", "expect", "believe", "may", "will", "should", "estimate", "intend" or other similar words). Forward-looking statements in this document are intended to provide TransCanada security holders and potential investors with information regarding TransCanada and its subsidiaries, including management's assessment of TransCanada's and its subsidiaries' future plans and financial outlook. All forward-looking statements reflect TransCanada's beliefs and assumptions based on information available at the time the statements were made and as such are not guarantees of future

performance. Readers are cautioned not to place undue reliance on this forward-looking information, which is given as of the date it is expressed in this news release, and not to use future-oriented information or financial outlooks for anything other than their intended purpose. TransCanada undertakes no obligation to update or revise any forward-looking information except as required by law. For additional information on the assumptions made, and the risks and uncertainties which could cause actual results to differ from the anticipated results, refer to the Quarterly Report to Shareholders dated July 27, 2017 and 2016 Annual Report filed under TransCanada's profile on SEDAR at www.sedar.com (http://www.sedar.com/) and with the U.S. Securities and Exchange Commission at www.sec.gov (http://www.sec.gov/).

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