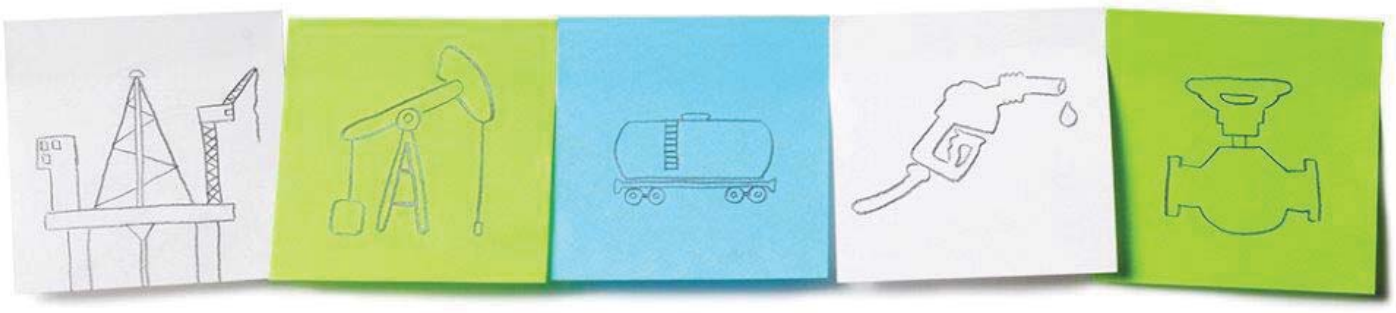
Deloitte.

Resource Evaluation & Advisory

Price forecast

March 31, 2016



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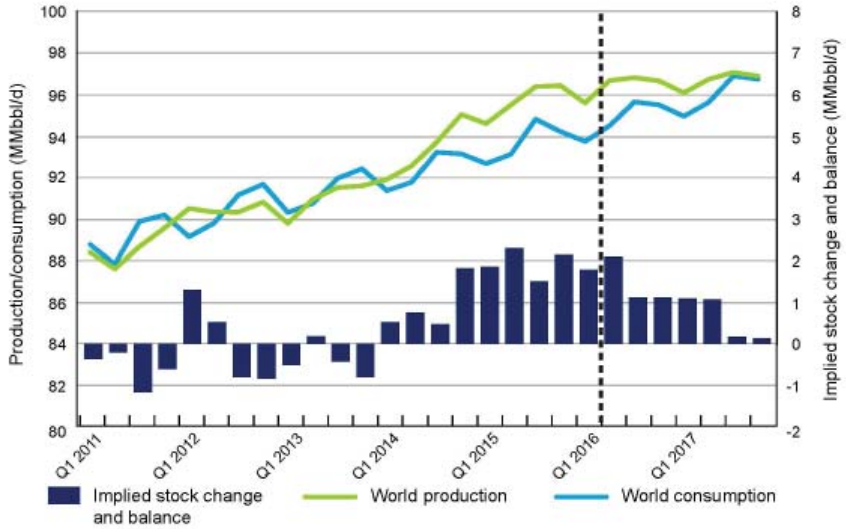
Forecast commentary

"Strength and growth come only through continuous effort and struggle."
- Napoleon Hill, author

Volatility in the oil market has subsided in the first quarter of 2016, with oil prices oscillating within a narrower band, albeit still below desired prices. Our view is that the market has reached a relative bottom and the trend for the next number of months will be a shallow but rocky upward slope as certainty increases in the global ability to chew through oversupply in the coming months and years. Prognosticators still differ widely in their expectations for where the markets will balance out in the long term and how industry will adjust to the lower price environment in the years ahead. One positive: market stability is beginning to drive increased merger and acquistion activity that will cause drastic changes to the oil business globally as companies come to grips with debt and balance sheet damages inflicted throughout the past 18 months.

As the pace of drilling activity continues to slow down, US crude oil production has followed, declining by approximately 500 Mbbl/d from its peak in June 2015. At the same time, crude imports from Canada and other countries have been on the rise, as demand for refined products has increased over the last year. The low price environment has contributed to growing consumption of refined products, such as fuel oil and gasoline, as it simultaneously restrained crude production, leaving a differential that is working to alleviate global oversupply. Globally, demand continues to lag supply, but renewed OPEC production freeze talks and recent boosts in crude imports to Asia offer positive signs that this surplus is beginning to shrink. The EIA Short-Term Energy Outlook for March forecasts the current oversupply to balance in late 2017 as demand is expected to grow faster than supply over the next several years. Although there will continue to be some price volatility, we expect prices to continue to strengthen as the market begins to balance.

Figure 1: EIA world liquid fuel production and consumption history and forecast



Source: US Energy Information Administration (EIA)

Complicating matters, US production can now be sold on the global market. Since the US crude oil export ban was lifted in December 2015, major oil companies and independent traders have begun to test the appetite for US oil in foreign markets. This has the potential to offer companies another market for their oil and may relieve some pressure on the US crude stockpiles which are currently at all-time highs.

Shortly after the ban was lifted, the differential between WTI and Brent narrowed to near zero based on the assumption that producers would shift their volumes to international markets, equalizing the two markets. In reality, producers have been slow to begin exporting due to oversupply in the world markets and some uncertainty from buyers who are hesitant to switch to the unfamiliar crude. As a result, differentials have increased to around $2/bbl. The United States is a net consumer of oil and even with the export ban lifted we expect a differential to remain as long as this is the case.

Figure 2: Brent and WTI oil prices

Source: US Energy Information Administration (EIA)

Our price forecast for all oil reference prices remains consistent with our year-end forecast. We expect to see more of a recovery in the last half of the year, and expect an average price of $44.00/bbl USD for WTI, $54.05/bbl CAD for Edmonton Light, and $46.00/bbl USD for Brent.

Gas prices have decreased considerably since the end of the year, with NYMEX and AECO prices dropping by 15 and 40 per cent respectively, comparing the March 2016 average price to December 2015.

Figure 3: NYMEX and AECO gas prices

Source: Canadian Association of Petroleum Producers (CAPP), US Energy Information Administration (EIA)

Canadian gas prices have been hit harder than the United States due to lack of markets for our gas. Two warm winters in a row have not helped with US natural gas storage above the five-year high since October 2015 and there is little expectation for change. Gas production in Canada has started to decrease, with the last quarter of 2015 averaging 15 Bcf/d down from a high of 15.5 Bcf/d in early 2015. US natural gas production has also started to turn a corner with production declining from a high of 2.5 Tcf/d in August 2015 to 2.4 Tcf/d at the end of 2015. This reduction in gas production may help the price by reducing the excess of gas in the markets, but warm summer temperatures are needed to draw on some of the excess supply.

The reference price that seems to be hardest hit is British Columbia Station 2, which has plenty of gas being fed into the system and a limited market to sell the gas. It is at the wrong end of a very long, oversupplied system.

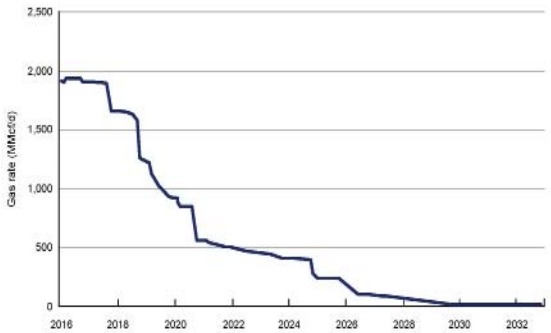
Figure 4: British Columbia gas production and price

Source: geoSCOUT, NGI Data

A number of companies with consolidated operations have been able to maintain a competitive cost structure in northeast British Columbia to keep drilling new wells economically viable. There are also pipeline and plant commitments, which means production in this area is not likely to see a decrease anytime soon.

Based on the data publicly available for the Spectra Energy system, contracts currently in place to Station 2 average approximately 1,900 MMcf/d up to and including 2018. Spectra is not the only system that carries gas to Station 2, but these numbers are an indication that companies are still banking on profitable operations even with low commodity prices and might find themselves committed to development.

Figure 5: Spectra Energy existing Station 2 contracts



Source: Spectra Energy Corp.

Our 2016 price forecast is expecting $2.10/Mcf USD for NYMEX, $1.75/Mcf CAD for AECO, and $1.25/Mcf CAD for Station 2. While our 2016 prices may be reduced compared to the year-end forecast, the 2017 and beyond expectations are quite similar.

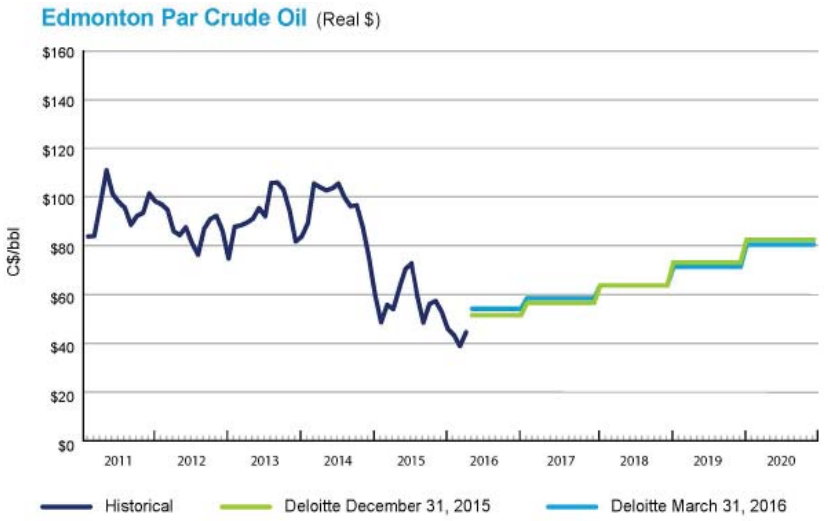
It is still a difficult market to turn a profit, but companies have made operational adjustments in recent months to achieve positive cash flow. Locally, a number of companies in industry have talked about operating and capital cost reductions as the mechanism that will allow them to maintain operations in the low commodity price environment. In the operating cost department, this seems to have been a fairly successful venture for most companies based on our research. Using a number of junior and mid-sized companies' publicly released financials, the average reduction in operating expenses was 10 percent over 2015. However, companies will have to begin fighting with fixed costs eating away at operating expense reductions because low drilling activity is causing reductions in overall production levels.

Canadian domestic price forecast

Crude oil price and market demand forecast

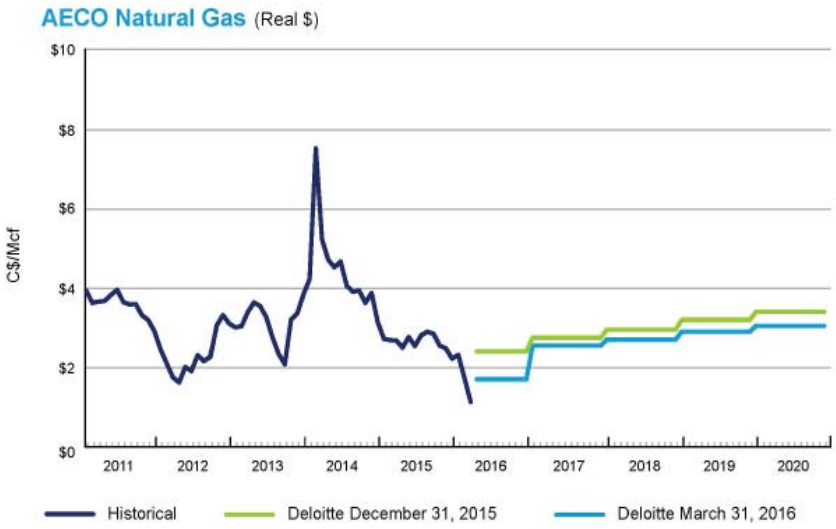
► Forecast comments

- Edmonton Par is forecast as a differential to WTI. This differential is based on Canadian Light Sweet Oil Index Futures which began trading in January 2014.
- The Edmonton crude oil price is used as the basis for the remaining Canadian crude reference points. Offsets are based on five-year historical averages with recent years weighted more heavily in the determination.



Year	WTI Cushing, OK (40 Deg. API)	WTI Cushing, OK (40 Deg. API)	Edmonton City Gate (40 Deg. API)	Edmonton City Gate (40 Deg. API)	WCS 20.5 Deg. API Hardisty	Heavy Oil Hardisty, AB (12 Deg. API)	Cost Inflation	CAD to USD exchange
	US$/bbl	US$/bbl	C$/bbl	C$/bbl	C$/bbl	C$/bbl		
	Real	Current	Real	Current	Current	Current	Rate	Rate
Historical								
2013	$101.91	$97.91	$97.17	$93.36	$74.97	$65.49	0.009	0.972
2014	$96.15	$93.26	$96.91	$94.00	$81.06	$73.70	0.019	0.906
2015	$49.24	$48.69	$57.65	$57.00	$44.80	$39.63	0.011	0.783
2016								
3 Months H	$32.94	$32.94	$42.07	$42.07	$26.08	$20.38	0.018	0.723
9 Months F	$44.00	$44.00	$54.05	$54.05	$40.05	$34.05	0.000	0.740
Avg.	$41.23	$41.23	$51.06	$51.06	$36.56	$30.63	-	0.736
Forecast								
2016	$44.00	$44.00	$54.05	$54.05	$40.05	$34.05	0.000	0.740
2017	$49.00	$50.00	$58.45	$59.60	$45.35	$39.20	0.020	0.770
2018	$55.00	$57.20	$63.75	$66.35	$51.75	$45.50	0.020	0.800
2019	$62.50	$66.35	$71.35	$75.70	$60.85	$54.50	0.020	0.820
2020	$70.00	$75.75	$80.50	$87.15	$72.00	$65.50	0.020	0.820
2021	$75.00	$82.80	$86.60	$95.60	$80.15	$73.55	0.020	0.820
2022	$80.00	$90.10	$92.70	$104.40	$88.65	$81.85	0.020	0.820
2023	$80.00	$91.90	$92.70	$106.50	$90.40	$83.50	0.020	0.820

Natural gas price and market demand forecast



▶ Forecast comments

- The AECO natural gas price is forecast based on historical differentials to Henry Hub and future contracts traded on the NGX based in Calgary.
- In contrast to other forecasts in the industry, Deloitte's long-term views consider two more years of growth in terms of real dollars.

Year	AB Ref. Avg. Price	AB AECO Avg. Price	AB AECO Avg. Price	BC Direct Station 2 Sales	NYMEX Henry Hub	NYMEX Henry Hub
	C$/Mcf	C$/Mcf	C$/Mcf	C$/Mcf	US$/Mcf	US$/Mcf
	Current	Real	Current	Current	Real	Current
Historical						
2013	$2.98	$3.30	$3.17	$3.11	$3.88	$3.73
2014	$4.22	$4.64	$4.50	$4.16	$4.53	$4.39
2015	$2.56	$2.72	$2.69	$1.81	$2.66	$2.63
2016						
3 Months H	$1.59	$1.78	$1.78	$1.31	$1.98	$1.98
9 Months F	$1.55	$1.75	$1.75	$1.25	$2.10	$2.10
Avg.	$1.56	$1.76	$1.76	$1.27	$2.07	$2.07
Forecast						
2016	$1.55	$1.75	$1.75	$1.25	$2.10	$2.10
2017	$2.45	$2.60	$2.65	$2.15	$2.60	$2.65
2018	$2.65	$2.75	$2.85	$2.35	$2.80	$2.90
2019	$2.90	$2.95	$3.15	$2.60	$3.00	$3.20
2020	$3.15	$3.10	$3.35	$2.80	$3.15	$3.40
2021	$3.40	$3.30	$3.65	$3.10	$3.30	$3.65
2022	$3.70	$3.50	$3.95	$3.40	$3.45	$3.90
2023	$3.95	$3.65	$4.20	$3.60	$3.60	$4.15

International price forecast

Crude oil price and market demand forecast

Year	Average WTI Spot	Brent Spot (38.3° API with 0.37% sulphur content)	Gulf Coast ASCI	Average OPEC Basket	Nigerian Bonny Light (33.4° API FOB)	Mexico Maya (21.8° API FOB)	Russia Urals (31.7° API FOB)
	US$/bbl	US$/bbl	US$/bbl	US$/bbl	US$/bbl	US$/bbl	US$/bbl
	Real	Real	Real	Real	Real	Real	Real
Forecast							
2016	$44.00	$46.00	$42.00	$43.00	$46.50	$38.00	$45.00
2017	$49.00	$51.00	$47.00	$48.00	$51.50	$43.00	$50.00
2018	$55.00	$57.00	$53.00	$54.00	$57.50	$49.00	$56.00
2019	$62.50	$64.50	$60.50	$61.50	$65.00	$56.50	$63.50
2020	$70.00	$72.00	$68.00	$69.00	$72.50	$64.00	$71.00
2021	$75.00	$77.00	$73.00	$74.00	$77.50	$69.00	$76.00
2022	$80.00	$82.00	$78.00	$79.00	$82.50	$74.00	$81.00
2023	$80.00	$82.00	$78.00	$79.00	$82.50	$74.00	$81.00

► Forecast comments

- International crude quality reference points for OPEC Basket, Venezuelan, Nigerian, UAE, Mexican, Chinese, Russian, and Indonesian crudes are now based on Brent in US dollars. For the purposes of this forecast Brent is receiving a premium to WTI on the world markets.
- Current forecasts for other Crude Oil reference points are based on historical trends to the WTI price.
- Brent, United Kingdom crude is based on 38.3°API with 0.37 percent sulphur content. Brent blend is a light sweet North Sea crude oil that serves as an international benchmark grade.
- United States Gulf Coast Argus Sour Crude Index (ASCI) is a blend of offshore Gulf Coast oil from Mars, Poseidon, and Southern Green Canyon.
- OPEC Basket represents the current grouping of crude oil prices from the OPEC member countries.
- Russia Urals 31.7°API is the FOB delivered price to the Mediterranean destinations.

Natural gas price and market demand forecast

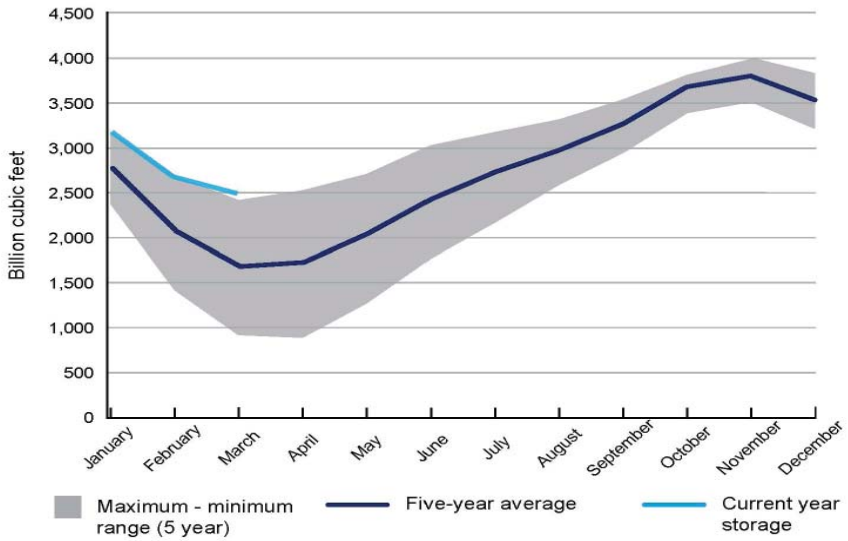
Year	USD to GBP Exchange	USD to EUR Exchange	NYMEX Henry Hub	Permian Waha	San Juan Ignacio	Gulf Coast (Onshore)	Louisiana East Texas	Rocky Mtn. Opal	UK NBP
			US$/Mcf	US$/Mcf	US$/Mcf	US$/Mcf	US$/Mcf	US$/Mcf	US$/Mcf
	Rate	Rate	Real	Real	Real	Real	Real	Real	Real
Forecast									
2016	1.450	1.100	$2.10	$1.95	$1.95	$2.00	$2.05	$2.00	$4.35
2017	1.450	1.100	$2.60	$2.45	$2.45	$2.50	$2.55	$2.50	$4.85
2018	1.450	1.100	$2.80	$2.65	$2.65	$2.70	$2.75	$2.70	$5.05
2019	1.450	1.100	$3.00	$2.85	$2.85	$2.90	$2.95	$2.90	$5.25
2020	1.450	1.100	$3.15	$3.00	$3.00	$3.05	$3.10	$3.05	$5.40
2021	1.450	1.100	$3.30	$3.15	$3.15	$3.20	$3.25	$3.20	$5.55
2022	1.450	1.100	$3.45	$3.30	$3.30	$3.35	$3.40	$3.35	$5.70
2023	1.450	1.100	$3.60	$3.45	$3.45	$3.50	$3.55	$3.50	$5.85

► Forecast comments

- The NYMEX price is based on delivery at the Henry Hub in Louisiana, the nexus of 16 intra- and interstate natural gas pipeline systems that draw supplies from the region's prolific gas deposits.

Global trends
Storage

Crude oil price and market demand forecast



Source: U.S. Energy Information Administration, Weekly Natural Gas Storage Report

The United States natural gas storage levels continue to remain above the five-year average. With continued warm weather expected in this El Nino year, a shift in storage levels are not expected.

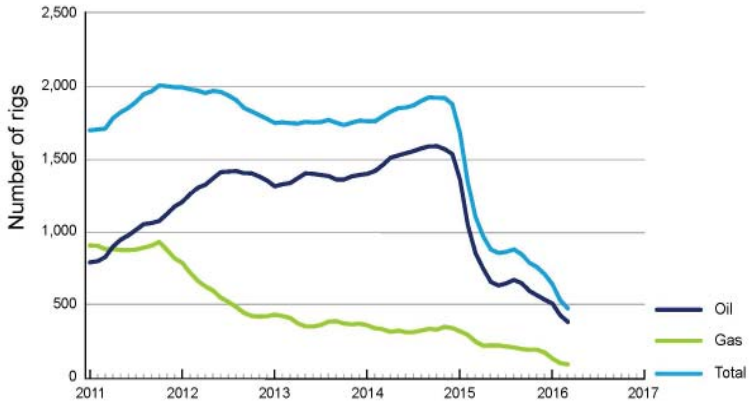
Rig counts

After temporarily leveling off in the summer months, US oil rig counts have steadily dropped throughout 2016 along with the oil price. Gas rig counts have also been reduced significantly over the last six months as gas prices have weakened. Total rig counts in the US have not been this low in over 15 years.

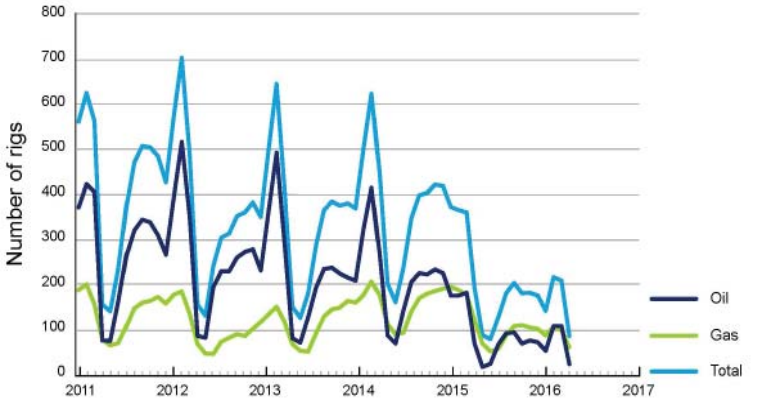
Like last year, the typical spike in rig counts seen in January and February has not occurred in 2016 as companies continue to cut capital budgets and reassess their strategies.

Rig counts continue to drop in Latin America and Asia, while they have leveled off in Europe and Africa. Middle Eastern rig counts have remained fairly steady as OPEC countries continue to pump oil at historic highs. International rig counts have not dropped as dramatically as in North America, which now accounts for less than 45 percent of the world's active rigs. The last time North America contained less than half of the world's active rigs was in 1993.

United States



Canada



International

Source: Baker Hughes Incorporated, International Rlg Count

Pricing philosophy

Price forecasting takes into account many variables that can influence future prices. Our experience tells us that we must continually review the forecasting tools we use to predict where oil and gas prices are heading. However, one constant influence on oil and gas pricing is the geo-political landscape. This impact is most accurately reflected in the financial industry's futures market for commodities, a main influence when Deloitte creates its price forecast. In other words, Deloitte looks to both the futures and the past when we create our forecasts.

This pricing philosophy challenges conventional thinking. The traditional view is based on the mean-reversion view of commodities presented by economists. Following this model, industry forecasts from 2000 to 2006 reflected a drop in prices over the long term from the current prices of the day – even though the futures market indicated otherwise. While the mean-reversion approach definitely has some merit, history has tended to reflect that the futures market is a more accurate barometer.

▶ Client focused

At Deloitte, we believe it is part of our role to help our clients in both the oil and gas sector and the investment community make better long-term business decisions by providing them with the most accurate and realistic information. We understand that sound analysis of changing trends can influence decisions on mergers, acquisitions, divestitures and investments. One way we ensure our price forecasts are as accurate as possible, given the continuing impact of near-term volatility, is to review our pricing assumptions on a quarterly basis.

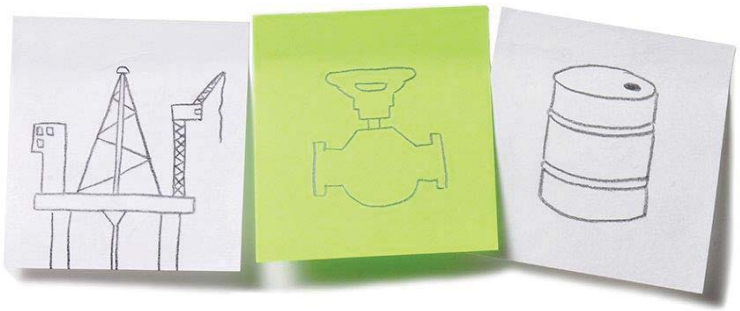
▶ Our process

In preparing the price forecast, Deloitte considers the current monthly trends, the actual price and trends for the year-to-date and the prior year actual prices. The base forecast for both oil and gas is based on New York Mercantile Exchange (NYMEX) futures in U.S. dollars.

Crude oil and natural gas forecasts are based on yearly variable factors, weighted to a higher percent for the current data and then reflect a higher percent to prior year historical data for the later years. Gas prices have been determined independently from oil prices, but still reflect the current competitive nature of the two fuels and historical oil-to-gas ratios for the latter years of the gas forecast.

Deloitte prepares our price and market forecasts based on information we collect from numerous government agencies, industry publications, oil refineries, natural gas marketers and industry trends. Inflation forecasts and exchange rates are also an integral part of the forecast.

These forecasts are Deloitte's best estimate of how the future will look, and while they are considered reasonable, changing market conditions or additional information may require alteration from the indicated effective date.



Glossary

Some of the words, phrases and acronyms we use frequently when talking about pricing are listed below:

AECO	Alberta Energy Company - historical name of a virtual trading hub on the NGX system
ANS	Alaska North Slope
ASCI	Argus Sour Crude Oil
AWB	Access Western Blend - Canadian condensate/ bitumen mix
BR	Bow River Crude Oil
CBOT	Chicago Board Of Trade
CGA	Canadian Gas Association
DCQ	Daily Contract Quantity
EIA	Energy Information Administration
FERC	US Federal Energy Regulatory Commission
FOB	Free on Board (shipper term)
IEA	International Energy Administration
LLB	Lloydminster Blend Crude Oil
LNG	Liquefied Natural Gas
MESC	Middle East Sour Crude
MSO	Mixed Sour Crude Oil
MSW	Canadian Light Sweet
NEB	Canadian National Energy Board
NIT	Nova Inventory Transfer
NYMEX	New York Mercantile Exchange
OECD	Organization of Economic Cooperation and Development
OPEC	Organization of Petroleum Exporting Countries
PADD	Petroleum Administration Defense District
USGC	US Gulf Coast
USWC	US West Coast
WCS	Western Canada Select Crude Oil
WTI	West Texas Intermediate
WTS	West Texas Sour

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