



# Canadian domestic price forecast September 30, 2013

## Forecast commentary

Andrew Botterill

Senior Manager, Resource Evaluation & Advisory

Futures prices don't jump. They amble.

"Study the past, if you would divine the future." - Confucius

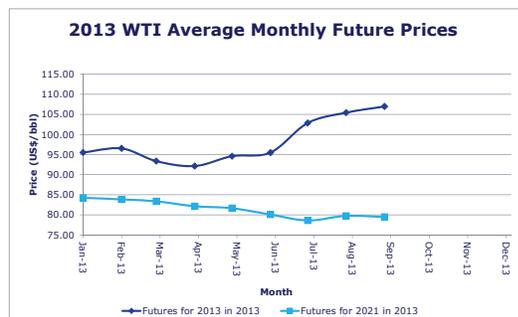
It is no secret that when geopolitical events cause tensions to rise – especially those in the Middle East that involve areas of large-scale oil production – the price of oil also rises. The reason is simple – geopolitical conflicts raise fears that the supply of oil may be put in jeopardy. As a result, prices are affected in the short term.

The country or countries involved don't even have to be major oil producers in order to produce a change in the short-term markets. For example, with respect to the current conflict in Syria, some fear that if the conflict is prolonged, it may spread to neighbouring oil-producing countries and interrupt those countries' ability to supply the market with oil. Such fears have fueled the upward march of oil prices in recent weeks.

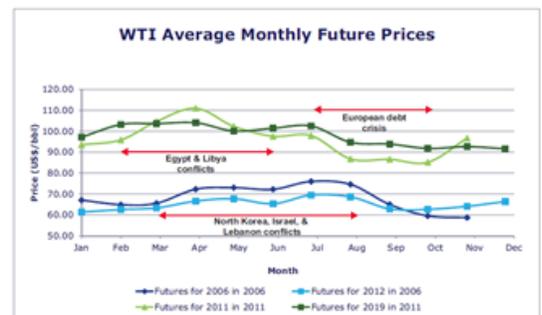
While current conditions do have short-term influence, Deloitte believes that an oil and gas price forecast shouldn't just be a report on today's market prices. You can look in the financial pages for that. To be useful for long-term business decisions, an oil and gas forecast is a carefully considered estimation of market confidence over the long term. And there is no better barometer for that than the futures market.

It is our contention that the market conditions we're seeing right now are similar to what we've seen before, and the long-term outcome will also be similar. Current geopolitical volatility will lead to higher oil prices for the remainder of 2013, and even a slight increase in the 2014 futures price. But, as has been typical in the past, conflict inflates the near-term futures price as well as the current spot price. As the conflict subsides, the market corrects itself and the primary driver of oil prices – supply and demand – takes over.

To illustrate our point, let's take a look back at the WTI Futures of 2011 and 2006.



In early 2011, geopolitical events primarily in Egypt and Libya drove the oil price up due to a drop in supply from Libya and fears of the conflict spreading. As the above graph shows, oil peaked at the height of the conflict, and then began to subside in late summer. Later in the year, the European economic crisis took over, driving down demand and causing the oil price to decrease even more. Prices fluctuated throughout the year due to various economic factors related to supply and demand. As expected, fluctuations were more pronounced in the short-term price than in the long-term price.



In 2006, WTI futures behaved similarly due to geopolitical tensions in North Korea, and between Israel and Lebanon. As the tensions began to ease in August and September, the higher trending price of oil at that time effectively decreased demand and the short-term oil price fell.

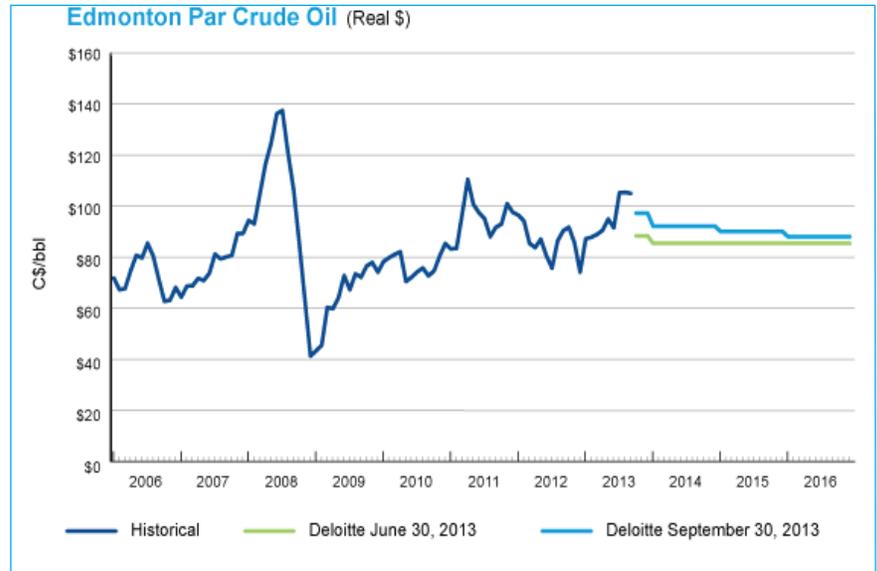
Comparing short-term futures to long-term futures prices, you can see from the illustration below that short-term futures are very sensitive to geopolitical events and fluctuate greatly, having increased more than US\$10/bbl since May. Long-term futures are far less volatile and more representative of supply and demand in the oil market. As the same illustration shows, long-term futures have actually softened since January.

Deloitte takes the influence of geopolitical events into consideration when preparing its forecast but understand that these events, while politically significant, may only be a blip on the futures radar, lasting only a few weeks or months. We monitor all geopolitical events carefully and treat them seriously, but we don't let short-term fear rule. Instead, we model our price forecast more consistent with the behaviour of the long-term futures, putting more weight on large-scale supply and demand factors. For more on our pricing philosophy visit: [www.ajmdeloitte.ca/price-forecasts/pricing-philosophy.html](http://www.ajmdeloitte.ca/price-forecasts/pricing-philosophy.html).

## Crude oil price and market demand forecast

### Forecast comments

- The differential between WTI and Edmonton Par has been forecast to be \$5/bbl for 2013 and 2014.
- In 2015, Deloitte is forecasting a return to the historical WTI to Edmonton Par differential of \$2/bbl, when pipeline and infrastructure constraints are expected to ease with further rail transport, and major pipeline reconfigurations and optimizations.
- Edmonton Par price is used as the basis to arrive at the remaining crude reference points. Offsets are based on five-year historical statistics with recent data weighted more heavily in the determination.
- Adjustments for oil consider the most recent pipeline tariffs and exchange rates to arrive at a Canadian Edmonton Par equivalent price.

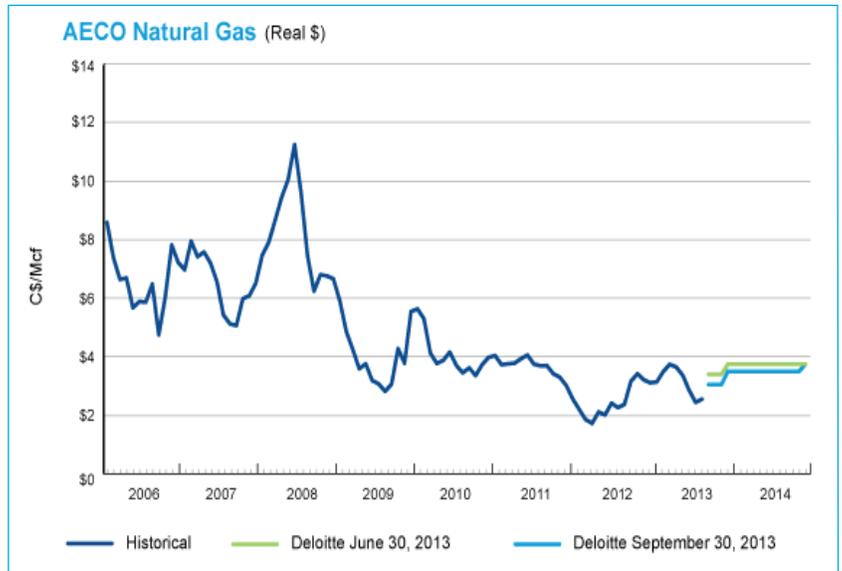


Year	WTI Cushing, OK (40 Deg. API)	WTI Cushing, OK (40 Deg. API)	Canadian Par Edmonton, AB (40 Deg. API)	Canadian Par Edmonton, AB (40 Deg. API)	SE SK Med. Oil Cromer, MB (29 Deg. API)	Bow River Oil Hardisty, AB (25 Deg. API)	Heavy Oil Hardisty, AB (12 Deg. API)	Cost inflation	CAD to USD exchange
	US\$/bbl	US\$/bbl	C\$/bbl	C\$/bbl	C\$/bbl	C\$/bbl	C\$/bbl		
	Real	Current	Real	Current	Current	Current	Current	Rate	Rate
<b>Historical</b>									
2010	\$83.27	\$79.42	\$81.56	\$77.79	\$73.48	\$68.16	\$60.59	0.018	0.971
2011	\$97.76	\$94.91	\$98.45	\$95.58	\$88.21	\$78.50	\$69.56	0.029	1.012
2012	\$94.07	\$94.07	\$87.84	\$86.51	\$80.83	\$74.34	\$63.99	0.015	1.001
<b>2013</b>									
9 Months H	\$98.32	\$98.32	\$95.85	\$95.85	\$87.09	\$78.78	\$68.07	0.010	0.978
3 Months F	\$100.00	\$100.00	\$97.95	\$97.95	\$90.95	\$82.20	\$70.95	0.000	0.970
Avg.	\$98.74	\$98.74	\$96.37	\$96.37	\$88.05	\$79.63	\$68.79	-	0.976
<b>Forecast</b>									
2013	\$100.00	\$100.00	\$97.95	\$97.95	\$90.95	\$82.20	\$70.95	0.0000	0.970
2014	\$95.00	\$96.90	\$92.80	\$94.70	\$87.25	\$78.70	\$68.70	0.0200	0.970
2015	\$90.00	\$93.65	\$90.75	\$94.45	\$86.35	\$77.45	\$68.45	0.0200	0.970
2016	\$88.00	\$93.40	\$88.65	\$94.10	\$85.30	\$76.10	\$68.10	0.0200	0.970
2017	\$88.00	\$95.25	\$88.65	\$95.95	\$86.15	\$76.00	\$68.95	0.0200	0.970
2018	\$85.00	\$93.85	\$85.55	\$94.45	\$84.30	\$74.45	\$68.45	0.0200	0.970
2019	\$85.00	\$95.70	\$85.55	\$96.35	\$85.15	\$75.35	\$69.35	0.0200	0.970
2020	\$85.00	\$97.65	\$85.55	\$98.25	\$85.65	\$77.25	\$71.25	0.0200	0.970
2021	\$85.00	\$99.60	\$85.55	\$100.25	\$85.25	\$78.25	\$72.25	0.0200	0.970

## Natural gas price and market demand forecast

### Forecast comments

- The NYMEX to Canadian AECO price historical differential is used to arrive at the AECO forecasted price.
- In Deloitte's most recent price forecast, we increased 2013 prices by \$0.15/Mcf.
- 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	SK Direct Plant Gate Sales	NYMEX	NYMEX
	C\$/Mcf	C\$/Mcf	C\$/Mcf	C\$/Mcf	C\$/Mcf	US\$/Mcf	US\$/Mcf
	Current	Real	Current	Current	Current	Real	Current
<b>Historical</b>							
2010	\$3.76	\$4.20	\$4.00	\$4.00	\$3.90	\$4.60	\$4.38
2011	\$3.46	\$3.74	\$3.63	\$3.34	\$3.33	\$4.11	\$3.99
2012	\$2.25	\$2.39	\$2.39	\$2.30	\$2.15	\$2.76	\$2.76
<b>2013</b>							
9 Months H	\$2.98	\$3.10	\$3.10	\$2.96	\$2.84	\$3.68	\$3.68
3 Months F	\$2.75	\$3.00	\$3.00	\$2.70	\$2.95	\$3.80	\$3.80
Avg.	\$2.93	\$3.07	\$3.07	\$2.89	\$2.87	\$3.71	\$3.71
<b>Forecast</b>							
2013	\$2.75	\$3.00	\$3.00	\$2.70	\$2.95	\$3.80	\$3.80
2014	\$3.25	\$3.45	\$3.50	\$3.20	\$3.45	\$4.00	\$4.10
2015	\$3.80	\$3.90	\$4.05	\$3.75	\$4.00	\$4.20	\$4.35
2016	\$4.10	\$4.10	\$4.35	\$4.05	\$4.30	\$4.40	\$4.65
2017	\$4.40	\$4.30	\$4.65	\$4.35	\$4.60	\$4.60	\$5.00
2018	\$4.85	\$4.60	\$5.10	\$4.80	\$5.05	\$4.90	\$5.40
2019	\$5.15	\$4.80	\$5.40	\$5.10	\$5.35	\$5.10	\$5.75
2020	\$5.50	\$5.00	\$5.75	\$5.45	\$5.70	\$5.30	\$6.10
2021	\$5.85	\$5.20	\$6.10	\$5.80	\$6.05	\$5.50	\$6.45



## Pricing philosophy

Deloitte looks to both the futures and the past when we create our forecasts. Price forecasting takes into account many variables that can influence future prices. While experience tells us we must continually review the tools we use to predict future oil and gas prices, one constant is the impact that the geopolitical landscape has on pricing. This impact is most accurately reflected in the financial industry's futures market for commodities. That is why the futures market is the main influence in the creation of Deloitte's price forecast.

At Deloitte, we understand that sound analysis of changing trends can influence the decisions made about mergers, acquisitions, divestitures and investments. One of the ways we ensure our price forecasts are as accurate as possible is to review our pricing assumptions on a quarterly basis. Accurate and realistic information ensures better long-term decisions for our clients.

These forecasts are Deloitte's best estimate of how the future will look. In preparing the price forecast, Deloitte considers the current monthly trends, the actuals and trends for the year to date, and the prior year actuals in determining the forecast. The base forecast for both oil and gas is based on NYMEX futures in U.S. dollars. Crude oil and natural gas forecasts are based on yearly variable factors weighted to a higher percentage for the current data and then reflecting a higher percentage 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 reflect 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 have also been considered.

While these forecasts 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

Deloitte  
Bankers Court  
700, 850 - 2 Street SW  
Calgary AB T2P 0R8  
Canada

Tel: 403-267-1700  
Fax: 587-774-5398

[www.ajmdeloitte.ca](http://www.ajmdeloitte.ca)

No representation or warranty of any kind (whether expressed or implied) is given by Deloitte LLP as to the accuracy, completeness, currency or fitness for any purpose of this document. As such, this document does not constitute the giving of investment advice, nor a part of any advice on investment decisions. Accordingly, regardless of the form of action, whether in contract, tort or otherwise, and to the extent permitted by applicable law, Deloitte LLP accepts no liability of any kind and disclaims all responsibility for the consequences of any person acting or refraining from acting in reliance on this price forecast in whole or in part. This price forecast is not for dissemination in the United States or for distribution to United States wire services.

Deloitte, one of Canada's leading professional services firms, provides audit, tax, consulting, and financial advisory services. Deloitte LLP, an Ontario limited liability partnership, is the Canadian member firm of Deloitte Touche Tohmatsu Limited. Deloitte operates in Quebec as Deloitte s.e.n.c.r.l., a Quebec limited liability partnership.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see [www.deloitte.com/about](http://www.deloitte.com/about) for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

© Deloitte LLP and affiliated entities.