

Canadian domestic price forecast December 31, 2012

Crude oil price and market demand forecast

Year	WTI Cushing, OK (40° API)	WTI Cushing, OK (40° API)	Canadian Par Edmonton, AB (40° API)	Canadian Par Edmonton, AB (40° API)	SE SK Med. Oil Cromer, MB (29° API)	Bow River Oil Hardisty, AB (25° API)	Heavy Oil Hardisty, AB (12° API)	Cost inflation	CAD to USD exchange
	US\$/bbl	US\$/bbl	C\$/bbl	C\$/bbl	C\$/bbl	C\$/bbl	C\$/bbl	Rate	Rate
	Real	Current	Real	Current	Current	Current	Current		
Historical									
2009	\$63.08	\$61.78	\$67.60	\$66.21	\$62.77	\$59.90	\$54.49	0.0031	0.880
2010	\$80.84	\$79.42	\$79.18	\$77.79	\$73.48	\$68.16	\$60.59	0.0176	0.971
2011	\$94.91	\$94.91	\$95.58	\$95.58	\$88.21	\$78.50	\$69.56	0.0292	1.012
2012									
12 Months H	\$94.00	\$94.00	\$87.76	\$87.76	\$81.12	\$75.47	\$64.23	0.0162	1.000
0 Months F	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	0.0000	0.000
Avg.	\$94.00	\$94.00	\$87.76	\$87.76	\$81.12	\$75.47	\$64.23	0.0162	1.000
Forecast									
2013	\$90.00	\$90.00	\$85.00	\$85.00	\$78.75	\$67.00	\$61.00	0.0000	1.000
2014	\$88.00	\$89.75	\$83.00	\$84.70	\$77.80	\$66.70	\$60.70	0.0200	1.000
2015	\$88.00	\$91.55	\$85.95	\$89.45	\$81.65	\$70.45	\$64.45	0.0200	1.000
2016	\$88.00	\$93.40	\$85.95	\$91.20	\$82.40	\$71.20	\$65.20	0.0200	1.000
2017	\$85.00	\$92.00	\$82.95	\$89.80	\$80.70	\$70.80	\$64.80	0.0200	1.000
2018	\$85.00	\$93.85	\$82.95	\$91.60	\$81.45	\$71.60	\$65.60	0.0200	1.000
2019	\$85.00	\$95.70	\$82.95	\$93.40	\$82.60	\$73.40	\$67.40	0.0200	1.000
2020	\$85.00	\$97.65	\$82.95	\$95.30	\$82.70	\$74.30	\$68.30	0.0200	1.000

Natural gas price and market demand forecast

Year	AB Ref. Avg. Price	AB AECO Avg. Price	AB AECO Avg. Price	AB System Plant Gate Sales	AB Direct Plant Gate Sales	BC Direct Station 2 Sales	SK Direct Plant Gate Sales	NYMEX	NYMEX
	C\$/Mcf	C\$/Mcf	C\$/Mcf	C\$/Mcf	C\$/Mcf	C\$/Mcf	C\$/Mcf	US\$/Mcf	US\$/Mcf
	Current	Real	Current	Current	Current	Current	Current	Real	Current
Historical									
2009	\$3.84	\$4.04	\$3.96	\$3.94	\$3.74	\$4.16	\$4.14	\$3.99	\$3.90
2010	\$3.76	\$4.07	\$4.00	\$4.07	\$3.76	\$4.00	\$3.90	\$4.46	\$4.38
2011	\$3.46	\$3.63	\$3.63	\$3.84	\$3.42	\$3.34	\$3.33	\$3.99	\$3.99
2012									
12 Months H	\$2.23	\$2.40	\$2.40	\$2.62	\$2.20	\$2.29	\$2.15	\$2.77	\$2.77
0 Months F	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Avg.	\$2.23	\$2.40	\$2.40	\$2.62	\$2.20	\$2.29	\$2.15	\$2.77	\$2.77
Forecast									
2013	\$2.95	\$3.20	\$3.20	\$2.90	\$3.00	\$2.90	\$3.15	\$3.50	\$3.50
2014	\$3.50	\$3.70	\$3.75	\$3.45	\$3.55	\$3.45	\$3.70	\$4.00	\$4.10
2015	\$3.80	\$3.90	\$4.05	\$3.75	\$3.85	\$3.75	\$4.00	\$4.20	\$4.35
2016	\$4.10	\$4.10	\$4.35	\$4.05	\$4.15	\$4.05	\$4.30	\$4.40	\$4.65
2017	\$4.40	\$4.30	\$4.65	\$4.35	\$4.45	\$4.35	\$4.60	\$4.60	\$5.00
2018	\$4.85	\$4.60	\$5.10	\$4.80	\$4.90	\$4.80	\$5.05	\$4.90	\$5.40
2019	\$5.15	\$4.80	\$5.40	\$5.10	\$5.20	\$5.10	\$5.35	\$5.10	\$5.75
2020	\$5.50	\$5.00	\$5.75	\$5.45	\$5.55	\$5.45	\$5.70	\$5.30	\$6.10

Forecast considerations

- Reflects the impact of European economic concerns that have transpired over the last year, the U.S. "fiscal cliff" and the decrease in growth of the Chinese economy. Previously we held the view that US\$100.00/bbl crude oil prices were the new norm, but as continued volatility exists in the world economies and as the focus on oil drilling in North America continues to grow, we have begun to see a softening in the futures market that we have chosen to model in the long term.
- Crude Oil is based on yearly variable factors weighted to higher percent in current data and reflecting a higher percent to the prior year data for the subsequent years.
- Adjustments for oil consider the most recent pipeline tariffs and exchange rates to arrive at a Canadian Edmonton par equivalent price.
- 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 more recent data weighted more heavily in the determination.
- Adjustments on each individual property are made to account for transportation and crude quality from the Edmonton posted price or the reference price used for the specific property.

Forecast considerations

- Natural gas continues to feel the effects of high storage levels based on the North American over supply. Our forecast is consistent with the long term futures market.
- The NYMEX to Canadian AECO price historical differential is used to arrive at the AECO forecasted price.
- Gas prices have been determined independently from oil prices but still reflect the current competitive nature of the two fuels. Direct spot sales prices are currently receiving a \$0.10/Mcf premium over system gas which is reflected in the forecast.
- Even though the Western Canadian gas market is highly competitive and prices have historically varied between purchasers, our view is that this will not hold as true in the future. The supply, demand and competition will keep the purchasers in close proximity to each other. Saskatchewan direct prices receive a slight premium over Alberta direct due to the occasional bottlenecks that occur in Alberta.
- The NYMEX price is based on delivery at the Henry Hub in Louisiana, the nexus of 16 intra- and interstate natural.

International price forecast December 31, 2012

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							
2013	\$90.00	\$110.00	\$92.00	\$107.25	\$108.00	\$100.00	\$108.00
2014	\$88.00	\$103.00	\$88.00	\$100.25	\$101.00	\$93.00	\$101.00
2015	\$88.00	\$93.00	\$86.00	\$90.25	\$91.00	\$83.00	\$91.00
2016	\$88.00	\$93.00	\$86.00	\$90.25	\$91.00	\$83.00	\$91.00
2017	\$85.00	\$90.00	\$83.00	\$87.25	\$88.00	\$80.00	\$88.00
2018	\$85.00	\$90.00	\$83.00	\$87.25	\$88.00	\$80.00	\$88.00
2019	\$85.00	\$90.00	\$83.00	\$87.25	\$88.00	\$80.00	\$88.00
2020	\$85.00	\$90.00	\$83.00	\$87.25	\$88.00	\$80.00	\$88.00

Forecast considerations

- International crude quality reference points for OPEC Basket, Venezuelan, Nigerian, UAE, Mexican, Chinese, Russian and Indonesian crudes are now based on Brent in US\$. For the purposes of this forecast Brent is receiving a premium to WTI on the world markets.
- US Gulf coast crudes are also receiving a premium to WTI for the first few years of the forecast then return to normal spreads.
- 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% 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	Permian Waha	San Juan Ignacio	Gulf Coast (Onshore)	Louisiana East Texas	Rocky Mtn. Opal	UK NBP
	Rate	Rate	US\$/Mcf	US\$/Mcf	US\$/Mcf	US\$/Mcf	US\$/Mcf	US\$/Mcf	US\$/Mcf
			Real	Real	Real	Real	Real	Real	Real
Forecast									
2013	1.600	1.300	\$3.50	\$3.15	\$3.20	\$3.35	\$3.50	\$3.10	\$9.50
2014	1.600	1.300	\$4.00	\$3.65	\$3.70	\$3.85	\$4.00	\$3.60	\$9.00
2015	1.600	1.300	\$4.20	\$3.85	\$3.90	\$4.05	\$4.20	\$3.80	\$7.70
2016	1.600	1.300	\$4.40	\$4.05	\$4.10	\$4.25	\$4.40	\$4.00	\$7.90
2017	1.600	1.300	\$4.60	\$4.25	\$4.30	\$4.45	\$4.60	\$4.20	\$8.10
2018	1.600	1.300	\$4.90	\$4.55	\$4.60	\$4.75	\$4.90	\$4.50	\$8.40
2019	1.600	1.300	\$5.10	\$4.75	\$4.80	\$4.95	\$5.10	\$4.70	\$8.60
2020	1.600	1.300	\$5.30	\$4.95	\$5.00	\$5.15	\$5.30	\$4.90	\$8.80

Forecast considerations

- 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.
- The NYMEX market trades natural gas futures to the year 2024.
- Gas prices have been determined independently from oil prices but still reflect the current competitive nature of the two fuels.
- Expanded world activity has also given cause to provide an estimate for the United Kingdom NBP price.

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