



International price forecast September 30, 2011

Forecast commentary

Ralph Glass, Director, Energy Valuation & Operations

As global economies struggle with the need for recovery and, hopefully, economic growth the fossil fuel energy industry and the desire to develop alternative energy sources are once more at a crossroads. Europe and especially North America rode the back of cheap energy for the last 50 years of the 20th century in developing their once robust economies. The struggle for alternative energy sources comes at a time when the world is feeling the strain of economic sustainability. It has been inferred that the financial crisis in Europe is a reflection of the attempt to go “green,” which does not create sustainable job growth the way fossil fuels have. It is also a reflection of all time high crude oil and natural gas prices burdening the European economies. North American success in developing tight oil and natural gas, like shale and coal bed methane, are now spreading around the world giving hope to economies that stagger under the weight of energy imports on their fragile economies. As a result we are seeing places like Poland ask why they cannot develop their own potential tight hydrocarbon formations.

As we moved into the 21st century a significant number of factors began to change the influence of economic development.

1. The rise in oil prices reaching over \$100.00/bbl have added to the strain on economies that are dependent on hydrocarbon imports and their ability for stable economic growth.

4. Middle Eastern energy consumption continues to rise with cheap internal hydrocarbon fueling their internal development and growth.
5. Continued decline in older established light oil pools throughout the world placing emphasis on heavier crudes, which have an effect on refinery profit margins and the refineries’ capabilities to handle the heavier crudes.
6. The era of finding and developing low cost oil pools has been replaced with significantly more costly developments like oilsands, deep water drilling, and even horizontal drilling multi-stage fracture completions to access tight oil formations.
7. Production facilities like pipelines, refineries, gas plants, and shipping terminal facilities continue to age and will be very costly to replace.
8. The fear of global warming has led to many green initiatives.
9. Nuclear power, although clean and relatively cheap, is now in question due to potential hazards from plants that are reaching their planned 40 to 50 year life cycles. Natural disasters and the proximity of nuclear plants continue to be a major concern for municipalities and citizens.
10. There is currently no “green” alternative to fossil fuels as an inexpensive, efficient energy generation tool. Currently green alternatives are too costly and have minimal impact on overall global energy consumption. Any green development is dependent on significant government subsidies at a time when tax bases continue to be eroded.

“The great thing in the world is not so much where we stand as in what direction we are moving.”

- Oliver Wendell Holmes

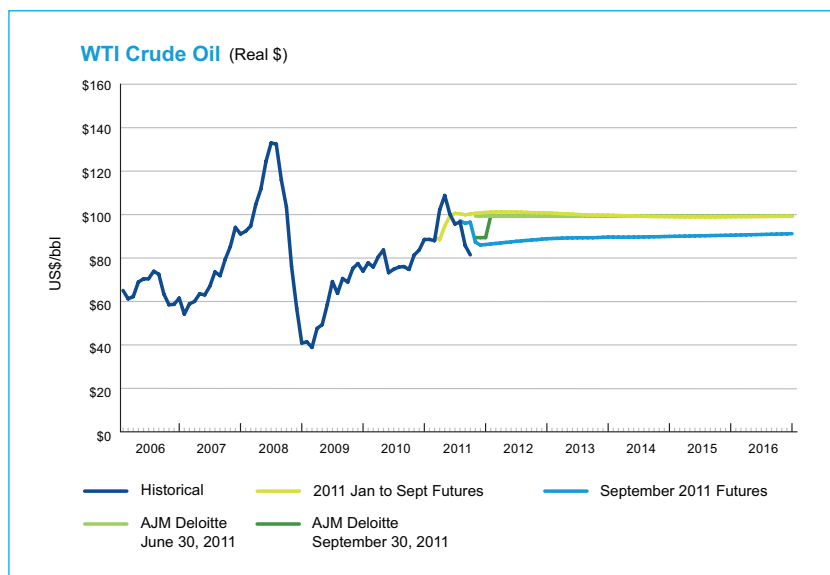
2. New technologies, like horizontal drilling and multi-stage hydraulic fracturing, in the development of shale gas plays in North America has changed the once perceived limited supply to now an oversupply of natural gas. These technologies are not only being transferred to the development of tight crude oil plays in North America, but in the “information age” the technology is now being spread around the world.
3. New economic giants China and India began to emerge relying on fossil fuels as the energy source to feed their continued expansion.

In the end, the need for relatively cheap energy, which is still fossil fuels like crude oil, natural gas, and coal, will continue to dominate well into the 21st century. Economic stability and profit to maintain both political and personal life styles will continue to put the global reliance on fossil fuels in direct conflict with the environmental factions of the world. There will continue to be pockets of green development in Western Europe and North America, but the rest of the world perceives it is their turn to develop their fossil fuels to gain economic power. The energy may not be as cheap, but it is currently the only alternative.

Crude oil price and market demand forecast

Forecast considerations

- 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.
- Nigerian Bonny Light is based on 33.4°API FOB at local port of landing.
- Mexico Maya is based on 21.8°API FOB at local port of landing.
- China Daqing is based on 32.3°API FOB at local port of landing.
- Russia Urals 31.7°API is the FOB delivered price to the Mediterranean destinations.

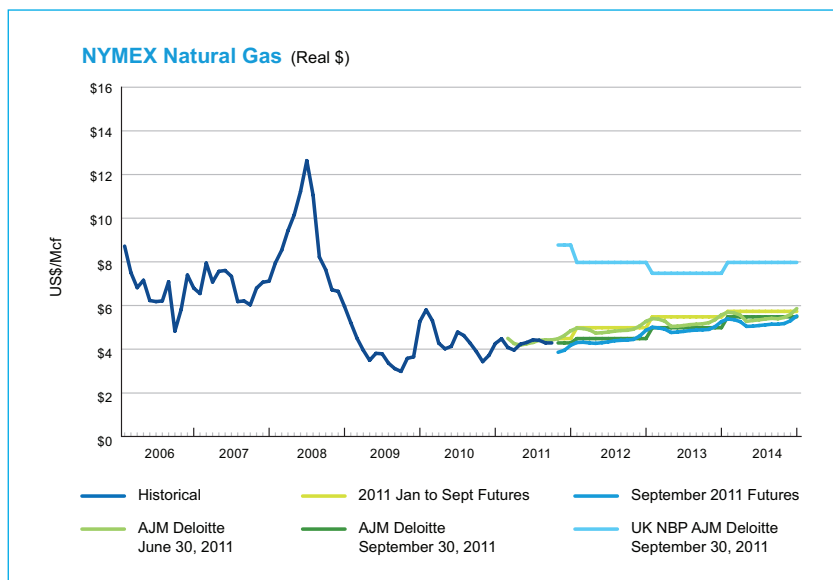


Year	Average WTI Spot	Brent Spot	Gulf Coast ASCI	Average OPEC Basket	Nigerian Bonny Light	Mexico Maya	China Daqing	Russia Urals
	US\$/bbl Real	US\$/bbl Real	US\$/bbl Real	US\$/bbl Real	US\$/bbl Real	US\$/bbl Real	US\$/bbl Real	US\$/bbl Real
Forecast								
2011	\$90.00	\$98.00	\$92.00	\$94.50	\$96.00	\$86.00	\$96.70	\$96.00
2012	\$100.00	\$105.00	\$100.00	\$102.25	\$103.00	\$95.00	\$103.80	\$103.00
2013	\$100.00	\$105.00	\$98.00	\$102.25	\$103.00	\$95.00	\$103.90	\$103.00
2014	\$100.00	\$105.00	\$98.00	\$102.25	\$103.00	\$95.00	\$104.00	\$103.00
2015	\$100.00	\$105.00	\$98.00	\$102.25	\$103.00	\$95.00	\$104.00	\$103.00
2016	\$100.00	\$105.00	\$98.00	\$102.25	\$103.00	\$95.00	\$104.00	\$103.00
2017	\$100.00	\$105.00	\$98.00	\$102.25	\$103.00	\$95.00	\$104.00	\$103.00
2018	\$100.00	\$105.00	\$98.00	\$102.25	\$103.00	\$95.00	\$104.00	\$103.00
2019	\$100.00	\$105.00	\$98.00	\$102.25	\$103.00	\$95.00	\$104.00	\$103.00

Natural gas price and market demand forecast

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 2021.
- Gas prices have been determined independently from oil prices but still reflect the current competitive nature of the two fuels.
- With the increase in the United States shale gas plays over the last few years, AJM Deloitte introduced estimates for a number of US supply regions effective with its September 30, 2009 price forecast.
- Expanded world activity has also given cause to provide an estimate for the United Kingdom NBP price.



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 Real	US\$/Mcf Real	US\$/Mcf Real	US\$/Mcf Real	US\$/Mcf Real	US\$/Mcf Real	US\$/Mcf Real
Forecast									
2011	1.650	1.350	\$4.30	\$3.95	\$4.00	\$4.15	\$4.30	\$3.90	\$8.80
2012	1.650	1.350	\$4.50	\$4.15	\$4.20	\$4.35	\$4.50	\$4.10	\$8.00
2013	1.650	1.350	\$5.00	\$4.65	\$4.70	\$4.85	\$5.00	\$4.60	\$7.50
2014	1.650	1.350	\$5.50	\$5.15	\$5.20	\$5.35	\$5.50	\$5.10	\$8.00
2015	1.650	1.350	\$5.75	\$5.40	\$5.45	\$5.60	\$5.75	\$5.35	\$8.25
2016	1.650	1.350	\$6.00	\$5.65	\$5.70	\$5.85	\$6.00	\$5.60	\$8.50
2017	1.650	1.350	\$6.10	\$5.75	\$5.80	\$5.95	\$6.10	\$5.70	\$8.60
2018	1.650	1.350	\$6.35	\$6.00	\$6.05	\$6.20	\$6.35	\$5.95	\$8.85



Pricing philosophy

AJM 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 AJM Deloitte's price forecast.

At AJM 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 AJM Deloitte's best estimate of how the future will look

In preparing the price forecast, AJM 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 US 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.

AJM 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.

Crude Oil Quality

API° & Sulphur %wt

United States Crude Reference Price Points:

West Texas Intermediate (WTI)	39.6°	0.24%wt
Alaska North Slope (ANS)	31.9°	0.93%wt
California Kern River	13.4°	1.20%wt
Heavy Louisiana Sweet	32.9°	0.35%wt
Louisiana Light Sweet	35.6°	0.37%wt
Mars Blend US Gulf of Mexico	28.9°	2.05%wt
Wyoming Sweet	37.2°	0.33%wt

International Crude Reference Price Points:

United Kingdom Brent	38.3°	0.37%wt
US Gulf Coast Argus Sour Crude (ASCI)		
<i>Approx.</i>	29.1°	2.00%wt
OPEC Basket (1)		
Venezuelan BCF-17 Bachaquero	16.5°	2.53%wt
Venezuelan Merey	16.0°	2.45%wt
Nigerian Bonny Light	33.4°	0.16%wt
Arabia UAE Dubai Feteah	30.4°	2.13%wt
Mexico Maya	21.8°	3.33%wt
China Daqing	32.3°	0.11%wt
Russia Urals	31.7°	1.35%wt
Indonesia Minas	35.3°	0.09%wt

(1) The current OPEC Reference Basket (ORB) is made up of the following crudes: Saharan Blend - Algeria; Girassol - Angola; Oriente - Ecuador; Iran Heavy - Islamic Republic of Iran; Basra Light - Iraq; Kuwait Export - Kuwait; Es Sider - Libya; Bonny Light - Nigeria; Qatar Marine - Qatar; Arab Light - Saudi Arabia; Murban - UAE; Merey - Venezuela.

AJM Deloitte

Fifth Avenue Place
600, 425 - 1 Street SW
Calgary AB T2P 3L8
Canada

Tel: 403-648-3200
Fax: 403-265-0862
erasprojects@deloitte.ca

www.deloitte.com/ca/energy-resource-advisory

Deloitte, one of Canada's leading professional services firms, provides audit, tax, consulting, and financial advisory services through more than 8,000 people in 56 offices. Deloitte operates in Québec as Samson Bélair/Deloitte & Touche s.e.n.c.r.l. Deloitte & Touche LLP, an Ontario Limited Liability Partnership, is the Canadian member firm of Deloitte Touche Tohmatsu Limited.

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 for a detailed description of the legal structure of Deloitte Touche Tohmatsu Limited and its member firms.

© Deloitte & Touche LLP and affiliated entities.