



OIL – How much? Supply; demand; price.

Goldman Sachs still expects \$20 per barrel, while most believe that the lows have occurred. What has become clear over the past year is that the experts' ability to forecast is poor. Perhaps the demand side has become too complex. While consumers win, we as investors, would rather wait.

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Spot WTI Crude \$US/B	Edmonton Light \$US/B	Spot Henry Hub \$US/MMBtu	Spot AECO \$Cdn/GJ	Spot AECO Basis \$US/MMBtu	Currency \$US/\$Cdn
44.63 ↓	41.92 ↓	2.66 ↓	2.81 ↑	0.43 ↓	0.7539 ↑

Chart Watch

- 6** The Canadian dollar is still near 11-year lows
- 12** Propane prices were positive again last week
- 27** Gasoline consumption is 4.1% over last year
- 40** Canadian drillers cut 8 oil rigs last week
- 53** YTD oil well completions are down ~51%

Supply is Still Growing But Pace is Slowing

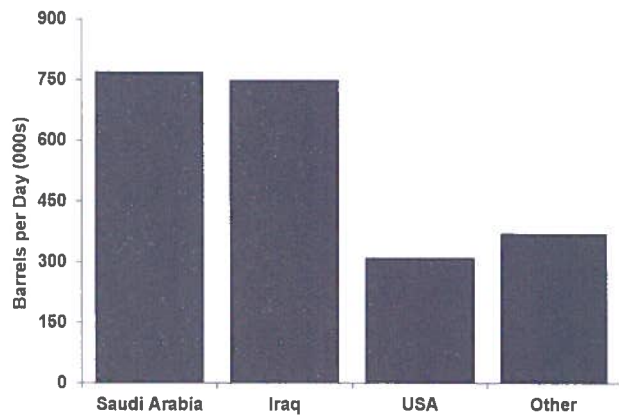
By Jackie Forrest

The casualties of low oil price are stacking-up. Pink slips are being handed out at alarming rates, oil rigs are lying idle, and the list of cancelled mega projects is growing. But world oil supply growth has not yet been injured by the downturn. This may be about to change.

Figure 1 highlights the three countries that have meaningfully increased their oil production since last November, when Saudi Arabia changed its strategy from defending oil price to focusing on market share.

Since November 2014, Iraq's oil production has surged by almost 0.8 MMB/d. But it is uncertain how much higher production can go from here. In the north, military attacks on infrastructure and souring relations between Kurdistan's regional government and Baghdad, are dragging on production growth. Supply gains in the south have mostly been the result of new infrastructure, but the prospects for large production gains are dwindling along with investment levels.

**Figure 1: Global Oil Production Growth
 November 2014 to August 2015**



Source: IEA Oil Market Report, ARC Financial Corp

Saudi Arabia has increased production by 0.8 MMB/d compared with last November. August's production came in at 10.3 MMB/d, a near record level. Even at this elevated rate, the IEA predicts that the country's spare capacity is still 2 MMB/d. However it is uncertain how much higher production levels will go from here, especially considering Riyadh's historical philosophy of maintaining some extra capacity to cushion the world's oil markets and to help Saudi Aramco optimize their operations.

Despite a sixty percent drop in US oil drilling rates compared to last year, American oil production still gained 0.3 MMB/d between November 2014 and August 2015. However, the production response from less drilling is now just starting to show-up. By year end, compared with the peak level achieved this past

Sources Bloomberg, CAODC, Baker Hughes, EIA, NOAA, CPC, IEA, Natural Resources Canada, Canadian Gas Association, ARC Financial Research

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April, the IEA and EIA expect US oil production to drop between 0.5 and 0.7 MMB/d.

The "Other" category in Figure 1 sums together all the countries that have registered small oil production gains, minus the producers who have registered losses. Countries that made modest production increases include Russia, Kuwait, UAE, Angola and Indonesia. As a result of oil sands facility outages this past summer, Canada was one of the countries that registered a temporary production loss compared with November. Libya also lost supply. The country's civil war has shut in its production, blocked pipelines, and closed oil terminals. Both Nigeria and Venezuela saw slight declines over the period, and the outlook for these two countries leans towards more production declines, not increases.

Iran's production is up slightly over the period, but the country is itching to make larger increases to its output. July's nuclear deal put Iran on a path that could technically boost the country's production levels by early 2016. The Iranian Oil Minister expects that within a few months of lifting the sanctions, crude oil production could grow by 1 MMB/d. Other agencies have a more conservative outlook, for example the IEA expects Iranian production could grow between 0.5 and 0.7 MMB/d when sanctions are removed.

Beyond Iran's immediate production gains, it is uncertain how much more production can grow. While Tehran is already starting to make plans for

opening-up its long neglected oil fields to foreign capital and technology, the fruits of these efforts are not likely to be immediate. For example, when Iraq struck deals with international investors in 2009, it took another two or three years to register any meaningful production gains. The Iran situation also has some unique investment risks, since the nuclear pact allows for sanctions to be slapped on quickly if Iran does not follow through on its obligations under the deal.

Adding up all the country-level changes in oil production, global oil supply has increased 2.2 MMB/d since last November. This is a big number. To put it in perspective, the oil supply growth since last November alone is responsible for about 85% of the world's current glut. And, more supply could be coming if Iran can unshackle itself from sanctions and increase its production level next year, or if Libya could turn things around.

But there is some room for hope in this seemingly gloomy situation. At this point, the list of countries that can add more production is getting smaller. It is uncertain if Iraq or Saudi Arabia can, or will produce more. For many other producers (including the US), the expectation is that future production levels will decline, not increase. So, although the crude oil glut looks like it will extend into next year, it is losing some momentum. A deceleration in supply, combined with robust demand, will eventually conspire to strengthen prices.

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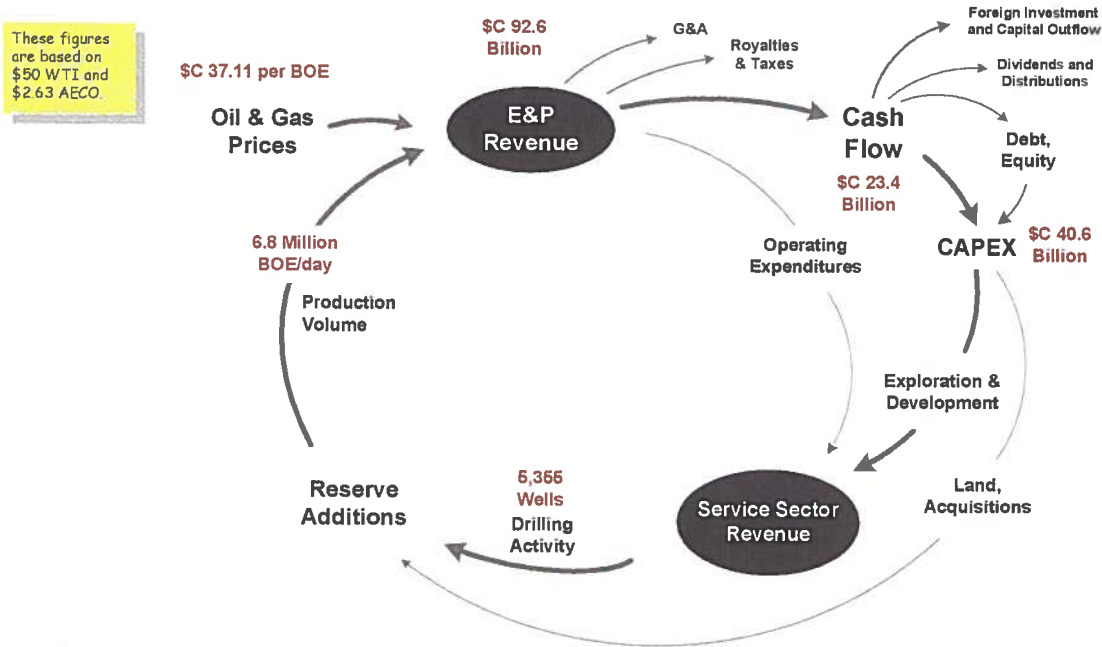
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Canadian Industry Metrics

Estimated Capital Flow in the Canadian Oil and Gas Economy for 2015
Industry Revenue, Cash Flow, Reinvestment, Drilling Activity and Production



Canadian Industry Statistics: Historical Data and Forecast

Canadian Industry Metrics

	Price		Production Volume				Capital Inflow		Reinvestment			Drilling		Well Split		
	Average Price	Edmonton Par AECO	Conv. Liquids	Bitumen + Synthetic	Natural Gas	Total Volume	Total Revenue	After-tax Cash Flow	Conv. Oil and Gas	Oilsands	Reinvest Ratio	Wells Compl.	Avg Rig Utiliz.	Oil Wells	Gas Wells	
	\$/BOE	\$/B \$/GJ	Average MBOE/d	Average MBOE/d	MBOE/d (@ 6:1)	MBOE/d (@ 6:1)	\$/ millions	\$/ millions	\$/ millions	\$/ millions	x 1	#/ Year	%	%	%	
2001	31.22	39.26	5.17	2,024	659	2,889	5,572	63,481	29,064	21,998	5,907	0.96	17,933	62%	26%	62%
2002	27.71	40.21	3.89	2,102	741	2,886	5,729	57,939	29,433	18,107	6,746	0.84	14,459	45%	27%	63%
2003	35.95	43.40	6.31	2,085	863	2,800	5,738	75,298	37,644	23,855	5,048	0.77	19,851	62%	23%	70%
2004	39.79	52.86	6.24	2,089	993	2,827	5,865	85,179	43,959	26,828	6,183	0.75	21,593	63%	21%	72%
2006	51.53	69.19	8.36	2,044	990	2,840	5,837	107,455	56,442	34,815	10,437	0.81	21,925	68%	22%	70%
2006	46.98	73.27	6.20	2,042	1,126	2,850	5,941	103,294	54,171	38,345	14,337	1.00	22,127	65%	22%	71%
2007	49.28	77.01	6.12	2,077	1,199	2,810	6,070	109,274	54,985	31,184	16,065	0.88	19,144	38%	28%	66%
2008	68.22	102.66	7.75	1,994	1,207	2,700	5,864	145,425	83,255	36,293	18,113	0.65	16,877	41%	36%	56%
2009	42.26	66.42	3.79	1,840	1,331	2,514	5,683	89,057	36,680	22,335	11,227	0.91	8,368	25%	41%	51%
2010	48.41	77.55	3.79	1,830	1,403	2,434	5,668	101,056	43,569	35,666	17,195	1.16	12,119	40%	56%	40%
2011	55.32	95.24	3.44	1,873	1,482	2,386	5,740	116,890	53,448	40,139	22,491	1.10	12,827	52%	69%	31%
2012	50.60	86.38	2.27	1,905	1,743	2,327	5,975	111,389	48,908	39,733	27,199	1.37	11,067	44%	83%	17%
2013	55.95	93.47	3.02	2,023	1,940	2,343	6,306	128,787	54,711	43,165	30,809	1.35	11,071	42%	84%	16%
2014e	61.12	95.07	4.23	2,079	2,163	2,445	6,687	149,185	67,201	45,000	33,016	1.16	11,222	45%	78%	22%
2015e	37.11	59.03	2.63	2,111	2,286	2,443	6,840	92,636	23,407	18,624	22,011	1.74	5,355	25%	55%	45%