



Outlook for Commodities in Alaskan Export Markets: From Minerals to LNG

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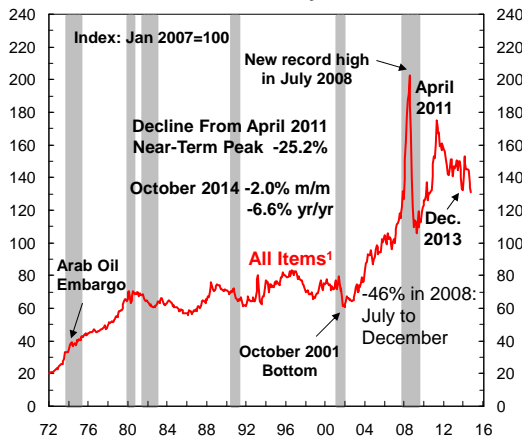
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Scotiabank's Commodity Price Index Lost Momentum In 2013, But Will Bottom In 2014

Scotiabank Commodity Price Index¹



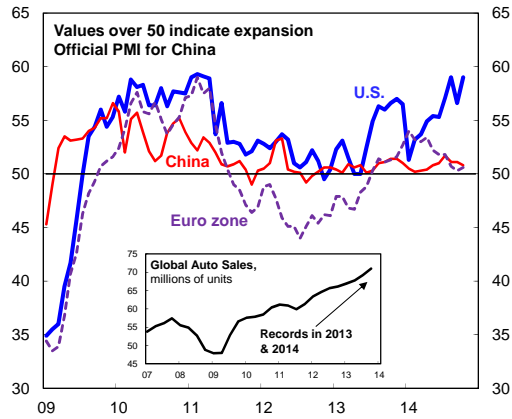
Scotiabank's Commodity Price Index rose to a near-term peak in April 2011 — just prior to financial market concern over excessive Eurozone sovereign debt and the negative impact on global economic growth.

The correction since April 2011 (-25.2%) — linked to austerity-led recession in the southern Eurozone, a sub-par U.S. economic recovery (until recently), new mine supply started in a slowly growing world economy and an unwinding of grain & oilseed prices due to massive U.S. crops in 2013 & 2014 — should be largely over in 2014.

1. A trade-weighted U.S. dollar-based Index of principal Canadian commodity exports, including Oil & Gas (39.9% weight), Metals & Minerals (30.1% weight), Forest Products (14.66% weight) and Agricultural commodities (15.35% weight).
 2. Shaded areas represent U.S. recession periods. Data to October 2014.

Global PMIs For Manufacturing

Drives Sentiment On Prospects For Commodity Markets



Source: Markit, ISM, Scotiabank Economics;
Data to October 2014.

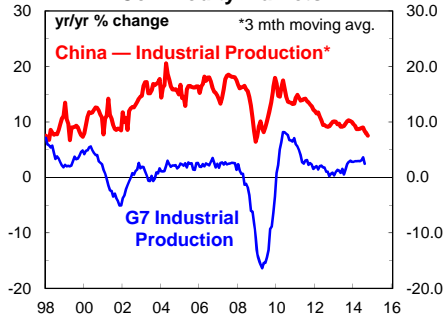
Growth in the global manufacturing sector in late 2013 posted its best performance since 2011:Q2 — led by an improvement in the G7 (excepting France and Canada). The gain in the United States was particularly notable.

However, global growth prospects for 2014 have recently been downgraded (the third consecutive year of disappointing growth) due to another pullback in the Eurozone and generally slower manufacturing activity in China. China's GDP rose by a stronger-than-expected 7.5% yr/yr in 2014:Q2, up from 7.4% in Q1, but slowed again to 7.3% in Q3.

The Purchasing Manager Index for Manufacturing in China — a key indicator for base metal prices — eased to 50.8 in October, pointing to manufacturing expansion, but at a slower pace than the 51.1 in September. However, this development was offset by a massive stimulus program by the Bank of Japan ('quantitative easing') in late October, lifting base metal prices.

U.S. growth advanced by a robust 4.6% in 2014:Q2 and 3.5% in Q3 — buoyed by strong business investment — after dropping by 2.1% in Q1, and should continue to perform well in 2015.

China — Vital to Global Commodity Markets



China's Share of Global Consumption in 2014 Compared with the United States (in brackets)

Copper	45.5% (8.4%)	Nickel*	50.6% (7.8%)
Zinc	46.6% (7.9%)	Aluminium	49.2% (9.5%)

Four Base Metals: China 47.9%, USA 8.9%.
*Japan 7.4%; excluding inventory accumulation in China.
World oil consumption: China 11.2%; USA 20.6%.

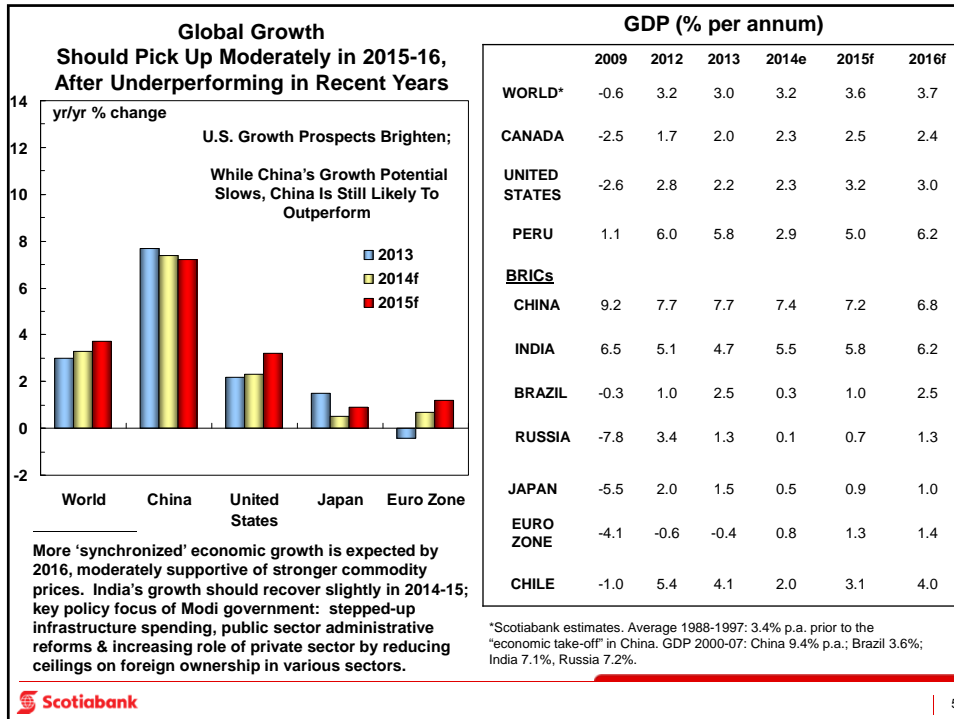
Source: Scotiabank Commodity Price Index.

China Industrial Production:

Jan-Feb 2009	3.8% yr/yr (the bottom)
Mar 2009	8.3%
July 2009	10.8%
Dec 2009	18.5%
2010	14.4%
China tightens monetary policy.	
2011	13.7%
2012	10.0%
2013	9.7%
Q4 2013	10.0%
Q1 2014	8.7%
Q2 2014	8.9%
Q3 2014	8.0%
Sept 2014	8.0%
Oct 2014	7.7%

G7 Industrial Production

U.S.	+4.0% (Oct)
Japan	-0.8% (Sep)
Germany	-0.2% (Sep)



ONCE IN A DECADE CHANGE IN LEADERSHIP IN CHINA — As Important To The Global Growth Outlook As The U.S. Presidential Election

November 8-15, 2012 — date of the 18th National Congress of the Communist Party of China, where a new leadership was established for only the fifth time since Mao Zedong — followed by the National People's Congress (parliament) in March 2013.

New Fifth Generation Leadership:

President (Head of State and Secretary-General of the Communist Party of China):

Mr. Xi Jinping; previously Mr. Hu Jintao

Prime Minister (Head of Government):

Mr. Li Keqiang, previously Mr. Wen Jiabao.

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China — Policy Continuity Under The New Leadership

China continues to pursue the economic initiatives in the 12th Five-Year Plan, unveiled in March 2011, though the new leadership is seeking more market-related solutions (less central planning & government involvement — including in the banking sector) — and will be more ‘populist’. Mr. Xi Jinping is pursuing the “national dream”.

The 12th Five-Year Plan (2011-15) seeks more ‘balanced’ economic growth — with less emphasis on export expansion & investment and greater focus on domestic consumer spending, development of the ‘service’ industries including the financial sector and ‘New Economy’ growth; other key objectives — productivity gains through ‘economic restructuring’ — e.g. closure of smaller, less efficient plant & rationalization into larger, lower-cost entities (the steel & iron ore industries); reducing industrial energy intensity; a focus on developing the Western & Central parts of China, away from the heavily industrialized Eastern & Coastal areas, as initiated by President Hu Jintao; raising household incomes & living standards & building a more environment-friendly society.

While progress on ‘rebalancing’ China’s economy has only been slight, the size of the service industries surpassed the primary sector & secondary manufacturing for the first time in 2013:Q4 — a trend which has continued. Domestic retail sales are running at 12% YTD in 2014.

What is evident is that China is no longer pursuing ‘economic growth at any cost’. A subtle shift is underway, with China comfortable with a slower, more ‘market-determined’ advance (official target was 7.5% for 2012-13 and remains at 7.5% for 2014).

Dual Policy Agenda In 2013-14 — De-Leverage Financial Sector, While Maintaining Growth At 7-7.5%

Since 2013:H2, Chinese policy makers have had a dual agenda: meaningful deleveraging/de-risking of China’s ‘shadow banking’ sector & municipal finances by encouraging tighter credit adjudication, while still ensuring 7.5% GDP growth.

Banking sector liquidity stayed relatively tight in 2014:H1, but fiscal stimulus (huge investment in high-speed railways & electricity transmission & stepped-up funds for affordable ‘socially assisted-housing’) supported the economy. Bank reserve requirements have been eased selectively in recent months. While a broad-based easing in monetary policy has NOT been implemented, the People’s Bank of China may ease overall bank reserve ratios and/or cut benchmark interest rates by early 2015.

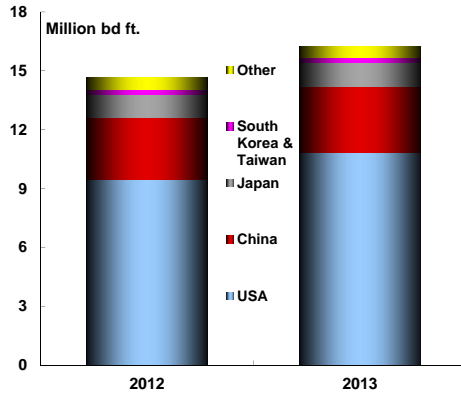
THE NEW LEADERSHIP ANNOUNCED A NEW PRO-GROWTH REFORM AGENDA, AFTER THE NOVEMBER 9, 2013 PLENUM OF THE COMMUNIST PARTY’S Central Committee:

Outlined the ‘decisive’ role that ‘markets’ should play in allocating resources (e.g. decontrol of energy prices), fiscal reform to deleverage municipal finances (better aligning spending obligations with revenue by shifting some spending to the central gov’t and allowing municipalities to issue debt), the beginning of ‘rural’ land & Hukou reform to enable farmers to move to smaller towns & cities, facilitating urbanization, and reform of SOEs (more private investment in state-controlled sectors will be permitted and dividends paid by state assets will be raised to 30% by 2020).

If effectively implemented, these reforms should enable China’s economy to achieve just under 7% p.a. GDP growth over the balance of the decade (6.8-7.0% per annum).

China Steps Up Urbanization Policy

Canadian Offshore Lumber Exports Set Record in 2013



Canadian softwood lumber exports to China in 2013: +6%; to all markets including USA +11%. China is 2nd biggest export destination; Canadian exports to China +4% in 2014:H1.

Home sales improved in China in October, as a result of the new policy for 'second-time' buyers.

In a drive to shift to domestically-driven economic growth, China unveiled a new 2014-2020 urbanization plan in March 2014. The plan aims to increase the proportion of urban residents in China from 53.7% to 60% by 2020, accompanied by a massive construction program of transportation networks (every city with over 500,000 people will be accessible by high-speed rail), urban infrastructure (subways) and residential real estate.

Re-development of 4.75 million housing units in 'shantytowns' will be undertaken in 2014 (costing RMB 1 trillion).

'Socially-assisted' housing starts are intended to partly offset a decline in 'private-sector' construction, linked to over-building and falling home prices in 2014.

In late September, the Chinese government moved to support the 'private-sector' property market. 'Second-time' homebuyers are now treated as 'first-time' buyers, provided previous mortgages are paid off; only need to provide a 30% rather than a 60-70% mortgage down payment.

Medium-Term, The 'Emerging' Markets Will Remain Supportive For Commodity Prices, With The 'Bull Run' Returning

Huge Potential for Oil & Metal-Intensive Motor Vehicle Sales in China & India
China's population: 1.354 billion

Vehicle Penetration — 2013 (Vehicles per 1,000 people)

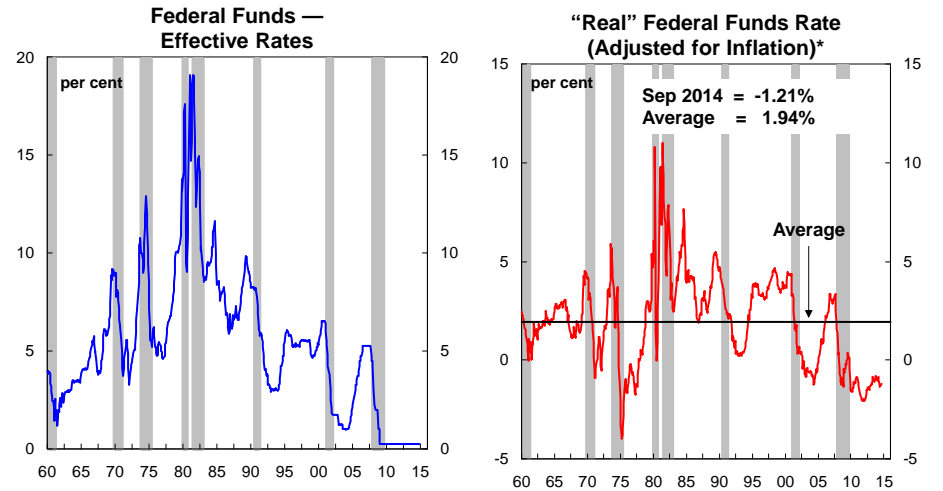
China	88
United States	792
Western Europe	569
Japan	590
India	26
Mexico	286

China's interest in direct investment overseas to secure mineral supplies continues, though interest has shifted to well-developed projects rather than junior mining ventures.

China will continue to be the main driver of global auto sales (accounting for more than 60% of the world total in 2013). Passenger vehicle sales soared over 16 million units in 2013 and will climb to 18 million in 2014. Automakers will introduce 200 new or upgraded models in China in 2014 compared with less than 70 in the United States.

China's potential GDP growth is slowing — in 2012: 8.5%, 2015-20: slightly less than 7.0% p.a., 2025-30: 5% p.a. with less under-utilized labour & much slower capital formation (less build-out of manufacturing, in view of emerging excess capacity in some sectors in China).

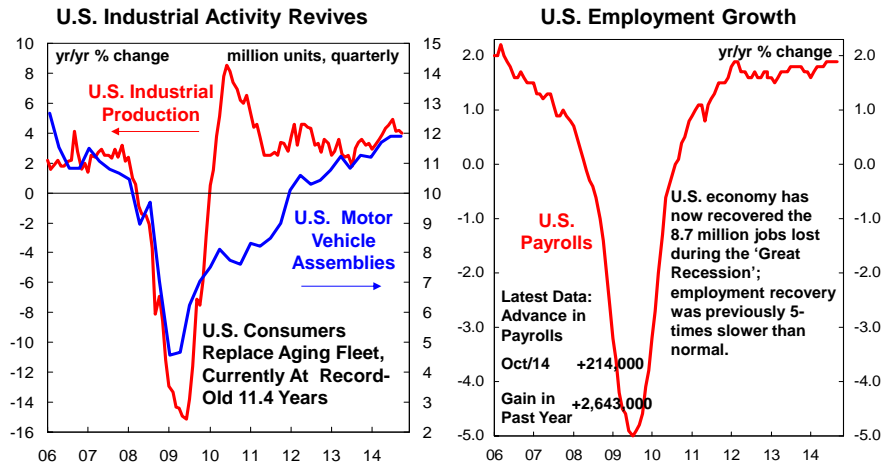
The Fed Has Been Determined To Strengthen U.S. Employment Recovery, But A Gradual Unwinding Of Accommodative Monetary Policy Is Coming



Fed Funds Target Rate is 0-25 bps. 'Asset purchase program' or Quantitative Easing has dropped to zero in November (purchases of longer-dated MBS & Treasury bonds were cut to US\$15 bn in October; originally US\$85 bn per month). Fed funds rate could be lifted within 6 months after an end to QE (around mid-2015), provided labour market & inflation objectives are met.

* Inflation-adjusted with the U.S. Personal Consumption Deflator (PCE) and the core PCE. Shaded areas represent U.S. recession periods. PCE inflation is currently running below the Fed's 2% objective. Unemployment rate in October: 5.8%, but participation rate remains low.

Strong Auto Assemblies Buoy U.S. Industrial Activity & Employment Picks Up



North American motor vehicle assemblies advanced by 3.7% in 2013 to 16.5 million units and will climb to 17.2 million in 2014 and 17.8 million in 2015 — exceeding the previous 17.7 million peak of 2000. U.S. household balance sheets have improved markedly. Last year was the 'Year of the Truck & Cross-Over Utility' in both Canada and the United States. Source: Scotiabank Economics, Global Auto Report.

Improving Fundamentals For U.S. Growth

U.S. consumers are in better shape to spend, with household debt (including mortgages) to disposable income falling to 135.3% in 2014:Q2 — the lowest level since late 2012.

While U.S. housing starts have been disappointing this year, we believe U.S. housing is in the midst of a multiple-year recovery, after five years of underbuilding relative to demographic demand.

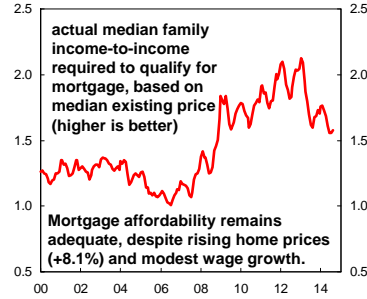
Less fiscal drag from the Federal government and slight stimulus from State & Local governments; the U.S. Federal deficit peaked at 9.8% of GDP in FY2009 and fell to 2.8% in FY2014; in FY2015 and 2016, deficits of about 2 ½% of GDP are projected; a potential resolution of deferred issues may offer upside on GDP growth.

Big improvement in U.S. merchandise trade performance due to the remarkable development of 'light, tight' oil in the North Dakota Bakken as well as the Permian and Eagle Ford Basins; renewed industrial competitiveness in petrochemicals, refining & natural gas-based fertilizers due to low-cost natural gas & NGLs from horizontal, multi-fracture drilling technology. However, the recent oil price decline will slow growth in drilling activity in 2015.

U.S. Household Debt-To-Disposable Income

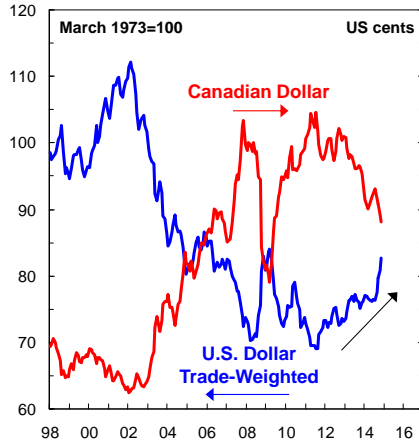


U.S. Mortgage Affordability

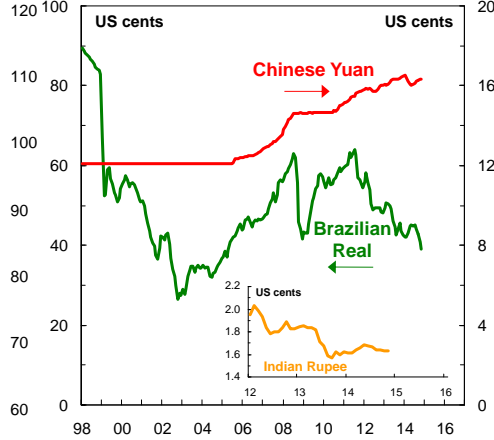


A Stronger U.S. Dollar Against Major Currencies Expected In 2015-16 Supported By Widening & Increasingly Attractive Growth & Interest Rate Differentials

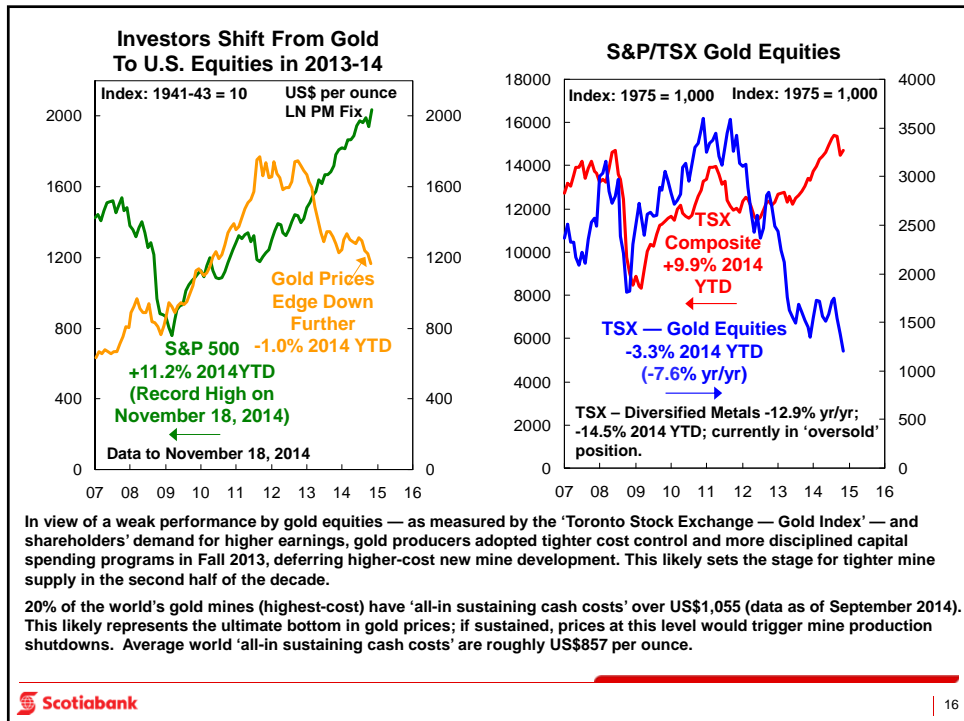
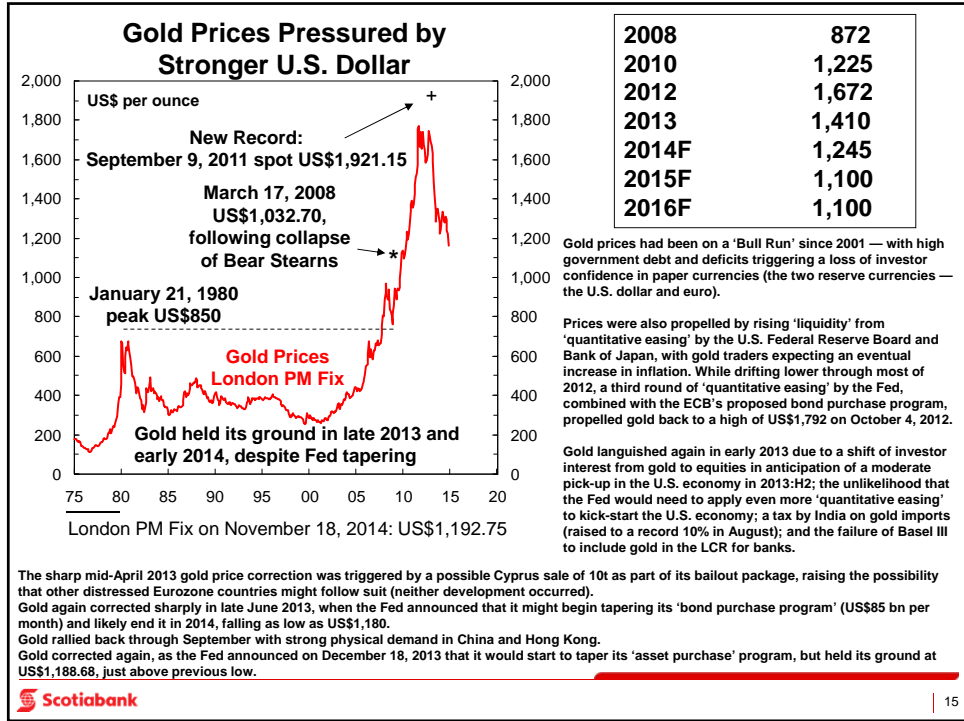
U.S. Dollar Trends



Pressure on 'Emerging-Market' Currencies



Data to November 18, 2014: euro US\$1.2537; Cdn\$ = US\$0.8848; US\$ = 6.1213 Rmb. A stronger U.S. dollar creates 'headwinds' for dollar-denominated commodity prices, including gold, potash & base metal prices. On a positive note, the lower Canadian dollar and reduced oil prices will improve competitiveness and bolster earnings for Canadian mining companies.



A Stronger Era Ahead For U.S. Dollar Will Dampen Gold Prices

Gold prices (London PM Fix) fell as low as US\$1,164 per ounce on October 31, 2014 – moving below the previous near-term low of US\$1,180 in mid-June 2013, following the Fed's announcement that it would likely reduce its 'asset purchase program' and end 'Quantitative Easing' (QE) in 2014 (on Nov. 6 intraday: US\$1,131). This reflected:

A jump in the US Dollar to a 4-year high against a basket of currencies (DXY Index), after the Bank of Japan announced a huge increase in its bond purchase programme (QE) in contrast to an end to U.S. QE and prospects for tighter U.S. monetary policy by mid-2015.

The Bank of Japan will now buy Y6.6 trillion per month of longer-term Japanese government bonds, expanding the 'base money supply' by Y80 trillion per year, to pull Japan out of deflation and lift tepid growth.

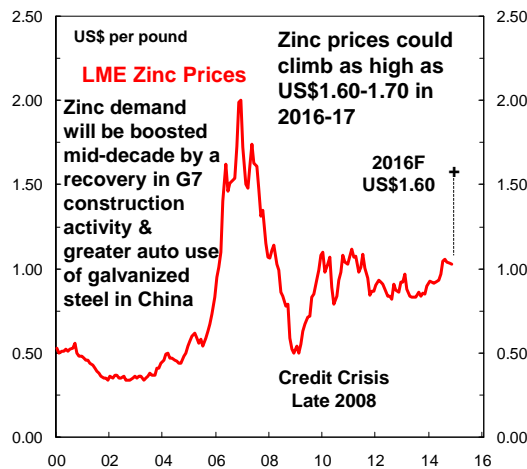
Reinvigorated U.S. growth prospects also sent the S&P 500 to a new all-time record high on October 31, with investors further shifting from gold to U.S. equities.

Medium-Term Outlook: Moderately stronger bullion prices are possible later in the decade amid tight new mine supplies and some pick-up in inflation.

China became the world's biggest 'physical' buyer in 2013, given stepped-up marketing by Chinese banks of coins & wafers; Chinese buying has increased in the Fall, after ebbing earlier in 2014.

Base Metal Prices Begin Cyclical Recovery

Zinc — The Next Big Base Metal Play



LME official cash settlement price November 18, 2014: US\$1.01.

Teck's Red Dog Mine: zinc, lead and silver by-product.

Zinc Price Outlook

2009	US\$0.75
2012	US\$0.88
2013	US\$0.87
2014F	US\$1.00
2015F	US\$1.25
2016F	US\$1.60

Zinc prices held up well during the doldrums last summer, given strong interest by Commodity Funds and investors, benefitting Lundin Mining, HudBay Minerals and Teck in Canada (Glencore is world's biggest zinc miner).

Stepped-up Bank of Japan 'Quantitative Easing' (monetary stimulus) recently boosted zinc and other base metal prices.

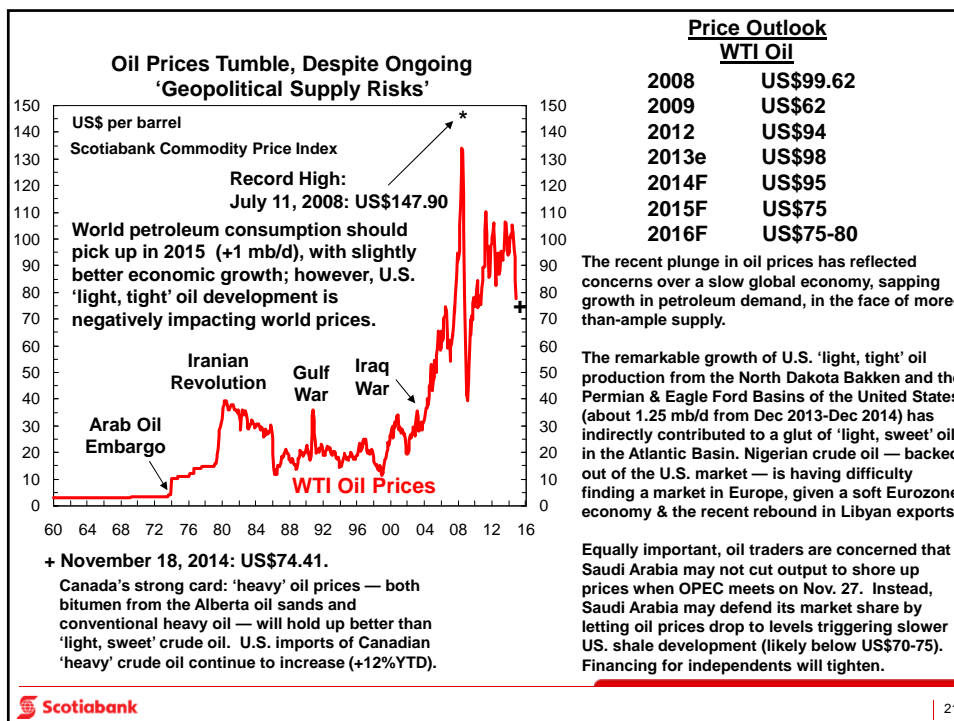
Zinc — The Next Big Base Metal Play (continued)

Zinc prices are expected to strengthen mid-decade alongside the following:

- 1) Gains in world mine production over the next 4-5 years will likely fall behind global demand growth (4.7% p.a.), given unusually high depletion at major mines in the face of tighter capital availability for new mine development; lack of equity capital for junior miners will take a toll on development, despite some pick-up in private equity interest; Century in Australia (the world's third-biggest zinc mine) will close in 2015:Q3 (480,000t) and Lisheen will shut in 2016 (172,000 t), following closures in 2013 at Brunswick (190,000t) and Perseverance (125,000 t) in Canada; and
- 2) The major end uses of primary zinc in galvanized steel are picking up — particularly in motor vehicle production and construction. World vehicle sales reached a record high in 2013 of more than 81 million units and an even bigger record is forecast for 2014 at almost 86 million (+5%). China's passenger car & cross-over utility sales jumped by 23.6% in 2013, surpassing U.S. sales last year, and have advanced by 13% YTD through September 2014. U.S. non-residential construction, a sector which has struggled since 2008, is recovering (including office buildings).

Top Ten Zinc Producers, 2014

<u>By Mine</u>			<u>By Smelter</u>		
	<i>Zinc Production, Kt</i>	<i>% of World</i>		<i>Zinc Production, Kt</i>	<i>% of World</i>
1. Glencore	1,319	10.0%	1. Nyrstar	1,081	7.9%
2. Hindustan Zinc	742	5.6	2. Korea Zinc Group	1,070	7.9
3. Teck	655	5	3. Glencore	1,011	7.4
4. MMG Limited (Century)	591	4.5	4. Hindustan Zinc	722	5.3
5. Boliden	300	2.3	5. Votorantim	587	4.3
6. Nyrstar	293	2.2	6. Boliden	448	3.3
7. Votorantim	291	2.2	7. Shaanxi Nonferrous Metals	422	3.1
8. Minera Volcan	252	1.9	8. China Minmetals	286	2.1
9. Industrias Peñoles	219	1.7	9. Teck	278	2.0
10. China State Enterprise	212	1.6	10. Yuguang Gold & Lead	277	2.0
World Total	13,141	100.0	World Total	13,626	100.0
11. Sumitomo	199	1.5	11. Noranda Income Fund	258	1.9
13. Goldcorp (Penasquito)	180	1.4	12. Huludao Zinc	256	1.9
14. Zhongjin Lingnan Metals	171	1.3	13. Dongling Trade & Industry	247	1.8
15. Lundin Mining	140	1.1	14. Industrias Peñoles	233	1.7
25. HudBay Minerals	94	0.7	15. Yunnan Metallurgical	224	1.6
Shaanxi Nonferrous Metals	65	0.5	30. HudBay Minerals	100	0.7



Oil Prices Lose Ground Amid U.S. Shale Development (continued)

Brent oil (the international benchmark) has plunged to the US\$78 mark in mid-November 2014, after running up to US\$115 in mid-June; WTI oil to US\$74 from US\$107. Concern over 'geopolitical supply risks' has eased, on hopes that U.S. air strikes against ISIS would cut potential disruptions in Iraq.

Libya also managed to re-open its major eastern export ports in the Fall, allowing oil exports to move back to 900,000 b/d from a mere 100,000 b/d earlier this year, though unrest has again pared exports to 600-700,000 b/d, with closure of the El Sharara field.

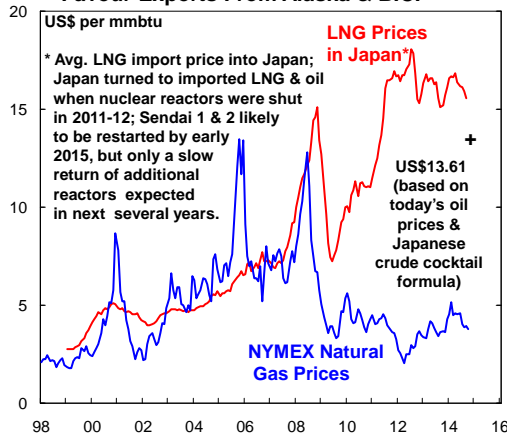
Higher Libyan exports have contributed to a glut of 'light, sweet' crude in the Atlantic Basin, with Nigeria having difficulty re-directing its crude from the U.S. market into Europe, where weak economic conditions and refinery shutdowns have tempered demand. Nigerian exports to the USA were only 25,000 b/d in July 2014 compared with 1.1 mb/d in 2010, before the 'oil shale revolution'.

Nevertheless, today's 'geopolitical' developments will cut supplies over the long-term. Oil traders may have become overly complacent about supplies.

Investment in southern Iraqi oil fields will be delayed. Access restrictions to Western oil technology will check Russia's oil development medium-term.

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**Higher LNG Prices in Japan & Asia
Favour Exports From Alaska & B.C.**



*LNG prices delivered to Japan: peak at US\$18.07 in July 2012, Sept. 30, 2014: US\$15.92. Source: LNG Japan Corporation.
Sabine Pass LNG: first train Feb 2016, last train by Aug 2017, 18MTPA; Cameron LNG: first exports by 2018, 12 MTPA; Freeport LNG: Train 1 by 2018, Trains 2 & 3 by 2019, 13.2 MTPA, received clearance from DOE and financing package; Cove Point LNG by 2017, 5.2 MTPA; Corpus Christi LNG, 13.5 MTPA by 2018; Perhaps Golden Pass, 15.6 MTPA by 2019.
TOTAL: 77.5 MTPA = over 10.08 bcf/d.

Nymex Natural Gas Prices

(US\$ per mmbtu)

2008	8.90
2011	4.03
2012	2.83
2013	3.73
2014F	4.35
2015F	4.00
2016F	4.00

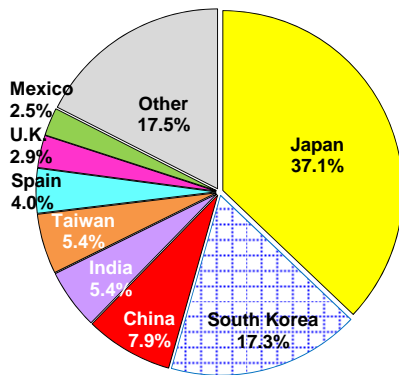
Natural gas is the fuel of choice for North American manufacturers, recently rejuvenating the U.S. petrochemical and fertilizer industries. Development of 20 new U.S. natural gas 'shale' basins – made economic by new multi-stage fracture drilling technology – has lowered the industry cost curve.

NYMEX prices fell to a decade low of US\$1.91 per mmbtu on April 19, 2012. This price level was unsustainably low; the vast bulk of North American natural gas cannot be produced profitably at prices below US\$2. Most 'dry' natural gas shale producers require at least US\$3 to generate a reasonable return.

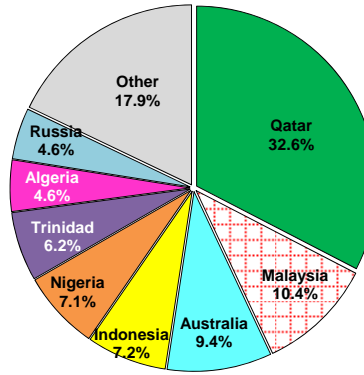
Frigid winter weather across most of the United States and Canada triggered a spike in near-by futures as high as US\$6.15 on February 19, 2014 (a 5-year high). U.S. gas-in-storage has been refilled fairly rapidly, but remains -5.7% yr/yr and -6.2% below 5-yr average as of Nov 7, 2014 and prices firm at US\$4.31. Stepped-up tie-in of Marcellus shale will check natural gas prices in 2016-17 (15 bcf/d), but LNG export projects in US Gulf will also boost demand in 2016-19 (especially in 2017-18).

**World Trade In LNG, 2013
236.8 MT**

Top Seven Importers
(% of Total)



Top Seven Exporters
(% of Total)



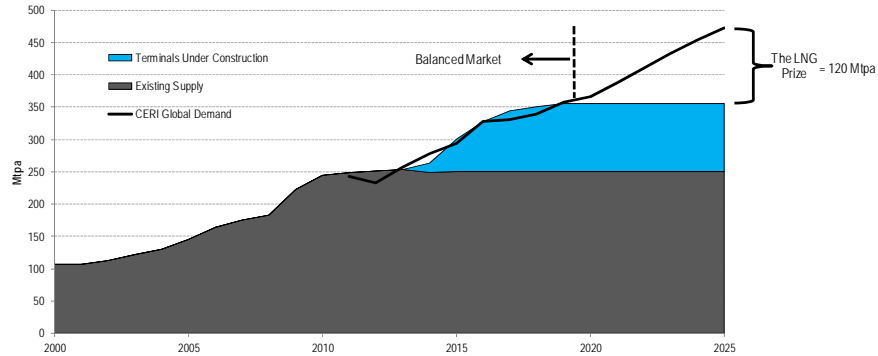
Data source: IGU World LNG Report, 2014.

Global LNG Supply and Demand Outlook

Global LNG market is forecast to grow at a CAGR of 5% between 2014 and 2025

- With significant liquefaction capacity currently under construction in Australia, the United States, and Russia, LNG demand appears to be well supplied to the end of the decade
 - Annual trading volumes are projected to reach 350 Mtpa (46 bcf/d)
- However, beyond 2020 a supply gap of roughly 120 Mtpa (16 bcf/d) is forecast for which there is competition primarily from the gas industries in the United States, Australia, and Canada
 - Combined, the three countries have over 60 LNG export projects proposed for more than 650 Mtpa (86 bcf/d) of capacity

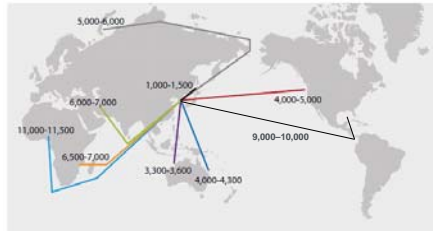
Global LNG Supply and Outlook



Source: Scotiabank GBM Equity Research LNG Watch

B.C. & Alaskan LNG Projects Have Logistical Advantages for Asian Markets

Approximate Nautical Distances



Source: Centre for Global Energy Studies

Source: Centre for Global Energy Studies.

B.C. has a transportation cost advantage to Pacific Basin markets relative to competing projects on the U.S. Gulf.

The nautical distance between B.C. and Japan/South Korea is 4,000-5,000 miles, less than half the 9,000-10,000 miles from the U.S. Gulf via the Panama Canal.

TOP FIVE LNG BUYERS – JAPAN, SOUTH KOREA, CHINA, INDIA, TAIWAN.

B.C. & Alaska could be cost competitive, provided 'greenfield' capex costs are contained.

Breakeven Costs FOB at loading port + Shipping Cost = Breakeven DES Cost in Japan, 2018

B.C. – US\$7.89 + US\$1.46 = US\$9.35 per mmbtu;

U.S. Gulf of Mexico – US\$6.96 + US\$3.22 = US\$10.18 per mmbtu; based on highly probable projects;

Australia – US\$8.44 + US\$1.50 = US\$9.94 per mmbtu;

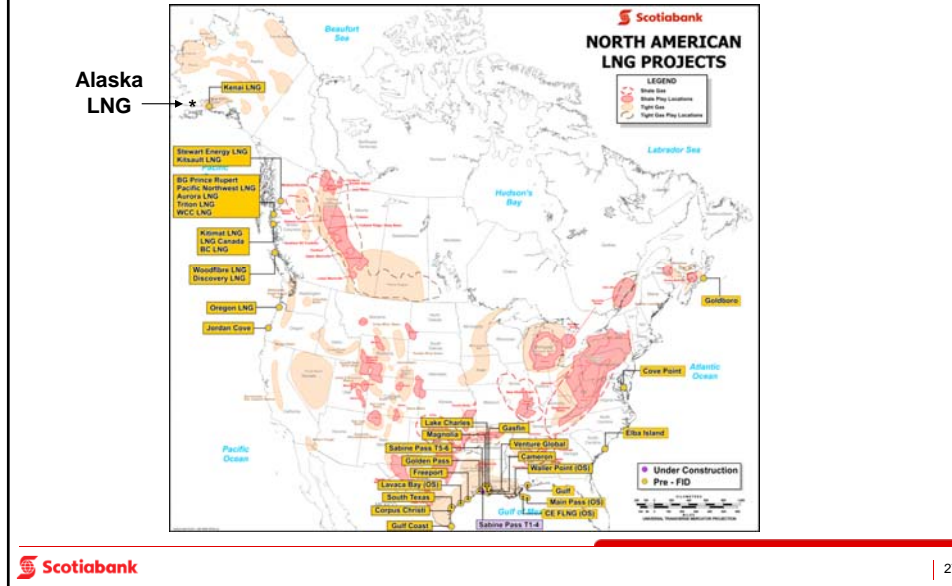
PNG – US\$7.03 + US\$1.55 = US\$8.58 per mmbtu.

Source: Bentek, May 2014.

North American Gas Market Dynamics

The rise of shale gas production has changed the dynamics of natural gas markets in North America.

North American Unconventional Gas Deposits and Proposed LNG Terminals



Canadian LNG – Project Progress Summary

Project	Downstream						Pipeline			Upstream
	Location Selected	Export Licence		FEED Awarded	Environmental Assessment		Environmental Assessment			Defined Resource
		Applied	Awarded		Initiated	Approved	Proposed	Initiated	Approved	
Mega-Projects With Dedicated Resource										
Pacific NorthWest LNG (PNW/LNG)	●	●	●	●	●	●	●	●	●	●
LNG Canada (LNGC)	●	●	●	●	●	●	●	●	●	●
Kitimat LNG (KMLNG)	●	●	●	●	●	●	●	●	●	●
Aurora LNG (ALNG)	●	●	●	●	●	●	●	●	●	●
WCC LNG (WCCLNG)	●	●	●	●	●	●	●	●	●	●
Discovery LNG (DLNG)	●	●	●	●	●	●	●	●	●	●
Mega-Projects Without Dedicated Resource										
Prince Rupert LNG	●	●	●	●	●	●	●	●	●	●
Woodside	●	●	●	●	●	●	●	●	●	●
Stewart Energy LNG	●	●	●	●	●	●	●	●	●	●
Steelhead LNG	●	●	●	●	●	●	●	●	●	●
Kitsault Energy Project	●	●	●	●	●	●	●	●	●	●
Orca LNG	●	●	●	●	●	●	●	●	●	●
U.S. Projects Capable of Exporting Canadian Gas										
Jordan Cove	●	●	●	●	●	●	●	●	●	●
Oregon LNG	●	●	●	●	●	●	●	●	●	●
Canadian East Coast Projects										
Goldboro LNG	●	●	●	●	●	●	infrastructure exists			●
Bear Head LNG	●	●	●	●	●	●	infrastructure exists			●
H-Energy	●	●	●	●	●	●	infrastructure exists			●
Canaport LNG	●	●	●	●	●	●	infrastructure exists			●
Small-Scale Projects										
Woodfibre LNG	●	●	●	●	●	●	●	●	●	●
Triton LNG	●	●	●	●	●	●	infrastructure exists			●
Cedar LNG Projects (I, II, & III)	●	●	●	●	●	●	infrastructure exists			●
WesPac Midstream	●	●	●	●	●	●	infrastructure exists			●
Watson Island	●	●	●	●	●	●	infrastructure exists			●

Source: Scotiabank Equity Research LNG Watch

Upstream Development Summary – Mega Projects

Project	Proponents	Project Cost (\$b)	Capacity			Project Timeline			Financing Alternatives
			Initial LNG Capacity (Mtpa)	Potential LNG Capacity (Mtpa)	NEB Capacity (Bcf/d)	FID	Construction	Commissioning	
Mega-Projects With Dedicated Resource			52.5	124.0					
Pacific NorthWest LNG (PNWLNG)	Petronas, JAPEX, PetroleumBRUNEI, Indian Oil Company, Sinopec	\$11	12.0	18.0	2.7	Late 2014	2015	2019	Self-funded via JV partnership
LNG Canada (LNGC)	Shell, Mitsubishi, PetroChina and KOGAS	\$10 to \$15	12.0	24.0	3.2	Early 2016	2016 - 2017	2020 - 2021	Self-funded via JV partnership
Kilmer LNG (KMLNG)	Chevron and Apache	\$3.0	5.0	10.0	1.3	2015	-	2017 - 2020	Self-funded via JV partnership
Aurora LNG ¹ (ALNG)	Nexen, INPEX, JGC	\$17 to \$20	10.0 - 12.0	20.0 - 24.0	3.1	2017	2017	2023	Self-funded via JV partnership
WCC LNG (WCC LNG)	ExxonMobil & Imperial Oil	-	10.0 - 15.0	30.0	4.0	Early 2016	2016	2023	Self-funded
Discovery LNG (DLNG)	Quicksilver Resources	-	-	20.0	2.6	-	2017	2021	Seeking partnership
Mega-Projects Without Dedicated Resource			67.5	145.0					
Prince Rupert LNG	BP Group	\$16	14.0	21.0	2.9	2017	2017	2022	-
Woodside	Woodside Energy	-	15.0	20.0	2.8	-	-	2021	-
Stewart Energy LNG	Canada Stewart Energy Group	-	5.0	30.0	4.0	2014	2015	2017	-
Steephead LNG	Steephead LNG	US\$30	24.0	30.0	4.3	-	-	2019	-
Kitasault Energy Project	Kitasault Energy	US\$8 to US\$10	5.0	20.0	2.6	-	-	2017 - 2020	-
Orca LNG	Orca LNG Ltd.	-	4.0 - 5.0	24.0	3.2	-	-	2019	-
U.S. Projects Capable of Exporting Canadian Gas			15.0	18.0					
Jordan Cove	Veresen	\$5.3	6.0	9.0	1.4	Q2/Q3 2015	2015 - 2018	2019	Seeking partnership
Oregon LNG	Leucadia	\$6.0	9.0	9.0	1.3	2015	2015	2019	-

Source: Scotiabank Equity Research LNG Watch



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Sinopec – Petronas LNG Transaction (Pacific Northwest LNG)

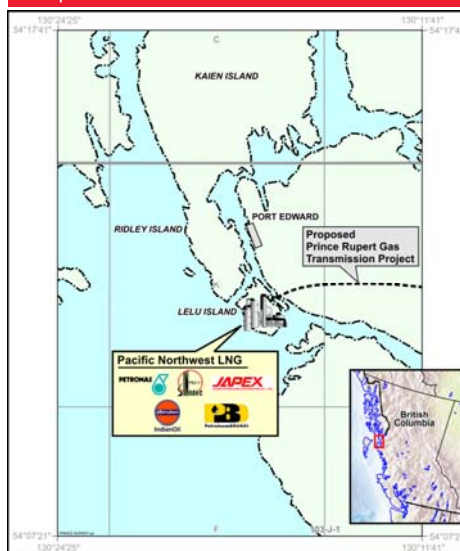
On April 29, 2014, Sinopec announced the acquisition of 15% of the PETRONAS-led LNG consortium ("Pacific Northwest LNG")

- Initial design for 2 trains planned at 6 mtpa each (12 mtpa)
- Export license application was submitted July 5, 2013 to export up to ~20 mtpa for 25 years beginning in 2019
- Triple FEED awarded May 2013
 - Final investment decision to be made by late 2014
- Sufficient supply from Progress acquisition, Talisman assets support a 3rd train (reserves and resource)
- PETRONAS is a leader in LNG development, shipping and marketing
- In January 2013, TransCanada was selected to design, build, own and operate the proposed \$5.0 B Prince Rupert Gas Transmission Project
 - Pipeline will be ~750 km with initial capacity of 2 Bcf/d
 - Ability to expand to 3.6 Bcf/d
 - Estimated to be in service by end of 2018

Pacific Northwest LNG Related Transactions

Date	Buyer	Seller	Value (US\$B)	Transaction Type	Asset Type	Notes
Jun-11	PETRONAS	Progress	\$1.1	JV	E&P	50% WI in north Montney properties
Jun-12	PETRONAS	Progress	\$5.6	Acquisition	E&P	Corporate acquisition
Mar-13	JAPEX	PETRONAS	n.a.	JV	LNG	10% WI in consortium
Nov-13	PETRONAS	Talisman	\$1.4	Acquisition	E&P	Acquisition of 75% of Montney position incl. Sasol JV
Dec-13	PetroleumBRUNEI	PETRONAS	n.a.	JV	LNG	3% WI in consortium
Mar-14	Indian Oil	PETRONAS	n.a.	JV	LNG	10% WI in consortium
Apr-14	Sinopec	PETRONAS	n.a.	JV	LNG	15% WI in consortium

Proposed Location for Pacific Northwest LNG



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Full Service Oil & Gas Platform

Scotiabank offers a comprehensive energy services portfolio covering all aspects of corporate finance advisory, equity and debt underwriting, lending and other corporate solutions

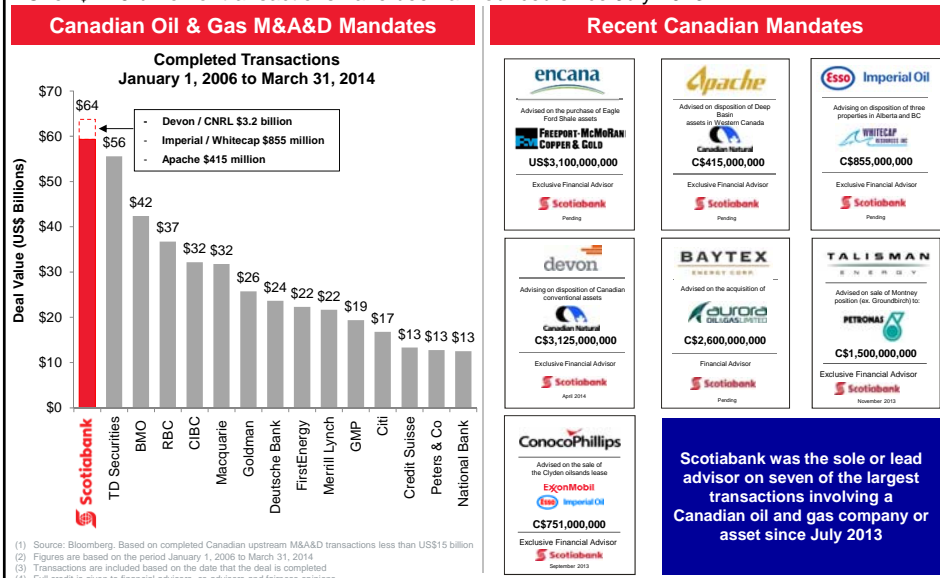
Scotiabank Full Service Oil & Gas Platform

Equity Platform	Investment Banking	Corporate Banking	Risk Management	Debt Capital Markets	Other Services
<ul style="list-style-type: none"> Equity Underwriter: Participate in all aspects of energy financings in Canada Sales & Trading: Significant distribution capability to institutions including two energy sales specialists Equity Research: Coverage of 200+ energy companies (including oil field services) by 20 publishing analysts 	<ul style="list-style-type: none"> Leading global oil & gas M&A advisor Conducting 50+ M&A mandates per year globally Advisor on 7 key transactions in since mid-2013 totaling over \$14.5 billion in value 	<ul style="list-style-type: none"> One of Canada's largest lenders to the oil & gas industry #1 Tier 1 Agent in Canadian Syndicated Oil & Gas Transactions since 2002 	<ul style="list-style-type: none"> Energy and agriculture commodities: oil and natural gas hedging Interest rate swaps Spot FX: cross currency swaps 	<ul style="list-style-type: none"> #1 market share in C\$ High Yield underwriting and C\$ High Yield secondary trading since 2010 Bookrunner on 30 of the last 61 C\$ High Yield transactions 6 dedicated personnel in Canada covering C\$ high yield issuers across all industries 	<ul style="list-style-type: none"> Global Transaction Banking ("GTB"): Full cash management platform including an industry leading purchase card product



Canadian Oil & Gas M&A

Over \$14.5 billion of transactions have been announced since July 2013



(1) Source: Bloomberg. Based on completed Canadian upstream M&A&D transactions less than US\$15 billion
 (2) Figures are based on the period January 1, 2006 to March 31, 2014
 (3) Transactions are included based on the date that the deal is completed
 (4) Full credit is given to financial advisors, co-advisors and fairness opinions

Scotiabank: Landmark Mining & Metals Transactions

Streaming	M&A				
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="font-size: 8px;">has sold a portion of the gold from some of its Sudbury mines and the Salobo copper mine to</p> <p style="font-weight: bold; font-size: 12px;">SILVER WHEATON</p> <p style="font-size: 8px;">For</p> <p style="font-weight: bold; font-size: 10px;">US\$2,000,000,000</p> <p style="font-size: 8px;">Financial Advisor</p> <p style="font-size: 8px;">February 2013</p> </div> <ul style="list-style-type: none"> Largest mineral royalty / streaming transaction ever Highest valuation achieved Largest international mining sell-side with a sole Canadian advisor 	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="font-size: 8px;">has merged with</p> <p style="font-size: 8px;">For</p> <p style="font-weight: bold; font-size: 10px;">C\$8,000,000,000</p> <p style="font-size: 8px;">Financial Advisor</p> <p style="font-size: 8px;">September 2010</p> </div> <ul style="list-style-type: none"> Fourth largest M&A transaction ever completed in the gold sector Long history of support <table border="1" style="width: 100%; font-size: 8px; border-collapse: collapse;"> <tr> <td style="text-align: center;"> C\$165,000,000 Common Shares Co-Bookrunner February 2009 </td> <td style="text-align: center;"> C\$60,025,000 Common Shares Co-Bookrunner December 2008 </td> <td style="text-align: center;"> C\$110,000,320 Common Shares Sole Bookrunner October 2007 </td> <td style="text-align: center;"> C\$375,000,000 Special Warrants & Sub. Receipts Co-Manager May 2007 </td> </tr> </table>	 C\$165,000,000 Common Shares Co-Bookrunner February 2009	 C\$60,025,000 Common Shares Co-Bookrunner December 2008	 C\$110,000,320 Common Shares Sole Bookrunner October 2007	 C\$375,000,000 Special Warrants & Sub. Receipts Co-Manager May 2007
 C\$165,000,000 Common Shares Co-Bookrunner February 2009	 C\$60,025,000 Common Shares Co-Bookrunner December 2008	 C\$110,000,320 Common Shares Sole Bookrunner October 2007	 C\$375,000,000 Special Warrants & Sub. Receipts Co-Manager May 2007		
<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="font-weight: bold; font-size: 12px;">BARRICK</p> <p style="font-size: 8px;">US\$4,026,164,375 Common Shares</p> <p style="font-size: 8px;">Co-Bookrunner</p> <p style="font-size: 8px;">September 2009</p> </div> <ul style="list-style-type: none"> Largest Canadian equity offering in history <ul style="list-style-type: none"> One of the largest common share offerings in the mining sector globally Largest ever in gold sector 	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p style="font-size: 8px;">has completed a private placement investment in the Class B shares of</p> <p style="font-weight: bold; font-size: 12px;">Teck</p> <p style="font-size: 8px;">For</p> <p style="font-weight: bold; font-size: 10px;">US\$1,500,000,000</p> <p style="font-size: 8px;">Financial Advisor</p> <p style="font-size: 8px;">July 2009</p> </div> <ul style="list-style-type: none"> Largest common share private placement by a single investor in Canadian history Largest investment in a mining company by a Chinese investor in Canadian history 				

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Scotiabank: Lead Lender In The Metals & Mining Space

- Corporate loans, project financing, M&A financing, letters of credit, structured metal financings
- #1 mining Tier – No. 1 lender in Canada (based on both deal count and notional loan volume)
- #1 mining Tier – No. 1 lender in North America based on deal count (#2 based on notional loan volume)
- #1 mining Tier – No. 1 lender in the Americas based on deal count (#2 based on notional loan volume)
- Broadest range (small to large borrowers), compared to competitors

Significant Relationships

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Scotiabank is Canada's most international bank

Global Operations



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