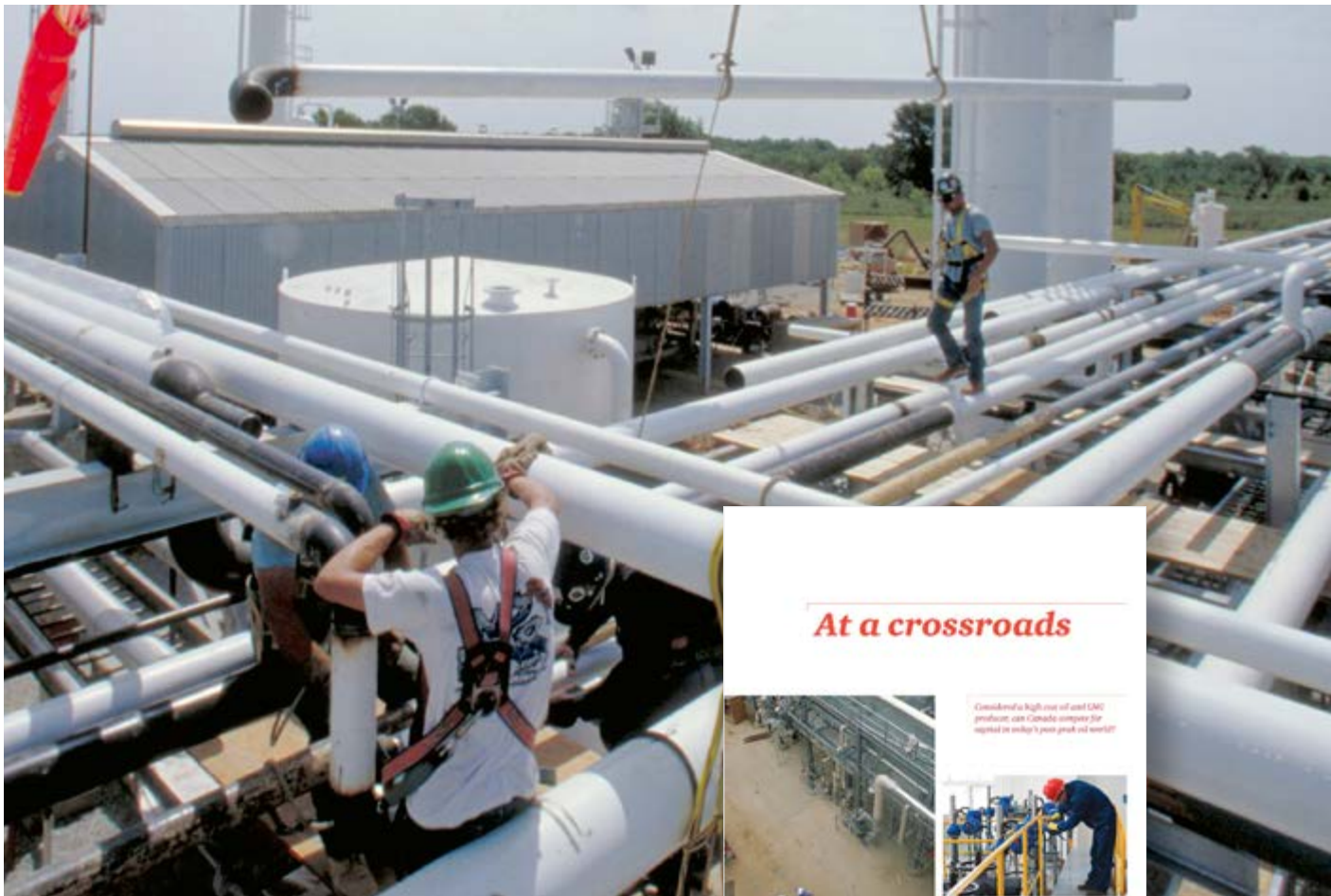


# *At a crossroads –* Considered a high cost oil and LNG producer, can Canada compete in today's post-peak oil world?



## *At a crossroads*

Considered a high cost oil and LNG producer, can Canada compete for capital in today's post-peak oil world?



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Energy Visions Business Forum  
Post-event summary report  
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# Energy Visions Business Forum 2014

## Post-event summary



For the past five years, our Energy Visions Business Forum has brought global analysts and industry leaders together to discuss issues affecting the Canadian energy industry.

This year our guest panelists provided insights and perspectives on 'At a crossroads: Considered a high cost oil and LNG producer, can Canada compete for capital in today's post-peak oil world'. The event took place on May 29, 2014 in Calgary, Alberta. We polled more than 300 energy industry executives in attendance on issues facing the sector.

Canadian oil sands and LNG production must consistently achieve costs below some of its higher-cost competitors, as our exports shift to tidewater and new competitors and demand side dynamics emerge. Other high cost suppliers include oil from the North Sea, US tight-oil plays

and new Siberian crude, while our LNG projects must deliver to Asia at prices comparable with Russian and Australian LNG producers. To compete for market share in the global energy market and for capital from investors searching for the highest return opportunities, Canadian producers must learn to think globally, beyond their traditional North American focus. Thinking globally means developing plans to manage future risks such as a potential oil bottleneck on the Gulf Coast, China's plans for increased shale gas production, the US push into world gas markets and potential heavy oil competition from Mexico and Venezuela.

The general consensus is that with a huge resource base and a stable business environment, the Canadian energy industry is well equipped to compete in the global market. Our industry executives and panelists said Canada needs to show that it can deliver oil and gas to the world by building major pipelines to tidewater. To successfully address this challenge, the industry needs greater government involvement in shaping a national energy strategy. As part of a national energy strategy, our polling showed strong support for the federal government to revisit its policy on foreign ownership of resources.

This report provides a summary of the polling results and a detailed look at the views of global analysts and industry leaders at the event.

### The polling questions included:

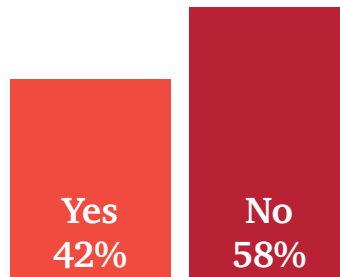
1. Do you think Canada is entering the global energy market too late?
2. Do you think the provincial and federal governments should be more active in supporting the energy industry through a national energy strategy?
3. Which of the following is the most significant challenge facing our industry in the coming year?
4. Should Canada re-review restrictions on foreign ownership of our resources?
5. In the next three years, how many liquefied natural gas (LNG) projects will advance past a final investment decision?
6. Will successful LNG projects improve domestic natural gas prices by a meaningful amount?

A handwritten signature in white ink that reads "Reynold".

**Reynold Tetzlaff**  
National Energy Leader  
PwC Canada

# Canada and the global energy market

**Do you think Canada is entering the global energy market too late?**



Canada has depended on the United States as its sole export market. But we can claim a share of world markets if we can resolve pipeline issues and constrain production cost increases. Jason Bordoff of Columbia University's Center on Global Energy Policy said the US is rapidly reducing its energy imports due to a new era of relative abundance in domestic supply. "Canada has good ability to export its gas to one country," he said. "Unfortunately, US demand for Canadian natural gas is shrinking quickly." While the oil picture is roughly similar, he and Robert Hormats of Kissinger Associates agreed that the current US administration is maintaining a policy of global engagement on oil that's likely to continue to favour Canada. Hormats said only Iraq and Canada have the technical ability to increase oil exports quickly and Iraqi production growth is limited by internal issues.

On natural gas, Hormats said, Japan's nuclear power will likely be tightly constrained and both Japan and South Korea can be strong markets for Canadian LNG. He added that China wants diversity and reliability of supply. That's why they buy LNG from Australia at a premium and why they'll want to buy from Canada. He said China's emissions problems will also drive gas

purchases, but they'll continue to use coal. Their energy policy is "all-the-above, all-the-time," he said.

"If you can find a way to get the gas to west coast terminals, China will be active buyers." Bordoff added that although China recently signed to purchase pipeline natural gas from Russia, longer term demand growth would likely fuel future Chinese investment in LNG projects.

Jan Stuart of Credit Suisse noted that global oil demand is increasing each year by about one million barrels per day. He said Canada and Iraq are countries with the ability to make major oil production increases in the near term and given a choice, "I pick Canada." He agreed with several panelists who said Canada's resource base, stability, rule of law and regulatory consistency make it a supplier of choice. But resolving pipeline permitting issues in a timely fashion is essential, he noted.

Harbir Chhina of Cenovus Energy, said it's the right time for us. We have the technology as well as a huge resource base and Canadian SAGD oil sands producers have pushed costs down to between CA\$40 and CA\$65 per barrel, in most cases, and are now very competitive with most new crude supplies in the global market.

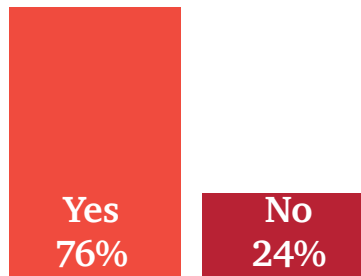
## ***In perspective:***

*Based on polling opinions of more than 300 Canadian energy executives and the comments of expert speakers at the symposium, it's not too late for Canada to break out of its dependence on the United States as its only export market.*

*There's still a lot of opportunity. Global energy demand is growing sufficiently to admit Canadian exports and Canada has a strong reputation as a reliable supplier.*

## Increased government involvement

**Do you think the provincial and federal governments should be more active in supporting the energy industry through a national energy strategy?**



Both audience polling and expert commentary pointed to the need for federal and provincial government leadership in resolving market access and other policy issues. Given Canada's challenges in pipeline permitting, control of Arctic resources, climate change management and fiscal transfers, Robert Johnston of Eurasia Group said pure laissez-faire free-enterprise may not be sufficient to meet current needs. "I'm just not sure that model is going to work anymore," he said.

Harbir Chhina said the one good thing to come out of the US delay of the Keystone XL pipeline proposal is that it has served to demonstrate the need for federal and provincial alignment on Canadian energy priorities and that, "we, as a nation, woke up and said, 'Nobody should rely on just one customer.'" He said federal and Alberta governments are now working more effectively together to bring the other provinces into accord on how transborder developments can proceed and he commended Ottawa on achieving increased US and European recognition of Canada's responsible development of the oil sands.

There's also potential for greater government involvement on a continental scale, Jason Bordoff observed. He said the US and Canada need policy coordination on issues such as rail shipping of crude oil, energy exports and regulations that will "build public confidence and support social license," or what the Canadian industry refers to as its license to operate.

Robert Hormats believes, "the role of government is going to be critically important" in the Arctic, which will be an "enormous issue" over the next 20 to 30 years, due to the size of the resource base and the impacts of climate change. He said Canada "really needs to pay a lot of attention to this" and it will need icebreakers "to monitor what's going on up there." There was general agreement that, within a free market, there's a need for government to set rules and resolve social issues.

### **In perspective:**

*Federal government involvement and federal/provincial cooperation are required to resolve interprovincial, municipal and First Nations, issues around pipeline permitting. Canada is facing near-saturation North American markets and it must develop major tidewater access points if its energy potential is to be realized. Whether through direct negotiation or the establishment of policy direction, federal government involvement is essential to securing Canada's energy future.*

## Access to markets – biggest challenge facing the industry

### Which of the following is the most significant challenge facing our industry in the coming year?

There was no doubt among attendees and expert panelists that market access is the biggest issue facing the Canadian energy industry. With six issues to choose from, the audience gave market access a 63% share of the vote.

Jason Bordoff said Keystone XL approval will be a challenge because the project has become a symbol far beyond its importance as an oil conduit. But he remains convinced that Canadian oil will reach global markets. “Oil is a pretty fungible commodity. In the end, oil is going to find a way to market, one way or another,” he said. With regard to oil pipelines, Stuart said, “you need to get out into the water.”

Harbir Chhina believes market access is definitely the number-one issue for the industry. He said rail shipping has grown to hundreds of thousands of barrels of oil per day and could double again every two or three years. “But it would be good to have some pipelines going.”

**Access to markets 63%**

**Commodity pricing 3%**

**Access to capital 6%**

**Cost containment 8%**

**Labour shortage 9%**

**Regulatory concerns 11%**

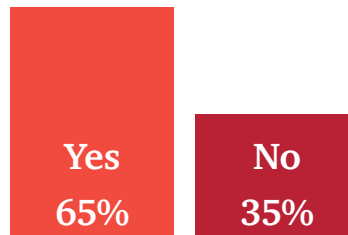
Canada’s small labour force, in contrast with its long list of major energy projects, is the second-biggest issue for the industry, Chhina said, and that’s why Cenovus builds one project at a time. “Even if you have the labour, the costs just get ridiculous,” with day wages for welders sometimes rising from CA\$600 to CA\$1,800. And once projects are built, there’s a major challenge to find qualified operators. However, there was no doubt that finding routes to tidewater for major oil and gas volumes is essential to achieving world prices and that this concern currently outweighs all others.

### In perspective:

The number one issue facing Canadian oil and gas producers is access to markets. A national energy strategy focused on market access—either by direct government involvement or by policy—is needed to help resolve First Nations’ and other opposition to pipelines that would reach tidewater and international markets.

## Revisiting foreign ownership

Should Canada re-review restrictions on foreign ownership of our resources?



Ottawa's December, 2012 limitations on acquisitions of controlling interests in oil sands operations by foreign state-owned enterprises (SOEs) appears due for review. Harbir Chhina said no one doubts Canada will need foreign investment capital to fund a long list of multi-billion dollar projects. "That's a must – our resource base is huge. We're talking about 180 billion barrels of oil sands bitumen. So that's going to require a lot of capital and we cannot internally fund it ourselves. That's an industry-wide perspective. There's a lot of foreign interest in getting money into Canada, so I think that's good for the industry and for Canada."

Jason Bordoff said legitimate security issues may arise in certain cases of foreign ownership. But he said clear rules and regulations need to be established, after which market forces should be allowed to prevail.

### *In perspective:*

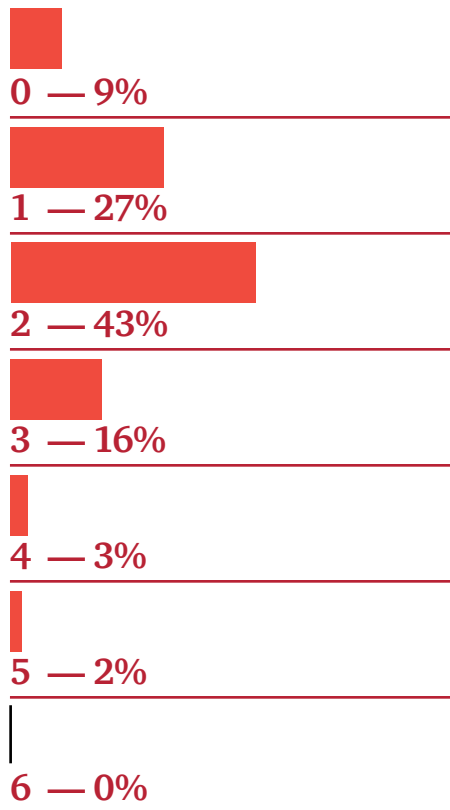
*Canada has more energy potential than its capital markets can fund and after 18 months of experience with the SOE ban, it's worth re-examining the rules to ensure the country's best interests are being served.*

# Final investment decisions on LNG projects

## In the next three years, how many LNG projects will advance past a final investment decision?

There was consensus that LNG projects face fewer approval hurdles than oil pipelines, and 43% of attendees believe two projects will likely break ground in the next three years. Robert Johnston agreed one or two of the current 14 LNG proposals will proceed. He said South Korea and Japan are the most likely LNG customers, but pipelines to the coast, project capital costs and provincial taxes need to be figured out before major investments can be made. Johnston said a long supply chain and a small labour market are additional challenges that could impact costs of Canadian LNG projects.

Jason Bordoff said there's a need for both Canadian and US project proponents to get financing in place. But he noted that contract negotiations are moving from oil-equivalent pricing toward Henry Hub take-or-pay arrangements for US contracts. He added that Canada needs to show progress before the US gas market dwindles much further.

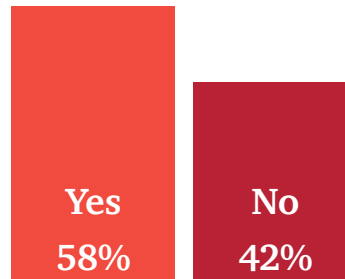


## In perspective:

Between one and three LNG projects will receive investment approvals in the next three years, but challenges remain before that can happen. Pipelines must be built, project cost escalation must be contained and provincial taxation must be resolved. Equally important, the delivered price of LNG in Asia must support the all-in cost of supply.

## Impact on natural gas prices

**Will successful LNG projects improve domestic natural gas prices by a meaningful amount?**



One or two large LNG projects could do a lot to soak up surplus gas and give modest lift to domestic prices. But much of it depends on what's considered meaningful improvement, Robert Johnston quipped. He said he expects a positive impact on North American prices but the amount is impossible to predict.

"Some of that might be priced in already. But there's probably still some upside." He warned that "if the gas price becomes too expensive here, we actually become uncompetitive in the Asian market, given potential lower-cost sources of gas. But we could see a 25% jump."

## In perspective:

*The huge differential between North American and Asian natural gas prices is not all blue sky for Canadian LNG proponents. It's neither a measure of profit margins for Canadian LNG projects nor of price potential for domestic gas, once LNG shipments begin to equalize markets.*

*Canadian LNG projects have to recover the multi-billion-dollar costs of producing, processing, liquefying and shipping gas to Asian markets. And buyers there might have to pay for regasification, which will tend to discount the maximum price they're willing to pay.*

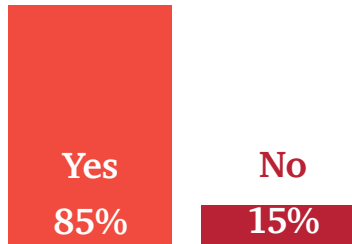
*All of those costs mean that any dramatic price gains in North America could eventually make LNG shipments to Asia uncompetitive. That would result in less gas moving to Asia and downward pressure on prices here.*

*The ultimate LNG sales price in Asia are still under negotiation. That price will include covering the cost of gas production, plant construction, pipelines, shipping and regasification.*



## Competitiveness on global platform

Based on the discussion, do you feel Canada's energy industry can compete in today's global environment?



Canada has been successful in reducing oil sands production costs and it can do the same for LNG, making it a credible contender for growing global energy markets. In the global competition for investment capital, Jan Stuart said, "Canada's image has been smudged to some degree by the federal government's policy reversal on investment by SOEs. Otherwise, the perception of Canada is quite brilliant." He sees two to five years of steady demand growth, with more upside if there is a global price shock or a scarcity episode. "In this environment, Canada's huge reserves and stable business climate will make it a supplier of choice. Canada has infinitely greater reserves than North American competitors, such as the Eagle Ford and Bakken plays. I can show you 150 countries that wish they had the problems that Canada has," Stuart told energy executives at the forum.

Aggressive hedging by smaller US oil companies has resulted in too few dollars chasing too many barrels and a future price that's lower than the anticipated spot market price for oil on long delivery dates. Far from being an investment disincentive, Stuart said, this "backwardation" of the commodity curve should be viewed as an attractive opportunity "to own the back end of the curve."

Robert Hormats said cost of production is vitally important in attracting capital, as international oil companies make tough choices about where to invest around the world. Canadian oil sands costs and projected LNG costs are high, but he said foreign deep-water projects are currently the most expensive and will be first to be deferred. Oil sands and LNG projects are large, long-term bets and investors will need a strong sense of short- and mid-term profitability in order to put up cash. But overall, he said, Canada's energy future looks good.

Harbir Chhina said Canadian producers have been successful at reducing SAGD oil sands costs and some projects can be profitable at CA\$40 to CA\$60 per barrel. He added that larger producers currently have no trouble attracting capital, though some smaller companies struggle. "I definitely think we can compete with the rest of the world because our supply cost is definitely lower than the average," he said.

Jason Bordoff agreed that many oil sands projects work at per-barrel costs well below current prices and investments in competing plays around the world face much greater political risks than those in Canada.

### In perspective:

*There's no doubt Canada can compete in global energy markets. But Canada's unconventional resources will require continuous technology improvements and a tight rein on capital and operating costs to stay competitive in world markets. Every success in reducing costs and controlling inflationary pressures on large projects will assist Canada's push for new markets.*

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# Can Canada compete in the global market?

## Conclusion

In his summation, Robert Johnston reminded all attendees that, while the industry pushes pipelines toward tidewater, a close eye must be kept on global oil and gas prices. All variables will remain in motion and constraining cost escalation will be vital to Canada's long-term export success.

Beyond price, the results of the symposium raise several additional questions. Most notable among polling outcomes is a clear call for a national direction on energy strategy that looks beyond piecemeal reviews of individual projects. Governments appear to have rejected any notion of vast and time-prohibitive public-consultation processes, and expert panelists clearly believe an ongoing government-to-government approach is being pursued.

While the federal government has used its mandate to set policy on foreign ownership, it is energy industry opinion that's now calling that outcome into question. Of the attendees, 65% favoured a re-review of the foreign ownership policy announced less than two years ago, and several panelists said that developing Canada's enormous energy resources will require far more capital than a small domestic market can provide. Others said Ottawa's ruling on SOE investment in the oil sands leaves several important questions unanswered. First among these may be whether the same standards will be applied to LNG proposals.

Despite these uncertainties, panelists and energy industry executives are confident that Canada's energy sector is, and will continue to be, a successful competitor for investment capital and that it can and must become a credible competitor for a share of global commodity markets. "Nobody should rely on just one customer," as Harbir Chhina succinctly put it.

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## Featured commenters

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**Robert Hormats** is Vice Chairman of Kissinger Associates, Inc., the New York-based strategic international consulting firm that assesses and navigates emerging market geopolitical and macroeconomic risk for its clients. Previously Bob served as Under Secretary of State for Economic, Energy and Environmental Affairs. Before

this Bob was vice chairman of Goldman Sachs (International) for 25 years. Earlier, Bob served as Assistant Secretary of State for Economic and Business Affairs. He served as a senior staff member for International Economic Affairs on the National Security Council.

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**Jason Bordoff** joined the Columbia faculty after serving until January 2013 as Special Assistant to the President and Senior Director for Energy and Climate Change on the Staff of the National Security Council, and, prior to that, holding senior policy positions on the White House's National Economic Council

and Council on Environmental Quality. One of the United States' top energy policy experts, he joined the Administration in April 2009. He's a member of the Council on Foreign Relations, a consultant to the National Intelligence Council, and serves on the board of the New York Energy Forum as well as the Association of Marshall Scholars.

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**Harbir Chhina** is Executive Vice-President, Oil Sands of Cenovus Energy Inc. and is responsible for all oil sands activities, including operations at Foster Creek, Christina Lake, Narrows Lake and the Greater Pelican assets. He also leads the Research & Development, Technology Development and Environmental Technology Investments teams, as well as

the New Resource Plays team. Harbir was instrumental in the initial application of steam-assisted gravity drainage (SAGD) technology on a commercial basis. Harbir has over 30 years of experience in all aspects of enhanced oil recovery including technology, business and organizational development.

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**Jan Stuart** is a Managing Director of Credit Suisse in the Investment Banking division, based in New York. He is the head of Global Energy Research, specifically covering markets for oil and natural gas. Mr. Stuart joined Credit Suisse in September 2011 after a combined six years as the Global Oil Economist at UBS and later Macquarie, where he worked on equity sell-side research.

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**Robert Johnston** is the CEO of Eurasia Group. He is also the director of the company's Global Energy and Natural Resources Strategy Group. Prior to joining Eurasia Group, RJ was a managing director of equity research at Medley Global Advisors.

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**Reynold Tetzlaff** is PwC Canada's National Energy Leader. He has over 20 years experience with a focus in audit and related services. Reynold has assisted clients through complex transactions like initial public offerings (including the largest IPO in the Canadian energy sector in 2012), reverse takeovers and global

expansion of their operations. Reynold is a frequent speaker at energy events and provides insights into Canadian oil and gas industry trends.

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