GLOBAL BUSINESS REPORTS

INDUSTRY EXPLORATIONS

CANADA OIL & GAS

2014

Economy | Oilsands | Finance | Environment | Services

Dear readers,

Home to the world's third-largest oil reserves, the health of Canada's oil and gas industry is invariably linked to the nation's economic wellbeing. Since Global Business Report's 2010 report on Canada's oil and gas sector, the industry has weathered many fundamental changes. Falling oil and natural gas prices and regulatory decisions that limited the availability of foreign capital mean that the sector had to adapt to the new reality of doing business.

Yet the long-standing debates surrounding the Keystone and Northern Gateway pipelines suggest that the industry is not doing enough to inform the wider public of the integral role that oil and gas extraction plays in supporting Canada's economic growth. Without viable options to transport product to market, the Canadian economy is losing nearly $50 million per day according to some reports.

In the financial world, equity markets continue to tighten. The vibrant junior oil and gas community that Canada once enjoyed has evolved drastically, creating a very different landscape for smaller exploration and production companies. That said, more oil and gas companies are listed on the Toronto Stock Exchange and TSX Venture Exchange than on any other exchange in the world. In 2012, the combined exchanges raised almost C$9billion in equity funding.

Despite a strong oil price recovery, share price performance of top oilfield services companies remained relatively underwhelming. This may soon change, however, thanks to higher oil prices and increased capital spending. In periods of economic downturn, the innovative spirit is alive and well in Canada's oil patch, and Canadian technology is increasingly being exported for use in the global marketplace.

Throughout our Industry Explorations, we will explore these issues in more detail in order to present to you the viewpoint of those on the ground, affected by these trends. This book is the result of months of preparation, research and interviews with the sector's top executives and policymakers who generously donated their time and insights. Such a report would not be possible without their input, and we sincerely thank you.

Finally, we would also like to acknowledge the city of Calgary. GBR's on-the-ground research took place before and after the devastating floods of June 2013 in which a good portion of the city's downtown core was under water. We were astonished with the speed and efficiency of Calgary's emergency response teams in getting the city back up and running and wish to extend a special thanks to them here.

THRIVING IN ADVERSITY
An Introduction to Canada and its Oil and Gas Industry

SPARSE CAPITAL, ABUNDANT OPPORTUNITIES
Hydrocarbon Financials in Canada

THE DOMINANT SOURCE
The Oilsands of Alberta

THE SAVING GRACE
Canada Takes Aim at LNG Projects

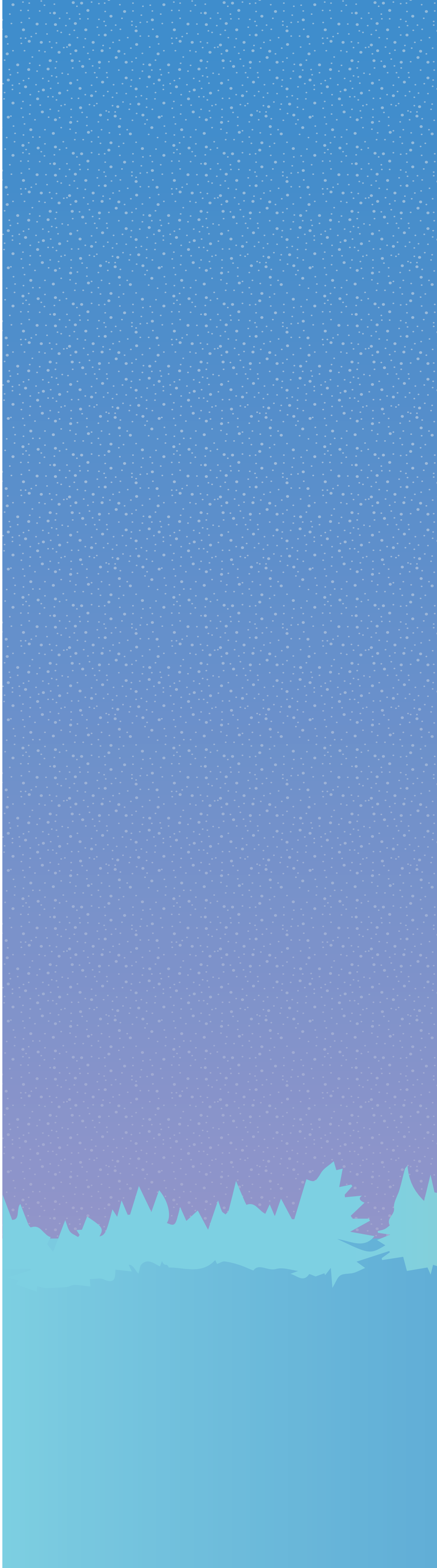
ENGINEERING AND THE ENVIRONMENT
The Companies Supporting Canadian Oil and Gas

LOOKING ABROAD
The Global Footprint of Canadian Companies

INTO THE FUTURE
Final Thoughts, Index and Credits

This research has been conducted by Angela Harmantas, Ramona Tarta, Chloe Dusser, Joseph Hincks, Josie Perez, Katie Bromley and Harry Thompson
Edited by Barnaby Fletcher
Graphic Design by Gonazalo Da Cunha

A Global Business Reports Publication
For more information, contact info@gbreports.com, follow us on Twitter @GBReports or check out our blog at gbroundup.com



Industry Interviews

Exclusive interviews with the leading industry figures in Canada's oil and gas industry including Alberta's Minister of Energy, Connacher Oil and Gas and the In-situ Oil Sands Alliance.

10, 33, 74

Analysis

In-depth opinions on the changes and trends in the regulatory framework and environmental impact of Alberta hydrocarbon industry, taken from our weekly newsletter the GBRoundup.

47, 73

Finance

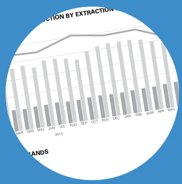
Financial powerhouses tell us the trends they see in the market and what juniors must do to attract capital, including the TMX Group, Sprott Global Resource Investments, and Canaccord Genuity.

14, 20, 24

Quantitative Data

The most relevant quantitative data presented in the most easily accessible format, allowing you to view economic and market statistics, identify trends and visualize infrastructure.

9, 32, 51, 79



Final Thoughts

Industry leaders give their opinions on the future facing Canadian oil and gas companies, both at home and abroad: trends, challenges, opportunities and what they need to do to thrive.

94, 95

Thriving in Adversity: An Introduction to Canada and its Oil and Gas Industry

"I think over the next two or three years we will turn the page on a lot of big problems around new pipelines and market access, we are going to get them solved. Canadian energy oil companies are undervalued in the market. The uncertainty in today's capital market has driven away a lot of Canadian and United States investors but there is a lot of value to be unlocked in Canadian energy sector in the next 24 months as some of these uncertainties are addressed. We see encouraging signs that the price for natural gas has bottomed out and indicators of a shrinking pricing differential between Canadian crude and the West Texas Intermediate benchmark for North America."

- Gary Leach, President, the Explorers and Producers Association of Canada (EPAC)

Image: SilverWillow

An Introduction to Canada

A brief overview of the country and economy

Canada's economy is diverse and paradoxical. On the one hand, the world's 14th largest economy claimed modest yet stable growth rates in a period when other developed nations remained stagnant or words: 3.2% GDP growth in 2010 and 2.4% in 2011. Its banks, which proved so resilient during the global financial crisis, have recently shown gains in the Toronto Stock Exchange. A recent Bloomberg ranking moved it up four places this year in ease of doing business, placing it behind only Hong Kong. The fourth quarter of 2013 showed growth of 2.9%, better than forecasts and above that of neighboring USA.

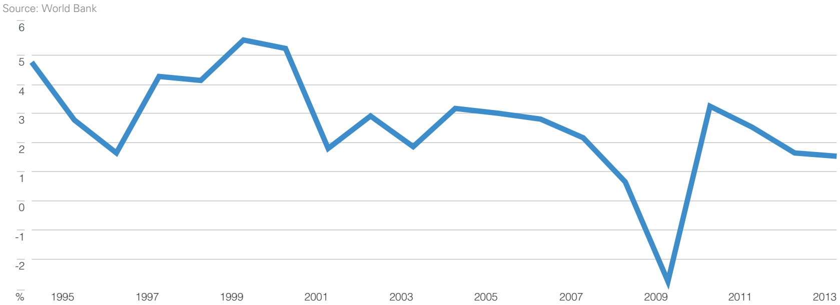
Yet the stories carried by the media present a picture of economic woe. The country's second-largest national newspaper, The Globe and Mail, carries the headline "The growth puzzle: Why Canada's economy is lagging the US". The Financial Post reads "Canada's economy sheds 7,000 jobs in second decline in 3 months". Media, as it is so often accused, loves bad news. The unusually cold winter, which has seen snowstorms blanket large swathes of Ontario, Quebec and the Atlantic provinces, has slowed the economy and is having a similar effect on the USA. Even taking these excuses into account, however, there is no doubt that Canada, for all its strengths, is struggling and has been for a while.

GDP growth in 2012 was a disappointing 1.7%. In 2013 it was 1.6% (although some estimates put it up to a more respectable but still slow 2%). Forecasts for 2014 are around 2.3%: an increase, but below the 3.1% forecast for the USA and nowhere near Canada's potential. Similar growth is expected for 2015.

The job losses early this year are real, and unemployment stubbornly refuses to fall below the 7% mark. This March Statistics Canada noted "there has been little overall employment growth in Canada since August 2013". Despite the expanding economy of Canada's largest trade partner, the USA, Canadian exports also appear to be stuck: something that the chief economist of the Canadian Imperial Bank of Commerce blames on former Bank of Canada governor (and current Bank of England governor) Mark

GDP GROWTH RATE

Source: World Bank



Carney. Because of his failure to check the Canadian dollar appreciation rate, says Avery Shenfeld, export-orientated companies did not invest in Canada. As a result, there are now 9,000 fewer Canadian exporting companies than there were in 2008.

While this may be the case (GBR will reserve its judgment on central bank policies for the time being), even 9,000 fewer companies do not significantly diminish the impressive diversity of Canada's economy. Its financial sector is among the world's most stable and respected. Its manufacturing sector boasts large and mature automobile and aerospace industries, supported by strong research and development funding. In the extractive industries, Canada boasts both the world's most important financing markets and substantial natural resources of its own.

Indeed, the negative news coming from the Canadian economy can be at least partially (but, unfortunately, by no means fully) explained by Canada's strong foundations. The government plans to balance the budget by 2015 and is therefore not spending in the same way as other countries, which still continue aspects of fiscal stimulus introduced during the global financial crisis. This means less government money and jobs contributing to economic growth, but it also means Canada is in a stronger position to counter unexpected shocks: as it did in 2009, after which it rebounded strongly. This rebound also contributes to its poor comparative performance now: other countries are still recovering from recession and rebound growth rates are often higher as countries return to normal; Canada has had its rebound.

There is no denying that the Canadian economy has entered a period of lethargy, even if slightly short of stagnation. There is no end to this period in the near future (although the end of the bear market in commodity prices that many predict would be positive news for the country). Nonetheless, it has avoided the dismal situation in many parts of Europe and is highly unlikely to fall into recession any time soon. Canada's fundamentals are strong, making the current period unlikely to turn into a long-term malaise. •

CANADA AT A GLANCE

Source: CIA World Factbook

Population: 34,834,841 (July 2014 est.)
Capital: Ottawa
Head of Government: Prime Minister Stephen Joseph Harper
Currency: Canadian Dollar (CAD)
GDP: $1.825 trillion (2013 estimate)
Growth Rate: 1.6% (2013 estimate)
GDP per Capita: $43,100 (2013 estimate)
Economic sector breakdown: agriculture: 1.7%, manufacturing: 28.4%, services: 69.9% (2013 estimate)
Exports: $458.7 billion (2013): motor vehicles and parts, industrial machinery, aircraft, telecommunications equipment; chemicals, plastics, fertilizers; wood pulp, timber, crude petroleum, natural gas, electricity, aluminum
Imports: $471.0 billion (2013): machinery and equipment, motor vehicles and parts, crude oil, chemicals, electricity, durable consumer goods
Major Trade Partners: US, China, Mexico, UK

$1.825

trillion

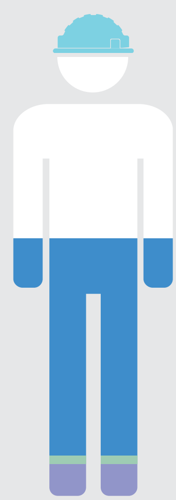
GDP
(current US dollars) 2013

Source: CIA World Factbook

POPULATION AND WORKFORCE INFORMATION

Source: CIA World Factbook, CAPP

Population 2014
34,834,841



- Labor Force 2013: **19,080,000**
- Unemployment Rate 2013: **7.1%**
- Poverty Line 2010: **9.4%**
- Jobs Supported by the Oil and Gas Industry 2012: **550,000 (1.6% of total population)**

The Honorable Ken Hughes

Minister of Energy
LEGISLATIVE ASSEMBLY OF ALBERTA

To what extent is the Albertan Government looking into contingency plans to deal with the price differential on Western Canadian Select should Keystone and Northern Gateway continue to be stalled?

We have developed an oil market diversification strategy over the past year that we are pursuing. The strategy involves getting transportation infrastructure in place in whichever direction makes sense. We are looking at every possible alternative that people bring to us, including pipelines in all directions and rail transportation. The other element is to add value to bitumen and natural gas here in Alberta, which would allow us to capture close to world price in the domestic market. None of these plans are 'contingency', based upon something else not happening—they are options we are pursuing to ensure that we have access to tide water in any way we can.

In the run up to the BC elections, Christy Clarke was quoted by the Globe and Mail saying 'we don't need Alberta' in relation to Northern Gateway. Can the Alberta government work with BC on inter-provincial oil pipeline development to reach a mutually beneficial solution?

Alberta, British Colombia, and Saskatchewan are part of the New Western Partnership, which has become an enduring relationship amongst the three Western provinces, and a way in which we can collaborate together on a number of issues. Lets look at what our respective interests are: gaining access to markets for LNG is an important interest that all three provinces have in common, so I believe that there is a lot of common ground to be built upon there. Secondly, there continues to be growing demand for electricity in both BC and Alberta; we can potentially work together to ensure that we have adequate electricity in the northern parts of our two respective provinces.

Is the government working directly with rail providers or are these relationships the preserve of negotiations between private sector entities?

The Alberta Government is working with companies that are [shipping]. We are in the commodity business ourselves, because we can take bitumen royalty in kind, so we can deliver our own product oil to refiners to help them determine what they need to do to be able to accept larger volumes. Through the Alberta Petroleum Marketing Corporation, we are active players in the market place exploring alternatives, and working with private sector players to develop alternatives.

Do you think there the need to further a unified Canada Energy Plan?

Certainly. The Canadian Energy Strategy in an initiative ably led by Premier Alison Redford and her colleagues. The strategy is still in its early stages but we have already seen great results. An example is our work with the government of New Brunswick on the proposed conversion of the TransCanada Pipeline, and then the extension of that pipeline down to Saint John New Brunswick. This happened as a result of a private company and the respective governments working together very effectively so that all of the stakeholders are well informed on any challenges they might face or concerns that might be raised along the transit route. The New Brunswick Government are strong champions of adding value to Alberta Bitumen in New Brunswick and that eastern pipeline has the potential to deliver bitumen to facilities in Montreal, Quebec City, and potentially also the Come By Chance refinery in Labrador and the Dartmouth refinery in Nova Scotia. This creates immense value-add to Alberta products in parts of the country that have higher unemployment rates and welcome the economic activity; this helps build good will for the Alberta energy sector and is win-win-win all around.

Can you provide us with an introduction to the Responsible Energy Development Act and how the creation of a super regulator will improve the permitting process in Alberta?

This initiative has come about as a result of work that was done around four years ago when it was determined that Alberta's regulatory processes were not as efficient or competitive as some other jurisdictions. The goal is to create an effective and efficient regulatory regime that works not just for applicants but also for landowners and those who have concerns about environmental issues. We are combining the regulatory roles that currently reside in the Energy Resources Conservation Board (ERCB) on one hand, and the Department of Environment and Sustainable Resource Development on the other hand.

The new regulator will function under the six existing pieces of energy legislation, and the four existing environment related pieces of legislation. I would characterize this as the next generation of regulatory structure. In Alberta we have had 75 years of very strong regulatory performance and oversight of the energy industry, and we have built on that at every generation to improve how the process works. For example, if you are doing a SAGD project in the oil sands, it could require as many as 200 separate licenses; we are turning that into a one window approach and if we can take a few months off the process it provides huge value to the applicants. •

Dave Collyer

President
CANADIAN ASSOCIATION OF PETROLEUM PRODUCERS

Canada's oil and gas industry is currently at the center of a number of debates around transit scenarios, North American energy self-sufficiency, environmental impact, and economic development, among others. What do you consider to be the most pressing issue for Canadian and North American petroleum industries at this juncture?

Nobody would have reasonably believed five or 10 years ago that North America could be energy self-sufficient by 2025 or 2030. People increasingly describe energy self-sufficiency today as a distinct possibility. There are profound implications on the affordability of natural gas, in particular, in North America, with the US expected to become an exporter in the next ten years. Canada has always relied heavily on the US market for crude oil and natural gas, but the abundance of shale gas there is now pushing our natural gas supply out; in fact, shale gas companies from the northeastern US are now serving eastern Canada. This is the impetus for LNG on the west coast.

What advantages does Canada have in competing in international markets? What timeframe do you envisage for its gas exports becoming more competitive?

There is no question Canada has a high quality resource. The industry has strong public and policy support; regulatory reform, while it will not affect the outcome of project reviews, has been helpful in expediting their process. The Canadian Association of Petroleum Producers (CAPP) has been pushing very hard for a competitive fiscal regime, with no new taxes on LNG projects or upstream production. The challenge will be to build new infrastructure in remote areas. I believe Canada will do well, but that it will be a tougher climb with lower margins than envisioned by some. People are talking about 2017 for the first projects but I think this is ambitious. Projects will be spread out over a period of time, and I would not be surprised if some are consolidated over time. A wide range of proposals is not unusual for the early stages of LNG development, but competitiveness demands fewer, larger facilities. CAPP's industry projections assume that not every project will go ahead at the same scale and in the time-frame it intends.

CAPP has its own environmental publicity platform. What impact has this had, and in broad terms how successful has industry campaigning been?

As an industry, we were slow off the mark in environmental publicity. Our industry has performed very well over the years but it has always been fairly low key, focused on dealing successfully with local communities. Clearly the world has now changed. In the last four or five years we have been much more active in communications, and performance improvements; reputation is a function of both. Broad public opinion is actually more supportive of the oil sands than you might infer from the media. Polls show between two thirds and three quarters in favor, although it is not unqualified support and nor should it be. The government and industry are both committed to ongoing environmental improvements. CAPP's Responsible Canadian Energy program is part of this; it also commits us to improved social performance. Ultimately improvements are the responsibility of our member companies, but through the program, best practices and transparency, CAPP attempts to raise the bar. At the same time we are focused on increasing our use of modern communications methods, which have such an impact on public opinion, especially because the environmental community employs them so skillfully.

The general view in our 2011 report was that the policy framework was becoming clearer, but there was still a residual complexity in Alberta. How has this changed since, and can the industry live with Redford's recently proposed carbon tax?

There have been improvements announced to the regulatory framework since 2011, both at federal and provincial level. These are still very much in the early stage of implementation, and we are yet to see their benefits. Northern Gateway will be the first project to be impacted – the process dictates that the regulatory review panel must make its decision by the end of the year. Alberta has announced its intention to strengthen its carbon policy, in place since 2007, while the federal government is set to move ahead with greenhouse gas regulations for the oil and gas sector in 2013. Carbon regulations, which do not exist in most parts of the world, will have an effect on Canadian competitiveness, but there may be a social license benefit to having them in place. A new climate change policy will likely have some impact on the public mindset, although the environmental community will probably continue to protest regardless. The other dimension to the issue is that we need a policy to encourage investment in technology, which will be the ultimate difference-maker. The dollars from the Alberta Carbon Policy are put into a technology fund for reducing greenhouse gas emissions elsewhere, while the state has also designated money to assist carbon capture and storage projects at the oil sands. •

Oil and Gas in Canada

A changing energy landscape

Canada enjoys an abundance of natural resources. Even as the world's third-largest natural gas producer and sixth-largest oil producer, the country's annual production does not begin to scratch the surface of available resources. The Canadian Association of Petroleum Producers (CAPP) estimates that Canada's total oil production will double by 2030, rising from 3.2 million barrels of oil per day to 6.7 million, mostly due to oilsands production.

Even in today's bearish market, however, Canadian companies are adapting – and many even thriving – through a combination of astute portfolio management, timely acquisitions and shrewd divestments. Nonetheless, all Canadian energy produces hoping to benefit from Canada's hydrocarbon wealth nonetheless face a headwind of challenges: accessing growth markets, political delays, environmental concerns and capital constraints chief among them. Growth is jeopardized by the United States' domestic energy boom. According to the International Energy Agency's World Energy Outlook, released in November 2013, the U.S. is expected to become the world's largest oil producer by 2015: nearly five years earlier than previous predictions. Currently, Canada exports 98% of its oil and gas south of the border.

As such, the number-one priority for Canada's oil and gas industry is to find a solution to export its abundant supply of crude oil and natural gas. Crude by rail has emerged as a stopgap measure but may lack the ability to handle the anticipated rampup in production. The demand scenario is changing as well: the International Energy Association expects demand for oil to rise 27% over the next 20 years. Two-thirds of that growth will come from Asia, a market that is currently difficult for Canadian producers to access.

The stinging point for cash-strapped Canadian producers is that there is an available pool of capital ready to invest, but hesitancy to do so. In the USA, companies have never had so much money on their balance sheets and want to put it somewhere. Whether or not this source of capital will make it north of the border clearly depends on Canada's ability to solve its issues and create an economically viable and environmentally sustainable industry deserving of the country's enormous oil and gas potential.

Despite these issues, in the medium- to long-term the Toronto Stock Exchange (TSX) and the TSX Venture Exchange (TSX-V) remains the best option for raising capital. For years, Canadian oil and gas explorers and producers have relied on the Toronto Stock Exchange (TSX) and the TSX Venture Exchange (TSX-V) for a substantial bulk of their financing needs. Combining 385 oil and gas issuers, the Toronto Stock Exchange (TSX) and TSX Venture Exchange (TSX-V) are home to more energy companies than any other exchange in the world.

Although there are some exceptions, the TSX mostly caters for larger companies; the threshold for oil producers is usually between 20,000 to 30,000 barrels of oil equivalent (BOE) per day of production, providing access to a vast range of institutional investors and mutual funds. The TSX-V, meanwhile, helps micro-caps and small juniors to generate equity capital.

"This two-tiered system has worked well for Canada's junior oil and gas producers, and the venture exchange has been a great first step for companies that want to tap public equity markets," said Gary Leach, president of the Explorers and Producers Association of Canada (EPAC),

WORLD'S LARGEST OIL PRODUCERS

Source: CIA World Factbook

	COUNTRY	BBL/DAY (2012 EST.)
1	Saudi Arabia	11,730,000
2	United States	11,110,000
3	Russia	10,440,000
4	China	4,155,000
5	**Canada**	**3,856,000**
6	Iran	3,594,000
7	United Arab Emirates	3,213,000
8	Iraq	2,987,000
9	Mexico	2,936,000
10	Kuwait	2,797,000

WORLD'S LARGEST NATURAL GAS PRODUCERS

Source: CIA World Factbook

	COUNTRY	CU M (2012 EST.)
1	United States	681,400,000,000
2	Russia	669,700,000,000
3	European Union	164,600,000,000
4	Iran	162,600,000,000
5	**Canada**	**143,100,000,000**
6	Qatar	133,200,000,000
7	Norway	114,700,000,000
8	China	107,200,000,000
9	Saudi Arabia	103,200,000,000
10	Algeria	82,760,000,000

CANADIAN OIL AND GAS AT A GLANCE

Source: CAPP (2012 statistics)

1.31 million bpd of conventional oil production
1.7 million bpd of oil sands production
13.7 billion ft3 per day of natural gas production
$62 billion in capital spending
$18 billion in taxes and royalties paid to governments
Oil and gas companies comprise about 20% of the TSX

whose members are split roughly in half between the two exchanges.

Listing on Tier 2 of the TSX-V, the exchange's bottom rung, requires a company to have adequate working capital and financial resources to carry out its stated work program for 12 months and just C$100,000 in unallocated funds. The relatively low barriers to entry have enabled Canadian companies to go public at a much smaller size and earlier stage than they do in the U.S. or Europe.

In part as a result, TMX Group, the exchanges' parent company, has led globally in new listings for at least the last four years. But it is not just the relative ease of making an IPO that issuers like. TSX encourages all prospective issuers to hold a pre-listing meeting with its listings managers to prepare them for any issues that might arise.

"The venture is very business-oriented and is responsive to the needs of the oil and gas industry," said Wade Becker, president and chief executive of Pinecrest Energy, which recently moved up to Tier 1 of the TSX-V. "It provides a loose enough structure to deal with the intricacies of energy extraction."

In the short term however, and although the TSX and TSX-V will remain the primary source of financing, companies are exploring alternatives means to bolster their fund raising and meet their capital requirements as they struggle in current markets. In addition, companies are increasingly looking towards projects and potential resources abroad, in countries that do not face the same logistical and export hurdles as Canada. Already, more than 35% of issuers on the TSX and TSX-V hold properties outside of Canada: issuers are as diverse by geographical focus as by market cap. •

Pentti Karkkainen

General Partner

KERN PARTNERS

KERN's portfolio is quite diverse, containing a number of exploration and production companies as well as those with international exposure. Why have you pursued international plays?

The downtown core of Calgary measures roughly 9 blocks by 7 blocks or 63 square blocks. If you were to count the number of engineers and geologists in the downtown core and compared the result to the other energy capitals in the world on some kind of standard city block equivalent my guess is that Calgary would stand number one in terms of concentration of talent. But this talent does not just focus on the Canadian basin: it looks globally. Almost half of the companies listed on the TSX or TSV exchanges have an international focus to their operations. In addition, the career path of many of today's oil and gas executives may have started in Calgary and gone international or may have started international and come to Calgary. Either way relationships may have been established and to the extent that the most critical element of investment success is people and we know these people and they have an interesting business plan in interesting parts of the world why wouldn't we want to consider it?

Considering private equity's increased interest in the Canadian oil and gas sector, why are we not seeing more firms set up offices in Calgary?

There are very few private equity firms here compared to the United States and the reason is simply that, from a Canadian perspective, PE is still a relatively new business model. Dating back to the mid-1980s, Calgary has been a public centric town. The public model being the preferred means of funding was a function of the Western Canadian Sedimentary Basin's relative underdevelopment at the time and the relative size of Canadian equity capital markets. Generally speaking companies would buy an asset with the principal focus being on production acceleration rather than new resource identification, particularly as it related to natural gas in the late eighties and early nineties. Short term, relatively low cost growth was possible, at least for a while, and that model fed well into what public markets were looking for at the time: the junior E&P model was born. Production growth through rate acceleration only works for a while though. Eventually the basin couldn't provide these kinds of opportunities and companies had to actually start building something new, a process that generally takes years and was less compatible with the near-term focused public market where expectations had been set. That need to start building something new in Canada was the same as what is going on throughout the global energy business today. Global demand growth has taken up all the spare capacity of the 1970s, 1980s and 1990s such that the energy industry needs to find new sources of oil and natural gas supply, build new pipelines and new facilities – all of which takes lots of time and lots of capital – which tends not to easily fit the public market's appetite for immediate results. With public markets broken from the perspective of being too preoccupied with the short-term, we are now finding more and more Canadian teams migrating to the private model where the focus is on building something real over the long-term. •

Monica Rovers

Head of Business Development
Global Energy,
TORONTO STOCK EXCHANGE & TSX VENTURE EXCHANGE

We are interested in the TSX and TSXV because they have the most issuers of oil and gas shares in the world. What role do the exchanges play in supporting the industry?

Toronto Stock Exchange (TSX) plays a variety of roles. We are always interested in increasing the number of listed companies on the Exchange, but we also want to ensure they get what they need from it. My role is primarily to help oil and gas companies around the world find the best capital-raising solutions, which we believe are on our Exchanges. TMX Group has led, globally, in new listings for at least the last four years. We have also added services in investor development. John McCoach, President of TSX Venture Exchange (TSXV), meets with retail and institutional investors to let them know what is happening in Canada: how we have successful and well-established listed companies, including many serial entrepreneurs in Calgary who have transformed high-risk, small companies in the oil and gas sector into very profitable enterprises. In Canada a high percentage of investors are in the retail category: many are executives of oil and gas companies, highly knowledgeable about the sector and prepared to take educated risks on it.

How has TSX managed to achieve this relative success?

Canada's sound economic, financial and political systems have all contributed to the country being seen as a safe place to invest. When the global economy is down, Canada seems to remain more stable than the rest of the world. TSX was number one in the world for mining, oil and gas and clean-technology in 2012 and raised more money for oil & gas companies than any other exchange in 2012.

Our investor development initiative is both domestically and internationally focused. The Exchange is more international than ever before; approximately 10% of our issuers are foreign companies. With the state of the global economy we are cautious about painting an unrealistically rosy picture about our markets, but we do point out that they have pulled ahead of others. Many people do not realize this: Canada has a reputation for not marketing itself as well as it could.

At this moment gambling on capital markets is unpopular, and Asian investors in particular are considered to be more risk-averse than their Canadian counterparts. To what extent are you targeting retail investors in Asia?

In 2011 we opened a representative office in Beijing where have someone who focuses on Asian markets. He covers every sector and is working hard to develop relationships. The Exchange has also just hired a person in London, who will look after Europe and Africa.. The first Asian companies into the Canadian oil and gas sector were in E&P; they were then followed by some service providers, and finally by the banks. If the example of France is to be used as a guide, the retail investors should be next.

Times are very tough at the small end of the mining market. Are oil and gas juniors more insulated from the current financial difficulties?

Junior oil and gas companies, like other sectors as well, have struggled in the last year on account of the state of capital market, and mergers and acquisitions are an active part of the oil and gas sector today. For example, small Canadian explorers operating in Colombia are farming in the big multinationals. M&A activity can turn a small company into a big one, attracting more capital, getting it onto indexes and giving it a better chance of success.

Considering the technological advances made in environmental management and efficiency in Canada, do you expect more outbound Canadian oil and gas investment in 2013?

I think Canadian outbound oil and gas investment will continue to grow. There is a myth that Latin America is environmentally undeveloped; in fact, the new bid rounds have become much more particular, so companies need to show they are taking precautions. Colombia is viewed as the easiest Latin American country for Canadians to access. People are waiting for Venezuela, with the second largest reserves in the world, to open up. Colombia is moving toward unconventionals and enhanced oil recovery, which particularly favor Canadian companies. There are big opportunities for service companies seeking to enter Colombia, as they are in short supply there and E&Ps are paying a premium for their services..

What will be the most influential trends in the domestic oil and gas industry this year?

A lot hinges on which pipelines are approved. A huge market for Canada is Asia, but we just cannot reach it. It would still be years before they come into operation, but the approval of pipelines would make a huge difference on domestic production, as companies have already made pre-orders on the condition of it. Gas prices are still so low that people are sitting on unprofitable fields, but oil is doing well. Naturally, a large proportion of our oil exports go to the US. •

Randall Block QC

Partner
BORDEN LADNER GERVAIS

BLG arbitrates between industry and government. Broadly speaking, how aligned would you saygovernment policy, regulation, and the oil industry are at this point?

I believe that the regulatory framework is working well and there is a good alignment between allstakeholders, not only industry and government. There is a general feeling that the regulatory framework,both federal and provincial, must become more streamlined. The Alberta regulatory system is of course oiland gas development in a democracy, which is something we all should cherish and protect, but that bringsvery wide participation rights in regulatory proceedings, and many regulatory proceedings have becomeoverly long, overly cumbersome, and frankly repetitive. These concerns are part of the driving force wesee reflected in legislative developments, both federally and provincially: trying to maintain an efficientregulatory process while at the same time acknowledging the participation rights of clearly affectedpersons.

Bill 2, The Responsible Energy Development Act, which if passed will create a single provincial regulator-for upstream oil and gas, oil sands development, and coal development, seems like an attempt tostreamline the industry, do you see this as a positive proposition?

I am in the wait and see camp with regards to Bill 2. Simply making administrative changes and rollingAlberta Environment into the "Super Regulator," by themselves, are not going to provide for a moreefficient regulatory system. I am waiting to see whether or not this will actually provide more streamlined,more efficient regulatory approvals.

How can there be a unified Canadian approach to energypolicy when there are quite divergent provincial approaches to issues such as carbon taxation and theinstallation of new intra-provincial pipelines?

Resource ownership is within provincial jurisdiction; it is significantly protected, as it should be, and is atthe heart of what motivates Premiers across Canada. There is no doubt that a unified approach toresource extraction, development, and transportation across provinces engages significant constitutionalissues and that is part of, if not the core mandate, of Alan Ross being appointed as Alberta's representativein Ottawa; to try to see if there are grounds for co-operation between provinces. On the legal side, it is atough nut to crack because you are getting right back to the constitution of Canada. Resource ownershiplies with the provinces however transportation of resources crosses provincial boundaries and invokesfederal jurisdiction.

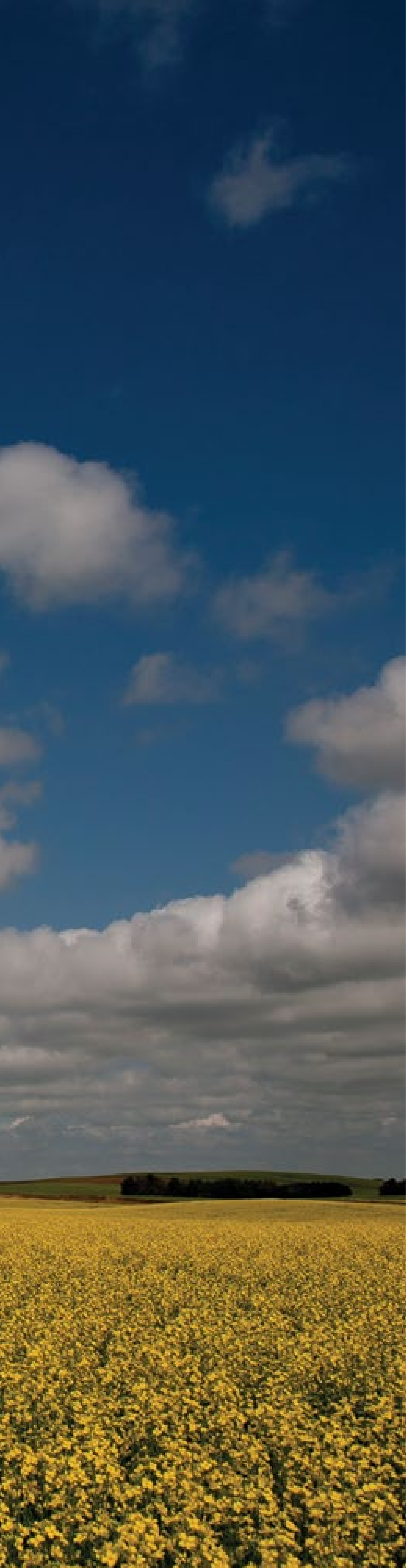
Regarding the streamlining question, it does not much matter whether you are in Saskatchewan, BC orAlberta, whether you are dealing with a federal pipeline or an Alberta based resource development, youhave two related issues: the standing law issue and the scope creep issue. Right now in Alberta, andfederally in my view, the management of standing law is a significant issue because many peopleunder our current rules get standing rights: the right to show up, frankly object, and have their viewsacknowledged. The second thing is that, once you have standing, how do you confine the evidence to therelevant issues so that you have an efficient regulatory process? It is easy to say; it is tough to do. That isthe scope creep issue. So you see a lot of writing and discussion about those two issues. To me, I see themas different sides of the same coin that need to be discussed together.I believe and I am hopeful that the legislation in Alberta will address these issues in a fair and balancedmanner.

What do you consider to be the key legal issues around inter-provincial pipelineconstruction and Canada's future energy transit scenario?

The key legal issue is an overriding power in federal approvals to essentially legislate inter-provincialpipelines into existence. Hopefully we never get that far, but that is a very significant issue, as we seem tobe paralysed in constructing pipelines, and when you look around the rest of the world is racing ahead anddoes not seem to have those fetters. So, that again takes us back to the constitution of this land, which weall cherish, and that over-riding power is in the constitution. Whether there is the political will to use it is adifferent issue.

There is a lot of uncertainty in the industry now and perhaps more thanever legal issues are coming to the fore. What kind of growth are you predicting for BLG and howinvolved will you be in shaping the future of the industry?

We expect to see very significant growth in litigation and regulatory issues. Project approvals will remainimportant. In tighter equity markets where you have to grow through the drill-bit as opposed to raisingcapital, we see an upswing in litigation. Whenever you have anything that looks remotely like a downcycle,you have somewhat of an upsurge in litigation.BLG has always been involved with oil and gas and oil sand development in this province, and we lookforward to continuing that well into the future. •



Sparse Capital, Abundant Opportunities: Hydrocarbon Financials in Canada

"Edge Resources has a healthy amount of debt. Debt is by far the least expensive and most readily available form of capital available today. I think our greatest asset outside of the physical properties is that we have some great partnerships with our investors. They do what they can to help us take advantage of whatever is available in the market and we have demonstrated that we are able to raise money in a market where money juniors struggle to. We raised just over $6 million at the beginning of 2013. Many juniors are struggling and lots of assets are underdeveloped, so there are many acquisition opportunities and we are working with our partners to take advantage of."

- Brad Nichol, President and CEO, Edge Resources Inc.

Image: Edge Resources

Oil and Gas in Canada

A changing energy landscape

TSX-V EQUITY FINANCING STATISTICS - JANUARY/FEBRUARY

Source: TMX

	2014	2013	% CHANGE
New Issuers Listed	10	11	-9.1
IPOs	2	5	-60.0
Graduates to TSX	3	1	+200.0
IPO Financings Raised	$1,350,000	$1,754,000	-23.0
Secondary Financings Raised	$198,422,434	$301,754,326	-34.2
Supplemental Financings Raised	$560,61,002	$331,655,946	+69.0
Total Financings Raised	$760,373,436	$635,164,272	+19.8
Total Number of Financings	291	322	-9.6
Market Cap Listed Issues	$38,048,979,926	$39,522,174,078	-3.7

TSX-V TRADING STATISTICS - JANUARY/FEBRUARY

Source: TMX

	2013	2014	% CHANGE
2013-2014:			
Volume	7,092,042,977	7,572,185,457	+6.8
Value	$2,977,926,804	$2,592,277,461	-13.0
Transactions	1,103,126	1,055, 390	-4.3
Daily Averages:			
Volume	173.0 million	184.7 million	+6.8
Value	$72.6 million	$63.2 million	-13.0
Transactions	26,906	25,741	-4.3

Just like in domestic metals and mining counterpart, Canada's oil and gas industry leads the world in its culture of junior exploration. The Western Canadian Sedimentary Basin, occupying more than 1.4 million square kilometers and ranging across the provinces of Alberta, southwestern Manitoba, southern Saskatchewan and northeastern British Columbia, became a globally exemplary model of resource extraction. The model was simple: in most cases a junior would acquire a property and conduct early-phase exploration, raise capital to finance an exploratory drilling program, and then if successful, partner with a larger company, or sell the property off. This model was enabled by the fiscal stability and efficacy of the TSX and, in particular, the TSX-V.

However, a variety of factors have disrupted the efficiency of this process. Chief amongst these is the decline of income trusts, thanks to the federal government's 2008 decision to lift the tax advantages that the trusts enjoyed, effectively ending the most profitable exit strategy for junior companies.

The removal of the trusts coincided with ongoing shifts in the upstream industry, including the growth of unconventional resource plays that are more technology-driven and capital intensive. As of July 2013, available capital had decreased by two-thirds compared to the same period the previous year.

This dearth of financing options has placed huge pressure on juniors. "When you are a young company, it is important not to come out of the gate and miss. If you trip out of the gate, there is no way in the capital markets of today's world that you get a second chance," commented Eric Boehnke, executive vice chairman (Vancouver) of TSX-listed and Vancouver-based Terrace Energy, which is focused outside of Canada on the South Texas cretaceous plays.

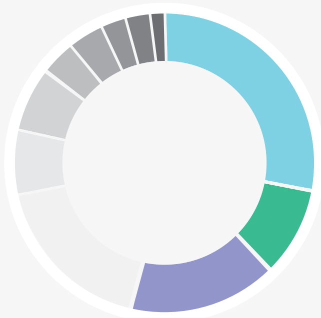
According to Bruce Edgelow, vice president, energy group at ATB Financial, an Alberta-focused bank, "Our findings indicate that common equity financing is at the lowest point in five years, significantly lower than during the 2008 financial crisis. We have seen a significant retraction from equity providers that have traditionally raised money to be put into the patch this year."

Within the Canadian marketplace, there are 226 TSX-listed energy companies. Of these, fewer than 10% have been able to raise capital, said Edgelow. "Those that have are those that have been deemed to be 'A' teams, meaning that with respect to management and board they are viewed as top tier. These companies are also able to aggregate for size, product diversity or a geography that can generate returns," he said.

A slump in equity markets has meant that capital is far harder to come by than it was two years ago, and the market valuations of companies can be difficult to comprehend. "The markets are supposed to be optimally efficient and always right. Perhaps that will become true again, but a lot of unusual things are happening today," said Garnet Amundson, president and CEO, Essential Energy Services. "Big pension funds that typically buy shares in companies like ours are trying to protect their shareholders' money as opposed to enthusiastically looking for growth opportunities."

LISTED COMPANIES BY SECTOR

Source: TMX



Financial Services	28%
Mining	10%
Oil & Gas	16%
Diversified Industries	18%
Communications & Media	7%
Utilities & Pipelines	6%
ETFs & Structured Products	4%
Real Estate	4%
Technology	3%
Other	3%
Clean Technology	1%

This downturn is not affecting all companies equally. Terrace Energy has seen its stock price grow from $0.1 a share in January 2011 to $2.1 a share today, success that is predominantly based on shrewd moves to acquire acreage close to the Eagle Ford geological formation in Texas, USA. "Our business model has been to find frontier areas so we can acquire acreage cheaply. We were able to get into our Olmos project for less than $300 an acre, in an area of Eagle Ford where property costs $10,000 to $15,000 an acre," said Dave Gibbs, president and CEO (Houston) of Terrace Energy.

Yet it also helps that Terrace Energy has looked outside of its home country. While the exodus of capital from equity markets is a global phenomenon, factors endemic to the Canadian industry have made access to capital for juniors particularly challenging. The transition to an unconventional sedimentary basin model has entailed significant changes in project deliverability in Canada. "The cycle times, from money in to money out, have extended significantly. Mul-

→ 22

Brian Prokop

Co-CEO and President

ARGENT ENERGY TRUST

There have been a few CBIT listings recently with mixed success; how successful was Argent Energy Trust's 2012 IPO?

We successfully launched our IPO in August 2012, with a $210 million base deal, plus the greenshoe, worth $38 million. We converted a nine year-old company, Denali, into a trust. We were able to add the Energy Quest asset just two months later, which is exceptionally fast.

There were many energy trusts in existence before the 2006 tax ruling. Given the success your company has enjoyed, why is it that there has not been a real re-emergence of these types of funds?

It took a while for the original trust model to be accepted. The model was first viewed as a bunch of accountants running assets they did not understand, but eventually its success was demonstrated. The model was shown to provide capital discipline and ultimately became exceedingly popular; companies that felt they were undervalued were spinning off mature assets into trusts and magically increasing their worth. The Halloween massacre of 2006 exempted Real Estate Investment Trusts and Foreign Asset Investment Trusts (FAITs). In the years of uncertainty that followed, Eagle Energy Trust pioneered the re-emergence of Cross Border Income Trusts (CBITs). From the experience of companies like Enerplus, there was tangible evidence that CBITs would work but it just took a while for them to come to fruition, as with the original trusts. Of course the poor state of the markets has not helped. When Eagle Energy Trust came out at the end of 2010, the CBIT model was still a unique concept; retail interest was high but it was difficult to attract institutional investors. Then, in April 2011, Parallel Energy Trust came out with a much bigger deal.

With a portfolio of US assets, Argent Energy Trust benefits from the price differentials between US and Canadian assets. Since CBITs work with any non-Canadian assets, is there a plan to take this model beyond the US?

As Vermilion has demonstrated, taking this business model overseas is certainly an option available to us, however we view this as a much longer term option given the significant market for US assets. Because this is such a new sector, the cross border trust model is still new to the investor and there is concern about long term sustainability. The good news is that US assets generally yield higher netbacks than Canadian assets, as a result of lower operating costs down in Texas, no seasonality to cope with and no oil sands sector to compete with for labor: as well as a $20 to $25 per barrel of oil price premium. Our economic advantages are ridiculously good, but we need to educate the market on our opportunistic new model and build up a track record, which will take some time. Further acquisition growth will be in the conventional sector where Argent Energy Trust deals. You can sell a 30-year-old field to us and we will get another 20 years of life out of it. There is a niche in the market we can fill where we can grow through both development and acquisition; in contrast to MLPs that need to find properties with at least 80% proved developed producing reserves, as they can only really grow through acquisition. •

David Vankka

Managing Director
Energy Investment Banking
CANACCORD GENUITY INC.

Can you give us a brief introduction to Canaccord Genuity and its role in Canada's oil and gas sector?

Canaccord Genuity is a global full-service investment bank focused on growth companies, with operations in 11 countries worldwide and the ability to list companies on 10 stock exchanges. We are on of the largest independent investment banks in Canada, and we provide corporate finance and advisory to oil and gas companies both within Calgary and globally. Our focus in Calgary is on mid market oil and gas and oilfield services companies. Many of our clients have assets and operations internationally. Our global energy platform involves coordinating between Calgary, Houston, London and China to give our clients the best possible access to foreign and domestic sources of capital and ideas.

How would you characterize the types of deals you are currently seeing as compared to previous years, and within the context of your global footprint?

Canada has taken longer than other regions to react, whereas the United States has rebounded quite nicely. One of the issues in Canada is market access for products. Many of the US funds abandoned Canadian oil and gas for a period of time when price differentials on crude remained high, and they had better economic access in their own backyard. The larger dividend-paying companies have been able to finance, and a select number of juniors have become midmarket players through a deal or dividend conversion. We are also seeing longer-term investors like pension plans becoming increasingly more active. Smaller startups have struggled to access traditional institutional funds for financing. We have seen recent increased interest for Canadian energy companies from the US and Europe. The weakening Canadian dollar and a rebound in natural gas prices have been catalysts for institutional investors to buy Canada again.

What are current plays that are most attractive to investors?

The plays getting considerable interest in Canada are some of the larger liquids-rich gas plays like the Montney and the Duvernay. On the oil side, the Bakken and Cardium are still getting attention. The Montney in particular is appealing for larger companies looking for repeatability to get enough gas to make an LNG financing decision viable for them. Companies have to have sufficient capital to operate in the Montney; an undercapitalized company who has assets in the Montney has to look at a variety of options, from outright sale to joint ventures. We could very well see the supermajors continuing to increase its ownership in the larger natural gas resource plays as a feedstock for LNG or other petrochemical development.

We have seen a number of juniors performing well despite the equity crunch. What does it take for a company to be successful in this market?

The first key to success is a proven, disciplined management team, followed by a good asset base that has sufficient inventory to continue to grow Investors are looking at netbacks, reasonable decline rates, balance sheet strength, play economics and commodity mix. A clear strategy of balancing growth versus paying dividends is important and in part driven by the asset base. Until recently drier gas plays have been challenged to generate enough cash flow to sustain the business. Undercapitalized or overleveraged companies will struggle to attract capital. There are also some microcap companies who are developing more conventional areas like southern Alberta where smaller opportunities have excellent rates of return once combined with the lower drilling costs.

Private equity is emerging as a viable source of capital. How viable is this method of funding for oil and gas companies?

Private equity capital is very accessible and is becoming a more common option for good management teams. Private equity in Calgary originally began with a number of local funds as well as certain Canadian pension investors. US funds have become increasing more active in funding startups as well as being potential buyers in going private transactions. These funds have raised considerable capital and as a result are creating a more competitive environment for their investments. More funds are establishing beachhead operations on the ground in Calgary. This, combined with a recent improvement in the public markets, is giving teams some attractive start up funding options.

Where does this leave publicly listed companies?

The environment for publicly listed companies has improved in the last three months. Good companies with strong business plans who execute well will get financed. Until recently, only the best in class companies at a smaller size range were successful in attracting capital over the past few years. There are far too many small, listed oil companies whose only solutions will be to merge or sell, and there are not many buyers for small players on the market. Investors have lost a lot of capital and in the bigger picture there are macroeconomic concerns. The marginal buyer will be US and European investors who are now starting to allocate more capital to Canadian resources after a several year absence.

What is your outlook for Canada's oil and gas sector, and where would you like to see Canaccord Genuity positioned in this context?

Canada's oil and gas sector is poised for a strong rally as global investors are underweighted in the region and the Canadian dollar depreciation has made the stocks all that more attractive. Canada's biggest problem on the global stage is access to markets, with Keystone XL and Northern Gateway being the most notable examples. There was reluctance amongst US investors to come into Canada with crude trading at such a discount to global benchmarks. Companies have adopted rail in part to get oil to much better markets and a cold winter has certainly helped deplete natural gas storage stockpiles. We strive to continue to provide our investing clients high quality opportunities in first class companies and to provide our corporate finance clients the best access to global capital and to be their trusted, independent advisor on M&A transactions. •

TSX TRADING STATISTICS - JANUARY/FEBRUARY

Source: TMX

	2013	2014	% CHANGE
2013-2014:			
Volume	13,142,392,010	14,270,685,613	+8.6
Value	$188,988,895,272	$203,322,973,319	+7.6
Transactions	25,572,470	31,698,441	+24.0
Daily Averages:			
Volume	320.5 million	348.1 million	+8.6
Value	$4,609.7 million	$4,959.1 million	+7.6
Transactions	623,694	773,133	+24.0

19

ti-stage fraced horizontal wells are highly capital intensive and, while they are very attractive economically, the rate of return profile is longer," says Shane Fildes, executive managing director for capital markets at the Bank of Montreal (BMO).

Faced with a lack of exit opportunities, some Canadian companies are considering turning their backs on the public markets and exploring private capital to finance their activities. Laricina Energy is a particular success story, having raised over $1.3 billion through private equity to fund its Saleski and Germain projects in Canada's oil sands. "Private equity is becoming more common as an option for good management teams," said David Vankka, managing director, investment banking at Canaccord Genuity.

Not every investor believes that private equity is the miracle that cash-strapped oil and gas companies are looking for. "The problem with private equity here is that the funds go out to raise money, become increasingly successful, and then face more challenging investment criteria," said David McGorman, CEO of Jennings Capital.

"Many projects do not need C$100 million to get started; they want C$25 million toC$40 million. Trying to find that amount is very difficult. The conventional hedge fund is not interested, and private-equity firms think this amount is too small for their portfolios. Currently the private-equity market raises more money than it knows how to deploy and this goes to companies that have more than they need already."

Another option for high-performing, producing companies is to start paying a dividend to investors. Whitecap Resources recently established a $0.05 dividend. According to Grant Fagerheim, Whitecap's CEO: "We had to look at it in terms of what we believed our assets could deliver, and how effective we could be with our capital. Now we are setting aside 34% of our cash flow to pay dividends to our shareholders, and the rest is used to fund our growth strategy."

A dividend model may be attractive to investors, but can consume a company's existing cash flow: the balance between spending money to stimulate investment and saving the investment received is a fine one. Nevertheless, Paul Colborne, CEO of Surge Energy, a light-oil producer in Alberta, believes it is a low-risk way to play their basin. "Surge will grow about 3% to 5% per year and pay a 7% dividend to our shareholders, giving us a return of 11% per year. This model allows us to return a monthly payment to our shareholders who can benefit from strong oil prices," he said. •

Bruce Edgelow

Vice President Energy
ATB CORPORATE FINANCIAL SERVICES

Can you provide us with an introduction to ATB Financial's role in Canada's energy financing sector?

ATB Financial, through its dedicated energy group provides solutions to businesses with operations in Alberta across the entire spectrum: private, public, junior, intermediate and senior. We support these companies throughout all sub-sectors of the energy marketplace including oil and gas exploration and production, drilling and oil field services, pipeline and utilities, and midstream. In terms of our role, ATB Financial is actually a Crown of the Province of Alberta, set-up with an independent Board of Directors. As such, our mandate is to provide services to all Albertans and businesses with operations in our province. Over our 75-year history, ATB has been there for our clients and markets through the good times and the bad: and there really isn't any other industry globally that knows good times and bad like our energy patch. Externally our Energy group here at ATB has become known as a market expert that genuinely functions differently: able to stay the course with its clients.No matter what point of the cycle we are in, our team is a market leader that clearly understands the risks inherent in our Alberta and global environment well enough to be able to take a different view.

How would you describe current lending and financing trends within the oil and gas industry?

Today we are stymied with respect to access for broader capital through the general raising of monies through the public domain. As of July year-to-date, one-third of the capital that had been available for the prior year is available this year. Our findings indicate that common equity financing is at the lowest point that we have seen in five years, significantly lower than during the 2008 financial crisis. We have seen a significant retraction from equity providers that have traditionally raised money to be put into the patch this year.

Within the Canadian marketplace, there are 226 TSX-listed energy companies. Of these, less than 10% have been able to raise capital. Those that have are those that have been deemed to be "A" teams, meaning that with respect to management and board they are viewed as top tier. These companies are also able to aggregate for size, product diversity or a geography that can generate returns. The other 90% are not viewed as attractive of investments as they were in the past.

Why are oil and gas companies finding it so challenging to finance their activities in current markets?

The private equity community, which typically invests billions into the energy space, has noted that there are four factors as to why the Canadian marketplace is not enjoying historicallevels of investment. The first is the lack of a near-term export strategy in the marketplace. There is a 2020 expectation for LNG export, but this does not fit within the PE investment timeframe or that of the public markets. The second is that in the United States, there are currently significant basins that are generating world-class deliverables on reserves that were not as robust three to four years ago. The third is that while we have an acknowledged resource base, there are doubts as to whetherwe have sufficient best-in-class teams that are capable of bringing resources to market. The last is thatthe market needs further consolidation. There are simply too many juniors across too many basins.

Given the obstacles that we are seeing in the markets, in what direction do you see the energy sector going?

The natural gas market place has upside potential in that we have enjoyed a 50% increase in the price of natural gas prices reserves. In the next five to seven years, as we develop our export capacity and strategy, there will be a growing emphasis on acquiring, aggregating and growing a basin of potential prospects to sell to the LNG marketplace in 2020. There is upside for those who are prepared to be patient. There is also upside potential in terms of exporting oil for those who are patient and willing to wait three to five years to see results.

How do you see the energy practice within ATB Financial evolvingwith the market in the next five years?

ATB Financial has always lent to all the players within the basin and we will continue to provide debt capital and ancillary services in whatever form it takes. We have demonstrated that we have been able to successfully adjust our strategies in terms of financial markets, syndications, other products and services and partnering with AltaCorp, in order to ensure that whichevershape this basin does take, wewill be participate. We fully intend to remain as the leader in this market that stays the course for its clients. •

Rick Rule

Founder Global Companies
SPROTT GLOBAL RESOURCE INVESTMENTS LTD.

Can you introduce us to Sprott Global Resource Investments Ltd. and its involvement in oil and gas?

Sprott Global Resource Investments Ltd. is mostly involved in the sub-$500 million market valuation space in both Canada and the United States. We are known as an alpha shop, which essentially generates alpha by answering unanswered questions; we have found that the flow of information is less efficient in smaller companies, and our ability to compete has been more efficient in smaller companies. In the US, Sprott has consistently recommended that US investors take a cornerstone position in oil sands: we think it is the largest source of secure hydrocarbons in North America, and is scalable in that it responds well to applications of capital during high oil prices. This does represent an exception to Sprott's smaller cap focus, because they play a unique role in high-end retail portfolios for US investors.

How has Sprott adapted its investment strategies to the tight fiscal environment?

Most of Sprott's competitors in the Canadian energy space are focused on companies producing 15,000 boe/d, but we focus on a lower level with the understanding that our exit strategy is uncertain. However, the valuation metrics are more attractive based on things like enterprise value and cash flow multiples. Over the coming months our suspicion is that companies producing less than 10,000 boe/d will either be taken private or opt out of an IPO. This will lead to more consolidation; for investors, there is money to be made by owning both the buyers and sellers. Sprott has been focused on light oil for the last few years, but recently is looking at assets with a dry gas "kicker". We look for companies with enough production acreage whereby that when gas prices do begin to recover, there is a warrant built in to the existing production base. We do not believe that prices will recover in the near term, but our attitude towards gas packages is higher than it used to be.

A number of companies have transitioned to a dividend model. How attractive is this to investors?

The market lift that companies have previously enjoyed by switching to a dividend model has been overdone. Sprott would prefer to see companies who utilize their free cash flow to develop attractive recycle ratios and deploy their capital effectively, rather than pass it along to shareholders. Companies that rely on a high dividend rather than capital efficiency will be taken private. There was a time two years ago where the way to lower your cost of capital was to increase your dividend, but this time has passed. Now, companies that have a large and repeatable resource base that can effectively redeploy their cash to grow production and reserves will enjoy premium values.

The retail market has proven an inadequate source of capital for oil and gas plays. What opportunities are currently available for financially constrained companies?

The institutional investors have exited the junior market, but there should still be adequate access to capital for juniors to access. The extractive industry entrepreneurs enjoyed remarkable access to capital from 2003-2010, and the issuers confused optimal pricing conditions with normalized pricing. If the issuers adjusted their expectations with regards to what ought to be normalized cost of capital, they would find that capital is reasonably available, although they would prefer that capital was cheap. We will see an increasing reliance on four sources of capital. First, conventional bank financing is still available in Calgary. Second, private equity will come into Canada with a vengeance; Canadian private equity valuations are cheap in comparison to their US counterparts. We also believe that consolidation will begin to take place, albeit slowly. Finally, juniors who are location-rich with large inventories will look to joint venture opportunities.

Can you give us some insight into whether we can expect higher natural gas prices and a closing of the gap between WTI and Brent prices?

There is a difference between the words "inevitable" and "imminent." On both sides of the border, primary gas producers are not earning anything close to their cost of capital and the industry is in liquidation. In these situations when you have an industry that is in liquidation and the utility of the commodity to users is so high, the price has to go up. Unfortunately, it does not have to do so in a timeframe that makes sense. With regards to crude price differentials, the disparity between WTI and Brent is particularly interesting in that the national oil company model is problematic to importers. NOCs have not made the sustaining capital investments necessary to maintain their production, and instead have diverted cash flow to domestic spending projects. The consequence on prices is that there is much less supply than people had been inclined to believe. The fact that political disruptions in Egypt and Syria – both non oil-producing countries – had such a dramatic impact on oil prices says a lot about the fact that many traditional oil-producing countries have less to export. It is difficult for me to see in five years with production volumes declining how some countries can generate enough cash to maintain domestic spending and arrest a decline in production. If that does not happen, it has positive implications for valuations put on high-quality production in jurisdictions like Canada, and goes to the disparity between WTI and Brent quotes. •

Export Diversification

Dealing with differentials

For all the strengths of Canada's oil and gas industry – vast geological wealth and potential, strong financial institutions, a culture of junior exploration – it faces one major problem: difficulty in diversifying its export base.

According to CAPP's June 2013 forecast, Canadian crude-oil production will rise from 3.2 million barrels per day in 2012 to 6.7 million barrels per day in 2030. Oilsands production will account for the vast majority of crude growth, rising from 1.8 million barrels per day in 2012 to 5.2 million in 2030. A significant majority of that oil is and will be exported.

However, a dearth of transportation options to the coast means that, beyond its small domestic market, Canada is stuck with just one recipient for its oil; its neighbor the USA. "Having only one customer has made our country vulnerable; we have to find a way to tap into global markets," said EPAC's Leach.

The widely dispersed revolution in horizontal oil completions and multi-stage fracturing that made exploitation of Canada's oilsands possible has also enabled the U.S. to rapidly increase its production of natural gas and crude oil, light crude, and unconventional heavy oil resources. Limited access to pipelines, combined with the additional upgrading and refining requirements of bitumen, disadvantages Canadian supply. The price difference between Alberta's bitumen – or Western Canadian Select – and West Texas Intermediate peaked at $42 per barrel in 2012, creating a phenomenon known locally as the "bitumen bubble.".The differential will strip some $27 billion from the Canadian economy in 2013 according to Alberta's finance minister, Doug Horner.

Although the bitumen bubble has shrunk somewhat this year, continued uncertainty around market access has led some to question investing in the oilsands.

"A lot of U.S. funds abandoned Canada for a period of time when price differentials on crude remained high and they had better economic access in their own backyard," said Canaccord's Vankka. "There is reluctance amongst U.S. investors to come into Canada as crude is trading at such a discount to global benchmarks.

"The valuation differences are going to drive people as time goes on, and some of the transactions we have seen may help, but only if we see deals bigger than 4,000 BOE per day. Global investors need to see the exit strategy in these assets, but without the catalyst to these takeaway problems, investors need to see a real valuation difference."

Energy infrastructure, overland issues, environmental concerns and First Nations interests have all contributed to a very complex analysis in terms of the likely profitability of the Western Canadian sedimentary basin, said Mark Horsfall, vice chair investment banking for the Canadian Bank of Imperial Commerce (CIBC) "If we are not able to solve some of these issues and create transportation outlets, it is likely that we will be subjected to wider location differentials in the future." •

> "Enbridge's Northern Gateway is an important initiative in terms of market access, which is critical for Alberta's national resources product. There is the so-called "bitumen bubble", meaning that Alberta does not receive international pricing for its oil, but is instead stuck with West Texas Intermediate (WTI) pricing. That has had a big impact on provincial coffers. The position of the Alberta government is that there needs to be more market access, in as many directions as possible."
>
> **- Alan Ross, Alberta's Envoy to Ottawa, Alberta Ministry of International and Intergovernmental Relations**

> "Canadian explorers and producers have historically enjoyed a close relationship as an energy partner with the United States. Indeed, the United States has been really our only export market. This situation is now depriving our producers, and Canadians generally, of billions of dollars a year in revenue. Thanks to the revolution in horizontal oil completions and multi-stage fracturing, North America is rapidly increasing its production of natural gas and crude oil, light crude, and unconventional heavy oil resources. Having only one customer has made our country vulnerable; we have to find a way to tap into global markets."
>
> **- Gary Leach, President, the Explorers and Producers Association of Canada (EPAC)**

David McGorman

CEO
Jennings Capital

Can you give us an idea of the types of deals that Jennings Capital has engaged in over the past year, and what this says about investor appetite?

Jennings Capital has raised about C$2.5 billion over the past few years in the energy space, of which 60% was directed internationally and 40% domestically. We have advised on the same amount in dollar value over the same period, with the opposite proportions for international and domestic focus. The market dictated the ratio: the investor appetite is looking for cash flow and downside protection. If we take geopolitical risks into account, they want to know that we have cash flow, liquidity in stock, and are self-sustaining. We have to be patient, selective and strategic about what companies we cover. The hit ratio is a lot less right now, with a one in ten shot of being able to gain success.

How have Jennings's own strategies changed in light of the wider economic challenges faced by your clients?

Jennings used to divide our analysts between international and domestic teams, but now this structure has switched. Our teams are now dedicated to projects based on size and type of production, independent of geography. Our research is currently directed towards heavy oil and the rates of return that investors are demanding. We think the timing of heavy oil is just a little bit in front of us based on top line revenue. When we consider WTI's discount to Brent, and WCS's added discount to WTI, it makes for a volatility that scares investors.

The US has a 20-year energy boom ahead, but in talking to the private capital sector, they have a great deal of money they would like to deploy. They will not go offshore because they want to protect their assets from geopolitical instability, but they do not want to come here because they see a top line revenue risk. Transportation is going to be our biggest key in this regard; investors are afraid of the fact that we lack markets.

The volatility takes away two things: it hurts on the bottom line but also gives a discount on the cash flow. If you look at the number of pipelines being built or that have been approved to deal with the bottlenecked Gulf Coast, there are about 4.5 million bopd to be approved and half of those up for grabs. Independent of Keystone, we are going to have access to our product, which will minimize volatility and increase value.

Private equity seems to be one of the only solutions for companies who are looking to raise money or avoid the volatility of public markets at the moment. Where do you see the role it plays going forward in Canada's oil and gas space?

There is an enormous amount of private equity in the US. We do have some colleagues who have started to slow down their investments and are just not finding the right deal. The problem with private equity here is that the funds go out to raise money, become increasingly successful, and then face more challenging investment criteria. Many projects do not need C$100 million to get started; they want C$25-40 million dollars. Trying to find that amount is very difficult. The conventional hedge fund is not interested and private equity firms think this amount is too small for their portfolios. As the market grows, we need more of a balance between the types who like to invest in large amounts and those who are interested in smaller projects. Currently the private equity market raises more money than it knows how to deploy and this goes to companies that have more than they need already.

Considering the amount of capital that is needed to invest here, what do you have to say about the restrictions that the federal government has placed on SOEs investing in Canada's oil sands?

It would be ideal if the federal government were easier on exploration drilling so that we could increase the use of flow through shares. What has hurt us the most, however, is the lack of a royalty trust structure. There are people in Calgary who are very talented at what they do, and this talent is more entrepreneurial in building up smaller companies and selling them to bigger players. Harnessing this is a bigger issue than whether or not foreign ownership is allowed, and we have already seen how nationalism plays into this issue with BHP Billiton's failed bid for Potash Corporation in 2011.

Going forward, what are some of the signs of optimism that we are seeing in the markets, and how healthy do you think 2014 might be for both the industry and Jennings Capital?

Relatively speaking, 2014 is going to be healthier than 2013. The last 12 months have been the worst we have seen in at least two decades, so the only way is up. Keystone would be a boost, but it is not a deal breaker. Northern Gateway will be harder because it is very expensive and more logistically challenging. Jennings is continually looking for opportunities outside of the upstream resource sector. Our main focus of coverage will be mining and oil and gas, but we will look at opportunities that represent the downside protection that investors look for. We look for interesting stories with great growth prospects, and introduce these to the buy side. As a boutique firm, Jennings is nimble and can change as the wider market dictates. •

Mark Horsfall

Vice-Chair Investment Banking
Canadian Imperial Bank of Commerce (CIBC)

Can you provide us with an introduction to the corporate strategy of CIBI?

As oil and gas is a core Canadian industry with global reach, we have been focused on enhancing our capabilities at home and abroad.Last year, we added an energy team in the U.K. and also acquired the firm Griffis & Small, whose acquisition and divestiture expertise in the exploration and production field in Houston complements our existing credit capabilities in that market. Griffis and Small also gives us a greater opportunity to talk to Canadian clients that want to grow in the United States and also US clients interested in Canada.

From a public policy and advocacy standpoint, CIBC has been a prominent voice in Canada and abroadon the importance of the oil and gas industry here, as well as addressing related topics such as infrastructure, foreign ownership and the environment.

Can you provide us with an overview of what you see as the key trends in the industry and how they have impacted CIBC?

The industry has changed significantly in the last few years. The revolutionary shift started in late 2006 with apolicy change that disallowed the ongoing creation and financing of income trusts. Up until that point it was a very important corporate form for Canadian producers. That change coincided with ongoing shifts in the upstream industry, including the growth of unconventional resource plays that are more technology-driven and capital intensive. The form of equity financing for Canadian producers started to change after this shift. Previously, public markets (retail investors and yield-oriented institutional investors) would fund a lot of these income trusts. Today, producers in Canada have had to find alternative sources of equity financing. This has led to an influx of joint-ventures, with large international parties looking to access the resources and reserves in Canada with a long term focus.

Whether or not this joint-venture cycle has run its course is a matter of debate. In the past several quarters there has been a drop in terms of the actual volume of joint ventures. This has led some to conclude that buyers' appetites have been sated. This may not be an overarching truth, but we observe an element of this process currently. Now there is an increased focus by producers on second and third order equity sources including royalty creation, private equity, monetizing mid-stream assets, etc. With regards to private equity, we have seen a huge influx, both by Canadian players, as well as New York and Texas based private equity firms. Overall there are more creative ways to generate extra capital to be redeployed into the ground and prove up these resources plays.

On the joint venture side you mentioned that some individuals are stating that buyers had been sated. To what extent do you think that is a function of the regulatory constraints on the Canadian market?

There are a number of contributing factors that have slowed down the pace of activity with cross-border acquisitions and joint venture equity financing. Many of the large international players have established positions in the key Canadian resource plays. Managing those portfolios and becoming comfortable with these recently acquired assets takes time. Also, recent federal government policies on foreign ownershiphave raised questions about the implications for State Owned Enterprises (SOEs) that are interested in investing more in Canada. Our buy-side clients in Asia and elsewhere, which are state-owned or state-affiliated, are trying to discern what these changes mean for them. This has not lessened their interest in doing business in Canada, although we expect opportunities will be pursued more cautiously.

Energy infrastructure, overland issues, environmental concerns and First Nations interests have all contributed to a very complex analysis in terms of the likely profitability of the Western Canadian sedimentary basin. If we are not able to solve some of these issues and create transportation outlets, it is likely that we will be subjected to wider location differentials in the future. An important aspect of this conversation is the development of the United States oil and gas industry and the increasing share of United States consumption from domestic sources. This, by its nature, lessens the need for Canadian production and exacerbates the above-mentioned issues. That being said, we are optimistic that on both the infrastructure and foreign investor side that pragmatic solutions will be eventually be found.

You had mentioned that companies are now employing various methods of raising capital. Does CIBC have any financial mechanisms suited for junior companies trying to raise capital in this market?

We have a suite of solutions that we talk to our clients about. On the investment side, we spend a lot of time thinking about innovative solutions for clients through capital markets and restructuring steps these companies can take. Also, through our Capital Markets and Commodities Hedging groups, we are very focused on developing new products to offer to our clients. We also have a very talented group in our M&A department in Toronto.

There are a lot of companies with a very large resource base but very small production who are not generating free cash flow. The longer this goes on, the more these companies will find that they have limited degrees of freedom and will need to look towards restructuring solutions. •

The Dominant Source: The Oilsands of Alberta

"I believe the industry has not done enough to communicate with the public. We were caught off guard when opposition to oilsands development started in 2006/7 and the push back was extremely hard, but that was at a time when everybody in the world was rich. After the global financial crisis people started caring about jobs instead of Hollywood fantasies. Keystone is important for Canadian exports, but the big movements against pipelines do not really care about Canada or the oilsands, they are largely groups who are against fossil fuels, full stop. If that is your goal, that is fine, just say it, instead of finding some dubious environmental reason to stop one pipeline out of thousands going through the US."

- Sveinung Svarte, CEO
Athabasca Oil Corp.

Image: Bellatrix

Alberta's Landlocked Oil

From the oilsands to elsewhere

Alberta's oilsands are famous largely for the controversy they elicit. They are Canada's dominant source of oil, and as such a key contributor to the country's economy and employment, and the process of extracting them serves as a driver of new technologies that have applications across the world. Yet they are continually under the spotlight not for the benefits they provide, but for their environmental impact of both their extraction and of the proposals being put forward to solve the transportation issues inherent in their location.

The European Union's 2011 assessment that oilsands extraction emitted 23% greater greenhouse gases than that of conventional oil extraction put Canada's industry under increased scrutiny. With deliverability issues constraining investment in the oilsands and putting a cap on profitability, companies are looking to transport bitumen via pipelines in almost every direction possible.

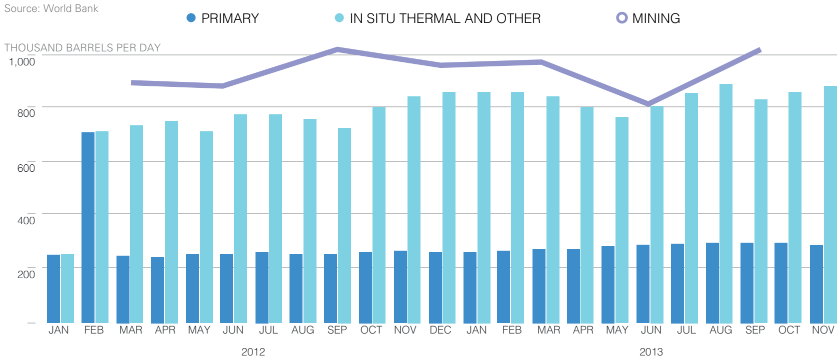
Enbridge's proposed Northern Gateway pipeline has elicited domestic backlash. The constituency of British Columbia is currently undergoing a provincial election that is set to bring the pro-environmental National Democratic Party (NDP) to power, which, at minimum, may stall the project. In the international realm, the administration of Barrack Obama delayed a decision on the Keystone XL pipeline in November 2011 under environmental pressure.

Given the controversy surrounding the oilsands, innovation is not the first thing that comes to mind. Rather, many think about large producers or new and emerging transportation possibilities, from the Keystone XL pipeline to the ever-growing practice of transportation by rail. Recent innovations in the oilsands

32

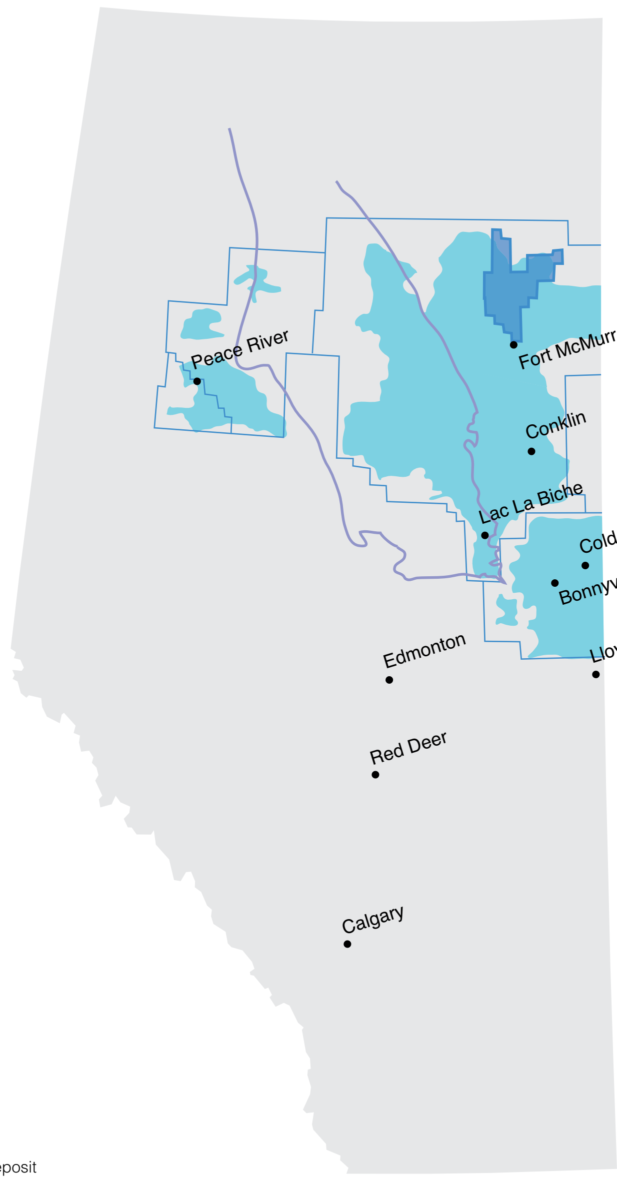
ALBERTA OILSANDS PRODUCTION BY EXTRACTION METHOD

Source: World Bank



ALBERTA'S OILSANDS

Source: Alberta Government



Oil Sands Deposit
Grosmont Carbonate Triangle
Oil Sands Area
Surface Minable Area

Alan Ross

Alberta's Envoy to Ottawa
ALBERTA MINISTRY OF INTERNATIONAL AND INTERGOVERNMENTAL RELATIONS

How well aligned would you say provincial and federal priorities are, particularly in light of the fact that Alberta is a Conservative Party stronghold?

My experience is that there is strong contact between the equivalent ministries at both the provincial and federal levels. I am amazed at the development of very strong working groups, which incorporate both levels of government. Coordination between both provincial and federal representatives was aptly highlighted with the 40-40 Carbon Taxation proposal, with the discussions that took place between Federal Minister of Environment, Peter Kent and Albertan Minister of Environment, Diana McQueen on carbon emissions. There has been discussion of some options, such as the 40-40 proposal, and I'd stress these are not policies set. There is no sense of misalignment, although there may be circumstances under which the Federal government takes a slightly different view on issues than the provincial government. This is mainly due to the fact that the Federal government has a national mandate and that their policies must reflect this reality.

To what extent is the current controversy surrounding the proposed Enbridge Northern Gateway, and the project's importance to Alberta, central to your appointment?

Enbridge's Northern Gateway is an important initiative in terms of market access, which is critical for Alberta's national resources product. While people have not forgotten about the Enbridge Northern Gateway or Keystone XL projects, there seems to be increasing focus and optimism regarding the Line 9 pipeline, which would run from Alberta to the East coast. While the Gateway pipeline is part of the role that I have, I spend much of my time on trying to find alignment regarding Line 9, with both the Ontario and Quebec governments. In Alberta there seems to be an eastward focus, in part due to the Gateway project being fraught with challenges. When it comes to Line 9, given that much of it has already been built, the environmental and safety hearing would largely be in regards to the pipeline's reversal. Overall, there is little additional build and a stronger message from the developers, two factors that should propel this project forward. That being said, given recent developments with other pipelines, I think that it will come under heavy scrutiny during the regulatory process.

There is strong support in New Brunswick from Premier David Alward and overtures of acceptability from Quebec for Line 9. Although, in the latter case there are many political factors at play; ranging from the environmental movement to refinery development in Montreal.

Can you expand upon your experience of liaising with other provincial governments on Line 9, and how this might inform the discussion around Northern Gateway and Keystone?

Important lessons from my experience largely focus on the actions of pipeline proponents, including the necessity of undertaking active and early communication with all stakeholders. One of the reoccurring negatives in the pipeline debate is emotionalism regarding potential impacts, an aspect which clouds the ability to have a constructive fact-based discussion. Early consultation, in additional to a strong application to the National Energy Board, is important. These are some of the lessons from Gateway. In particular, navigating the relationship frameworks with the government--both in terms of the ongoing cases of Enbridge's Line 9 and TransCanada's proposal--will be important. The Keystone project presents a good reminder of the necessity of interacting with all stakeholders.

Some of our respondents have suggested that the Federal government may not have the political will to legislate the Enbridge Northern Gateway Pipeline into existence. What is your assessment?

We have seen the Federal government make some very strong statements towards the ENGO groups that clearly indicate that they are a champion of the line. That being said, would the Federal government legislation that this pipeline is in the national interest and allow its development to go forward no matter the hurdles? This would be a very bold step, one which has happened only a very few times in Canadian legislative history. Not sure what the federal government would do, but I have to agree with the other respondents that the Northern Gateway would most likely not be legislated by the Federal government.

To what extent do you believe that rail is a viable for infrastructure constrained oil companies and how have you been working with rail operators?

Rail is a tangible option and the Alberta government's view is access to markets by any environmentally safe means. It is being used currently. Studies have shown that this process is safe and I think it is a helpful solution in addition to pipeline development.

You mentioned the 40-40 Carbon Tax proposal, to what extent do you think this is good for the industry and what reaction have we seen from the industry?

I think the reaction to the 40-40 Carbon Tax proposal has come in light of the fact that this is a preliminary consideration, not a fait accompli or a set policy. It is still a discussion point between the provincial and federal governments. There are also a fair amount of process that must occur, including industry stakeholder input and economic analysis from both levels of government. My sense from discussions with industry is that clarity on this matter is appreciated, particularly for the larger players. I have not heard either surprise or anger, but the overall feeling that environmental legislation must be developed in the proper manner. •

30

seem to have flown under the radar. This should not be the case: oil and gas players have both collaboratively and individually set out to reduce the environmental impact of their operations, in turn reducing costs.

Producers such as Baytex Energy, Southern Pacific Resources and Connacher Oil and Gas are already moving product by rail and, in some cases, barge to circumvent infrastructure bottlenecks. Christopher Bloomer, CEO of Connacher, explains the logistics involved in moving bitumen by rail: "Early on, you basically trucked oil to a pipeline terminal and put it in a pipeline, or you trucked it to the local market. Now you can rail oil to specific markets that may view the value of your product differently, but this is a very dynamic situation born out of necessity. Pipelines will get built, but Connacher will always be a trucker/railer of bitumen, whether inter-Alberta or ex-Alberta; that will be our approach until we get up to substantial volumes."

However, the explosion of an oil-carrying train at Lac-Mégantic in Quebec in June 2013, Canada's worst rail disaster in almost 150 years, has caused many to question the increase in rail transportation in North America. New and safer methods of transporting crude are possible, explained Ron Daye, president and chief executive of Rangeland Engineering.

"The large rail transloading facilities are not new, but with so many coming on, the technology, whether it is loading arms or vapor displacement systems and controls, is changing. Typically, a rail facility 10 years ago would handle 10 cars per day. Today, we are developing systems that are handling 100 to 300 cars per day.

Piping and pumping systems are large, and the processes to accommodate this size must become more innovative. "We have been working with specialized vendors that supply equipment to this industry and we are working to make the systems more efficient through innovation in the design," Daye said.

While rail transport is stepping up as a result of necessity, the safest option to transport crude, according to the vast majority interviewed, is still pipelines, making the delays surrounding Keystone, Northern Gateway and the East-West pipeline routes even more frustrating. Despite its potential to relieve some of these bottlenecks and its expected impact on Canadian coffers, the Northern Gateway project has numerous opponents, ranging from environmental organizations to First Nations communities along the pipeline's proposed route. At the end of May, the British Columbia government formally rejected Enbridge's Northern Gateway proposal on the grounds that it did not address the province's environmental concerns. Of particular concern was spill response. "Northern Gateway has said that they would provide effective spill response in all cases. However, they have presented little evidence as to how they will respond," British Columbia minister of environment Terry Lake said.

Such concerns will seem especially acute in light of the recent small crude-oil leak on the Trans Mountain Pipeline near Merritt, British Columbia. "The Alberta energy regulator and the public have little tolerance for pipeline leaks, as they should," said Bill Forrest, manager, Canadian operations of FlexSteel Pipelines. "If companies have a choice between building a steel pipeline that may or may not leak, versus composite pipelines that do not leak, you can see the trend heading toward even higher standards. Producers have nothing to gain and everything to lose from pipeline leaks."

Ultimately, because the proposed pipeline crosses provincial borders, it will be Canada's federal government that decides whether Northern Gateway progresses. "We have seen the federal government make some very strong statements towards the ENGO (environmental non-government organization) groups that clearly indicate that the federal government is a champion of the line," Allan Ross, Alberta's representative in Ottawa at the Ministry of International and Intergovernmental Relations, told GBR.

But would the government take the dramatic step of using its constitutional power to legislate the pipeline into existence? "My sense is that the federal government would not, particularly if an eastward line and Keystone are coming into place," said Ross. •

Christopher Bloomer

CEO
CONNACHER OIL AND GAS LTD

You were recently appointed CEO, which coincided with the restructuring of Connacher Oil and Gas. What forms your strategy going forward?
My coming on board represents an 18-month journey for Connacher. There was a change in management that culminated a little over a year ago with the sale of the refinery and the conventional business. Prior to the reorganization, the concept of Connacher was in-situ oilsands hedged against gas with conventional assets, and then the downstream aspect. The market turned and performance was trailing, and the company had a balance sheet issue; the board and the previous management were able to sell the refinery to put capital on the balance sheet and start to re-focus the company. Connacher's business was good – with reservoir geology in the top 10% of our peer-group – but that the balance sheet needed to be right sized. The geology is good, the facility is excellent, the capital is sunk and the organization, from an operating perspective, is great. The company evolved from a non-traditional way of marketing the barrels: we are able to leverage the oil on rail concept early on. Connacher has been focused on operational improvements during the last quarter, by trying to do things incrementally better than we have in the past. In Q2 2013 the company spent $68 million in new capital drilling four new infill well pairs and four new SAGD well pairs in a new part of the reservoir. While a 2% increase in production is not groundbreaking, it shows that our capital program is working. Our target of 20,000 boe/d is still reasonable if we have more steam capacity. We are looking at new technologies that will increase this at a reasonable cost and design steam facilities to take to pads.

Considering the tightness of the equity markets and the long cash in to cash out cycles for oilsands projects, do you think the barriers to entry are now too high for other juniors to come in and do what Connacher did?
The oilsands business has evolved since 2004. Connacher got on that wave early on and was able to get capital to develop the resource; the downside was that people's view of geology was that it was all the same. There is a barrier to entry now because the capital is difficult to come by and the realities of the business are starting to bite: you cannot over-promise. There is a traction issue on performance, and smaller players cannot bury it on a massive balance sheet. There is a realization that it is a long capital cycle in an impatient world, and people aren't willing to take the capital execution risk and the performance risk as much as they were. The oilsands can be a very lucrative business for junior companies if you consider well spacing and incremental technologies. It can be a psychological struggle: on one hand, there are large companies producing significant quantities and generating huge cash flows, but there is nothing wrong with producing 20,000 plus barrels a day in the oilsands and doing it for decades.

Can you expand on how Connacher raised the capital and created liquidity as part of its restructuring, and how you plan to address the remaining balance sheet issues?
Connacher has an over-leveraged balance sheet right now and that causes a lot of issues. There is a perception that the company currently does not have liquidity, however this is not accurate. We do have liquidity to execute our program through 2014 for sure, and possibly into 2015.
The sale of the refinery put about $100 million on our balance sheet. That enabled us to do some infill drilling, and to drill a new pad in new geology, where the reinterpretation of our asset is leading us to better rock. The wells that were drilled this year, from an execution and a capital management perspective, were bang on. Recent capital efficiency has been very good. Those wells start kicking in at the end of this year and start to ramp up through 2014. We have a solvent recovery process that has arguably the best results in industry from a solid process. We are not going to hit the equity markets anytime soon. In terms of debt, we have a liquidity envelope from a revolver up to about $170 million, but we do not want to take on more debt without a solid plan.

In our last report we focused on the development of new technology at Connacher. Given the simplification of the business model, it is better to be a quick adopter?
In my experience being a first mover usually means you are the first bleeder, and it is tough to get traction on new technologies. When our facility was built, it was the first cookie-cutter 10,000 bpd facility. The evaporator technology and water recycling technology was best in class, that is all there and imbedded. We can see that people have adopted that technology for their projects. I think that technology improvements are partly just a case of making incremental efficiency improvements learning from past mistakes. Drilling infill wells, or wedge wells, is a typical acceleration process: that is pretty low-risk technology. We are developing the solvent technology and over time we will see that solvent processes can work better in the thinner more heterogeneous reservoirs than the big thick ones, which is demonstrated by Connacher's pilot right now. The diluent recovery unit is just a simple process facility. •

Barry Heck

Chairman
ALBERTA ECONOMIC DEVELOPMENT AUTHORITY (AEDA)

What are the goals overarching goals and the processes utilized by the AEDA?
The main goal is to bring the business community's perspective, separate from government, to matters relating to the economic well being of the province. The government has the possibility of utilizing it in order to discuss economic platforms and policy changes with business leaders.

Given you experience as the head of EL Merchant Capital and as the Chairman of Alberta Enterprise, how does this play into you new role as Chairman of the AEDA?
The relationship between the three organizations is that each has an interest in the well being of the Albertan economy and innovation in this province. In regards to the similarities between AEDA and Alberta Enterprise, both of these institutions have strong relationships with the provincial government, the former in advisory capacity and the latter in terms of economic matters. My new role as Chairman is directly linked to this experience and it builds upon my insights into both domestic and international business perspectives.

What are you views on the Alberta economy, in terms of its reliance on oil and gas? Do you believe that the province has to diversify away from this industry?
The current government has made economic diversification a priority, a stance I agree with and part of the reason I was brought on to the AEDA. However, I believe that the province must diversify to our strengths. Take for example the energy industry; we must diversify within this industry, including the use of new drilling technologies. A lot of the innovation within the energy industry has been development right here in Alberta. The area of clean technology is an additional strength of the Albertan economy; there are many companies focusing on environmental issues, particularly in the energy sector. It is clear that we are not going to be able to fully develop our oil sands resource without innovation.

Can you describe your plan for the AEDA, including greater interaction with provincial representation?
AEDA has played a very important role, but like any other organization its structure needs to be renewed once in a while. The organization is only as strong and as effective as the Premier wants and asks it to be, and its value has ebbed and flowed over the past few years. Now it is time for a renewal of the organization and a refurbishing of its structure.
When I was asked to take this role, I told the current Premier about my restructuring ideas. I wanted to wait until I stepped into my position for this process – a refreshment of the organization – to occur. These changes include restructuring the board, creating a smaller group of individuals to streamline the directorship. This board will meet frequently with Premier Redford, in order to keep the channels of communication open and create a stronger advisory process. I would also like to do away with the current committee structure, which I believe is too restrictive. Instead, we are going to have a much larger number of individuals who we consult with, each of which can be drawn on for specific projects.

How crucial is the involvement of key players in the oil and gas industry within AEDA?
Having energy expertise on the board, with the ability to consult the government, is crucial and brings the industry perspective to the table. It allows the government of Alberta to understand the practical implications of proposed legislation from industry leaders.

In your personal view would you like to see less regulation on foreign investment?
Foreign capital is absolutely necessary to develop our resources due to the fact that we cannot raise the funds need domestically. That being said, foreign investment also has to be regulated responsibly, in order to protect our national resources and ensure that the right environmental legislation is in place. My personal view is that foreign investment is absolutely necessary, but that it should be prudently managed and regulated by the federal government. What I would like to see is some more certainty when foreign investment rulings are made, in order to lay the groundwork for the parameters of future deals.

Do you have an encompassing statement regarding the role of AEDA and its future role as a consultative body for the Albertan government?
AEDA is extremely important and going forward I would like to see the organization developed into a result-orientated body. To perform well at this task AEDA needs to be nimble and have the ability to both pre-empt and react to issues of concern to the provincial government. A practical advisory role for this organization is of utmost importance to the continued economic strength of Alberta and I look forward to leading this organization and ensuring that this transformation takes place. •

Brad Bellows

Director External Communications
MEG ENERGY

MEG seems to hold an interesting middle group among oil sands producers; can you tell our readers how your company fits into the industry?

MEG has a relatively unique space in the oil sands industry. Most companies are either of the super-major status or they are in a relatively small pilot phase and are currently in growth mode. MEG is an intermediate sized producer that is well into its production, growth and planned growth phases. The ability to occupy this space began with the genesis of the company. MEG intended to be a growth company and a significant player. We have demonstrated our ability to be a significant player and investors have shared in that success. In a very capital intensive business, such as the oil sands, it is somewhat unusual to bridge the gap between the starting up phase and the generation of cash flow. We are well on this path, generating cash flow and moving toward a model of self-funding.

Could you explain your infrastructure development strategy?

MEG has a hub and spoke model, we are building a tank farm terminal north of Edmonton, which will provide us with a large storage capacity. From that location, which is called Stonefell, MEG has access to all the existing pipelines into the United States and across Canada. It also provides access to potential markets with Enbridge's proposed Northern Gateway and the proposed expansion of the Trans-Mountain pipeline, out to the West coast. This is a key strategic advantage for a variety of reasons. First of which, we co-own the pipeline from our project site to Edmonton, which essential puts our wellhead at the hub of pipeline transportation. It essentially gives us access to every existing and planned market.

MEG is planning to move much of its production by rail. Can you describe the arrangements that your company has made to this extent?

Nearby to our terminal, we are working with a rail company named Canexus. MEG's plan is to have a pipe connection from our terminal to the Canexus loading facility, which will allow us to put our entire production onto rail. This allows us to move around mid-continent pipeline congestion and ship product to refineries along the Gulf Coast. The initial capacity of the Canexus deal is 70,000 bpd in unit trains, which are dedicated entirely to oil transportation. The price from the wellhead, for transportation will be around $15 per barrel under this Canexus deal. The underlying issue for this deal is the current differentials between Western Canadian Select (WCS) and Mayan Crude and West Texas Intermediate (WTI), which are almost entirely based on transportation limitations. That substantial gap can be bridged for the previously mentioned low transportation cost.

How about your unique plans to bypass congestion and gain access to markets through barging?

With barging we can bring product into and through the United States via the land water way system. This gives us access to markets in the Mid-West, the Gulf Coast and several refining options on the way. The refineries in the Gulf Coast have been set up to process heavy crudes out of Venezuela and Mexico, both of which are in decline. These refineries are extremely interested in processing Canadian heavy oil given this reality. Our first leased barge went into the water in December of last year and our barrels are put together in a tow of six barges holding 20-30,000 barrels each. I believe MEG Energy is the leader in this process and by the end of the year we will have substantial barging capacity.

What are the targets that our readers should be looking out for in 2013 and 2014?

Ultimately, we at MEG believe that the transportation-based differential gap will start to lessen with the development of pipelines. After this occurs you will start to see Western Canadian crude trade at a pure product basis, close to that of the pricing of Mayan crude. In the nearer term, having the rail and barge options allows us to get closer to that pricing faster and, over the longer term, keeps those options available. This allow us to move product around any congestion.

On the technical side, we utilize an Enhanced Modified Steam and Gas Push (EMSAGP) system, which combines two well understood innovations. In-fill wells and the injection of nature gas are the two key elements of this process. Natural gas is utilized, in small quantities to heat the reservoir, particularly because of its non-condensable properties. Unlike steam that condenses back into water, the use of natural gas keeps the pressure constant in the reservoir. On our pilot pad we have seen a sizable reduction in the use of steam with this natural gas process. This allows us to drive greater production with very low incremental capital costs. In the environmental sense as this process continues to get deployed, with the efficiency of our operations, we are well below the greenhouse gas intensity of United States oil and gas imports. With regards to capital and operation costs, not to mention environmental protection, MEG believes that we have a triple win scenario. •

James Bowzer

CEO
BAYTEX ENERGY CORP.

In 2012 Baytex increased its production and its resource base, in addition to paying off a significant amount of debt. Do you expect to continue with the same approach through 2013?
We remain committed to a growth-and-income model and its three fundamental principles: delivering organic production growth, paying a meaningful dividend and maintaining capital discipline. Our 2013 production guidance is 56,000 to 58,000 boe/d, which at the mid-point of this range, represents an organic production growth rate of 6%. Our current dividend yield is approximately 7% and we strive to maintain a conservative balance sheet.

Premier Redford recently proposed a 40-40 carbon taxation scheme; what is your opinion of this initiative?
The continued effort to have emission targets benefits the industry and the environment, however there is already a $15 per ton tax on carbon emissions here in Canada.

How does Baytex' commitment to environmental improvement manifest in terms of investment in new technology, given the conservative approach to your balance sheet that you mentioned?
Both technology and environmental protection are critical to our company. The social consciousness of companies is higher than it has ever been in our industry and employing new technology to benefit the environment can also be beneficial. Upfront investment in technology can reduce energy costs as well as protect the environment by reducing emissions.
For example, our wells in the Peace River area historically were drilled individually, utilizing a separate surface padsite for each well. Now, Batex's multi-lateral approach means we drill between 8 and 15 mile-long horizontal wells from a single vertical well, using only one surface padsite for many wells. A forward-thinking strategy to the employment of new technologies, combined with our socially-conscious approach, have allowed us to extract more resources with a smaller environmental footprint.

Can you tell us about your CSR operations in and around Peace River?
The Alberta regulatory framework requires a consultative period and a hearing process with the constituents affected by a project and we have a person on board who thoroughly deals with stakeholder engagement. There are many stakeholders, including First Nations, trappers and local residents and we spend a significant amount of time working with them. We are currently involved in a project in the Peace River area to ensure the sharing of best practices among companies so that we can implement improvements even faster.
Some people we have spoken to have suggested that too many people have standing rights and that the consultative process has become convoluted. Would you agree with this?
In regards to the community, individuals and businesses have rights and they should be heard. When it comes to the regulatory structure, Canada is now in the process of consolidating this system. Currently there is some duplication, but this is being addressed. Although there will be bumps along the way, I think that this consolidation is the right move going forward.

Can you take us through your specific targets and expectations for Baytex' development in 2013?
This year we are looking at a very healthy development program. We are spending approximately $520 million in total. Our largest program is in Peace River where we have about 37 multi-lateral wells planned for 2013. In order to further improve recovery at Peace River we recently drilled our first ten-well cyclic steam module and begin work on a second 15-well module this year. The other two significant pieces are the in the Lloydminster area, with conventional heavy oil development occuring throughout multiple pay zones, and in the North Dakota Bakken/Three Forks where we will be drilling 9 net wells this year. Our 2013 capital program is designed to grow our production by approximately 6%.

To what extent are Alberta oil price differentials affecting Baytex and to what extent might various transit scenarios resolve these issues?
The majority of our production is crude oil and we have a particular emphasis on heavy oil. The benchmark price for our heavy oil is Western Canadian Select, which trades at a discount to West Texas Intermediate. While global oil prices remain fairly robust, the discount for Canadian heavy oil experienced greater volatility over the past year. Baytex actively employs risk mitigation strategies to maximize the profitabililty of its heavy oil production in the context of volatile differentials. Our historical practice of hedging has recently been augmented through a significant increase in rail transportation which allows us to deliver our heavy oil to higher netback markets and mitigate our exposure to pipleline access disruptions. Over the long-term, we believe that transportation solutions to allow Canadian crude oil to access additional markets will proceed and that price discounts for heavy oil production will narrow. With our heavy oil focus, we are well-positioned to benefit from an improving market. •

Howard Lutley

President and CEO
SILVERWILLOW ENERGY CORP.

SilverWillow Energy's two principal properties, Audet and Birch Mountain, are at a preliminary stage of development and presumably the capital expenditure required to develop them will be quite significant. Will you be looking for a similar type of partnership agreement this time around?

Our preference is to seek a partner as we did historically with UTS Energy at Fort Hills and SilverBirch Energy at Frontier. However, the difference between SAG-D projects and mining projects is the degree of capital required. You can get a SAG-D project up and running for about $500 million, whereas a mining project is $7billion to $10billion. With support from our major shareholders – we have three major, very well capitalized shareholders on board – we would be able to take a project forward ourselves, should we chose to.

The logic is that as you move through each step – first the preliminary engineering, then regulatory application, and then regulatory approval – the value of the asset increases and it is de-risked for either a potential partner or a potential acquirer. Our sweet spot as a management team is our ability to take a project through these steps. In a normal market, as we advanced through those steps, you would expect to see our stock price increase, this is what happened with UTS and SilverBirch. In the current market we are seeing the opposite. This is primarily due to the pipeline constraints and the uncertainty around the big oil price differentials we are receiving right now. Investors look at our stock price now and although they know we have good assets and a strong team they think they do not need to own our stock this year because we are still two years away from our approvals: I think that is what is hurting us right now.

In addition to the lower capital expenditure, the other big advantage of SAG-D over mining is the social license to operate aspect. You spoke in our 2011 report about the industry having been behind the curve in terms of communicating with the public. Do you think that now there is a greater awareness about the differences between mining and in-situ extraction?

There is greater public awareness. The industry has done well to catch up. About two and a half years ago I presented at a general conference on oil sands tailings. My prediction then was that, with the amount of work the industry was doing and the enhanced regulation from the government, in two years nobody would be talking about oil sands tailings anymore. They are not talking about tailings anymore; now people are focused on pipelines and greenhouse gasses.

There was lots of good work going on in the past but industry had not communicated well to the public to say, we are trying to resolve these issues. Once they became public issues, the industry was able to quite quickly assemble the relevant information and get it out. That, combined with tighter government regulation, reassured the public that between industry and government their concerns were being addressed. There will always be a segment of the public that is opposed to development but if you can convince the majority that these investments are in the public good and in the long run contribute to mutual prosperity, it seems that you can put out a factual argument and be successful.

One of the biggest talking points at the moment is Keystone XL. In the current risk adverse investor climate is this an issue directly affecting your prospects or do you consider it a peripheral issue?

Keystone is more than peripheral but it is not what keeps us awake at night. The Canadian government and producers lost $15billion last year because of a lack of pipeline—you can do an awful lot with the prospect of that lack of money to solve the problem. One way or another, the oil will get to where it needs to go. It is not a slamdunk, but there appears to be a consensus in the US that this is probably the right thing to do.

Can you outline your exploration strategy for this year: are you looking to further delineate the reserves at Audet?

At Audet we have essentially completed our exploration. We have delineated 1.85billion barrels of discovered resource, and our independent estimator qualified 68 million barrels as recoverable. We have already got a scheme in design to recover about 120million barrels and we believe there is at least 120 million barrels beyond that, so it is of a sufficient scale for a standalone project. The application that we put in towards the end of this year will apply for 12,000 barrels per day at Audet so we have finished the fieldwork on that. We are now in the engineering and regulatory process. In about two years from now we would hope we can make a decision to go ahead, and by then hopefully we will have a partner in place. •

Succeeding in a Tight Market

Battening down the hatches

As the constricted market causes companies to become leaner and more efficient, and with industry-wide emphasis on growth through the drill bit and the reallocation of stranded assets, analysts predict that the Canadian companies able to ride out the current conditions will be in a much stronger position when the markets recover.

But even in today's bearish market, some Canadian companies have thrived through a combination of astute portfolio management, shrewd divestments and timely acquisitions. Arguably more than ever before, a strong, experienced management team is vital for inspiring investor confidence.

Manitok Energy, which was one of the TSX-V's top-10 performing oil and gas companies in 2012, focuses on conventional oil and gas reservoirs in the Canadian foothills along with heavy crude oil in east-central Alberta. Following successful capital raising programs in 2010 and 2011, Manitok Energy again went to market in late 2012 and raised around $18 million.

"Drilling in the foothills was 30 years behind the Deep Basin and the Peace River Arch, so there was an opportunity for big results. The problem was that there had been at least 10 juniors in the last 20 years trying to do the same thing, and all of them had failed, so there was a lot of skepticism in Calgary," Manitok's president and CEO Massimo Geremia, said.

One of Manitok's key differentiators was the experience of the management team and the match between the asset and the skill set of the technical team. Led by chief operations officer Tim de Freitas, Manitok employed a series of experts that had previously worked in the foothills with Talisman Energy.

"All of the other companies had been started by deep basin guys, or junior guys who had never drilled in the foothills and had to learn the pitfalls the hard way. Tim and the team from Talisman had already spent C$3 billion or C$4 billion dollars and more than 10 years in the area getting to grips with the pitfalls," said Geremia. "If you look at the junior companies that have prospered in Calgary over the last 30 years, a lot of them start with guys leaving the major firms and knowing the assets very well."

For companies with strong balance sheets, or those prepared to take on debt, asset divestiture presents a rare opportunity to pick up underdeveloped assets. Sub-C$15 million market capitalization Edge Resources was able to raise just over $6 million in early 2013. According to CEO Brad Nichol, a close and open relationship with investors was integral to achieving this.

"Debt is by far the least expensive and most readily available form of capital available today," said Nichol. "I think our greatest asset outside of the physical properties is that we have some great partnerships with our investors. Many juniors are struggling and lots of assets are underdeveloped, so there are many acquisition opportunities that we are working with our partners to take advantage of," said Nichol.

Other companies have had to refocus and reposition themselves to adjust to the challenging equity markets by selling assets. Connacher Oil and Gas, a junior oilsands player in Alberta, overhauled its management team and sold their downstream assets to focus on production at the Great Divide oilsands project in Alberta.

Prior to the reorganization, the concept of Connacher was in-situ oilsands hedged against gas with conventional assets, and then the downstream aspect. The market turned and performance was trailing, and the company had a balance sheet issue, according to Christopher Bloomer, Connacher's recently appointed CEO. The board and the previous management were able to sell the refinery to put capital on the balance sheet and start to re-focus the company.

"Connacher's business was good – with reservoir geology in the top 10% of our peer-group – but the balance sheet needed to be right-sized," Bloomer said. "The priority at the moment is positioning Connacher to show that it can invest capital and grow, to warrant people to say that the business deserves more capital because it has value." •

Grant Fagerheim

CEO
WHITECAP RESOURCES INC.

Since we last saw Whitecap in 2011, you have managed to grow the company to a strong mid-tier player on the TSX. Can you highlight the achievements in the past two years that have enabled you to do that?
At Whitecap, we still look at assets that are synergistic with our existing operations, whether from the corporate or property side. We will continue to look for assets we can grow out from. Essentially, our strategy is to grow from the inside out. With the inventory we have today, we can do this for a number of years going forward. We have to make sure any transaction we do is additive or creative to our existing shareholder base. While acquisitions will continue to play a part in our growth strategy moving forward, then, the overall plan is opportunity driven.

Your current asset bases are receiving a great deal of attention and are being rapidly developed; how much further room is there to acquire and expand in those areas?
Our Valhalla North asset is up in the Peace River Arch, where there are many assets relatively contiguous to the area. We are also looking at the Cardium play and any uphill zones to that. We are generally very specific to the assets we look at from a geological perspective and the Dodsland Platform also has 110 square miles of prospective acreage. Right now, we are trying to keep a focus in those areas. Everything in the energy business is cyclical, so opportunities that may seem overcrowded or exhausted today may come back to us sometime in the future.

How well equipped are you financially to continue your current growth path? What options are available to you?
Cash flow from existing operations is our first and main source of funding. We are working with the assumption that long-term prices trade somewhere between $80-100 WTI (right now we are using a $95 WTI price). Secondly, we have the option of eroding into debt. There are periods in this business where we have to utilize debt to help us continue growing. The last option we have is going back to the equity markets.

Whitecap recently converted to a dividend model. How has the company handled the transition?
Whitecap toyed with the idea of becoming a dividend-paying company after we bought Midway in April 2012. We had to look at it in terms of what we believed our assets could deliver, and how effective we could be with our capital. After our detailed analysis we decided to convert to a dividend growth strategy in January 2013. Now we are setting aside 34% of our cash flow to pay dividends to our shareholders, and the rest is used to fund our growth strategy.
Going forward, what are some of the main risks associated with your strategy?
We are always challenged with capital efficiencies, so that we do not elevate our level of decline. If you capitalize too quickly, your decline rate goes up. Oil and gas is a depletion business: the more intensely we drill, the higher our decline elevates. Pace is very important, as is hedging. Many corporations could improve their balance sheet by taking advantage of future markets, and make sure that they put downside protection in place.

Looking at the wider environment here in Canada, what sort of effect the debate surrounding the energy transit scenario has on a producing company's growth plans, and where does it fit into Whitecap going forward?
There have been far too many negative sound bites out of Canada about transportation being a limiting factor. In the area we produce in, there are older fields that do have access to pipeline capacity right now. Where this is exceeded, in certain pockets of the areas, there are railing opportunities. We can export our product out of the province and the country. With 250,000 barrels a day of railing capacity, there are many more options available for us. Specific to whether it is Keystone or any of the other LNG projects out there, it is important to continue to be able to move our product when we have it. As such, we are proponents of adding more capacity. It is really a matter of security of supply for North America. We can move our product today, but with the growth expectations we do see right now, it is hard to see why people would want to find more product if they cannot move it.

With the US undergoing an energy boom of their own, many are saying it will become energy independent in the next ten years; how will this affect Canada's export outlook?
Supply will change demand, and supply will always find a home. The US may not become energy independent in the next ten years, but North America as a whole certainly may. We are very resilient and they will find a way to export our product. Two years ago, railing of crude oil was zero, and now we are at over 250,000 barrels a day.

With the European fuel quality directive specifically targeted at Canada's oil sands, what perception does Canada's oil have in the 'ethical energy' arena?
Canada has not done a very good job of relaying information about our product to world markets. We can and should do a better job of educating and providing information to the market. The information we have provided to the world has been neither clear nor concise, and it has not been believed. It has not been misrepresented, just poorly presented. Once information comes out, it is very difficult to rein it in and restart it . •

Paul Colborne

President and CEO
SURGE ENERGY INC.

Surge Energy's stated goal is to become the best-positioned light oil company in Canada. What is your plan to achieve this goal?

It is a lofty goal, but an achievable one. I have grown three highly successful companies in the past and did not want to take the helm of just another junior company. Surge has an elite asset base comprising of large oil in place reservoirs with low recovery factors. Our Valhalla property in northwest Alberta is a 160 million barrel field with a 2.5% recovery factor. We just put an extension on the pool and had three big hits in the area. We have two new discoveries at the Silver project in southeast Alberta, totaling over 100 million barrels. Our most recent acquisition, Shaunavon, is nearly 250 billion barrels in place with a 1.5% recovery factor with a full waterflood upside, and our Nipisi property is an 85 million barrel field with a 1% recovery factor. The company's strategy is focused on low-risk development and waterflooding. Surge's top four properties have over 800 million barrels in place with a 3% recovery factor; with 500 drilling locations and a plan to drill our top 32 wells a year, we have a 10-year drilling inventory.

As Surge transforms into a dividend-paying company, how will you manage to sustain payouts while pursuing your growth strategy?

Surge will grow about 3% to 5% per year and pay a 7% dividend to our shareholders, giving us a return of 11% per year. This model allows us to return a monthly payment to our shareholders who can benefit from strong oil prices. It is a low-risk way to play our basin. We will be highly successful because of the way that we managed this transition: assuming a significant drop in production with a lower-growth dividend model, we can deliver immense free cash flow. Our transition will be smooth because we have not overestimated where the assets would level out.

What are the risks you have identified going forward, and to what extent to current WTI-Brent price differentials play into your risk analysis?

The differential between WTI and Brent prices hurt us last year, but the differentials have now decreased. The glutted cushion is dissipating as you see line reversals, with hope for Keystone to be approved, and the US economy is improving. Surge also decreases risk by hedging about 50% of our production. We are locked in until 2015. We also de-risk by having a low debt to cash flow ratio with $150 million of room in our bank lines. Our model has the lowest payout ratio in Canada of any dividend-paying company. At $95 WTI, with capital plus dividend, we are only spending 93% of our cash flow and are paying down our debt with the extra cash.

How can the application of new technology in the Western Canadian Sedimentary Basin unlock previously inaccessible plays, and how does this apply to Surge?

The Western Canadian Sedimentary Basin is regarded as mature, but in fact is only beginning to have modern technology applied to the assets. Horizontal, multi-stage fracking technology is now opening up new plays that vertical wells could not access. There are so many plays where we can increase our production, and there is huge opportunity to go back into these fields with new technology followed up with waterflooding. This basin is underwhelming to people who do not understand the potential returns, but for those who do, there is a whole other round of growth and development in the basin.

Since 2011, the number of juniors active in Canada's oil and gas sector has decreased dramatically. How has Surge managed to grow despite the challenges in the wider market?

This has been an incredibly tough market over the past few years due to the price differentials and the strength of the Canadian dollar, both of which occurred at the same time and shocked the balance sheet of growth-oriented juniors. As juniors grow to hit 10,000 barrels a day in production, it becomes harder to grow, and can only continue to do so with a cost of capital advantage. Many of these events are out of the hands of junior companies, like the Keystone holdup leading to the glutted cushion.

In light of the shale gas boom south of the border, how would you rate Canada's oil and gas sector as an investment proposition?

If we continue to develop elite assets in the Western Canadian Sedimentary Basin, the pipelines will get built. Crude is different from natural gas because we just need to get it to water, and the most efficient way to do that is through pipelines. On a macro level, nearly half of the world's population needs every barrel of crude oil they can get. The American economy is turning, but the onset of a shale gas revolution will not impact the global appetite for oil. In the meantime, crude by rail is a very appealing option that gives companies arbitrage opportunities, but pipelines are still the safest way to transport oil.

What is your vision for the future of Surge Energy?

Surge's goal is to assemble elite assets on accretive acquisitions and manage the reservoirs to this low-growth, low-decline dividend model. The market is very choosy on acquisitions, which is good for Surge because it means that there are good economics on acquisitions. The next few years look very good for the company: our model will only get better as our cost of capital improves thanks to the quality of our assets. •

Don Simmons

President, CEO and Director
HEMISPHERE ENERGY CORP.

Hemisphere Energy Corp. has a heavy oil property in Jenner, Alberta, and natural gas property in Trutch, British Columbia. Could you start by providing a brief overview of the company?

Hemisphere Energy has a legacy property in northeast British Columbia called Trutch, it has some liquids but it is mostly natural gas. With gas prices at their current level, the property has been on the backburner for the past few years. Since 2010, Hemisphere's main focus has been on our Jenner property in southern Alberta, which is heavy to medium crude oil. It is an area where we realized early on that there were no other juniors, so very little competition. It is a conventional play and the larger companies present in the region are not particularly active so we saw it as a great opportunity for Hemisphere to really carve out a niche.

At Jenner you have had 100% success drill rate with 11 horizontal wells. What is your strategy for assessing and analyzing new drilling opportunities?

Hemisphere is always looking for very low risk, conventional wells so they are not too expensive. Our specific strategy is to find old vertical well bores that have found hydrocarbon, usually oil sometimes gas, shoot or acquire 3D seismic, assess how big the pool is and how many horizontal wells could go into it, and then use the seismic to guide our horizontal drilling. Another way is pure number crunching, if we see a pool in our area that has only recovered 15% to 22% of the original oil in place but most of the other pools have recovered 25% to 35%, that tells us there is oil left to be recovered.

In Q1 you acquired eight new sections at Jenner totaling 4,963 acres. Do you plan to continue expanding your ground base through new acquisitions and farm-ins?

Hemisphere is always looking at acquisitions to increase our production, reserves, land base and facilities. For conventional plays, land is key but the quality of the land is more important than the quantity. Hemisphere only bids on very specific land where we have a very strong idea that there is hydrocarbon.

What are the key characteristics you look for in land to acquire or farm-into?

The key characteristic is proximity to our existing infrastructure and our current land base. There also needs to be well logs that show there is hydrocarbon there, or an old pool that a different company has owned for a number of years and not been actively drilling.

Last year you increased average production by 117% and your proved reserves grew by 90% between February and December. What is your main focus going forward at Jenner?

Going forward, Hemisphere is looking to continue to increase production, which should increase our reserve base and therefore our cash flow. The faster we can grow the better but we are not looking to buy any property, there are very specific hurdles and internal rates of return that have to be met in order for us to proceed with a new property.

In this current economic climate, it is essential for juniors to maximize efficiencies and maintain balance sheet strength. What measure have you put in place to ensure this?

Hemisphere was born in a challenging time and it has been challenging since we started so these are regular days for us. Hemisphere has always run as lean as possible, we really focus on netbacks and squeezing as much money as possible out of every barrel. We have done deals that have added significant value, we have only raised money when really needed and we have been very careful on our debt levels. This has provided Hemisphere with an opportunity to grow through the market as it is today and take advantage of it. There are a number of opportunities out there now and properties are on the market that have not been for 20 to 30 years. The general rule is to be buying when everyone else is selling and if deals are accretive and add value for the company then we will move them forward.

We carry out our research in key markets every two to three years. When we return in three years time, where will Hemisphere be and what will be the main topics of conversation?

In three years, Hemisphere aims to get to production of between 2,500 to 5,000 boe/d; we do not have a set timeframe but we will be some way along that path. Structurally, we will not be making huge changes, we will continue to focus on Jenner and we may have branched into a second or third core property. Unless things change on the gas front, we will be predominantly focused on oil. The plan is to keep it simple: grow production, grow reserves and grow cash flow. The more cash flow we have the faster we can grow. •

Asian Capital in Alberta

Eastern trade winds

While investors close to home become increasingly reluctant to part with much-needed funds, sources further afield have stepped into the gap: although not without generating some controversy. Unsurprisingly, it is companies and capital from the growth markets of Asia, and particularly China, which have played the greatest role.

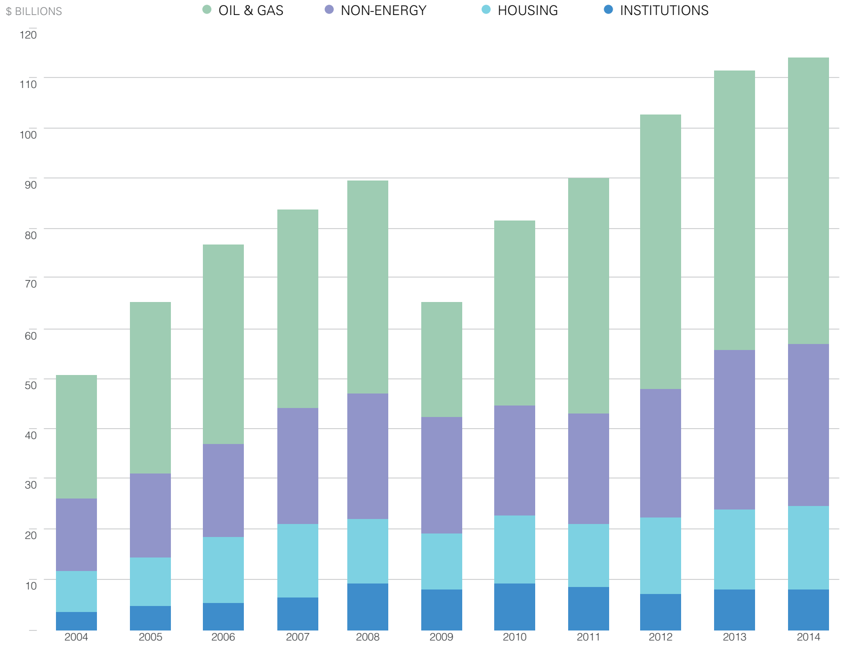
2012 was the year that both the power and the perils of Asian investment in Canada came to the fore. Blockbuster transactions such as the CNOOC takeover of Nexen, and Petronas' buyout of Progress Energy capturing headlines. While the C$6-billion Petronas/Progress deal passed government scrutiny without incident, the $15.1-billion merger of CNOOC and Nexen prompted Ottawa to enact a series of changes to the Investment Canada Act that specifically targeted foreign ownership of Canadian oilsands assets. In December 2012, the federal government moved to block foreign takeovers in the oilsands except on an "exceptional basis" in circumstances that constituted a "net benefit" to Canadians. Neither term was clearly defined, nor was an example of exceptionality or benefit provided.

Unsurprisingly, foreign investors are left wondering how they might be able to play in Canada's oilsands, and the viability of making investment overtures that could potentially be killed by the government. Mark Horsfall of CIBC said, "Our buy-side clients in Asia and elsewhere, which are state-owned or state-affiliated, are trying to discern what these changes mean for them. This has not lessened their interest in doing business in Canada, although we expect opportunities will be pursued more cautiously."

"The government's message after the CNOOC-Nexen deal is clear: state-owned enterprises should not get involved in Canadian oilsands except in 'exceptional circumstances,'" said Michael Laffin, partner and chair, Asia region at Blakes Cassels & Graydon LLP. "What is not clear is the government's definition of a state-owned enterprise–does it extend to companies that are influenced by their government? In that case, why do we allow companies like Statoil to invest heavily in Canada?" Chinese companies have independent directors to make sure that they abide by Canadian law, and undertakings to give to the federal government in the form of a net surplus test, he said. "The restrictions placed on oilsands investment should not affect other resource plays in Canada in terms of access to foreign investment. In terms of oilsands, it may take some time, but the government will see that foreign investment, including that of China, is needed to develop

CAPITAL INVESTMENT IN ALBERTA

Source: Alberta Government



"Canada has been a developer and exporter of resources throughout its modern history and as such has always attracted capital and a high degree of foreign ownership. 400 years ago all the foreign investment came from France, then the UK, then the US, now it's more global coming from Asia in addition to other areas. There is strong recognition that the country needs to attract capital to enhance its resource base. That being said, stringent rules on safety and environmental protection have always been an important facet of operating Canada. People are proud of that. Everybody has to live by the same tough standards, which I think is a healthy exercise."

- John Zahary, President and CEO, Sunshine Oilsands Ltd Association of Canada (EPAC)

the resource. The costs are too significant to develop alone."

Separately, some Canadian companies have navigated a route through the capital-constrained Canadian market by partnering with cash-rich Asian players with a keen interest in Canadian assets, and particularly the oilsands. Founded in 2006, Athabasca Oil Corp. is focused on the sustainable development of oilsands in the Athabasca region in northeastern Alberta and light-oil resources in northwestern Alberta. After having proved up its oilsands reserve base to 10.3 billion barrels of contingent resources (best estimate) in early 2010, Athabasca sold 60% of its working interest at its Dover and MacKay oilsands projects to PetroChina for gross proceeds of C$1.9 billion.

Following the sale, Athabasca partnered with PetroChina to develop its newly acquired Hanging Stone property. "PetroChina had been looking at oilsands from about 20 years ago and actually helped to fund the original SAGD (steam-assisted gravity drainage) pilot in Alberta. In 2009, when Athabasca Oil started looking for a partner, they were ready," said Sveinung Svarte, Athabasca Oil's chief executive. "They decided that this was a good opportunity now that the technology is mature, that Athabasca had great projects and PetroChina had faith in our ability to deliver."

The deal with PetroChina was concluded after about eight months of negotiations and at the time Athabasca had just 14 employees, while PetroChina had some 1.6 million. According to Svarte, partnering with PetroChina has been a good experience.

"Athabasca's model for financing has been focused on joint ventures from the early days. We built the company for that purpose and we hired people with international experience. It is important that you have the cultural understanding and the patience to work with people from different origins. We already had an internal culture of welcoming people like PetroChina."

The prospect of Asian investment in Canada led TMX Group to open a representative office in Beijing in 2011 and the corporation has a specialist focused on Asian markets. However, because of the structural impediments, it is doubtful that there will be a flood of Asian retail or institutional investment into Canada.

This issue can be at least partially circumvented by companies launching IPOs in Asian markets: the most obvious choice being in Hong Kong. However, although dual listing is relatively common for oil and gas juniors and many of the larger TSX-listed players also issue on the New York Stock Exchange, listing in Asia remains fairly unusual, with only a handful of Canadian companies currently listed in Hong Kong. Yet as these markets show increasing maturity, this option should see increased uptake.

Asian capital is not exclusively reserved for oilsands plays. Bellatrix Exploration, which holds a large Duvernay shale inventory, is focused on drilling in the Cardium and is also developing a Notikewin liquids-rich play. It formed a joint venture with a South Korean company to accelerate the development of some of its inventory.

"The question comes down to, how we can derive value to hopefully translate to an increase in our stock price? That is why we believed that the joint venture was the appropriate path to accelerate a small amount of our inventory and increase our cash flow," Brent Eshleman, executive vice president of Bellatrix said. "Our philosophy has been to keep a clean balance sheet, because if a company has too much debt and the industry turns for the worst, it is stuck selling core assets at a very low price." •

Brent Eshleman

Executive Vice President
BELLATRIX EXPLORATION LTD

Can you provide an overview of your management team and board in terms of core competencies and the mix of financial and operational expertise?

We have a very diversified board of directors, starting with our Chairman Micky Dunn, who is an independent businessman. We have a combination of accountants, lawyers, engineers and geologists, so we feel that we have a large depth of experience on our board. A lot of these individuals have been in the business 40+ years and they represent the appropriate disciplines required to oversee and guide an oil and gas company. In regards to our management team, our President and CEO Raymond Smith, is a professional engineer with over 40 years' experience. Ray has had a very extensive career in the Calgary oil patch and has successfully started and sold four companies. Our CFO, Edward Brown, has been in this business for 35+ years. As Executive Vice President, I am also a professional engineer with 28 years of experience and have worked in numerous aspects of the business. Given these competencies we believe we are very well positioned in the industry with both the directors and managers to move forward in the development of our assets.

As a gas weighted player, with the price of gas being low, what would you say was key to your positive performance?

Bellatrix was formed in 2009 as a growth oriented company. The reason we perform so well is both due to our management team and the understanding of our assets, including how to properly develop them. We are focused on shareholder growth, when you say we are a gas-weighted company you are correct from a macro standpoint. That being said, the majority of our money goes into the Cardium light oil resource play, one of two main plays where we drill. The second of which is the Notikewin, a liquids-rich gas play. We have had fantastic results with the Notikewin, with very high rate wells. The Cardium is a solution gas drive reservoir, which by nature has a large gas component associated with the oil. The Cardium is Canada's largest accumulation of light oil and it extends down into northern Montana and up into NE British Columbia. Yes, we are gas weighted on a 6-to-1 boe basis, but two-thirds of our revenues come from liquids. The associated by-product of this Cardium oil production being gas; thus, the more gas you have the greater recovery you have from the reservoir. Over the last four years we have built the infrastructure in these areas to drive our operation costs from approximately $18/boe to the $8/boe dollar range. This is part of the reason why we have been so successful and generate a high level of returns.

What is the ultimate vision for Bellatrix, are you primarily focused on becoming more of a production weighted company?

Where we drill is not considered exploration, the Cardium is a true resource play, so we have a 100% chance of success. Hence, they become statistical plays, which necessitates understanding how best to drill, complete and produce wells. Also, you must drive your operating costs down and return the highest amount of cash flow per share as you can. This has made us one of the top Cardium producers, paying attention to all of the details. We have a large inventory of Cardium locations and the overall recovery will come down to well density, with most of our development and production falling under the category of primary recovery. We are in essence a production oriented growth company. The exploration component in many parts of North America has been taken out the equation due to the development and drilling of these large resource plays.

Can you tell us about any further M+A activity you anticipate moving forward?

The main play types we are currently drilling are the Cardium Light Oil and Notikewin Liquids Rich Gas plays, in addition to a large Duvernay inventory. If you look at our cash flow vis-à-vis our inventory, we have 30 to 40 years of drilling inventory. Hence why we are pursuing possible joint ventures to accelerate our large inventory. The reason that we are so successful is that we look at what is best for the shareholders and company. The question comes down to how we can derive value to hopefully translate to an increase in our stock price. That is why we believe a joint venture is the appropriate path to accelerate a small amount of our inventory and increase our cash flow. Our philosophy has been to keep a clean balance sheet because if a company has too much debt and the industry turns for the worst, it is stuck selling core assets at a very low price.

Those companies which have a very solid balance sheet, successfully/profitably drill oil and gas reserves, know how to drive capital expenditures and operating costs down, while increasing deliverability and continuing to stay abreast of new technology, are successful. In short, this has been our strategy for success. •

Sveinung Svarte

CEO
ATHABASCA OIL CORP.

2012 saw Athabasca Oil Corporation became a producer of oil and gas for the first time. Can you take us through your highlights for the year?
Athabasca has two business units, one is oil sands, which we call thermal oil, the other is light oil, which is basically our hydraulic fracturing (fracking) business. The thermal oil operations will come on stream later and we do not expect to have any production before 2014 or 2015. However we sanctioned and started building one of the first projects in 2012 and it is moving forward as planned. On the light oil side, Athabasca reached its goal of exceeding 10,000 bpd towards the end of 2012. We are now building on this towards becoming a serious producer, 2012 was a period of growing up and we have showed that we can deliver. On the negative side, we had a joint venture lined up that we did not manage to close before the end of the year, which was a big disappointment for us. However, with the upcoming put/call agreement with PetroChina, we will receive funding for another two or three years so it is not really critical. We are still working on the joint venture and hope to resolve it this year.

You have previously stated that you wanted to keep your team small and nimble; will this continue to be the case as you increase production in 2013?
Athabasca Oil Corporation is targeting 11,000 to 13,000 bpd by midyear and that will come entirely from the fracking business. We have the people we need to do that so personnel wise it should not be a problem. Towards the end of last year we commenced a drilling program in all the corners of the most prospective areas of our deposit, so until midyear we will be observing how those wells behave. By mid-year we will have established the tight curves for the light oil by area and by formation and this will drive investments towards the end of the year. I think that probably takes us into the roll out of the real development plan for light oil.

How difficult do you expect finding contractors to be as you continue your development plan?
We thought it was going to be a very hot environment on the contracting side but things have slowed down a lot. Gas production and oil sand mining have cooled, and have to wait for higher prices to really get off the ground again, so that has freed up a lot of capacity on the contracting side. We had thought we would have to go through the US and Eastern Canada, but we actually found capacity in Alberta. On the light oil side, we were worried about fracking capabilities, but labour has also been freed up a lot due to the gas slowdown. So, we contract local. We have some key contractors that we try to tie up with stock-based compensation so that they feel they are part of the team and their outcome is aligned with the company. Finding good contractors has not really been a problem to.

Athabasca had some approvals come through on Hanging Stone this year, and at Mackay last year. Can you tell us about your experience of navigating the approvals process in Alberta and how efficient you consider it to be?
On Mackay with PetroChina, we got approvals within two years, which is very fast for a large project. At Dover, the other joint project, it has taken two years and four months as we speak, so with some luck we have approval within two and a half years. HangingStone came through as planned. Alberta is an oasis when it comes to approvals. It takes time but at least it is predictable. Alberta is not like BC; here the government gets it through and if necessary they call a public hearing. It is frustrating to see investors in places like New York who say, you have upcoming discussions with stakeholders—you'll never get it built. The regulatory system here and the regulators are very sophisticated, high quality people. The problem is that the industry has hired from them, so the regulatory body is losing very good people.

The PetroChina partnership is the first time a Chinese state-owned company has wholly owned a Canadian project. Can you tell us how this came about and give us an overview of your experience of working with a Chinese partner?
PetroChina had been looking at oil sands from about 20 years ago and actually helped to fund the original SAG-D pilot in Alberta. In 2009 when Athabasca Oil Corporation started look for a partner, they were ready. They decided that this was a good opportunity now that the technology is mature, Athabasca had great projects and PetroChina had faith in our ability to deliver. We concluded the deal after about eight months of negotiations—PetroChina is the biggest energy company in the world, with 1.6 million employees, and we had 14 employees at the time. Partnering with PetroChina has been a very good experience. Athabasca's model for financing has been focussed on joint ventures from the early days. We had built the company for that purpose and we had hired people with international experience. It is very important that you have the cultural understanding, the patience to work with people from different origins. We already had an internal culture of welcoming people like PetroChina. •

Michael Laffin

Chair, Asia Region
BLAKE, CASSELS AND GRAYDON LLP (BLAKES)

Can you give us a brief introduction to Blakes?

As one of Canada's top business law firms, Blake, Cassels & Graydon LLP (Blakes) provides legal services to leading businesses in Canada and around the world. Since our founding in 1856, we have focused on building long-term relationships with clients. Serving a diverse national and international client base, our integrated network of 12 offices worldwide provides clients with access to the Firm's full spectrum of capabilities in virtually every area of business law. Over the last fifteen years we have built our energy practice into the leading oil and gas practice in Canada.

Given that M&A activity has slowed down in 2013, what type of work is Blakes engaged in at the moment?

We are very heavily involved in projects related to infrastructure development in Canada. We are the lead counsel for TransCanada on Energy East and Keystone, as well as Shell's LNG representatives, and are involved in the Northern Gateway project.

What effect has the Canadian government's restrictions on foreign investment into the oil sands had on the attractiveness of Canada as a destination for foreign capital?

Foreign investment into Canada's resources has been significant for Canada. The restrictions placed on oil sands investment should not affect other resource plays in Canada in terms of access to foreign investment. In terms of oil sands, it may take some time but the government will see that foreign investment, including that of state owned enterprises, is needed to develop the resource. The costs are too significant to develop alone.

Why were Petronas and Exxon allowed to invest relatively quietly, but CNOOC's acquisition generated so much controversy?

In 2012, three deals accounted for 80% of the total value of mergers in Canada: Petronas-Progress, Exxon-Celtic and CNOOC-Nexen, which was the biggest at $15 billion. While Petronas and Exxon did not generate much controversy, CNOOC did, despite the fact that only 27% of Nexen's assets are in Canada. The argument that seems to generate the most attention is that Canadian companies cannot undertake the same activity in China, but to compare Canada to China does a disservice to both countries. China is finding its way in the world, and while some of their policies are not in line with the developed world as yet, significant advances have been made and by way of example, no other country has made as great strides in terms of poverty reduction and green energy investment in such a short period of time.

Currently there are no clear definitions from the federal government as to what comprises "exceptional circumstances" or "net benefit" to Canada. How do we deduce what is allowed and what is not? One can expect that to satisfy the net benefit test a non-Canadian would adhere to various commitments, including good corporate governance, managing the business on a commercial basis, commitments to capital spending on operations, research and development and social programs, and ensuring appropriate staffing levels including a significant Canadian presence in management. It is too early to identify those factors that will constitute "exceptional circumstances", however it will not be lost on anyone that the oil sands is a capital intensive industry that requires capital from many players, and the resource extracted from the oil sands must find its way to various parts of the world.

Despite the restrictions, we recently saw China's Yangchang Petroleum acquire Novus Resources for $345 million. Is this the type of deal that we should expect to see in the future?

Blakes acted for Novus on their deal with Yangchang Petroleum. The deal was interesting because Yangchang is not based in Beijing, and it showed that there are many other areas in China that are looking for Canadian resources. In addition we might see Chinese drilling and EPC companies starting to move towards Canadian investment.

What is your outlook for Canada's oil and gas industry, and where would you like to see Blakes in this context?

Canada has one single trading partner: the United States. Unfortunately, US energy self-sufficiency is staring us in the face. Canada needs other countries with whom to trade, and we do not have the infrastructure in order to do that. Blakes is fortunate to be at the forefront of infrastructure development in Canada. We will continue to see more project-based work and will be heavily involved in those transactions. •

Canada, the Petro-state

How Alberta's regulator was eaten by its super regulator

In December 2012, Alberta passed "Bill 2", the Responsible Energy Development Act, which authorized the new Alberta Energy Regulator to assume the regulatory functions of the Energy Resources Conservation Board (ERCB) and Alberta Environment and Sustainable Resource Development with respect to oil, gas, oil sands and coal development.

The act, which passed on the back of recommendations made by the Regulatory Enhancement Task Force two years before, effectively creates a "super regulator", combining two previously separate regulatory bodies. According to its implementers, the change will reduce regulatory duplicity and make both the approvals process simpler. "If you are doing a SAGD project in the oil sands, it could require as many as 200 separate licenses; we are turning that into a one window approach and if we can take a few months off the process it provides huge value to the applicants," Alberta's Minister for Energy Ken Hughes told GBR.

Neil McCrank, the Former Chair of Alberta Energy and Utilities Board (current counsel at law firm Borden Lander Gervais), said that the new system would benefit not just industry, who would have one approval to get instead of two or three, but also the public. "A farmer faced with the prospect of a well being drilled on his land currently has Alberta Environment to deal with, he has got the Surface Rights Board, and he has got the ERCB; he will have one place to go."

According to McCrank, the latest changes are natural developments for a regulatory system that has been world-renowned since its inception some 75 years ago. The enduring strength of this regulatory system has been a key factor in the development of a cutting-edge extractive industry in the province.

Unlike most oil and gas jurisdictions, including mature North American jurisdictions such as Texas and Oklahoma, where companies drill a well and then keep the information they discern to themselves, Albertan regulations dictate that following a one-year confidential (or "tight hole") status, everything becomes available to the public. In addition to promoting a culture of accountability, this means that prospectors can go to the core research center in Alberta and the logs are all publicly available.

Relative to other jurisdictions, the Alberta approvals process is considered timely and thorough. "Alberta is an oasis when it comes to approvals. It takes time but at least it is predictable. Alberta is not like BC; here the government gets it through and if necessary they call a public hearing. It is frustrating to see investors in places like New York who say 'you have upcoming discussions with stakeholders, you will never get it built'. The regulatory system here and the regulators are very sophisticated, high-quality people. The problem is that the industry has hired from them, so the regulatory body is losing very good people," said Sveinung Svarte, CEO of Athabasca Oil Corporation.

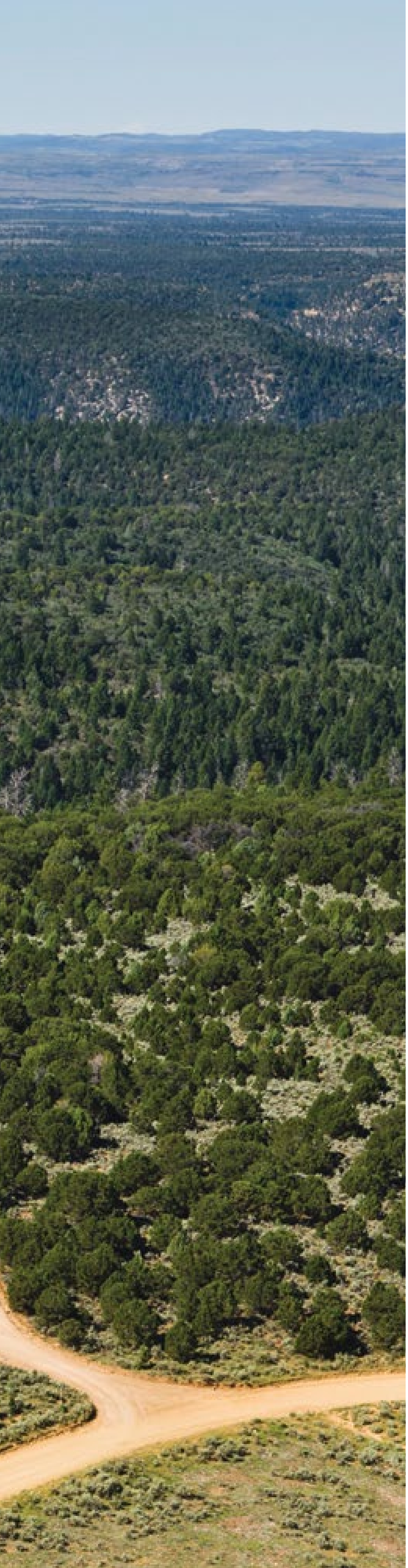
The key distinguishing feature of the Albertan system, however, has been its history of regulatory independence. "The body that has run the regulatory system in Alberta has always been seen to be arms length from government and independent in its decision making, which means that you take out the political environment or influences from decision making," said McCrank. As chair of Alberta Energy and Utilities Board, McCrank would be invited to lecture on the success of the Alberta around all over the world. "In some of the countries in Latin America I would explain the system and then I would get to the point of saying that one of the keys is that it has to have independent decision making power, to be independent from the political environment. That was unheard of in most jurisdictions and they were not prepared to accept it because the political people wanted to continue to meddle."

Although most respondents GBR spoke to were in favour of reducing regulatory duplicity in Alberta, some were concerned that a one section of Bill 2 had the potential to compromise the regulator's independence from the government. Bill 2's Section 67 provides that when the Minister considers it appropriate, the Minister may by order give directions to the Regulator for the purposes of (a) providing priorities and guidelines for the Regulator to follow in the carrying out of its powers, duties and functions, and (b) ensuring the work of the Regulator is consistent with the programs, policies and work of the Government in respect of energy resource development, public land management, environmental management and water management.

Neil McCrank told GBR that he would be concerned with Section 67 if it were in any way an attempt by the government to interfere with the independent thinking and decision making power of the board. "If they use it in an inappropriate way – and I hope they would not – they will cause the board to lose its independence."

"I would hope that it would never come to the point where industry is going behind the scenes to get government to direct the board in some fashion. I cannot conceive of that happening because of the tradition and history in Alberta. When I used to speak in some countries, particularly in Latin America, that was exactly what would happen. Some of those countries have huge resources that they cannot exploit because of the way this issue has been handled. We cannot have industry and government trying to make these kinds of decisions because they are all short term. The regulatory body is supposed to make long-term decisions in the public interest, not decisions for every election," said McCrank. "Bringing political sensitivity to the table when you are making long term decisions is problematic." •

This article was taken from GBR's weekly newsletter and blog, the GBRoundup. To subscribe to this newsletter, or view other articles and exclusive interviews, please visit gbroundup.com.



The Saving Grace: Canada Takes Aim at LNG Projects

"Predicting gas price changes is difficult but we are seeing some improvement now that is giving me cause for optimism. We will take a cautious approach: if we see gas prices at Alberta Atco go to about $4, we could hedge some of our future potential production and that would allow us to begin drilling some gas wells. We are looking at liquids rich gas so we have the liquids to go along with it, which make it all economic. As we drill those wells we will start to see where the gas market goes; if it holds up and is stable then we will get more aggressive with the gas drilling. If it tends to be choppy and go back down, we will drill to fill and then we will stop."

- Massimo Geremia, President and CEO, Manitok Energy Inc.

Image: US Oil Sands

Canada Explores LNG

The next frontier

Nestled in the middle of the Rocky Mountains, Kitimat is a sleepy town in northeastern British Columbia that is poised to become the next boom town in Canada, thanks to proposed development of liquefied natural gas (LNG) plants and terminals by a variety of multinational oil and gas players. Currently, three consortiums - Shell/PetroChina, Apache/Chevron and Petronas/Progress Energy – have invested a combined C$35 billion into early-stage projects. If these proposals are to go through, Kitimat and the excitement surrounding LNG in Canada may be the saving grace for Canadian natural gas.

The Montney, one of the largest natural-gas producing basins in Canada, sits right on the British Columbia-Alberta border. It is one of the few plays where Canadian gas juniors can currently operate and hope to gain any sort of investor recognition. As it stands, drilling activity in the Montney dropped off last year due to low gas prices. The key is finding and producing liquids-rich gas.

"Further up from the Montney there are more liquid-rich reservoirs that are gaining increasing appeal over dry gas," said Keith Braaten, CEO of GLJ Petroleum Consultants. "Although there are fewer resources there, the Montney presents higher prices for developing projects. At C$5- to C$7 million per well drilled, the gas price would need to be very competitive. Companies are no longer drilling for production, but to identify resources for their LNG plants."

Many Canadian service companies have moved their attention to LNG. "Right now, the big play in Canada is the LNG opportunity," said Brent Conway, president of Trinidad Drilling.

Image: Edge Resources

"There are significant hurdles in terms of getting the approvals to build pipelines, and decide who is going to build them, but it will happen."

The strategy will mimic the past, he said. "The E&Ps will figure out how they are actually going to drill and complete those wells, and then there will be a much bigger ramp up. It makes sense to get this trapped gas off the continent and into a market where it is going to get a decent return, but it is going to take some time."

Even so, the LNG opportunity could induce a profound shift for Canadian service providers and an important shift for U.S. service providers, according to Kevin Neveu, CEO of TSX-listed drilling company Precision Drilling.

"Typically, North American natural gas has been a high-demand option play. What is different about LNG is that these are mega projects. Moving LNG is deeply capital intensive; it requires large pools of capital with long horizons. If you are building an LNG export facility that is going to be exporting 145 billion cubic feet (Bcf) of LNG, you need 20 years of drilling to support that."

This creates a whole new paradigm of business opportunity, Presicion's Neveu believes. "We think that, in Canada, the LNG facilities that get built will include export facilities, pipelines and complete field developments tied to that export facility. It is likely that the rigs that go into those fields will be designed to operate for 20 years in one field. They will drill 365 days per year on pads. It will be a business model that Canada – which tends to be highly seasonal and commodity price dependent – does not often see."

There are still reasons to be cautious about the proposed level of development in Canada's LNG space. Chief among these is the length of time these large-scale projects will take to get off the ground.

"Projects will be spread out over a period of time, and I would not be surprised if some are consolidated over time," said David Collyer, president of CAPP. "A wide range of proposals is not unusual for the early stages of LNG development, but competitiveness demands fewer, larger facilities. CAPP's industry projections assume that not every project will go ahead at the same scale and in the timeframe it intends."

International competition is also a factor: both the United States and Australia have large LNG projects currently at an advanced stage. "Canada's LNG projects are greenfield projects, and there is competition from more brownfield projects in the U.S.," said Janice Buckingham, partner at law firm Osler Hoskin & Harcourt LLP. "We are expecting some consolidation in the LNG space to occur over the next 12 to 18 months, on a project basis."

"I believe Canada will do well, but that it will be a tougher climb with lower margins than envisioned by some," cautioned CAPP's Collyer. "People are talking about 2017 for the first projects, but I think this is ambitious."

"The most important thing is that we have determined that these legacy gas and oil fields that we thought were played out actually have a very good economic life and lots of resources in place," said Precision Drilling's Neveu.

"The politicians and the environmentalists have to understand that you do not go from a carbon-based economy to a zero-carbon economy in one step; you have to wean yourself off carbon." And while natural gas is a little less efficient than diesel and gasoline, it is a much lower-carbon option, he said. "From burning brush, to burning wood, to burning low-quality coal, to high-quality coal, to oil, and now gas, mankind has continued to move down the carbon chain. I think that natural gas, and moderate-cost shale gas, is a good long-term bridge as we find better solutions for our long-term energy supply." •

Keith Braaten

President
GLJ PETROLEUM CONSULTANTS

Please could you provide us with a brief overview of GLJ Petroleum Consultants and its role within Canada's oil and gas industry?

GLJ is one of the leading independent resource evaluation firms in Canada and celebrated its 40th anniversary last year. Our role is to provide reserves and resource evaluations to our clients for filing with securities commissions, financing requirements and to support transactions between companies involving oil and gas assets. We also provide other technical services including supply studies, simulation studies and expert witness testimony. We have branched out internationally and are currently one of the leading independent evaluators of resources in Colombia; we are motivated to pursue international markets because the oil and natural gas supply and demand situation in North America is not ideal. With our limited export capacity and a large price differential between Brent and Canadian oil prices, companies are looking to invest capital elsewhere to gain exposure to world oil prices.

With 40 years experience in the market, how would you describe some of the current trends you are seeing in the oil and gas industry?

The price of natural gas is currently very low due to increasing supplies from shale plays in the United States, so we are seeing gas focused companies disappearing, consolidating, or suffering from a lack of capital. Up until last year, we saw major international companies looking to invest in oil sands projects, however, that activity has stalled this year due to the high differential in oil price and the challenge of transporting the product to market from Alberta. If the Keystone and Northern Gateway pipelines are approved, we should see development accelerate in the oil sands. We are also seeing a need to develop supplies for LNG plants that are going ahead on the west coast and we are assisting our clients in identifying resource volumes to supply those facilities.

One of the hot topics these days is big data analytics. The ability to quickly handle and analyze large volumes of data is becoming extremely important. In the Montney resource play, for example, there are going to be approximately 16 horizontal wells per section in different layers of the strata, and there are going to be anywhere from 10 to 30 fracs per horizontal well, so keeping track of well lengths and fracs per well will be necessary. Performance needs to be normalized to a comparable standard; for example, on a per frac basis. This will be a major challenge for resource evaluators going forward. Also, as oil sands development accelerates, there will be many SAGD well pairs going into production. In the future, the norm will be resource plays with thousands of wells as opposed to tens or hundreds of wells in conventional plays. Our growth will depend on delivering services that align with these trends. This was one of the drivers in our acquisition of an interest in Visage Information Solutions earlier this year.

How have you adapted GLJ's corporate strategy over the years to accommodate more stressful market conditions in recent years?

We are endeavoring to develop more international business. To this end, we recently set up a formal partnership with ERC Equipoise out of London; our services complement each other and will help us to attract more international clients. We have also taken advantage of slower market over the summer months to dedicate engineers and geologists to increase our understanding of all resource plays in North America. When the busy period comes during fall and winter, we can leverage off of this knowledge.

Some say the Montney development is tied to whether or not proposed LNG facilities are brought on stream; due to the capital-intensive nature of these facilities, there has been some doubt over whether Canada will be able to meet this challenge. What are your thoughts?

The drilling activity in the Montney dropped off because of the low natural gas price. However, along the updip edge of the Montney Fairway there are liquid-rich regions that are gaining increasing appeal over dry gas. These natural gas liquids command a higher price and support development drilling. In the dry gas region, companies are less likely to be drilling to develop dry gas for immediate production, but to identify resources to supply LNG plants. This explains the decreased drilling activity we have observed in the dry gas region of the Montney. We are seeing a variety of large players in this arena, mostly Asian companies with adequate resources to develop these mega-projects.

What do you base the metrics of your price forecast on?

We primarily look at the NYMEX forward strip for guidance, but we tend to either trail or lead the strip depending on which direction it is trending. The strip is generally more volatile than we want for our evaluation work, so we react more cautiously in the direction that the strip is moving. If it is indicating much lower prices, we will gradually bring our forecast down, and if it is indicating much higher prices, we will gradually come up in our long-term thinking. •

Kevin Neveu

President and CEO
PRECISION DRILLING CORP.

Can you summarise Precision Drilling's key competitive advantages?

Many people focus on rig quality, and of course this is important – our super series rigs are very fast moving, high-tech, consistent drilling machines – however, the barrier to entry on the rig itself is actually fairly low. It is just a question of capital. Our view is that the quality of our business systems and the quality of our people have more leverage. We focus heavily on recruiting and training our personnel, and then providing company-wide business platforms to facilitate operations on the field: everything from safety to recruiting to procurement to cost control is handled by our company wide business systems.

Scale is also important, particularly in unconventional development. Most of our customers have multiple field developments that require a lot of rigs; having an operation where the rigs operate consistently, predictably, and repeatedly is more important than the base price. We have structured a business that delivers consistent, predictable and economic results to our customers.

To what extent does Canadian companies' inbuilt ability to deal with seasonal demand equip them for market volatility and weak equity markets?

If you can respond to rapidly changing market conditions, you can be very successful in any market. It is when you are stuck and you can't respond to a change that you become obsolete. Canadian companies have had to deal with highly cyclic markets throughout our history; we have built business models that respond to maximum utilization in the winter, low utilization in the spring, and uncertain utilization during the summer: this gives us a global competitive advantage.

We spoke at the beginning about Precision Drilling's past shift from a gas to an oil focus; LNG now looks very promising and at the same time there are a variety of impediments to oil sands growth: will the company be reinvesting in LNG?

The LNG opportunity could induce a profound shift for Canadian service providers and an important shift for US service providers. Typically North American natural gas has been a high demand option play. It was hard for us to build a business based around an option: hence we have wanted to get more oil activity, which is a global commodity. What is different about LNG is that these are mega projects. Moving LNG is deeply capital intensive; it requires large pools of capital with long horizons. If you are building an LNG export facility that is going to be exporting large volumes of LNG, you need 20 years of drilling to support that. For us that creates a whole new paradigm of business opportunity. We think that in Canada the LNG facilities that will get built will include export facilities, pipelines, and complete field developments tied to that export facility. It is likely that the rigs that go into those fields will be designed to operate for 20 years in one field. They will drill 365 days per year on pads. It will be a business model that Canada – which tends to be highly seasonal and commodity price dependent – does not often see.

I think that the most important thing is that we have determined that these legacy gas and oil fields that we thought were played out actually have a very good economic life and lots of resources in place. I think that the politicians and the environmentalists have to understand that you do not go from a carbon based economy to a zero-carbon economy in one step; you have to wean yourself off carbon, and while natural gas is a little less efficient than diesel and gasoline, it is a much lower carbon option. From burning brush, to burning wood, to burning low quality coal, to high quality coal, to oil, and now gas, mankind has continued to move down the carbon chain. I think that natural gas, and moderate-cost shale gas is a good long-term bridge as we find better solutions for our long-term energy supply.

Do you think the industry has effectively communicated with the public regarding the environmental impact of its operations?

The environmental impact of this industry will never be zero, but it can be managed to be very low as we transition through the energy cycle. That said, a picture of a duck that lands at the wrong time in a tailings pond does not need much explaining: a picture is worth a thousand words. The problem is that it takes several thousand words to explain how responsible the industry is, whereas a picture of a duck has infinite advocates and it is a popular cause to say how bad industry is. I think industry needs to work on finding advocates outside of the industry who have a social following, that understand the issues and recognize the transition that we have to run our economies through as we move down the carbon chain. I really think that for oil and gas companies and service providers, being a part of the community is important. Legacy oil towns were developed quickly with little regard for the neighborhood, and the oil industry does not look great. When we build a facility now it is a world class facility, it looks good, it is responsible, the liquids are contained, we are hiring locally, and we are bringing a long term view; we are not moving with mobile homes, we are building permanent facilities that have a 30-year life span. •

Midstream Opportunities

Feeding opportunities

With LNG development on the horizon, one of the more interesting sectors for Canadian companies is in midstream opportunities such as oil and gas processing, terminaling and transport. Over 60% of Canadian producers currently own their own midstream assets, but with major upstream players such as Encana Corp. recently divesting its midstream assets, this is poised to change.

Don Althoff, chief executive of Veresen Energy, a TSX-listed midstream company, extolled the value of the midstream player within a vertically integrated supply chain. "It makes sense in the current economy for producers not to own their own midstream assets. The only reason to want to build and own pipelines is if they somehow gave you a competitive advantage."

Enough infrastructure exists already that producers do not need to own it themselves, he said. "It is partly a legacy issue that is tied to the evolution of the junior community in Canada's oil and gas industry. Previously, it made sense for juniors to own midstream assets because it gave them some strategic advantage when they sold their projects to majors. The midstream market has evolved to the point where there are so many established players who can transport and treat product that it no longer makes strategic sense for a producer to own these assets themselves."

For a relatively small market as compared to the United States, where only about 20% of producers own midstream assets, there are a number of billion-dollar midstream companies in the Canadian space: ATCO, Keyera and Pembina are just a few players who are solely focused on linking producers with their customers. The opportunities are such, however, that newer midstream companies like Kanata Energy are breaking into the market.

Kevin Cumming, CEO of Kanata Energy, believes that Canadian companies are beginning to take notice of the value of midstream players.

"There is a greater movement toward the midstream model in Canada. A number of companies have assets in the U.S., where the ownership of midstream assets by producers is closer to 20%. Other companies would rather spend capital on the drill bit rather than infrastructure.

Midstream returns are in the mid-teens, whereas the upstream industry targets more than 30% returns. "For every dollar spent on the upstream side, about 20% to30% has to be spent on the midstream side, so why spend that money when it can be re-injected into a higher-return business? A properly run midstream company can add a lot of value to an upstream company that they may not have in-house," he said.

Despite the enthusiasm, it might yet be too early to invest heavily in midstream opportunities when many of the larger-scale LNG and oilsands projects are yet to be fully committed.

"Midstream companies are ready to take advantage of the growth opportunities in the sector but not sure how to capitalize on this growth," said Bud Strandquest, senior vice president, Canada, at MTG, a U.S.-based consulting company. "There are many opportunities coming from the expansion of pipelines, transport options and the building of refineries, but none of these plays are at a level of certainty for companies to deploy capital."

Using LNG as an example, some 10 projects are being planned at the moment, but it is unlikely 10 different large-scale projects will come to fruition. "There needs to be more assurance that the expected market will in fact be in place – coming in the form of regulatory and permitting approvals – before anything happens. Midstream development will follow capital deployment in these areas." •

Image: SilverWillow

Don Althoff

President and CEO
VERESEN INC.

Can you give us a brief introduction to Veresen and its role within Canada's oil and gas industry?

Veresen is a major player in the gas and natural gas liquids (NGL) marketplace. We have a relatively new asset known as Alliance, which is a dense phase pipeline that leads from Western Canada to Chicago, and transports 1.6 bcf a day of gas and 80-90,000 barrels a day of NGLs. Alliance runs right through the Montney, Duvernay and Bakken properties; it is the only pipeline in North America that has the capability to export gas and NGLs. Veresen itself has grown since the original Alliance asset; we purchased the Alberta Ethane Gathering System, which is the main pipeline system that connects these fractionation facilities with the petrochemical industries. We also own 1000 MW of power generation in Canada and the United States. Our fundamental business proposition, as an infrastructure company, is connecting producers to end-users by focusing on gas and NGL midstream businesses.

How well equipped is Alliance to handle the expected increase in production levels from the Montney, Duvernay and Bakken plays?

Gas pipelines coming out of Western Canada into the United States are running at relatively low utilizations; for example, the Mainline is only running at about 40% capacity. Alliance was built on the basis of 15-year contracts by a group of 22 producers. These contracts expire at the end of November 2015, and Veresen is currently working with producers to re-contract the pipe with the most liquids-rich gas we can find. Our first priority before expansion is to ensure that Alliance's carrying capacity is full.

What impact does the volatility in natural gas prices have on Veresen's growth strategy?

The price volatility has not directly impacted Veresen because we only transport the gas, not market it ourselves. However, it has had a secondary impact as producers have less money to drill and it takes longer for some of the newer fields to begin production. The big issue for Veresen is more about the differential between gas prices and crude prices. The petrochemical industry has a variety of feedstock options: it can burn naphtha or ethane. When ethane in inexpensive because natural gas is inexpensive, it makes our product more valuable.

How does the Jordan Cove LNG export facility fit within Veresen's portfolio, and what are your expected timelines to get it up and running?

Jordan Cove is a great project for Veresen. It began as an import terminal, and the strategy behind Veresen's involvement was our thinking that if we could bring gas into the West Coast, it would keep the eastward pipelines full. However, this thinking changed with the advent of the shale boom in the United States, and we started thinking about using it as an export terminal. Jordan Cove has the capacity to export around 1 bcf per day of gas and sits on two main pipelines that have about 2 bcf of excess capacity, meaning we do not have to build pipelines to connect the terminal. The great thing about Jordan Cove is that it only takes about nine days to ship product to Japan, compared to 18 days at Kitimat or 21 days out of the Gulf of Mexico. We are planning to begin construction in late 2014, and will go live by 2019. Jordan Cove is very different from existing projects, and is getting a lot of attention from Asian players as potential offtake partners. The great thing about North America is that there is so much existing infrastructure, so we can create a tolling agreement and have a product that Asian buyers like much better than gas that is tied to crude prices without Veresen having to take on molecule risk.

Despite companies such as Encana divesting their midstream operations last year, nearly 70% of Canadian producers own and operate their own transport and processing assets. Do you see this changing in the future?

It makes sense in the current economy for producers not to own their own midstream assets. The only reason to want to build and own pipelines is if they somehow gave you a competitive advantage. There is already so much existing infrastructure that producers do not need to own it themselves. It is partly a legacy issue that is tied to the evolution of the junior community in Canada's oil and gas industry. Previously, it made sense for juniors to own midstream assets because it gave them some strategic advantage when they sold their projects to majors. The midstream market has evolved to the point where there are so many established players who can transport and treat product that it no longer makes strategic sense for a producer to own these assets themselves.

In general, how well aligned would you say Veresen's economic priorities are with environmental and social incentives?

Veresen's focus is on gas and NGLs, which is a very low-carbon fuel and much better for the environment than oil. We also own several renewable energy projects. The company's values align well with a low-carbon future and where we think the markets are going. Over time, gas will likely comprise a larger percentage of fuel consumed; it is referred to as a "bridge fuel" in making the switch from hydrocarbons to renewable energy. •

Kevin Cumming

President and CEO
KANATA ENERGY CORP.

Can you give us a brief introduction to Kanata Energy and the impetus to its founding?

The founders of Kanata Energy felt that there was an opportunity for a smaller player in Canada's midstream sector to tackle projects that fell outside of the purview of major midstream companies. We have built our business model to target projects in the $30 million to $150 million level, a niche that we think will be slightly less competitive. Kanata focuses on gas gathering and NGL extraction in the field in areas that are newly developed or where the existing infrastructure is insufficient. We need to take risk, and are willing to take on additional risk as long as it is in an open, transparent manner. Kanata is looking at developing greenfield projects where we can construct and put in place assets that make sense for the existing and future needs of our customers. As for acquisitions, we look for assets that we can build upon.

Statistics show that nearly 70% of Canadian producers own their own midstream assets. How much of a market is there for Kanata to build its business?

There is a greater movement towards the midstream model in Canada. A number of companies have assets in the United States, where the ownership of midstream assets by producers is closer to 20%. Other companies would rather spend capital on the drill bit rather than infrastructure. Midstream returns are in their mid-teens, whereas the upstream industry targets more than 30% returns. For every dollar spent on the upstream side, about 20% to 30% has to be spent on the midstream side, so why spend that money when it can be re-injected into a higher-return business? A properly run midstream company can add a lot of value to an upstream company that they may not have in house.

What is your reaction to the announcement that Petronas is investing $36 billion to build and develop their own midstream assets?

There is still a role to play for midstream companies in Canada, despite Petronas's announcement to invest $36 billion to develop midstream assets. Not everything will be run through their plants: if you take a play like Progress, there might be outlying areas where it is more economical to go through another company's plants. Even a small percentage of that represents a large volume of gas.

Do you foresee an IPO for Kanata in the future, or does the company see more value in staying private?

Kanata is currently financed through private equity partners. There is always an exit strategy with private equity, either an outright sale, a refinancing with additional private equity, or an IPO. Kanata's senior management team would be happy with whatever option we feel is best for the company. We are in this for the long term, so if an IPO makes sense then we will do and IPO.

What is the most critical piece of the infrastructure puzzle that still needs to be developed?

The good thing about North America is that we are very well connected through pipeline infrastructure. On the gas side, it is not so much where the demand is coming from but a matter of ensuring that it does develop. Canada has incredible gas resources that we can supply to the world that will last for decades to come, so the important issue is to develop the demand. We are seeing industrial demand rise and LNG projects getting approved in the US, as well as power generation shifting from coal to gas. The demand within North America will continue to build every year.

How do the volatile natural gas prices of late play into Kanata's own growth plans?

We are very bullish on gas and think that they will return as necessary to develop the resource. Nothing cures low gas prices like low gas prices because it spurs people to make investments. Petrochemical companies make investments with a 40-50 year timeframe and we are seeing many of these investments come on stream. It is not happening as quickly as most people want but these projects take time.

According to the Canadian Chamber of Commerce report, "Canada must decide how to shepherd its natural resources for the good of Canadians. We need to engage in an in-depth conversation that is based on evidence." Given the emotionally-laden debate surrounding things like Keystone, do you think the industry is doing enough to educate Canadians on oil and gas development?

Canada has some of the highest standards in the world that companies must reach in order to develop natural resources. The oil and gas industry, however, were not at the forefront of the conversation from the beginning and chose a more quiet approach. We are doing a better job of getting the message of responsible development across. Oil and gas development is critical to Canada, and all Canadians benefit from a robust industry.

Where would you like to see Kanata positioned in the future?

Kanata does not aim to be the biggest midstream company in Canada. We are in a service industry so the key principles of transparency and trustworthiness are the ones that will build a successful business.•

Bud Strandquest

Senior Vice President Canada
MTG LTD

Can you give us a brief introduction to MTG?

MTG is a full-service consultancy that began in the United States, focusing on maintenance and reliability in the downstream sector. We began focusing on operational excellence in the upstream sector about ten years ago. Today, our service offering encompasses every facet of the industry, from exploration through to abandonment. Recently MTG began offering HSE and strategy consulting as a complement to our operational excellence consulting. The company opened its Canadian office two years ago, and recently established itself in Aberdeen; we are also planning to open an office in Australia. We have delivered over 500 projects since our inception; in Canada, we have worked on 10 projects, 5 of which were major transformational projects.

How do you define a transformational project?

A transformational project affects all aspects of a business: anywhere from upper management to the wellhead. A typical transformational project will take close to a year. Our approach is to build trust across all levels of the organization from the very beginning, which is different from a typical approach that seeks to engage directly with top management. Definitions of success may vary depending on industry sector: for example, in upstream we tend to focus on drilling programs where the most significant amount of capital is deployed.

What are some of the reasons that a client might turn to a consultant, and how would you characterize the demand for your services?

What is popular at the moment for MTG is drilling projects. One of our clients in the United States had very rapid growth in their drilling program but wanted assurance that they could meet their targets. We looked at organizational effectiveness and production efficiency in order to optimize their drilling program. Another trend we see, especially on the unconventional side, is rapid growth in areas that are new and require new technology; companies require help to reduce the cost of drilling but also set them up for success in terms of production.

How would you advise clients to optimize their drilling programs?

Drilling has been a historically "wildcatter" business with the thinking that no well is the same. Sometimes this thinking hijacks the need for efficiencies. Drilling programs today comprise of a collection of different priorities that are not synchronized. At the end of the line are the production guys who are faced with operating the well without having had any input into the drilling itself. If they do not have input into the amount of drill-ready locations, then the rig schedule is a mess. The key to a successful drilling program is getting priorities sorted on the front end.

We know MTG uses LEAN principles as part of their service offering. Can you elaborate on how these principles apply to the oil and gas industry, and the potential benefits offered?

MTG uses SMED techniques to prepare rig moves to make the rig work like clockwork, and it significantly reduces spud cycle times. In LEAN, it is important to ensure that the end user is involved in the development process; for example, getting the operators to participate in the design process.

The midstream sector is expected to grow rapidly in Canada over the next few years. How does this segment of the market fit into MTG's growth plans in Canada?

Midstream companies are ready to take advantage of the growth opportunities in the sector but not sure how to capitalize on this growth. There are many opportunities coming from the expansion of pipelines, transport options and the building of refineries, but none of these plays are at a level of certainty for companies to deploy capital. Using LNG as an example, there are almost ten projects being planned at the moment, but there likely will not be ten different large-scale projects in the future. There needs to be more assurance that the expected market will in fact be in place – coming in the form of regulatory and permitting approvals – before anything happens. Midstream development will follow capital deployment in these areas.

In general, how can oil and gas companies effectively and efficiently deploy scarce capital while delivering quarterly growth?

On the downstream side, there are various strategies related to the end-to-end value chain. The same can be said for upstream: taking a holistic view of the entire process instead of making strategic decisions based on one area of the chain. Other strategies are to understand how to get more out of employees by managing both the efficiency and the effectiveness of the labour force. Part of that strategy is exploiting technology to move towards more sophisticated methods to use and analyze data.

Do you have any final messages for our readers?

MTG wants to deliver a project to a client that in the end pays for itself. We strive to be cash neutral at the end of a project and deliver real benefits that drive growth forward. •


ESSENTIAL

Engineering and the Environment: The Companies Supporting Canadian Oil and Gas

"I have been in the oil patch for my whole career and the industry's safety and environmental performance has improved dramatically in that time. We are dealing with hydrocarbons, so when there is an accident the consequences are serious but the world still needs oil. As long as we need oil my belief is that we should be fulfilling as much of the requirement as possible from the place where oil can be produced with the most environmentally sensitive techniques, and I believe that is Canada. We need to focus on how we are moving the oil, and pipelines are probably the safest way to go. In today's environment, we have to meet the highest standards in environmental and safety performance. There is more transparency than ever before in terms of safety and environmental records."

- Garnet Amundson, President and CEO, Essential Energy Services

Image: Essential Energy Services

The Service Sector

A competitive market

While the upstream industry may have suffered recently from tighter equity markets, much of its capital expenditure is already committed and in place. This offers a greater degree of stability to the Canadian oilfields services sector that supports them. Yet although the service sector may be enjoying more certainty in their current and future work, it is certainly not immune to the challenges faced by the wider industry. New players in the industry, foreign investment and cost pressures have forced service players, from drilling and engineering companies to consultancy firms, to adapt to the changing needs of clients and projects in the Western Canadian Sedimentary Basin.

"There has been a demographic shift in our client base," said Wade McGowan, president and CEO of Ironhand Drilling. "Historically, we have not chased the larger multinationals or national oil companies, but we recognize that as we add rigs, those doors will open. Large upstream companies work with large service companies due to elasticity of supply. Juniors and intermediates typically only run a few rigs year-round.

"From a corporate perspective, we have seen the emergence of multinationals in the Duvernay and Montney, and we have to manage that risk. The basin is transforming into a playground of multinational super-majors and national oil companies who do not depend on the public markets for cash flow. Investors seem to think that there is work coming for oilfield service companies, but the proof is yet to be seen."

The nature and number of foreign transactions in Canada's oil and gas space forces service companies to deal with new entrants. Randy Karren, group managing director, Improve, at WorleyParsons in Canada, termed it a "new game" in the Canadian marketplace. "We are seeing a lot of foreign investment into the oilsands, and we must figure out how to work with new customers who are used to working differently," he said.

A separate issue affecting engineering companies is the changing nature of client expectations given the tighter equity markets and increased competition from international firms. "Rising cost pressures have forced many firms to contract overseas and, while this may allow for a lower per-hour billing rate, the amount of time required to get a project done is much longer," said Kurt Horner, president of Calgary-based Fortress Engineering.

According to John Pearson, global managing director with energy engineering firm Hatch, the biggest change is that clients now perceive the engineering process as a cost rather than an investment. In an era of extreme cost control, producers may feel obligated to go with the cheapest engineering option.

"Engineering is an investment that needs to be phased and implemented properly to generate returns," Pearson said. "If it is viewed as a cost, the tangential effects of improper implementation can cost way more than any initial savings. We pride ourselves on being the lowest cost engineering provider, not through savings up front but by the time it takes for projects to get into production. Unfortunately, there is a race to the bottom on finding ways to take money out of the intellectual property that is delivered, which is flawed logic."

WorleyParsons' Karren notes that few people are doing detailed design work. He explained, "Most of our work is for customers who have a reservoir capability, and have a plan of how they would like

Lyne Ricard

Director, Oil, Gas and Biofuels

BBA

Can you give us a brief introduction to BBA and its role in the oil and gas industry?

BBA is expanding its service offering into oil and gas market. The company has always had an interest in highly technical projects: we began in Quebec doing engineering work for utilities and expanded heavily into mining and metals. BBA's expansion is done through growing local presence and we have now 9 offices across Canada. Working in a country rich in resources, the oil & gas industry is a natural area of interest for our experts from all engineering disciplines.

What are some of the strategic objectives to grow BBA's presence in Western Canada, and what type of clients are you looking to work with?

BBA takes a relationship approach to client development in that we will look for customers and projects where we could potentially add value across different aspects of their business. We have opened 9 offices across Canada including Vancouver and Toronto as well as Calgary. Our strategy is to continue with our recognized strengths in electrical, automation and advanced control engineering for oil and gas companies and expand our services from there. We also differentiate from other engineering firms by our expertise in commissioning and support to operations. We are therefore attracted by clients that value this strength.

How have the expectations of clients changed with regards to the trend of going overseas for engineering work?

Most companies are well served by local engineering firms, but we see a definite increase in attribution of work to overseas engineering firms. There was previously so much work in Western Canada and this drove the local cost of services high with a downward slope in the quality of execution. This encouraged the producers to search for alternatives. This openness is creating opportunities for a firm like BBA.

What particular opportunities are most exciting to BBA in Western Canada?

There is so much happening in Canada. It is very exciting to be participating, especially for a company like BBA that is recognized for its expertise. We will concentrate on helping our clients in the development of their projects and as well, continue at working in the modernization of older facilities to expand the useful life. We have great interest and capabilities to improve safety, efficiency and reliability of existing plants, derived from our 'hands on' strategy. It is important for the producers to operate reliably with stable maintenance cost to finance the large capital projects and we see so much opportunity in contributing to this aspect. •

to extract oil. WorleyParsons helps with some of the pilot plants, but the client owns the process itself."

While the clients and expectations within the large-scale oilsands projects may be changing, some companies see more opportunity in smaller projects overlooked by the WorleyParsons and Hatches of the world. Rangeland Engineering, a mid-sized Calgary-based engineering firm, is targeting projects on the fray of production, such as rail transport. "The majors are looking for $1-billion projects, but that is not our game; we work on projects that are $300 million and less," explained Ron Daye, president and CEO of Rangeland. "When these larger players are looking at these larger projects, they are not paying attention to the off-sites or smaller projects, whereas we do."

The amount of work to come in the service sector means that it represents an attractive sector for merger and acquisition opportunities. According to a recent Deloitte report examining oil and gas M&A activity, the global oilfield services segment was very active during the first half of 2013, with the number of transactions rising to 51 from 39 as compared to the previous year, at a total value of C$11.1 billion.

Not surprisingly, Calgary-based advisory firm Stormont Energy Partners is eager to be a part of this heightened activity. "Many of the companies that we see buying in Canada want to have exposure to infrastructure, in particular to oilsands infrastructure, including construction capabilities, fabrication or instrumentation and electric-service companies," explained Dave Munro, managing director of Stormont, a financial services firm focused on oilfield services transactions.

"The development of the oilsands is a human- and capital-intensive business. What we have seen is that the scale of that operation and the ability to modularize, meaning building off-site and assembling the pieces at a later point, is becoming more attractive. The process was much more complicated before and this scared people out of the sector because it involved huge capital costs and risk from the service perspective. Today, we can put our arms around the difficulties; we can break up the process, which allows for the creation of many service companies to provide service in an area." •

Ron Daye

President
RANGELAND ENGINEERING LTD

Can you provide us with an update to Rangeland Engineering since we last saw you for our 2011 report on the Canadian oil and gas industry?

Three years ago our Rangeland staff size was around 70 people and today we are about 200. We are still primarily in oil and gas and our overall makeup has not changed significantly except that we have a heavier focus on NGLs and oil terminals and API storage facilities. Our primary markets are clients that deal with NGL liquids though we do some heavy industry and mixed manufacturing work. We have also gotten very involved in rail trans loading and transportation systems, where we see a lot of potential in the future.

Rangeland has experienced 40% to 100% growth since it was founded in 2001. How was Rangeland been able to sustain this growth?

Many of our clients are the majors and we work toward Master Service Agreements with these companies. We typically begin work by doing one or several projects, and with these service agreements we are able to continue our work through needed upgrades and modifications. The growth that we have had is in part due to our NGL business. We picked up a landmark project that is one of the largest NGL fracks in Western Canada in the last 20 years and we are currently working on the detail design for it.

A number of firms offer similar services and EPCMs are also beginning to move into this space. How does Rangeland Engineering differentiate itself from the competition?

The NGL business, which is where I began, is finding its time now and Rangeland is taking advantage of this. The rail trans loading and terminal work started to take off five years ago when we were working on one of the bigger projects in the province and we have since been picking up unsolicited clients. In both cases, we were in the right place at the right time.

In addition, the size of our firm fits with what our clients find desirable. We do compete with the Worley Parson types, but we get the smaller projects. The majors are looking for $1 billion projects, but that is not our game; we work on projects that are $300 million and less. When these larger players are looking at these larger projects, they are not paying attention to the off sites or smaller projects, whereas we do. In addition, our overall average charge rate to the client is lower because we have fewer overheads. When it comes to the client, we are cost effective because our costs are simply lower; our chargeability efficiency is 99.8%.

Rangeland uses sophisticated programs in the design process for its various projects. Can you walk us through this process and what advantages it offers for the clients?

Our first step is to establish the scope of work, which is not as straightforward as it seems. Clients may not know exactly what they want so we work with them to understand what they are trying to achieve. We then get into the detailed design for site development, civil structural works, mechanical equipment and piping, electric and controls. Essentially, we do every aspect of the design using a 3D drafting package to model all aspects. This 3D rendering allows us to put the design up on a screen and review it as if we are flying and can see behind the pipes and below underground. Using this technology, we can involve operations and construction and maintenance people at the early stages in the design process and helps us to work through issues in terms of design, constructability, maintainability and even safety before we even finish our design.

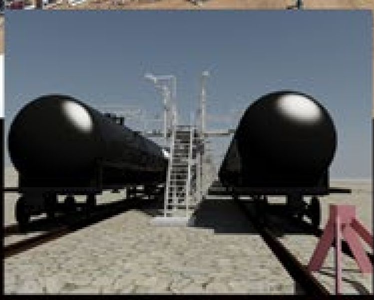
Technological innovation has taken on a new role in Canada by opening resource plays that were previously inaccessible. How does innovation play into Rangeland's designs?

The large rail trans loading facilities are not new, but with so many coming on, the technology, whether it is loading arms or vapor displacement systems and controls, is changing. Typically, a rail facility 10 years ago would handle 10 cars per day. Today, we are developing systems that are handling 100 to 300 cars per day. The piping and pumping systems are very large and the process that you must develop to accommodate this size must become more innovative. We have been working with specialized vendors that supply equipment to this industry and we are working to make the systems more efficient through innovation in the design.

In the NGL business, we are always innovating to redesign the facilities to make them more efficient as well. In our work, we upgrade and modify existing facilities to increase capacity from between 10 to 20%. Rangeland has seen a significant increase in this work in the last five years.

In what direction do you see Rangeland moving in the next five years?

We are honing in on what we have by developing internal systems and procedures. Rangeland is becoming more of a tightly run ship and one day we will sell it. We are considering moving into other areas such as heavy oil and SAGD given the amount of capital that has been spent. Now we are seeing that companies in these areas are spending to maintain and improve their operations. Given our expertise in infrastructure with off sights and terminals, the SAGD processes and facilities component is just one more step from what we already do. •



Dave Munro

Managing Director
STORMONT ENERGY ADVISORS

How would you assess cross border investment between Canada and the United States for the service industry?

If you are a buyer or investor in a sector, be it a private equity fund or a strategic, you are looking at a portfolio of opportunities beginning with those in your own backyard. When that backyard is the United States, there is a strong gravitational pull towards that market and a lot of Canadian firms look to the US market for diversification and Canadian opportunities have a hard time getting the attention they deserve. That said, like in any market, we have found that there are points in time when the United States market is a compelling target market, others when it is not a target rich environment or when it becomes so competitive for transactions that valuations get bid up to a point where rational buyers need to look elsewhere.

We believe we are at that point in the cross-border cycle now so we are seeing more investment in Canadian companies by both strategic buyers and US based private equity. Canada offers an abundance of mid-market companies that can serve as platform investments into lucrative secular plays such as oilsands or LNG or diversification strategies for portfolio investment.

There has been an increase in M&A activity for service companies in 2013. What factors are making these services companies so attractive to investors?

There are a number of longer-term secular themes that are driving M&A activity in Western Canada, but probably the biggest are LNG and oilsands. On the LNG side, British Colombia is home to several of the most significant natural gas plays in North America. Up until now it has been unattractive due to high shipping and finding and development costs, however, with LNG export capacity on the horizon from Kitimat and/or Prince Rupert on the coast, investors, particularly those that have a long-term view, can see that this gas is going to be one of the closest resources to market and are investing in the regional markets that will benefit from the development of the resource that will be feeding these facilities. The level of activity is accelerating as the level of transparency regarding these projects improves.

On the oilsands front, the driver for M&A has always been and will continue to be the exploitation of these massive reserves and the significant capital required to get it to market. Many of the companies that we see buying in Canada are looking for exposure to infrastructure, in particular to oil sands infrastructure, such as construction, fabrication, maintenance, and instrumentation service companies.

That said, there are so many facets to developing remote resources that the investment opportunity in services is significantly broader and more sophisticated than many people expect, so while it is the mega project construction projects that get the most attention, sometimes it is the hidden gem providing ancillary services that is the best investment opportunity. Consider for example companies that are doing modular construction where much of the fabrication is done offsite and then trucked to a remote location for final assembly or a company that provides healthcare services to remote drilling locations – these are recent opportunities we have been involved in and the deals done are major wins for both the buyers and sellers.

We have been seeing that private markets are becoming more of an influence within the oil and gas space. How well do you think service companies fit in the private market model?

Most Canadian service companies fit the private model better than the public model and this is largely due to size. If you look at what we define as United States middle market energy service companies, you would be looking at an enterprise value range of say $50 million to $500 million. There are companies in that range in the US but that is not the case here in Canada where the markets are more regional and dominated by smaller players so our mid-market range is smaller, call it $10 million to $50 million. In our view, unless a service company can command a market cap well in excess of $100 million it doesn't make sense for them to be publicly traded since they will be hard-pressed to realize any of the advantages that come with being public – they will be too small to attract much institutional interest or analyst coverage so their liquidity will be constrained and they will have all the headache of public market governance and overhead costs – it is really not a compelling option. The flip side of this of course is that the market for private M&A and private equity investment in Canada is very robust.

What is your vision for Stormont in the next five years?

We would like to be the incumbent boutique M&A firm for private energy service companies that are looking to raise private capital or divest. We also hope to be the go–to firm for foreign investment into Canada. We do some buy-side work for foreign strategic or out-of-province strategic buyers that need help to understand the local landscape. These customers know that they want to invest in a service company here in Canada but do not know where to start, which is where we can provide our services. •

Wade McGowan

President and CEO
IRONHAND DRILLING INC.

What role does Ironhand occupy within Canada's drilling space?

Ironhand is very focused on resource-style plays like the Montney, Duverney, and Cardium; we see the biggest demand here for equipment. One of the challenges is to evaluate in advance what the upstream client will want in this basin. We can offer our opinion, but sometimes clients are looking for a significant amount of excess capacity. We push the platform and capacity of the telescopic double market, which provides Ironhand with the broadest spectrum of opportunities in resource play drilling. There is a development now where upstream clients are asking for lighter triples. The service sector is deciding whether it should be building more triples or push the envelope on the heavy teledouble, and Ironhand is currently pursuing the latter strategy. We feel that with this approach we can capture a big chunk of the plays; however, as the basin slips to the south and west, it gets deeper, and the Montney and Duvernay are not immune to that dip in geological formations.

How has Ironhand's client profile changed in conjunction with the wider changes that we have seen in Canada's oil and gas sector?

When Ironhand began in 2006 there were over 100 junior and intermediate companies; now, there are less than 50. There has been a demographic shift in our client base. Historically we have not pursued the larger multinationals or NOCs, but we recognize that as we add rigs, those doors will open. Large upstream companies work with large service companies due to elasticity of supply. Juniors and intermediates typically only run a few rigs year-round. From a corporate perspective, we have seen the emergence of mutinationals in the Duvernay and Montney, and we have to manage that risk.

Where do you foresee the most growth occurring for Ironhand within your niche in Western Canada?

Ironhand has reached a level of maturity as a company where we now want to have a contract in order to continue adding to our fleet. Every company reaches a level where the EBITDA margins begin to level, so adding more rigs does not materially improve margins. The Canadian industry is very cyclical for reasons that do not exist in other regions, such as seasonality. We also come in and out of investor favour, and when we are out of favour the contract terms can soften as well. Ultimately, we need to see a robust environment where we can get a drilling rig build contract. Ideally, we would like to see at least one if not more rigs added to our fleet in the near term.

The Western Canadian Sedimentary Basin has a number of large, multinational drilling contractors who are very active. What value does a smaller company add in this context?

Ironhand currently represents less than one percent of the Western Canadian Sedimentary Basin drilling market, so there is a lot of opportunity for continued growth in the basin for us. We are a classic niche regional contractor with a focus on the telescopic double drilling rig platform, whereas most of our public competitors have international exposure and provide single, double and triple technology. The focused niche contractor still has good footing here in Canada.

Where would you like to see Ironhand Drilling in the future?

Ironhand is evaluating the triple market, trying to determine what the optimum triple would look like for our potential clients. We reinvest most of our cash flow back into our existing and new assets. The pressure is on us to find contracts that will allow us to expand. We feel comfortable based on our position in the market that we can grow the company in a meaningful way that contributes to the industry. •

Randy Karren

Group Managing Director Improve
WORLEYPARSONS

What role does WorleyParsons play in Canada's oil and gas sector?

WorleyParsons, via acquisition, has been in Canada since 1973. The thing to remember is that WorleyParsons developed into a global company by two growth mechanisms: acquiring companies and partnering with other companies that had complementary capabilities. These strategies have very much helped our work in the oil sands in particular, which requires companies to have a high degree of collaboration and cooperation. All the companies in the oil sands today are trying to operate their own SAGD operation, and are consuming and processing water independently. There has to be cooperation in the oil sands, and WorleyParsons can be the conduit for them to do so. We work with almost every major company in the oil sands today.

What type of demand trends is WorleyParsons experiencing within the breadth of services that the company offers?

WorleyParsons is a leading provider of professional services to the resources & energy sectors and complex process industries. Our services cover the full asset spectrum both in size and lifecycle – from the creation of new assets to services that sustain and enhance operating assets. From small brownfield services contracts to mega greenfield projects, WorleyParsons has the skills and technologies to address all challenges.

In addition to our core engineering services, we also provide direct-hire construction to our customers. As far as demand patterns, most projects are currently in the front-end development phase and few are doing detailed design work. This is likely true across industry; companies cannot raise enough in capital to move into detailed design and construction. We are a company that has to adapt based on what is in front of us. If anything were underutilized, it would likely be infrastructure and environment business. People view it as discretionary spending. Cost management has become the main area of focus for customers, and when financing is scarce, people cut back on non-core spending.

Most of our work is for customers who have in-house reservoir capability, and have a plan of how they would like to extract oil. WorleyParsons helps with some of the pilot plants, but the client owns the process itself. Oil sands are very much predicated on the reservoir, and we as a general course of events do not accept the process guarantees. We are currently working on Husky's Sunrise project on an EPC lump sum basis through WorleyParsonsCord, our construction group, with WorleyParsons performing the engineering. We also work with ExxonMobil on Aurora tailings management on the Syncrude site. We are performing engineering in Calgary and Edmonton, fabrication in our facility by Red Deer, and construction at the site in Fort McMurray.

Andrew Wood, WorleyParsons' CEO, mentioned recently that the Canadian division had underperformed to expectations. What effect does this have on the significance of WorleyParsons' Canadian operations going forward?

Both the Canadian and Australian operations have been affected by the commodities downturn. We have seen a significant drop off in revenues and spending by resource companies in Australia. As Canadians, we can learn a lot from what has happened in Australia: the cost of doing work in Australia is very high. If we are not careful, it can happen in Canada as well. The Canada business had a growth target in our revenue and EBITDA plan but were not able to get there. Even though we achieved some growth, we were not able to reach our planned target, so in that context Canada underperformed. The disappointment that our CEO discussed is related to the fact that WorleyParsons is a growth company.

We have seen a number of Australian LNG projects hit with cost blowouts and delayed timelines. Is the same trend affecting Canada's oil and gas industry?

Five years ago, all the stories about oil sands projects in Fort McMurray were that they were way over budget. Are we paying for that now? To a certain extent, yes. I think that oil companies have all learned that they have to be more cautious and have far better control than they had in the past. It was not a matter of high prices but of inefficiency.

Rig counts in Canada are slowly increasing compared to 2012 levels. Is this a sign that confidence is returning to the oil and gas market?

In previous years, I would have said yes, but I am not so certain that the case is true today. It depends where the rigs are and what they are drilling for. For example, shale oil and gas require a lot more wells, but that does not require much more investment. I am less confident in using rig counts as an indicator of market health now than a few years ago. As far as what it will take for confidence to return, there are a lot of geopolitical factors. The fact that Canadian producers cannot get the oil to market is a problem, and they are paying a higher price differential on their crude. Until they can figure out transportation issues, we cannot produce more oil. Five years ago, junior companies only had to worry about producing the oil to generate cash flow, whereas today, they must worry whether or not they can sell it, how they get their product to market, and at what price. Also, the shale gas renaissance within the United States is remarkable. If they are able to use shale gas as a heavy transportation fuel, the USA can reduce their oil consumption by about 9 million barrels a day. There are also changes in the demand curve of oil: people are using less of it, while supply is increasing. All things considered, there is a high level of uncertainty that permeates the oil market.

What are some of WorleyParsons' strategic objectives in Canada over the next few years?

It is a new game in the Canadian marketplace now. We are seeing a lot of foreign investment into the oil sands, and we must figure out how to work with new customers who are used to working differently. WorleyParsons has recently announced a few partnerships with Chinese companies and their subsidiaries here in Canada, and we will continue to pursue both foreign and domestic opportunities. •

Brent Conway

President
TRINIDAD DRILLING LTD

In our last report we discussed the benefits to being a first-mover on new drilling technology, as the proportion of complex wells increases what kind process refinements has Trinidad Drilling been focused on?

Canada and the US tend to be ahead of the technology curve because we are chasing diminishing economics compared to a lot of other basins. Long-reach horizontals have changed the pressure systems around the mud pumps. 1000hp pumps used to be considered large, now we won't even look at building something unless its 1600hp or 1800hp. Where rigs used to be built to handle 3500-5000psi, now in a lot of cases we are building rigs to handle 7500psi. In summary, everything is getting larger: you get out at 20,000 feet, you need a lot of pump pressure, you need bigger tanks to handle the fluids, and you need bigger generators to make it all run.

We are on our fourth or fifth generation of rig moving systems, and we are starting to see more and more use in the field, where we are drilling on multi-well pads. This reduces the environmental impact, it is a lot more efficient for the operator, and it is safer. One of the biggest technology changes to occur over the last couple of years is the ability to use AC technology on an auto-driller. This means that you have control right at the drill bit and complete predictably in how quickly you penetrate the reservoir.

To what extent has market diversification insulated you from Canada's labor challenges, and is it easy to have workers migrate from one jurisdiction to another?

Labor is a constant challenge. Trinidad Drilling has got some advantages because we have a newer fleet than many of our competitors, we have contracts and we are known as a technical driller. In our industry, the career progression generally starts at the smaller rigs and then moves up to the bigger rigs, so we are at the top of the food chain. That combined with more stable activity levels and a tier-one client base really does provide us with some advantages in being able to attract and retain crews.

What do you consider to be the most exciting plays in Canada at the moment?

I think right now the big growth area in Canada is the LNG opportunity. We have had proposals to build some equipment from Apache. There are significant hurdles in terms of getting the approvals to build pipelines, and decide who is going to build them, but it will happen. I think it will follow the same type of strategy as we have seen in the past, the E&Ps will figure out how they are actually going to drill and complete those wells, and then there will be a much bigger ramp up. It makes sense to get this trapped gas off the continent and into a market where it is going to get a decent return, but it is going to take some time.

In 2011 you said that access to capital for drillers was behind the curve off the back of the global financial crisis. We have since seen equity markets become even tighter. Can you tell us how you've managed your balance sheet under these conditions?

From 2011 to 2013, we voiced to the market and our investors that we wanted to bring our debt to EBITDA ratio down. We have done that. We are now below 2:1; the longer-term goal is to get to either side of 1.5:1. The market looks at us now and sees sizable free cash flow, showing up this year and into next year. Even if you look at a consensus number of around $200million, that equates to the potential for us to add 10 big Triples to our fleet.

The markets today are still not putting a great valuation on any of the drillers, but we typically get a better than average valuation because of our fleet style and our contracts. The market is really not paying us to go and issue equity and grow the business like crazy, but when you are using internally generated cash flow then it makes all the sense in the world to use that and build some assets. We are disciplined in making sure we do not do anything to send our debt ratios the wrong way. In 2013 and 2014, we are going to have more opportunity than we have capital, so it is a question of allocating the capital we do have properly, picking the right projects, and then executing them.

Can you give us a run down of your expectations for capital expenditure, market diversification and growth for the rest of this year?

This year we have publicly announced capital expenditure of $70 million to $80 million – that will be divided between finishing a couple of rigs that we started last year, some maintenance capital, and upgrading existing rigs – so we have got free cash flow that we can still put to work. On diversification, there is no mandate that we put capital into a particular jurisdiction, it is all opportunity and return driven, but we are looking seriously at some new markets. Saudiis heating up and it has a lot of tenders are coming on, so that would make sense. I think Mexico will come back; they are going to add a lot of rigs going into 2014. There are other parts of the world too that might make sense but for us it always tied to the risk and return equation. •

Jim Hill

CEO
GASFRAC

As CEO, your stated focus for GASFRAC is to "refocus, resize and reenergize." What is your strategy and timeline to accomplish this?

GASFRAC identified four aspects that we needed to accomplish, a good portion of which has already been done. The first was to get the appropriate cost structure in place, which we did rapidly and have reached a point where we are quite comfortable. The second was to assure that execution in the field increased in terms of reliability. We set for ourselves a target of 100% and today we are consistently at 98%. The third point was to incorporate feedback from our customers in terms of areas that they identified where we could add more value. These areas were our Hybrid LPG delivery system and our engineered fluids. From the fourth quarter of 2012 through the first quarter of 2013, we focused on these two product areas and are now ready to deliver. The final item is to increase the adoption of our technology. The first three platforms were necessary to have in place so that we could aggressively go out and target customers. Our sales process is to focus on a same number of companies and work to build solutions for those customers on a somewhat customized basis. We deliver 80% of GASFRAC technology but cater to each customer's needs based on the reservoir and supply chain process for building field development. We are looking to become true partners with our customers by understanding the details and what is critical and then delivering on it.

In terms of Hybrid LPG, how competitive can GASFRAC be on a cost level compared to what else is on the market?

We are not selling as the lowest cost provider. We will be the best value add provider, which will then equate to lowest cost. When we began, HD5 propane was the fluid that made the most sense and we needed to demonstrate to the market that it could be done safely. We had the science but needed to prove that this worked in field, which we have done. We have progressed to fracks with a mixture of propane and butane and have even moved to a C4 plus fluid for some of our work in the United States. On the hybrid side, we are also able to add a refined frack fluid and gelled LPG, which is not necessarily propane, but a C3 to C6 mixture as a base. With our customer, we are able to optimize the fluid as both a frack fluid and as a recovery fluid and by doing this we are able to generate cost savings for our client.

In an era where the majors and intermediates are focused on upfront costs, how receptive are people to GASFRAC's products?

We have found that people are receptive to our products because they want to understand them and are always looking for solutions. There is an upfront cost because of the fluid, but considering that in Canada, some companies do use frack oil, which is C$1,200 a cube, and LPG is C$400, there exists a marketplace where our fluid is less expensive; in the US, this is not the case because they typically have not used frack oils. However, as we look at more difficult formations, we see that water is not working, and companies are looking into other options. We are striving to make the whole GASFRAC system work, not simply the technology or the fluid. The challenge we have is that a typical frack is sent to a completions engineer who is incentivized by the lowest possible cost and not primarily focused on production, which sits within another silo in the oil company. We need to make sure that the completions department understands the delivery systems and how to fit them into the supply chain. The other people that we need to sell to are those involved with exploration because they are the ones that are going to see the benefit of the technology.

Currently, we see that the oil and gas industry is in a down cycle. On a macro level, what signs are indicating that a higher comfort level is returning and what is your outlook going forward?

The cycles are not nearly as pronounced as they have been in the past. This is because we know where the hydrocarbons are and the risk is now development rather than exploration related. In the past eight years we have gone from being a natural gas basin, to today largely focused on oil and liquids. We continue to have lots of natural gas and as LNG is being developed, we have the potential to have a basin that is running on all "eight cylinders," which we have not seen in 25 years.

For GASFRAC, what are your key strategic objectives and where would you like to take the company in the next couple of years?

Our core strategic initiative is to increase adoption through targeted sales and also continued enhancements to our technology to create value add for our customers. When you consider that the fracking industry is 60 years old, it has had a lot of time to develop and we see a lot of space for improvement with the technology we are providing. •

Green Technologies

New solutions to sustainability

Alberta's natural hydrocarbon wealth – which accounts for approximately 98% of Canada's oil reserves – has brought the province revenue and jobs. It has also brought it an extraordinary amount of criticism regarding its environmental record. This is perhaps unsurprising: Alberta's oil reserves are predominantly concentrated in the oilsands, which require more energy-intensive extraction methods than other reserves around the world.

However, this criticism is, in many ways, unfair. The province of Alberta is, in fact, leading the charge to increase production in an environmentally sustainable manner. In addition to already extant monitoring systems, in February 2012, the Alberta government announced the Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring. The plan seeks to gain an increased understanding of the long-term effects of developing the oilsands and ultimately detail how the Canadian and Albertan governments will implement a world-class monitoring program to ensure that the oil sands are developed in an environmentally responsible fashion.

> "Our objective is to reduce the volume of the tailing stream into primary components and eliminate as much water and non-valuable sands as we can so that we can get down to valuable liquids, which are bitumen and solvent, and valuable solids, which are the valuable minerals… The industry is prepared to do whatever can be done to reduce the environmental footprint, but at the same time the industry needs to be practical about what is doable and how long it will take."
>
> **- Scott Nelson, President and CEO, Titanium Corp.**

One of the areas in which Canadian innovation is being applied is oilsands tailings management. "One of challenges of oil-sand tailings ponds is the length of time they need to be reclaimed; the more water content you have, the longer the process takes," explained Dave Kerr of global environmental sciences firm Golder Associates.

Canadian companies are pioneering novel approaches to separating oil from sand, and dewatering mine waste. Hatch is working on a method that seeks to separate oil from sand without using water.

"N-Solv is a solvent-based in-situ technology that uses a pure solvent as the method of liberating oil from sand. We have proven the technology in a lab and are now applying it at a pilot project on one of Suncor's sites. If it works, it uses 90% less energy and actually produces water by liberating it from the ground. You are left with a recyclable solvent that eliminates the use of natural gas to burn steam. It leaves you with truly 'green' oil," said John Pearson, Hatch's global managing director, energy.

Golder Associates uses paste technology in a number of oilsands mines in Alberta. "The paste process is essentially the process of de-watering material waste," explained Sue Longo, associate, paste engineering and design, Golder

> . "Alberta was the first jurisdiction in North America to impose a price on carbon emissions; Alberta is leader on tackling its emissions. The Alberta regime is focused on about 100 large CO2 emission sites that represent about 80% of the province's emissions and focuses on reducing emissions intensity. It features a $15/tonne price on CO2 equivalent and the government has indicated it is considering increasing the price. The government is attempting to more aggressively tackle growing emissions but this is a challenge because our economy and population continue to grow relatively rapidly compared to most places in North America. We hear a lot about what the European Union has done in this regard, but the price of carbon in Europe has collapsed since the market was established to five or six dollars per tonne because so many free permits were issued."
>
> **- Gary Leach, President, the Explorers and Producers Association of Canada (EPAC)**

Associates. Historically, waste was mixed with water and deposited into tailings ponds, but paste separates solids from water in the waste management stage rather than during the extraction phase.

"The technology allows for drier deposits that can be managed with a smaller footprint with a positive topography. For example, run-off is manageable, and there is nowhere for ducks to land because there is no water. Surface disposal has taken a little more time to become mainstream, especially in the oilsands; nobody wants to be the first to try something new and unproven. You can always make the process work depending on how much money you want to spend."

However, the use of new technologies and approaches can only go so far in reducing the impact that oil and gas extraction has upon the environment. Canadian companies are arguably under greater environmental scrutiny given the international perception of Canada's oilsands as "dirty oil." It is worrying, then, that companies like WorleyParsons are seeing a decrease in demand for environmental services, viewed as discretionary services in an era of tight cost control.

Business performance and environmental management are inextricably linked, according to Golder Associates' Kerr. "For a long time, the environmental component of the approval process was seen as a necessary evil, but that has changed rapidly over last 10 to 15 years. "Today, there is a much stronger emphasis on environmental design as well as engineering design, with projects first looking at the best way to develop a resource technically and then linking that to environmental and social inputs, the constraints and opportunities. Corporate social responsibility requires the demonstration of a commitment to three segments of sustainability – environmental, social and economic – and these are all playing a much stronger role even in the earlier stages of concept development," he said. •

David Kerr

Principal North America Oil and Gas Market Sector Leader
GOLDER ASSOCIATES

Can you provide us with an overview of Golder's role in Canada's oil and gas industry?

Oil and gas is Golder's second-largest sector globally after mining and is a major part of our current effort in terms of developing our business. Our focus areas across North America are unconventional gas, namely shale gas; oil sands; pipelines; and offshore. What is common to these four areas is an upstream exploration focus and that our clients tend to be multinationals. One of the multinationals is our largest client globally and we do a substantial amount of work for the top 10 majors. As part of the focus on our client base, we have developed teams specifically for these clients. These teams are comprised of people with technical expertise, as well as client relationship resources, communication, and fully integrated services. The services that we offer are engineering, environment, design and construction, and social and public consultation. At Golder, we offer an integrated service package with a technical capability in each of these areas.

In terms of your four focus areas, what demand trends are you seeing from your North American clients?

In the Canadian context, there is no question that oil sands remain the largest area of investment in the industry from both domestic and foreign sources. I would be surprised if oil sands did not remain a major focus of the industry's growth going forward. Golder continues to have a strong market presence, and there is a continuing need for our services that goes beyond development to include environmental permitting and operations. In addition, the regulatory environment is such that there is a great emphasis on internal compliance standards in terms of corporate responsibility and the need to demonstrate a social license.

On a company level, how well aligned are economic improvement and performance with environmental management?

Business performance and environmental management are inextricably linked. For a long time, the environmental component of the approval process was seen as a necessary evil, but that has changed rapidly over last 10 to 15 years. Today there is a much stronger emphasis on environmental design as well as engineering design with projects first looking at the best way to develop a resource technically and then linking that to environmental and social inputs, the constraints and opportunities. Corporate social responsibility requires the demonstration of a commitment to three segments of sustainability, which are environmental, social and economic, and these are all playing a much stronger role even in the earlier stages of concept development.

What innovations have you been seeing in terms of waste management and environmental initiatives coming from the oil sands in Canada?

One of the areas that Golder has been involved in is something called Waste Management Technology, a specialty area derived from our mining expertise. Over the span of 30 to 40 years, mining is an area where we have invested heavily in terms of helping our clients deal with wastes that were liquid rich and therefore difficult to mange. During the mining process, when you excavate the product you are left with large holes underground and tailings on the surface. How do you reverse this? We developed a system that essentially looks at how we can address the issue, not just in mining, but also oil sands, where the technology is aimed at dewatering the material more efficiently and quickly over time. This ultimately helps in the reclamation process. One of challenges of oil sand tailings ponds is the length of time they need to be reclaimed and the more water content you have the longer the process takes. Using our expertise in mining, we have been able to apply this technology to oil and gas operations.

We are involved in landscape scale reclamation, involving engineering and environmental design of both terrestrial and aquatic habitat reclamation to support a variety of end land uses. This includes an integrated approach to terrain, soil, vegetation and water management in the reclamation of self- sustaining habitats and functioning landscapes.

What are some of the most significant areas of growth for Golder's Canadian oil and gas business going forward?

Water is everywhere as is the need to effectively manage it. We believe that investing in our water resources technical capacity is an area of growth across the board. We have also been investing in other areas related to environmental services, such as air quality. We are looking at developing capacity, as there is a chronic lack of people with appropriate expertise. The social and consultation piece of our work is increasingly becoming important. Without a good understanding of this, the other pieces of these integrated services become quite moot. We see this as something that needs to be addressed in the future as people become more aware of issues and social media becomes more readily available. Any consulting company that can get ahead of this and embrace it in a range of services will be well served. •

Going Green

Canada means business

From the soaring Rocky Mountains carpeted with Evergreens to the steep-sided fjords of Newfoundland, Canada is a land bountifully endowed with natural beauty. But the country's riches do not end there. Behind Venezuela and Saudi Arabia, Canada is ranked third in the world in crude oil reserves and contains enough natural gas resources to satisfy Canada's demand at current levels for over 100 years. This abundance has allowed for the development of a sophisticated oil and gas industry that directly and indirectly employs over half a million people in Canada and serves as the largest source of private investment in the country.

As a major driver of the national economy, the oil and gas industry will continue to have a strong presence in Canada for years to come. Moreover, the sector will likely expand with the construction of new pipelines and further development of the country's oil sands. However, as the world looks to reduce its impact on the environment Canada must strive to balance demands for cleaner energy with economic needs.

Accounting for 98% of Canada's oil reserves, predominantly contained in the oil sands, the province of Alberta is leading the charge to increase production in an environmentally sustainable manner. In addition to already extant monitoring systems, in February 2012 the Alberta government announced the Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring. Designed to be fully realized by 2015, the plan seeks to gain an increased understanding of the long-term effects of developing the oil sands and ultimately detail how the Canadian and Albertan governments will implement a world-class monitoring program to ensure that the oil sands are developed in an environmentally responsible fashion.

The government is not the only party interested in developing the oil sands with environmental sustainability in mind. In March 2012, 12 major producers, including BP, ConocoPhillips and Shell, formed the Canada's Oil Sands Innovation Alliance (COSIA) to "enable responsible and sustainable growth of Canada's oil sands while delivering accelerated improvement in environmental performance through collaborative action and innovation." Since then, two additional members have joined the ranks, bringing the alliance's representation of oil sands production to 90%. In this short period of time, COSIA member companies have shared over 440 technologies and innovations at a cost of over $700 million.

Through performance initiatives, COSIA focuses on what it has identified as four key Environmental Priority Areas (EPAs): tailings, water, land and greenhouse gases. In one such initiative, the Tailings Technology Roadmap, COSIA identified and prioritized around 30 technologies out of hundreds that were reviewed. One of these innovations was Titanium Corporation's Value-from-Waste technology. As Scott Nelson, president and CEO of Titanium Corporation, explained, "the tailings stream comes out of the oil sands process, which in this case is froth treatment. At that point, we intercept those tailings and redirect them before they go to the tailings pond and we reprocess them. Our objective is to reduce the volume of the tailing stream into primary components and eliminate as much water and non-valuable sands as we can so that we can get down to valuable liquids, which are bitumen and solvent, and valuable solids, which are the valuable minerals."

If implemented in Alberta's four oil sands mines, Titanium Corporation's technology could recover as much as 28,000 barrels a day of residual bitumen and solvent in addition to commercially viable heavy minerals. Not only is this technology a boon from an efficiency standpoint, but it also reduces the impact to the environment by reducing greenhouse gas emissions by 20%, volatile organic compound (VOC) emissions by 80% and river water use by 25%.

Although there is now a stepped-up effort on many fronts to improve environmental sustainability in the oil sands, a few companies, such as Golder Associates, are no strangers to the business. Founded in Canada in 1960, Golder Associates provides consulting, design and construction services in earth, environment and associated areas of energy. One area in which Golder has been active for the last several decades is waste management. Applying years of experience in the mining industry, Golder has transferred its waste management technology to the oil and gas industry where it seeks to dewater material quickly, thereby helping the reclamation process. As one of the challenges with oil sands tailing ponds is the positive correlation between the amount of water and length of time for reclamation, managing this aspect is key to improving the process.

While Canada is continuing its work to reduce the impact of the extraction industries, it may not be progressing at the pace that environmental groups would hope to see. As Canada stands on the brink of a new frontier in terms of increased oil sands production and transportation, the industry will have to strike a balance between environmental conservation and growth, best said by Scott Nelson: "The industry is prepared to do whatever can be done to reduce the environmental footprint, but at the same time the industry needs to be practical about what is doable and how long it will take. Everyone is looking to see where they can be more efficient, but the process is the process: it uses a lot of water and is energy intensive in many ways. But Canada is competing against other oil sources around the world and we have a great opportunity to improve and reduce, but the option of just standing still and choosing to not develop until there's a magical solution is not a good option for the country or consumers." •

This article was taken from GBR's weekly newsletter and blog, the GBRoundup. To subscribe to this newsletter, or view other articles and exclusive interviews, please visit gbroundup.com.

Patricia Nelson

Vice Chair
IN-SITU OIL SANDS ALLIANCE (IOSA)

In 2011, some of our respondents said the industry had lagged in communicating its commitment to environmental protection, do you think things have progressed since then?

There have been tremendous inroads made on the communication side to show the process and the progress that the industry has made. Our environmental record cannot be matched anywhere else, that is because of the government that is in place, and the commitment by the industry to make sure that regulations are upheld. That is critically important. I have visited projects in other jurisdictions that would never get licensed here, that goes from conventional plays,, to heavy oil plays, to transportation infrastructure and pipelines, to refining. Alberta put in place a body that regulates our industry, and industry becomes? Self-regulatory as well; we make sure that we are ahead the curve.

IOSA has participated in many conferences over the last couple of years to share the Alberta oil sands message and show how we are dealing with some of the toughest challenges in very challenging conditions. We have done a tremendous job, which is evident from actual production to emissions reduction and the successes in reclamationincluding wetlands for migratory birds and trails for wildlife.Alberta has appropriately dealt with these important conditions ahead of everyone else. Unfortunately, what sells the news is the near miss; when you are doing things well it does not make headlines.

It appears the job creation aspect of the Keystone pipeline is getting significant play in the US. Has this been a key part of IOSA's advocacy work?

Over 9 million direct jobs are related to the trade between Canada and the US and the biggest contributer is the energy trade. When people in Illinois, for example, realize that Caterpillar supplies all of the big equipment to the oil sands, and all those factories that are there are dependent upon oil sands development, they are amazed. When we met with a Senator from New York, he first commentedthatthere was no impact coming to his state from the oil sands. I said, where do you think the money came from to develop our resources—New York investment houses. All of a sudden the lights went on. This is a long term relationship, from the senator to the guy with a small refinery down in Louisiana that has retrofitted his plant to carry heavy oil. By going down and talking to the people who are on the sites, in the communities and small towns, who are dependent upon the continuation of the relationship, we have been able to build awareness and counter the fear-mongering of some of the vested interest groups.

We will keep supporting Keystone.We think it is a tremendous opportunity for the US. But it is not an either or—we are also going to go to the Pacific and we are also going to go into the Eastern market place because we are adding twomillion barrels per day production now and then another two million barrels in the near future. We do not have the domestic base to absorb that, so naturally we are a net exporter.

Premier Redford has proposed a 40/40 carbon reduction scheme. Are you in favor of this as a mechanism to reduce GHG emissions at the oil sands?

The premier hasproposed that as one scenario. There has been dialogue about what is necessary to meet Canada's emissions commitments for 2020 and 2050. Different scenarios have been floated by various people. On the in-situ side—unique to North America and I dare say anywhere else—we use a lot of co-generation, and as a result, We are able to take clean natural gas and create our own electrical generation to run our facilities. By doing that we see emissions cut by as much as 50%. Today in Alberta, of our total electrical generation, almost 40% of that is from natural gas, which includes co-generation. This is a story that needs to be told.

The other thing that is interesting is the opportunity to create additional electrical generation on site and add that capacity to our electrical grid to reduce the cost of electricity for residential and commercial customers. This is a huge advantage for Alberta, and one that started back in 1999 with the finalization of the de-regulation of electricity in the province, and so it has been a plus all around.

What people forget is that this industry, from day one, has been built on technological updates, enhancements and discoveries. There are teams in these companies that do nothing else but look for better ways to produce this product, because it is a very long-term product and if there is a way to shave off inefficiencies and bring in a more effective way of producing, they will find it.

Can you provide a summary of how you regard Alberta and the in-situ oil industry's approach to environmental management?

The accomplishments that the oil and gas industry has made in Canada cannot be matched worldwide. Alberta has the toughest environmental regulations in North America, and perhaps even worldwide. That is evidenced by the people that come to visit and look out the window and see that big blue sky: Albertans would never tolerate anything less. We actually have legislation that prevents pollution taking place, so the environmental impact is limited right from the start. •

John Pearson

Global Managing Director Energy
HATCH

Can you introduce us to Hatch's oil and gas capabilities and its strategic importance to the company?

Hatch is very dominant in mining and metals, but the company wanted to diversify its service offering. The Energy division of Hatch comprises of two separate units: power and oil and gas. It was an easy transition to manage because our basic skill set was very complementary to energy projects. Hatch looks to tackle the more challenging projects with a view towards constant innovation, and with that in mind, the oil sands were a natural area for us to take on. Hatch's mining expertise also transferred well to shale oil projects all over the world. The other industry we are focused on is gas monetization, such as gas to liquids and micro LNG projects. At the moment Hatch's oil and gas work comprises around 15% of the company's overall revenue. Hatch is part of the consortium building the Gorgon LNG project in Australia, where we have over 800 staff on the project. In order to grow that 15% figure, we need to build up our staff, which is a challenge.

How did your involvement in Gorgon come about, and how does the expertise translate in Canada?

Hatch is a 35% partner in the Gorgon project. We got involved through our acquisition of Kaiser Engineers in Australia who had a long LNG pedigree. There are direct applications for our Gorgon expertise to the burgeoning LNG sector in western Canada. We have structured the company so that once Gorgon tails off, we can capture that expertise and use some of the resources that will be demobilized.

Many of our interviewees have discussed the need to reduce engineering costs in order to win contracts. How does this affect your own profitability?

Reducing engineering costs is flawed logic. The biggest problem we find with the wider client base is that they perceive that the engineering effort as a cost rather than an investment. Engineering is an investment that needs to be phased and implemented properly in order to generate returns. If it is viewed as a cost, the tangential effects of improper implementation can cost way more than any initial savings. We pride ourselves on being the lowest cost engineering provider, not through savings up front but by the time it takes for projects to get into production. Unfortunately, there is a race to the bottom on finding ways to take money out of the intellectual property that is delivered, which is flawed logic.

It seems like client priorities and EPCMs have diverged somewhat, in that clients want faster delivery but lower costs. How realistic are these expectations?

There are a few dynamics that have changed over the past few years. Clients are looking for more surety from their engineering partners. Another dynamic, though, is that they are handing over some decisions to supply chain, which is simply focused on price. Price is the enemy of quality and surety in the outcome of a large-scale engineering project. The last change is management of risk: clients are trying to pass the risk onto engineers, which not only cannot be done but is causing the legal and financial aspects of projects to become much more complex. A recent report from the Independent Project Analysis Institute, who analyzes the health of major projects, found that companies are keeping their end date fixed but delaying the start of their engineering and procurement, leading to an overlap between design and construction and pushing costs further up.

Canada has ambitious plans to double its daily oil and gas production by 2020. How is Hatch planning to capitalize on this anticipated level of growth?

The main way for Hatch to capitalize on this market expansion is by sticking to our strategy of competing only on differentiated implementation projects and building long-term client relationships. We have to have a good grasp of our own levels of expertise as well: we are not interested SAGD, for example, because the market is already highly competitive, but we can add value for in situ projects using N-Solv technology.

N-Solv has been touted as a "game-changer" in the way that people view oil sands. How does the technology support this claim?

N-Solv is a solvent-based in situ technology that uses a pure solvent as the method of liberating oil from sand. We have proven the technology in a lab and are now applying it at a pilot project on one of Suncor's sites. If it works, it uses 90% less energy and actually produces water by liberating it from the ground. You are left with a recyclable solvent that eliminates the use of natural gas to burn steam. It leaves you with truly "green" oil.

What are the main objectives to grow Hatch's oil and gas presence in Canada?

Hatch's main objective is to be a strong, trusted partner for LNG projects in western Canada. Our other objective is to continue our strategy of being highly differentiated and solving tough projects. The last objective is to continue investing in our technology development business with respect to oil sands, and our number one priority is applying N-Solv to large-scale projects. N-Solv's success will allow us to build a robust solvent-based business and give us more visibility with regards to Hatch's ability to deliver projects in that space, and will hopefully lead to other complementary projects across the spectrum. •

Looking Abroad: The Global Footprint of Canadian Companies

"Our business model has been to find frontier areas so we can acquire acreage cheaply, get in, prove concept and drill enough wells to create value and decide how to move forward… Our four-step strategy is to acquire inexpensively, drill enough proof of concept wells to delineate value and then look at a variety of options going forward. We have thus far raised around $56 million which will take us through step three to value delineation. Once we get to that point we will be looking at a variety of options, whether it is farm-outs, sales or private equity partners. Our main focus now is to get these projects delineated."

- Dave Gibbs, President and CEO, Terrace Energy Corp.

Image: Petrominerales Ltd

Beyond Alberta

TSX and TSX-V companies around the world

> "Having international assets provides for a diversified product portfolio that decreases cash flow volatility and lowers risk. The regions in which we operate also remain relatively stable and provide strong profitability and opportunity for growth while continuing to exhibit relatively low levels of political, regulatory and security risk with respect to Vermilion's operations. These businesses receive some of the strongest pricing in our portfolio while having some of the lowest declines and strongest capital efficiencies anywhere in the world. This leads to top quartile netbacks that drive strong profitability and cash flow to sustainably fund both our growth and the dividend."
>
> **- Lorenzo Donadeo, President and CEO, Vermilion Energy Inc.**

The 10-square blocks that form Calgary's central business district are home to one of the highest concentrations of oil and gas companies in the world. The board rooms here look much like board rooms anywhere else; a central table is surrounded by walls hung with geographical maps. However, Calgary-based juniors have a vast geographical footprint, and the locations depicted on these maps are extraordinarily diverse.

Deciding where to invest can involve a variety of tacit considerations, but two ideas are prominent in most calculations: exploration risk, which in addition to geology can also encompass infrastructure, market demand, and operating costs, as well as political risk.

The maps hanging on the walls of CYGAM Energy's 12th Avenue SW offices depict the company's flagship assets in Tunisia, where, according to CYGAM chief executive David Taylor, the popular perception of political risk is way off-base. "It does not help that pictures of riots and cars burning make great press, but Tunisia has actually been much more fiscally stable than Alberta. Unfortunately, a lot of domestic investors are really quite parochial and will never arrive at an accurate assessment of Alberta," said Taylor.

Perhaps the political risk profile of a jurisdiction has more to do with its fiscal constancy than the stability of its leadership.

In Egypt, over the past two years of protracted Arab Spring, Calgary-based Sea Dragon Energy has doubled production from 1,000 to 2,000 barrels per day and acquired additional assets. "Sanctity of contracts is central to Egypt, a country with a long heritage in oil and gas, and fiscally Egypt offers a very solid environment," Seadragon Energy CEO Paul Welch said. "Business carries on. In fact, asset prices have dropped and we have been able to pick up property below market prices, so from our perspective, it has been very positive."

Misunderstanding of political risk, at least in the terms of how it affects oil and gas plays, is often compounded by investors conflating political risk with security risk. However, according to Petrominerales CEO Corey Ruttan, who is involved in Colombia, recently investors have evolved their perception

Image: Sea Dragon

$5.2 billion

15% of oil and gas equity capital raised globally

AMOUNT RAISED BY OIL & GAS COMPANIES ON THE TSX & TSX-V 2013

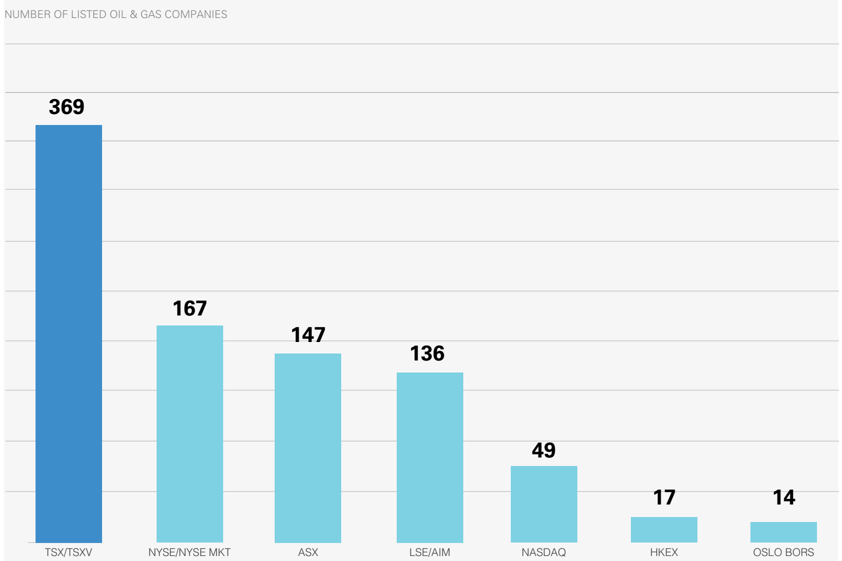
Source: TMX

of risk. "When the Alberta government introduced sweeping changes to the fiscal regime here, I think Canadians began to understand the difference between political and security risk," he said.

High operational costs, price differentials and a shortage of frontier exploration opportunities in Canada have been a push factor for some Canadian juniors who have found more opportunities abroad, and the memory of 2009's tax hikes caused some to question the conventional wisdom that the developed world, and Canada specifically, is without political risk. "Nowadays, western countries have significant political risk, if taxation is considered one of its elements," said Don Streu, president and CEO of Condor Petroleum, which is developing properties in Kazakhstan.

LISTED OIL & GAS COMPANIES

Source: TMX



TSX & TSX-V ENERGY COMPANIES ABROAD

Source: TMX

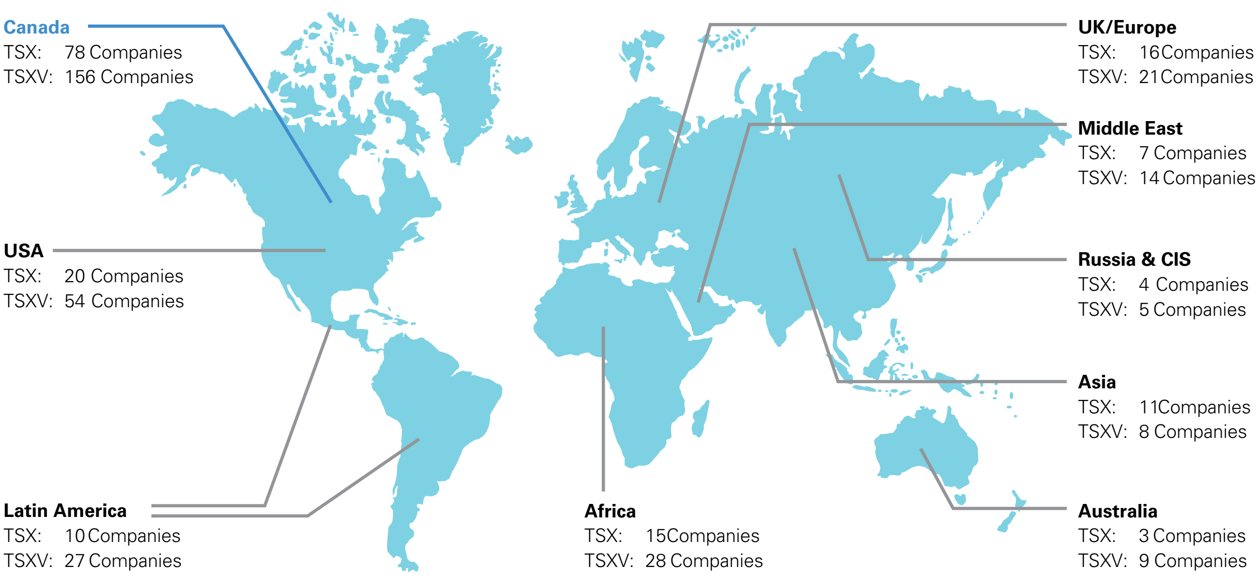


Image: Petrominerales Ltd

However, according to McCrank, who formerly headed the Alberta regulatory body ERCB for 10 years, the royalties hike was a good example of something that went wrong but was reversed in due course. "In any jurisdiction, the regulator can make mistakes, the government can make mistakes, and the industry can make mistakes.But in the system we have, mistakes get rounded out over time, which is sometimes not the case in Tunisia, for example," he said.

One jurisdiction claiming increasing levels of attention despite the political risk is Papua New Guinea. The country's geological prospectivity, combined with its access to large Asian LNG markets, has long captivated the attention of the world's major E&Ps. The country, now on the verge of big monetization events such as ExxonMobil's US$19-billion LNG project and the Inter-Oil Gulf LNG project, is looking an increasingly appealing investment destination.

However, despite improving political stability and the aforementioned proof of major-project deliverability, the barriers to entry are high for juniors looking for a piece of the action. "From a first-world perspective, it is exceedingly frustrating how slow things are," Brad Humbertise, CEO of Eaglewood Energy, said.

Calgary-based Eaglewood, a PNG pure player, is participating in the Stanley Fields project and holds a 12,000-square -kilometer land base over five significant licenses in Papua New Guinea's prospective Forelands.

Project delays are just one aspect of operating in the country that is highly capital intensive. However, having an operating team with significant in-country experience has helped Eaglewood Energy mitigate some of the risk.

"Our strategy has always been to employ an indigenous workforce, and our country manager is a Papua New Guinea national who has spent a long time with the regulators. Furthermore, being a pure play, we are able to monitor the situation very closely," Humbertise said.

Eaglewood also has been farming down its interests. With a rejuvenated balance sheet, the company planned to drill a Forelands exploration well in fourth-quarter 2013.

While a company in a jurisdiction such as Papua New Guinea can ensure it employs experienced locals and maintains a strong balance sheet with a realistic project focus, the government has to play its part too. "Our message to the regulators is that, if the delays are too long and we just can't operate in this country, junior companies may leave and stop stimulating the activity that results in the government receiving the royalty capital at the end of the cycle," said Humbertise. •

Brad Hurtubise

CEO
EAGLEWOOD ENERGY INC.

Equity capital is hard to come by these days; is the TSX-V still the place to go for a junior company exploring in a jurisdiction like Papua New Guinea (PNG)?

The TSX-V is a well-established venture exchange but a lot of Canadian's are conservative investors; they are not the punters you would see on AIM. Capital is modest but the TSX-V is a credibility regarded market with strong requirements but without over-regulation. Issuers can access global capital with reasonable documentation and that is what makes the TSX-V an excellent exchange. Eaglewood Energy looked at listing in Australia because we are South East Asia focused but small cap and resource investors all over the world are comfortable with the TSX-V. I still believe this is the premier venture market in the world.

How do you manage delays caused by regulatory holdups and climatic instability from a financial point of view?

By having as much money as possible and being realistic about what you can do. We came into PNG with four very different licenses initially, with a view to doing work on all four. We have renewed three of those licenses, two frontier exploration licenses and our more developed forelands license. From an investors perspective diversity of risk is important. We will find a big company with the wallet and risk appetite to develop our Frontier license and retain a small share; these projects are of such a size that 20% would be a company maker for us.

The key is not to let somebody else spend you into oblivion and then take advantage of you. That means that you have to operate. We have drilled a well on each of our remaining two licenses, one in the Forelands and one in the Highlands. The Highlands is a very expensive place to operate and wells can cost up to $100 million there; that is where the Oil Search's and ExxonMobils of the world should be. We sold our highlands asset then redeployed that capital in the Forelands, where it is easier for a smaller company to operate.

What has been your experience of navigating the PNG regulatory framework, and how would you assess the political risk of the country now compared to a couple of years ago?

Political risk never goes away in jurisdictions like this, however PNG is a parliamentary democracy and a commonwealth country. Last year there were actually two governments in power, this year is much better because there is only one government and infighting has ceased. The country is also on the cusp of big monetization events, particularly the EXXON project, and the Inter-Oil Gulf LNG project. The cash is going to start flowing, and there will have to be some discipline in government to manage that.

The regulatory regime itself continues to be very favorable, among the top 10 in the world. This has not changed, even as governments have. PNG understands that the extractive industries are their source of growth so they are not going to do anything to drive that away. I have been involved with Eaglewood in PNG for over five years and have seen no change on the regulatory side: here in Alberta we have seen plenty.

Finally, can you give us an overview of your targets for 2013?

Eaglewood Energy currently owns about 6.5% of the Stanley Project JV. That is our nearest source of cashflow and production or alternatively we may be bought out of the project, which would provide us with the capital to wait out any other regulatory holdups. We expect to have the unitization agreement with the Stanley joint venture settled in the 3rd quarter of this year, with cashflow starting 2014. The second milestone will be the granting of our pipeline and facilities license applications. Eaglewood owns 100% of this important strategic asset and I am hoping for a resolution on Trafigura in two to six months.

On our PPL 259 joint venture, we have just completed a 2D seismic program and have started going through our interpretation to pick our next drilling target, which we expect to be at a location called Nama. Our license commitment is to begin drilling operations in September, so we will be ramping up drilling activities in the near future.

Lastly, we continue our farm-out efforts on our frontier licenses; as the PNG gets more active with larger companies, we are increasingly encouraged that this is a buy-in area. Nearby activity is very important and Horizon, Talisman, and Mitsubishi will be drilling their Tingu prospect in PRL21 in June, which is a very good target. The PRL21 area contains more than a TCF of gas, so will be the next project after Stanley: the value moves way up because the resources are so large and so obvious, and we are next door in PRL28 so we would be a party to that development.

Our stock is cheap now because PNG has been out of favor and the market has been starved for news. I see quite a bit of news between now and the end of the year. If I was an investor, I would be watching for Stanley, watching for the pipeline facilities, the license awards, and how things are going around our next well, and the progress of the Tingu well drilling near us. •

Don Streu & Norman Storm

DS: CEO
NS: Kazakhstan Managing Director
CONDOR PETROLEUM INC.


DS

Kazakhstan has made great efforts to promote foreign investment but has historically struggled to attract greenfields exploration. What is your experience of working in the country?

DS: Kazakhstan is a vast and sparsely-populated country, with huge oil and gas resources. The industry's infrastructure has evolved in recent years. The oil equipment and service sectors are very well developed, and there are vast networks of pipelines and railways. Kazakhstan aims, aggressively, to increase production from 1.6 million barrels per day now to two million by 2017 and up to three million by 2030. Gas is more of an emerging sector, which received a positive boost when the world's longest pipeline, from Shanghai to Turkmenistan, was commissioned in 2009. It was a $30 billion dollar project, the second phase of which, linking western Kazakhstan into the pipeline, is under construction today. Our knowledge of the country is very important, as it takes several years to fully understand a market's nuances.

The market responded very positively to the sale of your Marsel gas assets. What were the reasons behind it?

DS: Condor Petroleum wanted to focus near-term on building reserves for production and cash flow. It is easier to do this through oil than gas. We have seen exceptional results, with four discoveries, at our Zharkamys oil block, and because the infrastructure is in place it is much easier to monetize the asset. The completion of the gas pipeline next year certainly provides a market for our product, and the last two of our three wells have been successful, but there is no business model for a junior to invest several hundred million dollars developing a gas field which will not see any cash flow from three or four years; the market wants to see companies getting into positive cash flow quickly. One positive aspect of the sale in the current climate was the way it provided a non-dilutive financing.

Tell us about your exploration on the Zharkamys block. How did you bring new seismic technology to the country?

DS: Condor Petroleum took a large company approach to Zharkamys, which is a good-sized 2,600-km2 block. It is rare for juniors to shoot a lot of seismic studies upfront: we have invested $23 million in the acquisition and processing of seismic data, which is highly unusual for a company of our scale. We shot the block in 3D in two stages between 2010 and 2011 and processed it in both time-migration and depth-migration. The type of salt basin we are in in Kazakhstan is similar to those our team has worked on around the world, so we realized from the start the need to use seismic technology; 2D imaging would not be sufficient. Calibrating the seismic data has allowed us to move into deeper ranges, from 1,500 m to 5,000 m, where costs rise but so does the size of the prize. Our latest discovery of 10 to 15 million barrels came from a $2.5 million well, so the project's economics are fairly strong.

Alberta has proposed carbon taxation and made regulatory changes in recent years, while Kazakhstan has some history of renegotiating PSAs. How do the two jurisdictions compare as investment destinations, and do you foresee more Canadian juniors entering Kazakhstan?

NS: Today western countries have significant political risk, if taxation is considered one of its elements. One thing Condor Petroleum likes about Kazakhstan is its apparently fair tax base. There is not huge pressure to increase royalties, although of course there is political risk related to leadership changes. Kazakhstan's history is a peaceful one, however, so we anticipate any future leadership transition being a relatively smooth one. Having spent a lot of time in Africa, I would describe the leadership in Kazakhstan as much more forward-thinking. This wish to leave behind a legacy does create some stability, so I feel we are in a very good region. The country's resource base in huge; many experts believe only one third of the Caspian Basin's potential has been identified today. The upside on conventional oil there is enormous, even if it will require the use of more advanced technology. Canada is a long way from Kazakhstan. There are some Canadian companies present, but there is a greater understanding of the country in parts of Europe like the UK. Although Kazakhstan is not a place where you can come in underfunded or without solid planning, as the government stipulates minimum-work programs, it is a good location for juniors.

Is the TSX still the best place for you to be listed?

DS: Condor Petroleum has always seen the TSX as the world's premier market. The Europeans have a little more tolerance for Africa and Central Asia, while North Americans migrate more to South America, but a fair proportion of our shareholder base is North American. The majority has stayed put as we have remained on course to deliver the five-year plan we laid out at our IPO two years ago. As Condor Petroleum grows, we may have the opportunity to look at other markets like London; I also would not be surprised to see more interest from Kazakhstan-based companies in the Hong Kong and Shanghai exchanges. •

Corey Ruttan

President and CEO
PETROMINERALES LTD

Petrominerales has worked closely with the governments in Peru and Brazil, how do you gauge the political risk in these countries relative to Colombia?

The political interest to have independent oil companies investing in Peru and Brazil is probably the highest it has ever been. There was a recent bid round in Brazil that attracted bids for 142 new blocks, from 30 different companies with a signature bonuses paid totaling $1.4 billion. We were successful in acquiring three new blocks in this bid round allowing us to more than double our land base in Brazil to 120,000 acres. We are operating mainly in the Reconcavo basin, the oldest producing basin in Brazil. There has been oil and gas activity for there for the last 75 years and over 1.5 billion barrels of oil produced. We are focused on a deep tight oil resource play similar to some of those being developed in North America. We feel this is a tremendous resource opportunity and we will be bringing Western Canadian know-how, operating practices, and technologies to bear and are looking forward to our first phase of investment in Brazil starting later this year.

The regulatory burden in Peru is reasonably high. The timelines are long and that will create a bit of an impediment to having rapid growth of the sort we have seen in Colombia. In Peru one of the biggest challenges is surface access. It is a very costly place to operate because of the logistics involved in accessing locations by river or helicopter. We are very focused on bringing the cost levels down and efficiently navigating the regulatory regime. We have already made a 53-degree API light oil discovery that is 8 km from a road, and 60 km from a barging point, so we think this can be very economic.

Petrominerales is listed in Bogota as well as on the TSX, what are main benefits to being dual listed?

Almost all of our current production and 80% of our staff are in Colombia, so we wanted to make it easier for Colombian's to be able to invest in our Company. There is a large pool of capital available in Colombia and today around 20% of our shareholders are Colombian.

Petrominerales has bought multi-stage fracturing technology and Toe to Heal Air Injection (THAI) to Colombia, what are the advantages to being a first mover on technology in the Llanos basin?

If you can be a low cost operator you will always have a competitive advantage; technology has opened up a whole suite of opportunities on projects that others have written off as uneconomic. Relative to North America, there are still very large oil accumulations available in the Llanos basin, which is highly under-explored and I think there is a lot of opportunity left, especially for companies who can control their costs. In Brazil, our goal is to prove the commercial potential of a large resource fairway. Our objective then would be to turn it into a large-scale development project, effectively a large manufacturing operation where cost control and the application of the correct technology is absolutely critical.

Is there anything on the exploration side that particularly distinguishes Petrominerales' approach from that of other players in Colombia?

I think the key thing is that Petrominerales was the first to apply high quality 3D seismic as an exploration tool in Colombia. We have had about 50% success rates on our exploration programs throughout the Llanos basin. This is really attributable to three things: the use of high quality 3D seismic, the stacked reservoir potential inherent in the geology, and our strong technical team. Petrominerales has brought a Western Canadian Sedimentary Basin approach—where there has been three or four or five different cycles of exploration—so it is not simply a case of looking for big fault bounded structures. Working the Western Canadian Sedimentary Basin you ascend the exploration learning curve very quickly and you become accustomed to looking for different types of plays; I think we are realizing the benefit of this in Colombia.

Can you summarize the Petrominerales story and what investors should be looking out for from the company?

At current share prices, Petrominerales represents a very compelling investment proposition. Our shares are trading at a significant discount to net asset value. Shareholders are receiving a dividend of $0.50 per year (paid quarterly), which alone translates into over an 8% yield. In addition, our goal is to significantly increase shareholder value by: 1) executing a capital program balanced between high impact exploration and development; 2) provide proof of commercial concept on the two exciting large resource opportunities in heavy oil in Colombia and tight oil in Brazil; and 3) from a financial perspective, we are uniquely positioned in Colombia in that we have ownership in some very high value strategic pipeline assets. We plan to monetize some of these assets that I expect will not only create some exceptional returns for our shareholders but it will also provide additional financial flexibility for us. •

Chris Beltgens

Corporate Development Manager
EAST WEST PETROLEUM CORP.

East West Petroleum has one producing asset in Alberta and 1.8 million exploration acres in five countries around the world. Could you provide a brief overview of the company and the expertise of the management team?

East West Petroleum Corp. was set up in 2010 with the concept of applying unconventional technology to international projects. Our property in Alberta is a legacy asset that was part of the listing process; it is not a core asset for the company. We were initially awarded with four blocks in Romania. At the end of 2010, East West raised $30 million to advance the Romanian project and review other business opportunities. During 2011 and 2012 East West looked globally to build up its portfolio. Our blocks in Morocco and India were acquired in 2011 but our key asset was awarded in December 2012 is the three blocks in New Zealand where we are partnered with TAG Oil in the Taranaki Basin. TAG Oil has been one of the most successful companies in the region, producing around 2,000 boe/d. The Taranaki Basin has been producing since the early 1970s and there is a lot of potential for both oil and gas exploration. East West drilled five wells with TAG Oil in 2013 and is planning a further six to nine wells in 2014. In December 2013, East West was awarded a license in the East Coast Basin of New Zealand. The block provides East West with access to the emerging East Coast unconventional play and we will again be partnering with TAG oil. The work program for 2014 will entail reprocessing of existing seismic.

Regarding Romania, the blocks were awarded in the 2010 licensing round. The first license, Tria, was ratified in December 2012, with the remaining three blocks ratified in November 2013. A farm-out agreement was signed by NIS, a subsidiary of Gazprom Neft in 2011 and now they are keen to get going with operations. The seismic acquisition on Tria started mid-2013, and is expected to commence on the other three blocks in 2014.

What is your long-term strategy going forward with your key assets in New Zealand and Romania?

New Zealand is somewhere you can still lock up big pieces of land, especially offshore. It is fairly early in the life cycle for an oil producing country and to date so all of the production has been in the Taranaki Basin. There are over 15 sedimentary basins around New Zealand, the country has the one of the largest economic exclusion zones, and there is a huge continental shelf offshore. Onshore there are also opportunities; our partner TAG just drilled the first onshore well in the East Coast Basin, which is an unconventional basin. In the Taranaki, there is also lots of potential to go after the deeper targets. In Romania, now that things are taking off, we have a good working relationship with NIS so we can look at other opportunities as they start to become available. We are focused on getting our exploration drilling this year and reaching first production.

What are the main opportunities and challenges with operating on such a global scale?

East West's strategy of being globally diversified allows us to be opportunity, rather than geographically, constrained. As interest in international exploration assets has increased over the past several years, it is becoming increasingly competitive to secure assets in prospective areas and in countries with low to moderate political risk. Therefore, we will look at all projects that may be of interest and that fit within the skill set and capital constraints of the company. On the other hand, the main challenge is to remain focused on a limited number of core assets that we dedicate the majority of our time and capital towards. For EW, that means dedicating the majority of our efforts to our projects in New Zealand to TAG Oil and our four blocks in Romania where we are partnered with NIS.

Could you talk us through the key characteristics you look for when choosing partners?

East West looks for partners that are well-capitalized, technically competent and proven operator in each region. For example, being the former state oil company of Serbia, NIS is a large organization with a numerous financial and technical resources that they can draw on as needed. In India and, to a lesser extent Romania, it is important to have the right political connections. New Zealand is open and transparent but if you are operating in emerging economies you need the right connections within government in order to get things done. Our plate is currently pretty full, we are always open to new opportunities but we have great partners where we currently operate so we will leverage off those relationships and focus on opportunities within those regions.

Where will East West be in three years time?

East West Petroleum aims to have two to three main focus areas that we are actively operating in, with production from one or two of those areas. We would look to have a well-diversified portfolio of exploration projects and an active drilling program supported by production. We hopefully be well financed and have enough cash flow to keep the company going on a G&A level; reviewing projects and self-financing existing drilling and development but also looking at bigger projects and possibly becoming an operator. As the company matures we will target becoming self-financing from our operational cash flow. •

Said Arrata, Paul Welch & Ahmed Farid Moaaz

SA: Executive Chairman and Director
PW: President and CEO
AFM: Country Manager and Director
SEA DRAGON ENERGY INC.

SA

PW

AFM

Sea Dragon Energy has recently changed its management structure, what was the rationale behind this and what does Paul Welch bring to the CEO role?

PW: From my past experience working with Chariot Oil and Gas and prior to that with Pioneer, I have a strong operational bias. I am somebody who gets things done. That will be a good fit with the team because of what is happening with the market in Egypt: there are a lot of opportunities available and we need to aggressively persue them.

SA: Paul's appointment was a means to augment the horsepower of the management team. When I joined Sea Dragon, the agreement was for me to take on a Chairman position, but I also took the CEO position. The intent was always to hire a CEO and over the past year or so we were looking actively. Paul has a lot of attributes to add to the team and we decided to join forces.

Sea Dragon's asset base is quite diverse in terms of ownership structure, geology and geographical location; can you tell us how you compiled your land base?

PW: It boils down to a three pronged approach. Within the Gulf of Suez, we have developed a fairway area that essentially goes from Shukheir Marine down to North West Gemsa; that is an area in which the geology is consistent, and the opportunities are similar. We have a strong operational understanding and a technical advantage in that area. Within that fairway we have production, development opportunities, and a small amount of exploration upside.

Additionally we have two areas of exploration focus. One in the southern part of Egypt in the Kom Ombo area, and one in the North, up in the Nile Delta. Our near term growth is going to be driven by our activities in the fairway, and the transformational growth is going to come from the two exploration areas that we have identified.

We are seeing opporutnities on the market that are significantly below the prices they were before the Arab Spring: very compelling value plays. Shukheir Marine, for example, was picked up for an equivalent of less than $1 per barrel, which is a fantastic metric regardless of where you are in the world. Our team's experience in the country means that we can pick up opportunity where others cannot.

Equity investors are quite risk adverse at the moment, and presumably this is compounded by the political instability in Egypt. How has this effected you?

PW: The markets come and go. We are in a low period here, but ultimately it will turn around, and when it does, will will be in a strong position. The nice thing about Sea Dragon is that we generate $15million per year in cash. Olivier through his banking experience has put a $50million revolver in place, so we do not need to go back to the market. We are self funding, and a result of that we are not dependent on the markets.

Sanctity of contracts is central to Egypt, a country with a long heritage in oil and gas, and fiscally Egypt offers a very solid environment. We do not expect that to change. This Arab Spring has been going on for a couple of years now and Sea Dragon has doubled production in that period, from 1000 to 2000 barrels per day. We have also aquired additional assets. Business carries on. In fact, asset prices have dropped and we have been able to pick up property below market prices so from our perspective, it has been very positive.

What has been your experience of working with the service sector in Egypt and how well equipped is the country to cater to the needs of small-cap juniors?

AFM: The Seven Sisters sunk Egypt's first oil well some 80 years ago in the Gulf of Suez, the basin in which we are active in. Egypt has got several top level service companies in every discipline: drilling, production, etc. Skilled personnel developed during the last few decades in Egypt have been able to run oil businesses all over the middle east, from Abu Dhabi to Algeria. E&P's enjoy a lot of support in Egypt and there is no shortage of skills.

What does the remainder of 2013 hold for Sea Dragon?

PW: We expect to drill five wells and complete three work overs on our blocks. We are going to have a capital expenditure budget of about $4million, and we anticipate generating revenues of between $13million and $17million.

Additionally, we are going to participate in bidding rounds with a view to picking up additional assets. That process has already started and we were successful in the last round picking up South Disouq; hopefully we will be successful in the next. Because of the political climate and the view of Egypt from the outside, we are going to continue to aggressively look at additional production and development assets that become available at attractive prices. The future story is one of growth: organic growth in the fairway, and potentially transformational growth both from the exploration side and from the acquisition side. •

Ian Gibbs & Alex Budden

IG: Chief Financial Officer
AB: Vice President of External Relations
AFRICA OIL CORP.

Africa Oil Corp. is a member of the Lundin Group, managed by the Lundin family. Could you please start by providing a brief overview of the company and your business model?

IG: Africa Oil is a member of the Lundin Group, which is a group of oil and gas and mining companies with a global reach. The group was set up by the Lundin family and they have ownership interest and varying degrees of directorship involvement in all the companies. Africa Oil's business model is to focus on very large, primarily exploration opportunities. And because we are looking for very large resource potential we believe that justifies taking that political risk.

You have recently made two new discoveries in Kenya at Twiga and Ngamia, which extend the Uganda Albert Graben play into Kenya. Could you please talk us through these discoveries and their significance?

IG: The discoveries at Twiga and Ngamia could not be more significant. There is currently no oil or gas produced in Kenya; a very significant amount of Kenyan GDP is spent on importing petroleum products. Any discovery in a country with no oil or gas production is hugely significant. The Kenyan people are very excited about the prospects of hopefully having a commercial oil development in the country. It is however still very early days; it will require a lot of effort and further exploration and appraisal to get to a commercial development project.

With respect to elsewhere in Ethiopia and Somalia, what current activity do you have going on?

IG: Africa Oil has multiple other efforts going on in East Africa Drilling operations continue, often ahead of schedule, in northern Kenya in conjunction with 50% partner and operator Tullow Oil. Test results for the Etuko and Ekales discoveries are expected early in the first quarter of 2014. We also expect our well in the Sala location of Block 9 to be completed early in 2014. Drilling has continued in the South Omo block and Block 8 in Ethiopia and, with the recent announcement of a Chinese company entering the basin and potentially providing export infrastructure, the economics of the basin could be vastly improved. In Somalia, we are primarily focused on the political situation. We drilled two wells there last year: they were not discoveries but they gave us significant encouragement to carry on with our exploration effort. When we are more comfortable with the state of the political situation we would like to get back to acquiring 2-D seismic in the Dharoor block.

Somalia has been war-torn for a considerable period of time. What is the status quo and is the situation improving?

AB: In Somalia, people are cautiously optimistic: the country is probably in the best situation it has been in since the civil war started in 1991. People are not underestimating the challenges moving forward but there is a real sense on the ground, with investors and with the international community, that there is an opportunity to get the country back on its feet. If extractives can be found and revenue can start to flow it is really important to get the systems and institutions surrounding security, stability, governance and financial transparency in place now so that when we start coming online the government has a foundation from which it can build. With regards to the security situation, there are still obvious concerns but overall it is improving; al-Shabaab have lost a lot of ground but are certainly not out of the fight.

What initiatives does Africa Oil have in place with regards to CSR and HSE in East Africa?

AB: There are three big issues in Kenya, Ethiopia and Somalia to consider with regards to CSR: community engagement, environmental issues and financial transparency. Community relations is a key part of Africa Oil's business model, we have a legal right to operate through the central government and our production sharing agreements but that is worthless if we do not have the social license to operate from all local people on the ground. We want to engage with local communities because, if we do not, it would create conditions very difficult for us to operate in. Regarding environmental issues, our job is to identify what impact we may have and put measures in place to mitigate against the negative impacts whilst potentially boosting any positive impacts. Lastly, financial transparency and good governance is key for us because we are looking to create value, not only for our shareholders, but also for the local communities and countries as a whole. If there is uncertainty or mystification around how money is being spent it will only create an environment of mistrust, which makes it difficult to operate in. We are very supportive of the Extractive Industries Transparency Initiative and we are striving to have financial transparency pushed up the agenda in Kenya and Ethiopia.

Where will Africa Oil be in three year's time?

IG: Africa Oil and our partners are looking to completely transform East Africa. In three years time we would hope to be talking about commercial oil developments that are well along in the planning, if not being produced. We are a couple of wells in on a huge acreage position with two discoveries. For frontier explorers this is as good as it gets.

AB: Kenya, Ethiopia and Somalia are poor countries but when you look at the potential for this to boost their economies this is really important not only for these countries but for the wider geo-political situation as well. If managed properly, this could transform these economies so the excitement is palpable not just across the company and shareholders but across the international community as well. •

Financing Global Exploration

Capital for Calgary's overseas players

More than the Australian Stock Exchange, or the London AIM, which developed a reputation as a punters' market, the TSX and TSX-V are considered credible exchanges for juniors to access global capital. However, as with domestically-focused players, depressed markets make equity capital hard to come by no matter where the project.

For many juniors, the need to appeal to a shrinking pool of investors is a key consideration when building a portfolio of assets. According to CY GAM Energy's Taylor, investors prefer to compartmentalize jurisdictional risk rather than backing companies operating across different regions. "Fund managers, institutional investors and portfolio managers all take the view that companies should either be domestic or international...very few companies have succeeded with a mixed model," said Taylor.

Operating as a pure play has advantages: the narrowed focus enables investors to select their preferred portfolios and potential partners to more simply acquire companies. Operators also ascend the experience curve more quickly. Terrace Energy, focused on utilizing unconventional techniques in the cretaceous plays of South Texas, had their expertise noticed by Shell, who invited them to be their science team on the Pearsall, a new play with similar characteristics to Eagle Ford formation. "Unconventional drilling makes projects economically viable because they emulate conventional five acre spacing, just down a hole. We are spending four times what a conventional well costs and creating 14 times the return," said the company's president Dave Gibbs.

Yet for some the ability to concentrate expertise is not worth the costs. "The challenge of just being in one country — and the regulatory wheels grind slowly, and the operations grind slowly — is that it is hard to have enough news flow to keep investors interested," said Eaglewood Energy's Humbertise. "Although we have been very active in the last year, that does not seem like the case from the outside looking in. The reality is that delays are inevitable in these jurisdictions, so you have to be much more careful with announcements," he said.

The consolidation of an asset base for the sake of investor simplicity is unlikely to make sense. In some cases, companies have actually diversified from being a pure play to having a split domestic-international asset base.

Prior to making the decision to buy its Canadian assets, Madalena Ventures was an Argentinean land play, with a focus on drilling and delineating large shale plays. However, the Canadian

Image: Bellatrix

assets provided production well sites: generally a much more stable source of capital. "Overall, the Canadian assets provide sustainability for the company in order to drive our vision in Argentina. This has turned into a longer-term project and we are looking to build up production and 2P (proved and probable) reserves," said Kevin Shaw, CEO of Madalena Venture.

The majority of Madalena Ventures' short-term production growth will come out of Canada and the company will invest the generated capital into delineating its shale plays in Argentina.

Latin America has traditionally been the starting point for Canadian oil and gas juniors looking for a find, but the next big discoveries might come from previously overlooked destinations. According to Jim Davidson, CEO at First Energy Capital, "The advent of new horizontal, multi-stage fracing technology has opened up many plays in jurisdictions that have previously been overlooked."

Poland, for example, has a very large shale play. "We are going to see oil and gas activity taking place in regions that we have not seen before, as plays that were previously not profitable become more attractive with the application of new technology." •

Kevin Shaw

President and CEO
MADALENA VENURES INC.

Can you provide us with an overview of the recent changes to Madalena's management team and the rationale behind the board's decision to bring on new personnel?

In November 2012 the board of Madalena made some strategic changes in order to bring in a full cycle operating team. Overall, the changes were needed to operate both domestically and internationally in various jurisdictions. Madalena closed a deal on a large land position in Canada in early November 2012, the board then decided to bring on some people in line with our increased asset base. Our current focus is to build up production and reserves in Canada along with our unconventional shale assets in Argentina, and the new team is currently executing this strategy.

Why was the decision made to move from an Argentinian pure play model to become operative in multiple jurisdictions?

Prior to making the decision to buy our Canadian assets we were an Argentinian land play, with a focus on drilling and delineating large shale plays. The Canadian purchase was needed to build the company and to provide cash flow and production well sites. Overall, it was a sustainability question for the company, in order to drive our vision in Argentina. This has turned into a longer term project and we are looking to build up production and 2P reserves. The majority of the production growth at this stage will come out of Canada and we will focus on putting money in the ground to prove up and delineate our shale plays in Argentina.

What are your production targets for your Canadian assets for this year?

Right now we are at 1,200 BOE as base production--about 44% oil and liquids--and we have 1,200 BOE/day of tested behind pipe volumes that will be tied in. This gets us up to around a couple thousands BOEs per day. Within a three-four month period Madalena has gone from 165 BOE/day to the numbers we are looking at today, which represents substantial production growth. We are looking over the next few years to bring production up to 4-5,000 BOEs per day.

Have you encountered a negative reaction to being in multiple jurisdictions from the market place?

The way Madalena sees it is that we are in the industry to create value by building reserves and production, not to mention drilling some potentially valuable shale plays. We were looking for a jurisdiction with low risk development and the ability to operate in a large land base. For the longer term we look towards shale in Argentina and we are in an emerging part of the cycle there. We believe that you want to be in Argentina given the significant amount of value in those shale plays. Hence why moving into another jurisdiction to focus on production growth and 2P reserves, made sense for us. Overtime we are starting to get results in both of our plays and I think if we can continue to do that the investors will react positively.

Can you tell us about the developments since the YPF expropriation and how you see the risk profile in Argentina?

Technically the shale plays in the Neuquina Basin are considered world class by many of the majors out there. It is one of the more tangible shale plays outside of North America, due to the amount of infrastructure and the decent amount of previous drilling through the shales, which provides us with important data. The challenge for the industry is to find the best way to exploit the resource and develop it.

The quality of the Neuquina shale play is thicker than the Eagleford and Bakken, which have driven the resources boom in the United States. In our resource report the numbers were staggering, with 34.8 billion of net total petroleum in place with a recovery factor of 2.9 billion BOE. The market started to react to it this week and the challenge to our company is to unlock that value, drill and prove up the resources further.

The political risk in Argentina is high on investors mind, what has your experience been with the regulatory framework in Argentina?

The reality is Argentina moves in cycles every couple of years and has been a complex are from a geo-political standpoint. We deal with the province of Neuquina, and we have always had a good relationship with the province. The key is in keeping continued dialogue with the provinces and we review plans yearly with both the federal and provincial governments.

Can you provide us with a brief summary of the Madalena story?

We are going to continue steady development in Canada on the oil and liquids-rich plays, including steady horizontal development to grow our 2P reserves. This will be followed by drilling in Argentina and we will be progressing our shale plays in 2013 and looking to unlock value. Overall, the story is about two assets, with two different plans that both complement one another. •

Dave Gibbs & Eric Boehnke

DG: President and CEO (Houston)
EB: Executive Vice Chairman
TERRACE ENERGY CORP.

DG

Terrace Energy Corp. has bucked the trend with its stock price growing from $0.1 a share in January 2011 to $2.1 a share now. Could you start providing a brief overview of the company and your success story thus far?

EB: When we started this company, the initial focus was not on a particular region, it was on the people involved. Dave brought together a technical team with considerable experience operating in Texas and around the world, whilst I brought together a board of directors with success in a range of sectors. We then went out and spent a lot of time creating a shareholder base. We did not have our first South Texas project until six months down the line.

Terrace Energy's business model is investing in projects with multiple objectives and repeatable locations. Could you talk us through your assets and how they match these characteristics?

DG: Our business model has been to find frontier areas so we can acquire acreage cheaply, get in, prove concept and drill enough wells to create value and decide how to move forward. We were able to get into our Olmos project for less than $300 an acre, in an area of Eagle Ford where property costs $10,000 to $15,000 an acre. We drilled three wells that proved concept and we have just initiated our 2013 program to really delineate value. We will drill another five wells this year and have identified 72 drilling locations on our acreage position. Our expertise and approach to looking at non-Eagle Ford assets located in the Eagle Ford basin led us to an invitation by Shell to come into their Maverick County project and be their science team on the Pearsall. The Pearsall is brand new and in the same situation as where the Eagle Ford was five years ago. There have only been 14 Horizontal Pearsall wells drilled in the region so it is still very much on the leading edge; we paid less than $200 an acre and we just drilled our first concept well which we will be fracking later this summer. There could be as many as 1200 to 1300 Pearsall locations on this ranch.

Could you talk us through your asset in the Eagle Ford?

DG: Terrace Energy's Eagle Ford project was a strategic move, it is only 3,400 acres gross but it is nestled in the ideal zip code; we are completely surrounded by Anadarko, Chesapeake and Rosetta Resources. We acquired it by partnering up with a local operator who had a long-standing relationship with the mineral interest owner, giving us a unique opportunity. We required some Eagle Ford because we needed to go to the market early on and everybody knows and understands the Eagle Ford, whilst many do not understand the rest of the South Texas Cretaceous play.

EB: At Eagle Ford, we are surrounded by several large operators including Anadarko, who have drilled hundreds of wells, so I could look an investor in the eye and say that we were not going to miss. When you are a young company, it is important not to come out of the gate and miss. If you trip out of the gate, there is no way in the capital markets of today's world that you get a second chance. It was therefore strategic for raising capital and not a risky play at all.

Terrace Energy has 170,000 gross mineral acres and a large inventory of 1,300 gross drillable locations. What is your financing strategy going forward, are you looking to farm-out or JV on any of your property?

DG: Our four-step strategy is to acquire inexpensively, drill enough proof of concept wells to delineate value and then look at a variety of options going forward. We have thus far raised around $56 million which will take us through step three to value delineation. Once we get to that point, we will be looking at a variety of options, whether it is farm-outs, sales or private equity partners. Our main focus now is to get these projects delineated.

These assets were not economically viable with conventional drilling techniques. Could you talk us through the significance of fracking and what it means for the US economy?

DG: Olmos is a very conventional reservoir that we are developing with unconventional techniques. Unconventional drilling techniques make projects economically viable because they essentially emulate conventional development on five acre spacing, we're just creating these drainage points down hole rather than on the surface. As an example, each one of the unconventional Olmos wells we are drilling now is equivalent to 14 conventional wells. We are spending around four times what a conventional well costs and creating 14 times the return.

EB: Like any industry, we are benefiting from technology and technology is being redefined continuously. Each well is different and we learn something new on each one so we perfect our techniques more and more each time. We are also using a Canadian company based out of Calgary called GAS FRAC who utilize a gelled hydrocarbon component to be used as fluid in fracking. The gel significantly improves returns and will further redefine how these wells are fracked.

We carry out our research in key markets every two to three years. When we return in three years time, where will Terrace Energy be and what will be the main topics of conversation?

DG: In three years time Terrace Energy will have delineated its current assets and be in discussion about the sale of some or all of the assets that we currently have and we will likely be on the leading edge of some new projects. We will continue to execute the strategy that we have and as we get projects delineated we will sell them on. We will continue to focus on what we do well; when projects become more mature they need to be in someone else's hands.

EB: Our goal is not to grow to a hundred people plus firm, but corporately we will grow to a billion dollar plus company. •


Precision Drilling
20 12

Into the Future: Final Thoughts, Index and Credits

"We believe we are at that point in the cross-border cycle now so we are seeing more investment in Canadian companies by both strategic buyers and US based private equity. Canada offers an abundance of mid-market companies that can serve as platform investments into lucrative secular plays such as oilsands or LNG or diversification strategies for portfolio investment."

- Dave Munro, Managing Director, Stormont Energy Advisors

Image: Precission Drilling Corp.

There are outstanding opportunities for North America in unconventional oil and gas. These are predictable, repeatable sources of moderate to low cost energy. Think about the economic situation in the US right now: the US is producing 1 million barrels of oil per day that was not being produced three years ago. Let's call it $95 per barrel. All of that money stays in the US. You can trace back about $50 per day to labor; that is $50 million per day of labor stimulus every single day. And then whatever company profits there are remaining are generally reinvested in America, and that becomes further stimulus. There really is a $95 million per day stimulus program going on right now, and if we double production in the US, that is a huge amount of value retained in the country; and the same thing applies in Canada.

- Kevin Neveu, President and CEO,
Precision Drilling Corp.

....

PetroChina had been looking at oil sands from about 20 years ago and actually helped to fund the original SAG-D pilot in Alberta. In 2009, when Athabasca Oil Corporation started look for a partner, they were ready. They decided that this was a good opportunity now that the technology is mature, Athabasca had great projects and PetroChina had faith in our ability to deliver. We concluded the deal after about eight months of negotiations: PetroChina is the biggest energy company in the world, with 1.6 million employees, and we had 14 employees at the time. Partnering with PetroChina has been a very good experience. Athabasca's model for financing has been focused on joint ventures from the early days. We had built the company for that purpose and we had hired people with international experience. It is very important that you have the cultural understanding, the patience to work with people from different origins. We already had an internal culture of welcoming people like PetroChina.

- Sveinung Svarte, CEO,
Athabasca Oil Corp.

....

The private equity community, which typically invests billions into the energy space, has noted that there are four factors as to why the Canadian marketplace is not enjoying historical levels of investment. The first is the lack of a near-term export strategy in the marketplace. There is a 2020 expectation for LNG export, but this does not fit within the PE investment timeframe or that of the public markets. The second is that in the United States, there are currently significant basins that are generating world-class deliverables on reserves that were not as robust three to four years ago. The third is that while we have an acknowledged resource base, there are doubts as to whether we have sufficient best-in-class teams that are capable of bringing resources to market. The last is that the market needs further consolidation. There are simply too many juniors across too many basins.

- Bruce Edgelow, Vice President Energy,
ATB Corporate Financial Services

....

Canada's oil and gas sector is poised for a strong rally as global investors are underweighted in the region and the Canadian dollar depreciation has made the stocks all that more attractive. Canada's biggest problem on the global stage is access to markets, with Keystone XL and Northern Gateway being the most notable examples. There was reluctance amongst US investors to come into Canada with crude trading at such a discount to global benchmarks. Companies have adopted rail in part to get oil to much better markets and a cold winter has certainly helped deplete natural gas storage stockpiles. We strive to continue to provide our investing clients high quality opportunities in first class companies and to provide our corporate finance clients the best access to global capital and to be their trusted, independent advisor on M&A transactions.

- David Vankka, Managing Director – Energy Investment Banking,
Canaccord Genuity Inc.

The oil sands business has evolved since 2004. Connacher got on that wave early on and was able to get capital to develop the resource; the downside was that people's view of geology was that it was all the same. There is a barrier to entry now because the capital is difficult to come by and the realities of the business are starting to bite: you cannot over-promise. There is a traction issue on performance, and smaller players cannot bury it on a massive balance sheet. There is a realization that it is a long capital cycle in an impatient world, and people aren't willing to take the capital execution risk and the performance risk as much as they were. The oil sands can be a very lucrative business for junior companies if you consider well spacing and incremental technologies. It can be a psychological struggle: on one hand, there are large companies producing significant quantities and generating huge cash flows, but there is nothing wrong with producing 20,000 plus barrels a day in the oil sands and doing it for decades.

- Christopher Bloomer, CEO,
Connacher Oil and Gas

The slight increase in rig activity is more due to the fact that the basin is transforming into a playground of multinational supermajors and national oil companies who do not depend on the public markets for equity. Investors seem to think that there is significant work coming for oilfield service companies, but the proof is yet to be seen. We still need to get clarity regarding pipeline issues and NGL facilities in order to get confidence back on the upstream side. Fortunately, it does not appear that we will hit the wall on oil takeaway capacity as the rail side of things has stepped forward to fill the gap. The most outstanding issue for the Western Canadian Sedimentary Basin as far as return on investment is that we are still a gas-prone basin, and current gas prices are insufficient to bring large-scale investment. We need a demand-side solution, either getting our product offshore or through wholesale manufacturing facility construction in North America.

- Wade McGowan, President and CEO,
Ironhand Drilling Inc.

In the NGL business, we are always innovating to redesign the facilities to make them more efficient as well. In our work, we upgrade and modify existing facilities to increase capacity from between 10% to 20%. Rangeland has seen a significant increase in this work in the last five years… We are honing in on what we have by developing internal systems and procedures. Rangeland is becoming more of a tightly run ship and one day we will sell it. We are considering moving into other areas such as heavy oil and SAGD given the amount of capital that has been spent. Now we are seeing that companies in these areas are spending to maintain and improve their operations. Given our expertise in infrastructure with off sights and terminals, the SAGD processes and facilities component is just one more step from what we already do.

- Ron Daye, President,
Rangeland Engineering

The price of natural gas is currently very low due to increasing supplies from shale plays in the United States, so we are seeing gas focused companies disappearing, consolidating, or suffering from a lack of capital. Up until last year, we saw major international companies looking to invest in oil sands projects, however, that activity has stalled this year due to the high differential in oil price and the challenge of transporting the product to market from Alberta. If the Keystone and Northern Gateway pipelines are approved, we should see development accelerate in the oil sands. We are also seeing a need to develop supplies for LNG plants that are going ahead on the west coast and we are assisting our clients in identifying resource volumes to supply those facilities.

- Keith Braaten, President,
GLJ Petroleum Consultants

GOVERNMENT, ASSOCIATIONS AND ORGANISATIONS

EXPLORATION AND PRODUCTION

This list contains those companies interviewed during the course of research for this publication and as such represents only a selection of the companies operating in the oil and gas industry of Canada. It should not be considered a comprehensive guide. GBR holds an exclusive and extensive oil and gas database for Canada and the wider region. For further information on database access packages, please contact info@gbreports.com or call +44 20 7612 4511.

EDITORIAL TEAM

Research conducted by:
Senior Project Director: Ramona Tarta (ramona@gbreports.com)
Project Coordinator: Chloe Dusser
Journalists: Angela Harmantas, Joseph Hincks and Josie Perez

Additional research provided by GBR's Vancouver office:
Senior Project Director: Katie Bromley (kbromley@gbreports.com)
Journalists: Harry Thompson

Executive Editor: Barnaby Fletcher (bfletcher@gbreports.com)
Graphic Designer: Gonzalo Da Cunha (gonidc@gmail.com)
Regional Director: Alfonso Tejerina (alfonso@gbreports.com)
General Manager: Agostina Da Cunha (agostina@gbreports.com)

For more information about GBR, please email info@gbreports.com. For updated industry news from our on-the-ground teams around the world, please follow us on Twitter @GBReports or subscribe to our newsletter at gbroundup.com.

Additional copies of this book or our other publications can be ordered through Elif Ozturk (elif@gbreports.com)

THANK YOU

GBR would like to extend our thanks to the following organizations for the assistance provided during the research of this publication:

Alberta Economic Development Authority
aeda.alberta.ca

Alberta Ministry of International and Intergovernmental Relations
international.alberta.ca

Alberta Ministry of Energy
www.energy.alberta.ca

Canadian Association of Petroleum Producers (CAPP)
www.capp.ca

Explorers and Producers Association of Canada (EPAC)
www.explorersandproducers.ca

TMX Group Inc.
www.tmx.com

We would also like to express our sincere gratitude to all the companies, associations and individuals who took the time to provide their insights into the market.

Global Business Reports