OPI NEWSLETTER

THE VOICE OF THE ONTARIO OIL AND NATURAL GAS INDUSTRY FALL 2017

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Hugh Moran, Executive Director
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Encouraging responsible exploration and development of the oil, gas, hydrocarbon storage and solution-mining industries in Ontario

ISSN 14802201

OPI
Industry Information Meetings

Tuesday, October 24, 2017, 5:00pm - Black Goose Grill, 525 James St, Wallaceburg, Ontario

Thursday, October 26, 2017, 5:00pm - The Car Barn, 27 Talbot Road East, Wheatley, Ontario

Tuesday, October 31, 2017, 5:00pm - Oil Rig Restaurant, 413 Albany St. Petrolia, Ontario

Working Together To Revive Ontario Oil and Natural Gas Production

The OPI welcomes everyone involved in the exploring, producing and the providing services to the Ontario oil and natural gas industry to attend to:

- Hear your concerns
- Hear from you on the challenges facing the industry
- Hear your ideas about preserving the industry and what the OPI can to do
- Inform you on how the OPI operates and what it does

The **OPI Industry Information Meetings** are open to OPI members and non-members.

COMPLIMENTARY DINNER

Please inform your industry friends about the meeting and invite them to attend. RSVP to opi@ontariopetroleuminstitute.com or call 519-680-1620 with which date you wish to attend.

OPI Board of Directors

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Message from the Executive Director

The onset of September brings an increased level of activity for the OPI on a number of fronts with a full agenda that includes Board of Director meetings, the OPI Annual General Meeting, and work with the government, various agencies and other stakeholders in the industry.

At recent Board of Directors meetings two important announcements: the OPI will be holding Industry Information Meetings the last week of October (see front page), and the Board passed a motion to support Tribute Resource Inc.'s appeal of an Ontario Energy Board decision on its municipal tax assessment (see OPI Talking Points).

In other Board news the Historical Producers Committee hosted a group of executives from Union Gas on a tour of the Oil Springs historical fields. Committee Chair Charlie Fairbank was in Ottawa to speak to the ATP Heritage Trust and he will be in Nova Scotia to support Oil Springs World Heritage.

The Producers Committee has been involved in various meetings on the 2017 Ontario Long-Term Energy Plan, the Tribute Resources Inc. appeal, and monitoring developments with Union Gas on meter stations and changes to the Gas Purchase Agreement.

The Conference Committee expects to have an announcement soon on the location and conference program for the 2018 OPI Conference and Trade Show.

The OPI met with Deputy Premier Deb Matthews in July and the Hon. Kathryn McGarry, Minister of Natural Resources and Forestry in September to update them on the current status of the industry and to discuss the OPI Submission to the 2017 Ontario Long-Tem Energy Plan.

The OPI-MNRF Hydrocarbon Sector Working Group in its review of a list of industry topics has various Sub-Groups preparing preliminary reports on various polices, regulations and standards upon which the industry operates to explore, produce, and store oil and natural gas. A cross section of OPI members are involved with the various Sub-Groups in the review.

The Oil, Gas and Salt Resources Library is experiencing a very productive year exceeding its revenue projections on the strength of an increased amount of special project work. It enabled the Library to add to the number of summer students to the staff team.

A reminder that on the OPI Website -www.ontariopetroleuminstitute.com - you can now find the minutes of the Board of Directors meetings as well as advertising opportunities that are now available.

Please enjoy this issue of the OPI Newsletter and please contact me anytime at 519-630-4204 or at hughmoran@ontariopetroleuminstitute.com

Hugh Moran, Executive Director

OPI Annual General Meeting

The OPI AGM will be held on November 2, 2017 at the Best Western Plus Stoneridge Inn, 6675 Burtwistle Ln, London (401 and Colonel Talbot Rd). The agenda includes the election of the 2018 Board of Directors as well as a report on the OPI's financial affairs.

The OPI encourages and welcomes all members to attend the AGM which opens with a breakfast at 8:30 a.m.

For further information please contact the OPI at 519-680-1630 or opi@ontariopetroleuminstitute.com

OPI Talking Points

OPI meets with Minister of Natural Resources and Forestry

The OPI met with the Hon. Kathryn McGarry, Minister of Natural Resources and Forestry and Deputy Minister Bill Thornton on September 21st for a discussion on Ontario's oil and natural gas exploration and production sector. The discussion included an update on the current economic and production status of the industry, highlights of the OPI Submission to the 2017 Ontario Long-Term Energy Plan; work of the OPI-MNRF Hydrocarbon Sector Working Group; and the value of the services provided to the government, industry and the public of the Ontario Oil, Gas and Salt Resources Library.

OPI-MNRF Hydrocarbon Sector Working Group

The Working Group is progressing with its review of a list of industry topics that include suspended well policy, inspector protocols, historical standards, well abandonment standards, well approval process, examiner protocols, and private gas well policy. The reports are being prepared by the Working Group and various Sub-Groups made-up of industry and government members. The target date for the completion of the reports with recommendations is January of 2018.

OPI Membership Renewals

Membership renewal invoices were emailed in September, to those who have already paid - Thank You! For those who haven't could you please do so by October 31st…

Tribute Resources Inc. Appeal

The OPI has been given "intervenor status" in the Tribute Resources Inc. Appeal to the Ontario Divisional Court of a decision of the Ontario Energy Board (OEB) on its pipeline municipal taxes.

Tribute had taken issue with the assessment of its pipelines by the Municipal Property Assessment Corporation (MPAC). Under the Ontario Assessment Act disputes related to pipelines are decided by the OEB. Tribute argued in its application to the OEB that its pipelines are not gas transmission pipelines used for distribution purposes. The OEB upheld the MPAC assessment.

In granting the intervention the Divisional Court determined that the OPI had an interest in and would bring a wider context to the matter and the OPI members could be adversely affected by the decision. The appeal is expected to be heard in late November of 2017.

Energy East Pipeline

TransCanada Pipelines has notified the National Energy Board that it is withdrawing the Energy East and Eastern Mainline project applications. Energy East would have given oil producers in Alberta and Saskatchewan a market for their crude by carrying about 1.1 million barrels a day to refineries and a marine-shipping terminal in eastern Canada. TransCanada cancelled that project amid regulatory hurdles and weaker oil prices.

Western Canada's oil industry is now counting on Trans Mountain project to help carry crude to the Pacific Coast, where it would be shipped to markets in Asia, as well as the Keystone XL pipeline, which would move more Alberta oil to refineries along the U.S. Gulf Coast.

Training Courses

Our next H2S Alive Training course has been scheduled for Tuesday, November 21, 2017 at the Ramada Inn, London. If you require FLBOP or WSBOP please let the office know as we will try to schedule courses for the spring if there is enough interest.

Petroleum Operations Section

Industry Open House

When: November 16th, 2017
10 am - 2 pm
Buffet Lunch Provided 11:30 - 1:00 pm

Where: Best Western Stoneridge Inn
and Conference Centre
Somerset Ballroom

Why: To build awareness of
current program and
new program initiatives.

How: Register by Nov 13th, 2017 via
email or phone:

POSRECORDS@ontario.ca
519-873-4634

Dawn Storage: 75 years for growth and innovation

It's an anniversary worth celebrating.

Seventy-five years ago, Union Gas pioneered the use of underground storage for natural gas in Ontario – a critical but largely unheralded innovation that to this day ensures Ontarians have a reliable source of affordable energy to get through cold winters.

Before storage was developed, the province's natural gas industry was operating on borrowed time. It relied wholly on declining domestic supply, but as an affordable energy source it was in high demand. Demand quickly began to outpace supply. Shortages were first felt during the cold winter of 1918, prompting the provincial government to restrict the use of natural gas for industries in favour of residential consumers. Despite this, shortages continued into the 1920s and on severely cold winter days, residents of cities such as Sarnia, Windsor and Chatham went without natural gas to heat their homes.

It was clear that new sources of supply were needed, but the high cost of exploration and development convinced many energy companies to stop drilling and instead focus on energy conservation. Union Gas, however, was determined to find a way to ensure Ontario would get the energy it needed and by the mid-1920s the company had increased its exploration and discovery efforts.

Those efforts paid off in 1931 with the discovery of two large natural gas wells in Dawn Township, near Sarnia, sparking a period of growth for the province, the natural gas industry and Union Gas. Over the next decade, more and more Ontarians began to use natural gas as service extended into new communities. At the same time, the growing popularity of natural gas as an affordable choice for home heating and more efficient automatic natural gas hot-water heaters and individual room heaters drove increased consumption. Concerns about supply remained, however, because while supply had continued to increase, growth had come through existing, rather than new, natural gas fields. It was becoming increasingly clear new solutions were needed.

In 1937, Union Gas hired Dr. Charles S. Evans to become the company's first full-time geologist. Evans, who would become one of Eastern Canada's leading geologists during his 25 years at Union Gas, directed the company's exploration and discovery program. He would also play a pivotal role in the development of a game-changing innovation for Ontario's natural gas industry -- underground storage.

In 1938, Evans proposed using depleted natural gas reservoirs in the company's Dawn gas field for underground storage. This was not a new concept. Originally tested in 1915, the first operational underground storage site had opened in New York in 1916. In fact, at the time Evans was writing his proposal, the United States had more than 50 storage pools in 10 different states. Evans knew this. He also knew the geology of Lambton County, and was adamant that the pinnacle reef formations near Dawn Township – domes of porous limestone covered with impervious rock – would be ideal for natural gas storage.

By 1940, Ontario's natural gas industry was in full-blown crisis. Consumer demand for natural gas was at an all-time high, while production had dropped to new lows. It was clear the province needed to find new sources of supply. Early in 1941, Union Gas president Sydney Morse contracted two different engineering firms to test Evans' underground storage proposal. Both firms agreed it would be feasible to inject natural gas into Dawn's depleted reservoirs and – most importantly – ensure that no gas would be lost when withdrawing it.

On Oct. 28, 1942, natural gas was injected into a depleted reservoir at Dawn, marking the birth of Canada's first commercially successful underground storage. Union Gas could now store natural gas during the summer for use during cold winter months when demand was at its highest, alleviating concerns over winter shortfalls and restoring consumer faith in natural gas to heat their homes. The growth of new underground storage in Ontario continued in June of 1964 as Tecumseh Gas Storage, now wholly owned by Enbridge Gas Distribution, was developed in Moore, Ontario.

The development of underground storage at Dawn 75 years ago also opened the door to natural gas imports from the United States and Western Canada, ensuring security of cost-effective supply for Ontarians well into the 21st century and helping to create the reliable system we count on today.

David Primorac
External Communications & Media Relations Specialist
Public Affairs
Union Gas Limited | An Enbridge Company

From The Newsroom

Fight over abandoned oil wells may head to Supreme Court of Canada

A battle over whether energy-company creditors should help pay for cleaning up thousands of abandoned oil wells in Canada may be heading to the country's Supreme Court.

At the centre of the dispute is Redwater Energy Corp., a small publicly traded oil producer in Alberta that filed for bankruptcy in late 2015. The receiver that's liquidating the company argues it should be able to sell its best wells and leave the worst behind for an energy industry-funded group to clean up. The province's regulator argues that buyers should have to take both good and bad wells, even if it means that the sale proceeds will be lower.

A court in Alberta sided with the receiver in May, 2016, reducing companies' concerns about the legal liability of walking away from some of their oil wells. Since then, the number of inactive, abandoned or otherwise orphaned sites has more than doubled to 3,200, according to the Orphan Well Association, the cleanup group. The provincial government has given the organization an emergency loan to fund the increasing costs.

Typically, proceeds from liquidating assets go to pay back creditors. Any decision that results in lenders getting less money in bankruptcies could ultimately force banks to charge more for financing, as they try to recoup lost income. But if the lower court's ruling stands, the industry-funded Alberta Energy Regulator (AER) may have to collect more money from energy companies to help pay for the remediation, and the public may need to shoulder some of the burden.

"At the end of the day, it is really a decision about where the money goes," Kyle Kashuba, a lawyer in Torys LLP restructuring practice, said by phone from Calgary.

The problem is increasingly urgent for Alberta as more oil companies go broke. The price of crude oil plunged more than 75 per cent between June, 2014, and February, 2016. Even if prices have recovered somewhat since then, many drillers are not making enough revenue to keep operating.

Since the start of 2015, 250 North American oil and gas producers and services companies have filed for bankruptcy, law firm Haynes and Boone said in April reports. About 1,000 oil sites in Alberta with liabilities of more than $56-million have been renounced since the May, 2016, court decision, according to the AER.

"Disclaiming unprofitable sites allows a company to reap the benefits of producing Alberta's natural resources while avoiding the costs to repair the land, permanently impacting the environment, the economy, and the safety of Albertans," Ryan Bartlett, a spokesman for the AER, said by e-mail.

The government-run Alberta Energy Regulator and the Orphan Well Association, who say they're protecting regulatory and public interests, have appealed the matter to the Supreme Court of Canada. The high court decides which cases to hear based on which are most in the national interest.

The questions about who should bear environmental costs, combined with the importance of the lower court's decision and the implications for the industry means the Supreme Court is likely to look at this case, Torys's Mr. Kashuba said.

"It does have ramifications for other provinces. That makes me think the Supreme Court will hear it," he said. "It's kind of become such a major issue."

The Orphan Well Association has tripled its annual budget to $45-million for the upcoming year, compared with its 2014-15 budget, paid for by levies on companies in the industry. The group wants the corporations' obligations to be balanced with taxpayers' and creditors', said Brad Herald, chairman of the association.

"We think there was a good balance there," Mr. Herald said. "These court decisions upset that balance."

Lenders benefit from the recent decisions because they're protected from the liabilities of the non-producing wells, which could impact their recovery in bankruptcy, said Geoffrey Richards, New York-based head of North America debt finance and restructuring at investment bank Canaccord Genuity.

"I think that from a cost of capital perspective, had the decision gone in the other direction, you could anticipate that lenders might then begin to price that risk into new loans, which could have a different impact on the industry," he said

Allison McNeely and Kevin Orland
Toronto Globe and Mail, August, 2017

Informed citizens are key to Canada's energy future

If your family gatherings are like most, there are probably a few topics that are guaranteed to generate controversy around the dinner table. Religion. Politics. Parenting advice.

In the extended family that we call Canada – a federation of 10 diverse provinces and three territories – that topic today is energy. From pipelines to carbon taxes, raising the issue of energy can be a surefire way to spoil the mood at the national table.

With such polarization around a complex subject, how will Canadians ever find agreement around our shared energy future?

Depending on where you live, energy might account for as much as 20 per cent of your province's economic activity. Energy is also responsible for 80 per cent of Canada's greenhouse gas emissions. Add to that the potential effects of energy policy on Indigenous rights, government revenues, jobs and our ways of life, and it's easy to see why the issue cuts so close to home.

Compounding the problem and mirroring a global trend is the fact that Canadians now distrust most major institutions, from government to business to the media.

New polling results just released by Simon Fraser University's (SFU) Centre for Dialogue and Forum Research show that Canadians don't even agree on where to get their information. In some regions, only 32 per cent of Canadians trust industry to predict Canada's future energy needs, while in other regions, this number is as high as 60 per cent. Similar regional differences exist over trust in environmental groups. Forty-nine per cent of Canadians say they are unfamiliar with the federal government's plans for the future of energy in Canada.

A well-functioning democracy requires both quality information and trust in institutions to work. This is particularly true for a file as crucial to the national interest as energy.

Unlike at a typical family gathering, the country doesn't have the option of avoiding thorny topics such as energy. There's too much at stake and Canada's people, diverse regions and industries are too interdependent for us to continue to shout at one another indefinitely.

We need to approach the conversation differently. And it starts with citizens. That's why we're convening the Citizen Dialogues on Canada's Energy Future.

Through a series of regional dialogues this September and October, the SFU Centre for Dialogue will convene 150 citizens who reflect the diversity of all Canadians. Coming from different home towns, perspectives and backgrounds, these participants will sit down to hear about one another's values and how they relate to energy.

This new approach begins by laying all the information on the table. Too much of what we read about energy in Canada contains cherry-picked facts that build the case toward some predetermined outcome. The discussion guide we have just launched provides a unique and original resource for this critical discussion, exactly because it surfaces multiple perspectives without censorship.

Just as important as fact-based information are the values that guide our decisions. Experts, campaigners and even lobbyists all have important roles to play, but it would be a mistake to think that they can replace the functions of citizens in a democratic society.

This initiative will mark the first time ever that randomly selected citizens have come together to deliberate and advise the federal government on energy policy. This work is funded by the federal Department of Natural Resources, which deserves credit for placing citizens front and centre in its decision-making process.

The results will be unprecedented: A set of recommendations showing what citizens – coming from all corners of the country and different walks of life – can agree upon when they search for common ground on energy.

No one's saying this conversation will be easy. Participants will have to imagine themselves in the shoes of others and will consider the same constraints and trade-offs faced by their elected representatives. But working through the hard questions is something we desperately need as a country and the citizen dialogues will provide a reference point to inform future pathways in national policy.

Along the way, we expect a robust discussion. There will almost certainly be moments of disagreement. That's healthy in a democracy.

What we can't afford is to squander another opportunity to listen deeply and improve the conversation about energy. Energy is central to our lives – and the family of Canada is too important.

Robin Prest, Civic Engagement Program Director
Simon Fraser University's Centre for Dialogue.
Toronto Globe and Mail, August, 2017

There's opportunity in the death of the oil industry's business model

Canada's oil industry is going through a transformational and difficult restructuring. Over the past three months, foreign companies have sold more than $24-billion in Canadian oil assets. According to a Reuters article in May, the sales are "due to depressed global crude prices, high operating costs and limited pipeline access to market."

While these factors have played a role in the realignment of the Canadian oil sector, the primary driver has been the death of the dominant oil business model of the past 100 years – globalization – originally pioneered by a Canadian: Donald Smith, Lord Strathcona.

Among Lord Strathcona's many accomplishments – which include co-founding the Canadian Pacific Railway and driving the ceremonial last spike of Canada's first transcontinental railway in 1885 – he is the most successful oilman in Canadian history.

In 1908, at the age of 88, he was chairman of Burmah Oil Co. when it discovered in Iran one of the largest oil fields in the world, which would go on to produce more than one billion barrels.

The discovery, the first successful oil well in the Middle East, formed the basis of a new company, Anglo-Persian Oil Co., which later became British Petroleum.

The discovery created a supermajor oil company, realigned economic power toward the Middle East and continues to shape geopolitics to this day. Lord Strathcona also helped give birth to the model of using transferable technology to explore in underdeveloped regions, and diversifying reservoir and political risk by investing in multiple countries.

Over the past century, this globalization business model was great for Canada.

When our basins were immature and Canadian companies were relatively small, foreign companies brought both expertise and capital. Even when the specialized nature of Canada's oil sands did not quite fit the model, foreign oil companies invested because the size of the resource was too good to pass up. Without international investment, our oil industry would have developed at a much slower pace.

Unfortunately, Lord Strathcona's business model started to get sick about six years ago and officially died on Jan. 17, 2017. That day, Exxon bought the Bass brothers out of the Permian for $6.6-billion (U.S.). Exxon, the largest investor-owned oil company in the world and the best positioned to take advantage of globalization, decided the best place to invest was a few hours' drive from its headquarters in Texas.

There are three reasons the globalization business model for the oil industry died. First, oil companies can now achieve better growth in relatively mature reservoirs in North America than by exploring for new reservoirs in less-mature regions overseas.

The application of horizontal multistage fracking technology, which began on a mass scale around 2011, has transformed the North American oil industry, leading to production growth not seen for decades.

Second, the technology required to develop these unconventional reservoirs is less transferable than before. Most large oil companies have highly centralized decision-making processes, which make sense for allocating capital overseas to mega-projects, but are ill-suited to the rapidly changing fracking industry, where techniques are being improved on almost a monthly basis. Consequently, it has been the focused, nimble companies, which have best capitalized on this new technology.

Third, in an era of ever-increasing environment regulation, navigating the local political landscape has become a minefield for foreign companies.

In major oil and gas regions such as British Columbia, Alberta, California and Colorado, governments are increasingly focused on maximizing not only revenues but environmental outcomes. Local companies can often better understand local stakeholders and be more comfortable in assessing the investment risks.

The same forces that led to the death of globalization – unconventional reservoir development, non-transferable technology, environmental regulations – have led to the birth of the new dominant business model: specialization.

The specialization business model dictates that oil companies should limit themselves to a small number of core fields win which they can add value by applying specialized technology. So far, the stock market has rewarded companies that have done so, such as Seven Generations Energy in Canada and Diamondback Energy in the United States.

Specialization is causing a huge restructuring of the global oil industry, which is impacting Canada. Emerging regions, non-operated positions and diversification are out – large, operated positions requiring specialized technology are in. Contrary to the Reuters article, it is this new specialization model, not low prices or high operating costs that primarily led Conoco to sell to Cenovus and Shell to sell to Canadian Natural. Conoco was able to sell a non-operated oil sands position and plow the proceeds back into its core-operated Permian acreage. For Shell, selling its oil sands assets to Canadian Natural allows it to focus on its industry-leading LNG and deep-water business.

While Canada needs to continue to welcome foreign investment, it already has most of the capital and expertise it needs to develop its oil resources.

Consequently, while the replacement of globalization with specialization is causing a difficult restructuring, it is also giving rise to a golden age of Canadian ownership of the oil patch.

Local Canadian companies, both big and small, have the opportunity now to dance on the grave of globalization.

Adam Waterous is the Managing Partner and CEO of Waterous Energy Fund in Calgary.
Special to The Globe and Mail, June, 2017

2017 Upcoming Events

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