OPI NEWSLETTER

THE VOICE OF THE ONTARIO OIL AND NATURAL GAS INDUSTRY **SPRING 2019**

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

ISSN 14802201

Please join us at EPEX 2019: OPI 57th Conference and Trade Show which is later this month on April 29th -30th at the Best Western Plus Lamplighter Inn & Conference Centre located at 591 Wellington Rd., London.

Why attend EPEX 2019? See for yourself all of last year's innovations and where we're heading in 2019: https://youtu.be/2mCbrXo6Cf0

Online registration is available at
http://www.ontariopetroleuminstitute.com/conference-registration/

Register before April 12th to save as price goes up 15% after this date.

Look forward to seeing you at EPEX 2019!

NAPE Summit 2019

The OPI attended the NAPE Summit 2019 from February 11th to 13th in Houston, Texas, the largest prospect expo in North America, with 12,000 attendees from around the world. EXPLORE ONTARIO the OPI's exhibit booth provided enhanced information on the exploration potential in Southwestern Ontario attracting a number of visitors over the two-day event. And for the second year in a row Ontario exploration was promoted at the NAPE'S International Prospect Theatre.

Ian Colquhoun, Director, Ontario Petroleum Institute

PDAC 2019

The OPI attended the Prospectors and Developers Association Convention 2019 March 5th and 6th at the Toronto Convention Centre. As one of the largest conventions in the world with an attendance of 25,000 from around the globe it provided the OPI with an excellent opportunity to promote the industry.

Hugh Moran, Executive Director, OPI and Craig Irwin, OGSR Library

Message from the Executive Director

It's been a full schedule for the OPI in the first three months of 2019: the Board of Directors and the Oil, Gas and Salt Resources Trust (Trust) held meetings in January and March, the OPI has attended two conferences to promote Ontario exploration opportunities, EPEX 2019: OPI 57th Conference is just around the corner, the Oil & Gas Magazine 2019 has been released, and a report on potential changes to how the industry is regulated is being finalized.

At the January Board meeting the Directors discussed items that included the OPI and Trust budgets, recent actions taken by the Ontario Ministry of Labour, the drop in oil prices, and the upcoming Ontario Budget consultations. In March, the Directors were updated on steps being taken to deal with tax assessments, the OPI's attendance at the NAPE Summit 2019 and PDAC 2019 conferences, and a meeting held with Toby Barrett, Parliamentary Assistant to the Minister of Natural Resources and Forestry (MNRF).

Other areas reviewed were the OPI Report to the Deputy Minister, MNRF on industry concerns related to oil and natural gas production, the Government of Canada's introduction of its Federal Carbon Pricing Program on April 1st, and the release of the Oil & Natural Gas Magazine 2019.

The final touches are being applied to EPEX 2019: OPI 57th Conference and Trade Show to be held April 29th-30th in London. The OPI Conference Committee has been meeting over the last number of months on the planning of the conference and have put together an interesting program for attendees.

The OPI gets inquiries on occasion on its involvement with the Oil, Gas and Salt Resources Trust. While it can be a little confusing it essentially works like this. The OPI entered into an agreement with the Government of Ontario to form the Trust which includes the operation of the Oil, Gas and Salt Resources Library (Library). The impetus for the creation of the Trust was to prevent the closure of what was then called the Petroleum Resources Laboratory, now Library.

The OPI created the Ontario Oil, Gas and Salt Resources Corporation (Corporation) to act as the "Original Trustee" to form the Trust. Included in the Trust Agreement was the creation of a Trust Advisory Committee (TAC) to set operating budgets and to direct policy with respect to expenditures.

The members of the organizations involved in the Trust: OPI, Corporation and the TAC are from the oil and natural gas exploration and production, hydrocarbon storage and salt solution mining industries. The Trust is funded by the industry and from client projects.

The Corporation, on behalf of the OPI, meets regularly as does the TAC to manage operations and monitor expenditures. The Trust and the MNRF hold collaboration meetings frequently to discuss the various aspects of the services and supports required by each organization, and in particular the work done on behalf of the MNRF by the Library.

Please join us at EPEX 2019: OPI 57th Conference and Trade Show on April 29th-30th.

Please contact me anytime at 519-630-4204 or at hughmoran@ontariopetroleuminstitute.com.

Hugh Moran, Executive Director

OPI Talking Points

Oil & Natural Gas Magazine 2019

The Oil & Natural Gas Magazine 2019 has been published and distributed to OPI members and a list of stakeholders. The OPI want to thank everyone who contributed to the content of the magazine and for your financial support provided through advertising. The OPI is pleased to have the magazine available as a communication tool to educate and inform members, stakeholders and the public about Ontario's historic oil and natural gas industry.

OPI-MNRF Hydrocarbon Sector Working Group

The OPI Report on Ontario Oil and Natural Gas Exploration and Production is being finalized for presentation to the Deputy Minister, MNRF. The report is a result of the work of the OPI-MNRF Hydrocarbon Sector Working Group to identify industry concerns related oil and natural gas exploration and production. The report will include a number of recommendations for changes to the Oil, Gas and Salt Resources Act, Regulation 245/97 and the Provincial Operating Standards.

Federal Carbon Pricing Program

The Government of Canada introduced its Federal Carbon Pricing Program (FCPP) on April 1, 2019. As a natural gas producer you may be eligible for a Fuel Charge Exemption Certificate as a "Distributor". Enbridge Gas. Enbridge Gas Inc. has secured its Canada Revenue Agency Exemption Certificate. If you supply gas to Enbridge Gas the carbon tax is not applicable as Enbridge Gas has its Canada Revenue Agency Exemption Certificate. It is our understanding that to receive the exemption a producer will have to register as a "Distributor". Information on the FCPP can be obtained at www.uniongas.com/campaigns/federal-carbon-charge/fcc-sandt

Wheatley Public School

The OPI gave a presentation to students of the Wheatley Public School on Thursday, February 7, 2019 providing the students with some general information on the industry – past and current, drilling of oil and natural gas, particularly drilling on Lake Erie, the work involved in moving a drilling operation, and a description and display of the various tools used in exploration and production.

Oil Springs, Ontario: The Living, Breathing Dinosaur

The Fairbank Oil Fields were featured in an article on Oil Springs, Ontario in the APT Bulletin a publication of The Journal of Preservation Technology, a magazine published by the Association of Preservation Technology International.

Follow the link on our website to see this article.
http://www.ontariopetroleuminstitute.com/oil-springs-ontario-the-living-breathing-dinosaur/

From the News Room

Canadian crude production flattening out on tight pipeline capacity: IEA forecast

The outlook for Canadian oil production has "significantly deteriorated" from just last year due in part to lack of pipeline capacity, as the U.S. shale sector is expected to dominate global crude growth, the International Energy Agency said in a forecast Monday.

As a result of the shale boom, the United States is expected to surpass Russia and challenge Saudi Arabia as the leading exporter of crude and petroleum products by 2024, the Paris-based agency said.

"The second wave of the U.S. shale revolution is coming," Fatih Birol, the IEA's executive director, said in a news release. "It will see the United States account for 70 per cent of the rise in global oil production and some 75 per cent of the expansion in [liquefied natural gas] trade over the next five years. This will shake up international oil and gas trade flows, with profound implications for the geopolitics of energy."
The tremendous growth in U.S. supply poses a major challenge for Canadian producers who rely virtually exclusively on American refiners for export customers. As a growing exporter itself, the United States will have less need of Canadian supply in the future, though refiners there are still eager to purchase oil sands crude for their facilities that are specifically designed to process heavy-quality oil.

While the American production is booming, Canada's outlook has faded over the past year as pipeline projects are stalled and crude-by-rail has failed to fill the void, the agency said in its annual oil forecast.

The lack of sufficient export capacity led to a glut of supply in Alberta last fall that depressed prices and prompted the provincial government to order an across-the-board production cut. It kicked in at 350,000 barrels a day (b/d) on Jan. 1, but has since been reduced to 250,000 b/d and is set to drop to 225,000 b/d in April.

"The outlook for Canadian oil production has significantly deteriorated," said the IEA, which advises industrialized countries on energy policy.

"With Canadian oil prices under pressure and so much uncertainty regarding new takeaway capacity, companies have been reluctant to launch new projects," it said. As a result, it expects Canadian crude production to expand by just 300,000 b/d by 2024 – equivalent to the increase in 2018 alone.

Energy economists said the lack of sufficient pipeline capacity and burdensome regulations are just two of the factors resulting in the lack of investment capital needed to increase production in Western Canada.

The global effort to reduce carbon emissions from oil and gas is also having an impact, which will only increase as the effects become more apparent, University of Alberta economist Andrew Leach said Monday.

"Large institutional investors are seeing carbon risk more clearly," Mr. Leach said. At the same time, the retreat from the oil sands by multinationals companies such as Royal Dutch Shell PLC, Total SA and Norway state-owned Equinor ASA is "partly a function of oil sands' relative emissions intensity and – perhaps more importantly – reputation globally," he said.

The Canadian oil industry has seen capital investment evaporate compared with the boom years when the sector regularly attracted $15-billion to $20-billion in debt and equity investment, said ARC Energy Research Institute director Peter Tertzakian in a note last week. Last year, that investment amounted to roughly $5-billion and it is expected to be lower this year, he said. Among the reasons: Institutional investors are pulling back because of climate-change considerations, imposing a "de facto carbon tax on the industry's cost of new capital," he said.
At the same time, the boom in U.S. shale oil has meant American investors, who typically accounted for half the capital raised in Western Canada's industry, are now investing closer to home.

The U.S. shale story continues to dominate the global market. From virtually zero, production of the light oil from the shale sector hit six-million b/d last year and is expected to climb to 9.6-million b/d by 2024, assuming prices remain around the US$50- to US$55-a-barrel mark. Total crude production in the United States should hit 13.7-million b/d in 2024.

By 2021, the United States will be a net exporter of crude and petroleum products, though it will continue to import crude for its refineries through the end of the forecast period.

Shawn McCarthy, Global Energy Reporter
Globe and Mail, March, 2019

Time to shrink Enviro Canada's mandate

Environment and Climate Change Canada (ECCC) should get out of the climate research and forecasting business entirely. Instead, it should be relegated to merely collecting data to be used by more effective and less partisan entities. Climate research is far too political for ECCC to be involved in and recent developments shows that they are absolutely hopeless at forecasting.
Consider the following:

There is currently 500,000 square kilometres more Arctic sea ice this year than at the same time last year. Lakes Superior, Huron, and Erie are 95% ice covered. Record cold temperatures were set across the country and more severe snowstorms occurred from coast to coast this winter.

On Feb. 7, 2019, The Canadian Press reported: "Saskatchewan's record-smashing cold has caught the attention of a senior climatologist at Environment Canada. David Phillips said it's tough to break records when temperature statistics date back to the 1880s, but that's exactly what happened in Saskatoon on Wednesday. The city shattered a 112-year-old cold mark when the temperature plummeted to -42.5 C. The previous record for Feb. 6 was set in 1907 at -41.7 C."

What do we get from Phillips? The story continues: "I'm impressed," said Phillips. "We're talking about more than 25 degrees colder than it should have been."

That is small comfort to Calgarians who experienced their longest stretch of cold weather in 21 years. It was no comfort to the people of Vancouver either, in fact less so, because they lost their usual warm weather bragging rights. The Vancouver Courier reported: "February 2019 was the coldest February on record in Metro Vancouver since the records began in 1937."

The pattern of extremes was global as the jet stream, that strong river of air that flows around the poles, changed its pattern to become very wavy allowing cold Arctic air to move into temperate latitudes and warm air to move into Arctic regions. Because of this increase in the north/south amplitude of these waves, a phenomenon understood since the 1940s, we saw, as *Weather Underground,* the internet's first weather service, explained in *"From North to South, A Winter and Summer of Record Temperature Extremes."*

Few of the so-called experts understand these mechanisms. National Geographic reported: "Scientists are only recently beginning to understand how a climate changed by warming temperatures may lead to colder winters. One study published last March in the journal Nature Communications found a link between warmer Arctic air and colder U.S. winters, particularly in the northeastern part of the country."

Recently? Swedish American meteorologist Carl Rossby (1898-1957) first described and explained these waves around 1940, and they are now named after him.

In the modern era, and especially after the anthropogenic global warming (AGW) deception appeared on the scene in the 1980s, all normal meteorology and climatology effectively ended. The deliberately narrow and premeditated science of the UN Intergovernmental Panel on Climate Change (IPCC) focuses only on human causes of change. This eliminated natural causes, including solar and major planetary mechanisms.

Most of the people now working at weather agencies throughout the world were educated during the post-IPCC era of the last 30 years. Worse, they all work for government agencies that comprise and appoint the IPCC. It is a truly incestuous system. Environment Canada is a member of the IPCC and contributed to the assembly of 100-plus computer models that make the IPCC forecasts. All the forecasts are wrong and the Canadian model forecasts are the worst.

Again this winter, we saw the abject failure of these models. Yet, funding continues and they remain the primary source of advice to the environment minister on energy and climate policy. They plan for warming because the bureaucrats tell them it is going to warm. They do this using these completely failed computer models while all real-world evidence indicates that cooling, a far more dangerous threat, is more likely.

The sad, but delicious, irony is that the Farmer's Almanac that began forecasting in 1792, predicted a very cold snowy winter for most of Canada. This pattern was achieved by the amplified Rossby Wave pattern that brought prolonged outbreaks of very cold air interspersed with brief warm but snowy periods.

Even as the cost of equipment and maintenance soars at ECCC, there is no improvement in accuracy. Private agencies with virtually no funding or equipment achieve much better results. It is high time to defund the climate research and forecasting arms of ECCC.

Dr. Tim Ball is an environmental consultant and former climatology professor at the University of Winnipeg.
Tom Harris is executive director of the Ottawa-based International Climate Science Coalition.
Toronto Sun, March, 2019

Carbon credits could cost Canadians plenty

Prime Minister Justin Trudeau's national carbon price alone will not achieve the industrial greenhouse gas (GHG) reduction commitments he made in the United Nations' 2015 Paris climate accord.

Taxpayers will have to spend billions of dollars more to reach Canada's target of cutting emissions to 30 per cent below 2005 levels by 2030.

That's regardless of whether one accepts Trudeau's assurance his carbon tax coming April 1 will leave most people better off financially in Ontario, Saskatchewan, Manitoba and New Brunswick better off financially through rebates. (The six other provinces have federally-approved carbon pricing plans.)

To help meet his 2030 target, Trudeau is considering buying international carbon credits, each giving the bearer the right to emit one tonne of industrial GHG.

Neither Trudeau nor Environment Minister Catherine McKenna have said what these costs of international emissions credits would be, a good question to ask them leading up to the October election.
As to potential costs, here are some ballpark figures.

Canada's GHG emissions in 2016 were 704 megatonnes, the last year for which figures are available. Trudeau's commitment for 2030 is 512 megatonnes, 192 megatonnes less.

Missing our target by 192 megatonnes, meaning 192 million tonnes, would cost taxpayers $3.84 billion annually, with carbon credits on the California market currently selling for about C$20 a tonne.

The government's latest prediction is in 2030 we will be 79 megatonnes short of its goal. At 79 megatonnes the cost would be $1.58 billion annually.

These costs would not be imposed all at once, but ramped up annually over time and depend on the future price of credits.

The theory behind international carbon trading is that doesn't matter where emission cuts occur, only the total, global cut.

But numerous studies have shown many carbon credits are fraudulent and don't reduce emissions.

Regarding California's cap-and-trade carbon market, when Ontario auditor general Bonnie Lysyk evaluated it prior to Ontario's now-cancelled participation in the system, she warned that without proper oversight, up to $2.2 billion annually by 2030 "may be leaving the Ontario economy for no purpose other than to help the government claim it has met a target."

Let the buyers, meaning taxpayers, beware.

Contributed by Lorrie Goldstein, Toronto Sun
National Post, February, 2019

2018 Upcoming Events

H2S Alive Training
April 25, 2019
Ramada Inn, London

EPEX 2019: OPI 57th Conference and Trade Show
April 29-30, 2019
Best Western Plus Lamplighter Inn, London

Board of Director's Meeting
May 10, 2019
OPI Boardroom

CSA Z341 2018 Edition Training
May 21, 2019
Holiday Inn, Sarnia

OPI Annual Golf Tournament
June 12, 2019
Links of Kent, Chatham