NOIA NEWS

INSIDE

2016: The year ahead

Industry Achievement Awards presented

Weathering the economic storm

Newfoundland & Labrador Oil & Gas Industries Association
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Noia News

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On the cover: Richard Wright received Noia's 2016 Rising Star award at the Industry Achievement Awards Luncheon on February 25.

President's Perspective

Robert Cadigan - Noia President & CEO

The oil & gas industry continues to deal with low oil prices and Noia members are still feeling the pressure to lower costs as the pain is pushed down through the supply chain. However, at time of writing, there are positive signs as the price of oil recovered the losses seen since December by rising to $40 a barrel. Hope remains that OPEC and non-OPEC producer overtures to maintain production to stabilize prices will take hold.

Only a few months in, 2016 has already been a very busy year. First, we welcomed a new Chair, Raymond Collins, and three new board members at our February Annual General Meeting. At the AGM, and discussed in his interview later in this edition, Raymond identified a number of goals for his term as Chair, advocacy being of utmost importance. To this end, Noia will continue to advocate for industry improvements on your behalf. Now is the time, while the price of oil is low, to make the changes needed to be ready for when the price goes back up – which it will.

One area of focus is rig intake. As Ron Davis, of Davis Rig Solutions, discusses in his interview in this edition of Noia News, Newfoundland and Labrador is the most challenging rig market in the world to enter. In Mr. Davis's view, the process for accepting rigs is unpredictable and inconsistent, with many barriers impeding smooth entry. These are critical issues that need to be addressed and ones that Noia will continue to press with all levels of government. The good news is that a working group has now been established with participation of the Governments of Canada, Newfoundland and Labrador and Nova Scotia and the offshore petroleum boards to deal with rig intake regulations.

As exploration and development moves further offshore, another area that we view with urgency is the international laws that apply to areas beyond the 200-mile limit. For example, Article 82 of United Nations Convention on the Law of the Sea (UNCLOS) requires Canada to make payments to the international seabed authority in respect of oil & gas production on the continental shelf beyond 200 nautical miles. However, there are many questions around the interpretation of the article and how collection will be made. As Wylie Spicer, counsel to the law firm McInnes Cooper, explains in his in-depth interview later in this edition, other countries have begun to assess how the law may impact them, but they are not as close as Canada to having to deal with the issue head on and the lack clarity is critical to development decisions. This is another area in which Noia will push the debate as we continue to meet with provincial and federal lawmakers in 2016.

We will also continue to engage in open dialogue and discussion with our members as we move forward on these and other issues that impact our industry. For example, in February, Noia held five consultation sessions to provide information to, and hear from, our members on the Canada – Newfoundland and Labrador Offshore Petroleum Board's changes to benefit guidelines. The feedback received informed Noia's submission to the Board in March.

As we move through 2016, you will continue to hear about our Redefining Oil strategy, which in fact guides all of our advocacy work. This edition of the Noia News features interviews with Bill Fanning and Raymond Collins, both of the Redefining Oil Board Committee, and focuses on the need for collaborative governance through the formation of an Industry Council. This is something that Noia continues to press with the Provincial Government. While formation of such a body was included in the Honourable Siobhan Coady, Minister of Natural Resources' official mandate letter, it is critical that government not lose sight of its importance to the future of the industry as it looks for ways to deal with the province's current fiscal reality. ■

Robert Cadigan
President & CEO

Completed Hebron ancillary structures were shipped from Pennecon Energy's Marine Base in Bay Bulls in January. Pennecon's many divisions provide resources and capabilities to service many industrial sectors locally and around the world.

Weathering the economic storm

From a high of over $100 per barrel to recent lows less than $30, there is no doubt that the oil & gas sector has been weathering a tough economic storm in recent months. No matter when things might turn around and how the industry will look after a recovery, there are steps that all organizations can take to better position themselves to survive and thrive into the future.

The Business Development Bank of Canada (BDC) provides financing, securitization and consulting services to small and medium-sized business owners in Canada. It has been working to educate clients about this particular downturn and some survival strategies they can employ.

Pierre Cléroux, VP Research and Chief Economist for BDC, said the main reason for this most recent downturn in oil prices is excess supply (currently almost two million barrels). The United States is credited with adding most significantly to this supply, doubling its production from five to ten million barrels over the last three years.

Although oil and all commodities are cyclical, Cléroux said this downturn is different from the one in 2008-2009, which was caused by a drop in demand during a worldwide recession. Oil prices recovered quickly at that time as developing countries such as India and China were not as impacted by the recession as North America and Europe. Their rapidly growing economies increased demand and aided a quick recovery.

Although it is difficult to speculate just how quickly oil prices will recover, the consensus right now is that the current price is too low. Cléroux said the market has to rebalance, with a new equilibrium expected to be in the $55-60 per barrel range.

"I do believe the price will increase this year because we're starting to see less production in the U.S.," noted Cléroux. "It may be some time before we reach a new equilibrium, probably not this year, but I think we'll see the movement up in 2016."

Strategies to survive the downturn

So how can companies survive and compete in this new oil price environment? According to the experts: be innovative and creative. Cléroux explained that in any sector the most successful firms are the ones who can understand and respond to the needs of their clients.

He said with oil companies now working hard to reduce operating costs, suppliers need to find solutions or offer different options that will reduce the cost of producing oil.

"One of the reasons why the price is staying so low for so long, especially in the U.S., is that people are able to produce oil at a much cheaper price than before. They have been adjusting the way they produce oil to this new reality. So in Canada we have to do the same."

A second strategy is diversification. A BDC study of 1000 Alberta firms released in November showed that diversified small and medium enterprises were doing better than non-diversified companies in revenue and profit growth. Cléroux said it's true in every sector.

"Right now it's a good time to look at selling products and services to other sectors or to look to change your products to fit another sector as well," he explained.

He added that the growth of the U.S. economy and the low Canadian dollar are making many export markets attractive.

"This is a good time right now to look for other sectors or to have a diversified strategy," Cléroux stated.

He added that change is inevitable so companies must do what they can to prepare now.

"We will see a different oil & gas sector," said Cléroux. "Businesses must find ways to be more efficient and reduce costs. That's going to change the sector."

Advice for local business

With today's tough economic conditions top of mind, the St. John's Board of Trade focused its 2016 Business Development Summit on educating members to "bullet proof" their businesses.

Innovation and creativity again emerged as key themes. A panel discussion looked at the need for innovation, as well as some of the challenges businesses face. Ron Subramanian of Go Productivity said that innovation is about having the clarity, commitment and courage to try new things and see things differently in a focused

Pierre Cléroux, VP Research and Chief Economist, BDC. Photo courtesy of BDC.

Pennecon Limited CEO David Mitchell. Photo courtesy of the St. John's Board of Trade.

Jess Chapman of ethree Consulting. Photo courtesy of the St. John's Board of Trade.

manner. He said sometimes that means creating a need that no one knew they had.

Kendra MacDonald of Deloitte LLP said it is critical to have an open mind and curiosity and to understand not only what's out there, but also what's coming, that can impact your business.

Raymond Collins of PF Collins International Trade Solutions (and Noia's current Board Chair) noted that it is important to take risk and to support failure as well as success.

"Sometimes we need to fail in order to find a solution," Collins said.

Jess Chapman of ethree Consulting built on the innovation theme during her presentation on developing a workforce that is ready for change. She said change has to come from the top down and involve all employees.

For instance, it's estimated that in the next 20 years, half of all jobs in the United States will be able to be automated or computerized, and there will be seven times as many connected devices in the world as people.

"These are the things that we need to adapt to and we need to have workforces that are ready and willing to adapt when we say we need to," noted Chapman.

The challenge is overcoming peoples' resistance to change.

"This means building a culture in your organization where everybody is ready for change," Chapman explained. "It's not going to happen overnight, but you will gradually reduce some of the concerns, time, energy and effort that it takes to drive change in your organization and allow yourselves as an organization to be more agile and to adapt faster."

A local success story

Pennecon Limited is a Newfoundland and Labrador company and Noia member that has proven its ability to adapt and succeed. CEO David Mitchell closed out the Business Development Summit with a look at Pennecon's 40-year history in the province. He explained that what began in 1972 as a heavy civil construction company has evolved into a multi-disciplined organization with over 1000 employees and project experience across Canada and in several other countries.

Its business lines include heavy civil, mechanical and electrical, construction fabrication and a services group of companies that provide specialty and conventional services to the offshore oil & gas, marine and heavy industrial sectors, as well as a real estate division and a rebar company. Mitchell offered some insight into the company's success.

"When the economy is hurting, that's not when you pack up and go home. It's when you dig in, pull up your socks and work a bit harder. It's when we all need to work smarter and, for Pennecon, the diversity of our business is helping us through."

For example, Mitchell explained that while current oil prices will affect the timing of the next mega projects for Pennecon's heavy civil division, the company's service group should fare just fine since it provides long-term maintenance and operational support to its clients.

"The service group was a strategic direction to provide stability and reliability to our business," he noted.

Mitchell said maintaining a competitive advantage comes down to defining a value proposition and owning that space.

"We consider ourselves a one-stop shop, so to speak. Each of our entities stands alone and has its own clients, contracts and bottom lines. But when we get the opportunity to work together, the whole is truly greater than the sum of its parts."

Mitchell said times of economic uncertainty are when companies should look to new markets and new opportunities while staying within the realm of their business competencies. Pennecon, for example, recently opened a new office in Edmonton in order to geographically diversify, while staying true to its core service offerings.

His advice: "Find out what you're really good at and perfect it. As you enter new markets and seize new opportunities, stay within the realm of what's tried and tested for your company."

Mitchell said another key to business success is attracting and retaining top talent. With a turnover rate of only 2 per cent, Pennecon utilizes many HR best practices to motivate and engage employees.

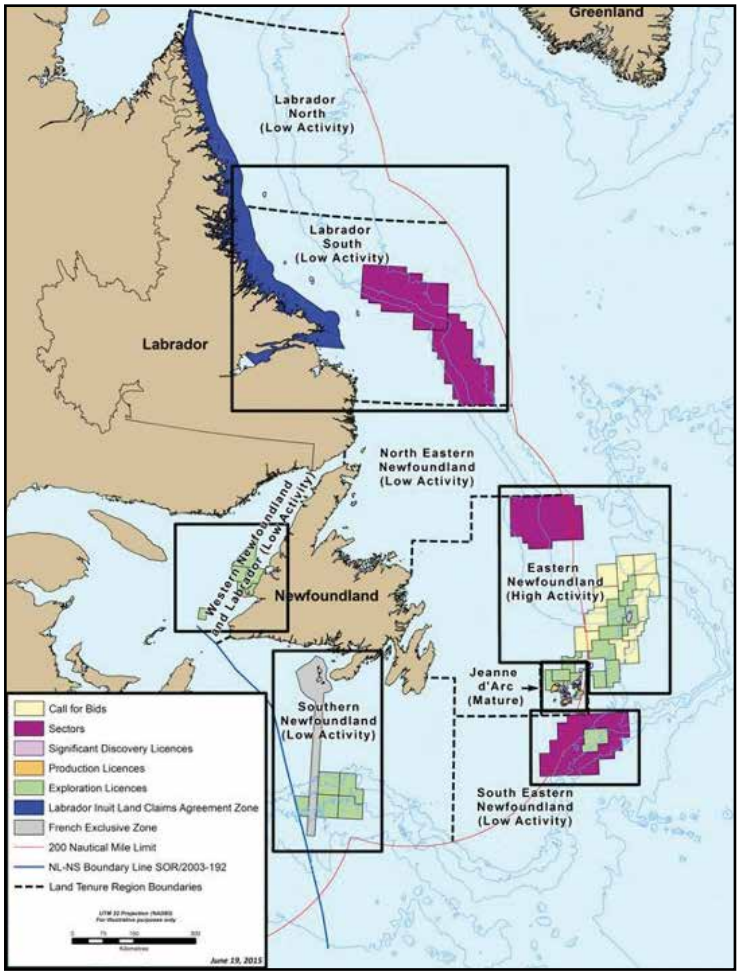
"Invest resources into improving and perfecting your processes and people. It's worth the time and it's definitely worth the money," Mitchell said.

Mitchell also noted that Pennecon, like all companies weathering this downturn, has a mandate to be leaner financially. He said being creative and finding bigger impact for investments can create an upside to this down.

"It's not just about being mindful of overheads and it's certainly not a cutting and slashing exercise, but it's rather about finding smarter ways to do all the same things."

He echoed the sentiments of many others who said that innovation is key to propelling businesses forward.

"The economic downturn is giving us incentive to look for opportunities to be smarter, to create new solutions to old problems." ■



Exploration is currently taking place in the Newfoundland and Labrador offshore beyond the 200 nautical limit in the Flemish Pass Basin.

Outside the 200 Mile Limit: Who makes the rules?

As exploration and development move further offshore, consideration must now be given to the international laws at play beyond Canada's 200 nautical mile exclusive economic zone (EEZ).

Exploration is currently taking place on the high seas beyond the 200 nautical limit in the Flemish Pass Basin, an area where seven parcels were also recently awarded in the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) NL15-01EN licensing round in November.

Wylie Spicer, counsel to the law firm McInnes Cooper, addressed two of the major issues arising from operations on the high seas when he spoke to delegates at Noia's Fall Seminar Luncheon in November. He noted that Canada is the first country having to face the interaction between national and international laws and laws fashioning

the offshore industry. He stressed the importance of attaining similarly high standards for operators beyond 200 miles as those within.

One issue he highlighted was the fact that Canada has little ability to regulate shipping and navigation beyond 200 nautical miles. Fishing vessel activities, international vessel movements and vessel-to-vessel communications are among the issues needing to be addressed.

National versus international laws

While Canada's ownership of and sovereignty over the Continental Shelf (seabed) extends 500-550 miles offshore, the rules governing the high seas beyond 200 nautical miles are entirely different. Spicer pointed out that under Canadian law, Section 18 of the Oceans Act states that Canada has sovereign rights over the Continental Shelf of Canada for the purpose of exploring it and exploiting the mineral and other non-living resources.

Above the seabed, however, the oceans are governed by the United Nations Convention on the Law of the Sea (UNCLOS). Article 78 of UNCLOS states, in part, that the exercise of the rights of the coastal state over the Continental Shelf must not infringe or result in any unjustifiable interference with navigation and other rights and freedoms of other states as provided in this convention.

Spicer said he believes compromise is possible.

"In various places UNCLOS strives to achieve balances between coastal states and the high seas," he said. "Exploration has been an important use of the ocean for a long time and, since the mid fifties, oil exploration has been a recognized piece in international law for use of the ocean."

He pointed to one example whereby Canada may be able to negotiate to protect the equipment of operators beyond 200 miles. Currently the Oceans Act contemplates safety zones of 500 metres for offshore facilities, but Spicer said it wouldn't be unreasonable for Canada to create zones of perhaps 2 kilometres around equipment to prohibit foreign vessels from fishing in the area, thereby better protecting subsea equipment.

He acknowledged that other issues are a little more difficult, including vessel communications beyond 200 miles, which do not require passing vessels to communicate with offshore installations.

Spicer added that he believes it is possible to balance the right to explore and exploit resources without interfering unreasonably with the rights of others to operate on the high seas.

"In order to provide certainty for offshore operators, we need to consider how these various interests are balanced," he explained. "I would say that these are all things that can be addressed by the various stakeholders acting together."

Oil royalties

Spicer said that other issues are not as straightforward. Article 82 of UNCLOS requires Canada to make payments to the international seabed authority in respect of oil & gas production on the Continental Shelf beyond 200 nautical miles. The Article provides for a five-year grace period for oil & gas production, after which a financial or in-kind royalty equivalent to 1 per cent of the value of production must be paid each year to a maximum of 7 per cent by the twelfth year. It stays at this rate for the life of production.

Spicer said even the interpretation of the Article raises questions. For example, in determining the payment, "production" does not include "resources used in connection with exploitation." He said this is important because, depending on how it is applied, it may limit deductions from gross production to physical resources used in the production process, or allow deduction of a whole range of financial and other resources used and/or spent to enable production.

Canada, as the coastal state, is obligated to pay this royalty, but there is currently no mechanism in place to determine how that is collected. Spicer said when the issue first surfaced in the political arena in 2004, the federal government contended that the monies for funding the UNCLOS obligation should be sourced from the benefits associated with offshore activity. The Government of Newfoundland and Labrador, however, took the position that the federal government was responsible since the purpose of the Atlantic Accord legislation is to provide benefits (including royalties) to Newfoundland and Labrador. Spicer added that it would seem unfair to expect operators to pay additional royalties to fund this obligation simply because of their location, and bearing in mind that they receive less protection than operators within the 200 mile zone.

"I think that we've kind of let the industry develop without governmentally paying enough attention to the issues that arise now that we're beyond 200 nautical miles. How can you ask a company to make a billions of dollars investment decision in an area if they don't even know if there's going to be an additional tax payable by them or in some part by them because of Canada's obligation under Article 82? I would say that that's just not fair."

Spicer said other countries have begun to assess how this law may impact them, but they are not as close as Canada is to having to deal with the issue head on. While the federal government is working on the issue, he said it is critical that it be addressed properly for the viability and validity of the industry. ■

Work continues on the Hebron GBS at Bull Arm's deepwater site. Photo courtesy of ExxonMobil Canada Properties.

2016: The year ahead

Hebron Project

It's going to be another busy year for the $14-billion Hebron project.

The ancillaries – the helideck and two lifeboat stations built by C&W Offshore in Bay Bulls – were shipped to Bull Arm in January. The utilities processing module (UPM), which is being built by Hyundai Heavy Industries in Ulsan, South Korea, is scheduled to arrive this year.

With the arrival of the UPM, the integration and commissioning of all the topsides modules and ancillaries will begin with the installation of the drilling support module and the derrick equipment set. Then, the living quarters module, helideck and west lifeboat station will be integrated with the UPM, followed by the east lifeboat station and the flare boom.

This summer, lead Hebron partner ExxonMobil expects to install the pipeline and bases for the offshore loading system (OLS), which will pump crude from the storage tanks of the Hebron platform's storage cells to shuttle tankers.

ExxonMobil says the final concrete slip-form operation for the gravity base structure (GBS) brought the center shaft to its final height of approximately 120 metres.

Tow-out of the completed Hebron platform to the Grand Banks oilfield is scheduled for 2017. First oil is expected in late 2017.

Flemish Pass

Statoil Canada expects to continue its Flemish Pass drilling program until this spring. Since spudding the first well in November 2014, the West Hercules rig has drilled 11 exploration and appraisal wells, including three sidetracks, for Statoil in the Flemish Pass and Northeast Newfoundland Shelf.

So far, all but two of the wells have been drilled in Exploration Licence (EL) 1112, where Statoil and partner Husky Energy made the Bay du Nord discovery estimated to contain up to 600 million barrels of light crude in 2013.

Statoil targeted one well each in EL 1123 and EL 1126. In EL 1123, Statoil is partnered with Shell, which recently

acquired BG International's stake in the licence once held by Repsol. In EL 1126, Statoil is partnered with Chevron Canada (40 per cent) and Shell (10 per cent).

Statoil is prepping for a 3D seismic survey of its exploration licences in the Flemish Pass. Scheduled to take place sometime between May and September of this year, the survey will cover 5,000 square kilometres of seabed. The exact location of the survey has yet to be determined.

Statoil has also acquired an interest in six of the seven new exploration licences issued in the Flemish Pass for total bids of more than $1.2 billion late last year. The company is the operator of five of those new ELs issued in January.

The West Hercules rig is under contract to Statoil until January 2017, according to Seadrill's fleet status report issued November 24, 2015.

White Rose

Husky Energy expects the semi-submersible drill rig Henry Goodrich to return to the Newfoundland and Labrador offshore by mid-year. The Henry Goodrich is contracted to Husky from May of this year to May 2018, according to a Transocean fleet status report issued February 11.

Husky announced the two-year contract for the rig in December 2015. It will be primarily used for ongoing development drilling at the White Rose oilfield and satellite fields, including the North Amethyst-Hibernia well and the next series of wells at South White Rose, which started production last year.

Production from the North Amethyst-Hibernia zone, which is located deep beneath the White Rose oilfield, had been scheduled for late 2015. That production timeline was revised to 2016-17 following the September 2015 cancellation of the contract for the newbuild rig, West Mira, by Seadrill Ltd.

The SeaRose floating production, storage and offloading (FPSO) vessel is scheduled for a 20-day maintenance turnaround during the third quarter of this year.

Husky continues to evaluate both a wellhead platform and subsea tieback as development options for the

West White Rose satellite field. In December 2014, the company announced it was deferring its investment decision in West White Rose to reduce costs and reassess the development options. Husky has since said production from the satellite is expected in the "2020-plus timeframe."

Hibernia

The West Aquarius rig will continue drilling wells this year for Hibernia Southern Extension (HSE). The subsea tieback consists of up to five production wells drilled from the Hibernia GBS and up to six water-injector wells drilled by the West Aquarius. To date, three of the HSE six water-injector wells have been drilled.

The $2-billion expansion will also enable additional wells to further develop the Ben Nevis-Avalon reservoir, which has been in production since 2000.

Hibernia Management and Development Co. (HMDC) also plans to spend six months upgrading the two drill rigs on the Hibernia platform starting in July. Both rigs will be out of service until the end of December. HMDC says the upgrades are necessary because the rigs will be in use longer than originally anticipated when the Hibernia platform was built. The oilfield is expected to continue production until 2040 due to increased Hibernia reserves. Oil production at Hibernia will continue during the rig upgrades.

The West Aquarius is under contract to HMDC until April 2017, according to Seadrill's fleet status report issued November 24, 2015.

Terra Nova

Suncor Energy's main activities this year for the Terra Nova oilfield will be ongoing maintenance. The Terra Nova FPSO is scheduled for a four-week maintenance turnaround starting in mid-May.

Suncor does not currently have a drill rig contract and the company says no drilling is planned this year in offshore Newfoundland. The company says it is prepping for a drilling program in 2017 and is looking for a rig to carry out this work. Suncor has issued expressions of interest (EOIs) to procure long-lead equipment items for the drilling program.

Suncor is also looking for other offshore services. One EOI, which closed in December, indicates the company is looking for dive support vessel, construction support vessel and light well intervention vessel services. The scope of the work includes additions to an excavated drill centre consisting of flexible jumper, flying leads, connectors and Christmas tree flowlines, along with light well interventions on two to six wells.

In 2014, Suncor conducted well interventions at Terra Nova using the Skandi Constructor.

Nalcor Energy Oil and Gas

By the end of 2015, Nalcor Energy Oil and Gas and its international partners TGS and PGS had acquired 110,000 line kilometres of 2D multi-client seismic data throughout the Newfoundland and Labrador offshore area. This seismic survey program, which includes marketing the multi-client data to global oil & gas companies, has been ongoing since 2011.

Early this year, Nalcor expects to issue a second resource assessment in advance of the 2016 licence round. A round is scheduled in the Jeanne d'Arc basin.

In the fall of 2015, Nalcor and the provincial government released the first in a planned series of resource assessments by Beicip-Franlab. It showed the hydrocarbon potential in 11 parcels up for bids last year in the Flemish Pass Basin to be 12 billion barrels of oil and 113 trillion cubic feet of natural gas.

In November 2015, combined bids from oil & gas companies totalled more than $1.2 billion for the exploration rights to seven of the 11 parcels up for bids in the Flemish Pass.

Land tenure activity

In mid-January, the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) issued seven licences to oil & gas companies that bid successfully in last year's land sale in the Flemish Pass:

- EL 1138: Chevron Canada (35 per cent), Statoil (35 per cent) and U.K.-based BG International, which was acquired by Shell (30 per cent);
- EL1139: Statoil (40 per cent), ExxonMobil (35 per cent) and BG International (25 per cent);
- EL 1140:Statoil (34 per cent), ExxonMobil (33 per cent) and BP Canada (33 per cent);
- EL 1141: Statoil (34 per cent), ExxonMobil (33 per cent) and BP Canada (33 per cent);
- EL 1142: Statoil (50 per cent) and BP Canada (50 per cent);

- EL 1143: Statoil (100 per cent);
- EL 1144: Nexen Energy (100 per cent).

Also in January, the CNLOPB issued calls for nominations in three offshore regions:

- North Eastern Newfoundland Region – The deadline for nomination of areas of interest is April 27. Under the four-year land tenure cycle for this region, a call for bids is scheduled for August 2019 and bids close November 2020.
- Southern Newfoundland Region – The deadline for nomination of areas of interest is April 27. The region, which includes the Laurentian sub-basin, is under the four-year land tenure cycle. A call for bids is scheduled for August 2019 and bids will close November 2020.
- Labrador South Region: Sector NL01-LS – The deadline for the nomination of parcels is March 16. Nominations will be considered in a call for bids issued later this year. Bids are scheduled to close in late 2017.

Scheduled land tenure activity is also ongoing in other offshore regions:

- Jeanne d'Arc Region NL15-01JDA: Parcels that were nominated by the October 20, 2015 deadline will be considered for a call for bids in 2016. The call for bids will be known as NL16-01JDA.
- South Eastern Newfoundland Region: In June 2015, the board identified Sector NL01-SEN, the first sector identified in this offshore region. This sector includes the Carson Basin. Interested parties will have an opportunity to nominate parcels in early 2018. A call for bids is anticipated in 2019.
- Labrador South Region: In June 2015, a second sector was identified in this offshore region, Sector NL02-LS. Sectors are identified at the beginning of the land tenure cycle. Oil & gas companies will have an opportunity to nominate parcels in this sector in early 2018. A call for bids is expected in the summer of 2018, and bids close in the fall of 2019.
- Eastern Newfoundland Region: In February 2015, the offshore board identified Sector NL02-EN in this region, which includes the Flemish Pass and the Orphan Basin. The next step is a call for the nomination of parcels within the sector. A call for bids is due in the spring of this year and bids are expected later in the year.

Seismic Surveys

Polarcus U.K. Ltd. filed a project description with the C-NLOPB in December 2015 to conduct 2D, 3D and 4D seismic surveys spanning more than 308,000 square kilometres in the Eastern Newfoundland offshore region between 2016 and 2022. The proposed survey area includes the Jeanne d'Arc Basin, Flemish Pass and Orphan Basin. A C-NLOPB environmental assessment is ongoing.

Seitel Canada Inc. filed a project description with the C-NLOPB in November 2015 to conduct 2D, 3D and 4D seismic surveys over most of the Newfoundland and Labrador offshore from northern Labrador to the French baguette off the south coast to the southern Grand Banks, and eastward beyond the Flemish Pass. Surveys would take place in the 2016-2025 timeframe. A C-NLOPB environmental assessment is ongoing.

CCG Services Canada filed a project description with the C-NLOPB in October 2015 to conduct 2D, 3D and 4D seismic surveys in the 2016-2025 timeframe. The proposed survey area includes portions of the Northern and Southern Grand Banks, Northeast Slope of Newfoundland, Flemish Pass and Orphan Basin.

Western Newfoundland

In January, the C-NLOPB announced a one-year extension for EL 1105, which is held by Corridor Resources Inc. The licence area contains the Old Harry Prospect in the Gulf of St. Lawrence where Corridor has proposed a one-well drilling program. The EL is now scheduled to expire January 14, 2017, unless the company drills a well that would extend the licence period.

The C-NLOPB also waived the $1-million deposit that is usually required to extend the term of a licence, stating: "In consideration of regulatory factors that have resulted in Corridor Resources encountering delays in drilling a validation well in the final year of its nine-year licence term, the board has removed the requirement for a drilling deposit. The board will announce plans for consultations on the environmental assessment with aboriginal groups and with the public at a later date."

Black Spruce Exploration also received a one-year extension on EL 1120, which contains the Lark Harbour prospect. That licence now expires in January 2017.

"Black Spruce Exploration received an extension to (the licence period) because onshore-to-offshore drilling activities require co-ordination with the board's provincial government counterparts, as the board does not have jurisdiction for the onshore portion of such activities," a C-NLOPB spokesman told The Telegram on January 19.

Nova Scotia

Shell Canada is in the midst of a two-well exploration drilling program in the Shelburne Basin located about 350 kilometres south of Halifax, N.S. The drillship Stena IceMAX spud the first well, known as Cheshire L-97, on October 23, 2015, and drilling wrapped up early this year. The company has applied for authorization to drill the second well dubbed Monterey Jack. Shell holds a 50 per cent interest in six exploration licences in the Shelburne Basin. The company is partnered with ConocoPhillips (30 per cent) and Suncor Energy (20 per cent). Shell also owns a 31 per cent interest in the Sable Offshore Energy Project (SOEP).

ExxonMobil Canada has said it could begin plugging wells at the Sable Offshore Energy Project as early as 2017, but a firm timeline has yet to be announced for decommissioning the natural gas field that started production in 1999. The field was expected to have a 25-year lifespan, but in recent years natural gas production has dwindled.

BP Canada has issued an EOI for a baseline environmental sample survey of the seabed in the Scotian Basin where it operates four ELs. The company has said it plans to start drilling in the latter half of 2017 and an environmental assessment is ongoing. BP acquired 7,090 square kilometres of wide azimuth 3D data two years after acquiring the deepwater exploration licences southwest of Sable Island in 2012. The company is partnered with U.S.-based Hess Corp. (40 per cent) and Australian-based Woodside Petroleum (20 per cent).

The Deep Panuke natural gas field resumed production in late October following five months of inactivity. Last year, Encana Corp. announced the field would become a seasonal operation – producing during the winter when natural gas prices are higher and shutting in during the summer months when demand and prices decline. The move is expected to increase the life of Deep Panuke, which has been producing high rates of water. Encana also cut its remaining reserve estimate for the field by more than half – from 200 billion cubic feet to 80 billion cubic feet. Deep Panuke started production in 2013. ■

Richard Wright, recipient of Noia's Rising Star Award and Laura Crosbie, who accepted on behalf of Robert Crosbie, Outstanding Contribution Award recipient.

NOIA INDUSTRY ACHIEVEMENT AWARDS 2016

Noia's Industry Achievement Awards were presented during a luncheon at the Sheraton Hotel Newfoundland on February 25. Presented annual during Oil & Gas Week, the awards celebrate two individuals who have made outstanding contributions to the local oil & gas industry and 30 year Noia members.

This year Robert S. Crosbie of Crosbie Group Ltd. and Dr. Richard Wright of Nalcor Energy (Oil & Gas) were named recipients of the Outstanding Contribution Award and Rising Star Award, respectively.

The Outstanding Contribution Award recognizes exemplary individuals who have influenced the development of our local oil & gas industry and who have demonstrated qualities of vision, integrity and leadership through their work and lives. And during his 36+ year career, Rob Crosbie has done just that.

Chairman and Chief Executive Officer of Crosbie Group Limited (CGL) since 1991, Mr. Crosbie's entrepreneurial spirit, vision, pursuit of excellence, business acumen, commitment to education and innovation, community leadership, record of charity, and high standards of ethics

and integrity are just some of the attributes which have inspired so many who have had the opportunity to work with him. These values have also been key to his ability to build what has come to be regarded as one of the most respected home grown businesses in our province. Mr. Crosbie's views are sought out by the general public, industry associations and government and he has played a leading role, often behind the scenes, in helping to shape both industry and public policy.

In addition to his considerable business success, Mr. Crosbie has also been an active private and public sector advisor and director and has an outstanding record of volunteerism for the betterment of our industry and our province.

The Rising Star Award was launched in 2014 to recognize the talents of an impressive individual who is 40 years old or younger and has made remarkable strides in their role in the local oil & gas industry. Dr. Richard Wright, Nalcor Energy's Manager of Exploration, certainly fits that description through his leading role in developing and executing Nalcor's multi-year exploration strategy – a strategy focused on reducing risk and uncertainty for the global industry while gaining knowledge about our resource potential to maximize the benefit for the people of the province.

Dr. Wright's technical expertise, keen business sense, industry insight and passion for the province has been instrumental in reshaping Newfoundland and Labrador's oil & gas future. Under his guidance, Nalcor's exploration strategy has seen much success for the local industry. The basin area in offshore Labrador has more than doubled and new areas in the slope and deepwater are being surveyed for the first time in the province's history. New play types that have never been seen before in offshore NL are being seen – successful play types that are yielding some of the leading discoveries in other hydrocarbon regions of the world.

The event also acknowledged companies and institutions which are marking 30 years as Noia members and contributors to the local oil & gas industry. This year, five companies achieved this milestone:

- Atlantic Canada Opportunities Agency (ACOA)
- Acuren Group
- Harvey & Company
- College of the North Atlantic
- Oceans Limited ■

Eg Walters of the Community Food Sharing Association was present at the event, which collected over $3000 in cash and pledges from event-goers to benefit the CFSA.

Robert Crosbie was unable to attend the Industry Achievement Awards luncheon but provided a videotaped acceptance speech.

Raymond Collins, Noia Board Chair, opens the event at the Sheraton Hotel Newfoundland. Almost 200 Noia members and guests attended the Oil & Gas Week event.

Understanding crude oil pricing

With the oil price volatility of recent months, it can be difficult to make sense of where markets are heading and just what drives them to behave the way they do. Noia asked Wood Mackenzie, an international consultancy company which provides commercial intelligence for the energy, metals and mining industries, to outline the processes involved in crude oil forecasting, with an eye to recent events.

Ann-Louise Hittle, Head of Macro Oils and Skip York, Vice President of Integrated Energy, provided the following information.

Q: What processes do economists/forecasters undergo when making oil forecasts?

A: Every month we do a near-term analysis that forecasts oil prices over the next two years. We update our prior forecast with reported actuals and also any changes in dynamics for both supply (e.g., OPEC meetings) and demand (e.g., weather). We then re-estimate changes in the supply/demand balance and forecast how these changes impact the path of oil prices.

When we do our long-term assessment we follow a similar approach and also include analysis on issues such as technology advances that could impact the long-term supply/demand balance, and upstream development improvements and penetration of alternative fuels in to transportation (which is the largest consuming sector for oil).

Q: What do you see as the key drivers affecting crude oil pricing?

A: We see the change in non-OPEC production as being the key driver to the 2016 oil market. We expect non-OPEC to decline about 700 thousand barrels /day. Two years of cutting capital spending by over 30 per cent is taking a toll on maintaining oil production. We also expect demand to grow 1.2 million barrels/day in 2016. The combination of non-OPEC decline (somewhat offset by production growth in Iran and Iraq) and continued demand growth are key drivers to tightening the global oil market supply/demand balance, which provides a positive catalyst for prices. We believe these are the primary fundamental drivers to the oil price. There also is the role of market sentiment incorporating various risks. Those risks are largely economic and geopolitical in nature and although the regions of the world impacted may change, it has always been part of forecasting oil prices. Currently fear about China's economy is affecting oil prices in a negative manner.

Q: Have these factors historically been the main drivers or have these changed over the years?

A: What is somewhat different this time is the larger role the financial sector is playing in oil industry dynamics. Access to capital has always been critical to upstream development plans. However, improved access to debt markets (due in some part to the returns the industry offered in a low-interest rate environment) gave smaller and more entrepreneurial producers the ability to develop their resources at an accelerated rate. The industry now is on the other side of that coin as we watch those companies struggle to keep loan covenants intact.

Q: Are there any secondary factors that you use in your analysis or a particular weighting to the criteria used universally?

A: Economic growth is a very important driver to our oil demand view. We have a team of economists who keep a close eye on economic activity in both advanced and emerging countries. A secondary factor to the impact of the economy on the oil price is how the financial (paper barrel) market interprets economic data. For example, in July 2015 the forward market assumed that volatility in China's equity markets would lead to weaker oil demand growth. However, oil demand growth in China was stronger than expected in the third quarter of 2015 for those who expected weakness in China. Wood Mackenzie forecast strong oil demand growth in China for 2015. We see forward curve drawing the same inference as Chinese equity markets slide again so far this year. We are closely watching China oil market statistics to see if this time is different than last summer.

Q: To what do you attribute the recent volatility in oil prices?

A: The volatility of oil prices since early December has been driven largely by sentiments in the paper market, rather than changes in fundamentals. The recent price rout started when non-commercial (e.g., speculators) in the paper market formed an expectation OPEC would disregard consensus and cut production at its early December meeting. When the production cut did not materialize it created a bearish sentiment that dislocated the financial (e.g., forward curve) price from the physical fundamental (e.g., spot) price. The bearish sentiment continues as the paper oil market is pricing in three fears: economic weakness in China (as a proxy for the emerging world), Iran will return to the export market faster and with more volume than expected, and non-OPEC production will not decline so market stays over-supplied. In addition, currently the fundamentals are very weak in the physical market with supply outpacing demand by over 1 million b/d. We expect this to persist through the first half of 2016.

Q: Is this volatility different than past periods of volatility? Why or why not?

A: The oil market is no stranger to price volatility. Although the recent magnitude of volatility is unusually strong, it is not unprecedented. It is not unusual to see a significant bout of volatility during a price recovery, so perhaps that is what the last few weeks are signaling. Interestingly, while volatility does elevate during a price decline, the increase tends to be of a smaller magnitude than the volatility associated with price recovery. ■

Redefining Oil: Collaborative governance

Redefining Oil is Noia's vision for the continuous development and growth of a competitive, local oil & gas industry. It is a plan that seeks to initiate a process for industry-wide collaboration and set the course for the future focused on increased participation, technology transfer, technology development and the mechanisms to achieve results.

One aspect calls for a renewed governance structure with government and industry working together to develop a long-term vision and a strategy for the further development of a competitive and competent local supply and service community.

Industry Council

The recommendations include the creation of an Industry Council to formulate the vision and strategy as well as a mechanism for implementation, monitoring and feedback.

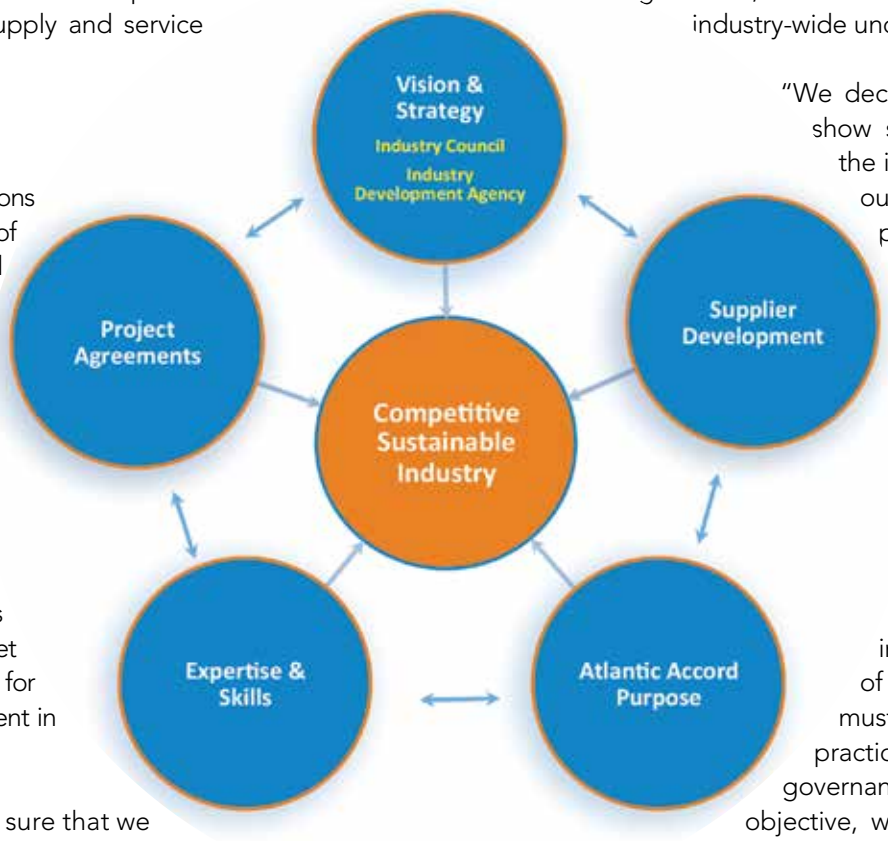
Noia Chair Raymond Collins said that this body is needed to set a long-term strategy for oil & gas development in the province.

"We want to make sure that we are doing things that are effective and have a long-term prospect and not just focused on what's immediately in the short term," Collins said. "We need to look to where local suppliers can be engaged in the long term and facilitate movements into international markets."

Bill Fanning, President and Country Manager, Kvaerner Canada, is a Noia Board member who has been heavily involved in the *Redefining Oil* committee since it was launched more than two years ago. He said that early on, the committee realized that a fundamental change in thinking had to take place from looking at the industry on a project-by-project basis to trying to better articulate the long-term value proposition.

"We need to elevate our thinking to a much higher level and really think about how this industry could become world class," said Fanning.

Fanning said the committee realized that the discussion needed to focus not just on talking about the next benefits agreement, but rather how to achieve an industry-wide undertaking.



"We decided that we could show some leadership in the initial stages and set out a process to get people to a starting point where we could have a broader, industry-wide stakeholder engagement."

To that end, Noia believes the Industry Council should play a pivotal role in shaping the future of the industry. It must adopt global best practices on collaborative governance and support objective, well-informed policy-making across government for the supply and service sector.

Noia feels this body should include representation from across the industry and government and include representatives from oil companies, the supply and service community, labour, and research and development and educational communities. Fanning said that in the early stages it is also important to engage the regulator (Canada-Newfoundland and Labrador Offshore Petroleum Board).

In terms of structure, Noia would like to see the Industry Council consist of 12-16 members who would meet at least quarterly, and more as often as needed. Collins said that an Industry Council is seen as part of the government platform, with the provincial department of Natural Resources taking the lead. Noia, through *Redefining Oil*, is positioned to assist in the process.

"We're looking forward to helping the government facilitate the development of that," Collins noted.

Fanning added that initial discussions have already been held with Premier Ball and some of his ministers, including Minister of Natural Resources Siobhan Coady, to move on striking this council.

"We have an obligation now to go and give the Minister a view of how we see it going forward."

Industry Champions

Another component of this collaborative structure is the concept of appointing industry champions and industry stewards to engage the broader industry and ensure that the work of the council is not done in isolation.

Collins said that industry champions are envisioned as people who have long experience in the oil and gas industry, usually at the end of their careers or retired.

"They've seen what it's like in the past but have no immediate connections so they would be an independent voice," Collins explained. "They're not representing their own companies or a particular sector but rather looking out for the province as a whole."

Fanning also sees a role for sector representatives whereby core members of the Industry Council could branch out into their respective industry clusters to network and make sure that the entire industry is engaged and providing input to the council. He said it's critical to have maximum two-way communication and input.

Fanning said the ultimate goal of an Industry Council and the *Redefining Oil* initiative is to strengthen the industry for the long term.

"To me it's all about trying to industrialize our industry," Fanning stated. "And I think we can do that in a collaborative way with a broader stakeholder group, using the industry council in the early days and being led by government or co-led. Then I think the second phase down the road will be the ability to internationalize or export our capabilities."

Collins agrees that formation of an Industry Council is a critical first step. It is one his priorities as Chair.

"I would like to see that the Industry Council is developed and there are members put forward and it actually starts meeting before the end of my term," Collins said. "I think it's critical that government and other interested bodies get together to proceed as urgently as possible to make sure we can make the necessary changes to make sure that the Newfoundland oil & gas industry can take advantage of any upswings in investment as time goes on so we're on the leading edge of that." ■

West Aquarius drill rig moored near Bay Bulls in 2014

Newfoundland and Labrador's challenging rig requirements

Rig intake regulatory requirements for the Newfoundland and Labrador offshore were among the issues addressed during Noia's fall seminar, which was themed Navigating Remote Logistics: Recognizing the Challenges. Knowing the Solutions. Rig consultant Ron Davis (formerly of GVA Consultants AB, now with Davis Rig Solutions) said that Newfoundland and Labrador is the most difficult rig market in the word to enter.

"The volume of rigs that have gone through Newfoundland really hasn't allowed the province to come up with a smooth, consistent system to accept rigs," said Davis. "Australia and Norway are complicated but, with a lot more practice and experience, they've been able to streamline it slightly better and make it more consistent so you know what you're getting into."

Davis added that the process makes it very difficult from a scheduling and budgetary perspective.

"If you're a drilling contractor, especially in this market, you want to know how much it's going to cost and how long it's going to take before you sign a contract. It's financially material."

Davis explained that the rig part of the approval process is referred to as the Operations Authorization, with work divided into two main areas. Operational Procedures and Training includes items such as safety assessment processes, environmental protection plans, crew training and competency requirements, while the Certificate of Fitness (COF) involves the technical requirements of everything on the rig (equipment compliance, inspection regimes, fire and safety systems, etc.). In order for a Certificate of Fitness to be issued, every piece and system on the rig is subject to review and approval by the regulator (Canada-Newfoundland and Labrador Offshore Petroleum Board).

Davis said some of the barriers to rig entry in the region relate to requirements that are out of step with international standards. For example, Newfoundland and Labrador has tailored local requirements for crew training and competency. Crews must do the safety training in Newfoundland, which presents scheduling and cost challenges.

Satisfying the requirements to receive a Certificate of Fitness has been another challenge for rig contractors. Davis said the contractor must engage the services of a third party certifying authority (in this case Det Norske Veritas) to prove that it can meet both goal-based and prescriptive regulations. He explained that goal-based regulations are open to some interpretation, while prescriptive regulations are much more rigid. If a rig doesn't satisfy the language of a requirement, there is an item-by-item query process.

"If the rules say I have to have 10 of an item and I only have 9 but I can prove that my 9 are better than 10, there's a long process of documents that have to be exchanged between the certifying authority and the Board."

Davis explained that some of the drilling and production guidelines are problematic because they are based on facilities and technology from the seventies and eighties. He believes they should be updated to reflect modern rig design.

"Rig safety systems and rig design have come leaps and bounds," Davis said. "You have to look at a rig in a modern design context, not a rig that's 35 years old."

The requirement for quarters sprinkler systems is one that Davis feels is out of step with international standards. He said this requirement went away elsewhere in the seventies, due to the availability of other methods including mist systems, improved materials and HVAC systems that mitigate damage to the quarters in a fire.

Another challenging requirement for contractors has been the welder's shop location. The rules stipulate that there cannot be open flame within 50 metres of the rotary table (where the first exposure to the well happens), but Davis said because of the geometry, it's almost impossible for a semi-submersible to meet this requirement.

Davis said some other longer-term considerations will also come into play when the Newfoundland and Labrador offshore finds itself with rig contracts of longer than five years. Current contracts have not yet reached that threshold. Regulations mandate the inspection of safety critical equipment every five years, which Davis said involves a whole host of equipment, much of which is very difficult and expensive to do. For example, changing thrusters, which weigh about 70 tons and are located underwater, is very difficult, expensive and dangerous. The contractor would need to have millions of dollars in spare equipment in order to minimize downtime for the rig and extensive shorebase facilities would also be required.

"Newfoundland and Labrador is promoting exploration so some rigs may be out there a long time and these problems will surface," said Davis. "This is another barrier. The drilling contractor has to work in all that cost to the contract."

Davis noted that regulations are not fully applied to the intake of a new purpose-built rig, something that will likely be needed for developments further offshore, in deeper water. He said there is a very concentrated knowledge base surrounding rig intake regulation which could slow down rig intake.

"If Newfoundland and Labrador is successful in promoting development, that knowledge base has to grow or it will create a huge bottleneck."

He said another challenge is that the approval process is not designed to scale up so you have to go through the process each time, even if a rig leaves and comes back. Having a set of precedents would enable the province to accept more rigs in less time.

"Other jurisdictions have gone through it so many more times so they've evolved their rules and they have precedents and a bigger knowledge base to pipe all this through. And the drilling contractors are more familiar with this because they've had more rigs through there."

Davis said the provincial government is working to update regulations but it's a slow process. He added there are steps that can be taken to improve the rig intake process, including early assignment of classifying authority, early definition of interpreted requirements and initiation of compliance (six months minimum notice), procurement and logistics diligence, clear cost and schedule definition for all stakeholders and a proactive and coordinated effort led by all stakeholders.

Davis said now is the time to sort out these issues.

"Newfoundland and Labrador needs to get its act together now while the price of oil is low because once it goes back up it will be too late. You don't want to lose investment dollars to other parts of the world." ■

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Raymond Collins, Noia's 2016 Board Chair

Noia's 2016 Board Chair outlines top priorities

Raymond Collins, President of PF Collins International Trade Solutions, began his term as Noia Chair at the 2016 Annual General Meeting on February 4 in St. John's. As he begins this role during a slowdown in the oil & gas industry, he discussed the importance of all stakeholders coming together to help shape an industry that is globally competitive and sustainable for future generations.

A key priority for Collin this year is implementing the early stages of Noia's *Redefining Oil* strategy (see page 23 for more details).

"Given the current state of the environment and how connected Newfoundland and Labrador is to the price of oil, it's critical that we treat this industry with as much seriousness as possible," he noted.

He added that it is necessary for the industry to review and assess its place now to maximize future returns when the investment cycle picks up again. He said *Redefining Oil* is about planning for the future and not just focusing on individual projects.

"There really hasn't been a long term vision in terms of where we want the province to be on a long term basis," Collins said. "We need to have a more focused approach so that companies and people can make investments for the long term and know where the industry is headed."

Collins added that seeing the formation of an Industry Council with broad stakeholder involvement is a goal for this year.

A second focus area for 2016 will be supplier development. Collins said that Noia would like to be able to offer or direct members to services that will help their businesses be more competitive. He noted that while Noia may not be able to provide them all in-house because of the broad range of services offered by members, it does want to engage in research to find out about what other organizations can offer to help members be better at what they do.

"We've done a good job of communicating information to our members, but with the broad base of membership in various industries it's hard to have specific assistance to each type of member to help them be better and more competitive in their own businesses. We feel that we need to be able to point the way so that they're more competitive when they're bidding in the market place."

Recent supplier development sessions have been designed to get feedback from members on what they're looking for from Noia in this regard.

The third priority area identified by Collins was improved Board governance. Collins said this will include educational opportunities through the Institute for Corporate Directors.

"We're looking to use some of the educational tools and frameworks that they've developed to help us more efficiently and effectively manage our Board operations," Collins explained. "It's about having the mechanisms to make sure we have the right tool sets to do our jobs."

Overall, Collins said his role involves being a champion for the Newfoundland and Labrador oil & gas industry.

"I'm looking forward to working for the continued promotion of Newfoundland and Labrador as an investment opportunity for oil & gas and making sure that we're well noted in the world market." ■

Noia Board welcomes new faces

Noia members elected three new people to its Board of Directors at its Annual General Meeting on February 4.

Kerri Best, Senior Consultant, Flourish Energy Inc. is a native of Newfoundland and Labrador and currently resides in Portugal Cove - St Philips. She was educated at Memorial University.

Kerri achieved a 20 year career centered in the petroleum industry through her work with the provincial government, industry operators and private local business. The acquired expertise she will bring to the Noia Board was developed within the provincial Department of Mines & Energy, along with supply chain management within Suncor Energy and Encana. Kerri is currently General Manager with Waterford Energy Services Inc, a local energy engineering firm specializing in our east coast oil & gas subsea development, well construction and QAQC. She has a firm understanding of the needs for both the operator and small business owner.

Since last year, Kerri has been an active member of Noia's Supplier Development Committee. Her energy and determination for results is evident with her appointment in 2014 as Chair of the Board with Women in Resource Development (WRDC) and her part-time yet ongoing volunteer work with Choices for Youth.

Christian Somerton is Assistant General Manager of Pennecon Energy Marine Base, a deep-water port specializing in logistical solutions to Newfoundland and Labrador's marine and offshore oil industries. Like the company he works for, Christian was born and raised in Newfoundland and Labrador, making hard work, creative problem solving and a community wide focus second nature.

In his work role, Christian is responsible for planning, scheduling, bidding and the executive oversight of all activities and functions at the facility. Under his management and oversight, as a subcontractor to Technip and Subsea 7, Christian has supported several subsea construction projects for each producing field offshore Newfoundland and Labrador. Christian has a keen interest in helping Newfoundland and Labrador companies become competitive in the global marketplace. His experience working with the operators, major EPC contractors, and the local supplier base during his career at Pennecon will serve him well in his capacity as a Director of Noia's Board.

Currently, Christian is completing a Masters of Science in Supply Chain Management and International Logistics at the University of South Wales.

Hank Williams is General Manager of Cougar Helicopters. He has 20 years of experience in the transportation industry with the last 16 years in the aviation sector. Hank joined Cougar Helicopters in 1997 as Passenger Movements Coordinator, quickly moving to Base Operations Manager (St. John's) before being appointed as General Manager East Coast Operations. In 2010 Hank was appointed General Manager, Cougar Helicopters, with overall responsibility for all of Cougar's operations globally, which comprises all of VIH Aviation Group's IFR operations. A hands-on helicopter manager, Hank has completed the Helicopter Association International's Helicopter Operator Management Course and is a member of London-based Heli Offshore.

NOIA FALL Seminar

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