# CONTEX

Energy Examined.

IGNITING A NORTH AMERICAN ENERGY RENAISSANCE

WHAT'S UP AT CAPP, Q2

RCE AWARDS

GERRY PROTTI, AER CHAIR



# Photographs: (top to bottom) Brian Buchsdruecker; Courtesy Encana ; Tom Walker; Jason Dziver; Courtesy Talisman Energy

### Volume 2 Issue 2 THE SHALE GAS ISSUE

### **Features**

### 20 The Shale Gas Revolution

How shale gas has altered the global balance of energy production, creating opportunities and challenges for Canadian producers.

### The RCE Awards: The People Behind the Innovations

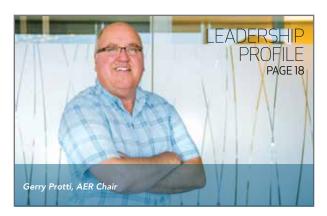
We profile the project leaders and visionaries who helped bring these ground-breaking projects to life.

### 35 After the Floods

Industry volunteers demonstrated caring and a can-do attitude helping those impacted by the June 2013 floods in Alberta.

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CAPP.CA/CONTEXT

### Oil and Gas Industry Regional Profile:

### ATLANTIC CANADA

To date, development of oil and gas production in Atlantic Canada has mainly occurred in the oceans around Newfoundland and Labrador and Nova Scotia. Significant quantities of both crude oil and natural gas have been discovered in sedimentary basins beneath the ocean floor.

East of St. John's, off the coast of Newfoundland and Labrador, there are three offshore oil projects in production: Hibernia, Terra Nova and White Rose. Southeast of Halifax, off the shore of Nova Scotia, the Sable Offshore Energy Project and Deep Panuke are both producing natural gas.

Atlantic Canada also has a small but growing onshore oil and natural gas industry. In New Brunswick, there are two producing projects—the McCully field which produces natural gas and the Stoney Creek field which produces oil. There is also significant shale gas development potential in New Brunswick and active exploration underway. New Brunswick's natural gas potential is estimated at 70 Tcf of gas in place. There is no commercial production taking place onshore in Nova Scotia or Newfoundland and Labrador, although a number of companies hold exploration agreements and one company holds a production agreement and is actively exploring.



### **Production:**

In Newfoundland and Labrador, 1.48 billion barrels of oil have been extracted from the Hibernia, Terra Nova and White Rose fields since 1997 (production began in these three fields in 1997, 2002 and 2005, respectively). In NS, 1.9 trillion cubic feet has been extracted from the Sable Offshore Energy Project since operations began in 1999. Deep Panuke reached full production in December 2013.

CRUDE OIL



230,000 B/D 6.0 PER CENT

OF CANADA'S TOTAL CRUDE OIL PRODUCTION (FIRST HALF 2014)

NATURAL GAS



406 MMCF/E 2.7 PER CENT

OF CANADA'S OVERALL NATURAL GAS PRODUCTION (FIRST HALF 2014)

Production numbers based on government sources.



### What's New:

The Hebron Project, is based on a 1980 offshore heavy oil discovery about 350 kilometres southeast of St. John's, NL. Hebron is currently under construction and is scheduled to start producing in 2017. This summer, 4,000 people will be employed at the Hebron development at Bull Arm, NL. The project is expected to have a 30+ year project life and is estimated to contain 700 million barrels of recoverable oil.

(continued on page 4)

### Resource Potential\*





OFFSHORE NATURAL GAS

260 TCF

(NS: 120; NL: 60; NB: 80)

\*These are estimates of resource potential by the governments of NL, NS and NB. Resource potential estimates total resources for which reasonable prospects exist for eventual economic extraction, as distinct from reserves which are known to be economically and technically feasible to extract.

TCF = trillion cubic feet; MMCF/D = million cubic feet per day; B/D = barrels per day

### **Economic Impacts:**

7,000 PEOPLE DIRECTLY EMPLOYED Source: CAPP



INVESTMENT CUMULATIVE EXPENDITURES

> \$37

BILLION Source: CAPP



28%
OF GDP IN NL
2.5%
OF GDP IN NS

(MINING AND OIL AND GAS)
Source: Governments of NL and NS



VALUE CHAIN
SUPPORTS OVER

800
LOCAL SUPPLY/
SERVICE
COMPANIES
Source: CAPP



ROYALTIES TO GOVERNMENTS (2012)

Source: Government



### CONTRIBUTORS



### Ian Doig

lan Doig is a Calgary-based freelance writer and editor. His feature writing has appeared in Alberta Venture, The Globe and Mail, Calgary Herald, Canadian Geographic and GrainsWest. He has also edited Where Calgary, Essential Calgary, Our Alberta and the Tourism Calgary visitor guide. In this issue Doig wrote "The Shale Gas Revolution," page 20.



### Jason Dziver

Jason Dziver is a professional photographer of 20 years since attending the Alberta College of Art and Design. He loves taking on a wide variety of assignments; the majority of his work is capturing images of architecture, portraits, editorial food and beverage, product, and heavy industry. When he has down time, you can most likely find him relaxing with his wife and two girls in B.C.'s wine country. In this issue, Dziver's photography appears in "The RCE Awards: The People Behind the Innovations," page 26.



### Sonja Franklin

Sonja Franklin is a Calgary-based communications consultant to the energy industry who has taught applied writing for public relations at Mount Royal University. Prior to that, she spent a decade as a reporter for Bloomberg News in Canada and Europe, covering the energy industry as well as economics and monetary policy. She has reported from all G7 countries, and her stories have been reprinted by major newspapers worldwide. In this issue, Franklin wrote "After the Floods," page 35.

### Regional Profile: Atlantic Canada

(CONT'D FROM PAGE 3)

### WHAT'S NEW

Atlantic Canada has an active and ongoing oil and gas exploration industry. In the fall of 2013, Statoil and Husky Energy discovered a field at its Bay du Nord prospect in the Flemish Pass (about 500 kilometres northeast of St. John's) that it estimates holds between 300 million to 600 million barrels of oil. This is one of three recent discoveries in the Flemish Pass Basin and may lead to further exploration of these waters. Commercial development of these discoveries could lead to new investment, production and jobs in the Atlantic region. The Gulf of St. Lawrence is another prospective area with industry interest in further exploration.



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# Shale Gas, THE RCE AWARDS and more.



>> Evolution is the common theme for the summer edition of *Context*, CAPP's quarterly member magazine.

Our cover story focuses on the transformation brought on by the shale gas revolution. The advent of commercially viable shale gas extraction has altered the global balance of power in many ways regarding energy production—creating both big opportunities and some new challenges for Canadian producers. Read about how this has catalyzed significant change and is a vital part of the oil and gas balance in Canadian energy.

It's hard to believe that June marked the one year anniversary of the flood that impacted so many Albertans, communities and our industry. This article will take you behind the scenes and tell you about how the oil and gas industry came together to help communities and individuals affected by the June 2013 floods in Alberta, which became Canada's costliest natural disaster.

Speaking of coming together, CAPP recently hosted the 2014 Responsible Canadian Energy Awards in Calgary to celebrate and recognize member companies for their leading performance in environment, health and safety, and social performance categories. While many of the companies and projects have been recognized, this article introduces you to some of the people behind the projects.

In addition to our regular departments of the magazine, we are introducing a new section called Regional Profile. The concept is to provide you with a snapshot and better understanding of oil and gas production, economic impacts, resource base, and an update on recent regional developments. We hope that you will enjoy this addition to the magazine, and this issue's profile of Atlantic Canada.

Last but not least, be sure to read "In Closing" from CAPP Vice President Janet Annesley, as she talks about her transition from Communications to the role of VP Ottawa, Eastern/Atlantic Canada in September. Although Janet will be based in Ottawa, her communication legacy will continue, given her no small part in championing the evolution to our member magazine, Context.

Enjoy this edition of *Context*, share it with your colleagues, and as always, let us know how we are doing. **C** 

### Brenda Jones,

Manager, Member Communication and Special Events, Canadian Association of Petroleum Producers

### DELIVERING VALUE TO NATURAL GAS PRODUCERS

>> This issue, we highlight a robust and vital segment of Canada's oil and gas industry: natural gas supply and markets, with a particular focus on shale gas.

Our cover feature story discusses the shale gas revolution (page 20), from the great technical success story that has unlocked this resource to the benefit of Canadians and Canadian producers, to the opportunities and challenges created by the significant increase in North American natural gas supply potential.

This is an interesting and important time for Canada's natural gas producers. We have a vast, known and inherently valuable natural resource. However, with the erosion of U.S. export markets and pressure on markets in Eastern Canada, growth in Canadian natural gas production will require the opening up of new markets. There is significant potential, but also some significant challenges in the development of a Canadian LNG export industry to diversify and grow natural gas markets.

Market opportunities also exist in expanded domestic markets, such as the use of natural gas in electricity production to replace coal and nuclear power generation, as a feedstock and energy source for further growth in oil sands production, and as a fuel source for the small but growing segment of natural gas vehicles.

All of this means a great deal of focus and effort for CAPP and industry, ensuring we maintain the social licence required to develop our natural gas resources and to access new markets, while being competitive relative to the many natural gas suppliers around the world. This is particularly true in the case of providing LNG to Asian markets, where we face not only competition from existing suppliers such as Qatar and Australia, but the potential entrance in the next few years of new suppliers from the United States and east Africa.



Natural gas has always been a critical part of CAPP's work in relation to policy and regulatory advocacy, energy literacy, performance improvement, and communication and outreach. To some extent, there is perhaps a perception otherwise, given some of the large-scale advertising campaigns being funded by oil sands producers under the Canada's Oil Sands brand, and the generally high profile of oil sands issues—many requiring CAPP's response—found in the news media.

However, the oil sands communication program has positive impacts on the reputation of the entire industry, recognizing that our core opponents are largely promoting an "off hydrocarbons" agenda. Additionally, analysis of CAPP staff effort and costs consistently demonstrates that natural gas focused members are deriving good value in terms of CAPP staff activity and results delivery.

Recent changes in CAPP's governance, organizational structure and branding all serve to focus activity and increase transparency regarding natural gas issues. CAPP has an MOU with the recently established BC LNG Developers Alliance to ensure integrated and comprehensive coverage of issues related to the full LNG value chain. Working together, CAPP and the BC LNG Developers Alliance can enable LNG development and associated natural gas production growth through integrated education, communication and outreach, and advocacy across the entire natural gas value chain. This includes branding to differentiate communication focused on natural gas.

Within CAPP, the creation of the position of Vice President Western Canada & Natural Gas Markets ensures that a member

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of CAPP's executive team has ongoing consistent focus on non-oil-sands issues. CAPP is also establishing a Natural Gas committee of the Board that will report directly to the Board of Governors. This committee has the mandate to provide a strategic steer on behalf of the CAPP Board related to CAPP's activities on social licence and competitiveness for natural gas across the full value chain.

In summary, natural gas continues to be a key part of the upstream industry in Canada and CAPP is very focused on delivering consistent value to our natural gas focused members.

Sincerely,

### Dave Collyer,

President and CEO,

Canadian Association of Petroleum Producers

### CAPP Priorities, Heat Map and Q2 Progress

The following tables show CAPP's "top five" Competitiveness and Social Licence priorities for 2014 as agreed to by the CAPP Board of Governors, along with a broad description of key deliverables in each area. In addition, the "Heat Map" element of the Scorecard identifies whether issue areas are intensifying, staying the same or diminishing over time. This is a high level overview of CAPP's accountability for results delivery to our members.

In the Competitiveness area, issues are generally intensifying as the year progresses. Through the end of Q2, CAPP is generally on track in meeting its key deliverables for the year, but with some headwinds and with a couple of areas where focus and results delivery need to increase over the remainder of the year.

On the social licence and reputation front, CAPP's overall results are also generally on track relative to the plan for 2014. That being said, there are regional and project-specific issues that are ongoing and problematic. To date, oil markets and transportation infrastructure development have kept pace with oil production growth. The assessment of further enhancements to the RCE Program and implementation of the ground campaign in eastern Canada both need to be accelerated over the remainder of the year.

### Top 5 Competitiveness Priorities

PRIORITY		HEAT MAP	KEY DELIVERABLE	
1.	Fiscal Competitiveness		Balanced public policy with focus on industry competitiveness.	
2.	Environmental and Operational Regulation		Federal and AB reform proceeding as per plan.	
3.	Oil Market Access and Growth		Access to markets aligned with oil production growth	
4.	Pipeline Tolls		TransCanada Mainline tolls remain within approved parameters	
5.	Aboriginal Engagement and Consultation		Clarity and consistency in industry approach to engagement and consultation	

### Top 5 Social Licence Priorities

	PRIORITY	HEAT MAP	KEY DELIVERABLE
1.	Overall Social Licence and Public Reputation		Maintain or enhance industry's overall reputation with the Canadian public.
2.	Industry Performance		A progressive RCE Program that facilitates continuous industry performance improvement.
3.	Safety		Best practices framework for producer-owned pipeline safety and integrity.
4.	Oil Sands Communication and Outreach		"Next level" communication and outreach program that maintains leadership on value chain approach.
5.	Unconventional Natural Gas and Oil Communication and Outreach		Next phase of landowner/community engagement plan.

HEAT MAP
Intensifying
Unchanged
Diminishing

### TransLink Moving to Natural Gas

The B.C. Greater Vancouver Transportation Authority, TransLink, is planning on buying 170 buses fuelled by compressed natural gas over the next three years. TransLink officials say that improved technology and fuel cost savings make these buses superior to traditionally used diesel buses.

ACCORDING TO THE
INTERNATIONAL
ENERGY AGENCY, THE
SHARE OF NATURAL GAS
IN THE GLOBAL ENERGY
MIX IS EXPECTED TO
GROW 2.4 PER
CENT PER YEAR
UNTIL 2018.

### **5 NUMBERS**

### Every British Columbian Needs to Know



THE ECONOMIC IMPACT OF OIL EXTRACTION ON B.C.'S GDP. THIS IS SIMILAR TO THE FORESTRY AND LOGGING INDUSTRY DIRECT CONTRIBUTION TO B.C.'S GDP OF \$1.6 BILLION.



THE DECREASE IN AVERAGE VOLUME OF OIL SPILLED FROM OIL TANKERS AROUND THE WORLD FROM THE 1990s TO NOW (113,500 TONNES TO 4,700 TONNES)—LARGELY DUE TO NEW TECHNOLOGIES AND REGULATIONS.



THE NUMBER OF THE TANKER MOVEMENTS
THAT ALREADY OCCUR SAFELY ALONG THE WEST
COAST OF BRITISH COLUMBIA. PORT OF METRO
VANCOUVER HAS BEEN RECEIVING OIL TANKERS
SINCE 1957.





THE BARRELS OF OIL NEWFOUNDLAND TRANSSHIPMENT (A COMPANY THAT TRANSPORTS OIL FROM OFFSHORE NEWFOUNDLAND) HAS MOVED SAFELY AND WITHOUT INCIDENT OVER THE LAST 16 YEARS.

THE PERCENTAGE OF FOREIGN TANKERS INSPECTED ON THEIR FIRST VISIT TO CANADA—PART OF THE FEDERAL GOVERNMENT'S NEW MEASURES IN SUPPORT OF A WORLD-CLASS TANKER SAFETY REGIME.

Source: "Five Facts Every British Columbian Needs to Know" published by the Canadian Chamber of Commerce.

### Got a Bright Idea?



GE RECENTLY ANNOUNCED A TOTAL OF \$1-MÎLLION IN DEVELOPMENT GRANTS AND CASH PRIZES FOR SELECTED PROJECTS BRINGING FORWARD VIABLE TECHNOLOGICAL SOLUTIONS TO DECREASE GREENHOUSE GAS EMISSIONS IN THE OIL SANDS.

Enter at www.geghgecochallenge.com.

### **INNOVATION:**

### GE Partners with COSIA on Environmental Performance

In early July, GE signed two agreements that are expected to enable the development of new technologies to reduce greenhouse gas emissions and water usage in Alberta's oil sands.

One agreement features a \$5 million investment in the SAGD Produced Water Treatment pilot project currently under way at Suncor's MacKay River facility. The agreement extends an existing partnership between GE, Suncor and Alberta Innovates—Energy and Environment Solutions (AI-EES) into a Joint Industry Project within the collaboration framework of COSIA, enabling new support from Devon Canada and ConocoPhillips Canada for the project.



🛕 Elyse Allan, President and CEO of GE Canada

The SAGD Produced Water Treatment pilot project tests new technology that would allow produced water (i.e., water that has already been used to extract bitumen) to be treated more efficiently, enabling increased re-use of this water within the in situ process. The technology has the potential to reduce overall water use and operating costs at in situ oil sands facilities.

The second agreement is a Memorandum of Understanding with six member companies of COSIA to pursue other Joint Industry Projects, with a potential investment of up to \$13 million. The projects would be aimed at developing technologies to improve environmental performance, primarily in areas of greenhouse gas reductions and advances in water treatment.

Elyse Allan, President and CEO of GE Canada called the agreements "a step toward a new generation of environmental technologies."

### INDUSTRY NEWS 🕟

### Alberta Farmers Tour, Part Trois

For the third consecutive year, the Oil and Gas Services Association of Québec (OGSAQ) organized a July farmers tour to Alberta. The tour is an opportunity for more Quebeckers to deepen their knowledge about shale gas production—by seeing the developments first-hand, and meeting the landowners whose fields are directly impacted by oil and gas development.

In the past, the trip consisted primarily of participation by farmers. This year, the Quebec delegation was made up of twelve business leaders and decision makers from Quebec, including representatives from Quebec Chambers of Commerce, Quebec Council of Employers, Business Council on the Environment of Quebec, Port of Quebec, local mayors, researchers, economists and academics.

Over a period of three days, the delegation toured the province, meeting scientists, government regulators, industry representatives and other stakeholders in Alberta's oil and gas industry. They visited the University of Alberta's Rangelands Research Institute, Canyon Services Group Red Deer office as well as an operating oil well, to see first-hand oil and gas industry operations. A key was the opportunity to



🙊 Quebec delegation visits a mocked-up hydraulic fracturing site at Canyon Services Group in Red Deer.

meet and have discussions with Alberta farmers who have been living with and benefiting from oil and gas for the past 100 years while maintaining a strong farming and agricultural industry.

Françoise Bertrand, the President and CEO of the Federation of Chambers of Commerce of Quebec, was a member of the delegation. She noted, "Quebec should draw its inspiration from the way Alberta government accompanies hydrocarbon industries. Their strong expertise and modern technologies, their large scientific literature and the partnership they developed with local communities, are all part of the success model of the Albertan oil and gas industry that deserves to become better known in Quebec." Bertrand added that with the hydrocarbon industry in the middle of

a new beginning in Quebec, things are looking positive, and the tour will help her and other participants be "better equipped" ambassadors for the oil and gas industry back home.

### WHAT IS OGSAQ?

FOUNDED IN 2011, OGSAQ REPRESENTS MORE THAN 60 BUSINESSES, EMPLOYING MORE THAN

### 5000 PF0PLF

TS MISSION IS TO EDUCATE QUEBECKERS ON THE OIL AND GAS INDUSTRY.



For more info, go to www.afspg.com.

### Huge Jump in Oil by Rail

Canada's oil-by-rail exports have increased almost nine-fold in the past two years. According to the National Energy Board, 15,980 barrels a day of crude were exported in the first quarter of 2012. As of the fourth quarter of 2013, this number has climbed to 146,047 barrels a day.



### Arctic Research

Statoil Canada and the province of Newfoundland and Labrador plan to spend \$3.9 million on a number of projects to help advance oil and gas development in harsh environments.

For example, one project will employ advanced radar systems to research ways to automatically detect and predict ice movement.

### Doer Confident on Keystone XL

In a speech at the 2014 Pacific
Northwest Economic Region Summit
held in Whistler, B.C., in July, Canada's
Ambassador to the United States,
Gary Doer, said, "I know that the
President will go with science. I am
very confident with that." Ambassador
Doer was referring to U.S. scientific
data that shows shipping oil by rail is
more expensive and increases harmful
greenhouse gas emissions and the risk
of spills. Ambassador Doer pointed out
that oil shipments by rail in the United
States have increased significantly in
recent months.



Gary Doer, Canada's Ambassador to the United States

### WHAT'S (/P at CAPP

>> UPDATES ON SOME OF THE ACTIVITIES AND MILESTONES WE'VE BEEN WORKING ON FOR MEMBERS. THROUGH THE SECOND QUARTER OF 2014.

### Communication

### Taking Part in the National Skills Competition



CAPP was a presenting sponsor at the 20th Skills Canada National Competition held in Mississauga in May. The event features the best-skilled trade and technology students and apprentices.

More than 500 students and apprentices battled for top honours in competitions ranging from precision machining to welding and graphic design. There were also interactive activities, demonstrations and exhibits encouraging visitors to experience a host of in-demand trades and technology careers.

"This event is a valuable forum to engage young people about the high-quality career opportunities available through oil and gas and related industries," said Janet Annesley, Vice President Communication at CAPP. "If they have the skills, we have the iobs." Learn more at skillcompetencescanada.com.



(left to right) Shaun Thorson, CEO of Skills Canada; Larry Cann, Admin Assistant to the General President at UA Canada; Janet Annesley, VP Communication at CAPP; Jason Kenney, Minister of Employment and Social Development; Donavon Elliott, President of Skills Canada; Mike Holmes, host of HGTV's Holmes on Homes and Holmes Makes it Right.

### CAPP's Strategic Outcomes CAPP STRIVES TO DELIVER FOR OUR MEMBERS IMPROVED COMPETITIVENESS IN: Fiscal Environmental and Operational Policy and Regulations Market Access and Growth Pipeline Tolls Aboriginal Engagement and Consultation Workforce Canadian Energy Framework ENHANCED SOCIAL LICENCE TO DEVELOP AND OPERATE THROUGH: **Environmental and Social Performance** Communication and Outreach

### Canadian Geographic: The Energy Issue Plus Resource Map



CAPP's partnership with the Royal Canadian Geographical Society continues to pay dividends in terms of promoting better energy literacy.

The June 2014 edition of Canadian Geographic was themed "Energy Rich: Exploring the Top Resources Powering Our Nation," and included a feature article describing the size and potential of Canada's energy resources, including natural gas, oil sands, offshore, coal and uranium. The issue also included a pull-out map highlighting Canada's energy resources and reserves, pointing out that some of the world's greatest energy reserves of oil and natural gas are found in Canada.

Reprints of the map are available to member companies upon request. For more information or to request copies of the resource map, contact Christina.Pilarski@capp.ca.



### DID YOU KNOW?

THE ROYAL CANADIAN GEOGRAPHICAL SOCIETY HAS AN EDUCATIONAL NETWORK OF APPROXIMATELY 11,000 SCHOOLS **ACROSS CANADA** 

### CANADA'S ENERGY CITIZENS



### Join Canada's Energy Citizens

In May, CAPP launched its Canada's Energy Citizens campaign. The campaign is designed to engage oil and gas industry "core supporters"—the people who most strongly support the industry.

"There's an important opportunity to help our strongest supporters become advocates. As an energy citizen, you can help spread the word of the numerous economic and social benefits that our industry provides, and the commitment and innovation the industry is applying to meet environmental challenges," says Christina Pilarski, Manager Campaigns at CAPP.

The initial phase of the campaign has been focused on enrolling participants using digital advertising and social media, reaching out to industry supporters at events, and to employees at CAPP member companies. Online elements include a web page where participants can register to join, as well as a Facebook page and Twitter channel.

Our goal is to provide core supporters of the industry with the information they need and want to share with their friends and circles of influence.

"Response has been positive," notes Pilarski. "Our goal is to provide core supporters of the industry with the information they need and want to share with their friends and circles of influence. It's interesting to see what resonates with pro-oil and gas people, and what aspects of the industry they are most proud of."

Registered Canada's Energy Citizens will receive updates and information via email on a variety of energy issues designed to engage, create discussion and be shared. The website will be expanded this fall to include a blog that will highlight issues, key messages and citizen stories, and a resource section with fact sheets and regional information. If you're not already a member, sign up at www.energycitizens.ca.

### CANADA'S ENERGY CITIZENS BY THE NUMBERS

WEB SITE PAGE VIEWS:

FACEBOOK LIKES:

TWITTER FOLLOWERS:

MOST SHARED POST:

28,605

3,172

2.088

**41,808** PEOPLE



### CAPP's Annual General Meeting 2014

At CAPP's annual general meeting on April 8, 2014, Glenn Scott, Senior Vice President Upstream at Imperial Oil Limited, assumed the position of Chair of the CAPP Board of Governors for 2014/15, and John Rossall, Senior Vice President of Talisman Inc., was appointed Vice Chair. A full slate of Governors was elected to the Board, with representation from junior to large corporations operating in all regions of Canada's upstream oil and gas industry. Outgoing Chair Brian Schmidt was thanked for his many contributions.



Glenn Scott, Senior Vice President at Imperial Oil is CAPP's new Chair

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### CAPP's Speaker Series

CAPP held three Speaker Series luncheons in Calgary between April and the end of June.

On May 21st, award-winning author and Financial Post columnist Peter Foster gave a talk centred around his new book "Why We Bite the Invisible Hand: The Psychology of Anti-Capitalism." During his presentation, Foster touched on political specifics related to the protracted debate around TransCanada's Keystone pipeline and explored more broadly why it could be in human nature and evolution to enjoy simultaneously the longer, easier and richer lives we have today while holding pessimistic and negative views toward the technological and economic systems responsible for getting us here.

On June 3rd, Conservative pundit and bestselling author Ezra Levant gave a talk based on his latest book, "Groundswell: the Case for Fracking." With his trademark rapid-fire wit and reasoning, Levant made the case for the benefits of hydraulic fracturing while shining a light on the motives of groups that oppose it.

On June 17, Financial Post contributor Vivian Krause gave a talk outlining her views on the millions of dollars being funneled into Canadian environmental groups by U.S. foundations. Krause identified this as part of a deliberate and extraordinarily well-funded campaign to "demarket" Canadian oil and gas and called for environmental groups to move away from campaigns and towards real solutions.







(left to right) Peter Foster, Ezra Levant and Vivian Krause gave talks to our members as part of the CAPP Speaker Series this spring

### **Investment Symposium Takes Off**





The 2014 CAPP Scotiabank Investment Symposium held on April 3 and 4 in Toronto was a definitive investment event for the Canadian upstream oil and gas industry. The event featured 800 participants (50 per cent more than in 2012), 89 presenting



companies, 230 institutional investors and 100 retail investors.

"In addition to being well-attended, the event was highly successful at connecting investors and oil and gas executives," says Brenda Jones, Manager Member Communications and Special Events at CAPP. Over the two days, opportunities for interaction included themed panel company presentations, individual company breakout sessions and more than 700 one-on-one meetings.

### THE INVESTORS THAT ATTENDED THE 2014 CAPP SCOTIABANK INVESTOR SYMPOSIUM

### 880 BILLION

IN CAPITAL FUNDS

The investment symposium also created greater visibility for the oil and gas industry in Eastern Canada, as well as a greater awareness of key energy issues facing the industry today. Plenary sessions included a keynote address by Federal Minister of Transport Lisa Raitt and a presentation on West Coast LNG prospects by Steve Carr, Deputy Minister for the Ministry of Natural Gas Development in B.C.

Based on positive feedback from members, the CAPP Board of Governors has approved a 2015 event. "Mark your calendars," says Jones, "The event is scheduled for April 8 and 9 next year and once again will be held in Toronto." For more information, including sponsorship opportunities for next year's event, contact Brenda.Jones@capp.ca.

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Alberta Energy Minister Diana McQueen speaks at the sold-out RCE awards dinner in May.

### The 2014 RCE Awards and Awards Dinner

The sold-out Responsible Canadian Energy awards dinner was held Wednesday, May 21st, at the Westin in Calgary. The night featured more than 500 attendees who heard a rousing keynote speech on U.S. / Canada energy relations by Canada's ambassador to the United States, Gary Doer. There was also a video and award presentation by the Red Cross, acknowledging industry's generosity in response to last June's flooding in Alberta, as well as a speech by Alberta Energy Minister Diana McQueen indicating her government's support for responsible energy development through initiatives like the RCE program.

The centerpiece of the evening were the record 34 submissions by industry featuring projects that demonstrate excellence in social, health and safety, and environmental performance.

The RCE Advisory Group, which consists of external leaders from the safety, environment, labour, aboriginal, academic, private, finance and investment sectors, selected the five 2014 RCE Award recipients.

Read about the projects that received awards and the individuals who helped bring them to life in: "The RCE Awards: The People Behind the Innovations" (page 26).

### The RCE Awards Go To:

- Health and Safety Award: Talisman Energy, Cypress 3D Seismic Program.
- Social Award: Japan Canada Oil Sands, Hangingstone Expansion Project - Aboriginal Review Group.
- Environmental Award: Devon Canada, In Situ Oil Sands Wildlife Mitigation and Monitoring Program.
- President's Award: Suncor Energy: Hydrocarbon Blanket Gas and Recovery System; Using Recycled Tailings Water for In Situ Make-up Water; and Social Prosperity Wood Buffalo.
- Chair's Award: Laricina Energy, Heavy Equipment Training Program.

The President's Award recognizes outstanding projects in any or all three performance categories, while the Chair's Award recognizes outstanding work by a smaller CAPP member company.

### **Policy and Performance**

### Reforming the Temporary Foreign Worker Program





In June, the federal government announced reforms of the Temporary Foreign Worker Program (TFWP). The changes limit access to the TFWP in a bid to ensure Canadians are first in line for available jobs, and includes stronger enforcement and tougher penalties against companies that seek to bend or break the rules.

"CAPP supports a labour market system that prioritizes hiring Canadians first, while enabling access to temporary foreign workers in a manner that is responsive to industry's short-term labour needs and while recognizing the unique nature of various regions and sub-sectors," says Ben Brunnen, Manager Fiscal and Economic Policy at CAPP. "CAPP provided input to that effect to the federal government, and that input was largely reflected in their announcement."

### Key reforms to the program include:

- Wage levels (as a proxy for skill) will replace National Occupational Classification as the main criteria for administering the TFW program.
- A Labour Market Impact Assessment (LMIA) replaces the Labour Market Opinion as the screening mechanism for employers. The LMIA requires employers provide information on the number of Canadians who applied for and were interviewed for a particular job, and an explanation if they were not hired.
- Applications for the lowest-wage, lowest-skill entry-level occupations will be barred from the TFW program in areas where unemployment is six per cent or higher.
- Employers seeking to hire high-wage temporary foreign workers will be required to submit transition plans to demonstrate how they will increase efforts to hire Canadians.
- Improved information sharing among departments and agencies involved in the oversight of the TFW program, including provincial and territorial governments.

Brunnen notes that industry relies on the TFW program to meet short-term, high-demand labour needs and specialty applications, particularly for the construction, turnaround and maintenance of major energy projects in more remote northern and offshore locations. A government commitment to a standard of ten business-day service for in-demand, highly paid (top 10 per cent) or short-duration (< 120 days) positions will be important to ensure efficient administration in meeting these needs.

One measure that will require clarification, however, is the barring of low-wage applications in regions of six per cent unemployment or higher. Depending on how regions are defined, this could have a negative effect on places like northern Alberta and British Columbia. "The hospitality and service sectors in remote and northern communities where we operate are also experiencing short-term labour shortages and also benefit from the TFW Program," says Brunnen. "However, if the government were to define economic regions broadly—as it does for the Employment Insurance program—northern Alberta and northern B.C. would lose access to low-wage workers." CAPP is recommending that the definition of local unemployment rate be based on specific economic regions, like those used in the government table: Annual Unemployment Rates by Economic Region, found here: http://bit.ly/1prMJhc. For more information, contact Ben.Brunnen@capp.ca.

New Faces: Meet Brian McGuigan

One of the new faces at CAPP is Brian McGuigan. In June, McGuigan took on the position of Manager of Aboriginal Policy at CAPP.

McGuigan is well-prepared for the challenges of this key portfolio at CAPP with over 20 years experience specializing exclusively in Aboriginal and treaty rights. A graduate of Dalhousie Law School in Nova Scotia, McGuigan worked in the Yukon as Chief Federal Negotiator



Brian McGuigan,
Manager Aboriginal
Policy at CAPP

in the early 1990s, where he negotiated the Kwanlin Dun First Nation Treaty, the first in Canada in an urban setting. Following the 1999 Supreme Court Marshall decision affirming the Mi'kmaq and Maliseet First Nations treaty right to fish in pursuit of a moderate livelihood, McGuigan negotiated agreements facilitating First Nation participation in the commercial fishery in Atlantic Canada. Later, McGuigan led the development of the Government of Alberta First Nations consultation policy which was adopted in 2005. After 2005, McGuigan practiced law, representing industry or First Nations in negotiation of benefit agreements, and in a variety of other negotiations.

Over the years, McGuigan has sat on all sides of the negotiating table—at different times representing First Nations, government and industry. The experience has given him insights into the different perspectives. "It's also taught me you can make a positive contribution from any side of the table," says McGuigan.

McGuigan is excited by the challenge of joining CAPP. "It's an opportunity to make a contribution for industry, and also to help improve how consultation is done." Contact McGuigan at Brian.McGuigan@capp.ca.

A NEW LABOUR DEMAND REPORT FROM THE PETROLEUM HUMAN RESOURCES COUNCIL OF CANADA SAYS OIL SANDS ACTIVITY WILL GENERATE ALMOST 100,000 CONSTRUCTION, MAINTENANCE AND

THE NEXT 10 YEARS

Read the report: http://www.careersinoilandgas.com/labour-market-information/reports/

McGuigan led the development of the Government of Alberta First Nations consultation policy.

### Oil Sands and Market Access

Feds Weigh in on Rail Safety, Marine Oil Transport



In April, Federal Minister of Transport Lisa Raitt announced new safety measures for rail transportation to be enforced by Transport Canada. These measures include:

- Removing the least crash-resistant DOT-111 tank cars from dangerous goods service;
- Requiring DOT-111 tank cars used to transport crude oil and ethanol that do not meet the standard published in January 2014, or any other future standard, to be phased out or refitted within three years;
- Requiring emergency response assistance plans (ERAPs) for the transportation of crude oil, gasoline, diesel, aviation fuel and ethanol: and.
- Requiring railway companies to reduce the speed of trains carrying dangerous goods.

"We broadly support the measures announced and will continue to work with service providers and Transport Canada to ensure the safe delivery of our products," said Greg Stringham, CAPP Vice President Oil Sands and Oil Markets.

Vicki Ballance, Manager Alberta Regulatory Affairs at CAPP adds that in a collaborative effort to enhance rail safety, CAPP, the Railway Association of Canada and the Canadian Fuels Association formed an industry task force.

This task force developed an Emergency Response Assistance Plan framework, setting out the key deliverable elements that a preparedness and response organization would need to execute on in order to meet industry's needs. The framework was developed in response to Transport Canada's Protective Direction 33 (PD-33), requiring ERAPs from shippers of flammable liquid hydrocarbons.



Sands and Oil Markets

"The task force evaluation process identified the Liquid Petroleum Gas

Emergency Response Corporation (LPGERC) as the most suitable organization to design and implement this framework, delivering national spill and fire emergency response capability through a single entity to meet the needs of shippers, first responders and government agencies in the event of an incident involving flammable liquids on rail," says Ballance. The LPGERC will support shippers' ERAP submissions by providing key deliverable response elements and preparedness management processes.

Alignment of Canadian and U.S. standards will ensure safe, clear and consistent regulation for increasing oil transportation by rail across the Canada/U.S. border.

The LPGERC will have nation-wide emergency response support in place by September 20, 2014, which is the deadline upon which PD-33 takes effect. CAPP is providing subject matter experts to help the LPGERC Technical Advisory Committee develop this capability.

Finally, in light of the U.S. government consultation announced on July 23 on similar new measures to enhance rail safety, including the rail tank car standards, Stringham adds that it will be important for the two governments to seek alignment of Canadian and U.S. standards. "This will ensure safe, clear and consistent regulation for increasing oil transportation by rail across the Canada/U.S. border," says Stringham. "It is also important that requirements for transportation of crude oil be comparable to those for shipment of similar products." For more information, contact Vicki.Ballance@capp.ca.



### Marine Tanker Safety System

In May, Transport Canada announced measures to enhance Canada's world-class marine tanker safety system. Among the measures announced are:

- Modernization of Canada's marine navigation system, including taking a leadership role in implementing "e-navigation", a system that provides accurate, real-time information on navigation hazards, weather and ocean conditions;
- Establishment of area response planning partnerships for regions that have current or projected high levels of tanker traffic;
- Amending of legislation to provide use of alternate response measures such as chemical dispersants;
- Conducting of additional research into the behaviour of different formulations of heavy oil products when spilled in marine environments; and,
- Strengthening the polluter pay principle through actions such as removing the Ship-Source Oil Pollution Fund (SOPF) per-incident liability limit of \$161 million in order to make the full amount of the SOPF (currently about \$400 million) available for a single incident.

# DESPITE A NEAR DOUBLING

CAPP was a participant in the expert panel process which provided recommendations on which many of these measures are based, and supports a world-class marine tanker safety system that ensures oil and natural gas products continue to be transported safely in Canadian waters, even with increased traffic.



"We know Canadians will only accept additional pipeline infrastructure and associated tankers if it is demonstrated to be safe and continues to have the necessary regulatory oversight," says Greg Stringham, Vice President Oil Sands and Oil Markets at CAPP.

Over the coming months, Transport Canada plans to conduct round-table discussions with stakeholders and CAPP will continue to participate in the ongoing public review process, seeking clarity on how these new measures will affect shippers, particularly in the area response plans, research initiatives and liability fund.

"We recognize the new measures add costs for shippers and we look forward to participating in the upcoming meetings to understand the details of what this will mean for our industry," says Nancy Bérard-Brown, Manager Oil Markets at CAPP.

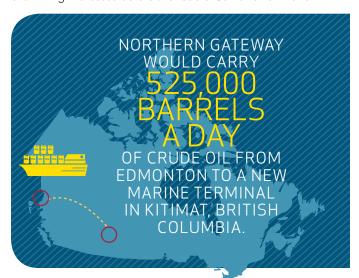
For more information, contact Nancy.BerardBrown@capp.ca.

### A Positive Decision on Northern Gateway

In mid-June, the federal government approved construction of the Northern Gateway pipeline project between the oil sands and Kitimat, B.C. The approval includes 209 specific conditions set by the National Energy Board's (NEB) Joint Review Panel which concluded a lengthy review process in December 2013.

"The approval is another important step for Canada to access global markets and world prices, and earn full value for our oil resource," said Greg Stringham, CAPP Vice President Oil Sands and Oil Markets. "While more work needs to be done, significant progress has been made, including work by the federal and B.C. governments and industry to ensure world-class land and marine safety systems."

CAPP has been an active participant in the review process, including presenting written and oral arguments and cross examining witnesses before the federal Joint Review Panel.



### New Crude Oil Forecast, Plus Oil by Rail Report

The 2014 edition of CAPP's annual Crude Oil Forecast, Markets and Transportation publication anticipates that Canadian oil production will continue to grow steadily by an annual average of four per cent (175,000 barrels per day (b/d)) over the period to 2030.

Much of the growth will be driven by oil sands production, which is forecast to grow from 1.9 million b/d in 2013 to 4.8 million b/d in 2030.

The projected growth in production is dependent on expansion of transportation capacity to a range of market opportunities.

To address the growing importance of rail transport, CAPP has also published a new report, *Transporting Crude Oil by Rail in Canada*. The report provides an overview of crude oil transport by rail, including an update on uploading capacity at rail terminals in Western Canada, a discussion of the economics of rail transport, and highlights of initiatives to enhance rail safety.

Crude Oil Forecast, Markets and Transportation is available at http://www.capp.ca/forecast; Transporting Crude Oil by Rail in Canada is available at http://bit.ly/1rue6a7. For more information, or to request hard copies of the Crude Oil Forecast, contact Beth.Lau@capp.ca.

Alberta's oil and gas industry is being competitively disadvantaged as a result of substantial property taxes on industry assets.

### Western Canada

### Alberta Municipal Competitiveness Report and Recommendations



CAPP is representing members on a key competitiveness issue relating to the increasing taxation of Alberta's oil and gas industry by municipal governments. CAPP recently finalized a report called the *Alberta Municipal Competitiveness Report and Recommendations*.

"Using data we've collected over the past year, the report clearly identifies that the Alberta oil and gas industry is being competitively disadvantaged as a result of substantial property taxes on industry assets relative to other provinces and sectors," notes Ben Brunnen, Manager of Fiscal and Economic Policy at CAPP. In many cases, these taxes reflect a growing tax gap between non-residential and residential classes, an unsustainable growth in tax rates relative to growth in the assessment base, and inequitable tax increases on oil and gas producers relative to other industries and regions.

As an example, the report found that applying current municipal assessment and taxation practices in B.C. and Saskatchewan to



Ben Brunnen, Manager Fiscal and Economic Policy at CAPP

Alberta, would result in annual competitiveness improvements of at least \$386 million and \$319 million respectively for the oil and gas sector.

The report also makes recommendations to address these issues including re-introducing a linkage between residential and nonresidential property taxes in rural and specialized municipalities.

According to Brunnen, CAPP will be using the report as part of its ongoing advocacy efforts on this issue with the Alberta provincial government as well as key municipal governments. For more information, contact Ben.Brunnen@capp.ca.

### British Columbia Deep-Gas Well Royalty Program



The British Columbia government recently made changes to its Deep Gas Well Royalty Credit program that will expand drilling incentives for producers. In March, it announced the creation of a new Tier 1 Royalty Credit Program for horizontal wells shallower than 1,900 metres total vertical depth (TVD).

### The changes will stimulate drilling of horizontal wells in the region.

"This change is a positive outcome for members," notes Geoff Morrison, Manager British Columbia at CAPP. "The previous royalty program provided good value, but offered no stimulus for wells shallower than 1,900 metres TVD." Morrison notes that this created an imbalance in development based on an arbitrary cut point. In the old program, a well with a TVD of 1,901 metres might receive a credit of around \$2.2 million, whereas a nearby well with a TVD of 1,899 metres would receive no credit at all.

"CAPP and members advocated eliminating artificial boundaries and expanding the program to include horizontal wells drilled in shallower formations," says Morrison.

The B.C. government's new Tier 1 Deep Well Royalty Credit is aimed at those shallower wells with long horizontal segments. Royalty credits range from \$440,000 for wells with a deep well depth of 2,500 metres (i.e., vertical plus horizontal distance), up to a maximum of \$2.81 million for wells with a deep well depth of 5,500 metres. Wells which qualify for credits under Tier 1 attract a six per cent minimum royalty.

The government's existing program for wells with a greater than 1,900 metres TVD is now designated as Tier 2 of the new program. These wells attract a three per cent minimum royalty. For more details on the program, visit: http://bit.ly/1kb6XLI.

### **Atlantic Canada**

### **CAPP Publishes Dispersants Fact Sheet**



Dispersants are chemicals designed for use in marine environments to speed up natural oil dispersion. They can be rapidly sprayed onto an oil spill by a specially equipped aircraft or vessel, or injected directly into a subsea spill.

Dispersants are one of several response tools that have been proven safe and effective in managing and mitigating oil spills. CAPP has published a fact sheet explaining how dispersants work and how and why they are used. Download the fact sheet at: http://bit.ly/1pNRctK. 

### Atlantic Canada Education Day in Ottawa

CAPP's Atlantic Canada Executive Policy Group held an education day in Ottawa on May 26. The day included meetings with key ministers and deputy ministers, Members of Parliament, and Senators from the Atlantic Canada region.

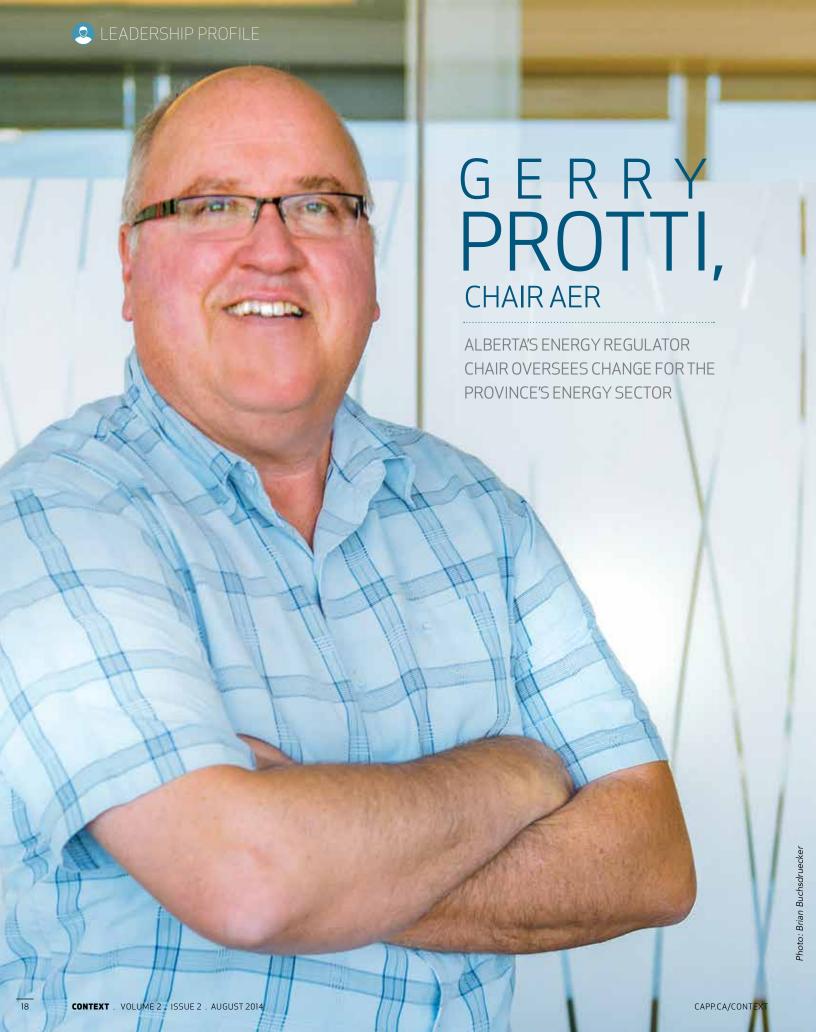
"The meetings gave an opportunity for CAPP to provide an overview of industry activity in the region, and highlight the significant impact the industry is



Paul Barnes, Manager Atlantic Canada and Arctic at CAPP

having on the Atlantic Canadian economy," says Paul Barnes, Manager Atlantic Canada and Arctic at CAPP. "It was also an opportunity to discuss issues CAPP members see as impediments to industry growth which require attention."

Members in attendance considered the day to be successful as it resulted in a greater understanding of the industry and industry issues among the government officials. For more information, contact Jill Piccott, Communications and Policy Advisor at CAPP, Jill.Piccott@capp.ca.



### If there's one dominant theme to Gerry Protti's career, it's energy.

Since entering the energy field more than 35 years ago as an economist with Ontario Hydro, he's held many roles—including assistant deputy minister with the Alberta government's Energy Department, Encana executive, founding president of CAPP and senior positions with the Alberta Treasury Department and the Canadian Energy Research Institute.

Protti was tapped in 2013 by the government to become chair of the new Alberta Energy Regulator (AER). After reaching its first year milestone in June—a period in which the organization assumed its regulatory functions and established a new vision and strategic plan—the AER has transitioned to become the single regulator of energy development in the province.

### **INDUSTRY OUESTIONS**

### Q: What attracted you to the oil and gas industry?

A: I began my career with Ontario Hydro after I graduated from the University of Western Ontario in 1975. That really started me in the energy field. When I returned to Alberta two years later, I started working with the Canadian Energy Research Institute and from there just naturally gravitated toward an interest in oil and gas. I find that the oil and gas industry has the most interesting people and the most compelling issues to work on.

### Q: Last year you assumed the role of chairman for Alberta's new energy regulator. How will the new agency differ from past regulatory agencies in the province?

A: I'd say there are two broad changes that make it different from past regulators.

First, we've amalgamated the regulatory responsibilities of three different agencies—the former Energy Resources Conservation Board (ERCB), Alberta Environment and Sustainable Resource Development—into a single entity. What this means is cradle-to-grave regulation covering all aspects of the natural gas, oil and coal industries.

Second, we've changed the governance model. Previously the chairman of the ERCB was the chief governance officer, the CEO and the chief hearings commissioner. What the provincial government did was separate these three roles. Today we have an arms-length governance board for the regulator, we have a CEO who focuses attention on day-to-day operations, and we have a roster of independent hearings commissioners. This allows for more effective regulation for stakeholders.

### Q: What is your role as the chair?

A: I'm responsible for the overall governance of the organization. The CEO reports to me. I lead the board of directors, which operates very much like a corporate board. I have to ensure the AER is moving forward consistent

### **Quick Hits**



Favourite restaurant in Calgary: River Café Restaurant in Prince's Island Park.



**Top travel tip:** Get to the airport early and practise Zen.



Current book you're reading: Essentialism: The Disciplined Pursuit of Less by Greg McKeown.

to others in the community or to people they meet when travelling, they have a real opportunity to communicate about the industry, its role in Alberta, the way it does business and the type of people in the industry. I hope people in the business will use the opportunity to talk more about the industry and share their perspectives, because that is very useful for other people to hear.

## People in the oil and gas business underestimate their ability to act as ambassadors for the industry.

with the legislative framework outlined in the province's Responsible Energy Development Act.

### Q: What are the biggest challenges facing your organization?

A: One is to bring in the efficiency gains in regulation that are part of the AER's original concept and plan. Also, we need to continue to build the stakeholder trust and credibility for the new regulator. The AER already has a considerable degree of trust and credibility among stakeholders, but we can definitely improve on that through transparency and other mechanisms.

### Q: What do you think is the greatest opportunity in the oil and gas industry that not enough people are aware of?

A: People in the oil and gas business underestimate their ability to act as ambassadors for the industry. Whether it's talking to neighbours across the fence,

### THE PERSONAL SIDE

### Q: What is the most important thing you've learned about leadership?

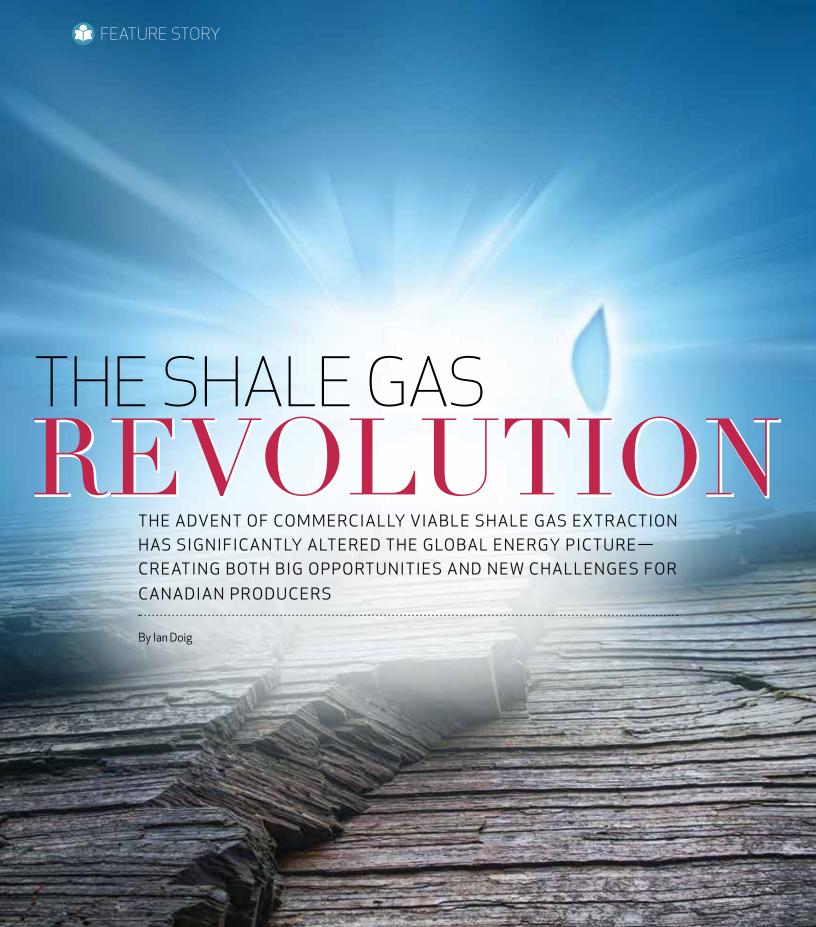
A: That leadership is really about the type of person we are on a day-to-day basis. I hope people will see me in my role as AER chair as being honest, transparent and decisive.

### Q: What personally inspires you?

A: Commitment and passion. Seeing people give their all to accomplish their passion in life—whether it's in sports, business, government, politics or the arts.

### Q: Name an interest or accomplishment that might surprise people to know about you.

A: People might be surprised that I have a passion for trees of all kinds. I enjoy planting trees and am a real student of nature and trees. C



>> Commercially viable shale gas extraction has changed the world for producers, consumers and governments. By unlocking previously uneconomic supplies of natural gas out of shale rock formations using the process of hydraulic fracturing, producers now have access to unprecedented natural gas resources.

Globally, it's estimated that the technological leap represented by hydraulic fracturing has effectively increased the world's gas reserves by 32 per cent. In North America, conventional resources of natural gas had been headed towards an early 21st century decline as wells matured and reserves were gradually depleted. Now, both Canada and the United States sit upon massive, global-scale reserves. Canada has an estimated 100-year supply, leading to the possibility of ramped-up exports to an energy-hungry world. The United States, meanwhile, has used hydraulic fracturing to become the number one natural gas producer in the world.

For consumers and governments, the benefits of a stable and affordable long-term energy supply—particularly one billed as the world's cleanest-burning hydrocarbon fuel, with significantly less GHG emissions and air contaminants than coal or oil—are obvious. For producers, the shale gas revolution has certainly sparked some great opportunities, but it has also created key challenges to overcome.

### **BEGINNINGS OF A REVOLUTION**

Hydraulic fracturing—the use of pressurized liquid to fracture rock formations deep under the earth—has been used to stimulate production in oil and gas wells since the 1940s. Horizontal drilling, the technique of drilling vertically to a certain depth and then turning the pipe to drill horizontally so as to follow the plane of a rock formation layer (in so doing, exposing substantially more of the wellbore to the producing formation) is also not an overnight technology, having been in commercial use since the 1980s.

Nonetheless, when in 1997, Mitchell Energy & Development Corp. (since acquired by Devon Energy) perfected the combination of using horizontal drilling and hydraulic fracturing within the Barnett shale play in Texas so as to extract natural gas profitably, something radical happened. The technique they developed spread like wildfire across the basin and by 2005, gas production was surging across the States.

"The scale of the transformation is unprecedented," says Mark Pinney, CAPP Manager of Natural Gas Markets. "The industry surprised itself with how effective this technology would be and how efficiently it would perfect it," he says. Once uneconomical to tackle, a 20 per cent recoverability rate is now typical for shale-gas formations—enough to make extraction profitable under most circumstances.

The scale of North American shale gas reserves is world class. The U.S. Potential Gas Committee increased its annual reserve estimate of U.S. natural gas resources in 2013 to 2,384 trillion cubic feet (Tcf), largely due to the inclusion of an estimated 1,073 Tcf of potential shale gas. Meanwhile, Canada's natural gas resources are estimated to be between 700 to 1,300 Tcf. To put this in perspective, Canadians consumed a total of three Tcf of natural gas in all of 2013.

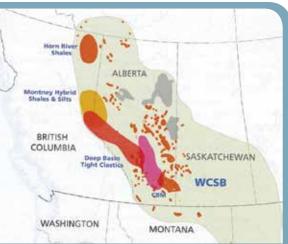
"Given this tremendous resource potential, Canada has plentiful supplies to meet current domestic consumption, while also building towards new markets for natural gas, both domestically and overseas," notes Brad Herald, Vice President Western Canada and Natural Gas Markets.

### TOP 5 COUNTRIES WITH TECHNICALLY RECOVERABLE SHALE GAS RESOURCES

	СО	UNTRY	SHALE GA (trillion cubic feet)
		CHINA	1,115
*		ARGENTINA	802
C*	3	ALGERIA	707
		U.S.	665
*	5	CANADA	573

Source: U.S. Energy Information
Administration. Note that technically recoverable resources is not the same as economically recoverable, which depends or multiple variables including current market conditions and efficiency with the technology.

According to the IHS, substantial production is currently occurring in only three countries: the United States, Canada and Argentina. This may change over time. For example, France's Total made a deal in May with Russia's Lukoil to develop a shale formation in the Russian Urals. China is investing billions to develop its resources, and has set a goal of producing 6.8 billion cubic metres of shale gas in 2015—up from just 200 million cubic metres in 2013.



The National Energy Board estimates there are 531 Tcf of marketable unconventional natural gas resources in the Western Canadian Sedimentary basin.

New Brunswick has a significant resource in the Frederick Brook Shale, estimated to contain 78.2 Tcf of shale gas reserves, while the Utica Shale in Quebec potentially holds up to 38.8 Tcf of shale gas. Shale gas resources are also located in Ontario, Nova Scotia, Newfoundland and Labrador, and the North.

### **BUMPS ON THE ROAD**

The shale gas revolution is not without challenges. Drilling is expensive, capital can be skittish, and international competition for markets is heating up. Ironically, while hydraulic fracturing has opened up the potential of vast global-scale natural gas reserves, in recent years Canadian natural gas production has been declining. Between 2007 and 2013, production fell from just over 16.5 billion cubic feet per day (Bcf/d) to about 14 Bcf/d.

"The reason for this is quite simple," says Pinney, "Currently, almost all of our exports go to the United States. With the dramatic increase in shale gas production south of the border, competition has increased, and demand for Canadian natural gas has fallen."

The traditional export markets for Canadian natural gas include American consumers in the West, Mid-West and Eastern U.S. Of the 13.7 Bcf/d produced in Western Canada in 2012, 5.3 Bcf/d (or



Richard Dunn, Vice President of Government Relations, Encana

39 per cent) were consumed domestically, while 8.4 Bcf/d (61 per cent) were exported into the United States. However increased production from shale plays in the southern and eastern United States means that supply and competition, particularly into the Mid-West and Eastern markets, will increase. "Over the long run," notes Pinney, "especially as more transportation infrastructure is built to carry U.S. shale gas into these markets, we'll see a gradual but inevitable decline in North American demand for Canadian natural gas."

Pinney recently helped create a Natural Gas Forecast that looked into a number of scenarios for Canadian natural gas producers. In what Pinney describes as a "market constrained" case where producers are unable to find new markets for product, Canadian production of natural gas is predicted to fall below 12 Bcf/d by 2020.

At the same time as demand is falling, so has the export price for natural gas. From a July 2008 annual average of US \$8.42 per thousand cubic feet (Mcf), the U.S. natural gas export price slid to an annual average of \$2.78 in 2012. The drop was driven in part by oversupply, but a warm winter and post-recession economic malaise also slackened North American demand. As the market price of gas dropped, production in the U.S. has remained high, further weakening prices. A harsh winter in 2013/14 and improving economic conditions have permitted a recovery back up to an aver-

age of \$6.57 per Mcf over the first half of 2014, but much of this increase is expected to be temporary. As of July 2014, the Henry Hub price has been hovering around just under \$4 per Mcf.

The combination of falling demand and low prices has created serious challenges for producers invested in Canadian production. In many cases, this has forced producers to drill strategically. Some, for example, have shifted wells from dry to wet gas plays, taking advantage of strong natural gas liquid (NGL) prices.

Encana, for example, has sharpened its focus from 15 to five plays—two in Canada and three in the U.S.—upon which it now focuses 75 per cent of the company's capital expenditures. Wet gas work in the Montney and Duvernay has taken the place of dry gas production in the Horn River.

At the same time, Encana realizes it still has a valuable resource and is optimistic about the future. Richard Dunn, Encana Vice President of Government Relations Canada says "We've got very strong plays. We expect prices will continue with a modest recovery. We're retaining natural gas optionality in our portfolio."

The price drop in North American natural gas also forced energy company Unconventional Gas Resources Canada to retrench and revise strategies. A key has been to find ways to reduce costs.





Michael Gatens, CEO of Unconventional Gas Resources Canada

"There were still opportunities out there that we could explore for, evaluate and develop in a low-price gas environment," says Unconventional's CEO, Michael Gatens.

For example, the company moved into the Montney, which, as of spring breakup 2014, featured more active drilling rigs than any other gas play on the planet. "That's turned out to be the company maker for us," says Gatens.

Informally partnering with Progress Energy, Talisman and Painted Pony, the company shared expenses on the highercost, higher-risk early evaluation phase of development. The partners went their own way once results were positive. Further cost reduction came with confidence and experience, says Gatens. Costs per well dropped approximately 30 to 50 per cent, reflecting overall long-term well-productivity increases and reduced production costs in the shale gas sector.

### **NEW MARKET OPPORTUNITIES**

While adaptive strategies are key to company prosperity in the short-term, long-term growth will require a change in the status quo, particularly when it comes to export markets.

"The United States is our number one importer of natural gas, and they will continue to be a key consumer for

the foreseeable future," says Herald, "However, if the industry is to grow and take advantage of this tremendous resource potential, we need to develop new markets for Canadian natural gas."

With consumers in Asia currently paying as high has \$15 per MMbtu, and with energy demand in Asia expected to grow substantially over the next two decades, there is a clear opportunity to get higher returns by shipping product overseas in the form of liquefied natural gas, or LNG.

Though Encana is not directly engaged with LNG export projects, it is a strong supporter. "LNG is absolutely critical to the growth of the resource base in Western Canada," Dunn says.

Gatens also supports offshore LNG, citing the appealing stability of 20-year supply agreements. However, he stresses these projects won't come online for several years. While gas may eventually move to foreign markets, he is convinced North American economic growth will yet bring substantial opportunity. "We can grow North American production, and Canada can play a key role," he says.

Such opportunities include powering oil sands development. Gas is used in various aspects of the bitumen extraction process, for example the generation of steam used in SAGD in situ wells, and as a feedstock to upgrade bitumen. According to CAPP's

most recent "Crude Oil Forecast" report, oil sands production is expected to almost triple, from 1.9 million barrels per day (b/d) in 2013, to 4.8 million b/d in 2030.

"This kind of growth would certainly help drive domestic consumption," says Pinney, who notes that oil sands represents 15 per cent of current natural gas consumption in Canada.

Another area of growth is electricity generation, with natural gas expected to increasingly offset coal and nuclear energy in electricity production. "Currently, electricity production consumes about 1.5 Bcf/day of natural gas. If natural gas power generation is used to replace several aging nuclear power plants in Ontario by 2030, this amount could increase to 2.1 Bcf/day," notes Pinney. Meanwhile, the National Energy Board estimates that gas-fired generation will more than double between 2010 and 2035, as natural gas replaces older coal plants and other fuels.. This would increase its share of total capacity from 9 to 15 per cent.

A small but potentially robust growth area is anticipated to be in the area of natural gas vehicles using LNG and compressed natural gas. B.C. Ferries, recently announced that it would begin using ferries powered by LNG. TransLink, meanwhile, the Greater Vancouver Transportation Authority, has announced the purchase of 170 buses that run on compressed natural gas.

### LNG: LIQUEFIED NATURAL GAS.

This is gas that has been cooled to -162 degrees Celsius, at which point it becomes a liquid that takes up 1/600th the volume;

### CNG:

### COMPRESSED NATURAL GAS.

This is natural gas that has been compressed to less than one per cent of the volume it occupies at a standard atmospheric pressure.

### <mark>NGL:</mark> Natural gas liquids.

These are commercially valuable hydrocarbon liquids like ethane and butane found in "wet" gas wells. These liquids can be separated out and sold on their own.



### Eastern Canada

- CBM
- Western Canada Unconventional
- Western Canada Conventional

### **EVOLVING THE REVOLUTION:** SUSTAINED GROWTH

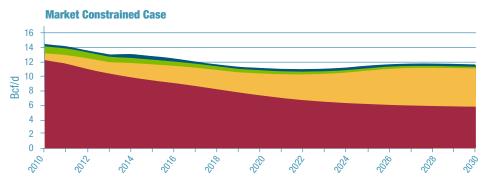
In his Natural Gas Forecast, Pinney also explores a scenario which envisions success in the development of new markets for Canadian natural gas. By modeling the inclusion of new LNG exports and growth in domestic consumption via oil sands, electricity generation and natural gas vehicles, a rosier future for producers is envisioned—with production rising to 16 Bcf/d by the mid 2020s.

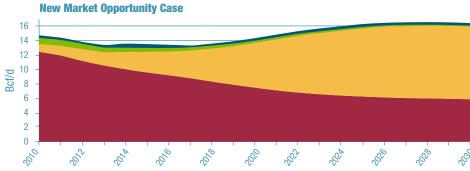
Growth also relies on maintaining social licence in the face of public concerns. Although hydraulic fracturing is a mature, proven technology with thousands of wells having undergone hydraulic fracturing in Canada and the United States without incident, worries regarding the technology's potential impact on drinking water continue.

To assist producers, CAPP has tailored supportive resources focusing on public communication, the environment and generating social licence through responsible practices. CAPP also utilizes outreach initiatives to manage and respond to concerns about water usage, air quality, wildlife management and hydraulic fracturing technology. "We are reaching out into the communities we operate in to provide information about the industry, the resource and extraction methodologies," says Herald. "There is an opportunity to broaden this effort in 2015.

CAPP has created a set of Guiding Principles and Operating Practices for Hydraulic Fracturing. Among its features are guidelines on alternatives to fresh water usage, such as accessing municipal wastewater supplies. As well, in accordance with the guidelines, CAPP producers utilize the FracFocus database, rising above proprietary concerns and making public the chemical makeup of their fracturing fluids. "It's important to the public to be able to see that there is industry transparency," says Herald.

### **Canadian Natural Gas Production Forecast**





Attracting capital while generating economic return favourable to government and industry will remain the shalegas sector's biggest challenges, says Herald, as will the regulatory and policy environment, which has had to keep up with the evolution of industry practices. An ongoing development in this regard is the Alberta Energy Regulator's potential implementation of play-based regulations to simplify approvals for new wells. As well, a move to a regulated increase in pad drilling is cost effective and minimizes land disturbance.

"At the end of the day, we're optimistic for industry," says Herald. "We have a worldscale resource of the cleanest burning hydrocarbon. Consumers in Canada and around the world want our energy, and we're working hard to build the new markets and infrastructure needed to deliver that energy competitively and safely, and for the benefit of all Canadians." C



### LEARN MORE:

More information is available at these CAPP publications and resources:

Upstream Dialogue: The Facts on Natural Gas

http://www.capp.ca/upstreamdialogue/naturalgas/Pages/default.aspx

Upstream Dialogue: The Facts on British Columbia Natural Gas and Crude Oil

http://www.capp.ca/library/publications/naturalGas/pages/publnfo.aspx?DocId=234418

An Overview of the World LNG Market and Canada's Potential for Exports of LNG

http://www.capp.ca/library/publications/naturalGas/pages/publnfo.aspx?Docld=238007

Learn more about shale gas:

http://www.capp.ca/canadaIndustry/naturalGas/ShaleGas/Pages/default.aspx

CAPP's Hydraulic Fracturing Brochure:

http://www.capp.ca/getdoc.aspx?DocId=218174&DT=NTV

# SUCCESSFUL SUCCESSFUL SUCCESSION PLANNING

### Q: In your experience, are oil and gas companies good at succession planning?

A: Succession planning is an area where most companies can improve. It often isn't handled proactively, and is a reaction to someone leaving. Companies should have a comprehensive plan that prepares them for staffing change. As well, the board of directors/senior management should hold hiring managers accountable, asking questions to ensure a process is in place that goes deeper than just the executive team. Finally, the concept of succession planning needs to be broadened to encompass "talent management": this includes identifying key talent within your organization, and providing these individuals with a plan to advance internally.

### Q: What are three keys to good succession planning?

A: Be Comprehensive: Your succession plan must be organization-wide. Boards should review with the CEO strategies to replace key members of the team at all levels. Where there are staffing gaps, the company can look to accelerate training and/or bring in talent via recruitment.

Keep it Up to Date: Review your succession/talent management plan at least once a year. The plan should be updated to reflect the organization's needs and priorities, taking into account factors like growth projections, pending retirements and job market conditions. It should also be updated to identify any new key roles and talent within the organization.

Communicate: Talent within your organization should be engaged to ensure they are receiving the training required to reach their potential. This could include courses, special assignments and/or new roles. While new roles should never be guaranteed, it is important that senior management take an active interest in the personal development of individuals with a path towards advancement. This typically pays dividends in the form of increased loyalty and morale.



**Kevin Gregor** is a Partner with the Calgary office of Boyden Global Executive Search, with 25 years of business and community leadership experience. His practice focuses on Board and Executive Suite recruitment, predominantly in the energy, utility, education and industrial practice groups.

CAPP thanks Boyden for being a sponsor of the 2014 CAPP Scotiabank Investment Symposium held April 3 and 4.

### Succession planning needs to be broadened to encompass "talent management".

### Q: Do small organizations face unique challenges?

A: Small to medium-size businesses may also feel they do not have the scope to offer the training or range of different experiences that would help their employees—but with a little creativity, I believe they do. As an example, to help someone gain leadership skills, a company can ask someone to run their annual United Way campaign, or represent the firm in an industry association.

### Q: What's the most common mistake organizations make?

A: Two come to mind: The first is not establishing a regular cycle of analysis to ensure that the needs of the organization can be met when a change needs to be made. The second is not informing individual employees that they are being thought of as possible successors. In

the absence of feedback, employees may make decisions to pursue new opportunities in other organizations, leaving management surprised when they leave.

### Q: Can the average employee make a difference in their organization's succession planning?

A: Yes. Individuals need to take ownership of their own careers. It is important for them to have discussions with their manager/supervisor about interests and goals, including advancement. People should ask in what areas they need to develop, and look for opportunities to gain the experience needed. By volunteering for special projects or assignments, they can showcase their abilities while growing personally.



### **ENVIRONMENTAL PERFORMANCE:**

### AMIT SAXENA, DEVON CANADA In Situ Wildlife Mitigation and Monitoring Program

Amit Saxena is a professional biologist with a mission: bring scientific rigour into the on-the-ground decision making of oil and gas companies. Based on his ground-breaking work on Devon Canada's In Situ Wildlife Mitigation and Monitoring Program—a program which has become a model for the industry, one could say he's well on his way.

When Saxena joined Devon in 2007, he took over responsibility for the company's wildlife monitoring program. The program had been initiated in 2003 as part of the environmental impact assessment for Devon's Jackfish oil sands operations. What Saxena saw, however, was an opportunity to use his expertise to take the project beyond minimal regulatory compliance.

"Right away I saw the opportunity for a long-term monitoring program," he said. Because wildlife populations change over time, Saxena notes that the more data you have, the better you can truly assess the impacts of operations. So Saxena worked to turn the program into one of continuous data collection, utilizing standardized processes and methods to ensure year-over-year comparability and a high degree of scientific rigour.

Now, with 11 years of wildlife monitoring data, Devon has one of the richest, most scientifically credible data sets on wildlife monitoring in the industry—so much so that other companies often come to Devon for insight.

This data set has enabled Devon to implement one of the strongest wildlife mitigation plans in the industry, a plan that maintains an ambition of net zero adverse effect on wildlife over the life of Devon's oil sands projects. Devon also applies industry-leading BearSmart practices throughout its operations, and is a strong advocate for a regional caribou collaboration and research program.

"One of the things I'm most proud of is that we're using real science and real biology to make on-the-ground engineering and planning decisions," says Saxena. "Often the two are viewed as discrete components." However Saxena notes that to make truly impactful and effective wildlife mitigation decisions, you need strong scientific data. For example, Saxena notes that using their data set, Devon can avoid putting crossing structures "willy nilly" over pipelines. "Based on our data, we know where the wildlife are crossing, and we can put the crossing structures where they're actually going to use them."

### RCE AWARD NOMINATIONS

This year, there were a record 34 nominations of projects for the Responsible Canadian Energy Awards. The projects demonstrate

leadership, innovation and the application of new technology to improve performance in many areas of our industry. Read more about all 34 nominated projects by downloading or viewing the PDF at: http://bit.ly/1mkdi34



While the program is an essential part of earning social licence for Devon's in situ oil sands operations, Saxena ventures that the program also makes good business sense—saving Devon time and money through trouble-free regulatory approvals and sensible on-the-ground decision-making. The use of scientific data ensures that Devon's mitigation strategies are effective and that resources aren't wasted having to repeat or replace ineffective or unnecessary approaches.

One of the things I'm most proud of is that we're using real science and real biology to make on-the-ground engineering and planning decisions.

A Bachelor of Science graduate from the University of Alberta, with a Masters in Conservation Biology from Arizona State University, Saxena notes that he is one of the few biologists directly employed by an oil and gas company (more often, they are hired as consultants). Saxena says that his position as a member of the company allows for greater internal ownership of environmental values and stewardship. "We can make commitments that consultants can't make on our behalf," he points out.

Saxena is proud of what his team has accomplished and grateful for the strong support and buy-in he's received from Devon's leadership group. "They've allowed me to work to my standards and ethics as a professional biologist," he says.



### HEALTH AND SAFETY PERFORMANCE:

### MATTHEW COLLINS, TALISMAN ENERGY Cypress 3D Seismic Program

Two years ago, Talisman Energy set out on the challenge of carrying out a low-impact geophysical exploration of a 320-square kilometre area in the rugged foothills northwest of Fort St.

John in northern British Columbia. Given the remote location, Talisman would rely almost exclusively on helicopter transport to move workers and equipment into and out of the region. As Talisman's Global Aviation Advisor, Global HSE Support, the challenging task of managing the project's helicopter operations fell to Matthew Collins.

Collins is a helicopter pilot with more than 12 years of flying experience. He's flown helicopters for oil and gas companies as well as firefighting programs. He recognized that for a program as large as Cypress 3D, strong safety protocols and thoughtful planning would be required.

"Our priority was to acquire seismic data in the safest manner possible without harm to employees and contractors," says Collins. The program also had to be environmentally responsible and cost-effective.

To meet the challenge, a project team was created, representing seismic, community relations and health, safety and environment functions.

"We looked at how we could manage our main risks and achieve gains in aviation safety—and do so without a lot of extra costs," noted Collins. Among the approaches used was flying only during the spring and summer months to avoid winter icing challenges while allowing for more daylight hours for operations. As well, the group determined that by adopting the final draft of the Helicopter Association of Canada's Helicopter Guidelines for Canadian Onshore Seismic Operations, the project could be conducted with single-engine helicopters more safely and more cost effectively than by sourcing twin-engine helicopters alone. The project became the first to adopt the guidelines, which cover everything from pilot training to protective equipment and aircraft operations.

In addition, the company enforced several key safety protocols, including cockpit cameras to monitor instruments and pilots, a review of helipads to prevent rotor strikes, and strict adherence to helicopter performance levels.



During the five months beginning in June 2013 when operations were carried out, Collins traveled to different helicopter staging sites to conduct spot checks for safety. Collins admits to feeling nervous at first in field testing the standards. The feeling quickly dissipated once he started to talk to crews and saw them putting the standards into action.

"We set high expectations but we were very fortunate that we had contractors who worked really hard to realize our goals for the program. It was a true partnership," says Collins.

Over the lifetime of the Cypress 3D Seismic Program, contractors recorded over 300,000 man hours with zero lost-time incidents. Over 1,800 hours of single-engine helicopter flight time was flown, including 7,400 take offs and landings, all without incident. In addition, helicopter operations costs were reduced by a third compared to industry standard twin-engine helicopter use.

"It was great to be involved in this process. I'm a firm believer that the oil and gas industry is the most proactive, engaged industry when it comes to making aviation safer," says Collins.





Talisman's Matthew Collins makes helicopter safety a priority during seismic exploration.

### SOCIAL PERFORMANCE:

### BILL RENNIE, JAPAN CANADA OIL SANDS Hangingstone Expansion Project – Aboriginal Review Group

Having spent more than 25 years in stakeholder and community relations, Bill Rennie has learned a lot about what to do and what not to do when it comes to engaging small communities and Aboriginal groups.

So when in 2008, his employer, Japan Canada Oil Sands (JACOS) decided that it would be expanding its Hangingstone SAGD oil sands operations just south of Fort McMurray by 30,000 barrels a day, his advice was to speak with impacted Aboriginal groups early and often about how they would like to be consulted, particularly with regards to the environment impact assessment (EIA) required by the regulator.

"It's been apparent to me for quite some time that Aboriginal communities have some mistrust, not only of oil companies, but also of the regulators," Rennie says. To help build trust and a meaningful sense of collaboration, Rennie and JACOS approached the Aboriginal communities early in the process, saying, "We would like to do it [the environmental impact assessment] in a way that is meaningful to you."

Rennie, who joined JACOS in 1999 as their Director of Stakeholder Relations notes that too often, companies do things in reverse—performing their own EIAs and project planning internally, and then approaching their consultation obligations as if trying to check off

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ACOS' Bill Rennie emphasizes building trust during Aboriginal consultation

a box on a list of regulatory requirements. This approach doesn't help build the kind of positive relationships with stakeholders needed over the decades-long lifetime of a project.

As a result of early discussions, it was decided that the Aboriginal groups—three First Nations, two Métis locals and three Aboriginal trap line holders—would form an Aboriginal

Review Group (ARG) consisting of representatives from each community. The group would review and provide input on all aspects of JACOS' EIA submission. In addition, JACOS would resource an independent third-party environmental consulting firm—chosen by and working for the ARG—to

review and critique all work associated with the EIA and project submission.

Through this process, Rennie says that not only was a high level of trust created, "It gave the Aboriginal elders the opportunity to share their knowledge of the land in a meaningful way."

"We got a better EIA out of it," asserts Rennie.

Ultimately, Rennie considers the approach a strong win-win for both JACOS and the involved Aboriginal communities. While there was a need for up-front resource and time investment by JACOS, the fostering of a truly collaborative consultation process helped ensure a smooth regulatory approval, avoiding the potential for a costly and time-consuming public hearing.

It gave the Aboriginal elders the opportunity to share their knowledge of the land in a meaningful way.

Finally, for Rennie personally, "It was important to me they were treated with respect." Having worked closely with the Aboriginal groups over the past 15 years at JACOS, he's developed some close ties and a deep appreciation of the groups' community and cultural values.

Rennie, who turns 61 this year, plans to retire in the fall. He's grateful to have had the opportunity to be a part of such a positive experience that he feels can help inform others when it comes to respectful stakeholder relations and collaborative Aboriginal consultation.

"It's my legacy to JACOS and to the communities," says Rennie.



### DEREK KELLER, LARICINA ENERGY Heavy Equipment Training Program

When Derek Keller talks about Laricina Energy's Heavy Equipment Training Program, he realizes he comes across as a bit "idealistic." But for him, it was the right-minded thing to do from a number of perspectives, both practically and as a way of helping a small Aboriginal community.

In 2013, Keller, who is the Vice President of Operations at Laricina, met with Chief Romeo Cardinal of the Bigstone Cree Nation—a First Nation inhabiting Wabasca, a community just south of Laricina's operations in the Grosmont formation in north central Alberta. Chief Cardinal had a proposal.

You want the communities participating. We all need the workers.

"They had this great idea to create a heavy equipment training program, and have a practical element to it: to upgrade a Bigstone housing subdivision," says Keller. The program would be managed through Bigstone's Aboriginal Skills and Employment Training Strategy (ASETS) group, in partnership with Alberta Works Human Services.

For Keller, this was a perfect opportunity to support construction training for members of the local community—enhancing their work skills and employability, while also creating a labour force sure to help with Laricina's long-term need for workers in the region. The bonus of also providing benefits to the community

itself through improvements to housing and infrastructure development within Wabasca made the idea a no brainer.

He had one proviso, however. He wanted to bring in some other industry partners. Keller points out that getting multiple industry players involved reduces the per-company

cost. More importantly, additional partners help to ensure sustainable and steady demand for training program graduates even when an individual company goes through ebbs and flows of activity and labour needs within its operations.

As it turns out, the first two people Keller called, Marie Robidoux of OSUM and Darwin Bateyko of Cenovus, agreed with his thinking. "On a single phone call, they said that sounds like a

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Laricina's Derek Keller looks to training people in local communities to meet industry's workforce needs.





### PRESIDENT'S AWARD:

### JOHN HAYES, KIM NORDBYE AND SHANTHI VELAN, SUNCOR ENERGY

cool program. We're in, we'll take a third," says Keller.

Keller, who is an engineer by training, admits that he's an "operations guy" who's spent most of his life dealing with the technical and management challenges of drilling, operations and completions. When he joined Laricina in 2006 as one of its 15 founders, community engagement became a part of his portfolio.

"It was all brand new to me," he says, but adds, "That's been some of the most rewarding work—working with the community."

While community engagement was a new challenge for the Laricina executive, the idea of training people within the community to meet industry's labour needs made simple good sense to Keller.

"You want the communities participating. We all need the workers," he notes. Keller, who grew up in Provost, Alberta recalls many of his friends growing up and staying in the area to work in the oil and gas industry. "Why is Wabasca any different?" he asks.

In the case of Wabasca and the Bigstone Cree Nation, the Heavy Equipment Training Program provided tangible results. Over the course of a three-month training program completed in 2013, twelve local residents (nine men and three women) became proficient at operating rock trucks, excavators, dozers, skidsteers and graders. Almost all have since found employment. At the same time, upgrades to the landscaping, ditching, grading and road access to two subdivisions within the community have enhanced the quality of life for 33 Bigstone Cree Nation families.

"It's not a massive program, but it's a start," notes Keller, who would like to see as a next step the introduction of a pre-trades training program into the community. "My hope is that we can build some momentum with this."

### JOHN HAYES, SUNCOR ENERGY Hydrocarbon Blanket Gas and Recovery System

Suncor's Hydrocarbon Blanket Gas and Recovery System is an innovative system that virtually eliminates volatile organic compound (VOC) emissions from Terra Nova, Suncor's floating production storage and offloading (FPSO) oil production vessel that operates off the coast of Newfoundland and Labrador. While the environmental benefit of this system is clear, John Hayes notes that the genesis for the idea actually arose from a need to solve a technical problem.

"The project initially started because we were having spurious trips of the production system on board the FPSO," says Hayes, Suncor's Technical Services Lead for Terra Nova.

"As oil was produced and transferred to the storage tanks, inert blanketing gas was released through an open vent on our flare stack and the entrained cargo off gases [i.e. gases evolving off the oil, including some VOCs] were picked up sometimes by our gas detection system as a gas leak. This was shutting down the production plant multiple times each year," says Hayes.

Hayes and other members of the Terra Nova engineering and operations team evaluated the situation and uncovered a solution: a blanket gas and recovery system. Such systems were just starting to be used on tankers in other regions of the world.

"As our team started to investigate this technology further, we realized it offered a closed system that could not only reduce production shutdowns but have environmental benefits," says Hayes.

The new system blankets the cargo tanks with dehydrated hydrocarbon gas during offloading of crude oil, instead of using inert gas. Then, rather than venting the

gas to the atmosphere when crude reenters the cargo tanks during production, the blanket gas, including any associated VOCs, is instead recovered through a closed-loop system.

The system was installed on the Terra Nova in 2012 and fully commissioned in 2013. Since then, the company has reduced VOCs from the Terra Nova FPSO by almost 95 per cent from 2007 levels. And with reduced risk of production trips and process shutdowns, the FPSO's production reliability has improved substantially.

A proud Newfoundlander, Hayes notes that "We have a pretty keen relationship with the environment. With this project, it's great to know that we've made a difference both to the company and to the environment."

### KIM NORDBYE, SUNCOR ENERGY Social Prosperity Wood Buffalo

In 2011, Kim Nordbye was offered the opportunity to be seconded from Suncor to project manage a new community initiative called "Social Prosperity Wood Buffalo" (SPWB). She jumped at the opportunity, for it was a chance to steer an innovative approach to community engagement.

The idea for the project arose from an opportunity the Suncor Energy Foundation (SEF) saw to increase the effectiveness of their community efforts in the Regional Municipality of Wood Buffalo (RMWB), which includes Fort McMurray.

"Sure, we've funded lots of great initiatives and projects," says Nordbye, "But we questioned whether we've made any significant change or impact in the community to improve quality of life. We felt that it was time for a different approach."

The new approach was inspired by a book called *Getting to Maybe* co-written by Frances Westley, Brenda Zimmerman and Michael Patton. The book emphasizes that



### PRESIDENT'S AWARD



Kim Nordbye steered an innovative approach to social change.

to be effective, social projects can't occur as isolated endeavours—that instead, there needs to be an understanding of the complex relationships within a community, and that principles of shared value, collaboration and collective impact need to be a part the strategy.

SPWB was a means to put these ideas in practice. It emerged as a result of a collaboration that combined the strengths of SEF, RMWB, the United Way of Fort McMurray, and the University of Waterloo. These organizations drew on their networks of expertise regionally and nationally to enhance the ability of the non-profit sector to deliver services.

"There's lots of evidence and research and proof that the non-profit sector in any community is a key part of quality of life," says Nordbye, "They provide essential services, recreation services and the extras in a person's life that give you that sense of quality of life and connection to community."

Nordbye and members of SPWB worked alongside other stakeholders from the Wood Buffalo region to reach out to a broad range of the more than 350 non-profit organizations operating in the community. The team engaged these groups through a range of activities designed to build networks, foster collaboration, and share ideas.

The program is now entering its fifth year, and Nordbye can see a meaningful difference. Nordbye says, "It's opened people's minds to collaborating together; it's definitely strengthened networks and increased knowledge. This creates shared value and also makes good business sense."

### More Online



Learn more about each of the RCE Award receiving projects in our Web feature: "The 2014 RCE Award Winning Projects" at www.capp.ca/context.

For Nordbye, "It's changed my thinking about how engaged a company should be in a community. It was also one of the best experiences I've ever had."

### SHANTHI VELAN, SUNCOR ENERGY Using Tailings Water for In Situ Make-up Water

Since February 2013, Suncor Energy has begun using recycled tailings water from its surface mine near Fort McMurray to provide make-up water to its Firebag in situ operation. Shanthi Velan, Suncor's Operations Manager for In Situ Projects, and a chemical engineer with more than 20 years experience, says the achievement sets a historical precedent for the industry.

"It's a new approach not only for Suncor, but for the oil sands industry," says Velan who oversaw the introduction of tailings water at the 164,000 barrel a day in situ facility.

Velan says the idea for reusing tailings was a case of ingenuity born out of necessity. To maintain production and meet regulatory requirements to reclaim land, Suncor needed to find a way to reduce its tailings ponds.

"The idea was conceived five years ago as part of a collaborative effort now known as Canada's Oil Sands Innovation Alliance," says Velan, then Firebag's Process Development Manager.

The process would involve piping tailings water from its oil sands base mine to the Firebag SAGD facility north of Fort McMurray. The



Shanthi Velan believes using tailings water as make-up water for in situ operations could change the industry.

water would be treated on site and pumped through an existing 55-kilometre pipeline.

Starting in 2011, Velan and her process development team, working with other Suncor engineering and operations experts, established a full-scale testing program to assess the suitability of the proposed water source. They closely monitored parameters in different processing units at Firebag to ensure tailings water would not compromise processes and equipment at the plant. The company also built and tested pilot facilities with other industry partners through Canada's Oil Sands Innovation Alliance (COSIA).

The project was commissioned in early 2013 and today about 1,500 cubic metres of tailings water are used daily at Firebag as make-up water for steam.

Velan says Suncor has shared project learnings and knowledge with COSIA to encourage other operators to develop a similar process for their own water management practices. C

# AFTER THE FLOODS

INDUSTRY VOLUNTEERS
DEMONSTRATE CARING AND A
CAN-DO ATTITUDE HELPING THOSE
IMPACTED BY THE JUNE 2013
FLOODS IN ALBERTA

By Sonja Franklin

 It's been more than a year since the devastating floods of June 2013 overwhelmed more than 30 communities across the province of Alberta.

The disaster forced more than 100,000 to evacuate, ravaged houses, businesses and infrastructure. It destroyed people's belongings and keepsakes—even threatening the livelihoods of some.

The shut-down of Calgary's downtown core contributed to making this the costliest disaster in Canadian history, with insurable losses exceeding \$1.7 billion. With Calgary being home to many of Canada's oil and gas company head offices, the industry faced a direct and damaging impact.

At the same time, Canada's oil and gas industry was among those that quickly raised urgently needed funds, collected goods for donation and encouraged its employees to help out. Oil and gas producing companies raised a total of \$15 million in cash, as well as providing extensive in-kind donations such as cleaning equipment, household goods and hotel stays for displaced flood victims. Cumulatively, the effort showed how Albertans support one another in tough times, says Vicki Reid, Director of Community Affairs at Cenovus.

"The flood was a testament to the whole community of Alberta coming together,"



Flooding in late June 2013 shut down Calgary's downtown core for almost a week.

### It felt incredibly good to help people who so deeply and badly needed help.

says Reid. "The oil and gas industry is always there for our communities, particularly Calgary, where our head offices are, and also outside of the downtown core. All of the companies as an industry give back."

Perhaps more remarkable than donations of money or items was the readiness of the employees of oil and gas producers to donate time and sweat to help those affected, as well as the willingness of employers to back these efforts—not only on company time, but also

through active support in the form of websites connecting staff to volunteer opportunities, and the donation of shuttle buses and cars to ferry teams to and from relief sites in Bowness, High River and the Siksika First Nation.

Employees donated 45,000 hours of their time to help with the flood relief effort, mucking out mud-filled basements, removing debris and soaked sandbags, and helping to feed flood victims and aid workers.



One such employee is Trina Bulych, a Learning Coordinator and New Grad Administrator at Nexen. Bulych lives in a condo in Mission, one of the areas that was flooded. Though her condo sustained no water damage, Bulych was unable to live in it for about three weeks, because the parkade had flooded and there was no power. Unable to improve her own situation, she found an opportunity to help others through Nexen's employee volunteer program.

"I just showed up at a muster point near my home with rubber boots," says Bulych, who then joined a volunteer crew cleaning out flooded basements. "I feel I am very fortunate to work for an organization like Nexen, which not only encourages volunteering but also provides opportunities to do so."

Not only did companies encourage the helping of others—many were quick to provide extensive support to their own From his office window in downtown Calgary, Jonathan Wright saw the flood as it was happening and knew trouble was ahead. When the extent of the crisis became clear a few days later, the Chief Executive Officer of NuVista Energy assembled a team of about 30 employees, clad in coveralls and armed with whatever tools they could bring, and joined other volunteers on foot in heavily flooded Bowness.

"In the first homes we saw, everything was flooded and full of mud," he says, describing images he says he will never forget. "I have never seen anything like that "

The NuVista team spent the day removing debris and damaged contents from flooded homes. Grateful residents made sandwiches for the volunteers. Wright, whose company also raised \$25,000 through matching employee donations, said the recovery effort was spontaneous but effective due to everyone's determination to pull together.

"I am not overstating this: It gave me renewed faith in human nature," says Wright. "It could have been us. So it felt incredibly good to help people who so deeply and badly needed help."

The willingness to help has gone beyond the immediate flood recovery efforts, with companies and staff helping those struggling to rebuild their lives long after the waters receded. One family in need of help was Matt and Catherine Smith from High River, along with their young daughters Briley and Isla. Isla was an infant when the Smiths' house flooded and Matt lost the truck he needed for his work as an electrician. Displaced from their home and turned down by insurance, the Smiths worried what their future looked like:

"We thought there was no way we were going to be able to stay in High River in the long term," says Catherine Smith, who like Matt grew up in the town. They

### I just showed up at a muster point near my home with rubber boots.



staff who were directly impacted by the flooding.

Roger Monette, Regional Security Director Canada at ConocoPhillips Canada, was mulling over buying the ground-floor condo he was renting on the Elbow River in Mission when it flooded and became inaccessible until early July. Even then, he was allowed in only to throw out his damaged belongings. With no family in town, Monette was rescued by eight ConocoPhillips employees, including two vice presidents, who came to lend a hand. He, his co-workers and a few friends removed everything the water had touched from his home.

"It was quite a humbling experience, because as a security director, I am so used to helping people out," he explains. "Now the roles were reversed, and I had never been in that situation before. I saw the real human side of ConocoPhillips in coming together and helping folks out. And it was very genuine."

Companies large and small found ways to contribute. While many of the large oil and gas producers made headlines announcing \$1 million and higher donations, smaller producers also gave what assistance they could.

### The oil and gas industry is always there for our communities.

were unable to move back for more than five months, during which they lived with Matt's parents. With Matt unable to work, prospects for the young family looked grim.

Enerplus helped out with its "Adopt-a-Family" program. The company adopted seven families, including the Smiths, who received gift cards to replace lost household items and even a truck so Matt could return to work. Today, finally back at home, though without a finished basement and garage, the Smiths are still awed by the help they received from Enerplus and others:

"So many strangers have helped us," Catherine Smith says. "I didn't even

know anyone at Enerplus at the time. So for them to just reach out and help is so

These instances of unsolicited aid and compassion are illustrative of the oil and gas industry's strong community values and can-do attitude. They also are not unique. Recognizing that in many ways this is the home and backyard of Canada's oil and gas industry, producer companies with offices or operations in Alberta—and even a few without—stepped in and stepped up to help in a myriad different ways, often quietly and without expectation of recognition or reward.















### **Red Cross Recognition**

At the Responsible Canadian Energy dinner held on May 21st 2014, the Canadian Red Cross gave a plaque recognizing the generous efforts of industry.

"We thank you for your outstanding corporate citizenship. You've made a tremendous difference in the lives of people and you should be proud," said Conrad Sauvé, Secretary General for the Canadian Red Cross.

The Red Cross Alberta Flood Relief Fund received a significant portion of donations from the oil and gas industry. Donations also went to Boys and Girls Clubs, Calgary Food Bank, Calgary Foundation, United Way, YWCA and more...

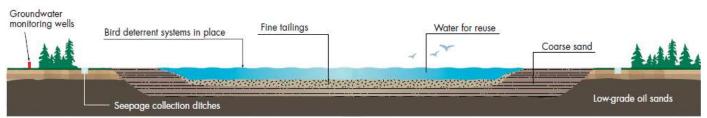


### Watch It:



CAPP's flood retrospective video at http://bit.ly/1xr2Wn3

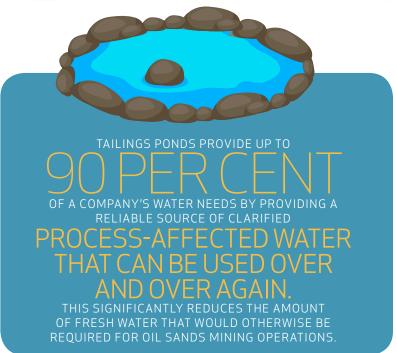
### Oil and Gas 101: TAILINGS PONDS



### WHAT IS A TAILINGS POND?

Settling ponds—also known as "tailings" ponds are found at all oil sands mining sites. These large, engineered dam and dyke systems are designed to contain the water, sand, fine clays, silts, and residual bitumen that are the by-products of the oil sands mining and extraction process. The combination of these by-products is called tailings. Note: tailings ponds are used at oil sands mining sites only—they are not used for oil sands in situ projects.

Tailings are contained in ponds to allow the settling of sand and clay. They are managed within a closed-circuit drainage system that helps maintain the structural integrity of the ponds and ensures that no tailings or process-affected water are allowed off-site. Clarified water from tailings ponds is reused in the mining operations. At the end of their useful life, tailings ponds are reclaimed into self-sustaining landscapes.



### **Reclaimed Land**

of Suncor's first tailings pond, operations in the 1960s. As the first tailings pond to be reclaimed to a Great progress has been made. Many



### CHALLENGES AND SOLUTIONS





### **CHALLENGE #1: PROTECTING WATER AND AQUATIC LIFE**

Because the water in tailings ponds has come into contact with oil during the bitumen extraction

process, this water contains natural chemicals that, in high enough concentrations, are toxic to fish. As a result, ponds are designed to ensure that tailings and/or tailings water are not released into nearby rivers or groundwater.

### What's Being Done:

Numerous measures are in place to limit the risk of tailings pond water entering the environment, including constructing ditches to capture dyke drainage and runoff water, building cut-off walls to prevent seepage migration, and installing groundwater interception wells to capture any seepage detected. All captured water is pumped back into the tailings pond.

In addition, industry and government jointly operate comprehensive monitoring systems to safeguard nearby sources of water. To date there has been no detection of harmful levels of chemicals from tailings ponds into surface water or potable groundwater.



### CHALLENGE #2: PROTECTING WATERFOWL AND WILDLIFE

The small amount of residual oil that floats to the surface of a tailings pond poses a risk to waterfowl.

This danger was highlighted by the tragic deaths of 1,600 ducks that landed in a Syncrude tailings pond in 2008. Syncrude paid a \$3-million fine for the incident, and has since enhanced measures to deter waterfowl from landing at their tailings pond sites.

### What's Being Done:

Mine operators employ multiple methods to deter waterfowl and other wildlife from coming into contact with the tailings ponds, including propane noise cannons, scarecrows, decoy predators and radar/laser deterrent systems. A radar-controlled bird deterrent system has been in use at some mining operations since 2009. The system detects birds at a distance of up to three kilometres and automatically activates acoustic and visual deterrent systems.



### CHALLENGE #3: RECLAIMING THE LAND

Below the clarified water layer of a tailings pond is a mixture of clay and water called fine tailings. This mixture takes a long time to settle and solidify. Even

after many decades, it can still have the consistency of yogurt.

Under CAPP's Guiding Principles for oil sands development, industry is committed to progressively reclaiming all lands disturbed by oil sands operations, returning them to selfsustaining landscapes. Moreover, the Government of Alberta requires all oil sands operators to have plans in place to convert fine tailings to reclaimable landscapes. The total footprint of all

oil sands tailing ponds, including associated structures such as ditches and dykes, occupies an area of 182 square kilometres. The total area within those ponds that is covered by fluids is 77 square kilometres.

Reducing the size and number of tailings ponds, and increasing the speed at which they can be reclaimed are ongoing challenges being addressed by industry through a significant technology and innovation effort.

### What's Being Done:

Canada's Oil Sands Innovation Alliance (COSIA) has identified the management of oil sands tailings as one of its four key environmental priority areas (EPA). As a result, the member companies of COSIA (representing all of the oil sands mining in Canada) have committed to collaboratively develop and share technology related to reducing the size and need for tailings ponds and increasing the pace of reclamation. One innovative approach is the synergetic use of tailings water for in situe makeup water where possible. The approach was honoured with an RCE award and is described on page 34.

Suncor uses TRO technology to solidify tailings.



### Case Study: Tailings Tech and COSIA

Suncor has developed a new technology called TRO that are the tailings at the bottom of the pond after a period additional ponds. Shell Canada, meanwhile, is using a technology called Atmospheric Fines Drying (AFD) that that allows for faster reclamation.

the clay particles in MFT, causing them to bundle together these technologies with COSIA's member companies. C



To learn more about this and other technologies under development within COSIA's Tailings Environmental Priority Area, visit:

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http://www.cosia.ca/initiatives/tailings

CAPP.CA/CONTEXT CONTEXT . VOLUME 2 . ISSUE 2 . AUGUST 2014

# What's Online at CAPP

Looking to connect with fellow CAPP members and find out the latest goings on in industry?
Join the CAPP LinkedIn Group for updates and discussion.





Essential oil sands facts at your fingertips: The Facts on Oil Sands mobile app is available for free download on your Android, Blackberry or iOS device!

http://appstore.capp.ca/oilsands

### Subscribe to our YouTube channel:

for CAPP and member interviews, press conferences, advertisements and educational videos.



www.youtube.com/CAPPVideos



★ Watch Ben Sparrow describe how he started a company that turns low-grade heat energy and high-saline wastewater—both waste products from oil sands production—into distilled water.

### Main Links:





www.capp.ca/rce

www.oilsandstoday.ca

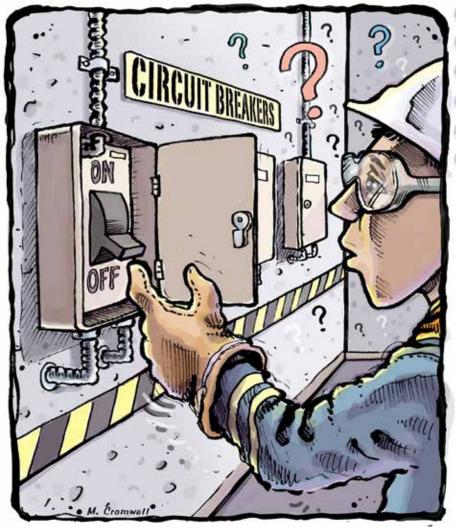
nttp://twitter.com/OilGasCanada

http://www.facebook.com/OilGasCanada

### **Safety 101:** What's Wrong With This Picture?

A plant employee discovers a tripped breaker. What should he do? What would you do?

[answer on page 41]



### THE ART OF LEADERSHIP CONFERENCE

September 8, 2014

Telus Convention Centre, Calgary, Alberta

This year's conference includes speakers Rudy Giuliani, Colonel Chris Hadfield, Hayley Wickenheiser, Dan Roam and Dr. Vince Molinaro

http://www.theartof.com/leadership-calgary-2014/

### OIL SANDS TRADE SHOW AND CONFERENCE September 9 – 10, 2014

Fort McMurray, Alberta

Discover technology for oil sands development, network with the oil sands community, and learn from industry experts on key issues facing the industry. http://oilsandstradeshow.com/2014/

### WESTERN NEWFOUNDLAND & LABRADOR OIL AND GAS INTERNATIONAL SYMPOSIUM

September 10 - 11, 2014

Ocrner Brook, NL

The symposium explores the research, exploration, development and commercialization of the Western NL Oil and Gas industry.

http://www.wnloilandgas.com/register/

### CANADIAN SOCIETY OF SAFETY ENGINEERING (CSSE) PROFESSIONAL DEVELOPMENT CONFERENCE

Sept. 14 - 17, 2014

Hyatt Regency, Calgary, Alberta

The conference for Canada's safety, health and environmental practitioners. The theme is "linking safety culture to business outcomes" and the event features national and international speakers providing practical insight into emerging issues. CAPP's Dave Collyer will provide the keynote address on Tuesday, September 16.

http://www.csse.org/annual\_conference

### OFFSHORE SAFETY CONFERENCE

September 23 – 25, 2014

O Houston, Texas

The theme of the conference is: Exceeding regulatory guidelines through operational discipline, safety-based culture, workforce excellence and technological superiority.

http://bit.ly/1lAqbG3

### FIRST INTERNATIONAL SAFETY CULTURE SYMPOSIUM

October 1 - 2, 2014

O Saint Mary's University, Halifax, Nova Scotia

Presentations and case studies from renowned safety experts, as well as a choice of interactive workshop sessions addressing some of the key safety challenges facing industry.

http://www.safetyculturesymposium.ca/

### CANADIAN ENERGY SUPPLY CHAIN FORUM October 28 – 30, 2014

BMO Centre, Calgary, Alberta

This event will provide world-class examples of supply chain management excellence and provide insights on how Canadian energy companies can achieve supply chain excellence by re-evaluating communication practices, scope preparation, contract negotiation, risk management, integrated project delivery and more. CAPP is a major partner.

http://www.supplychainforum.ca/

### CSEG OIL AND GAS COURSES

November 3 – 7, 2014

The Canadian Society of Exploration Geophysicists offers a range of oil and gas courses—everything from "The Basics of Migration for Seismic Interpretation" to "Rock Physics for Geophysical Reservoir Characterization and Recovery Monitoring." There are 21 one- to two-day courses in total—visit the link below to see the full range of courses.

http://cseg.ca/education/doodletrain



Representatives from CAPP, member companies and Scotiabank opened the Toronto Stock Exchange on April 3rd, 2014, as part of the CAPP Scotiabank Investment Symposium 2014. Mark your calendars: the 2015 CAPP Scotiabank Investment Symposium will be held in Toronto on April 8 and 9.

### CPA CANADA'S CONFERENCE FOR THE OIL AND GAS INDUSTRY

November 25 – 26, 2014

Metropolitan Conference Centre, Calgary, Alberta

Sessions include: technical updates and discussions on application and interpretation of key IFRSs, legislative and regulatory standards impacting the industry; management accounting and finance issues; and sessions addressing broader areas of interest and concern for members in or serving the oil and gas industry.

http://bit.ly/1s9kVAB

### ABORIGINAL LAW: CONSULTATION AND OTHER EMERGING TRENDS

December 2

in Calgary, AlbertaDecember 9

in Toronto, Ontario

This presentation, led by Thomas Isaac, highlights various aspects of current Aboriginal legal matters such as Aboriginal and consultation law, best practices for proponents, anti-corruption legislation and benefits agreements, government consultation policy, Métis rights and legal issues, and the intersection of Aboriginal consultation and environmental assessment in Canada.

http://bit.ly/1rmUPL0

### Answer Key to Safety 101: What's Wrong with This Picture?

The illustration on page 40 shows a plant worker puzzling over a tripped circuit breaker. One natural impulse might be to flip the breaker to the on position to see what happens.

"This would be a mistake," notes Claudette Fedoruk, CAPP Health and Safety Analyst, "The worker needs to understand that a tripped circuit breaker is often the result of an electrical fault. Re-energizing that fault could cause electrical arcs at the faulted location and this could contribute to a fire hazard or the energization of metallic parts that could result in personnel receiving an electric shock."

The proper course of action when a tripped circuit breaker is discovered is to call in a qualified electrical worker to investigate the cause.



CAPP Health and Safety Analyst, Claudette Fedoruk

Fedoruk adds that electrical safety is a vital component of workplace health and safety, and an electrical safety program should be part of every organization's Occupational Health and Safety Management System. Enform, the safety association for Canada's upstream oil and gas industry, has recently published updated guidelines for developing an electrical safety program. This publication can be downloaded at: http://www.enform.ca/safety\_resources/publications/PublicationDetails.aspx?a=72&type=guidelines



### IN CLOSING

By Janet Annesley

As I prepare to hand off the VP Communications pen to Jeff Gaulin next month, I offer reflections on oil and gas industry communications, in particular to thank the industry's supporters and to contemplate how better off this industry would be if more people participated in the dialogue and offered real ideas and solutions to move us forward.

This is particular food for thought after reading self-proclaimed dragon Brett Wilson's *Oilweek* article last month, in which he criticized strategic communication in the oilpatch.

Mr. Wilson said industry needs to "speak with a more cohesive, coordinated, consistent and credible voice, in a way that builds trust with key audiences and inspires them to act with us rather than against us." Until we do, he said, "we will remain in remarkably shaky territory."

Lovely alliteration, but as Wilson knows, central planning is not the energy industry's forte. Our critics are legion, but so are our supporters, and we need all supportive voices.

Nor is our territory particularly shaky.

It's true the oil and gas sector was late to the party a few years ago when critics cranked up their attacks. But this isn't 2008, and to suggest today's industry communications—from both associations and individual companies—are not effective is not supportable. Significant effort has been made, and continues to be made, in both listening and responding to a wider and wider group of people interested in our business.

Why are they interested? Because it's full of growth and dynamic change. When you look at the industry record since 2008, you see activity levels are up. Jobs are up. Capital investment and production are up. Exports are up. And while much remains to be done, the environmental impact per barrel of production is down in many areas.

There will always be issues. But the glass isn't half empty.

The public opinion polls CAPP and others commission show marked improvement in the attitudes of Canadians toward the industry. Not in every city and town across our varied nation, but enough to show that efforts to improve performance and communication are recognized. It's a simple formula: Reputation = Performance + Communication. We need to address both if we are to continue to get ahead.

# There will always be issues. But the glass isn't half empty.

Mr. Wilson is dead right when he says we need to focus on facts, speak to the issues and avoid personal attacks or dismissive retorts. We have our own story to tell. But it's a fact of life that we need to correct misinformation when it's presented. And some of the more ardent industry supporters may launch the occasional pointed missile, but the industry lives on the high road and I'm hard-pressed to think of examples to the contrary.

We're never going to win the hearts and minds of our fiercest foes. Greenpeace is never going to grant the oil and gas industry its blessing. That's not their role. Moreover, does it matter? Despite the noise they make, anti-industry-at-all-cost groups don't speak for the Canadian public.

Mr. Wilson is a friend to our industry. He sees the value it creates, and his call for leadership is spot-on. But where should that leadership arise? I'd argue he, CAPP and others, including our industry's network of supporting finance, legal, engineering and other businesses, need look no further than ourselves.

We need all voices to be aware, engaged and raised in support. If you feel the industry is being unfairly treated in the news, or by activists or politicians, seek



Janet Annesley is Vice President,
Communications, at the Canadian
Association of Petroleum Producers.
In September, Janet will succeed Bob
Bleaney as Vice President - Ottawa, Eastern
& Atlantic Operations.

information and speak up: about the positive role energy plays in our lives every day and what it means to our communities; and provide relevant facts and commentary on environmental issues.

Last month, CAPP started a venture called Canada's Energy Citizens we hope will help even the most introverted oil and gas engineer do just that (page 11).

Canada's energy citizens are interested in issues and proud of their industry. We're excited about the challenges and opportunities in Canada's energy future because we're creating it. We share information with family and friends, and we promote a rational national discussion about energy.

Perhaps Mahatma Gandhi said it best: "You must be the change you want to see in the world."

Responsible Canadian energy development is based on demonstrating, tracking and communicating continuous performance improvement in operations, technology and innovation, health and safety, environment and social responsibility. Sharing successes, being candid about challenges and staying focused on progress.

That's the industry story. We need all supporters to tell it. Then tell it again... and again. C

### Janet Annesley,

Vice President Communications
Canadian Association of Petroleum Producers

### MARKET**PATHWAYS**

2015 APRIL 8-9, TORONTO CAPP SCOTIABANK

INVESTMENT SYMPOSIUM



Save the Date for the 2<sup>nd</sup> Annual CAPP Scotiabank Investment Symposium.

**APRIL 8-9, 2015** 

Sheraton Centre Toronto Hotel, Toronto Canada

For more information about the event and sponsorship opportunities, contact
Brenda Jones at Brenda.Jones@capp.ca or
Elizabeth Palermo at capp.symposium@scotiabank.com.









The Canadian Association of Petroleum Producers (CAPP) represents companies, large and small, that explore for, develop and produce natural gas and crude oil throughout Canada. CAPP's member companies produce about 90 per cent of Canada's natural gas and crude oil. CAPP's associate members provide a wide range of services that support the upstream crude oil and natural gas industry. Together CAPP's members and associate members are an important part of a national industry with revenues of about \$110 billion a year. CAPP's mission, on behalf of the Canadian upstream oil and gas industry, is to advocate for and enable economic competitiveness and safe, environmentally and socially responsible performance.

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37 TREES



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