The business world is competitive. Companies are constantly vying to win the favour of customers and shareholders in order to grow their market share. They can only do it if they are giving their best day in and day out. With our fourth annual Industry Excellence Awards, *Natural Resources Magazine* features six shining examples—like Nalcor Energy’s Stan Marshall, our 2019 Industry Person of the year—in Atlantic Canada’s resource sector, who are hitting their targets in a big way.
PERSON OF THE YEAR

When duty calls

Stan Marshall was asked to lead Muskrat Falls out of the abyss. He didn’t hesitate to jump in.

In April 2016, Stan Marshall came out of retirement and answered Newfoundland and Labrador Premier Dwight Ball’s plea to take over as president and CEO of Nalcor Energy.

Few envied him. Fewer still even understood why Marshall—who was not quite two years into his retirement after stepping down as president and CEO of Fortis Inc. in 2014—would want the job. After all, he was taking over a Crown Corporation that was being consumed by the Muskrat Falls mega-project, a project that was behind schedule and billions of dollars over budget. His predecessor, Ed Martin, had been replaced for his role in overseeing the mess, and Nalcor’s board of directors had resigned en masse after Ball replaced Martin with Marshall. It was not the best time to be stepping into the CEO’s chair at Nalcor.

But Marshall has never been one to shy away from the challenges. And with a resume that included a 35-year career at Fortis, a St. John’s-based power company, Marshall felt he was the only person in the province who could save Muskrat Falls.

“The premier asked me who could do the job. I said I didn’t have anyone in mind, and he basically said, ‘It has to be you,’” Marshall says. “I felt it was my duty to help them. The project was in trouble and because of the magnitude of it, it was bankrupting the province. It’s not unlike a doctor who drives along and sees somebody dying on the side of the road. The doctor has an obligation to stop. It’s your duty.”

Marshall has performed his duty with zeal. He has stabilized a hydro project that had cost overruns spiralling upward and a completion date that was uncertain. The project will now cost $12.7 billion (its original estimate was $6.2 billion) and it’s scheduled to finally be complete and pumping out power by mid-2019. The large role Marshall has played in righting a heavily listing project is why he is our 2019 Industry Person of the Year.

Not that it’s been smooth sailing for Marshall or the project since he took over almost three years ago. In fact, the challenges never seem to end. The latest came in October when Nalcor terminated its contracts with Astaldi to build the hydro generating station and related infrastructure at Muskrat Falls (the parent company in Italy filed for creditor protection and its Canadian subsidiary was unable to pay its bills for Muskrat Falls work). That has raised fresh concerns the project won’t be finished by 2019.

Despite the continued turbulence, Brendan Paddick, the chair of Nalcor’s board of directors, has high praise for...
Stan Marshall’s work on Muskrat Falls. That includes Marshall’s decision to separate it into two projects—

power development (Muskrat Falls) and power supply

(the Labrador-Island Transmission Link and Labrador
transmission assets that will deliver power from Church Falls to the island). He and his team were able to

strike a $2.9-billion federal loan guarantee to finance the

project’s cost overruns. Paddick also gives Marshall credit

for addressing the numerous protests surrounding the

project and its potential adverse environmental impacts and

improving relations with indigenous people in the

project area.

“When Stan stepped aboard, Nalcor equalled Muskrat

Falls. Morale was low. Public sentiment was sour. Fingers

were pointed in all directions. It was a political hot potato

and a general state of chaos existed. Stan set out to calm

stormy seas,” Paddick says. “We all owe a debt of gratitude
to Stan Marshall for raising his hand and saying, ‘I want
to help’.”

As this magazine went to press, Nalcor had released

its 2018 third quarter results and provided an update on

its progress at Muskrat Falls. Transmission lines from

Church Falls to Soldier’s Pond on Newfoundland’s

Avalon Peninsula have been completed. Construction

on the converter stations, switchyards and transition

compounds was almost complete, and it’s developing

the software needed to operate the Labrador-Island

Transmission Link.

Marshall acknowledges with a project as big as Muskrat

Falls, there are challenges that arise almost daily. Some,

like getting rid of Astaldi, are bigger than others. But he

says the key to getting the project back on track was taking

a ‘big picture’ approach to solving the crisis. “When you’ve
got a big project or a big operation, somebody’s got to be
responsible for the big picture,” Marshall says. “Someone

has to be stepping back and seeing like a commander on

a battlefield. When I came in, nobody understood the big

picture. Nobody understood that there were two projects

instead of one. The key was to recognize that and separate

them. The things we have done, nobody recommended

because everyone was focusing on the details.”

Critics of the project are still focusing on the details,

like how much power rates are going to go up in the next

few years to pay for Muskrat Falls. However, Marshall

believes the ultimate benefit provincial residents will gain

from the project isn’t just the renewable energy it will

create, but the experience working on Muskrat Falls has
given a generation of young Newfoundland and Labrador

workers. Before he leaves the job in 2020, Marshall’s

final act will be figuring out how to keep them all in the

province.

“The greatest benefit coming out of Muskrat Falls is

we have another generation of bright people, not only

engineers, but technicians and accountants, that know

their stuff now. They have gone through this project and

they will be among the best in the world here,” Marshall

says. “For the next 40 years we’ll have people who will do

things that I can’t envision right now to help the province.

One of the legacies I want to leave is to make sure we

retain these skills.”
Large industrial plants employ a lot of people. They also generate a lot of waste and emit a lot of greenhouse gases. And that’s a problem for companies like J.D. Irving, Ltd., as the federal government increases its tax on carbon emissions to $50 per tonne by 2022.

But the Saint John-based company is taking major steps to reduce its carbon footprint and treat wastewater coming from its pulp and paper plants. One of its key projects is a $28.8-million upgrade at its Lake Utopia Paper plant in New Brunswick. J.D. Irving put a new environmental treatment facility in the plant that takes its wastewater and converts the organic materials into biogas. The biogas is converted into steam, which provides energy to the mill. The biogas generated from the treatment facility has allowed J.D. Irving to reduce its natural gas use and greenhouse gas emissions by 25 per cent. The company’s commitment to reducing its carbon footprint has earned it the 2019 Industry Excellence Award in environmental stewardship.

As it turns out, the technology is home-grown. It comes from a Fredericton company called the ADI Group. Mark Mosher, vice-president, pulp and paper, J.D. Irving says when the company decided it needed to replace its...
previous environmental treatment facility, it looked at several different technologies before landing on ADI’s. “It seemed to be the one that hit all the key criteria we were looking for around energy conservation, climate change, long-term environmental improvements and reducing our carbon footprint,” Mosher says.

How does the technology turn wastewater into clean-burning biogas? Mosher says it takes the waste from the Lake Utopia mill that has organics in it from the trees used in the pulp and paper making process. The effluent is put in a reactor that has tiny bugs in it. The bugs eat the organic material and give off natural gas. The gas is then collected off the reactor and used in the plant’s boilers to offset the use of natural gas to generate steam.

Mosher says the project started in early 2016 and was finished in December of 2017. J.D. Irving took a risk in choosing this technology, but Mosher says it has exceeded expectations. “Because it was new and such a large reactor for this technology, we were prepared to do some modifications to it or better understand how to run it,” he says. “But it’s been virtually a one-button start and a dream to operate. It’s super simple. It was pioneering new technology and it’s turned out to be a darn fine project.”

HONOURABLE MENTION

COOKE AQUACULTURE is working to solve a sector-wide problem by adopting Thermolicer technology to remove lice that attach themselves to farmed salmon. The Norwegian technology uses a warm water bath to gently remove the lice from salmon without using chemical baths that could harm the marine environment. Cooke Aquaculture has even added a vessel, Miss Mildred, that is equipped with Thermolicer to treat the salmon.

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Kraken Robotics Inc. president and CEO Karl Kenny says the St. John’s-based marine technology company has a simple mission—innovate or die. “Innovation really distinguishes the leaders and the followers. We are continually evolving our platforms. It’s never good enough,” he says.

Kraken’s ability to evolve into a world-class company in underwater sensor and robotics technology servicing clients all over the world is why this 70-plus employee company is the winner of our 2019 Industry Excellence Award in innovation.

It’s been an impressive rise for Kenny and his company, which was formed in 2012. Back then, the firm was focused on selling its synthetic aperture sonar technology. This is an underwater imaging technology that greatly improves seabed surveys by providing ultra-high-resolution images. The company sold the sensor to other clients, who used it on their underwater robots. But since 2015, the company has formed a team and is making its own robots at home in Newfoundland and Labrador.

That’s led to Kraken developing unmanned underwater vehicles, the KATFISH and THUNDERFISH (a third vehicle, JELLYFISH, is in the development stage.) “What this stuff does is let the operator find very small objects over very large distances,” Kenny says. “We are increasing the resolution of the pictures they are seeing.” Kraken’s technology initially was used by the military to find mines on the seabed. But now the sensors and underwater robots are being used by other sectors such as oil and gas, which has a lot of subsea infrastructure like pipelines and flow lines, ocean sciences and even offshore wind. The technology helps these industries detect where damage has occurred or might be occurring to their subsea infrastructure. It also helps them map the seabed.

Of course, Kraken isn’t the only company in the world providing this kind of technology. But it’s developed a culture of innovation that is essential to stay relevant in the marine technology sector. “For good ideas and innovation, you’ve got to have a healthy interaction among your team,” Kenny says. “We have the ability to engage and debate and argue to squeeze out the best ideas without hurting anyone’s feelings. Brutal honesty is what is required here and that’s what we do.”

With an office in St. John’s, one each in Halifax and the U.S. and now two in Germany, Kraken is a company with a global reach. Kenny says over the next 12 months the
company’s product line should be complete. From there, Kraken will grow by improving the products it has in its stable and looking for new opportunities.

“It’s all about execution for us now. The big technical risks are behind us. We’ll continue to innovate and develop our products. At the end of the day that’s what gives us the competitive advantage in the market place. Innovation is the new competitive advantage,” Kenny says.

HONOURABLE MENTION

ANACONDA MINING INC. is being recognized for a project at its Point Rousse gold mine in central Newfoundland. With its partner, College of the North Atlantic, Anaconda is working on turning tailings from its mining operations in central Newfoundland into an agricultural supplement. Tailings are powdered stone and the company believes it can use its tailings with soil to grow different types of vegetables and grass—transforming mining waste into a value-added product.
RESOURCES DEVELOPMENT

VALE

Vale’s decision late in 2017 to put the Voisey’s Bay underground expansion on hold due to depressed nickel prices was not good news for Newfoundland and Labrador’s mining sector. But in June of 2018, the Brazilian-based mining company had a sunnier story to tell the province—it was giving the US$1.75 billion-project the green light.

“It is the largest project we have on the base metals business,” says Joao Zanon, project director for the Voisey’s Bay underground expansion. “I know it’s one of the largest mines being developed in Canada nowadays. It is critical for the future of our business.”

The decision to go ahead with a project that will result in 16,000-person years of employment during the approximately three-year construction period and extend the life of the mine until at least 2032, is why Vale Canada was awarded the 2019 Industry Excellence Award in resource development.

The June announcement that Vale will build an underground mine to complement, and eventually replace, its open pit mine at Voisey’s Bay meant the company had to hustle to get construction started in 2018. Zanon says Vale commissioned a 360-person construction camp on the site and used four different barges to bring in the equipment it needed. The underground development began in October with blasting the rock that marks the start of four decline ramps that will be used to access the two underground deposits—Reid Brook and Eastern Deeps.

Zanon says other critical work that will be done in 2019 includes installing a new incinerator and a potable water system. Once Labrador’s harsh winter is over, construction will intensify and there will be close to 700 people working on the site. First ore is expected by 2022.

In October the company had completed almost one million-person hours of work on the project with no lost time incidents. And it’s selected the aboriginal crew who will work directly with Vale’s underground development contractor. This is part of an agreement with the Labrador Aboriginal Training Partnership to train at least 74 underground miners to work at Voisey’s Bay.

The company is also working hard to get its operations team in place for when the mine is finally producing ore. “We are on the market looking for good people who want to join our team on the operational side. The project is not all about construction. It’s about creating the first underground mine in Labrador. There is lots of work to be done on that side,” Zanon says.

HONOURABLE MENTIONS

The July 2018 announcement that EQUINOR CANADA and the Government of Newfoundland and Labrador had reached a development agreement framework for its Bay du Nord discovery is music to the ears of the province’s oil and gas sector. Equinor says it will make an investment decision on Bay du Nord, which contains approximately 300 million barrels of oil, by 2020. But the agreement suggests Equinor and partner Husky Energy Inc. are serious about developing an oilfield that could be producing by 2025.

THE PEI ENERGY CORPORATION is advancing its proposed $60 million, 30-megawatt wind farm in the Eastern Kings region of the province. In April 2018 the crown corporation began wind resource assessments at three sites in the region, testing for wind speed, temperature and changes in wind direction. The work will help the corporation select a site for the wind farm, which it expects to be operating by 2020.
The Hibernia offshore oil field was Newfoundland and Labrador’s first producing asset, ushering in the province’s offshore oil era. As such, it will always hold a position of significance in the province.

The company that operates the field, Hibernia Management and Development Company Ltd. (HMDC), recognizes this by investing millions of dollars—and considerable volunteer hours through its employees—in community causes throughout Newfoundland and Labrador. For its ongoing charitable contributions, HMDC is the recipient of the 2019 Industry Excellence Award in the community champions category.

“The Hibernia team is proud of the fact that it was the first producing asset and the foundation for the industry. We’re proud to be part of Newfoundland and Labrador’s history, and we are enthusiastic about contributing to the province’s future. That includes supporting local organizations,” says HMDC spokesperson Margot Bruce-O’Connell.

Some examples of HMDC’s contributions to Newfoundland and Labrador in the past 12 months include donating $840,000 to the Manuels River Hibernia Interpretation Centre, $3.4 million to expand Let’s Talk Science learning programs across the province and a $5-million donation to Memorial University to develop two programs to help make science, technology, engineering and math exciting for Newfoundland and Labrador students.

Considering the technical work that’s required to extract oil from the ocean floor, it’s not surprising Hibernia has invested millions of dollars in STEM programs (science, technology, engineering and math) over the years. But Bruce-O’Connell says education is just one of the causes that Hibernia supports—civic, environment, arts and culture are also areas where it focuses its philanthropic efforts.

In addition to generous financial contributions, HMDC encourages its employees to get involved in the community through volunteer work. One such example occurred when Let’s Talk Science held its Canada Youth Summit in St. John’s in 2018. Hibernia employees spoke at several events during the summit and held workshops with the students, leading them through various activities.

HMDC also helps its employees volunteer by communicating with the organizations it supports to learn about events and volunteer opportunities that its workers can get involved in. It advertises these through its internal communications network, so they are aware and can get involved in any opportunity that interests them.

Even though the Hibernia field contributes millions of dollars in royalties to the provincial treasury, which is invested in Newfoundland and Labrador in various ways, contributing to community causes also makes a significant impact on the province. HMDC clearly gets that. “Hibernia is part of this community. Our people live and work here and it’s important for HMDC as a company to support the community in which we operate,” Bruce-O’Connell says.
Blacks Harbour, New Brunswick is where it started. In 1985 brothers Glen, Gifford and Michael Cooke started Kelly Cove Salmon with a marine cage site that held 5,000 salmon. Over three decades later, the company is known as Cooke Aquaculture and 150,000 metric tonnes of Atlantic salmon is produced globally every year. It has production in Canada, the U.S., Chile and Scotland and exports its product to 67 countries.

That growth and global reach has earned Cooke Aquaculture a 2019 Industry Excellence Award as exporter of the year. And what a year it has been for the New Brunswick-based company that not only farms Atlantic salmon but also wild salmon in Alaska, plus scallops, oysters, crab, shrimp and other value-added products. It was a top 10 finalist in the 6th annual Private Business Growth Award put on by the Canadian Chamber of Commerce and Grant Thornton. In November of 2018 Cooke Seafood USA (it’s United States subsidiary) invested over US$2.8 million in its Suffolk, Virginia facility to up its production capacity there.

Andrew Young, Cooke Aquaculture’s vice-president global sales and marketing, says the company’s biggest markets are the U.S., France, United Kingdom, Israel, Japan, Taiwan, China and Brazil. He says finding new markets is a key reason the company is growing, and exports continue to rise. “Exports have grown significantly over the last few years,” Young says. “China and Brazil have added significant growth and we continue to find new markets like Taiwan and Israel.”

Young says the company will continue to explore new markets for its farmed and wild seafood. India and other parts of Southeast Asia it doesn’t already sell to are particularly appealing. However, China and Brazil will be where Cooke Aquaculture focuses on growing its exports even more in 2019.

Cooke has certainly come a long way from its humble start in Blacks Harbour. But for it to become an even larger exporter, the company would like to see trade barriers removed worldwide. While the big news in Canada in the fall of 2018 was the new U.S., Mexico and Canada trade deal that the three neighbours negotiated after months of bickering, free trade remains elusive in other parts of the globe for aquaculture companies like Cooke. “Trade barriers remain a big issue in our business. We promote free trade globally,” Young says.

Cooke acquired Omega Protein in late 2017 and it now has 9,000 employees worldwide. That’s a long way from 1985 when the Cooke family started the venture. Its global headquarters remain in Blacks Harbour—population 894— and it is firmly an Atlantic Canadian company with production and farming facilities in in New Brunswick, Nova Scotia and Newfoundland and Labrador and its smoked salmon is processed in P.E.I. But it also has operations and offices in distant locations like Uruguay, Japan, the Netherlands, Wisconsin, Spain and more.

That demonstrates that Cooke Aquaculture is a global player in the seafood industry, and Young says the company isn’t done flexing its export muscle. “We will continue to grow new markets and look for new export opportunities,” Young says. “We think globally and have a global team in place to support these goals.”