

# **Building Trust:** Canadian LNG Developers & First Nations



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### INTRODUCTION



Canada's historic treatment of Indigenous peoples has been called a "cultural genocide<sup>1</sup>," marked by broken treaties, broken promises, and, through a process of assimilation, causing Indigenous peoples to lose connection with their land and culture. The establishment and operation of residential schools were a central element of this policy.

In 2009, the Truth and Reconciliation Commission of Canada began a multi-year process to listen to survivors, communities and others affected by the residential school system. The resulting collection of statements, documents and other materials now forms

the heart of the National Centre for Truth and Reconciliation.

"The urgent need for reconciliation runs deep in Canada," says the final report of the Commission.

"Reconciliation must support Aboriginal peoples as they heal from the destructive legacies of colonization that have wreaked such havoc in their lives. But it must do even more. Reconciliation must inspire Aboriginal and non-Aboriginal peoples to transform Canadian society so that our children and grandchildren can live together in dignity, peace, and prosperity on these lands we now share."

<sup>&</sup>lt;sup>1</sup>Honouring the Truth, Reconciling for the Future: Summary of the Final Report of the Truth and Reconciliation Commission of Canada

A transformation is also needed in Canada's oil and gas sector, whereby developers and First Nations come together as true partners to support responsible economic development opportunities; assess risks to traditional land, water and heritage resources; and deliver better, more sustainable projects.

In Canada's liquefied natural gas (LNG) sector, the companies that have succeeded in moving their projects forward spent considerable time and resources on First Nations consultation and engagement. They engaged early and earnestly and learned that First Nations were not interested in being merely rent-seeking landlords, but wanted in as business partners and potential shareholders.

In this special report, we examine how LNG developers have consulted with First Nations, how to get it right, and why these types of partnerships matter.

#### We look at:

 Best practices for First Nations engagement, including the need for LNG project proponents to be flexible when dealing with Indigenous peoples, and to take their concerns to heart;

- How LNG development can be used to promote 'economic reconciliation' with Canada's Indigenous community, with partnerships evolving to where First Nations take equity positions in projects; and,
- The benefits of pursuing greater involvement of Indigenous communities in energy developments

   how it's worked in Alberta and how those lessons can be transferred to other jurisdictions — and why it should matter to all Canadians.

Ultimately, those behind the projects that are now moving ahead say the key to success is building trust. And that may mean doing things differently than in the past.

"You can't come in here and push a timeframe and a way of negotiating that isn't acceptable to the counterparty," says Susannah Pierce, director of corporate affairs with LNG Canada. "That is not the way they do things. You can't rush it. You've got to build the trust up front, because there's years and years of evidence where that trust has been decimated.

"Be available, be responsive and be respectful."

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## **Canadian LNG Projects**

Canada has vast reserves of natural gas, particularly in Alberta and British Columbia.

As of year-end 2018, Alberta had 27.72 tcf of remaining established reserves of marketable natural gas, while B.C. had  $41.03 \text{ tcf.}^2$ 

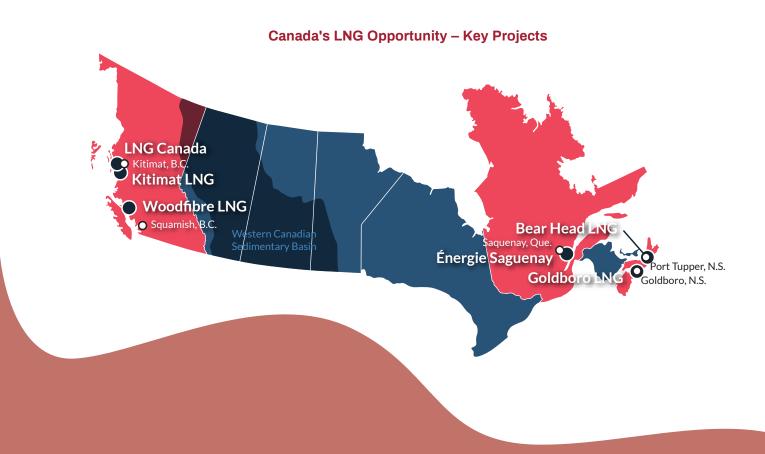
At current rates of consumption, Canada has sufficient natural gas in the Western Canadian Sedimentary Basin to meet the country's needs for 300 years, with enough remaining for export.<sup>3</sup> As such, the export of natural gas using LNG facilities could help meet growing demand around the world for the cleaner-burning fuel.

In October 2018, LNG Canada announced a positive final investment decision (FID) for the first phase of its

export project in Kitimat, British Columbia. Backed by LNG heavyweight Royal Dutch Shell, the \$40-billion project (total cost, should the second phase receive a positive FID) has been described as the single-largest private sector investment in the history of Canada.

Importantly, both LNG Canada and Pacific Oil & Gas' smaller Woodfibre LNG project in Squamish, B.C., have secured long-term buyers.

Both are well placed to serve growing Asian demand for cleaner natural gas to replace coal and are expected to be in operation within the next decade.



<sup>&</sup>lt;sup>2</sup> Canadian Association of Petroleum Producers (CAPP); effective 2010, CAPP Reserves are based on provincial and NEB data.

<sup>&</sup>lt;sup>3</sup> Canadian Association of Petroleum Producers

Just down the road from the LNG Canada project, Kitimat LNG could be the next large project in line to receive an affirmative FID, although its operator, Chevron Canada, announced in December 2019 that it plans to exit its entire 50% working interest as part of the global portfolio optimization effort of parent Chevron Corporation. (See the Reference Material section at the back of this report for updated LNG project details.) The other partner in Kitimat LNG, Woodside Energy, announced last September it was seeking to reduce its stake in the project to cut its capital exposure.

At the other end of the country, Pieridae Energy has proposed an LNG plant at Goldboro, Nova Scotia. The Goldboro project also has a committed buyer. Pieridae would source its natural gas from the Western Canadian Sedimentary Basin via the TC Energy (formerly TransCanada) mainline pipeline.

Two other projects in Eastern Canada are the Bear Head LNG project, also in Nova Scotia, as well as Quebec's Énergie Saguenay project.

#### Selected Key LNG Projects in Western Canada

Project	Owner(s)	Capactiy	Capital Cost (billions)	Status
LNG Canada	Shell, PETRONAS, PetroChina, Mitsubishi Corporation, KOGAS	14-28 mtpa 1.9-3.7 bcf/d	\$40	Under construction; completion expected by 2025
Kitimat LNG	Chevron, Woodside Energy	10 mtpa 1.3 bcf/d	N/A	Chevron to exit the project; Woodside seeking to reduce stake
Woodfibre LNG	Pacific Oil & Gas	2.1 mtpa 0.3 bcf/d	\$1.6	FID expected after a construction agreement is finalized.

#### Selected Key LNG Projects in Eastern Canada

Project	Owner(s)	Capactiy	Capital Cost (billions)	Status
Goldboro LNG (Nova Scotia)	Pieridae Energy	5-10 mtpa 0.7-1.3 bcf/d	\$8.3	FID expected in 2020; completion in 2024-2025
Bear Head LNG (Nova Scotia)	LNG Limited	8-12 mtpa 1.1-1.6 bcf/d	\$6	
Énergie Saguenay (Quebec)	GNL Quebec	11 mtpa 1.5 bcf/d	\$7	FID expected in 2020; completion in 2025

<sup>\*</sup> Only projects with export licenses and regulatory approvals in place are included.

Source: Canadian Energy Research Institute, Natural Resources Canada, company announcements



## First Nations Engagement

There has been a major evolution over the past decade in the way the oil and gas and pipeline industries approach Indigenous relations and partnerships.

The biggest change is that industry and Indigenous interests are now aligned, Tristan Goodman, president of the Explorers and Producers Association of Canada (EPAC), said last fall in Calgary at the third Energy and Natural Resources Summit. The event is hosted by the National Coalition of Chiefs (NCC), which was formed in response to the poverty crisis and social despair that currently exists in First Nations and Metis communities throughout Canada.

Over the years there have been a lot of partnerships between industry and Indigenous groups and it hasn't always been a smooth road, Goodman acknowledged.

"But I think now we are in a position where it is essential for all of us," he said.

"We don't have a choice because if we don't have it, we are not going to have the development, we are not going [to] have access to those funding components,"

Goodman noted. "You want an equitable system across the country and I think that is where the opportunity is starting to occur."

Chris Bloomer, chief executive officer of the Canadian Energy Pipeline Association (CEPA), agreed there has been a sea change in the pipeline world over the past 10 years, largely because society has changed and pipelines have become the nexus for a number of issues, including climate and Indigenous matters.

"What's happening is the realization that you need to get engaged much sooner in the process," he said.
"You need to get to know each other much sooner and much deeper before you enter into these relations and partnerships."

What the industry learned through the process — and is getting better at — is that early and deep engagement leads to a better understanding and better outcomes in the future, said Bloomer.

Chief Dan George of the Burns Lake Band and a director of the B.C.-based First Nations LNG Alliance, said he

thinks that governments and industry have learned a lot in the past 10 years and "things are looking a lot brighter for First Nations throughout the country."

He suggested that court cases in British Columbia also are a major reason that negotiations with industry have become a lot easier. At one time, said George, consultation appeared to be little more than industry checking the box on an application to say they had consulted with a community and the project would proceed, even if the community didn't like it.

"I believe consent means talking together with industry and coming together to a mutual agreement to do work on our lands," he said.

Benefits and procurement also are an important part of agreements involving Indigenous communities, said George. The alliance negotiated procurement opportunities for every Nation along the Coastal GasLink line with joint venture partners and has a Pipeline Benefit Agreement with the B.C. government, he said.

"Partnerships are like a marriage and you learn how to make things happen together," said George.

The oil and gas industry has been partnering with Indigenous communities for a long time, but the

definition of this is changing, which is "a good thing," said Bloomer. "The scope has been changing, the breadth of partnerships has been changing; long-term value creation is happening."

Partnerships are moving from being transactional to being more relationship-based, he added.

"Where you need to make sure partnerships work, it is about a degree of trust and it's not just about trust on one side," said Goodman. "Trust is established by actually working together on things, making mistakes, which will be made."

And while there are going to be some mistakes, "the key is to understand it's not intentional," he said. "Through building those actual working-together relationships, that's where we're going to come out the other side and benefit everybody."

But the ultimate partnership is ownership, added Bloomer, which brings a whole new perspective to the relationship. "You are involved in decision-making. You leverage the ownership piece into other things."

Ownership, he said, enables all stakeholders — including Indigenous companies and Indigenous communities — to have a long-term stake and a long-term vision and it leads to better self-determination.

#### **LNG DEVELOPMENT: PREPARE TO ENGAGE**

Of the 634 First Nation communities in Canada, a third are located in British Columbia. Of the 198 First Nations in B.C., only a handful have ever extinguished aboriginal title through either historic or modern treaties, which can make First Nations engagement and consultations more challenging in the province than in other parts of Canada.

"You can't rely upon a structure that sets out and defines various different roles and responsibilities," said Susannah Pierce, director of corporate affairs for LNG Canada. "Here you actually have to create that."

Many First Nations in B.C. also have a hereditary clan or "house" system that may not exist in other parts of Canada. This can create a kind of dual governance, and it isn't always clear just who has the authority to negotiate on behalf of a given First Nation.

Robin Junger, an aboriginal and environmental law expert with McMillan LLP, said that either elected or hereditary leaders can represent their people in rights and title issues. It all depends on who the First Nation



Source: First Nations LNG Alliance

members themselves invest the authority in, and that is something that proponents will need to determine up front.

For LNG developers, there is no easy answer except to meet with both hereditary and elected leaders and try to get clarification — as early as possible — if a given First Nations has invested authority in its elected band council or hereditary chiefs. In most cases, it is the elected chiefs who have been given authority by their community to negotiate with industry and government.

First Nations engagement is particularly challenging when the proposed resource development project is a

linear one, like a pipeline, since it will mean dealing not just with one or two key First Nations, but dozens.

For any project to succeed, it is clear that proponents need to engage with First Nations early on and be prepared to make changes to their projects, especially when it comes to environmental issues, like impacts on fisheries.

"Consultation is only meaningful if you're prepared to make changes or actually address concerns in a meaningful way," said Michael Eddy, Indigenous relations manager for LNG Canada.

#### **FIRST NATIONS SUPPORT**

A key part of the \$40-billion LNG Canada project is the \$6.6-billion Coastal GasLink pipeline, which will transport natural gas from the Dawson Creek area of northeastern B.C. to Kitimat via a 670-kilometre pipeline that cuts through the territory of 20 First Nations. The pipeline is being built by TC Energy Corporation.

A Google search of "Coastal GasLink" will bring up news stories about the Unist'ot'en — a clan of the Wet'suwet'en First Nation — that has been blockading the pipeline route for several years. Media coverage of the issue would suggest there is significant opposition to the project when, in fact, there is significant support.

Apart from the Unist'ot'en, the Coastal GasLink project actually has the support of all 20 elected band councils along the pipeline corridor, including the Wet'suwet'en. Getting that support took thousands of hours of engagement, and \$600 million in impacts benefits.

"Coastal GasLink set the standard for how to deal with First Nations people," Archie Patrick, chief of the Stellat'en First Nation, said at last year's Canada Gas and LNG Conference. "You can quote me on that."

So what, exactly, did Coastal GasLink do right?

Since the project was first announced in 2012, Coastal GasLink engaged early on with 31 First Nations, two Tribal Councils and two Metis organizations. More focused consultations involved 30 Indigenous groups.

The Coastal GasLink team logged more than 15,000 meetings and phone calls with Indigenous communities along the proposed pipeline route, and a third of all the early preparatory work completed on the project was done by Indigenous people. The team also held 120 inperson meetings with Wet'suwet'en hereditary chiefs, some of whom remain opposed to the project.

"Fundamentally, all they did was listen," Ellis Ross, former Haisla chief, now a B.C. Liberal MLA, said of LNG Canada. "I've dealt with a lot of companies that listened, and then just went and did whatever they planned in the first place.

"But what LNG Canada did was they listened to the concerns and they actually made best efforts to address the concerns. And that built up a lot of trust with First Nations."

Typically, in the past, what would happen with a major industrial or resource project is that the company would

submit its proposal to the provincial government, and then the province would send referral letters to relevant First Nations informing them of what was proposed.

"Then it would start this whole process between us and the Crown — letters going back and forth, lawyering up," Ross explained. "And at some point, the proponent would come in and give presentations."

LNG developers in B.C. took it upon themselves to begin the dialogue earlier on in the process. LNG Canada appears to have benefited from the advice of the developer behind the very first LNG project in B.C. — Kitimat LNG. After he left that project, Alfred Sorensen was approached by the LNG Canada consortium. He offered them some advice on how to work with the Haisla and other First Nations.

If the company was serious, he said, and didn't want to get off on the wrong foot, they should send the president of the company to meet with the chief and council, not some lower level functionary.

"I said, 'If you're not willing to do it, I can tell you right now it's going to be a struggle everyday and you'll spend more money and waste way more time than you would to make a simple gesture that's important to them,'" said Sorensen, who is now leading the Goldboro LNG project in N.S.

"Coastal GasLink set the standard for how to deal with First Nations people."

Archie Patrick, chief, Stellat'en
 First Nation

Former LNG Canada CEO Andy Calitz met often with First Nations leaders, and LNG Canada maintained its presence in Kitimat, even when the project was put on hold in 2016, which Ross said helped maintain trust.

"They stayed in Kitimat," Ross said. "They kept up communications. There wasn't much to talk about, but they stuck around."

In total, LNG Canada and the associated Coastal GasLink pipeline project required the consent and support of 26 First Nations — 20 along the pipeline route and six in the Kitimat region. LNG Canada employed a team of four to five people whose job was First Nations engagement.

"I think we've had in the neighbourhood of 10,000 to 20,000 engagements with First Nations," said Michael Eddy, Indigenous relations manager for LNG Canada. "So that is face-to-face engagements, that is email

conversations, phone conversations.

"We spent three years working with our environmental department on one permit with the Haisla specifically. It's a tremendous effort."

The engagement process included bringing an LNG container to Kitimat to demonstrate what it looks like, and taking First Nations leaders to Oman to tour an LNG terminal.

Many First Nations don't have the in-house legal or technical expertise to analyze highly technical engineering, environmental and economic reports, so the company also provided capacity funding so First Nations could hire technical and legal experts.

#### LOCATION, LOCATION, LOCATION

One of the issues in dealing with First Nations is underestimating the attachment they may have to their land and resources, and it becomes particularly prickly when a proposed project may have negative impacts on fisheries.

Companies may spend considerable time and resources on siting an LNG plant only to discover First Nations have serious objections. That was the case in the cancelled Pacific NorthWest LNG project. Although Petronas cited market conditions for cancelling the \$36-billion project, the location the company chose for an LNG plant in Prince Rupert was problematic.

The site, Lelu Island, is near Flora Bank, which is ecologically sensitive. The eelgrass beds there are important to juvenile salmon. First Nations from Prince Rupert — notably the Lax Kw'alaams — to northeastern B.C. (Fort Nelson and Saulteau) objected to the site due to the impact it might have on salmon.

Greg Kist, who was president of Pacific NorthWest LNG and is now CEO for a new LNG group called Rockies LNG Partners, said he's not sure PNW LNG could have done anything differently when it came to the site. However, he adds that Rockies LNG will be taking a

different approach to First Nations engagement.

"It [Lelu Island] was part of the Port of Prince Rupert," he said. "It was zoned for industrial development. There was nothing that led us to believe that that wouldn't be supported. In fact, the Prince Rupert port had the support of those First Nations for development.



Woodfibre LNG is proposing to house workers in a self-contained "floatel." Image: Woodfibre LNG

"I think what we maybe weren't as cognizant of was the importance of the eelgrass in that area to the First Nations in terms of the fisheries. I think our approach this time has been, as we've been working with the Indigenous nations is, instead of us saying 'We like this site or that site,' we've worked with a number of First Nations along the pipeline route and said, 'Where do you guys want a project to go? Where do you think is the optimum site?'"

Ross said the original site proposed for the Kitimat LNG project was also problematic. Originally, the developer chose Emsley Cove. The area is important to local First Nations because it is a prolific crab and shellfish production area. Ross said the Haisla made it clear that the site was going to be a problem for them.

Eventually, Sorensen said, the location for Kitimat LNG was changed to the site the Haisla preferred — their own reserve land at Bish Cove. Ross strongly urges companies to be flexible when dealing with First Nations, and to take their concerns to heart, especially when it come to things like impacts on fisheries.

"I understand you have to secure a location," he said.
"But from then on, don't go with an offer in hand. Don't go there with your plan 100% laid out, because the First

Nations can offer you so much more information that you're not even aware of.

"It's better to actually select your location and go talk to the band before you make your application. If you do it the way LNG Canada did, at the very least you've got the general principles from the First Nations in question already incorporated into your application."

Kist agrees with Ellis, and noted: "I think that one of the things you need to be cognizant of is just making sure, right off the bat, that you find the places where the Indigenous nations believe it's the best place to go, and then assess those.

"They're not trying to shoehorn you into a particular area. They're saying, 'Here's the areas where we're comfortable with development happening.' You then have options."

#### **EASTERN PROJECTS**

LNG proponents in Eastern Canada have also engaged with First Nations. The two LNG proposals in Nova Scotia, for instance, both have benefits agreements with Mi'kmaq First Nations in the province.

Bear Head LNG signed a benefits agreement with the Assembly of Nova Scotia Mi'kmaq Chiefs in February 2019. This agreement commits both parties to develop the Bear Head LNG project in an environmentally sustainable manner for the benefit of the regional community and the project.

Pieridae also signed a benefits agreement in February 2019 with the 13 chiefs of the Assembly of Nova Scotia Mi'kmag Chiefs.

The agreement sets the framework for how the Mi'kmaq will benefit economically from the development, construction and operation of the Goldboro LNG facility.

A memorandum of understanding (MOU) signed in

2013 originally outlined the relationship between Pieridae and the Mi'kmaq in Nova Scotia and the new benefits agreement underscores Pieridae's commitment to ongoing engagement and relationship building with the First Nations communities in Nova Scotia.

"As we look to ensure responsible development and environmental stewardship that reflect a Mi'kmaq voice, it's important that we can bridge that gap with industry," said Chief Terrance Paul, co-chair for the Assembly of Nova Scotia Mi'kmaq Chiefs, noting that Nova Scotia is unceded Mi'kmaq territory and the management of its lands and resources is a priority.

"This agreement with Pieridae is an example of how companies can respect our Mi'kmaq rights and title, and also provide an opportunity for Mi'kmaq participation in development on our lands," Chief Paul said.

It was a relatively easy and straight-forward negotiation, compared to dealing with First Nations in B.C., according to Pieridae CEO Alfred Sorensen. For one thing, there are historic treaties in place in Nova Scotia that provide at least some clarity on rights and title — something that is ill-defined in B.C. Sorensen said the Mi'kmaq's business capacity also appears to be more developed than on the West Coast.

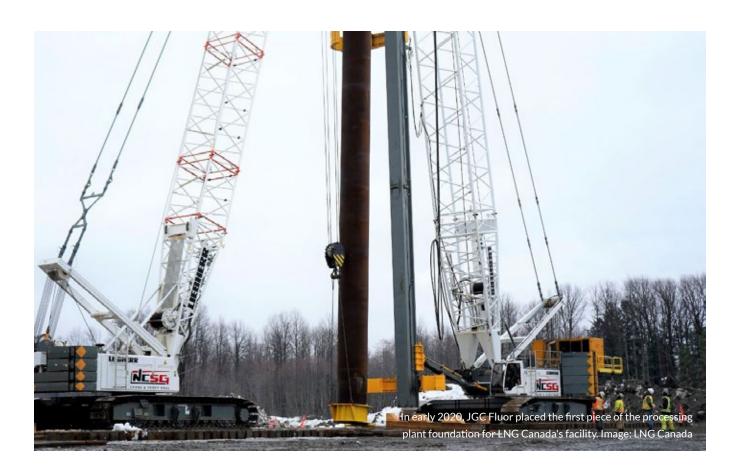
"They've got a negotiating council that all of their business in Nova Scotia runs though," he said. "So very much a different scenario than what you'd see in the West and much more organized."

Meanwhile, for the proposed Énergie Saguenay project in Quebec, the proponent GNL Québec (GNLQ) signed a collaboration agreement in 2015 with the councils of three Innu First Nations — Mashteuiatsh (Pekuakamiulnuatsh), Essipit and Pessamit.

For its part, the collaboration agreement is a process by which GNL Québec will consult with the three First Nations during the planning phase of the project, in consideration of their interests, concerns, and ancestral and treaty rights, with the purpose of accommodating them as far as practicable. The agreement will also allow just and proper participation in the benefits of the planning phase for the First Nations, according to their qualifications and project needs, particularly in terms of jobs and contracts.

"To encourage the social acceptability of the project, and thus its sustainability, GNLQ, from the outset of the project, consulted with and encouraged the First Nations to express their points of view, their concerns and their suggestions for improvements," the company says.

The consultations with the First Nations took place in two stages: prior to the filing of the project notice and during the completion of the impact study. The purpose of the consultations initiated by GNLQ is to ensure the full participation of First Nations in the environmental assessment process. GNLQ said it made sure to explain its project and its components and take into account the expectations and concerns of First Nations.



## 'Economic Reconciliation'

Across the oil and gas sector in Western Canada, there are several positive examples of new ways that companies and First Nations are working together.

Reflecting on his 35-year career in the energy industry, the president and CEO of Suncor Energy Inc. says he would be hard-pressed to imagine many greater highlights than his participation in forming the East Tank Farm deal — a pact he says provides two First Nations with stable revenue for the next quarter century, and serves as a standard for "economic reconciliation."

"This was transformative and creates a model in which we aspire to do more in our future — a model we think could be used in so many other opportunities...," Mark Little told last fall's Energy and Natural Resources Summit in Calgary.

In 2017, the Fort McKay and Mikisew Cree First Nations jointly bought a 49% stake in Suncor's East Tank Farm

near Fort McMurray. Suncor helped the First Nations raise more than \$500 million on the public equity markets for that deal, Little noted. "We think Canada should continue to grow our energy and provide it to the world, but we also think having Indigenous participation in it is a great way for us to work on economic reconciliation together."

Growing up in Calgary, Little added, whether at school or at home, the truth is he never learned about Canada's Indigenous peoples and the challenges they face. Fortunately, he told the summit, through his career Little has had a "tremendous opportunity" to learn from First Nation communities, which has impacted him personally and impacted the company and how its workers think about engaging with Indigenous Canadians.

## LNG DEVELOPMENT TO AID IN ECONOMIC RECONCILIATION

As with oilsands development in Alberta, First Nations that have embraced LNG also see it as an opportunity to lift their people out of poverty and generate their own revenue to fund programs that are important to them — providing better education for their youth, for example.

Karen Ogen-Toews, former Wet'suwet'en chief and CEO of the First Nations LNG Alliance, also calls it economic reconciliation. (The alliance was established to help educate First Nations about LNG and what it means to Indigenous peoples, providing them with the information to make an informed decision on whether to support it.)

The growing involvement of Canadian First Nations in LNG and other resource development projects is moving them from poverty to the standard of living enjoyed by a majority of Canadians.

"To me, that goes, and must go, hand-in-hand with reconciliation, moving Canada forward in a mutually respectful relationship between Aboriginal and non-Aboriginal groups," Ogen-Toews told a recent LNG investor conference in London.

The London event, which provided a special briefing to around 140 European energy investors and stakeholders, was supported by the Government of

## Alberta Indigenous Opportunities Corporation advancing toward funding projects

The first funding award by the new Alberta Indigenous Opportunities Corporation (AIOC) is expected this year, increasing the ability for Indigenous groups to invest in the province and become partners in prosperity, said Matthew Machielse, its interim chief executive officer.

Machielse said that the \$1 billion in loan guarantees being offered by the province to support Indigenous participation in natural resource projects is one of the government's top priorities, "only behind takeaway capacity and market access."

Alberta's goal is to facilitate more deals like the 2017 agreement that saw the Fort McKay and Mikisew Cree First Nations take a \$545-million equity position in the East Tank Farm portion of the Fort Hills oilsands project.

"We've been using the Suncor initiative of the East Tank Farm as kind of the gold standard or a model that this initiative wants to replicate," Machielse said.

The AIOC is looking to fund projects in what Machielse calls "broad-based energy," including renewables and upstream through downstream oil and gas, as well as mining and forestry.

A minimum of \$20 million of Indigenous equity interest in a project will be required for eligibility.

"That sounds like a significant number, but we have to keep in mind that the objective of this initiative is to have revenues from the natural resources sector coming back to communities and we want those revenues to be material, so that means we're looking for significant investment opportunities," he said.

Approximately \$4 million in capacity funding is being made available to help Indigenous communities evaluate business opportunities, Machielse added.

"This isn't about subsidizing; this is about making deals on commercial terms and making sure that Indigenous communities can engage in that exact conversation."

There is tremendous interest in the AIOC, with a number of potential projects starting to come forward, Machielse said.

However, "we're probably looking at late into the quarter or into mid-2020 by the time everything is agreed to" for a funding award on a project of this complexity, he said.

Alberta, and organized by Glacier Media (the parent company of the *Daily Oil Bulletin*) and the Canadian Society of Unconventional Resources.

First Nations have moved beyond merely having a say in resource projects and signing impact benefit agreements to investing in natural gas and LNG, said Ogen-Toews.

"From coast to coast to coast, First Nations and their people are becoming known as business leaders and as solid partners to non-Indigenous companies," she said. "We have become an important player in the development of natural gas, LNG and other resources in Canada."

For decades, resource companies simply walked onto

Indigenous territories with the approval of federal and provincial governments, she said. "They drilled, they built pipelines, they built processing plants and they carried on their business without First Nations having a say in any of it."

However, based on successful court cases on land, title and rights, British Columbia's First Nations finally have a say in the development of natural gas pipelines and LNG projects on their lands.

"The truth is, it has become a fact you really can't do your business on First Nations land without the consent of the affected First Nations," said Ogen-Toews. And while the Supreme Court of Canada has held that a First Nation does not have a strict legal veto over development proposals, the courts and others have held that consultation and accommodation are vital elements to be delivered today before governments give the green light to a resource project, she said.

#### IMPACT BENEFITS AGREEMENTS

Getting First Nation support for a pipeline or LNG plant typically includes impact benefit agreements. For First Nations that are most directly affected, these agreements can be substantial.

Benefits agreements can be signed with industry or the provincial government, but often include both. In the case of Woodfibre LNG, the Squamish First Nation signed a benefits agreement with Woodfibre LNG, FortisBC and the provincial government valued at \$1.1 billion.

It includes \$225.6 million in cash over 40 years, \$872.4 million in contracts, 422 hectares of land, and employment provisions for Squamish members. The agreement also includes an option for the Squamish to take a 5% equity stake in the project.

Benefits agreements often will include provisions for employment, job training and procurement for First Nations contractors.

For the Haisla, two fairly significant business developments resulted from benefits agreements.

One of them is HaiSea Marine — a joint venture between the Haisla and Seaspan ULC, which was awarded a \$500 million contract from LNG Canada to provide tug services for LNG Carriers. It will employ 70 mariners and six onshore staff, and the agreement provides the Haisla access to employment, training and procurement opportunities. Other neighbouring First

Nations — the Gitxaala Nation and Gitga'at — will also benefit from the project through a transit agreement with the Haisla.

The Haisla also negotiated an agreement with LNG Canada, the provincial government and the District of Kitimat to develop the Haisla Town Centre — a \$21-million mixed-use development that includes 80 residential condominiums, an 80-room hotel and commercial office building.

The project was built on Crown land that had been the former site of an old hospital. The Haisla, province and



Woodfibre LNG site in Squamish, B.C. Image: Woodfibre LNG

District of Kitimat negotiated a deal in which the Haisla would get the land in fee simple. That means the district collects taxes on the land, not the Haisla.

The Haisla financed the condo project and struck a deal with LNG Canada to be an anchor tenant on a 10-year lease.

In December 2019, the Gitga'at First Nation and LNG Canada announced that the Gitga'at will construct and operate a new Marine Emergency Response and Research Facility in Hartley Bay, having finalized the terms of a financial agreement with LNG Canada.

The Response and Research Facility will support marine safety, research and monitoring in Gitga'at territory, as well as the protection of the coastal environment.

The Marine Emergency Response and Research Facility will consist of a shore-based structure, a

research vessel, and communications equipment, and will be staffed by trained Gitga'at employees. These staff will work in collaboration with federal and provincial agencies to provide front-line support for marine emergencies, and will undertake research and monitoring programs in Gitga'at territory.

Gitga'at will design and construct the facility, and will be responsible for its ongoing operations and maintenance. LNG Canada will provide financial support as committed in the Impact Mitigation and Benefit Agreement written in 2014.

#### HAVING A STAKE MEANS HAVING A SAY

The benefit agreements that First Nations sign aren't just about economic opportunities, however. Being active participants in projects also gives them more say in those projects, which is especially important when it comes to addressing environmental impacts. In at least one case, it resulted in a significant design change to address environmental concerns.

When the Squamish First Nation started taking a serious look at the Woodfibre LNG proposal as an economic development opportunity, it also had to take a hard look at environmental impacts.

Howe Sound, where the plant will be located, has a long legacy of industrial pollution from pulp mills and the old Britannia copper mine. The sound has only recently recovered from decades of pollution, so the Squamish were concerned about any new industry that might reverse that trend.

In what was described as unprecedented, the Squamish First Nation conducted its own environmental assessment for the Woodfibre LNG project, and came up with 25 conditions — all of which Pacific Oil and Gas agreed to.

In fact, the company signed a legally binding agreement giving force to the Squamish document and conditions. One of those conditions included a significant design change.

Chilling natural gas to -160 C involves heat exchange, and Woodfibre LNG initially proposed to use seawater drawn from Howe Sound to remove waste heat. But that would have meant warm water flowing into Howe Sound.

Although seawater cooling was the cheapest option, the company agreed to change the plant's design to use aircooling. It negatively affected the project's economics, but it addressed what, for the Squamish, was a serious environmental concern.

"To my knowledge, we're the only LNG company in Canada and, I think, in the world that has actually agreed to be legally bound by an environmental assessment by a First Nation government," said David Keane, president of Woodfibre LNG and former head of the BC LNG Alliance. "That was a whole new way of approaching consultations with the First Nations."



## Haisla chief gives heartfelt support for LNG development

Haisla Nation Chief Councillor Crystal Smith gave a passionate, off-the-cuff defence of LNG development at the BC Natural Resources Forum in January 2020.

Smith said she and her council support the development of the LNG Canada natural gas export terminal in Kitimat and the 670-kilometre Coastal GasLink pipeline which would supply it, because it means economic opportunities for their people, reported the *Prince George Citizen* (a Glacier Media publication).

"Our nation's goal is to be an independent, powerful and prosperous nation. We can't get there without powerful, prosperous, independent people," said Smith, who is also chair of the First Nations LNG Alliance.

She said she and her twin sister grew up mostly in the care of their grandparents.

"My grandfather was a victim of the residential school, but they made my twin sister's life most memorable. I didn't think we were poor. We ate traditional food every day. But I grew up poor."

Her mother died in her early 40s of cancer, and Smith and her twin helped raise their nine-year-old sister.

"Poverty, been there. Suicide, been there," she said. "I don't want our people to continue living that life."

Smith said she remembers being 11 or 12 years old, walking by the band office on her way to school in the Kitimaat Village, and thinking the only jobs she'd ever likely get were as a janitor or working as an assistant in the band office.

"Alcan or the band office, those were the two places I had a chance to work," she said. "I'm going to get pregnant early, be on social assistance. I'm going to be a burden on society. I'm supposed to be stupid, right? I came out of that school believing that."

She went to a local community college but dropped out after a year. The self-fulfilling prophecy came true when she got a job working as an assistant to the elected chief at the band office.

It was working for former Haisla chief councillor Ellis Ross, now the B.C. Liberal MLA for Skeena, that helped inspire her that she could do more.

"The reason he did what he did was because of people like me," she said.

Projects like LNG Canada's gas terminal are giving her people a chance to escape poverty and have hope for the future, she said.

"I've seen the impacts firsthand. I've felt the these

impacts firsthand," Smith said. "The focus for us is the long-term careers."

Her 17-year-old daughter has a two-year-old son, and will face challenges as she considers going into post-secondary education, Smith said.

"I asked her, 'Do you have hope?' She said, 'Yeah, because with what's going on in the nation, you can do anything. You can be anything. And Zavier will be taken care of all his life,'" Smith said. "Hearing my 17-year-old daughter say that, [I know] our nation isn't doing the wrong thing. I support projects, and I'm not afraid to say it."

The project is also generating benefits at the First Nation governance level, she added, providing revenue to support projects.

"For the first time ever, we're funding culture and language programs. We're also expanding existing programs. This independence is what we want," she said. "This is what we need more of in our community. We need to heal our people. No other government ... has been able to heal our people the way they need it."

Smith said she is also mindful that the project isn't just

an opportunity for them, but for their neighbours and other First Nations in the region.

"At every First Nations table I sit at — or to the other First Nations leaders in the room ... I want to see your people come to Kitimat," she said. "There is enough opportunity, we're not going to be able to fill it all. That opportunity is LNG Canada and Coastal GasLink."

When asked about the blockade by some Wet'suwet'en hereditary chiefs and their supporters impeding work on the Coastal GasLink pipeline, Smith said she is sympathetic to the Wet'suwet'en people and the difficult political divide in their community. She's experienced similar conflicts in her own First Nation.

"These are people's lives. Our community experienced that, too. There is a political divide, and you have families that don't talk to each other. It is the hardest thing to go through..." she said. "What is happening in the territory of the Wet'suwet'en can only be resolved by the Wet'suwet'en. [But] they have the power — forget the titles, the people have the power to decide who leads them."

"I've seen the impacts firsthand. I've felt the these impacts firsthand. The focus for us is the longterm careers."

- Chief Councillor Crystal Smith, Haisla Nation

#### REWRITING THE PLAYBOOK

While the LNG industry is credited with rewriting the book on dealing with First Nations, First Nations themselves also did things differently in B.C., when it came to the LNG industry.

The clearest example is the First Nations Limited Partnership (FNLP). The FNLP is a \$500-million-plus commercial partnership arrangement between 16 B.C. First Nations and the Pacific Trails Pipeline, which would supply natural gas to the Kitimat LNG project.

The FNLP is unique in that it brought together all First Nations that had a potential stake in the Pacific Trails Pipeline to act as a kind of collective bargaining and investment group.

It was formed to avoid what had typically happened in the past with other large industrial projects, wherein industry and government would bargain one-on-one with individual First Nations, some of whom may have had real concerns about things such as territorial overlap.



Mark Podlasly, chairman of the First Nations Limited Partnership, addressing last year's Canada Gas and LNG Conference.

"In many cases there's a divide-and-conquer mentality by companies who will come in and try to hive off one community to the next to try to get what they're after," said FNLP chairman Mark Podlasly. But First Nations are now starting to understand that they fare better when they work together as a unified entity, rather than in competition with each other, and Podlasly said that is ultimately good for the industry.

"You have multiple First Nations now starting to understand that our interests need to come together first, and then approach the company," he said. "It is in the interest of a corporate partner to have that internal cohesion at the First Nations level — devised by the First Nations."

The partnership differs from the way benefits agreements have been negotiated in the past with individual First Nations. The partnership is a commercial entity that acts on behalf of all the First Nations members.

One benefit of this approach is that the commercial entity, to a large extent, will assume the task of getting social licence from the member nations.

"The communities will take care of the social issues," Podlasly said. "The government or the proponent doesn't have to do that, then — it will be the communities."

Ultimately, First Nations say the next step in the partnerships between them and industry will be taking equity positions. For the Coastal GasLink project, TC Energy said in December 2019 that it is committed to working with the 20 First Nations along the route to provide an option for them to acquire a 10% equity interest in the pipeline. (TC Energy also announced at the same time an agreement to sell a 65% equity interest in the project to KKR and Alberta Investment Management Corporation.)

Podlasly pointed out that the equity investments that some First Nations are now seeking are not industry grants.

"They would have to source their own capital," he said. "It's not a free ride."



#### **First Nations supporting First Nations**

When First Nations are wrestling with the question of whether or not to support the industry, it can be helpful to get advice from other First Nations that already have experience dealing with LNG and pipeline proposals.

That's where First Nations organizations like the First Nations LNG Alliance (FNLNG) and First Nations Major Projects Coalition come in. The FNLNG is comprised of B.C. First Nations that support the LNG industry, and offers assistance and information to other First Nations.

The alliance was originally formed in no small part to address what alliance members felt was misinformation about the LNG industry. It has produced a number of reports, in partnership with provincial and federal governments, on things like procurement opportunities.

The First Nations Major Projects Coalition also provides support to First Nations considering development proposals in their territories but is not limited to LNG. The BC First Nations Energy and Mining Council is a similar organization that helps First Nations deal with industry on resource development.

#### ANALYSIS: WHY IT MATTERS?



One need only look to the now dead Northern Gateway pipeline and the endless delays plaguing the Trans Mountain pipeline expansion to see what First Nations opposition can do to a major industrial project in Canada.

"The relationship between a proponent, between the municipalities, between the First Nation is paramount, and that will stop a project if not done properly," Mark Podlasly, chairman of the First Nations Limited Partnershp, said at last year's Canada Gas and LNG Conference.

"We see ourselves as partners," Podlasly said. "Not hosts of the facilities, but true partners. And that means the gamut — from education, training, right through to equity."

One thing that projects such as LNG Canada, Kitmat LNG and Goldboro LNG have in common is that they secured support from First Nations. Without that support, it's unlikely any of these projects would have moved past the starting line.

The model of project proponents working more closely with First Nations at the start of projects is something that Canadians approve of.

Survey research by the University of Ottawa's Positive Energy program indicated a majority of Canadians agree or somewhat agree that energy companies should develop partnerships with Indigenous communities even if it means lower tax revenues to governments (28% agree, 31% somewhat agree) or higher energy prices (26% agree, 28% somewhat agree).<sup>4</sup>

Similar figures hold for partnerships with local communities and municipalities. And support for such partnerships has grown since the question was first asked in 2018, in some instances, by almost 10%, a substantial rise.

Moreover, Canadians see a strong role for partnerships with Indigenous and local communities, the University

of Ottawa says. More than eight in 10 support (52%) or somewhat support (30%) governments negotiating an energy accord with Indigenous peoples to reduce conflict and uncertainty. These figures have held steady since 2015, a significant finding given the large number of energy projects in the news where Indigenous support or opposition — in many cases both — has been front and centre.

#### **GETTING TO WORK**

There are 12,000 self-identified Indigenous workers in Canada's oil and gas industry today, says the National Coalition of Chiefs (NCC), a community of prodevelopment First Nation chiefs and Metis leaders that advocate for the development of oil and gas resources in their communities. Energy development in and near their communities — many of which are located in rural and remote areas where few other economic drivers exist — provides much needed jobs and opportunities that help Indigenous members thrive and help defeat on-reserve poverty.

Across the country, NCC says, the vast majority of Indigenous business procurement comes from the natural resources sector.

In Saskatchewan, for instance, uranium-miner Cameco procured over \$3 billion in services from northern and Aboriginal suppliers between 2004 and 2016. In Alberta, Suncor procured almost \$5 billion in goods and services from Indigenous businesses between 1999 and 2018.

#### JOBS IN THE LNG SECTOR

Last year, more than 600 people were employed on the LNG Canada project, 45% of whom are from the Kitimat and Terrace area — many of them First Nations.

Getting prepared for LNG related jobs has taken several years of investing in education and skills training.

And as part of its benefits agreements, LNG Canada has provided funding for trades training, as well as provisions for preferential hiring of First Nations workers. The company also provided funding for various types of education and apprenticeship programs.

"We have heavily invested into our employment and

education department," said Haisla Chief Crystal Smith. "The opportunities for life-long careers are there, and that's with one project."

The provincial government has provided \$30 million for training and education over a three-year period to ready First Nations for jobs in industry.

"Over those three years, we trained over 4,000 people, and 43% of those Indigenous participants have retained employment over that time," said Laurel Nash, B.C.'s assistant deputy minister with the ministry of Indigenous Relations and Reconciliation.



Four Haisla community members, at work, at Kentron Construction in Kitimat. From left to right are Darnell Woods, Paul Lloyd (who grew up in the village), Dan Paul and Mike Ridsdale. Image: Laisdels (January) 2020 Dootilh.

A recent edition of the Haisla Nation's *Dootilh* publication tells the story of four community members who work for Kentron Construction, which provides paving, aggregate supply, ready-mix concrete supply, and road building in Kitimat and the surrounding areas for commercial, industrial, and residential clients.

One of the four, Dan Paul, is a concrete mixer driver and has worked with Kentron for about five years. A big part of his job is delivering concrete to the LNG Canada worksite. He says he loves that he's able to see the development of the project as it progresses.

The job at Kentron, and the steady income, has made

a huge difference in his life, Paul said, bringing more stability and security to his family.

Tiffany Murray, Coastal GasLink's director of Indigenous relations, told the *Vancouver Sun* newspaper last December that the company's contractors employed 1,100 workers, of which 400 were Indigenous — mostly from the 20 B.C. bands that have signed agreements.

The company has promised to spend \$1 billion of its \$6.6 billion budget providing direct funding, employment and training opportunities for affiliated First Nations.

### CONCLUSION

For too long, Canada's Indigenous peoples have been kept on the outside of economic development, looking in.

Against that painful historical backdrop, a powerful story of reconciliation occurred at the recent launch of one of the lodges that Coastal GasLink will use to house the approximately 2,500 women and men who will build the project.

Many of these workforce sites — or lodges — are built and housing workers today, while others are under construction for a later stage of the project. But all of them are being constructed and operated in partnership with Indigenous communities along the 670-kilometre project route.

"People are talking to us, people are engaging us, ... we're finally getting on track."

- Mike Gouchie, Coastal GasLink

The December 2019 opening of the Little Rock Lake Lodge marked an opportunity to honour the past while celebrating the future. The workforce accommodation site will house up to 700 women and men working on Coastal GasLink and will be operated in partnership by the Nadleh Whut'en First Nation, Horizon North and Falcon Camp Services.

Little Rock Lake Lodge is located on land that carries both a rich and painful history for the Carrier people; it is the former site of Lejac residential school. The presence of the lodge on this site symbolizes a turning point for the Nadleh Whut'en as they build new opportunities to reclaim history and chart a new path for the future of the Dakelh (Carrier) people.

Mike Gouchie, a construction monitoring and community liaison co-ordinator for Coastal GasLink, described experiencing a profound emotional response after spending a night at Little Rock Lake Lodge.

"My father went here. That's where my siblings and I, we lost our culture, my father lost his culture. And through that, the language. All of that trauma and everything else just sort of fell over on top of me," said Gouchie.

"To recognize it, and for people to understand that, I think is a huge opportunity for everyone to move forward in a positive direction."

Indigenous people finally have a seat at the table, said Gouchie. "And now we actually get those opportunities. People are talking to us, people are engaging us, ... we're finally getting on track."

# REFERENCE MATERIAL – KEY CANADIAN LNG PROJECTS

#### 1. LNG Canada

- Location: Kitimat, B.C.
- Proponents: A joint venture comprised of Royal
   Dutch Shell plc, through its affiliate Shell Canada
   Energy (40%); PETRONAS, through its wholly owned entity, North Montney LNG Limited
   Partnership (25%); PetroChina Company Limited,
   through its subsidiary PetroChina Canada Ltd. (15%);
   Mitsubishi Corporation, through its subsidiary
   Diamond LNG Canada Partnership (15%); and
   Korea Gas Corporation, through its wholly-owned
   subsidiary Kogas Canada LNG Ltd (5%).
- Capacity: The project will initially export 14
  mtpa, the equivalent of about 1.9 bcf/d, from two
  processing units. At full build out, LNG Canada will
  have four trains or processing units, each with the
  capacity to process approximately 7 mtpa of LNG for
  export to countries in Asia and elsewhere.
- FID: A final investment decision was made for the first two trains on Oct. 1, 2018
- Anticipated onstream date: 2025
- Associated infrastructure: The 670-kilometre
   Coastal GasLink (CGL) pipeline will connect natural gas from northeast B.C. to the export plant.
- Regional economic benefits: 4,500 people employed at peak construction on the Kitimat site.
- Recent announcements:

- In December 2019, TC Energy announced an agreement to sell a 65% equity interest in the Coastal GasLink pipeline project to KKR and Alberta Investment Management Corporation (AIMCo) on behalf of certain AIMCo clients. TC Energy will hold a 35% limited partnership equity interest and will be contracted by the limited partnership to construct and operate the pipeline.
- In November 2019, TC Energy increased to estimated cost of CGL to \$6.6 billion from \$6.2 billion due to increased scope and the refinement of construction estimates.
- In September 2019, LNG Canada prime contractor JGC Fluor awarded Clough PPM the EPC for the project's loadout line trestle.
- In June 2019, the federal government said it will spend \$220 million to help fund energy-efficient gas turbines and another \$55 million to replace a bridge for the project.
- In April 2019, the LNG Canada project owners officially hand over construction management to their prime contractor, JGC Fluor.
- In January 2019, LNG Canada approved \$937 million in contracts and subcontracts to First Nations and Canadian businesses.
- More details: https://www.lngcanada.ca/

#### 2. Kitimat LNG

- Location: Bish Cove, near Kitimat, B.C.
- Proponents: The proposed project is a 50/50 joint venture between Chevron Canada Limited and Woodside Energy International (Canada) Limited. Chevron is looking to sell its entire equity position; Woodside wants to reduce its stake (see below for recent announcements).
- Capacity: The Kitimat LNG plant includes up to three LNG trains totalling 18 mtpa (6.0 mtpa/train. The initial foundation project consists of two trains (12 mtpa).
- Construction of Phase 1: 2022/23 to 2028/29; commissioning of first LNG train begins after construction is complete; commissioning of second LNG train begins three weeks after the commissioning of the first train; construction and commissioning of the third LNG train as market conditions allow.
- Associated infrastructure: The 471-kilometre Pacific Trail Pipeline (PTP).
- Regional economic benefits: At peak construction
  of the LNG facility, it is estimated that more than
  3,000 people would be working on the Kitimat LNG
  plant site with another 1,500 workers building PTP.
  In addition, Kitimat LNG has a benefits agreement
  with the Haisla Nation for the plant, which is located
  on Haisla Nation Reserve land, and an agreement
  with all 16 First Nations along the proposed PTP

route through the First Nations Limited Partnership (FNLP)

- Recent announcements:
  - In December 2019, Chevron Canada announced plans to exit its entire 50% working interest, and to solicit expressions of interest for its share of the project. No timeline has been set to conclude this process.
  - In September 2019, Woodside said it was seeking to reduce its stake in the Kitimat LNG project to cut its capital exposure.
  - In July 2019, in an NEB filing, the proponents said supply will come from the equity gas resources of Chevron and Woodside held together in the Liard Basin, Chevron's equity gas resource in the Kaybob Duvernay resource and, if needed, from other contingent and prospective resources, and open market purchase or swaps made in WCSB market hubs.
  - In July 2019, the project proposed to become an all-electric plant that will be powered by hydroelectricity from BC Hydro. In July, the proponents also proposed a third train for the project.
- More details: https://canada.chevron.com/ourbusinesses/kitimat-lng-project

#### 3. Woodfibre LNG

- Location: Squamish, B.C.
- Proponents: Woodfibre LNG Limited is a subsidiary of Pacific Oil & Gas Limited (PO&G), part of the Singaporean conglomerate RGE.
- Capacity: The project is licensed to export about 2.1 mtpa for 40 years.
- Anticipated FID: Projected dates will be announced after a construction agreement is finalized.
- Anticipated onstream date: TBD.
- Associated infrastructure: The project will receive natural gas from the Eagle Mountain – Woodfibre Gas Pipeline (EGP) Project.
- Regional economic benefits: 650+ jobs at peak construction; 100+ jobs at Woodfibre site;
   1,410+ additional indirect or induced jobs during construction or at the site thereafter.
- Recent announcements:

- In October 2019, Woodfibre LNG filed
  a proposed amendment to the project's
  Environmental Assessment Approvals.
  The amendment seeks approval to house
  construction workers in a floating worker camp
  located just offshore at the project site. The
  proposed "floatel" would have the capacity to
  house a majority of workers during the facility's
  construction phase.
- In July 2019, the BC Oil and Gas Commission approved Woodfibre's permit for its export facility.
- In June 2019, Woodfibre said that BP Gas
   Marketing Limited had agreed to buy 0.75 mtpa
   of LNG for 15 years starting in 2023.
- In May 2019, PO&G said it is acquiring all of the issued and outstanding shares of privately-held Canbriam Energy Inc. and its Montney assets.
- More details: https://www.woodfibrelng.ca/

#### 4. Goldboro LNG

- Location: Goldboro, N.S.
- Proponents: Pieridae Energy (Canada) Ltd.
- Capacity: up to 10 mtpa
- Anticipated FID: 2020
- Anticipated onstream date: Commercial deliveries of gas to Uniper are expected to start between Nov. 30, 2024, and May 31, 2025.
- Associated infrastructure: The facility is located adjacent to the Maritimes & Northeast Pipeline, a 1,400-kilometre transmission pipeline system built to transport natural gas between developments in Nova Scotia, Atlantic Canada and the northeastern United States.
- Regional economic benefits: Construction phase up to 3,500 jobs at the Goldboro site; ongoing operation and maintenance – up to 200 positions.

- Recent announcements:
  - In December 2019, Pieridae announced a pre-FID budget of \$32 million for 2020, and a development expense budget of \$16 million for Goldboro LNG.
  - In October 2019, Pieridae closed its acquisition of all of Shell Canada Energy's midstream and upstream assets in the southern Alberta Foothills for \$190 million. Pieridae signed the purchase and sale agreement with Shell Canada Energy in June 2019. Shell Canada will take an equity stake in Pieridae.
  - In July 2019, Pieridae said it has negotiated extensions of the key deadlines under its 20year agreement with German utility Uniper.
- More details: http://goldborolng.com/

#### **Glossary & Conversions**

mmcf/d = million cubic feet per day

bcf/d = billion cubic feet per day

tcf = trillion cubic feet

bcm = billion cubic metres

mtpa = million tonnes per annum

1 bcf/d = 7.55 mtpa

1 mmcf/d = 0.267 mtpa

1 cubic metre = 0.0007 tonnes

#### **Web Resources**

Canadian Society for Unconventional Resources

JWN Energy

Daily Oil Bulletin

**Evaluate Energy** 

Alberta government - Natural Gas

B.C. government - Natural Gas & Oil









