Chevron and Woodside are leading the way in Canada’s emerging liquefied natural gas (LNG) industry.

The proposed Kitimat LNG project is a 50/50 co-venture of Chevron and Woodside Canada from the resource development phase and gas pipeline transportation, to LNG liquefaction, and shipping to end customers. This includes Chevron-Woodside’s ownership in a world class natural gas resource at the Liard and Horn River basins in northeastern British Columbia that will provide the necessary gas supply to the Kitimat LNG facility.

The Kitimat LNG project is planned to include a two-train LNG facility, and has a 20 year, 10 million-metric-tonne-per-year LNG export license from the National Energy Board. It also has all major provincial and federal environmental assessment and LNG export certificates in place.

Chevron is the operator of the project downstream components, including the natural gas Pacific Trail Pipeline and LNG plant, as well as the operator of the project upstream resource assets in the Liard and Horn River basins in northeastern B.C.

Since 2011, early works have been underway on the facility site, the Bish Forest Service Road and proposed Pacific Trail Pipeline right-of-way. These significant investments have already provided hundreds of thousands of employment hours and millions of dollars invested in local businesses.

CURRENT STATUS

- Kitimat LNG is currently in the Front End Engineering and Design (FEED) phase that will determine the engineering and design of the LNG facility and natural gas Pacific Trail Pipeline.

- An appraisal program of the project’s upstream assets in the Liard and Horn River basins in northeastern B.C. is currently underway.

- All key federal and provincial government permits are in place for the project as well as a 20-year National Energy Board permit to export 10 million tonnes of LNG each year.

- Early site preparation work for the LNG facility began at Bish Cove, near Kitimat, in 2011. Full construction will begin once a final investment decision (FID) is made.

- An FID for the Kitimat LNG Project is dependent on finalizing engineering and design work, establishing a stable and competitive fiscal framework from government, gaining additional First Nations support, and securing firm LNG sales agreements.
The Kitimat LNG project has been under development since 2008 and received its federal Environmental Assessment (EA) approval in December of that year. The project's provincial Environmental Assessment approval was granted in January 2009, and in 2010 the Haisla Nation approved the lease of their land at Bish Cove to Kitimat LNG. Early engineering and site preparation work began at Bish Cove and along the Bish Forest Service Road in 2011.


In January 2015, the Moricetown Indian Band became the 16th and final First Nation to join the First Nations Limited Partnership. The Pacific Trail Pipeline is the first natural gas pipeline for an LNG project in B.C. to have the support of all First Nations bands whose traditional territories are along the proposed pipeline route.

Woodside Energy International (Canada) Limited (Woodside Canada) purchased Apache's 50% interest in the Kitimat LNG project and became co-venturer in the project in 2015. As part of this agreement, Chevron also assumed operatorship of the upstream natural gas assets in the Liard and Horn River Basins in May 2015.

**QUICK FACTS ABOUT KITIMAT LNG**

- All major provincial and federal environmental approvals in place
- National Energy Board Export permit in place for up to 10 million tonnes of LNG per year
- Benefits agreement with all 16 First Nation bands along the proposed Pacific Trail Pipeline
- Projected number of LNG shipments from Bish Cove: 10-14 per month
- The construction of the LNG facility and Pacific Trail Pipeline will create an estimated 4,500 jobs that will be filled by British Columbians first
Economic Benefits

Kitimat LNG has the potential to be the largest capital investment in an energy project in Canadian history.

British Columbians will benefit from the Kitimat LNG Project for decades to come. Benefits such as employment, skills training, contracts for goods and services to local businesses and provincial revenues have already begun. These benefits will increase significantly once a final investment decision to build the project is made.

In addition to tax and royalty benefits to the B.C. government, federal taxes, major economic opportunities, skills training and investment in local communities will continue throughout the entire life of the project.

First Nations Benefits

First Nations are partners in the Kitimat LNG project and Pacific Trail Pipeline.

Benefits agreements have been signed with the Haisla Nation for the use of their land for the LNG facility at Bish Cove and with all 16 First Nations bands whose territories are along the proposed Pacific Trail Pipeline route.

These agreements are unique among any of the proposed LNG export projects in Western Canada. The First Nations Limited Partnership (FNLP) for the Pacific Trail Pipeline ensures First Nations receive benefits and have direct access to the opportunities presented by the proposed Kitimat LNG project and Pacific Trail Pipeline.

Chevron's goal in working with First Nations is to ensure the project is built in a manner that, above all, protects people and the environment.

Providing Employment Opportunities

- More than 1,500 people have been employed on the Kitimat LNG project.
- When a final investment decision is made and construction begins on the facility and Pacific Trail Pipeline, an estimated 3,000 people will be employed in facility construction and another 1,500 on the pipeline. Chevron is committed to hiring British Columbians first for all employment opportunities.
- Additional jobs will be created in the upstream natural gas resource development process in northeastern B.C.

FNLP Benefits So Far

- 1,600 First Nations individuals have taken skills and employment training through the Pacific Trail Pipeline Aboriginal Skills to Employment Partnership (PTP ASEP) program.
- First Nations employment accounts for more than 54% of all construction hours worked so far on the Pacific Trail Pipeline project.
- FNLP members' businesses have received more than $245 million in construction contracts, representing more than 65% of all construction contracts so far on the Pacific Trail Pipeline.
- 82% of all contracts for the LNG facility pre-construction activities have gone to Haisla Nation businesses.
Liquefied Natural Gas

What is LNG?

Liquefied natural gas (LNG) is the same natural gas that is delivered by pipelines each day to hundreds of thousands of homes across British Columbia. It’s the same gas that heats our homes, cooks our food on gas ranges and is used to produce electricity in many parts of Canada.

In fact, LNG is actually natural gas that has been chilled to -161 degrees Celsius where it changes from a gas into a clear, odourless liquid.

Liquid form is the safest way to transport natural gas to overseas markets. Not only does it take up less space – 1/600th of its original volume – LNG can be stored in tanks on specially designed LNG carriers and safely shipped to overseas customers. Once it has arrived at its destination, the LNG is warmed so that it becomes a gas again and is distributed by pipeline to customers. The world’s largest LNG importers are currently Japan and South Korea.

Producing Natural Gas Safely

Natural gas extracted from unconventional resource deposits using hydraulic fracturing has become a significant new global energy source. Hydraulic fracturing is not new. It has been used to recover oil and gas in Western Canada for over 60 years with a solid safety record and continually improving environmental performance. More than 175,000 wells have been fractured safely in Western Canada over the last 60 years.

The Kitimat LNG project’s Liard / Horn River Resources upstream operations will involve the appraisal and development associated with Chevron-Woodside interests in the Liard (395,000 acres) and Horn River (220,000 acres) basins in northeastern British Columbia. This includes drilling, seismic, facilities, and production operations. These very significant natural gas resources will provide sufficient natural gas supply to the proposed Kitimat LNG export facility for decades to come.

Kitimat LNG will safely and responsibly develop Canada’s unconventional resources while ensuring the highest level of environmental protection. This includes reducing water use, safeguarding groundwater and the use of hydraulic fracturing fluids with the smallest possible environmental impact.

As operator of the upstream resources, Chevron is committed to ongoing community consultations, engagement with First Nations and participation in industry groups that promote best practices as part of our unconventional resources operations.

LIQUID NATURAL GAS FACTS

• Natural gas is the cleanest-burning fossil fuel. It creates fewer greenhouse gasses and airborne emissions than coal and oil. By replacing those fuels, it can result in 45% fewer GHGs then coal and 30% fewer than oil and just a fraction of the airborne emissions.

• Unconventional natural gas extracted through hydraulic fracturing has 40% fewer emissions than coal when the entire lifecycle from the point of extraction to end use is taken into account.

• LNG is odourless, non-corrosive, and non-toxic. If there were to be a release of LNG, it would not mix with water or soil and would quickly turn into a gas again and dissipate into the atmosphere.

• The LNG industry has an excellent safety record and has been shipped safely around the world, without a major safety or environmental incident for more than 50 years and 77,000 voyages.
About Chevron

Chevron is one of the world’s leading integrated energy companies. Our success is driven by our people and their commitment to get results the right way – by operating responsibly, executing with excellence, applying innovative technologies and capturing new opportunities for growth.

At Chevron, our businesses work in concert to provide the energy that drives human progress through our involvement in virtually every facet of the energy industry.

Chevron’s goal is to see the Kitimat LNG facility and Pacific Trail Pipeline built in a manner that, above all, protects people and the environment.

The Chevron Way

The Chevron Way explains who we are, what we do, what we believe and what we plan to accomplish. It establishes a common understanding for our employees and for all who interact with us. At the heart of The Chevron Way is our vision:

To be the global energy company most admired for its people, partnership and performance.

Our vision means we:

• Safely provide energy products vital to sustainable economic progress and human development throughout the world;

• Are people and an organization with superior capabilities and commitment;

• Are the partner of choice;

• Earn the admiration of all our stakeholders – investors, customers, host governments, local communities and our employees – not only for the goals we achieve but how we achieve them;

• Deliver world-class performance.

Our company’s foundation is built on our values, which distinguish us and guide our actions. We conduct our business in a socially responsible and ethical manner. We respect the law, support universal human rights, protect the environment and benefit the communities where we work.
Environmental Protection

The Kitimat LNG project will be designed and built in a manner that reduces emissions, conserves natural resources, and minimizes potential environmental impacts.

Chevron's LNG projects in Australia are recognized as being among the cleanest in the world. Similar engineering, design and technology applications are being planned for the Kitimat LNG project.

Chevron is an industry leader in developing systems that support a culture of protecting people and the environment. We strive to achieve world-class performance and operate without injury or environmental incidents. We call the system that helps us achieve this “Operational Excellence” (OE). OE defines everything we do from our field work to office environments. Our workforce truly believes that all incidents are preventable and we have policies, processes, tools and behavioral expectations in place to assist in achieving that goal.

Kitimat LNG and the environment

The Kitimat LNG Industrial site project at the former Eurocan pulp and paper mill location in Kitimat will be remediated to address historical environmental issues and to upgrade the site to meet or exceed current environmental standards. A new leachate collection system will be installed at the existing landfill site to collect and treat any runoff from the landfill to drinking water quality standards. Further remediation work at the site will allow the project to house a larger work camp, and to store equipment and materials. Utilizing the upgraded landfill will minimize waste disposal at the municipality’s existing landfill.

Chevron is committed to safely and responsibly developing Canada’s unconventional resources while ensuring the highest level of environmental protection. In the upstream natural gas extraction operations in the Liard and Horn River Basins in northeastern B.C., this includes optimizing efficient water use and its safe disposal, safeguarding groundwater, maintaining well integrity, minimizing operating footprint and using hydraulic fracturing fluids with the smallest possible environmental impact.