ALASKA GASLINE DEVELOPMENT CORP.

ALASKA'S INTEGRATED **GAS INFRASTRUCTURE** AND LNG EXPORT PROJECT

Developed by the Alaska Gasline Development Corporation

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ALASKA **GOVERNOR**

BILL **WALKER**

Downtown Anchorage Skyline.

LETTER FROM **GOVERNOR WALKER**

As governor of the great state of Alaska, I would like to thank you for taking the time to read through our project summary. This document has been prepared to help you understand what the State of Alaska, represented by the Alaska Gasline Development Corporation (AGDC), is striving to build – Alaska's largest integrated natural gas infrastructure and liquefied natural gas (LNG) export project.

I am excited to explore new ways to engage the market to develop a viable Alaska project. Located in the North Pacific, Alaska's proximity to the growing markets in the Asia-Pacific region offers significant shipping advantages. Alaska has been a pioneer in global LNG with nearly 50 years of reliable export to Japan. With this project we will be able to provide up to 20 million tons per year of LNG to meet growing demand worldwide.

Thank you for your interest in this project. I will continue to keep everyone apprised of the market opportunities that support an Alaska project under state leadership, and I look forward to hearing from you.

Bill Walker

Governor Bill Walker
State of Alaska

Rendering of the Liquefaction Facility in Nikiski, Alaska.

Brooks Range, Alaska.

A Welder at the Nikaitchuq Oilfield on the North Slope of Alaska. Photo Courtesy of CH2M.

"THE PROJECT WILL PRODUCE UP TO 20 MILLION TONS OF LNG EACH YEAR, USING CLEAN, ENERGY-EFFICIENT, AND SAFE PRODUCTION METHODS."

PROJECT **HIGHLIGHTS**

The Alaska natural gas infrastructure and liquefied natural gas (LNG) project includes three major integrated components: **a gas treatment plant; an 800-mile gas pipeline to Southcentral Alaska with multiple interconnection points to service in-state demand; and a natural gas liquefaction plant** with storage facilities and an export terminal located on Alaska's Kenai Peninsula. The project will transport up to 3.5 billion cubic feet (Bcf) of gas each day, and the LNG plant will process up to 20 million tons of LNG per year.

Alaska has proven gas resources of **35 trillion cubic feet of gas (Tcf) with another 200 Tcf to be found** on the outer continental shelf. Oil was first discovered in the state in 1959 and the maximum daily production in 1989 was over 2 million barrels.

The Prudhoe Bay and Point Thomson fields anchor the project. These fields are expected to produce, on average, about **3.5 billion cubic feet of gas per day** with approximately 75 percent from the Prudhoe Bay field and 25 percent from the Point Thomson field.

The natural gas will be liquefied using the **propane precooled mixed refrigerant (C3MR™) process,** an Air Products patented technology.

Construction, done in phases, is planned to last from 2018 to 2025; target startup in 2023-2025.

The U.S. Department of Energy has conditionally approved an application for the project to **export up to 20 million tons per year of LNG from Alaska for a 30-year period** to Free Trade Agreement (FTA) and non-FTA nations.

Over the last year, the project stakeholder engagement team has **visited dozens of communities and met with over a thousand people** regarding the project. Additionally, the team spoke with hundreds more at fairs, conventions, and local events.

The project is anticipated to **create 9,000 to 12,000 jobs** for design and construction with approximately 700 to 1,000 permanent jobs upon completion. Each permanent job could create as many as 20 additional supporting jobs.

The project has been **vetted at many levels,** including a series of 13 draft Resource Reports – totaling a combined 33,700 pages – that have been filed with the Federal Energy Regulatory Commission (FERC).

More than 193,000 acres of land have been mapped and more than 300 streams have been surveyed. Thousands of boreholes (between 10 and 150 feet in depth) have been drilled along the proposed route. Estimated volumes for key logistics include **225,000 truckloads and 40,000 railcar loads, which comprise more than 3 million tons of project materials.**

The **permitting process requires careful coordination with more than 50 federal, state, and local agencies.** Thousands of permits and authorizations will be required.

ABOUT **ALASKA**

Alaska derives its name from the Aleut word "Alyeska," meaning "Great Land." Alaska is geographically the largest of the 50 states in the United States (U.S.) and would rank as the 19th largest country in the world if it were a country. Alaska has more than 586,400 square miles of land.

Alaska is one of the leading states in the U.S. for natural resource development. In fact, the state has a constitutional mandate to develop its resources. Alaska's overarching resource development goal is to encourage the settlement of its land and the development of its resources by making them available for maximum use consistent with the public interest.

In 2014, Alaska was one of the first states to elect an independent governor, Bill Walker. Gov. Walker has made energy a key part of his administration agenda. He spent considerable time with President Obama discussing the importance of Alaska in regard to Arctic issues, resource development, and the nation's defense. Alaska's senior U.S. Senator, Lisa Murkowski, also supports resource development and chairs the Senate Energy and Natural Resources Committee. She also serves on the Senate Appropriations Interior and Environment Subcommittee.

"The most common denominator for any growing economy is low-cost energy. Monetizing our gas on the world market makes it possible to deliver low-cost energy to Alaskan homes and businesses, create thousands of construction and long-term operational jobs, while at the same time generating much needed revenue for the state through gas exports." — Gov. Bill Walker.

A Commercial Fishing Vessel Draws a Net Full of Pacific Herring Near Sitka, Alaska.

Glacier Bay National Park in Southeast Alaska.

"IT IS POSSIBLE TO REACH VIRTUALLY 90 PERCENT OF THE INDUSTRIALIZED WORLD BY AIR WITHIN NINE HOURS FROM ALASKA."

Alaska is a proven leader in resource extraction including oil and gas, fish, and minerals such as gold, silver, copper, and zinc.

Alaska is the third largest producer of oil in the U.S. with remaining resources estimated at 50 billion barrels.

The first LNG plant in the U.S. to service the Asia-Pacific market was built in Alaska. The Kenai LNG plant began operating in 1969 and, until recently, has been the only LNG export plant in the U.S.

Alaska's seafood industry puts the state among the top 10 producers of all seafood producing nations, if it were an independent nation, and Alaska is the world's largest zinc concentrate producer.

The state has nearly 35 trillion cubic feet (Tcf) of proven gas resources plus 200 Tcf of potential gas resources found on the North Slope and outer continental shelf. This vast known resource is located nearby existing infrastructure, thereby positioning Alaska to take advantage of the global LNG markets.

Moreover, Alaska's global location provides the state a competitive advantage. It is possible to reach virtually 90 percent of the industrialized world by air within nine hours from Alaska. This allows for direct shipping routes to Asia and America's West Coast, while still being able to connect to Europe and the Middle East.

Alaska is also a strategic location in terms of military presence. There are 30,000 active duty members in Alaska from all branches of the military. Alaska plays a strategic role in U.S. defense with state-of-the art military equipment and immediate deployment capabilities, from the Joint Base Elmendorf-Richardson to the Eielson Air Force Base and Fort Wainwright Army Post.

AGDC represents the State of Alaska as the project leader for the Alaska LNG project. The corporation has been given significant authority to expedite, finance, and build an integrated LNG infrastructure project to maximize the benefit of Alaska's vast North Slope natural gas resources.

"WORLD TRADE IN LNG HAS **MORE THAN TRIPLED** OVER THE **LAST 20 YEARS.**"

LNG MARKET **OVERVIEW**

INTERNATIONAL

World trade in liquefied natural gas (LNG) has more than tripled over the last 20 years growing from 63.7 million tons per annum (MTPA) in 1994 to 244.8 MTPA in 2015. The growth is expected to continue with projected demand over 450 MTPA by 2025 accompanied by a projected 40 to 100 MTPA shortfall in supply.

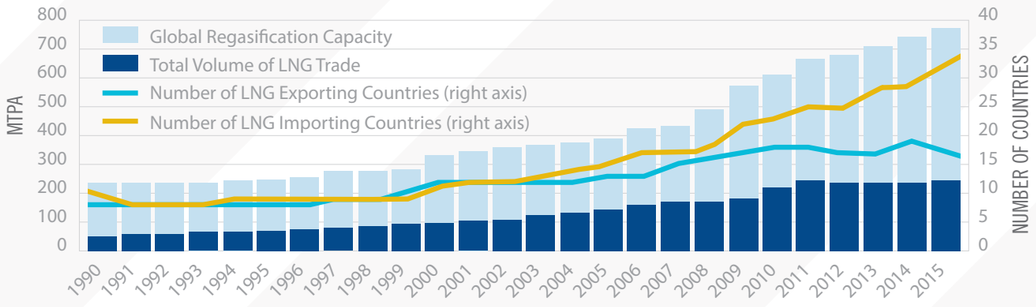
Driving that growth has been the emerging economies of Asia including Japan, China, and South Korea. However, recent entrants into the LNG market such as Thailand, Taiwan, and Singapore are having an effect on demand. Additionally, countries such as the UK, Pakistan, and Lithuania have added LNG as a means to diversify their supply portfolio and increase security of supply.

Currently, natural gas meets roughly 25 percent of the global energy demand of which 10 percent is supplied as LNG. Liquefaction nameplate capacity has reached 301.5 MTPA as of January 2016 with an additional 141 MTPA under construction. LNG is currently exported by 17 countries and imported by 33 and the number of importing countries could double by 2030 creating a market that Alaska could sell into for years to come. Over 70 percent of total imports went to the Asia and Asia-Pacific markets.

LNG prices have moderated due to an oversupply of LNG and weakening demand from Asia, mainly Japan. Despite price fluctuations, this trend is not seen as a long-term issue with supply and demand

LNG TRADE VOLUMES, 1990-2015

Source: International Gas Union



An LNG Carrier Transports Natural Gas.

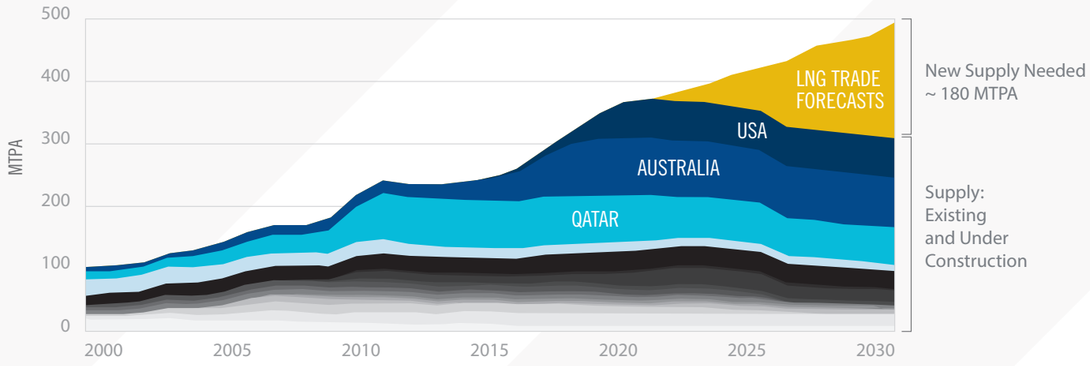
"PROJECTED DEMAND FOCUSES ON **POWER GENERATION, HEATING NEEDS, GROWTH IN MANUFACTURING AND MINING,** AND THE POTENTIAL USE FOR **TRANSPORTATION NEEDS.**"

coming back into balance in the next few years and a potential shortfall after 2022. Driving this forecast is population growth and increasing demand for ever-cleaner fuels.

Historically, the largest buyer of LNG has been Japan. However, non-Japanese Asia demand could be the real driver of future growth with increased demand from China and India. Under China's Atmospheric Pollution Prevention Action Plan, coal consumption is to be supplanted by cleaner natural gas increasing its need for LNG imports. At the same time the implementation of floating storage and regasification units (FSRU) is allowing new markets to open at a rapid pace. FSRUs have been successfully used in Latin America and the Middle East and are expected to play an important role in bringing new importing countries to the LNG market in a timely fashion. Of the seven new import terminals brought on line last year, four were FSRUs.

LNG MARKET CHANGES

Source: Cheniere interpretation of Wood Mackenzie data (Q4 2015)



Fairbanks, Alaska.

DOMESTIC

The Alaska domestic natural gas market is a growth market based on a population of approximately 750,000. While demand in Southcentral Alaska is currently being served by local producers, a potential market exists throughout the state which relies heavily on coal, diesel, and other fuel sources in more remote areas. Projected demand focuses on power generation, heating needs, growth in manufacturing and mining, and the potential use for transportation needs. Currently Alaska uses roughly 80 Bcf of natural gas annually, and demand is projected to be as high as 122 Bcf by 2040. Based on current production trends, a shortfall of 97 Bcf is expected and additional supply will be required to satisfy the in-state market.

Many of the remote communities throughout Alaska will benefit from natural gas, with usage anticipated to be as much as 9.4 Bcf by 2030.

The natural gas from the pipeline can also be used to fuel industrial and mining activities within the state. These activities could require 17.5 Bcf by 2030. This project will meet the in-state needs of Alaskans for generations.

LNG GROWTH	LOCAL GAS MARKET	LARGEST IMPORTERS	NEWEST IMPORTERS
• Tripled over the last 20 years. • 33 countries import LNG. • Demand projected to reach 450 MTPA by 2025.	• 750,000 residents. • Current usage totals 80 Bcf. • Potential growth to 122 Bcf by 2040. • Potential shortfall of 97 Bcf if project does not move forward.	• Japan. • China. • South Korea.	• Thailand. • Taiwan. • Singapore.

"THE PROJECT IS BEING BUILT WITH THE GOAL OF SUPPORTING ALASKA'S IN-STATE GAS NEEDS, AS WELL AS EXPORTING LNG TO KEY MARKETS INTERNATIONALLY."

PROJECT BACKGROUND

Discussions about a possible trans-Alaska natural gas pipeline date back to the early 1970s when the Prudhoe Bay field was first being developed. Initial plans considered many ideas; however, at the time, a global market for natural gas did not exist and the primary source of power generation in the contiguous U.S. was coal. As a result, Alaska's North Slope natural gas resources remain undeveloped and inaccessible to potential users.

The project is being built with the goal of supporting Alaska's in-state gas needs, as well as exporting LNG to key markets internationally.

Domestically, the project represents a final conclusion to the years of resource management that has seen cities, such as Fairbanks, struggle to provide affordable energy to local residents. By building the natural gas pipeline, a stable supply of clean-burning natural gas will finally be available to the people of Alaska. This resource will provide not only for electricity and heat, but also economic expansion and an alternative transportation fuel.

At the federal level, this project brings many benefits. As the global economies turn more to natural gas, being able to provide a stable resource to growing economies in Asia is very important. For the U.S., having an untapped vast resource of natural gas strategically positioned in the North Pacific represents a unique opportunity to support our allies in Asia and position the U.S. as a viable option to less favorable governments. Alaska is geographically well situated to fill this need and has infrastructure in place.

Juneau, Alaska.

LEGISLATIVE SUPPORT

In response to declining Cook Inlet gas supplies and crippling interior energy costs, the Alaska State Legislature initiated a publicly financed effort to explore the feasibility of developing a North Slope natural gas pipeline. The Legislature and Governor established AGDC in 2010 as an independent, public corporation of the State of Alaska for the purpose of planning, constructing, and financing in-state natural gas pipeline projects.

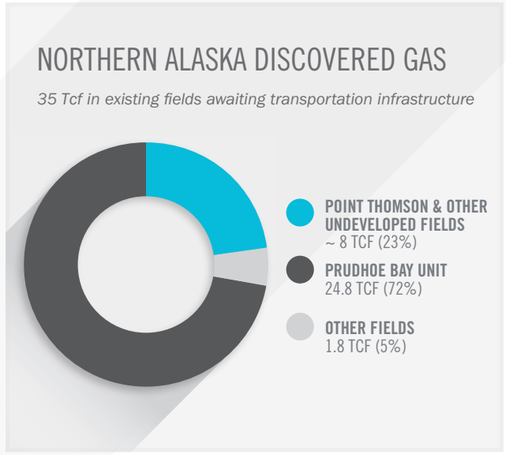
In a letter written by Alaska State Representative Dan Saddler, co-chair of the House Resources Committee, to the U.S. Department of Energy, Rep. Saddler indicated, “There is no other project that means more to the economic future of our state, and thus to the welfare of Alaskans in my district and around the state.”

Today, AGDC is moving into a leadership role on the project allowing the corporation to steer the project through the front end engineering and design (FEED) stage, attracting international customers for the project, and exploring alternative financing with partners and potential customers.

FEASIBILITY RESEARCH

The project has been reviewed and studied by several consulting and governmental agencies to determine feasibility, including Wood Mackenzie and The Brookings Institution. Additionally, the gas resources on the North Slope have been studied for years by both private and public entities including the Bureau of Ocean Energy Management and the United States Geological Survey (USGS). These organizations have supported the fundamentals of this project.

A recent study completed by Wood Mackenzie articulated that if the funding for the project were structured properly, the project would be significantly more competitive than other projects seeking final investment decisions (FID) around the world.



The Brookings Institution, a public policy organization, concluded that an Alaska project would be one of the least costly alternatives for delivering LNG to Japan.

The USGS has estimated that Alaska’s North Slope and outer continental shelf have more oil and gas than any other Arctic nation.

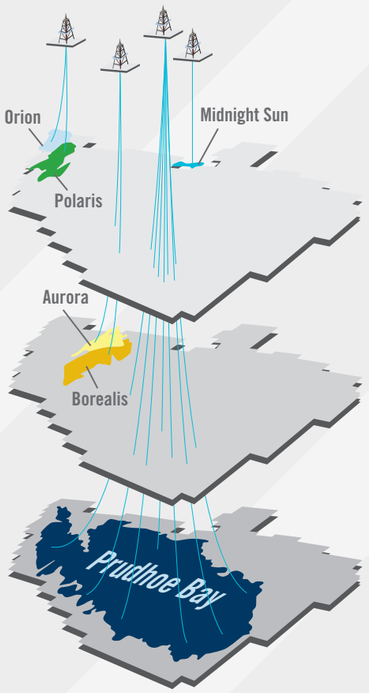
NATURAL GAS RESOURCES

Alaska's petroleum-rich North Slope is home to four of the United States' top 10 conventional producing oil fields including Prudhoe Bay, the largest conventional field in North America. Oil production began on the North Slope in 1977 and continues today.

Alaska also holds vast amounts of proven natural gas resources. The majority of which are located in the Prudhoe Bay and Point Thomson fields, which both already contain infrastructure and large-scale production facilities.

On Alaska's North Slope there is approximately 35 trillion cubic feet (Tcf) of natural gas between Prudhoe Bay, Point Thomson, and other producing fields, and an additional potential of 200 Tcf of conventional gas resources on Alaska's outer continental shelf, according to the Bureau of Ocean Energy Management.

Without a market for the gas, it is currently being used for well stimulation and oilfield reinjection. The Prudhoe Bay field alone reinjects 8 to 9 billion cubic feet daily.



Oil is found at different depths and in different quantities. Five Prudhoe Bay satellite oil fields are important to stabilize production rates on the North Slope.

HISTORY	LEGISLATIVE PROGRESS	VAST RESOURCE
• First oil found in 1902. • Prudhoe Bay discovered in 1968. • Gasline first discussed in 1970. • AGDC established in 2010.	• House Bill 369 passed (2010). • House Bill 4 passed (2013). • Senate Bill 138 passed (2014).	• 35 Tcf of proven gas resources. • 200 Tcf of potential gas resources. • 590 Tcf of shale, tight gas, and gas hydrates.

TIMELINE

"AGDC IS COMMITTED TO PROJECT COMMERCIALIZATION."

2023-2025
Target in-service first cargo.

2018-2019
Final investment decision.
Detailed design.

2018-2023
Construction.

2016
The integrated LNG project continues technical progress. Pre-FEED is complete.
Federal Energy Regulatory Commission Resource Reports completed.

2015-2017
Engineering and design.

2014
AGDC and State of Alaska sign Heads of Agreement establishing the framework for the integrated LNG export project.
The Alaska State Legislature authorizes AGDC to invest in the integrated LNG project on the State's behalf.

2015
AGDC adjusts pipeline work activities and timeline to recognize that an integrated LNG project is the State's top priority.
AGDC completes in-state gas demand study and begins to plan and develop gas off-takes.

2012
North Slope producers establish an integrated Alaska LNG project team.

2013
AGDC becomes an independent, public corporation of the State of Alaska.
Legislature appropriates $355 million to fund the design, development, and planning of the in-state pipeline project.

2010
AGDC becomes a subsidiary of Alaska Housing Finance Corporation.

2011
The Legislature receives the original in-state pipeline project plan.

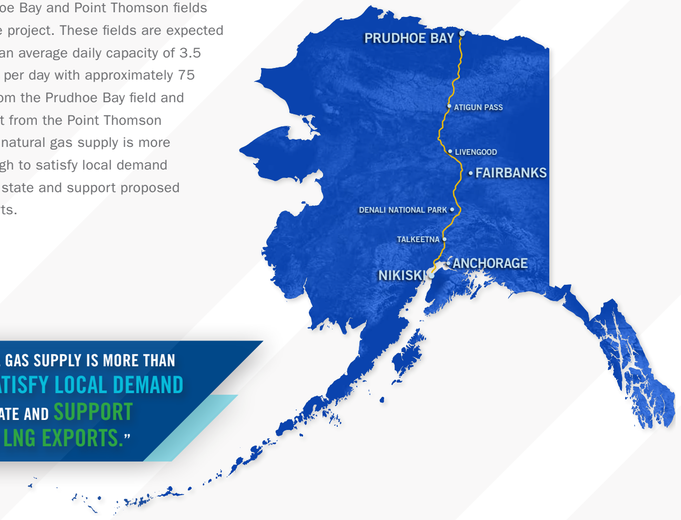
2009
The Alaska State Legislature explores the feasibility of a publicly financed in-state North Slope natural gas pipeline.

PROJECT **OVERVIEW**

The integrated natural gas infrastructure and LNG export project includes a new liquefaction facility; an 800-mile (1,287km), 42-inch diameter (1.1m) pipeline, with multiple in-state interconnection points and associated infrastructure; and a gas treatment plant.

The U.S. Department of Energy (DOE) has conditionally approved an application for the project to export up to 20 million tons per year of LNG produced from Alaska for a 30-year period to Free Trade Agreement (FTA) and non-FTA nations.

The Prudhoe Bay and Point Thomson fields anchor the project. These fields are expected to deliver an average daily capacity of 3.5 Bcf of gas per day with approximately 75 percent from the Prudhoe Bay field and 25 percent from the Point Thomson field. This natural gas supply is more than enough to satisfy local demand within the state and support proposed LNG exports.



"THIS NATURAL GAS SUPPLY IS MORE THAN ENOUGH TO SATISFY LOCAL DEMAND WITHIN THE STATE AND SUPPORT PROPOSED LNG EXPORTS."

"THE PROJECT WILL EXPORT UP TO 20 MILLION TONS PER ANNUM OF LNG."

Rendering of the Liquefaction Facility in Nikiski, Alaska.

LIQUEFACTION FACILITY

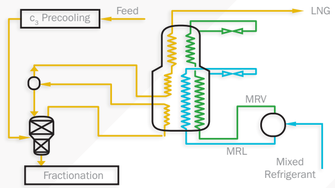
The liquefaction facility will be a new facility constructed on the eastern shore of Cook Inlet approximately 3 miles from Nikiski and 8.5 miles from Kenai.

The natural gas will be liquefied using the propane precooled mixed refrigerant (C3MR™) process, an Air Products patented technology. Over 100 of the world's LNG plants are using the C3MR™ LNG process and is recognized as an industry standard.

The facility will have three liquefaction processing units, called trains, that are jointly capable of producing up to 20 MTPA of LNG. The facility will process an average stream day rate of 2.7 billion standard cubic feet per day (Bcf/d) of feed gas.

LNG from the three liquefaction trains will be stored in two LNG storage tanks, capable of holding approximately 240,000 cubic meters of natural gas. The facility will be able to transfer approximately 12,500 cubic meters of LNG per hour from the tanks to waiting LNG Carriers (LNGCs). The system is designed for loading one LNGC at a time; however, another LNGC may berth or unberth while loading operations are occurring.

The propane precooled mixed refrigerant process outlined.



MARINE TERMINAL

The loading berths will be designed for a range of LNGC sizes to accommodate specific contract requirements. Based on a nominal 176,000 cubic meter LNGC, approximately 21 visits per month will be required to export the produced LNG. The LNGCs will range in size between 125,000 cubic meters (approximately 30 visits per month) and 217,000 cubic meters (approximately 17 visits per month).

ALASKA GASLINE DEVELOPMENT CORP.

ALASKA'S NATURAL **GAS INFRASTRUCTURE AND LNG EXPORT PROJECT**

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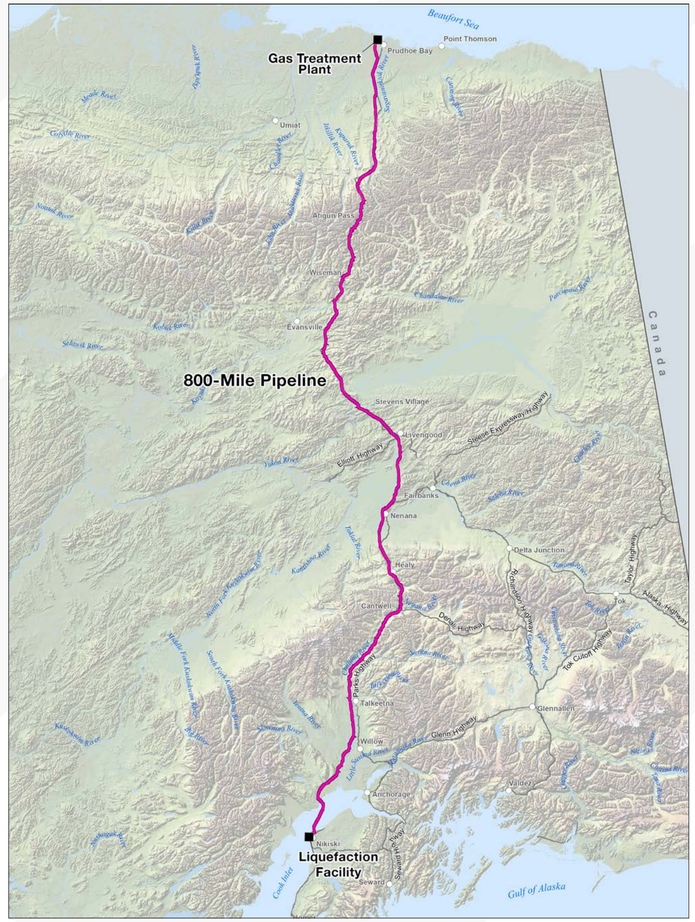
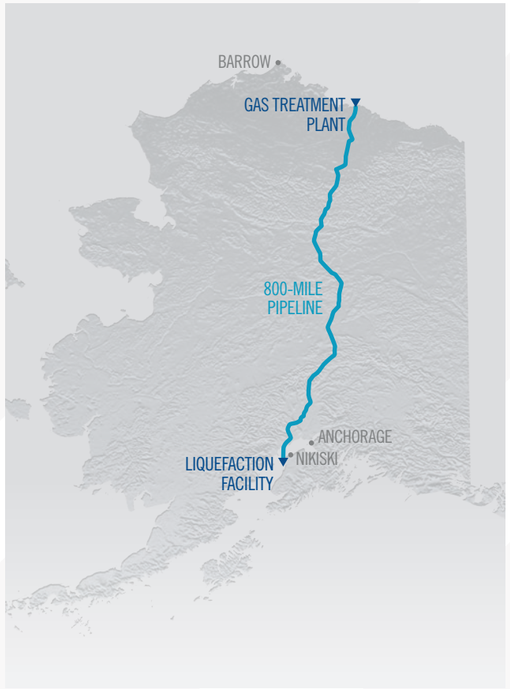


THE PIPELINE

The backbone of the project is an 800-mile (1,287km) pipeline that connects the liquefaction facility and the gas resources on the North Slope. The pipeline will originate at the gas treatment plant located in Prudhoe Bay. Necessary structures, equipment, and other associated systems needed to move the gas, maintain pressure, and ensure safe operations will be located along the pipeline route.

With the pipeline will come a stable supply of natural gas for Alaskans, ensuring they have access to a long-term and affordable gas supply for home heating and industrial needs. To ensure that mission, there will be multiple gas interconnection points to allow for future in-state deliveries of natural gas. This economic resource will also drive multiple industries for Alaska including manufacturing, mining, and other developments.



"THE NATURAL GAS PIPELINE WILL BE APPROXIMATELY 800 MILES IN LENGTH AND INCORPORATE MULTIPLE GAS INTERCONNECTION POINTS."

Rendering of the Gas Treatment Plant in Prudhoe Bay.

"ABLE TO RECEIVE 3.5 BCF/D AND HAVE A PEAK CAPACITY OF 3.9 BCF/D."

GAS TREATMENT PLANT

The gas treatment plant (GTP) will be located in Prudhoe Bay near existing oil and gas infrastructure.

The GTP will have an average daily capacity of 3.5 Bcf/d and have a maximum capacity of 3.9 Bcf/d, while being able to accommodate the varying compositions of natural gas received from the respective fields.

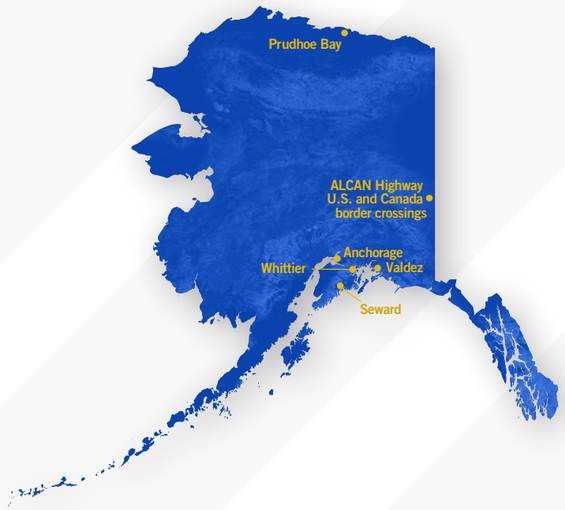
Three parallel treatment trains, each sized to process roughly 1.3 Bcf/d of gas, will remove carbon dioxide (CO_2) and hydrogen sulfide (H_2S) to the specification of the liquefaction facility. The treated gas will enter the pipeline at a maximum pressure of 2,075 pounds per square inch (psig), while the CO_2 and H_2S will be returned to the field for reinjection to help pressurize underground reservoirs.

LIQUEFACTION FACILITY	PIPELINE	GAS TREATMENT PLANT	TIMING
• DOE authorized. • Three LNG trains. • 20 MTPA. • Large ships 125,000-217,000 cubic meters. • Located in Nikiski, Alaska.	• 42-inch (1.1 m) pipeline. • 800 miles (1,287 km) long. • Maximum capacity of 3.3 Bcf/d. • Serving local and international markets.	• Average capacity of 3.5 Bcf/d. • Located in Prudhoe Bay. • CO_2 and H_2S captured and resupplied for injection.	• Target startup in 2023-2025. • Pre-FEED stage. • 33,700 pages filed with FERC.

CONSTRUCTION

A request will be submitted to the Federal Energy Regulatory Commission (FERC) to formalize the site, construction, and operation of the project no later than mid-2017, with construction expected to commence in 2018. Prior to any site preparation or construction, all necessary property rights, permits, and authorizations will be acquired.

The first phase of construction will include the LNG and gas treatment plant trains, marine facilities, pipeline, and the Prudhoe Bay and Point Thomson transmission lines. Construction of the project components (liquefaction facility, gas treatment plant, and pipelines) are designed to occur simultaneously.



CONSTRUCTION LOGISTICS

Although site preparation and construction will be phased to lessen impacts to local infrastructure and communities, the size of this project and duration of construction requires detailed planning with State and local agencies to reduce impacts to existing infrastructure. The majority of materials and equipment will enter Alaska through the following points of entry:

- The Port of Anchorage – Barge and vessel routes.
- The Port of Seward – Barge and vessel routes.
- The Port of Whittier – Barge and railroad routes.
- The Port of Valdez – Barge and vessel routes.
- Alaska-Canada Highway U.S. and Canada border crossings – Trucking routes.
- Direct delivery to the pipeline material offloading facility (MOF), liquefaction MOF, and West Dock.

"CONSTRUCTION PHASES FOR THE MAIN PORTIONS OF THE PROJECT WILL OCCUR SIMULTANEOUSLY."

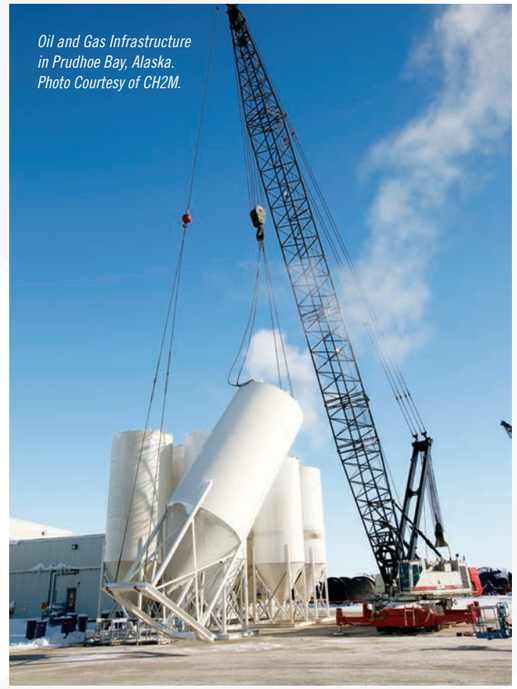
LIQUEFACTION FACILITY CONSTRUCTION OVERVIEW AND SCHEDULE

Three liquefaction trains will be constructed and completed approximately six months apart. Project construction will begin soon after all regulatory permits and approvals have been received.

- Site preparation activities and infrastructure development will begin in the fourth quarter of 2019 and are scheduled to occur over a two-year period.

- A significant number of the modules for the LNG plant will be built off-site and delivered by vessel from 2021 through 2024. Other major facilities will be constructed fully on-site at the LNG plant.

- Commissioning of the tanks and processing units will occur as natural gas is delivered to the site.



Oil and Gas Infrastructure in Prudhoe Bay, Alaska. Photo Courtesy of CH2M.

PIPELINE CONSTRUCTION OVERVIEW AND SCHEDULE

The pipeline construction execution plan must consider many technical aspects such as varying terrain, soil types, Arctic conditions, environmental and community impacts, as well as logistics and cost-efficiency.

Pipeline construction will be divided into four pipeline construction spreads that will be built over a three-year period with an emphasis to balance summer and winter construction.

The northern spreads (Spreads 1 and 2) encompass the first 401.3 miles (645.8km) from Prudhoe Bay to Livengood. The southern spreads (Spreads 3 and 4) encompass the southern 402.7 miles (648km), which includes the 28.4-mile (45.7km) offshore Cook Inlet section.

- The pipeline infrastructure construction and logistical support is planned to begin in 2020. Infrastructure construction and right-of-way clearing will take place before primary pipeline construction activities begin.
- The offshore portion of the pipeline across Cook Inlet will be laid in the ice-free season. Hydrostatic testing will occur shortly after installation.
- Aboveground facilities (e.g., compressor stations, meter stations, heater station, and other associated pipeline infrastructure) will be constructed at the same time.
- The pipeline will be buried with the exception of four planned water crossings and active fault crossings, in addition to the offshore pipeline.

GAS TREATMENT PLANT CONSTRUCTION OVERVIEW AND SCHEDULE

Due to the wetlands and permafrost in the tundra at the GTP site, installation of work pads and road construction to support the GTP will primarily be completed during the winter season to avoid tundra degradation.

Brooks Range, Alaska.

The majority of the GTP facility will consist of modules transported to the site via seagoing vessel and then transported from the dock to the site using self-propelled modular transporters. It is expected that the modules will be delivered during four summer sealift seasons. The remaining facility components will be constructed on-site.

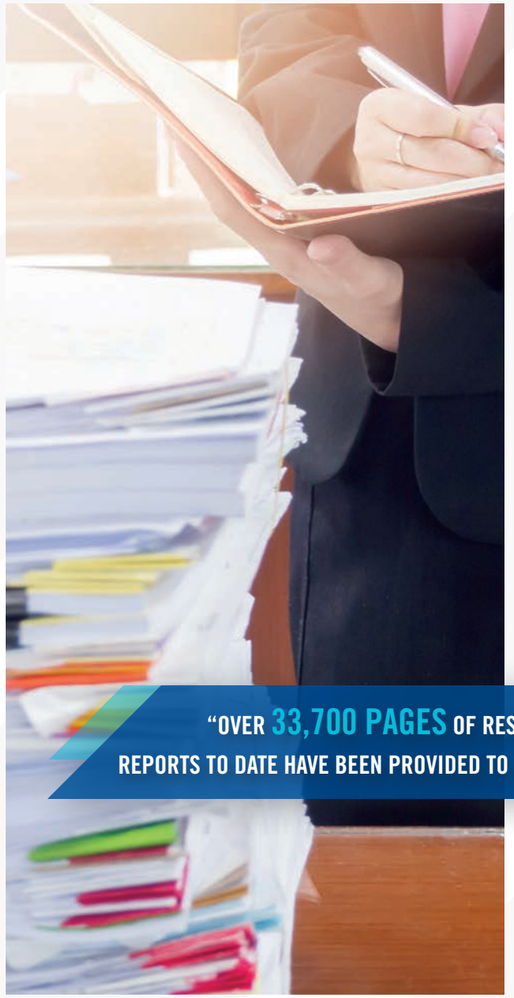
GTP work will be divided among a number of different construction activities based on logistics, execution, and other planning considerations.

- The Pioneer construction camp will be established at or near Deadhorse or Prudhoe Bay in the winter of 2019.
- Additional infrastructure construction activities are planned to start in the winter of 2019 including construction of granular pads and access roads to support the aboveground facility construction efforts.

A Crane Moves Materials in Prudhoe Bay, Alaska. Photo Courtesy of CH2M.

PERMITTING AND REGULATORY PROCESS

The permitting process requires careful coordination with more than 50 federal, state, and local agencies. Throughout the planning and construction phases, thousands of permits and authorizations will be attained. Several of the approvals require extensive agency reviews, the time frames for which are incorporated into the overall permitting timeline.



"OVER 33,700 PAGES OF RESOURCE REPORTS TO DATE HAVE BEEN PROVIDED TO FERC."

FEDERAL PERMITTING

Even though the project is an Alaskan effort, it requires several federal authorizations and a National Environmental Policy Act review. The Federal Energy Regulatory Commission (FERC) is the lead federal agency responsible for conducting the environmental review of the project. It has a rigorous process for collecting information and facilitating effective conversations with project stakeholders.

Currently the project is in the FERC pre-filing process, allowing opportunity for stakeholders to engage in useful dialogue before a formal application is filed. Over 33,700 pages of draft Resource Reports to date have been provided to FERC and this information will be used to define and prepare the Environmental Impact Statement (EIS).

Once the formal application has been filed with FERC, the Commission will use the EIS to consider environmental impacts and what procedures and changes would be required for potential mitigation of those impacts.

The input of stakeholders is essential and helps shape the project. Representatives from FERC and the project stakeholder engagement team have held meetings across the state, engaging Alaskans early in the process to identify and responsibly manage environmental, socioeconomic, and other potential issues.

STATE AND LOCAL PERMITTING

In addition to the FERC permitting process, there are several state and local agencies that will require permits and authorizations for the project, including permits for temporary water usage, gravel placement, air quality, storm water and wastewater discharge, and pipeline right-of-way.

Local agencies along the entire route of the project, from the North Slope Borough (GTP location) to the Kenai Peninsula Borough (liquefaction location), will also have general permitting authority for the project.

"THE LIQUEFACTION FACILITY WILL BE DESIGNED AND OPERATED IN COMPLIANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS."

OPERATIONS

A core team of experienced workers supplemented with trained staff hired throughout the state will operate the project. All operations will occur in accordance with applicable federal and state requirements and be built using state-of-the-art technology.

LIQUEFACTION FACILITY

The facility will require approximately 335 personnel; 160 who will be located at the liquefaction facility and 175 support staff who will be based in Anchorage. Early staffing plans assume that facility personnel will reside off-site in the local communities of Kenai, Nikiski, and Soldotna.

PIPELINE FACILITIES

Operation and maintenance of the pipelines, meter stations, compressor stations, and the heater station is expected to require approximately 60 to 80 full-time workers, comprised of trade technicians, technical specialists, safety personnel, support staff, and management.

Nikiski, Alaska.

LNG Loading Dock in Nikiski, Alaska.

"THE FACILITY WILL REQUIRE APPROXIMATELY 335 PERSONNEL; 160 WHO WILL BE LOCATED AT THE LIQUEFACTION FACILITY AND 175 SUPPORT STAFF WHO WILL BE BASED IN ANCHORAGE."

Facilities will be monitored and operated from the Anchorage control center, which will be staffed 24 hours a day. A second, fully functional backup control center will be available in the event the primary control center becomes unavailable.

GAS TREATMENT PLANT

Approximately 100 GTP-based operations and maintenance personnel will be located on-site and each shift is expected to require approximately 50 personnel. Support staff will also be based in Anchorage.

The GTP will be monitored and controlled from a control center located on the GTP pad and will include a work permit area and four to five offices.

Turnaround durations and frequencies will be set by the gas turbine major inspections and overhauls. All other inspection and maintenance work will occur within those outages. Turnarounds at the GTP will be scheduled and coordinated to coincide with liquefaction facility turnaround.

LIQUEFACTION FACILITY	PIPELINE FACILITIES	GAS TREATMENT PLANT
• 335 total personnel. • 160 located in Kenai, Nikiski and Soldotna. • 175 based in Anchorage.	• 60 to 80 full-time workers. • Anchorage-based control center staffed 24 hours a day. • Backup control center.	• 100 personnel located on-site. • 165 support staff based in Anchorage. • Control center located on GTP pad.

"IN 2015, **4.3 PERCENT** OF ALASKA'S JOBS WERE IN THE **OIL AND GAS** INDUSTRY, **14 TIMES** THE NATIONAL AVERAGE."

EMPLOYMENT

The project will provide significant opportunities for Alaskans and Alaska businesses offering multi-faceted, complex opportunities over a 10-year period. The project is expected to create 9,000 to 12,000 jobs for design and construction plus approximately 700 to 1,000 jobs for long-term operations.

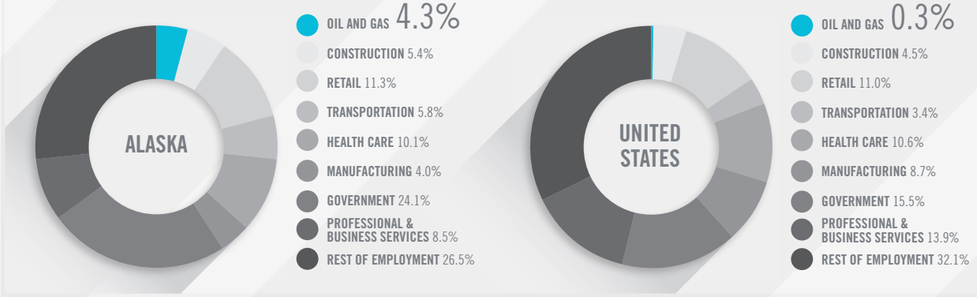
In 2015, 4.3 percent of Alaska's wage and salary jobs were in the oil and gas industry. While this does not sound like a large number, that is more than 14 times the national average.

OPPORTUNITIES

A wide range of occupations are needed to construct and operate a natural gas pipeline. It is likely that workers in all regions of Alaska will benefit from the additional employment opportunities created by the project. AGDC will communicate available opportunities and provide guidance regarding expectations and standards.

A Scientist Tests Ground Samples in Southcentral Alaska.

PERCENT OF TOTAL EMPLOYMENT BY MAJOR INDUSTRY



Scientists and Engineers Perform Project Research Near Nikiski, Alaska.

"THE PROJECT IS EXPECTED TO CREATE **9,000 TO 12,000 JOBS** FOR DESIGN AND CONSTRUCTION PLUS APPROXIMATELY **700 TO 1,000 JOBS FOR LONG-TERM OPERATIONS.**"

A labor study was conducted within the state of Alaska and identified construction-related craft labor that will be needed during the construction of the project. These include pipefitters, welders, ironworkers, carpenters, scaffolders, sheet metal workers, boilermakers, equipment operators, truck drivers, instrument technicians, insulators, electricians, and laborers.

TRAINING

Experienced, well-trained personnel are essential for the successful implementation of environmental compliance and mitigation measures. All project staff and contractors will undergo mandatory environmental and safety training before they can proceed to any work sites. The training program will be designed to improve awareness of project environmental compliance responsibilities and safety requirements (including climate exposure/frostbite, and protection against large predators). Different levels of training will be required for contractor personnel and crews based upon job responsibilities.

Project Team Members Perform Environmental Studies on the Kenai Peninsula.

"THE PROJECT TEAM VISITED DOZENS OF COMMUNITIES AND MET WITH **MORE THAN 1,000 PEOPLE** TO TALK ABOUT THE PROJECT."

COMMUNITY **RELATIONS**

COMMUNICATIONS AND COORDINATION

Over the last year, the project stakeholder engagement team has visited dozens of communities and met with more than 1,000 people to talk about the project. Additionally, the team spoke with hundreds more at fairs, conventions, and local events.

From Homer to Barrow, Alaskans have shared their views and suggestions regarding the project. Issues raised focus on several areas: technical aspects of the project, job opportunities and workforce development, contracting opportunities for Alaska businesses, impacts on subsistence hunting, access to gas for Alaskans, and ensuring minimal environmental impacts during construction and operation.

Based on input from local community members, the project has incorporated a number of mitigation measures as well as construction and operations protocols.

Alaskans Gather to Learn About the Project and Provide Feedback.

Alaska Native Inupiaq Mother and Daughter.

"FROM **HOMER TO BARROW,** ALASKANS HAVE SHARED THEIR **VIEWS AND SUGGESTIONS** REGARDING THE PROJECT."

WORKING WITH ALASKA NATIVE COMMUNITIES

The project understands the importance of Alaska Native traditional uses in areas where the project is located. Avoiding impacts to subsistence resources, cultural activities, and facilitating continued subsistence access to the project areas, are important to the project.

The project is committed to maintaining a positive working relationship based upon trust and collaboration with the many Alaska Native communities located along the pipeline route. Communication with these stakeholders will be critical to the success of the project.

ALASKA
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Front Cover: Pipeline Construction.
Photo Courtesy of Bechtel.

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