

# Alaska LNG Project Update

## AGC Spring Meeting

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Frank Richards, President  
April 15, 2021



## The Alaska Gasline Development Corporation (AGDC):

- Independent, public corporation owned by the State of Alaska
- Created by the Alaska State Legislature
- Currently lead party for developing the Alaska LNG Project

**Goal:** Maximize the benefit of Alaska's vast North Slope natural gas resources through the development of infrastructure necessary to move the gas to local and international markets.

- **2010** - HB 369 instructed AHFC to conduct a pre-feasibility study of a small diameter pipeline from the North Slope to Fairbanks and south-central Alaska
- **2013** - HB 4 created the Alaska Gasline Development Corporation (AGDC) in A.S. 31.25, giving broad powers and funding to advance the Alaska Stand Alone Pipeline Project (“ASAP”)
- **2014** - SB 138 gave AGDC authority to represent the SOA in the LNG terminal of the Alaska Liquefied Natural Gas Project (“Alaska LNG”)
- **2016** – State of Alaska bought out TransCanada and AGDC was granted the entire 25% SOA share in AKLNG
- **2016** - Pre-Front End Engineering and Design (“Pre-FEED”) was completed and the Producers, based upon the economics resulting from that work, stepped aside to allow AGDC to continue working the project
- **2017** - AGDC assumed 100% ownership of Alaska LNG Project
- **2020** - FERC granted AGDC authorization to construct Alaska LNG Project

# Alaska LNG Project – Overview



## Gas Production

Project anchored for 20 years by 34tcf of discovered conventional North Slope associated gas from Prudhoe Bay and Point Thomson

100tcf of prospective conventional resource could give 50+ years of feed gas

## Gas Processing

A new gas treatment plant (GTP) will be located at the North Slope

## Pipeline

807 mile pipeline with 3.3 bcf/d capacity

## In-State sales

Gas will meet the needs of local markets, reducing use of highly polluting fuels in interior Alaska

## Liquefaction & Storage

20mtpa

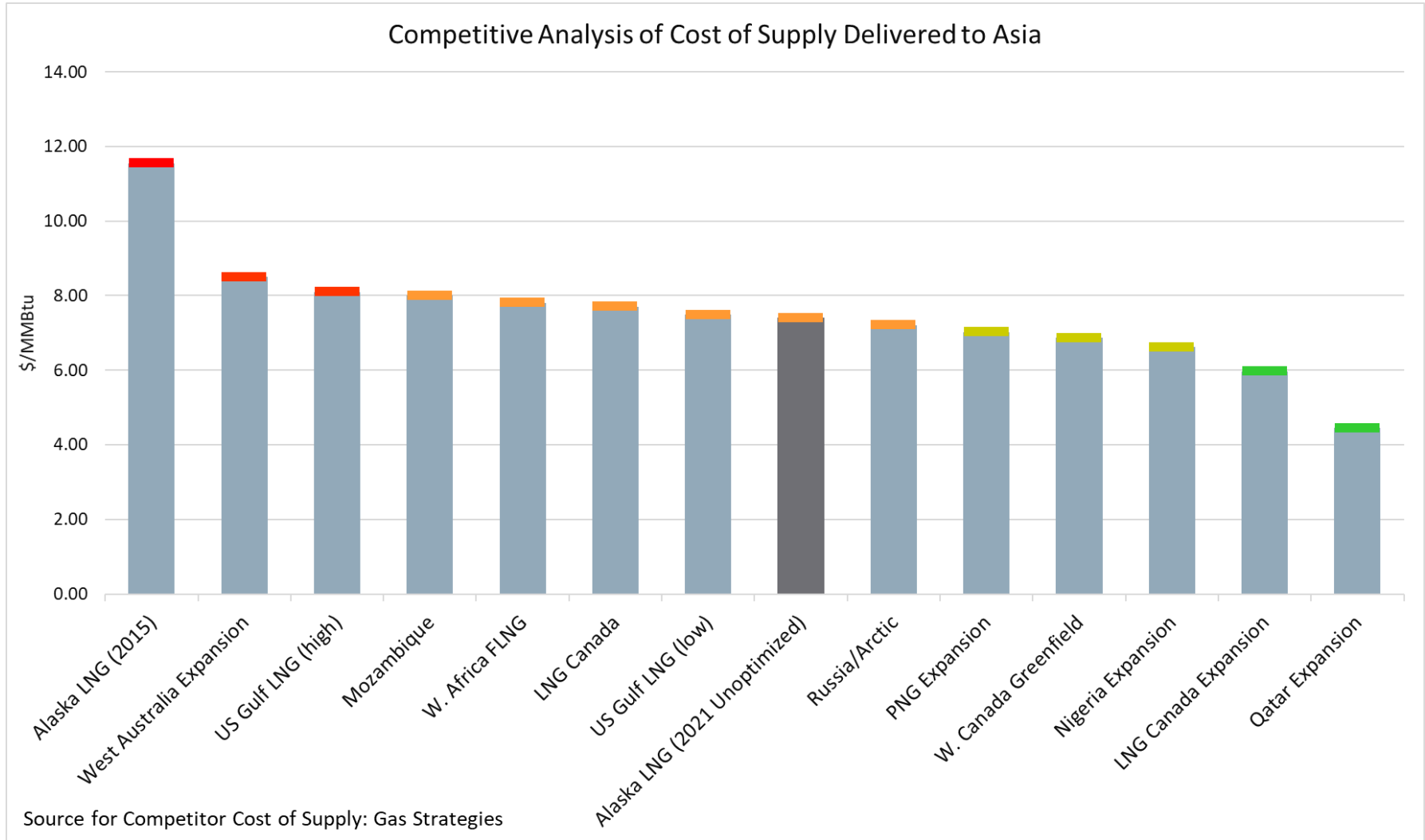
2 x 240,000 m<sup>3</sup> LNG Storage Tanks

Expected to export 15-20 cargoes per month

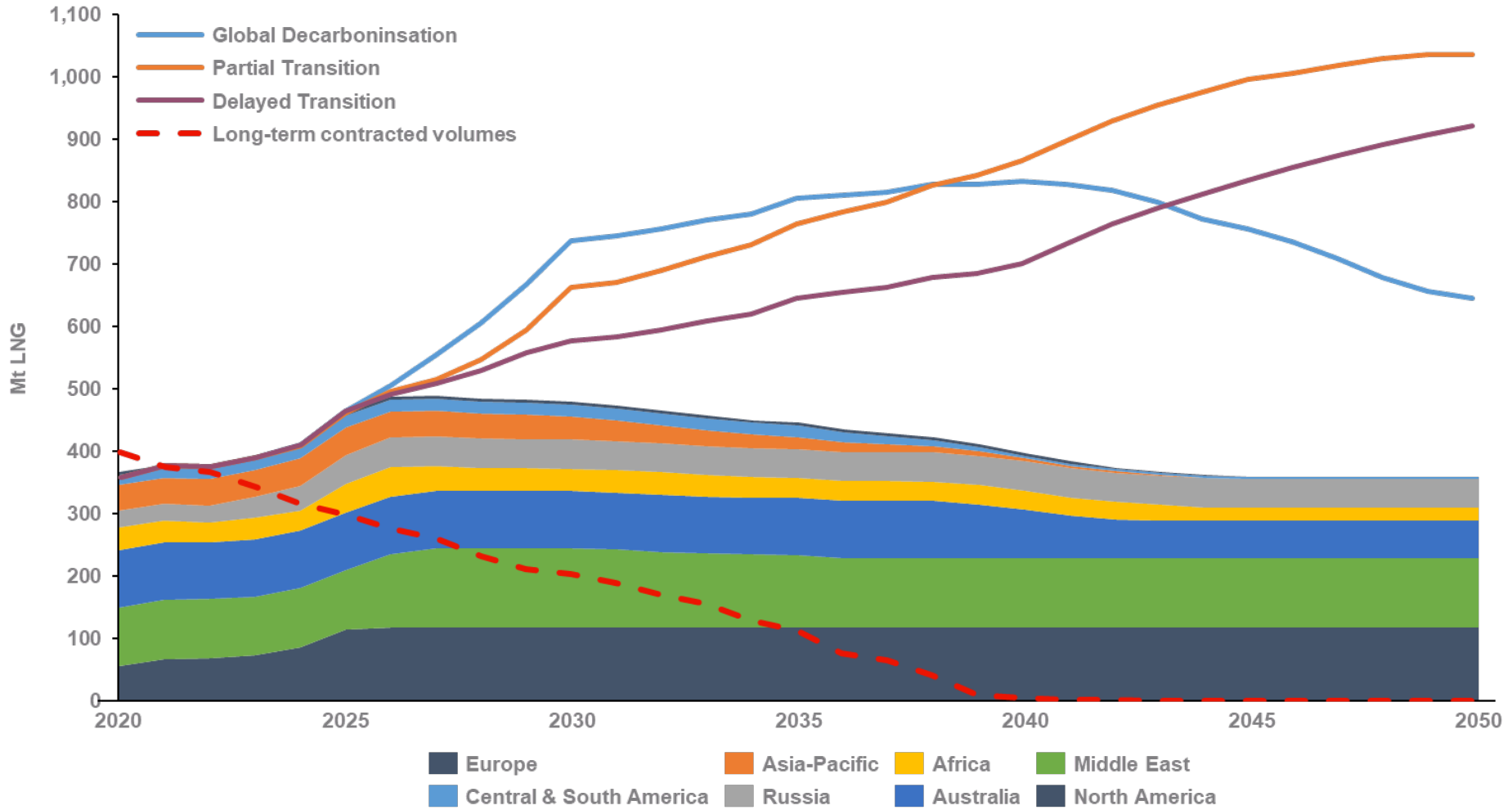
- Completed
  - Federal Energy Regulatory Commission (FERC) Final Environmental Impact Statement and Section 3 Order
  - All 36 Major Federal permits & authorizations completed
  - Federal ROWs: Bureau of Land Management, National Park Service
  - Alaska DNR State Land ROW Lease
  - Alaska DEC Air Permit for the Gas Treatment Plant (GTP)
- In Process:
  - Alaska DEC Air Permit for the Liquefaction Facility

- AGDC worked with senior engineers and project management professionals from BP and ExxonMobil to review original cost estimates and concluded that, with changes in the industry, costs could be reduced significantly
- AGDC analyzed and updated the total capital and operating cost projections of the AKLNG project from the 2015 Joint Venture Agreement estimate of \$44.3B to \$47.3B (\$2020)
- AGDC contracted with Fluor Corporation to evaluate cost reduction opportunities and update the Class 4 Cost Estimate
- Updated Class 4 Cost Estimate of \$38.7B (\$2020) as input into project economic model developed with input from BP, ExxonMobil, DOR, and an investment bank
- Outcome was decision by Board of Directors that Alaska LNG Project is commercially and technically viable

# Alaska LNG Competitiveness



# Global LNG Supply and Demand



Source: Gas Strategies, March 2021



- Advancing the structure and leadership of the project with Strategic Parties consisting of:
  - North Slope producers
  - A major pipeline developer
  - LNG buyers
  - Banks and financial corporations
- These parties have the technical and financial capacity to bring this project to completion
- Strategic parties have a combined market capitalization of \$1.25 trillion
- New potential strategic parties with significant market capitalization have approached AGDC

# Alaska Will Need to Address Two Hurdles

## Fiscal Stability

- It is difficult to imagine a scenario where the private sector would invest \$38 billion, when any future legislature can essentially change contract terms at any time.
- Most other resource owner states are able to offer a Fiscal Stabilization Clause.
- Compounding this issue is the fact that the State can change it's election for royalty and tax between "in-kind" and "in-value" – this project relies on long-term, 20+ year contracts to work and that requires fiscal stability.

## Payment in Lieu of Tax (PILT)

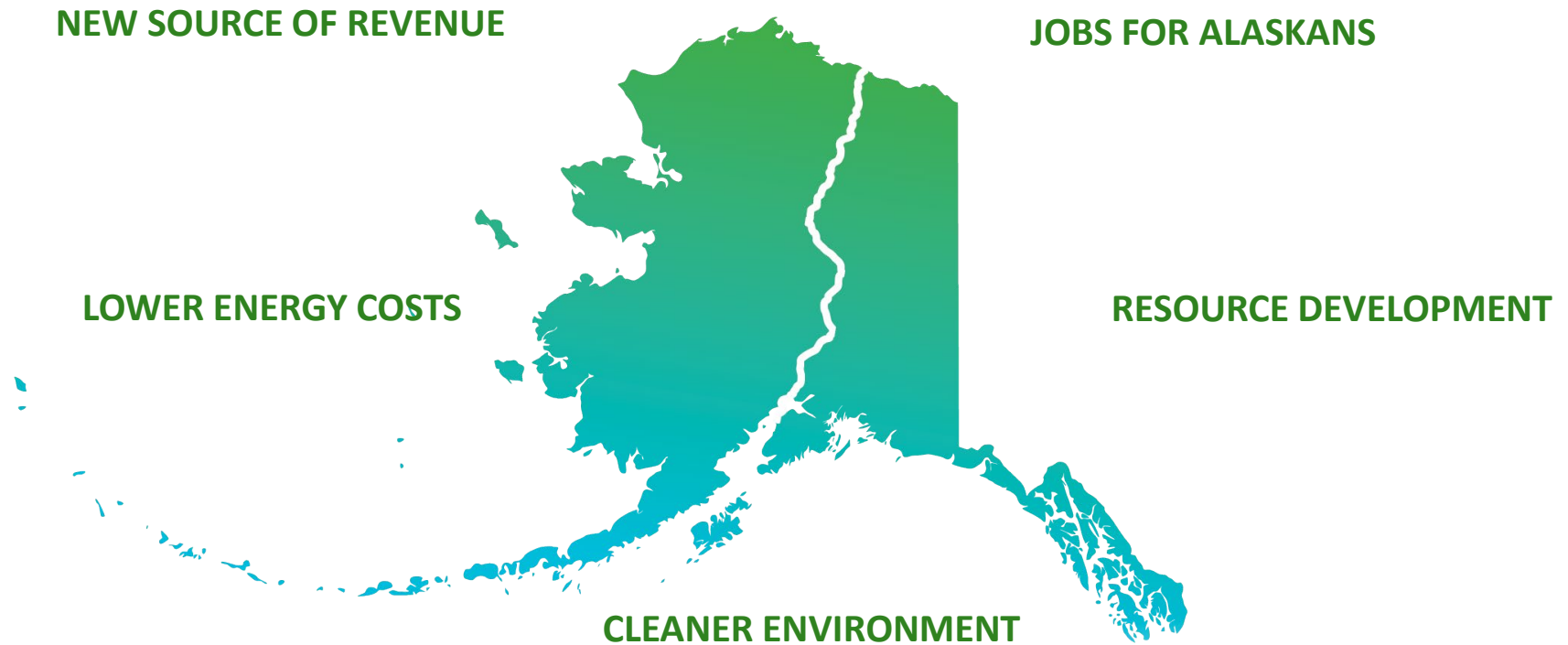
- Property tax for the project is an order of magnitude higher than other projects in North America (\$0 – 50 MM p.a.).
- Competing projects globally don't pay property tax, or it is back loaded in the project life.

## And ultimately decide on level of participation

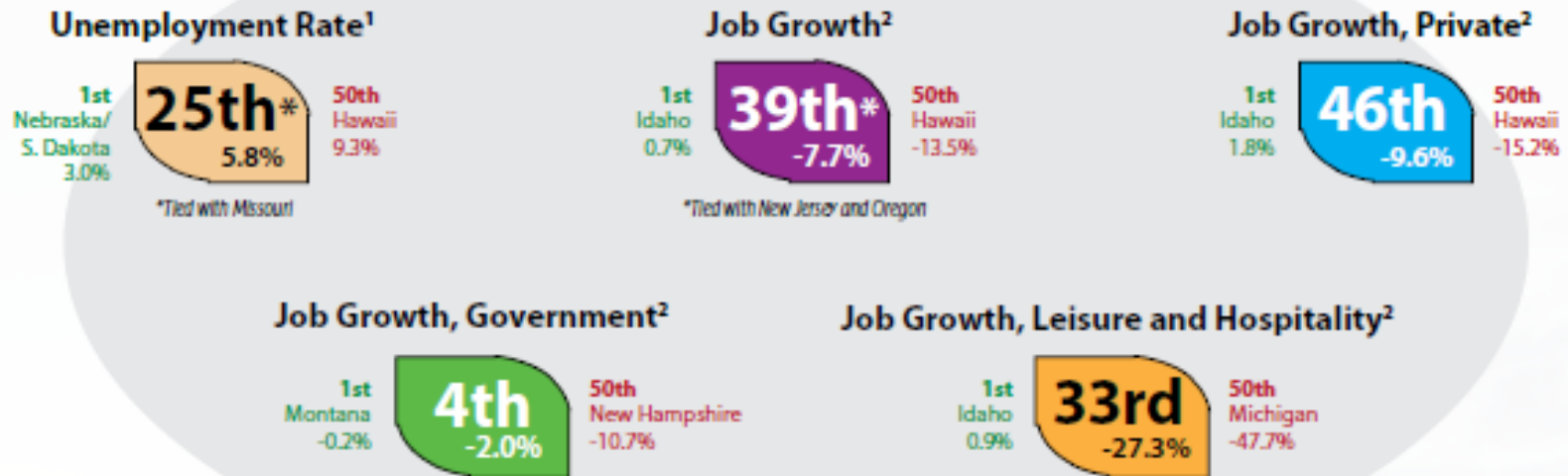
## State Participation

- State equity participation can help facilitate the project.
- State participation helps create alignment between the state and the project.
- It is not uncommon for to see sovereign ownership in infrastructure.
- The State should only have a minority stake and not an operatorship role.
- Equity participation will also increase the State's take from the project.

# Alaska LNG Project – Positive Impacts



## How Alaska Ranks



Note: Government employment includes federal, state, and local government plus public schools and universities.

<sup>1</sup>December seasonally adjusted unemployment rates

<sup>2</sup>December employment, over-the-year percent change

Sources: U.S. Bureau of Labor Statistics and Alaska Department of Labor and Workforce Development, Research and Analysis Section

- Potential to attract stimulus and private funding to quickly create jobs and revitalize Alaska
- Phase One opportunity - \$5.9 billion clean energy infrastructure initiative
- Immediately ignites our economy, put thousands of Alaskans back to work
- Resolves longstanding climate, pollution, and energy problems affecting rural and urban Alaskans
- Alaska LNG is unique; the project has major permits required to start Phase One work now

## Governor Dunleavy and the AGDC Board support a phased approach to Alaska LNG

- The phased project would start with a \$5.9 billion pipeline to Fairbanks
- Constructing the pipeline segment to Fairbanks will provide energy for Alaskans and significantly de-risk Alaska LNG
- The first phase is expected to be predominantly funded by Federal stimulus investments and progress President Biden's low-carbon initiatives


*U.S. clean energy infrastructure initiative that will resolve longstanding climate, pollution, and energy problems affecting vulnerable rural populations and strategically located Department of Defense installations*

ANCHORAGE DAILY NEWS

Opinions

### It's time to build an Alaska natural gas pipeline

Author: Mike Dunleavy | Opinion Updated: 17 hours ago Published 17 hours ago



The ExxonMobil facility at Point Thomson on Alaska's North Slope. (Business Wire)

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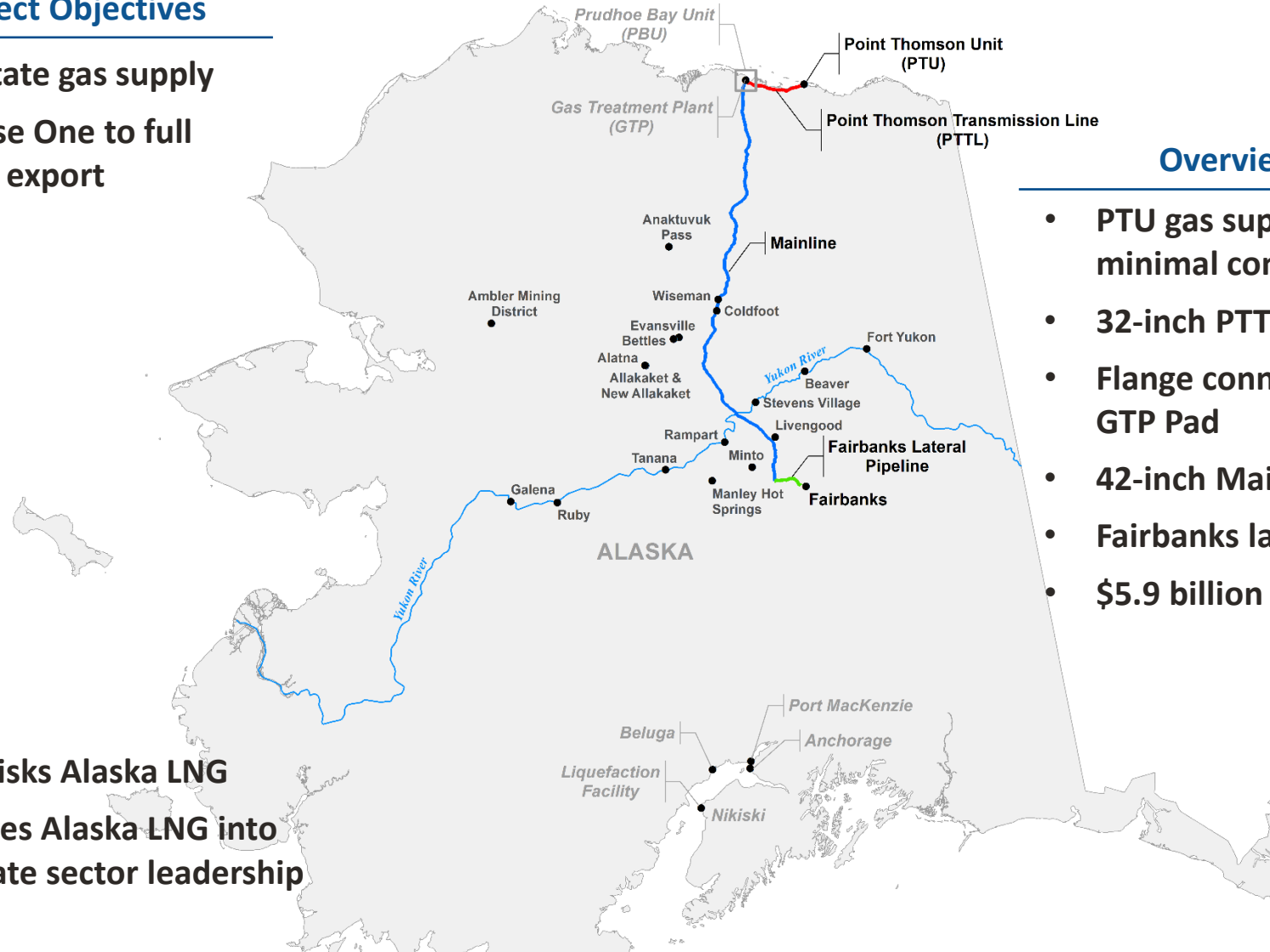
We're on the cusp of a generational dream: construction of a gas line from our stranded gas fields in the North Slope to the road system in Alaska. As the world turns toward clean fuels like natural gas and renewables, this is Alaska's time to think big.

# Phase One - Infrastructure Opportunity

## Project Objectives

- In-state gas supply
- Phase One to full LNG export

- De-risks Alaska LNG
- Moves Alaska LNG into private sector leadership



## Overview

- PTU gas supply with minimal conditioning
- 32-inch PTTL
- Flange connection at GTP Pad
- 42-inch Mainline
- Fairbanks lateral
- \$5.9 billion

## Alaska State Legislature Letter of Intent for SB 138:

- Employ Alaska residents and contract with Alaska businesses to the extent they are qualified, available, ready, willing and cost competitive
- Use, as far as practicable, job centers and associated services operated by the Department of Labor and Workforce Development
- Participate with the Department of Labor and Workforce Development to update the training plan for an LNG export project including main operations
- Advertise for available positions locally and use, as far as practicable, Alaska job service organizations to notify the Alaska public
- Work with the Department of Labor and Workforce Development and other organizations to provide training



- Propels a near-term economic recovery for Alaska:
  - ✓ \$1.5 billion impact in first 24 months
  - ✓ 1,400+ high-paying direct jobs
  - ✓ 20,000+ indirect jobs
- Immediate benefit to hardest-hit service industries (e.g., restaurants, hotels, transportation, warehousing, etc.)
- Delivers natural gas to Interior Alaska in 2025
- Private sector leadership:
  - Build and operate
  - Invest capital in ownership depending on level of Federal infrastructure funds available to Alaska

- Will significantly decrease gas supply costs
  - 75% Federal infrastructure support: \$15 MMBtu
  - 100% Federal infrastructure support: \$5 MMBtu
- Will provide cleaner air
  - Some of the worst air quality in the nation
  - Bring relief to residents with no alternative to diesel or wood
- Will boost military readiness and efforts to alleviate climate impacts
- Will reduce costs for producing minerals

- Fund the project alongside private sector Lead Party:
  - ✓ Owner Builder Operator (OBO) would invest capital
  - ✓ OBO to receive minimum return ahead of any State payback
  - ✓ Gas is delivered to Fairbanks for \$5 -\$15/MMBtu depending on Federal infrastructure funding
- Significantly de-risks Alaska LNG
- Once Alaska LNG is sanctioned by investors, gas prices normalize to under \$5/MMBtu in Interior and Southcentral Alaska
- The Alaska LNG project final phase will bring additional job creation
- Alaska LNG's clean-energy infrastructure positions Alaska to remain a major energy exporter far into the future by exporting LNG and eventually hydrogen

- Working with private-sector Strategic Parties to provide investment and lead the LNG export project
- Seeking Federal infrastructure funds for a Phase One economic stimulus opportunity
- Completing state permits and approvals
- Encouraging Alaskans to rally behind the project that will bring positive impacts to Alaska for generations

Backup Slides

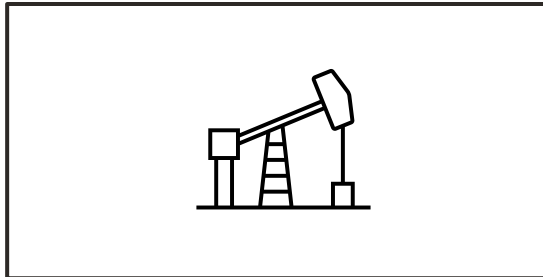
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ALASKA  
GASLINE  
DEVELOPMENT CORP.

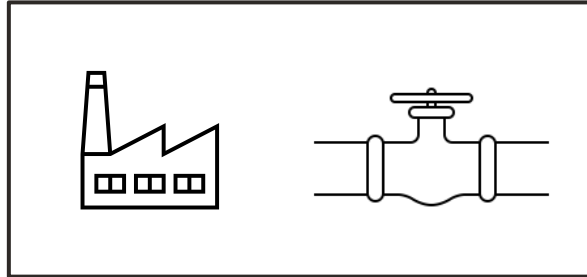
The logo for Alaska Gasline Development Corp. features the text "ALASKA GASLINE DEVELOPMENT CORP." in a blue, sans-serif font. To the right of the text is a stylized outline of the state of Alaska, composed of several blue stars of varying sizes arranged to form the state's shape.

# Proposed Commercial Structure

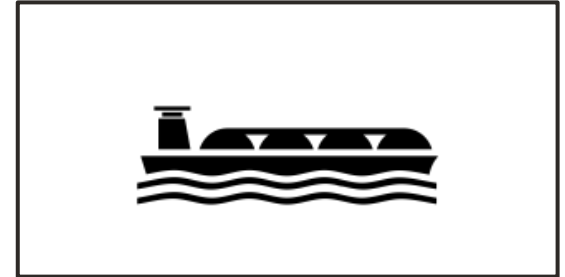
The project will have a non-integrated structure to attract a broad range of potential investors by allowing investors to target specific asset classes, and risk return profiles.



Will unlock otherwise stranded gas for upstream investors



Infrastructure investors can focus on the GTP and Pipeline



LNG offtakers can focus on the Liquefaction Plant

## Key Benefits

- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"><li>• Market for significant gas resource which would otherwise be stranded</li></ul> | <ul style="list-style-type: none"><li>• Low risk, long life assets</li><li>• Credit worthy counterparties</li><li>• Long terms capacity agreements</li><li>• Experienced operator</li></ul> | <ul style="list-style-type: none"><li>• Fixed price LNG with no commodity price risk</li><li>• Low exposure to shipping costs</li><li>• Excellent location to enable portfolio swaps and optimisation</li></ul> |
|---|---|---|

- In February 2021, the Department of Energy projected that coal and natural gas will still contribute nearly 40% of U.S. electricity generation in 2050
- Wind and solar power energy sources will increase but they aren't ready to meet the huge demand for electricity without fossil fuels and nuclear power in the mix
- China generates 28% of the planet's yearly carbon dioxide emissions

- Electric grids face a dual challenge: meeting growing demand for power while also decarbonizing the energy it supplies
- Natural gas will play an indispensable role in managing the risk that a precipitous leap to renewables will make electricity more expensive and potentially less reliable
- Gas plays an indispensable role in renewable energy expansion by providing an instantly dispatchable source of electricity
- Retaining sufficient natural gas generation to backstop wind and solar power would reduce costs and increase reliability compared to a grid that relies entirely on renewables
- Political debate around energy and climate policy often presents Americans with a false choice between natural gas and renewable energy - the two are intertwined

*Progressive Policy Institute*

*Wind, Solar, and Gas: Managing the Risks of America's Clean Energy Transition*

*December 2020*



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