

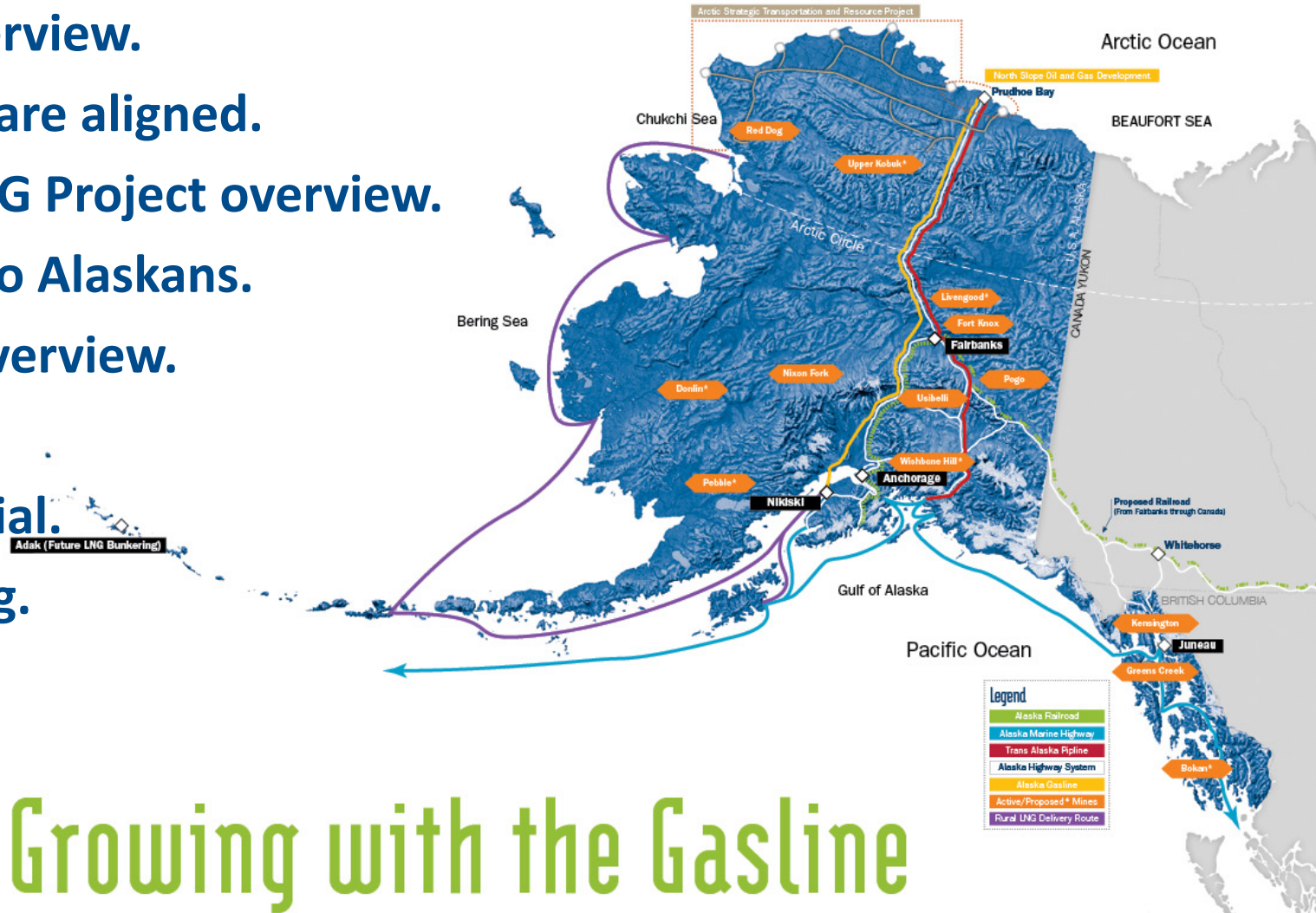
Nikiski Community Meeting

The Stars are Aligned for Alaska LNG
May 2018



Agenda

- AGDC overview.
- The stars are aligned.
- Alaska LNG Project overview.
- Benefits to Alaskans.
- Market overview.
- Finance.
- Commercial.
- Permitting.



Growing with the Gasline

- **Alaska Gasline Development Corporation (AGDC):**

- Public corporation owned by the State of Alaska.
- Empowered to expedite, finance, and build a gas project.
- ***AGDC is Alaska's natural gas infrastructure development company.***

- **Vision:**

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



AGDC Board of Directors



Dave Cruz
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The Stars are Aligned for Alaska LNG



U.S. President Trump focuses on trade to China and energy dominance.



Secretary of Interior Ryan Zinke states energy dominance must go through the State of Alaska.



China President Xi turns his focus to the environment and recommends natural gas to displace coal.



President Trump and President Xi agree LNG is an area of cooperative trade and President Trump specifically mentions Alaska LNG.



Chinese President Xi meets with Governor Walker and AGDC president Keith Meyer to discuss the benefits of LNG from Alaska.



Secretary of Commerce Wilbur Ross organizes a trade mission to China and AGDC was selected to participate.



AGDC signs Joint Development Agreement with Sinopec, CIC Capital Corporation, and Bank of China. The signing was witnessed by President Trump and President Xi.



Memoranda of Understanding (MOUs) are signed with Korea Gas Company (KOGAS), PetroVietnam Gas, and Tokyo Gas.

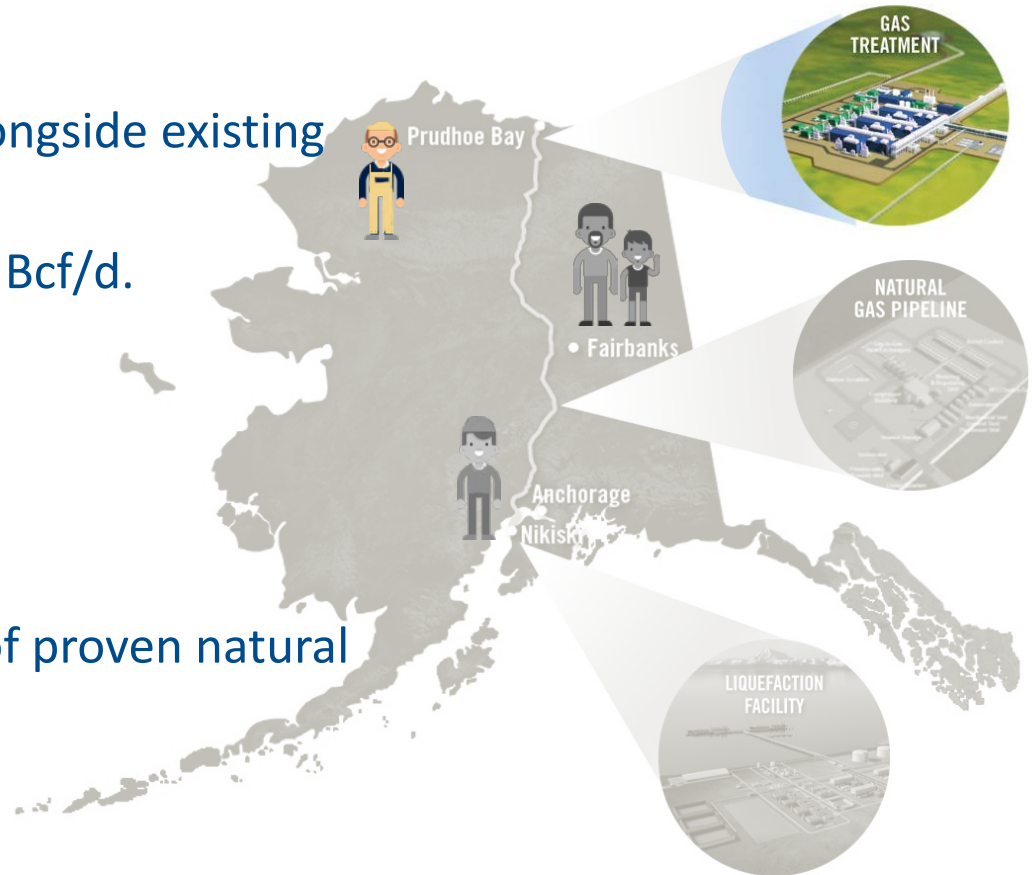
A well planned and responsible development future.

- **Gas Treatment Plant:**

- Located in Prudhoe Bay alongside existing gas infrastructure.
- Treats and compresses 3.5 Bcf/d.
- Removes carbon dioxide.
- Provides high-quality, clean natural gas.

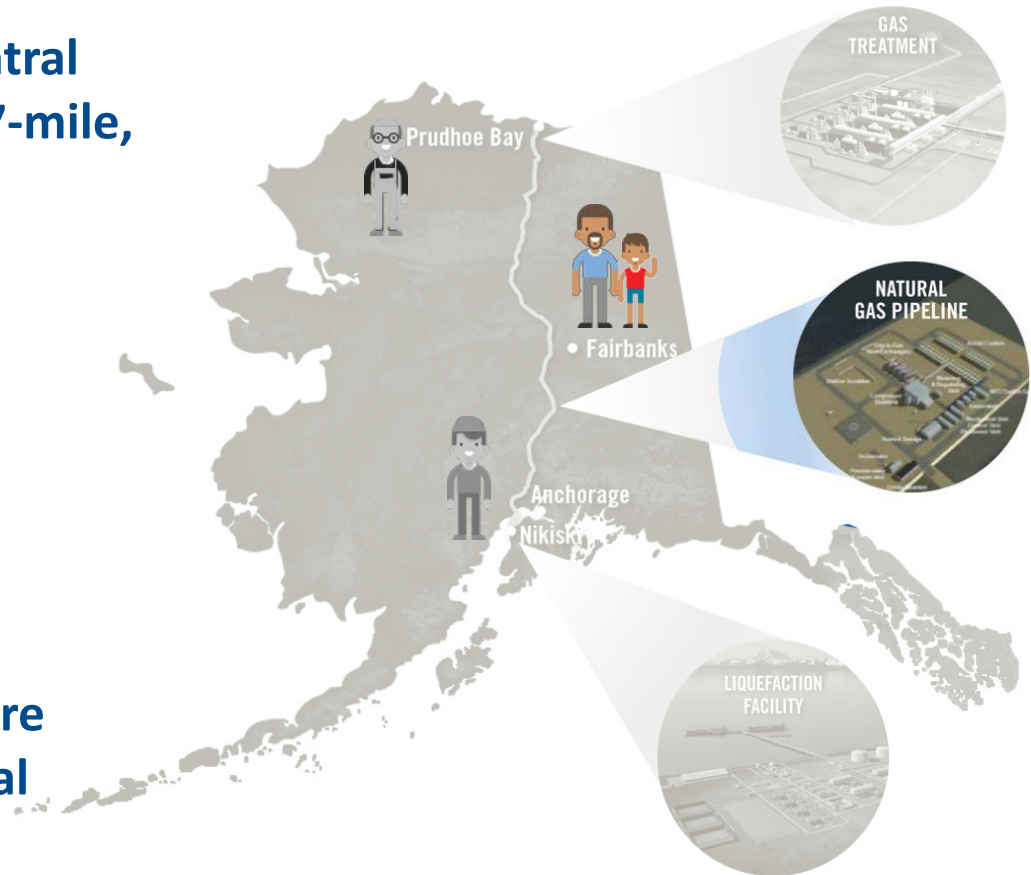
- **Alaska's North Slope:**

- 35 Trillion cubic feet (Tcf) of proven natural gas resources.
- Existing infrastructure and workforce.



Multiple offtakes for in-state domestic and industrial use.

- Gas is transported to Southcentral Alaska via an underground 807-mile, 42-inch pipeline.
- Established corridor.
- 8 compressor stations.
- Delivers over 3.3 Bcf/d.
- Multiple offtakes for in-state domestic and industrial use.
- Alaskans will get gas first, before it's turned into liquefied natural gas (LNG) for export.

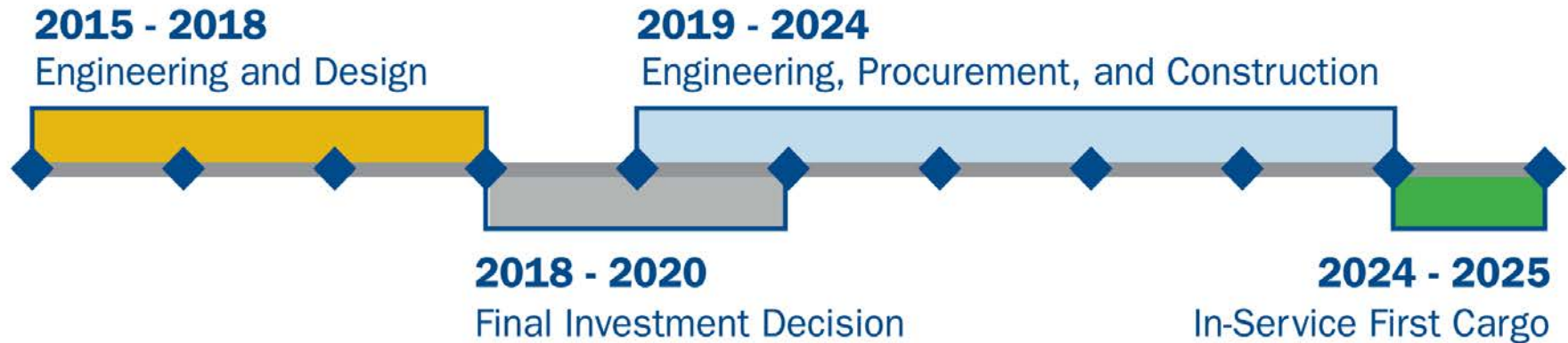


Opportunity for small scale in-state LNG distribution.

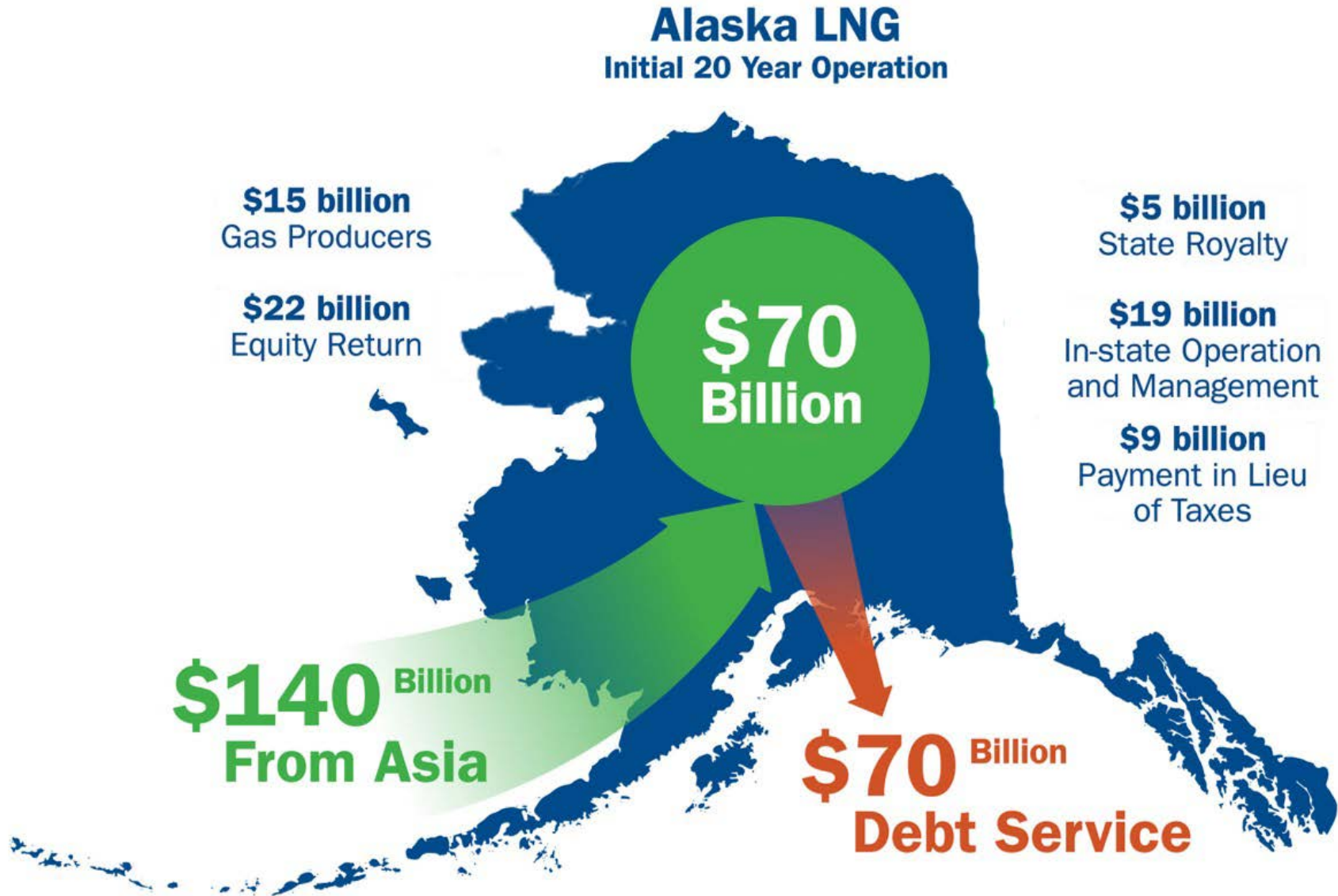
- Located in Nikiski.
- Natural gas liquefied for transportation.
 - Potential super chilled volume reduces to 1/600 its gaseous form.
- 20 million tonnes per annum (MTPA).
- LNG is loaded into LNG Carriers for transport.
 - Fleet of up to 20 LNG carriers will transport to markets in Asia.
 - 50 year history of LNG carrier traffic moving through Cook Inlet.



Project Schedule



Benefits to Alaskans: Economy



20%

The Alaska Affordable Energy Fund

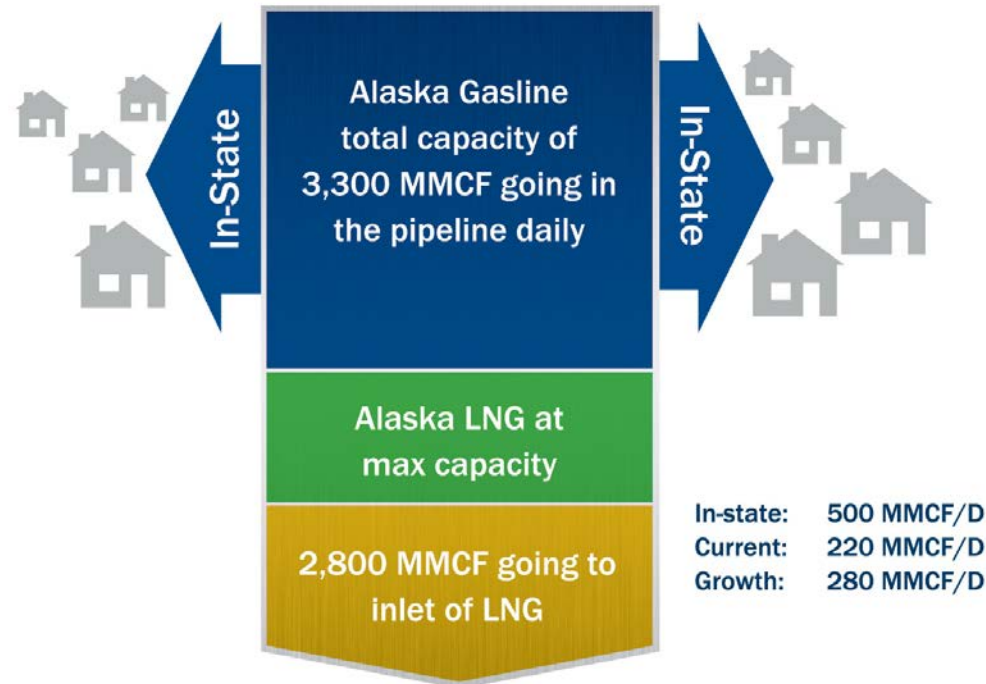
- 20% of revenue from the state's royalty gas.
- All Alaskans should benefit from the development of our gas resources.
- The State will receive a steady stream of revenue over the life of the project.
- The Alaska Affordable Energy Fund is a positive step to ensure we address high energy costs across the state for decades to come.

Vision:
Economically
feasible to
transport gas
for local use.

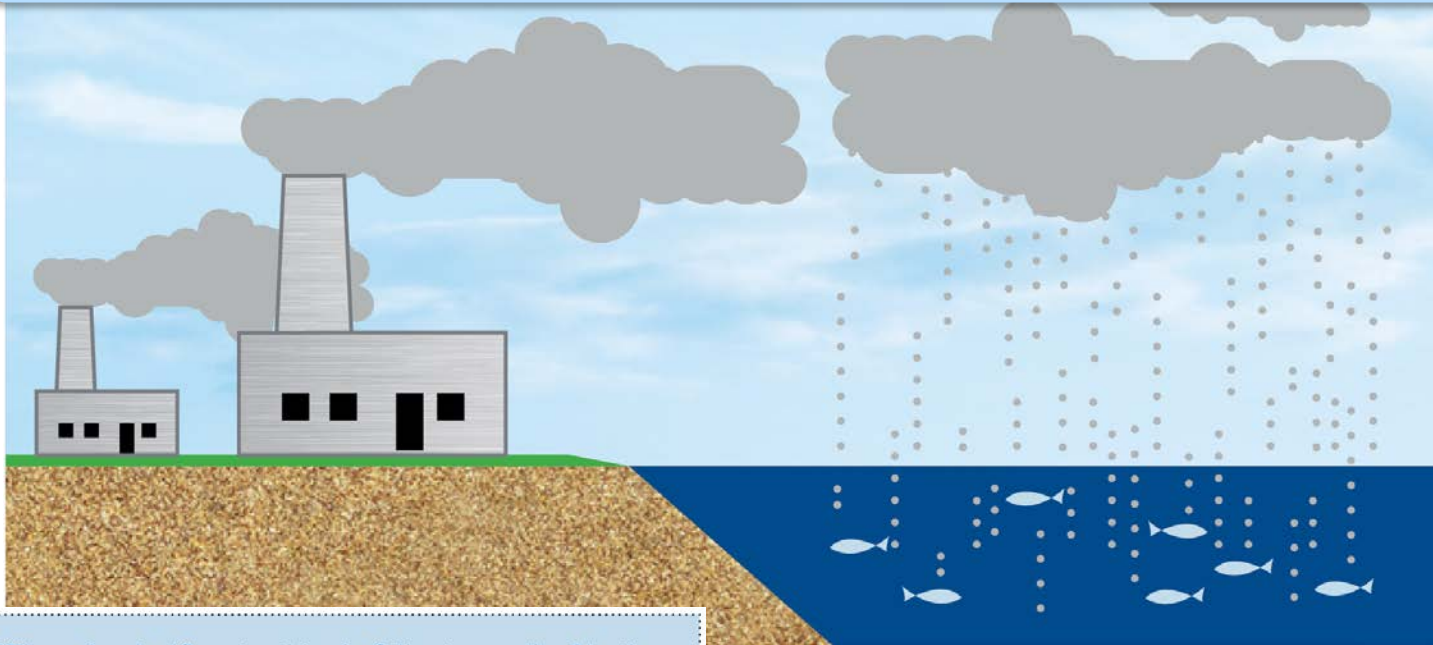
Designed to serve in-state needs before gas is delivered to the Liquefaction Facility.

Gas for Alaskans
Anticipated Price:
\$5-6 PER MMBTU

- **Stable Prices.**
- **Energy for all of Alaska:**
 - Offtakes to communities and projects along the Alaska Gasline.



Alaska LNG will bring clean air and blue skies to Alaska and the world.

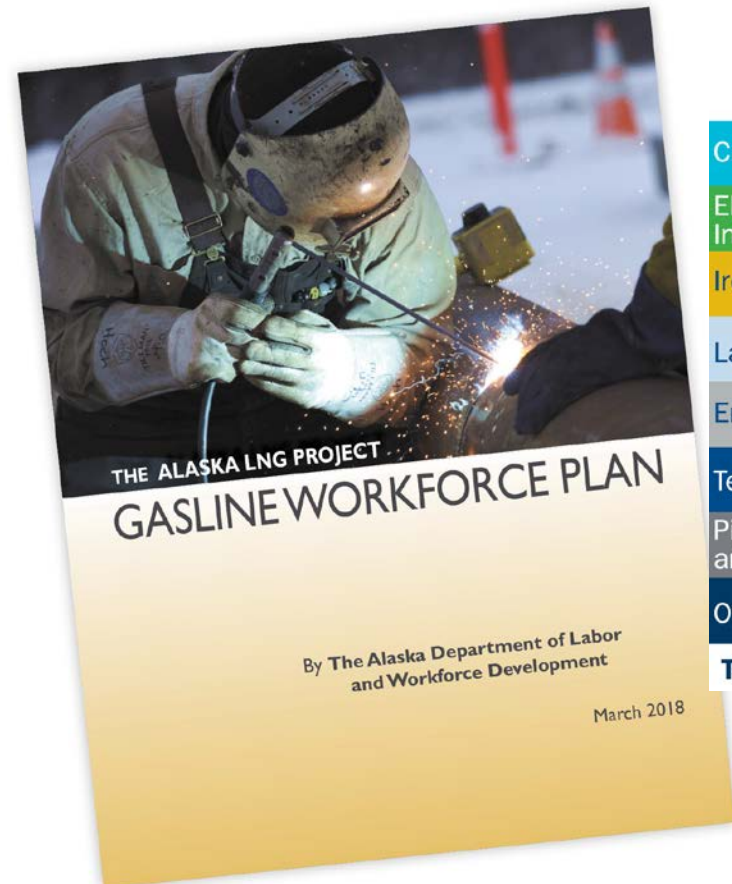


“There is significant acid rain fallout over the North Pacific due to air pollution in Asia. Cleaner air in Asia will lead to cleaner oceans and healthier fish in Alaska. It is a win-win situation for all of us.”

Ricky Gease,
Executive Director, Kenai River Sportfishing Association

**Alaska LNG will offset
80 million tonnes of CO₂ per year
going into the atmosphere.**

Employment During Construction: Alaska LNG will directly employ almost 12,000.



Carpenters	295
Electricians and Instrument Fitters	397
Ironworkers	447
Laborers	2,311
Engineers	1,864
Teamsters	3,519
Pipefitters, Welders, and Insulators	1,566
Other	1,452
Total	11,850



Find your opportunity at agdc.us/careers.

“Bringing Alaska’s gas to market under economically-beneficial circumstances remains a priority. While we work through our due diligence concerns as a legislature, we look forward to the project moving forward with minimized financial risk for Alaska and we all agree that the associated jobs will be filled by Alaskans.”

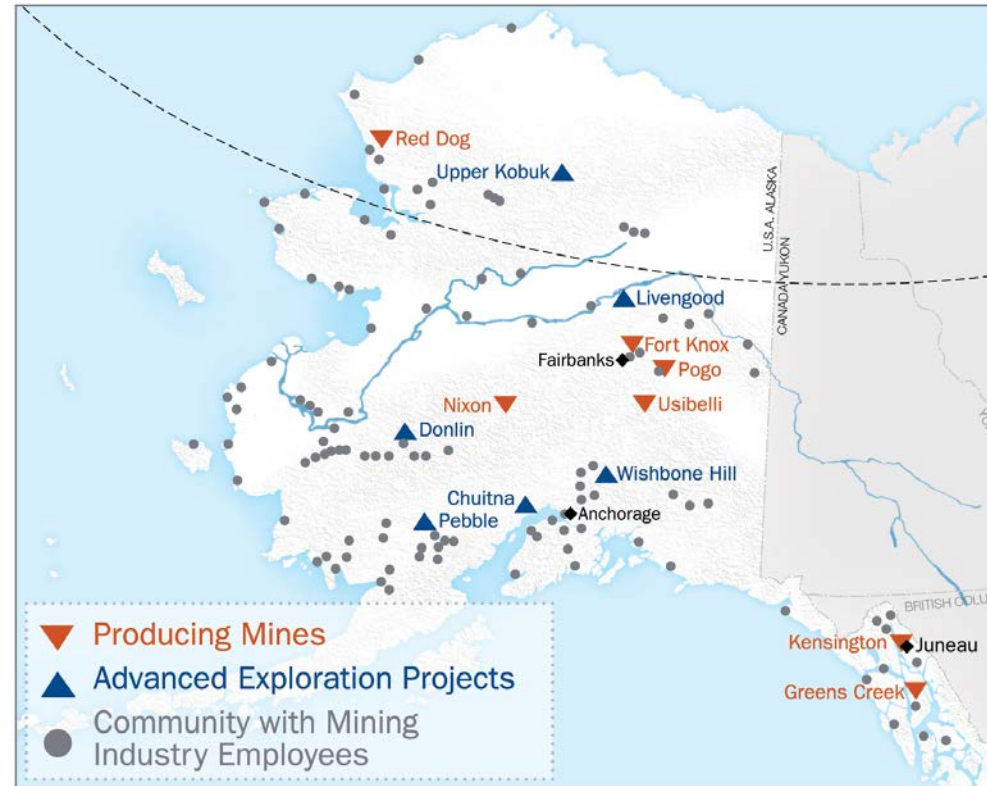
Senator Peter A. Micciche
Soldotna



Train now for your career with the Alaska LNG project.

Investment in Alaska's Future

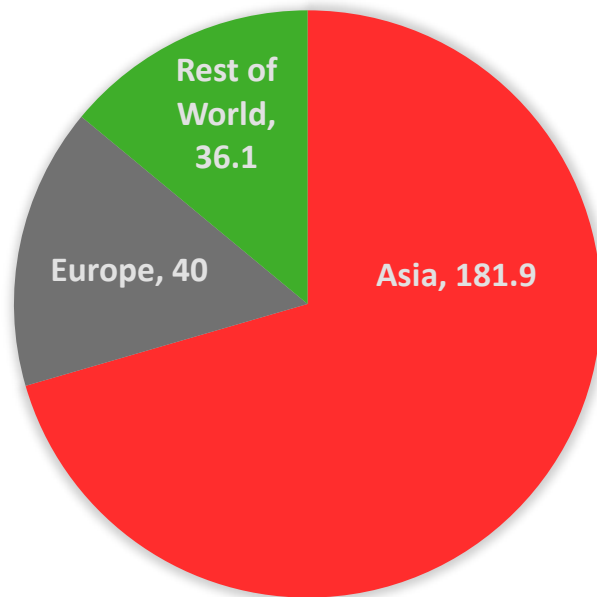
- Alaska LNG will be the biggest economic driver in Alaska since the construction of the Trans Alaska Pipeline System (TAPS).
- Alaska LNG project will spur new resource development projects, including mining projects and other industrial and commercial developments.
- Low cost, clean burning natural gas will spur economic development for the next generation.



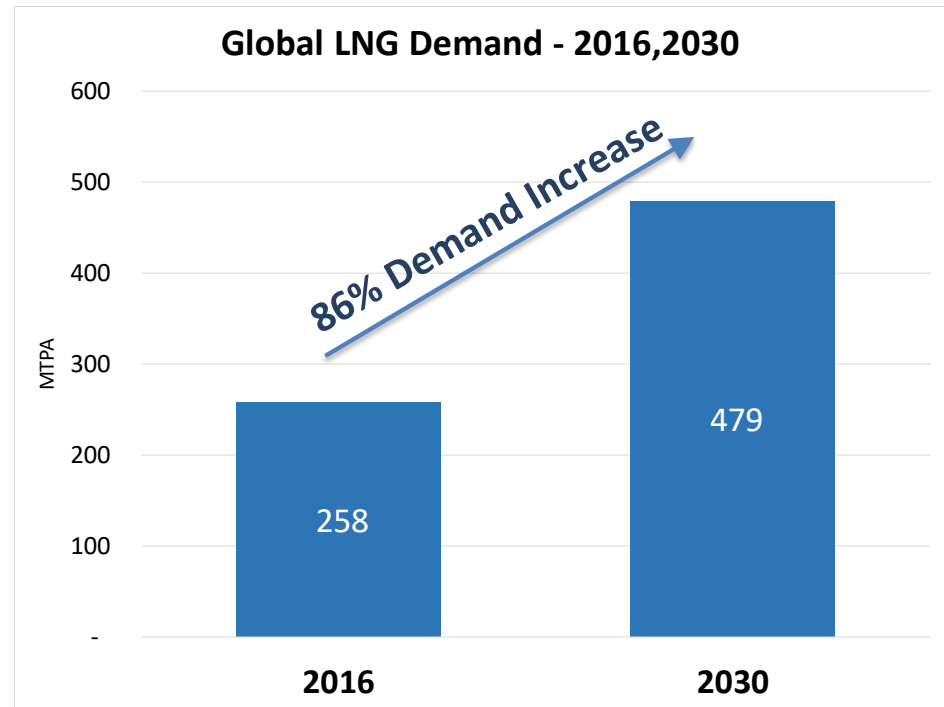
- **LNG Supply-Demand Forecast:**

- LNG is a growth industry (\$250 Billion annual by 2030).
- Asia is the biggest LNG market.
- Asia is Alaska's regional market.

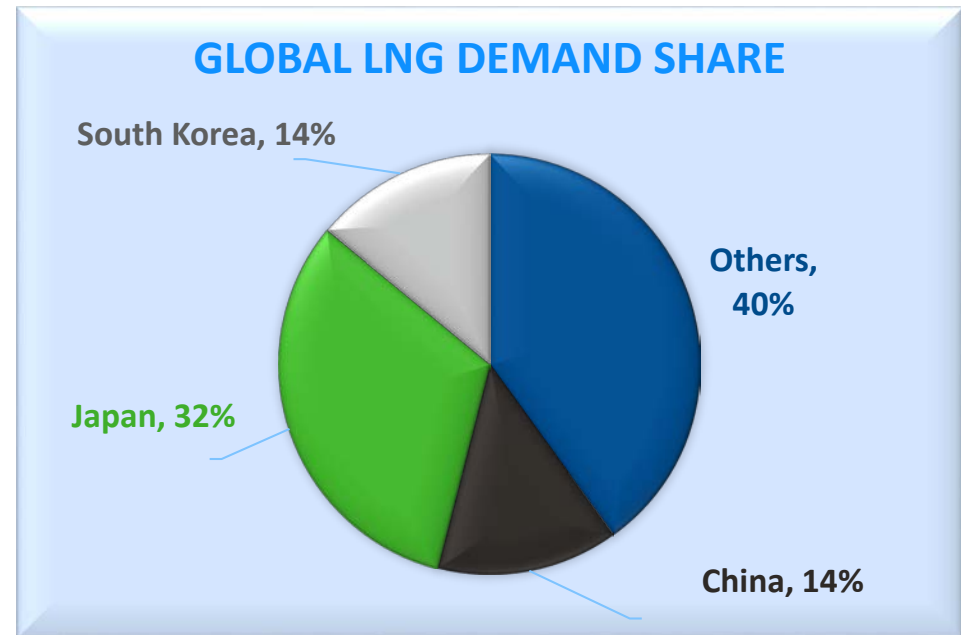
**GLOBAL LNG DEMAND 2016,
258 MTPA**



Global LNG Demand - 2016,2030

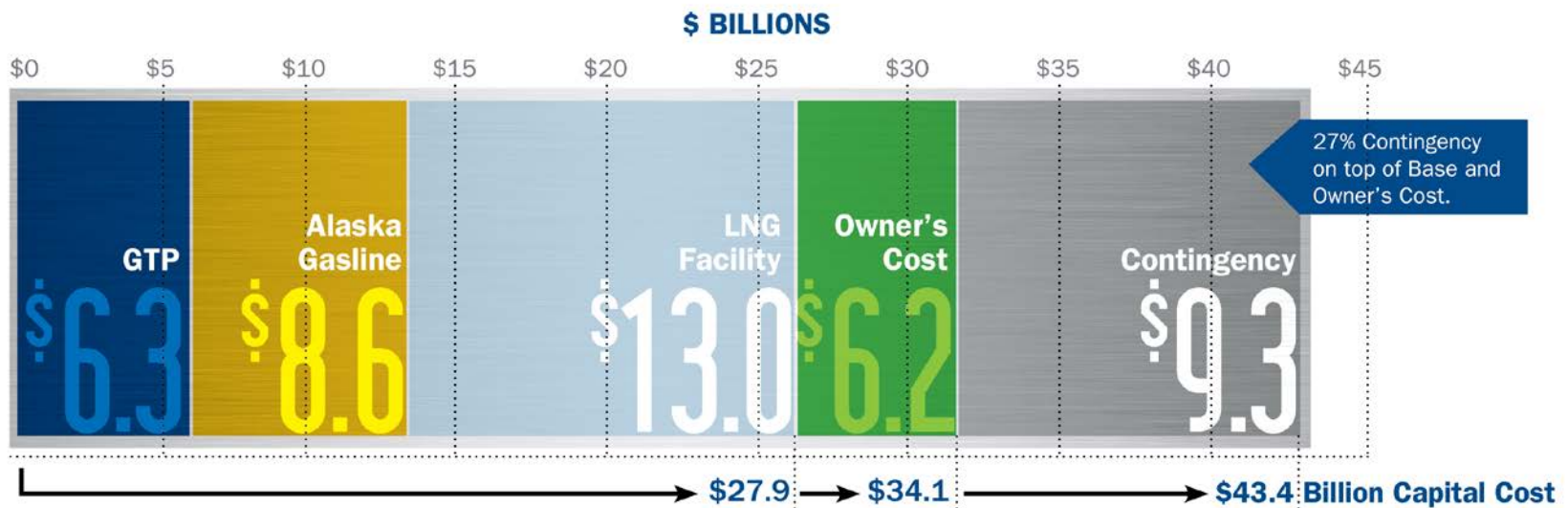


- Asia is the largest LNG market.
- Environmental concerns in China have mandated a shift to gas.
- Demand for natural gas has grown dramatically, outpacing the ability to produce domestically.
- Chinese President Xi's address to the 19th Party Congress mentioned "environment" 89 times.
- By 2040, China's coal consumption is projected to decrease by 26%.
- "China is very serious about constructing an ongoing, mutually beneficial relationship with Alaska," Chinese Deputy Consul General Ren Faqiang.

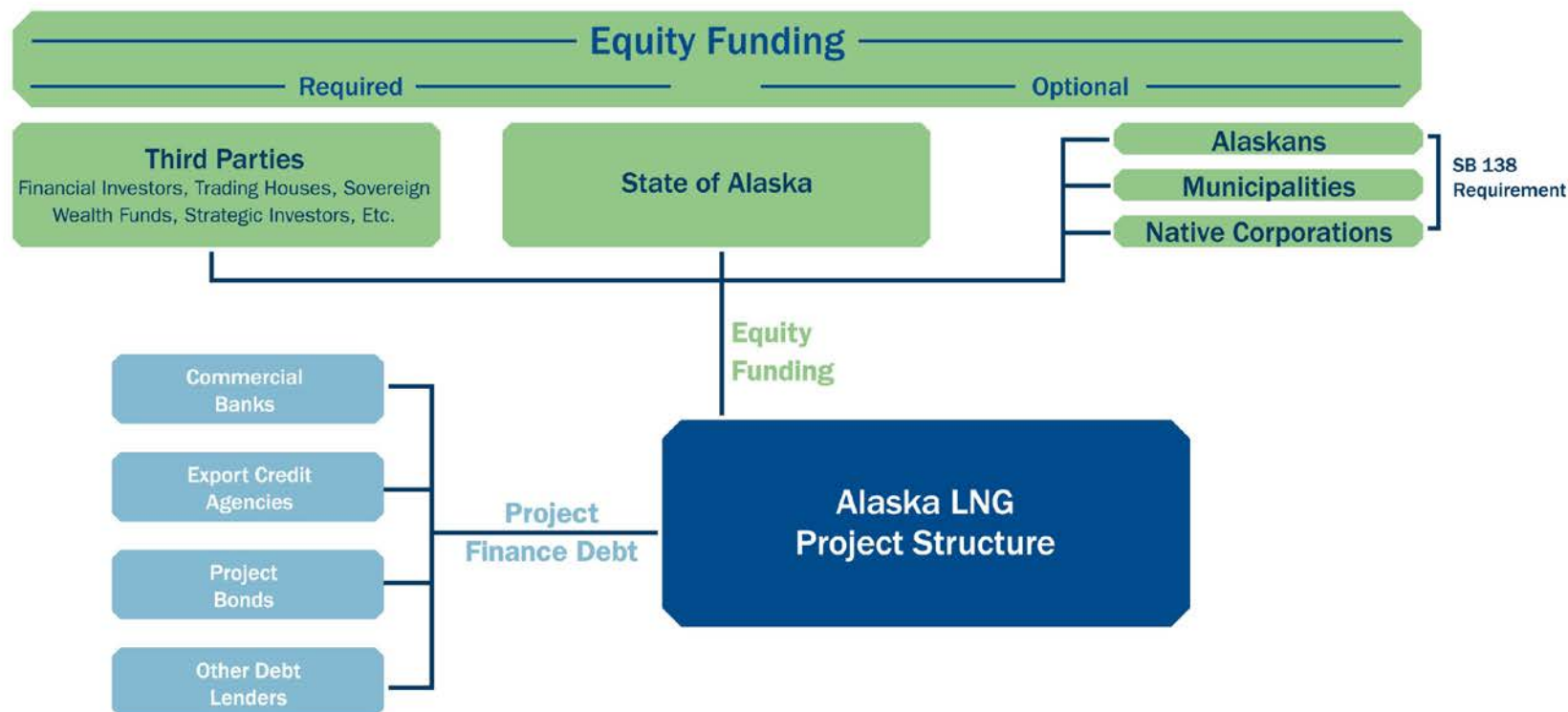


Finance: Cost and Ownership

- AGDC will act as the project developer and will assemble the necessary partners to build the Alaska LNG project.
- A best in class project management approach will be adhered to and AGDC will engage Engineering, Procurement, Construction firms to manage the construction risk.
- Equity investment in the project will be required and AGDC is pursuing a development path to provide the state with an opportunity to invest, but not the requirement to invest.



Finance: Financing Structure



- **Senate Bill 138:** Municipalities, Alaska Native Corporations, and Alaska residents should have the opportunity to acquire ownership interest in North Slope natural gas pipeline projects.

Commercial: Agreements

- **AGDC has signed agreements with:**
 - Japan – Tokyo Gas Co., Ltd.
 - Vietnam – PetroVietnam Gas.
 - South Korea – Korea Gas Corporation (KOGAS).
 - China:
 - Sinopec: World's largest integrated oil company.
 - Bank of China: World's 4th largest bank.
 - CIC Capital: World's 3rd largest sovereign wealth fund.



AGDC and Tokyo Gas Co., Ltd. sign LOI in Tokyo, Japan; December 4, 2017.



Joint Development Agreement signing in Beijing, China; 2017.



AGDC and KOGAS sign MOU in Washington, D.C.; June 28, 2017.

Commercial: Next Steps

- Commercial team focused on definitive agreements by the end of 2018.
- AGDC April trip to China.
- AGDC continues to engage the parties with which AGDC has signed Memoranda of Understanding (MOUs) or Letters of Intent (LOIs) in other parts of Asia.
- Continuing its negotiations with the upstream producers on Gas Supply Agreements.



- **The Federal Energy Regulatory Commission (FERC):**
 - Project lead federal agency.
 - Regulates the transmission and wholesale sale of electricity and natural gas in interstate commerce and regulates the transportation of oil by pipeline in interstate commerce.
 - For more information, visit ferc.gov
- **Reviews proposals to build:**
 - Interstate natural gas pipelines.
 - Natural gas storage projects.
 - Liquefied natural gas (LNG) terminals.
- **Works closely with the United States Coast Guard to review the safety, security, and environmental impacts of proposed LNG terminals and associated shipping.**



Permitting: Alaska LNG Progression

ALASKA LNG PERMITTING TIMELINE		
2014 – 2016 Producer Led Effort	95% of Permitting Work Already Done	
	\$600 million of engineering, environmental, and science completed to advance permitting of Alaska LNG under Producer Led Effort.	
2017 and Beyond AGDC Led Effort	December 2016	AGDC takes the lead of Alaska LNG project
	April 2017	AGDC Files FERC Application
	August 2017	Fast Act Acceptance
	August 2017	Presidential Executive Order
	November 2017	Joint Development Agreement
	March 2018	FERC publishes EIS schedule
	March 2019	Draft EIS
	December 2019	Final EIS
	March 2020	FERC authorization

- **FERC:**
 - FERC Section 3 Application submitted – April 14, 2017.
 - FERC initiated the process of formal data requests starting July 5, 2017.
 - To date, AGDC has responded to approximately 1,300 requests.
 - FERC published Notice of Schedule in the Federal Register – March 21, 2018.
 - FERC is drafting the Preliminary Administrative Environmental Impact Statement.
 - Consultation underway with Environmental Protection Agency, National Park Service and the U.S. Fish & Wildlife Service.

- **Large amounts of paperwork:**
 - Multi-billion dollar international purchase agreement, loan documents, investment agreements, construction contracts, and regulatory approval.
- **Joint Development Agreement:**
 - Define specifics by May 2018 (interest rate, term of debt, system capacity, LNG shipping, pricing, operations and maintenance forecasts, contributions of parties, etc.)
 - Definitive Agreements by end of 2018.
 - Construction “early works” commences as planned in 2019.



To date over 100,000 pages of information has been provided to FERC.

- **Environmental, Regulatory and Land (ERL) and Engineering:**
 - United States Army Corps of Engineers (USACE) revised Final Supplemental Environmental Impact Statement (FSEIS) schedule:
 - Publish Notice of Availability in May 2018.
 - Submitted near final cultural and wetland mitigation plans.
 - USACE continues consultation with National Oceanic and Atmospheric Administration (NOAA) Fisheries/ U.S. Fish and Wildlife Service (USFWS) under Section 7 of the Endangered Species Act.
 - Draft Programmatic Agreement (PA) developed for Cultural Resources.
 - Completing the Cultural Resource Management Plan (CRMP), to be submitted by April.

The Alaska LNG Project

- **Needed:**
 - A project with major benefits for the State of Alaska.
 - Economic diversity.
 - Long-term energy supply stability.
 - Direct and indirect quality jobs.
 - Increased exploration for other industries.
 - Asia market demand continues to grow.
 - Alaska LNG is well positioned.
- **Competitive:**
 - Alaska can deliver LNG at a competitive price.
 - Alaska LNG will provide predictable, long-term security.
 - Project phasing reduces risk and exposure.
- **Achievable:**
 - Pre-FEED engineering completed.
 - FERC regulatory approval scheduled for March 2020.
 - First cargo in 2024/2025.





The stars are aligned, seize the opportunity.



Big project. Achievable. Alaskans have done it before.

Get Involved.
Get Ready.
Get Engaged.



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