

Anchorage Community Meeting

The Stars are Aligned for Alaska LNG
May 9, 2018



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 History

2013

May: House Bill 4 enacted to establish AGDC.

**2018:
9 signed
LOIs**

2014

January 15:
Heads of Agreement (HOA)
with ExxonMobil, BP,
ConocoPhillips, and
TransCanada Corp.

March 18:
SB 138 passed, which sets
up commercial framework
for the Alaska LNG Project.

October 30:
AGDC Board, "We are not here
to study another pipeline
project. We are here to build
a pipeline."

2017

June 28:
Korea Gas
Corporation –
Memorandum of
Understanding
(MOU).

November 9:
Bank of China,
Sinopec, CIC Capital
– Joint Development
Agreement (JDA).

November 12:
PetroVietnam
Gas - MOU.

December 4:
Tokyo Gas –
Letter of Intent
(LOI).

2018

March 27:
Bank of China, Goldman Sachs
& Co. are global capital
coordinators.

May 7:
BP and AGDC reach
agreement on the primary
terms of a gas sales contract.

2018 AGDC Board,
"We are not here to study
another pipeline project. We
are here to build a pipeline."

Board Members

2014:



John Burns, Chairman



Al Bolea, Director



Susan Bell, Commissioner of Commerce, Community and Economic Development



Diane Blumer, Commissioner of Labor and Workforce Development



Dave Cruz, Director



Drue Pearce, Director



Richard Rabinow, Director

**“We are not here
to study another
pipeline project.
We are here to build
a pipeline.”**

Interim:
Luke Hopkins
Rick Halford
Chris Hladick

2018:



Dave Cruz
Chairman



Hugh S. Short
Vice-Chairman



Joey Merrick
Secretary/Treasurer



Marc Luiken



Heidi Drygas



Warren Christian



David Wight

Alaska LNG Project Overview

Gas Treatment Plant:

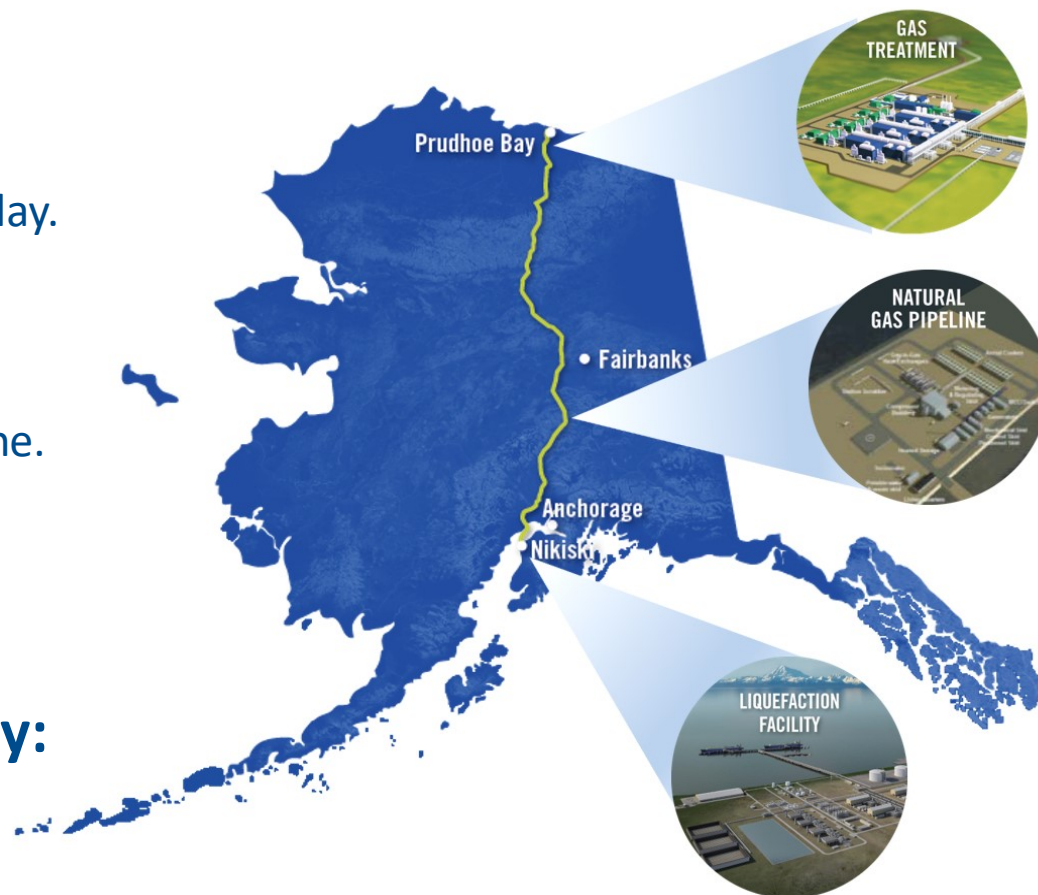
- Treat and compress 3.5 billion cubic feet (Bcf)/day.
- Remove all CO₂.

Pipeline:

- 807-mile (1,299 km) pipeline.
- 42-inch pipe.
- Established corridor.
- Delivers over 3.3 Bcf/d.

LNG Production Facility:

- 20 million tonnes per annum (MTPA).
- Two berths, capable of 217,000 m³ vessels.



First gas 2024 – 2025.

ALASKA'S GAS IS PROVEN AND CONVENTIONAL.

➤ 35 Tcf of proven and conventional gas resource.

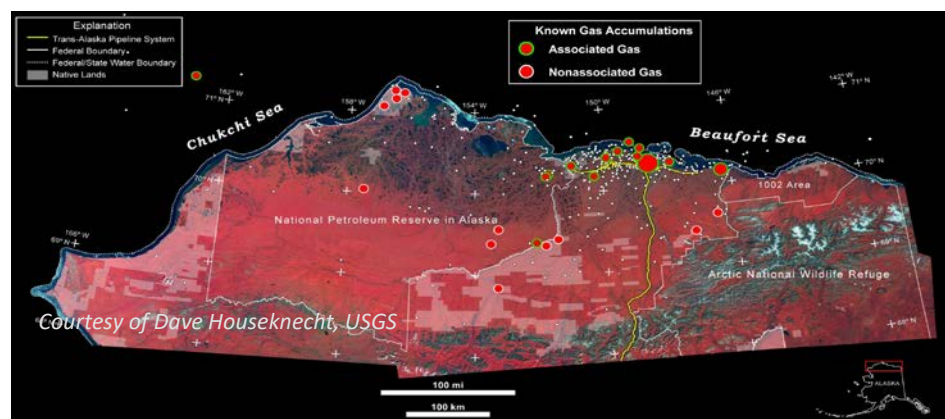
➤ 100+ Tcf potential gas resource.

➤ Reliable oil & gas production for the 40 years.

➤ Alaska's gas is a stranded resource
we want to bring to the world market.



Alaska's North Slope is a hydrocarbon-rich, largely unexplored area. At 245,000 km², it is larger than most U.S. states.



ALASKA'S ECONOMIC TIES ARE WITH ASIA.

➤ Alaska is Asia's closest
and most direct source
of U.S. LNG.

➤ 7 to 9 days shipping.

➤ Direct route; no third
nation or canal.

Alaska's political ties are with the United States, but our economic ties are with Asia. - The Hon. Walter J. Hickel

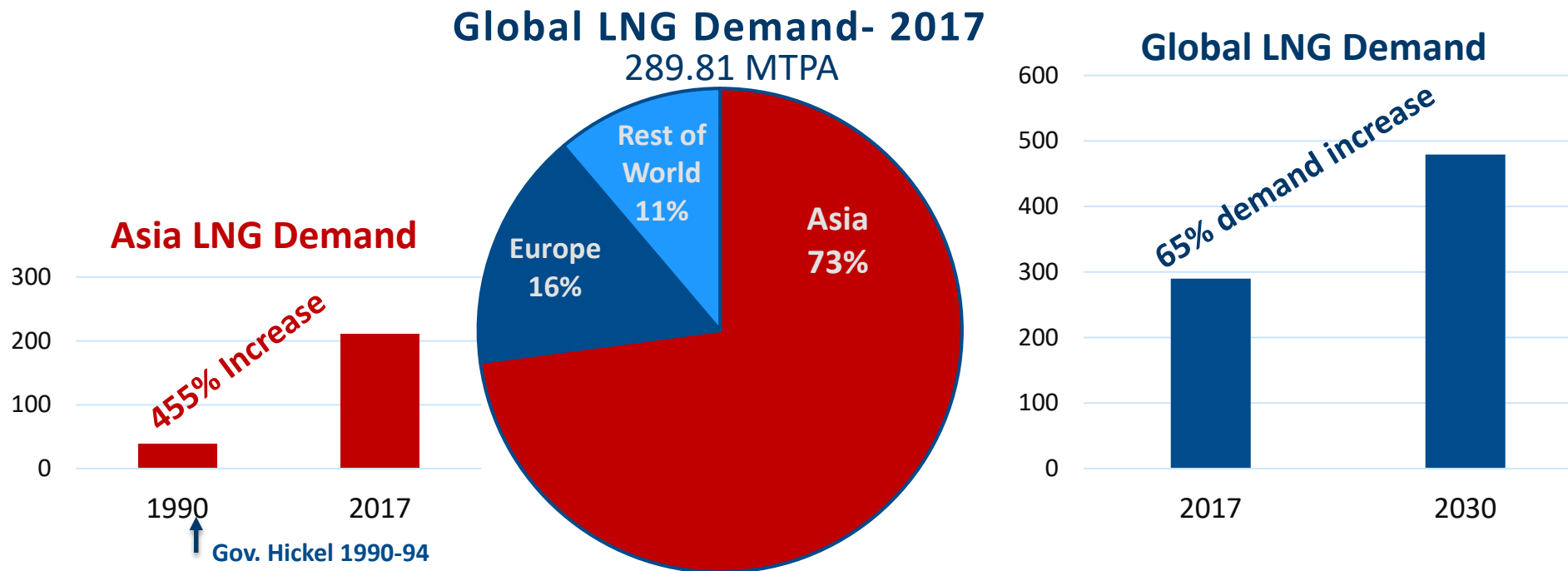


LNG is a Growth Industry

➡ LNG is a growth industry (\$250 Billion annual by 2030).

➡ Asia is the biggest LNG market.

➡ Asia is Alaska's regional market.



Back in 2016, we said:

As part of the effort to improve the project's competitiveness, the Parties (AGDC, BP, Conoco, Exxon) are **working collaboratively to transition the project to State leadership.**

The parties are also **pursuing alternative commercial structures** that have been successfully used in global LNG projects to reduce the cost of supply of the project.

The goal is to have a seamless continuation of the project, maintain project momentum, and reduce the cost of supply.



ALASKA MOVING FORWARD

2017 - Alaska Takes Project Lead

AGDC'S IMMEDIATE FOCUS IS ASIA.



➡ Build awareness

➡ Correct misperceptions.

➡ Engage customers.



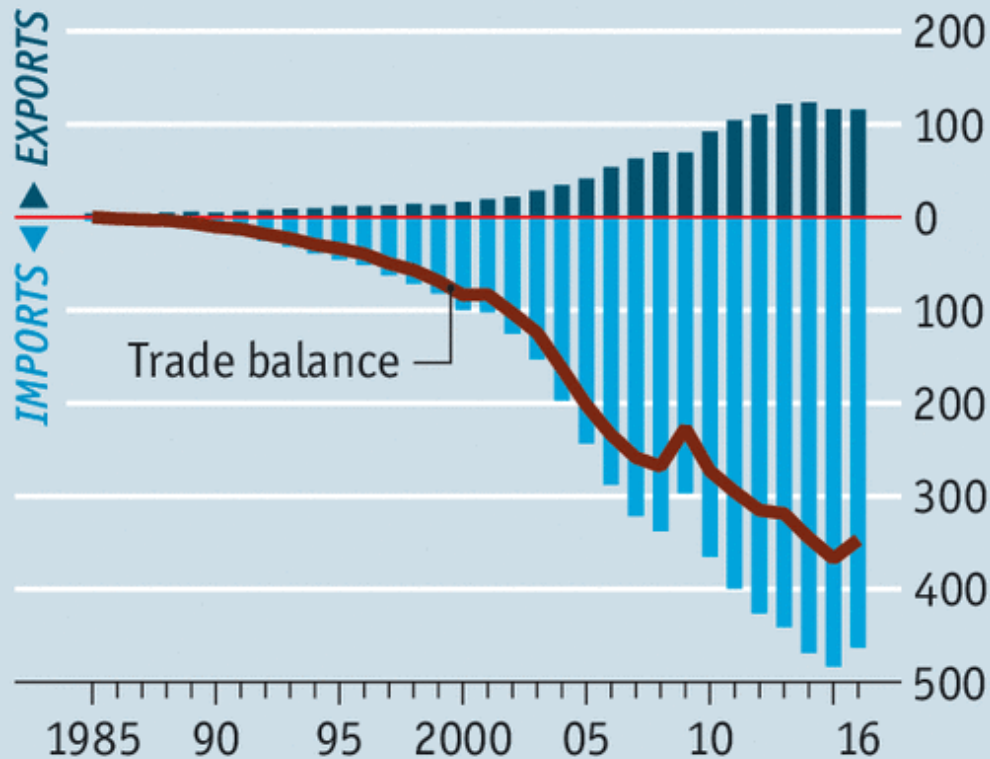
Stars Aligned



U.S. Focus on Trade and Energy

It's yuuge

United States goods trade with China, \$bn



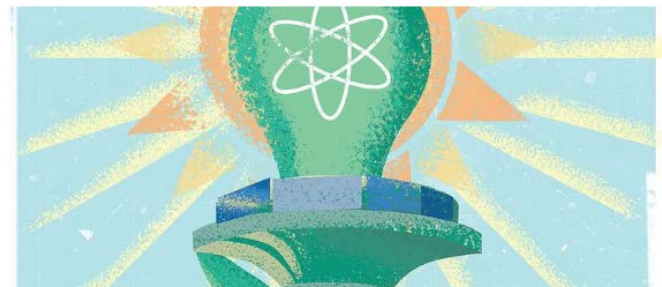
Source: Census Bureau

China needs to buy more from U.S.



Paving the path to U.S. energy dominance

"Energy Week" highlights the role of American resources in securing prosperity



"If you look at our trade balance, there's one geographic source of our imbalance and that's most importantly China."

- Commerce Secretary Wilbur Ross



"The only path for energy dominance is a path through the great state of Alaska."

- Interior Secretary Ryan Zinke



America's Project

Large infrastructure.

Large construction.

Resource development.

Energy export.



AMERICA'S LARGEST ENERGY EXPORT PROJECT

TRANSFORMING ALASKA GAS INTO JOBS AND EXPORTS TO THE ASIA-PACIFIC REGION

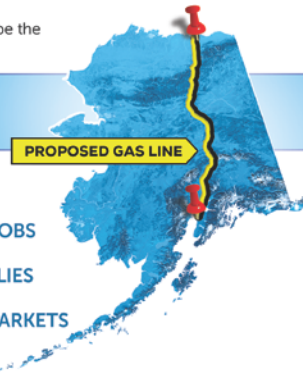
Alaska holds America's largest concentration of proven, conventional, but stranded gas supply. Through the development of an 800-mile pipeline and LNG facility, Alaska can supply domestic projects and can provide a stable source of gas supply to our allies in the Asia-Pacific region. With expedited regulatory approval the project can finalize commercialization and begin construction.

This LNG project will create 10,000 direct jobs and up to 70,000 total jobs without burdening the taxpayers, increase our national energy production capacity, and strengthen commercial ties with our allies.

Alaska gave birth to the US-Japan LNG trade and now seeks to be the strategic supplier to the region.

ALASKA MOVING FORWARD

- NEW ENERGY INFRASTRUCTURE
- 70,000 NEW CONSTRUCTION & RELATED JOBS
- STRENGTHENS ENERGY TIES WITH OUR ALLIES
- IMPROVES TRADE BALANCE WITH ASIAN MARKETS



Alaska LNG will be pivotal and profitable for America.

China Demand for Natural Gas

MEANWHILE, ENVIRONMENT
IS A PRIORITY FOR CHINA.



OCTOBER 25, 2017

China leads the growth in projected global natural gas consumption

Natural gas consumption in selected regions, IE02017 Reference case (2015-40)
billion cubic feet per day



CONSENSUS REACHED THAT LNG IS
AN AREA OF COOPERATIVE TRADE.



Trump-Xi Deal Could Fuel A U.S. LNG Boom

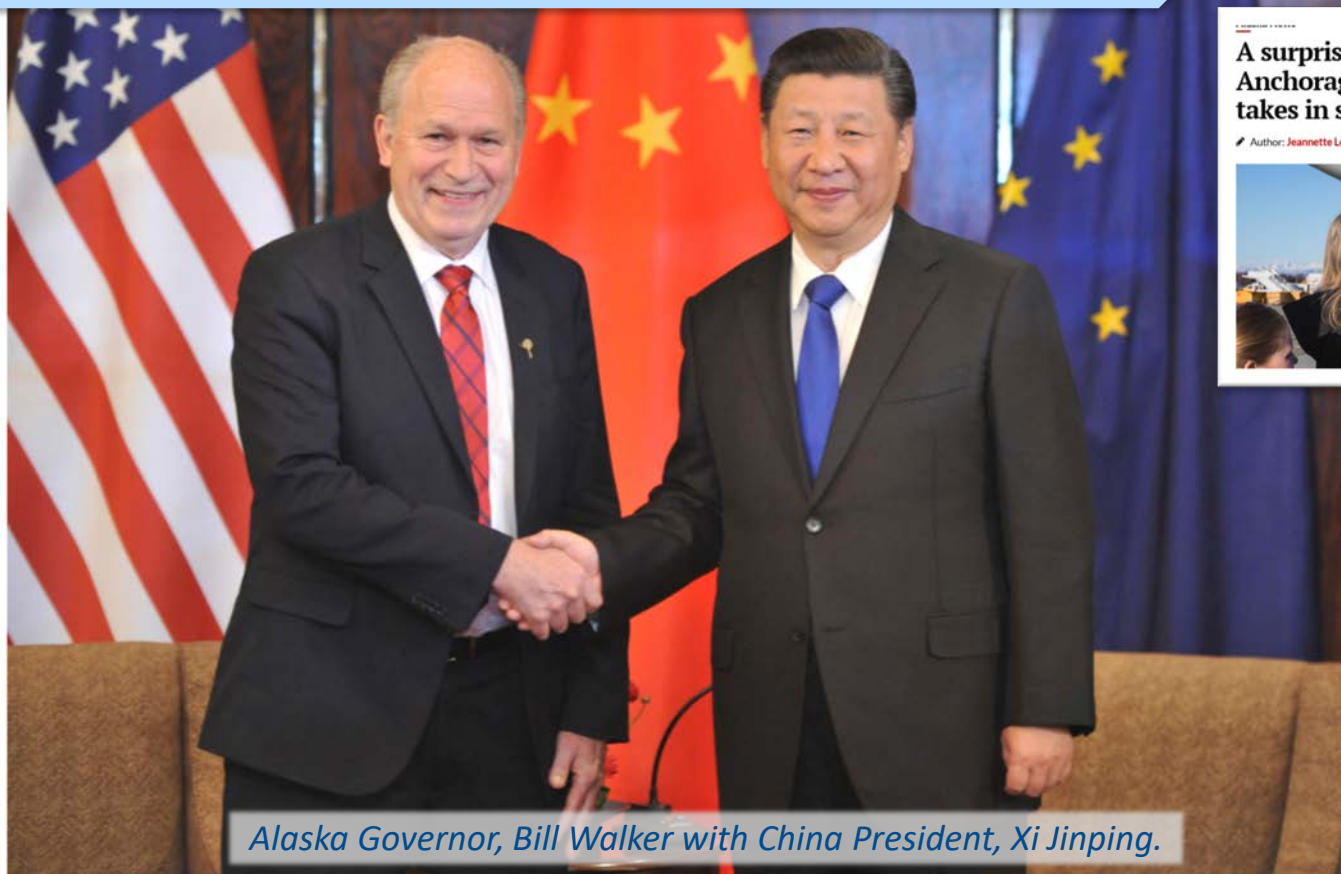
By Irina Slay - May 16, 2017, 4:00 PM CDT



U.S. President, Donald Trump with China President, Xi Jinping.

Alaska and China Establish Ties

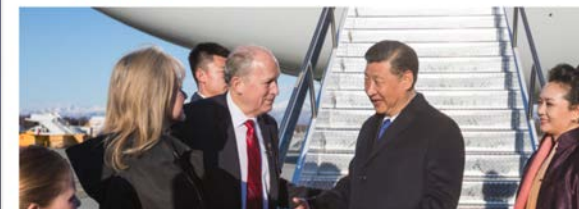
CONSENSUS REACHED THAT LNG IS
AN AREA OF COOPERATIVE TRADE.



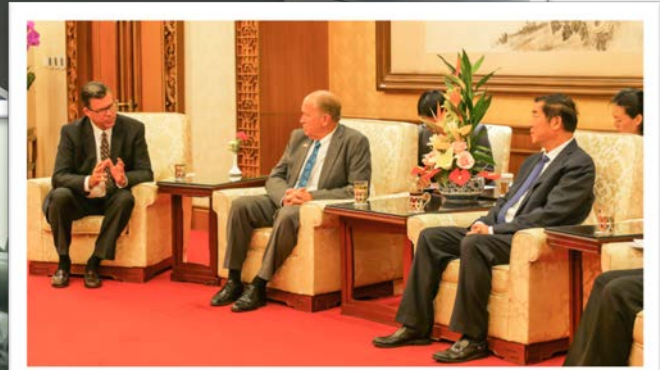
Alaska Governor, Bill Walker with China President, Xi Jinping.

A surprise guest: Chinese president makes Anchorage stopover, meets Gov. Walker and takes in some sights

Author: Jeannette Lee Falsey Updated: April 8 Published April 7



Trips, Meetings, Presentations



U.S. Trade Mission to China



Alaska Governor, Bill Walker with U.S. Secretary, Wilbur Ross and AGDC President, Keith Meyer.

Joint Development Agreement



THE RIGHT COMPANIES
TO ADVANCE THE PROJECT.



PetroVietnam Gas

➤ Wholly owned by nation of Vietnam.

➤ Responsible for all oil and gas resources.

➤ Developing two LNG receiving terminals in Vietnam.



AGDC and PetroVietnam gas sign Memorandum of Understanding (MOU) in front of U.S. President, Donald Trump and Vietnam President, Trần Đại Quang on November 10, 2017.

KOGAS IS THE WORLD'S LARGEST SINGLE COMPANY BUYER OF LNG IN THE WORLD

MOU sets framework for cooperation in several areas of Alaska LNG, including: Korean investment and KOGAS cooperation on EPC of project components and operation.



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



*KOGAS technical team inspects Nikiski LNG site;
November 6, 2017.*

➡ AGDC has signed agreements with:

- Japan – Tokyo Gas Co., Ltd.
- South Korea – Korea Gas Corporation (KOGAS).
- Others

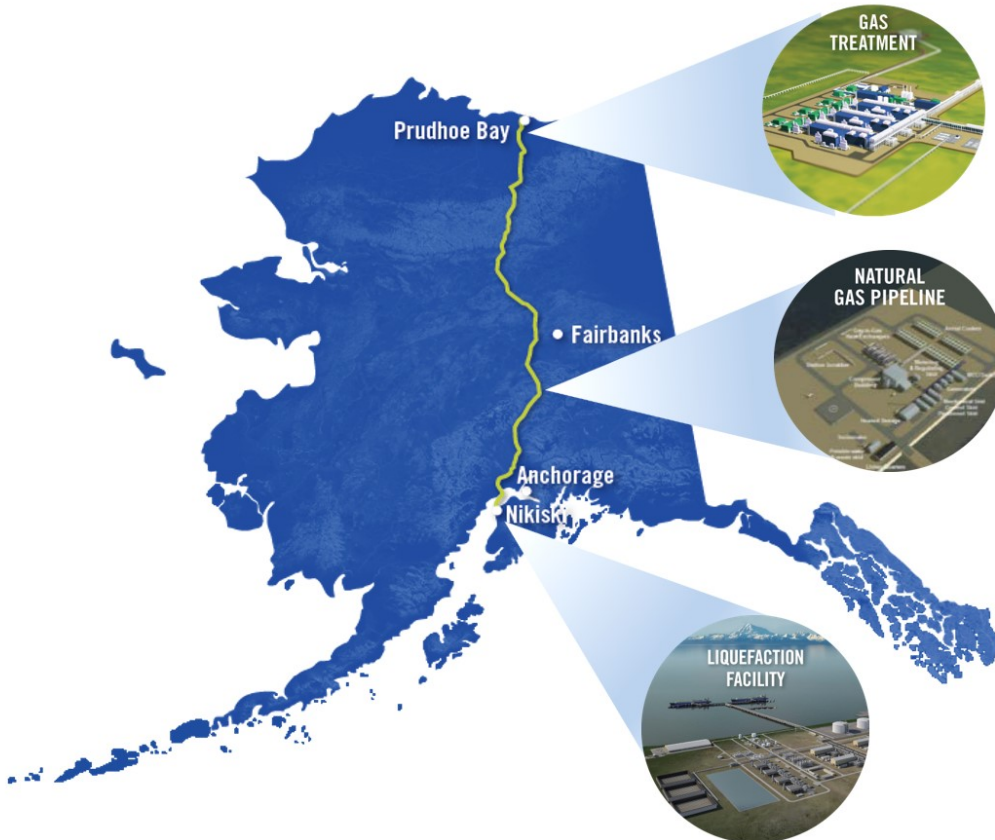


AGDC and Tokyo Gas Co., Ltd. sign LOI
in Tokyo, Japan; December 4, 2017.

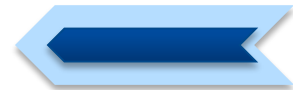


AGDC and KOGAS sign MOU
in Washington, D.C.; June 28, 2017.

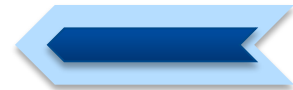
PREPARING FOR A MAJOR PROJECT



Trade Impacts.



Construction.



Jobs.



Environment.

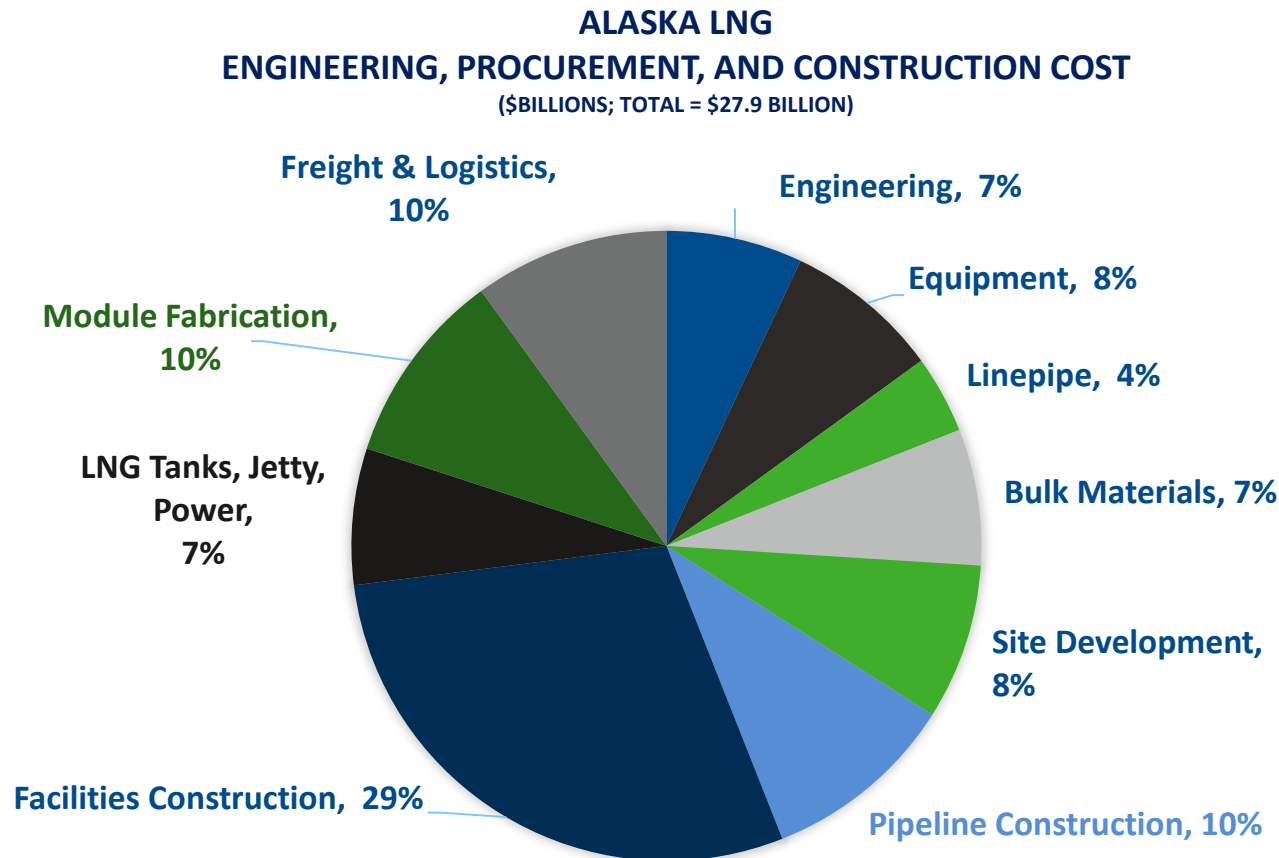


Resources.

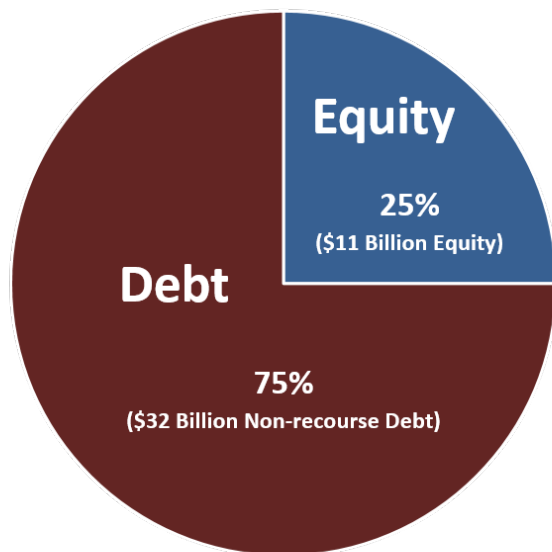


Engineering, Procurement, & Construction Cost

➡ The \$27.9 Billion construction estimate is divided into various components and categories.

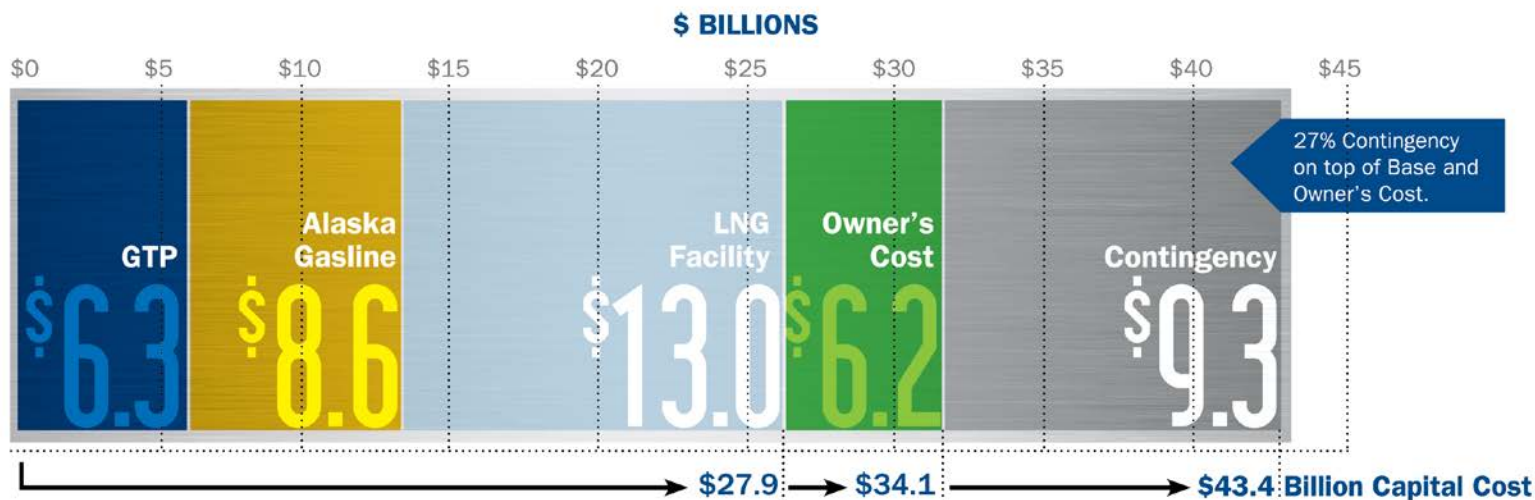


Alaska LNG Capital Structure

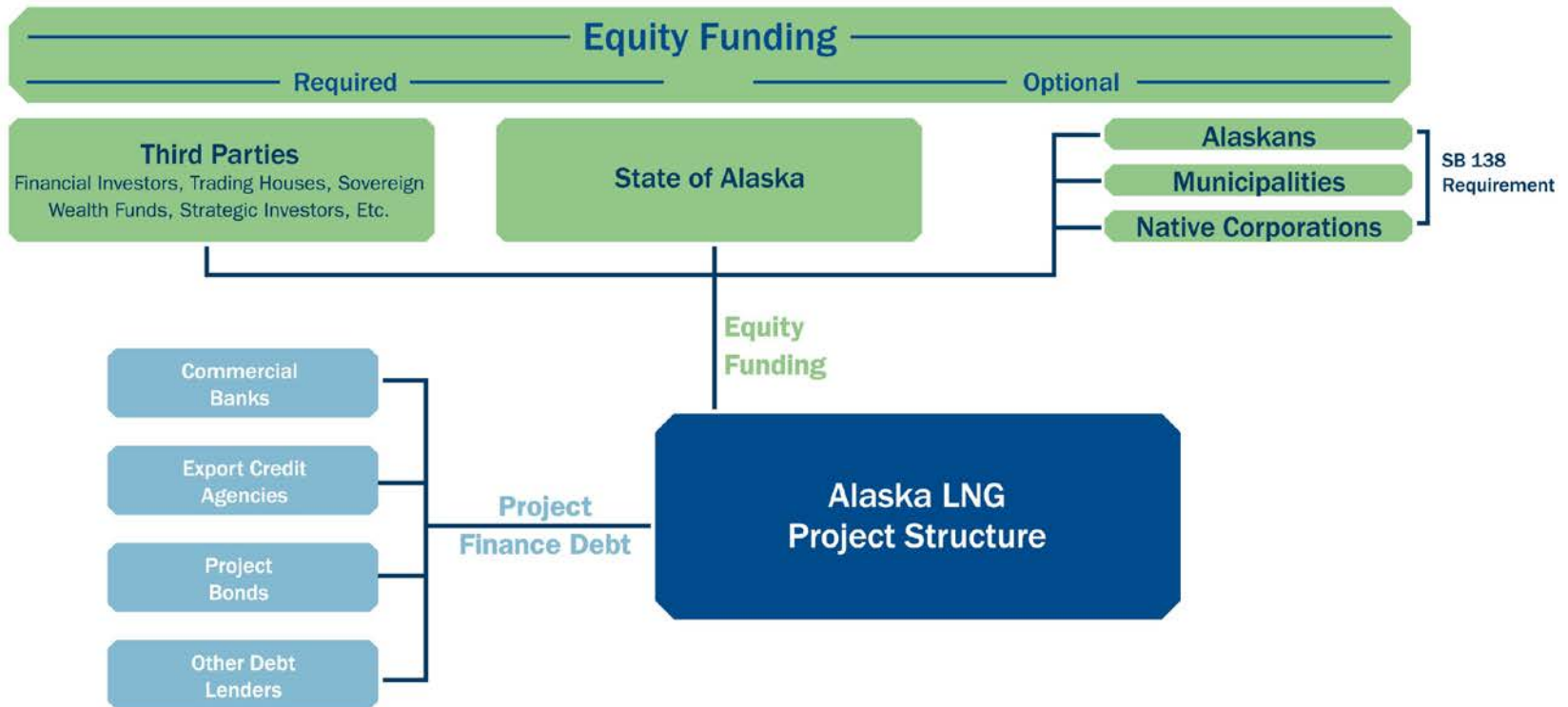


\$Billions

- \$27.9 Construction Cost,
- \$ 6.2 Owner's Costs,
- \$ 9.3 Contingency.
- \$43.4 Potential Total



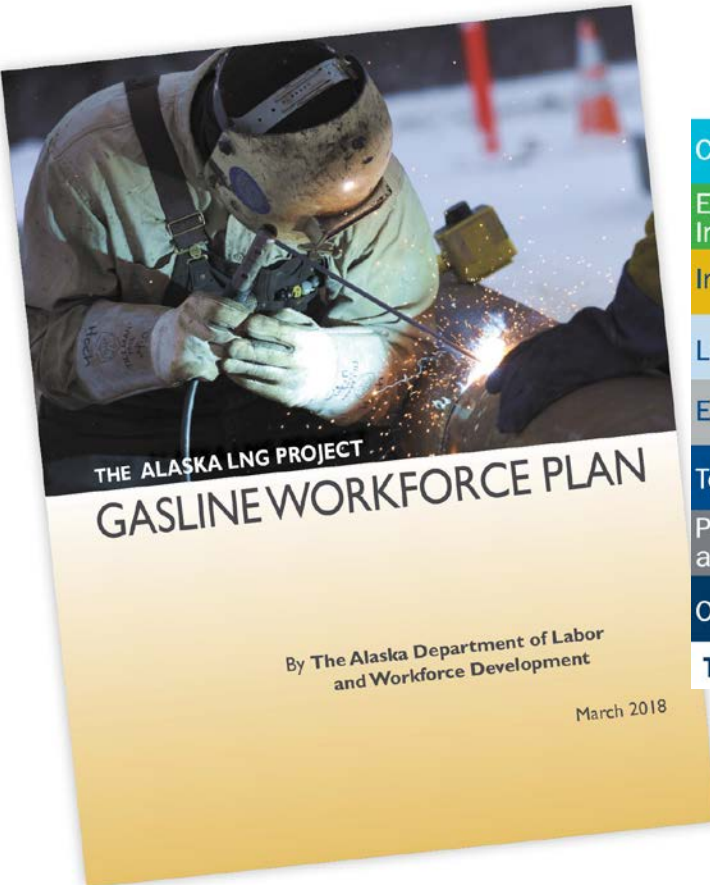
Finance: Financing Structure



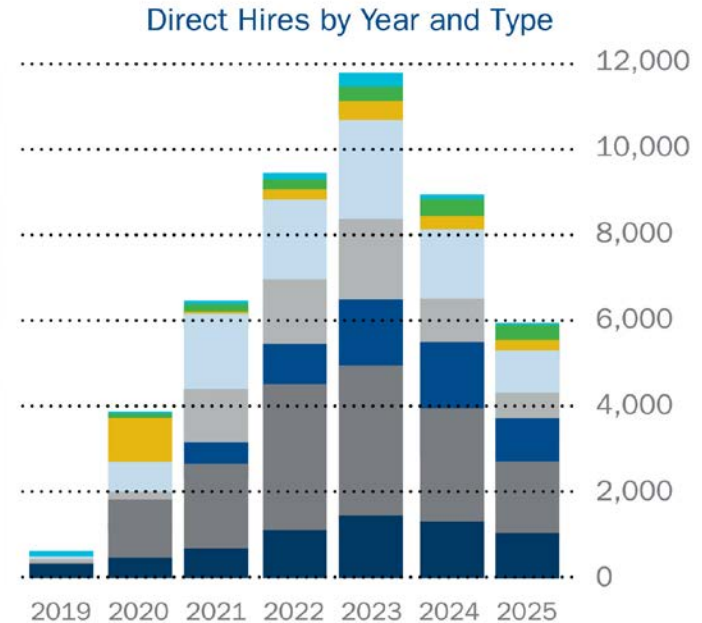
➡ **Senate Bill 138:** Municipalities, Alaska Native Corporations, and Alaska residents should have the opportunity to acquire ownership interest in North Slope natural gas pipeline projects.

Benefits to Alaskans: Jobs

**Employment Boom 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.

The Alaska LNG Project: Pipeline

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

Gas for Alaskans

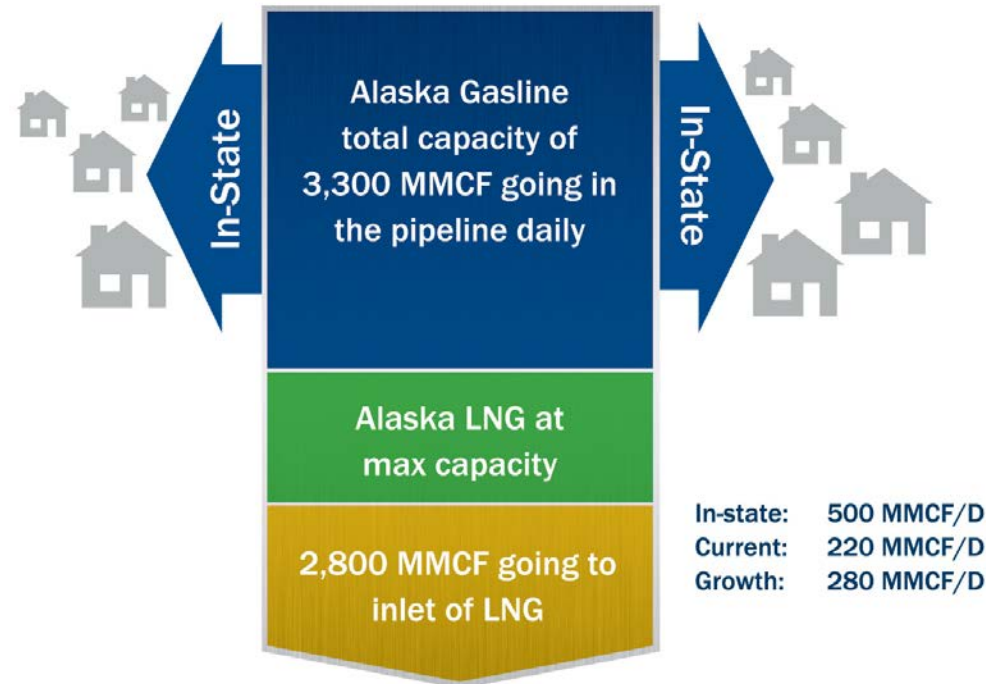
Anticipated Price:

\$5-6 PER MMBTU

Stable Prices.

Energy for all of Alaska:

- Offtakes to communities and projects along the Alaska Gasline.
- No risk of Alaskans' gas going to Asia.



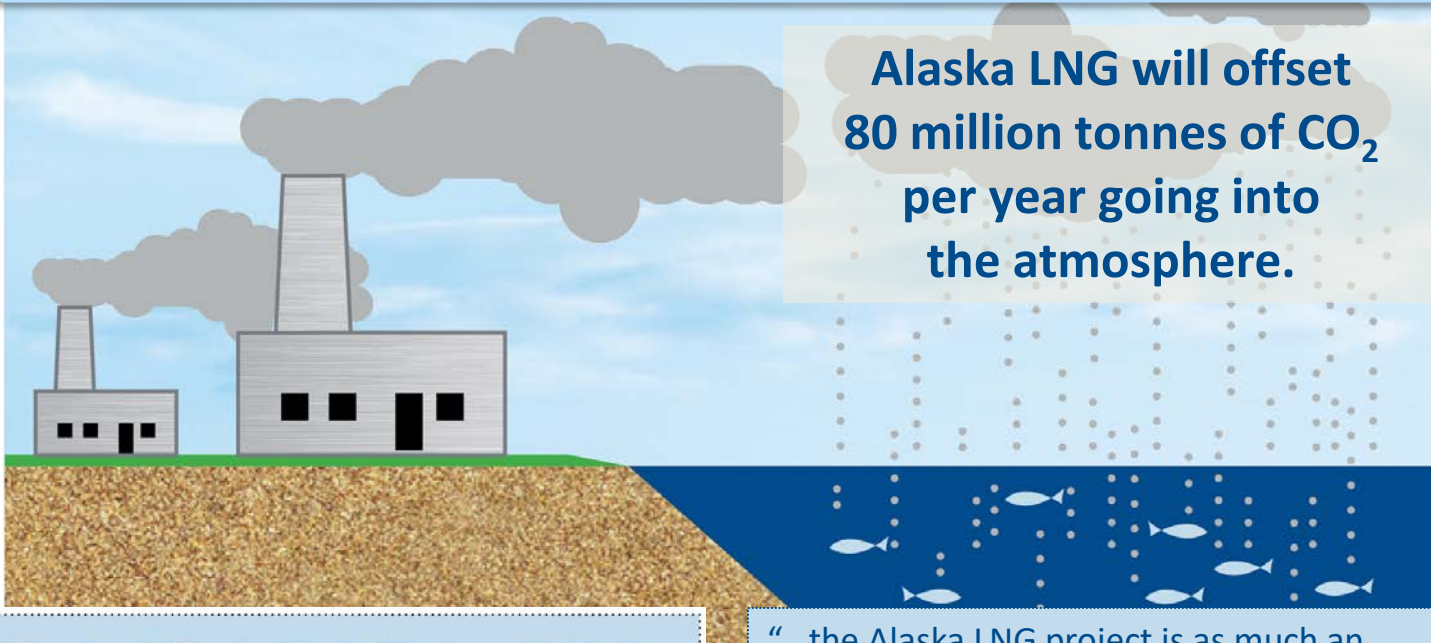
20%

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:
Economical
energy for all
of Alaska.

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

"...the Alaska LNG project is as much an environmental project as it is an energy project" based on the positive impact it will have on the global environment.

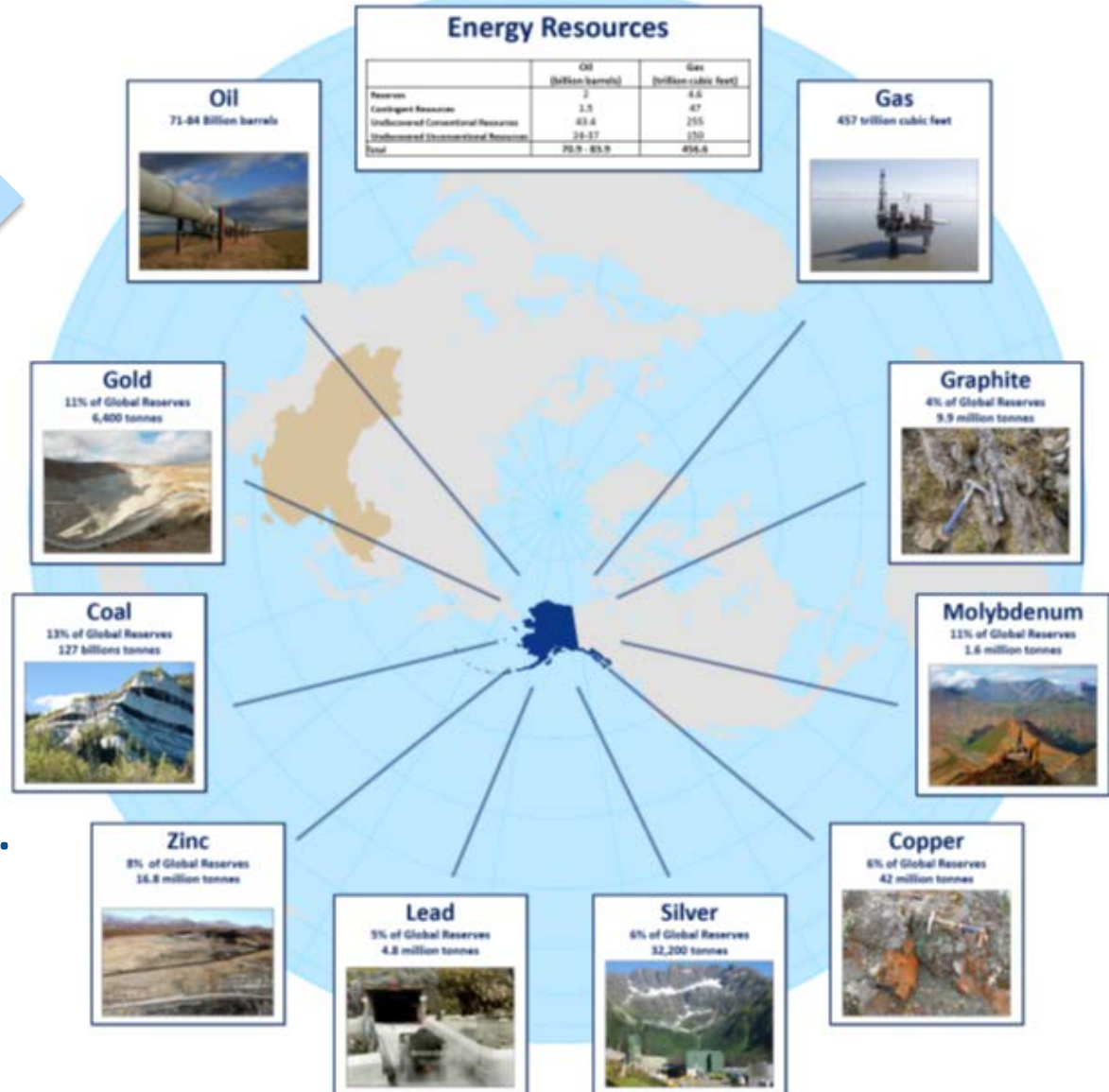
Dr. Jiang

Energy Expert, Alaska Legislature

Broader Benefits: Resources

\$AK Billions in resource projects can be advanced with stable fuel prices.

- ➡ Alaska is a resource development state.
- ➡ 4 trillion tons of high quality coal.
- ➡ World-scale lead/zinc and graphite deposits.
- ➡ World-scale gold and copper mines.



National Benefits: Resources

MAJOR POTENTIAL IMPACT TO U.S. - ASIA TRADE IMBALANCE

➤ Major resource base in many commodities.

➤ Gas, oil, and coal for energy buyers.

➤ Mining projects, enabled by
Alaska LNG will further enhance trade.



ALASKA CAN BE THE
RESOURCE EXPORT
POWERHOUSE FOR
THE UNITED STATES

- **The Federal Energy Regulatory Commission (FERC):**
 - Lead federal agency for the Alaska LNG project.
 - 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	\$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

Permitting: Regulatory Process - Timeline

- **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.



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.
 - 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.
 - Submitted near final cultural and wetland mitigation plans.
 - Draft Programmatic Agreement (PA) developed for Cultural Resources.

Reach for the Stars

Get Involved.

Get Ready.

Get Engaged.



The stars are aligned, seize the opportunity.

Questions?



www.agdc.us

agdc.us

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