### **Alaska LNG Project Update**

Frank T. Richards, P.E., AGDC President Presented to Alaska Sustainable Energy Conference May 26, 2022 ALASKA \*\* **GASLINE** \*\* DEVELOPMENT CORP.

# What is the Alaska LNG Project

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### North Slope Gas Supply

- 40 tcf of stranded, low-cost natural gas reserves
- Conventional and already developed gas

### **Gas Treatment Plant**

- Captures 7.7 million metric tons of CO<sub>2</sub> per year for permanent geologic storage or enhanced oil recovery
- Treats gas to 99% less CO<sub>2</sub> than typical pipeline quality gas

### **Natural Gas Pipeline**

- 807-mile pipeline from Prudhoe Bay to Nikiski, following TAPS and highway system
- Provides gas to communities and defense installations across Alaska

### Alaska LNG Facility

- 20 Mtpa LNG facility located in Nikiski, near existing infrastructure and legacy Kenai LNG plant
- The only permitted LNG facility on the US West Coast
- Critical for energy security in the Pacific Basin



# Alaska LNG Project Status



### **Fully Permitted**

- DOE export authorizations, FERC approvals and State of Alaska offtake approvals are all in place
- An advanced level of project design and engineering

### Low-Carbon LNG

7 - 9 Days

- Supplied by associated gas already producing and being re-injected
- Cook Inlet basin has excellent potential for CO<sub>2</sub> sequestration
- Potential to transition to net-zero GHG blue hydrogen production

**Prudhoe Bay** 

#### **Strong Economics**

- A Cost of Supply of \$6.50/MMBtu (verified by Wood Mac)
- Closest North American LNG project to Asia
- Vast, stranded gas resource with no commodity price linkage

**Climate Benefits of Alaska LNG Project** 

#### Alaska LNG is Low-Carbon LNG

- Over 99.9% of CO<sub>2</sub> is removed from the natural gas before it enters the pipeline
- 7.7 million tons of CO<sub>2</sub> per year removed at the Gas Treatment Plant
- Cold temperatures add to system efficiencies
- 78 million tons of CO<sub>2</sub> per year displaced in Asia





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Source: Greenhouse Gas Lifecycle Assessment: Alaska LNG Project 4

# Wood Mackenzie Cost of Supply



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# Alaska Hydrogen Opportunity



H Alaska Hydrogen Opportunity

50 years ago, the modern LNG industry was created in Alaska. For many of the same reasons, the clean hydrogen industry can also be created in Alaska.

Carbon Storage and Sequestration at the Project Site on Tidewater

Short Distance to Growing Clean Hydrogen Markets in Asia

Low-GHG Natural Gas from Conventional Supply Existing Ammonia Plant well Positioned to be First Mover in Market

# Alaska LNG Unlocks Clean Hydrogen



Source: West Coast Regional Carbon Sequestration Partnership

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## **Benefits of Alaska LNG to Alaskans**

### Decreased Energy Costs and Increased Energy Security



Source: EIA

#### **Gas Sales Revenue To Offset Oil Decline**



#### Jobs

• Almost 12,000 direct jobs at peak of construction

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- 1,000 long-term operations jobs
- Significant indirect jobs during construction and operations



#### Maintains the balance of power in the Arctic and Pacific Basins

- Russia is building its Power of Siberia 2 pipeline to divert Europe-bound gas to China ۲
- As the only permitted West Coast LNG export project in the US, Alaska LNG is uniquely ٠ positioned to meet the energy security needs of allies in Asia and maintain a balance of power

### Meets clean energy needs for national defense

- The Fairbanks North Star Borough is home to two major defense installations and is currently one of the five most air polluted communities in the US
- Defense installations rely on coal and diesel fuel, which can be replaced by natural gas ٠
- Alaska can meet US Navy requirements for LNG and hydrogen/ammonia in the Pacific ٠

### Positions Alaska to meet US and global energy transition needs

- The Alaska LNG project delivers abundant natural gas supplies to southcentral Alaska ۲ where it can be used to generate clean hydrogen, ammonia and synthetic fuels
- Anchorage International Airport is the 4<sup>th</sup> busiest air-cargo hub in the world the ۲ availability of hydrogen and synthetic fuels allows the US to decarbonize the Asia-US supply chain

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