Qilak LNG

ALASKA'S
ARCTIC LNG OPPORTUNITY

Presentation to Alaska Senate Resources Committee
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March 12th , 2025

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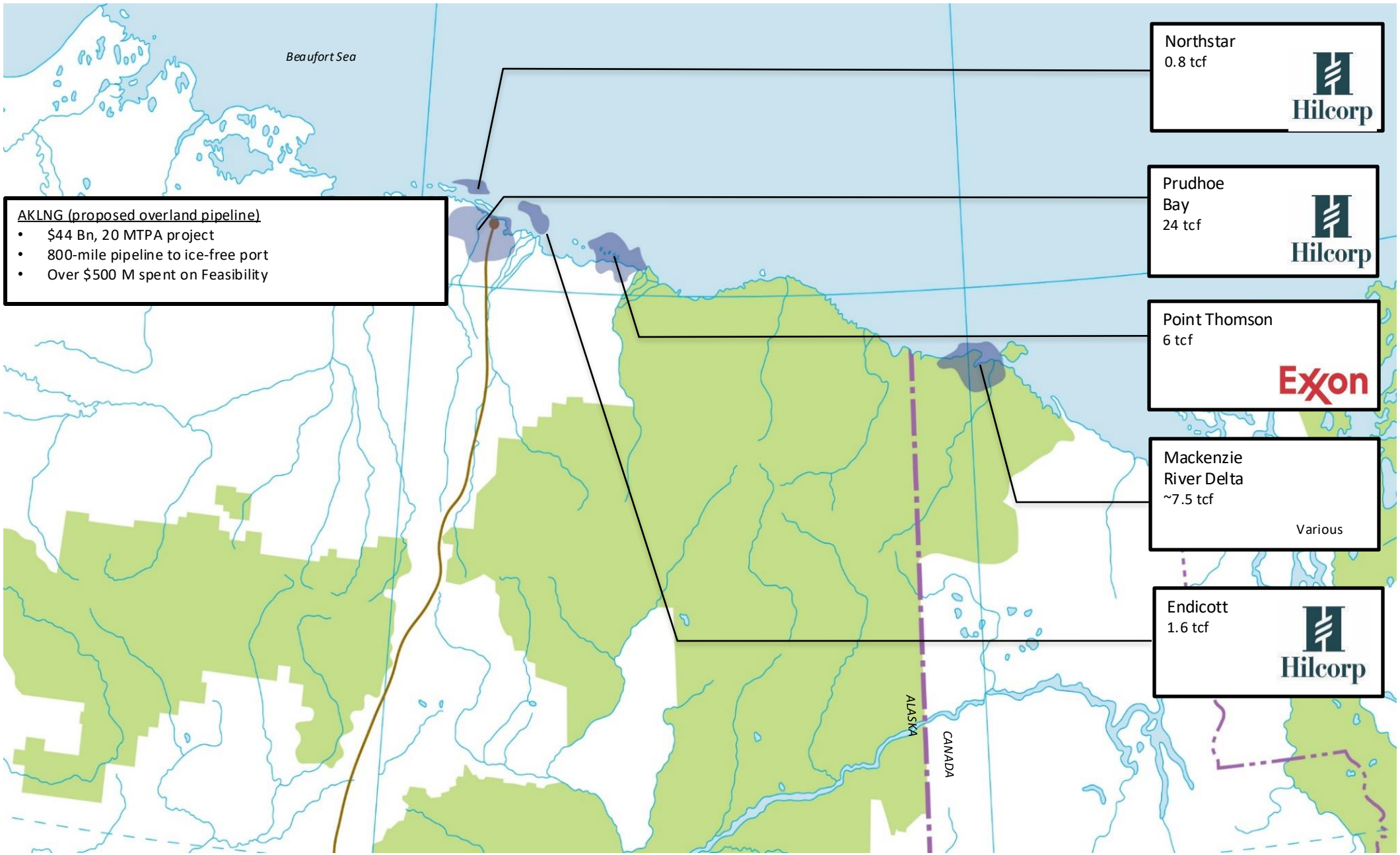
Today's Presentation

Qilak LNG

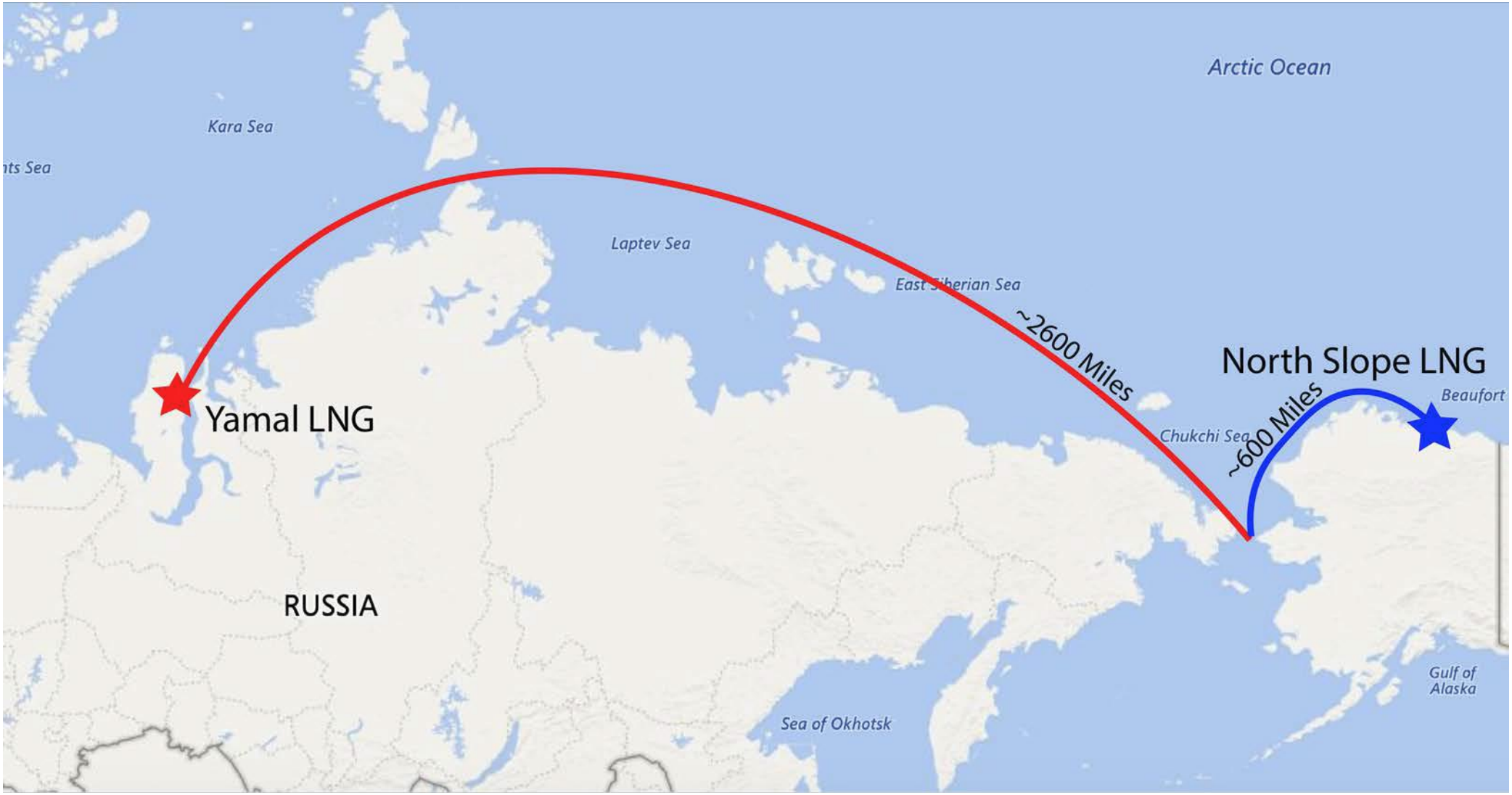
- **Project description and update**
- **What does Qilak LNG seek in the market?**
- **Proposed Asian Working Groups on Alaska LNG**
- **What can the State of Alaska do to help?**

Vast Alaska Gas Supplies Available to Alaska/Exports, but how?

Qilak LNG



Arctic LNG – A Proven Concept



- Yamal LNG is a 2,600-mile trip from Yamal to the Bering Strait (where sea ice dissipates), whereas Qilak LNG would be only 600 miles

Russia began shipping LNG through the Arctic, reliably, in 2017

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Russia's Yamal Project

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Yamal, Spring 2011

Google Earth

Image Landsat / Copernicus

4 mi

Yamal was a greenfield project in 2011. Alaska was focused on a pipeline through Canada at that time.

Russia's Yamal Project

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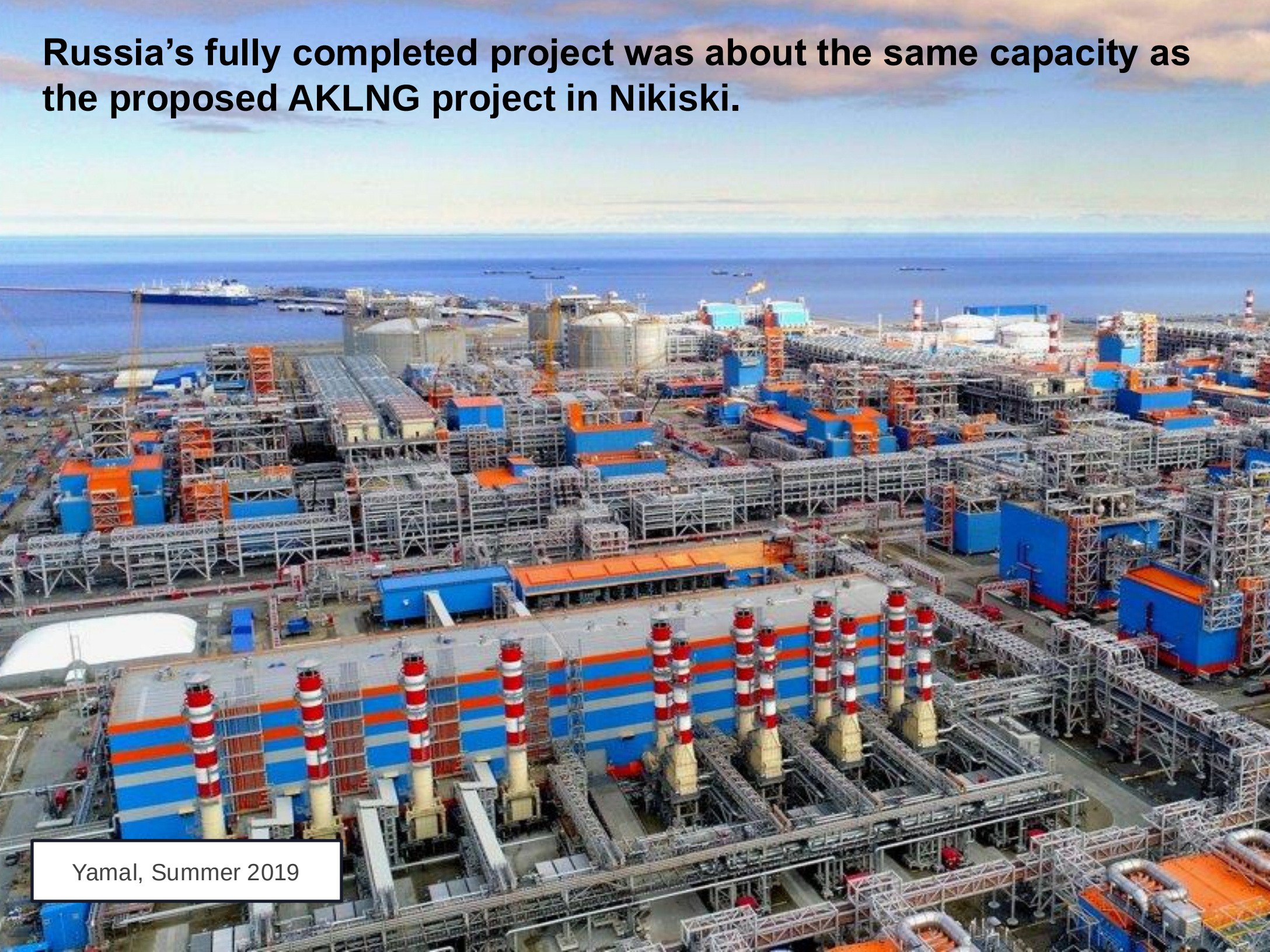
By 2016, Russia, using modules delivered from Asia via the Bering Strait, completed the Yamal project.

Russia's fully completed project was about the same capacity as the proposed AKLNG project in Nikiski.



Yamal, Summer 2019

Russia's plans for expansion of Yamal continue, using the same near-shore concept as Qilak LNG

Arctic LNG 2 Project status – stalled now with sanctions after Ukraine War

- Front-end engineering design (FEED) was completed in October 2018
- Final investment decision made in September 2019
- EPC-contract with TechnipFMC was signed
- More than 90% of equipment for the project contracted
- Russian government will cover 60% of the shipping terminal cost of $2.17 bn

Qilak LNG will use next generation icebreaking tankers, proven by Yamal

Rated to Arc7 (IACS Polar Class 3)

- **Icebreaking capacity (astern): 2.1 m**

Double-Acting Ship (DAS) concept

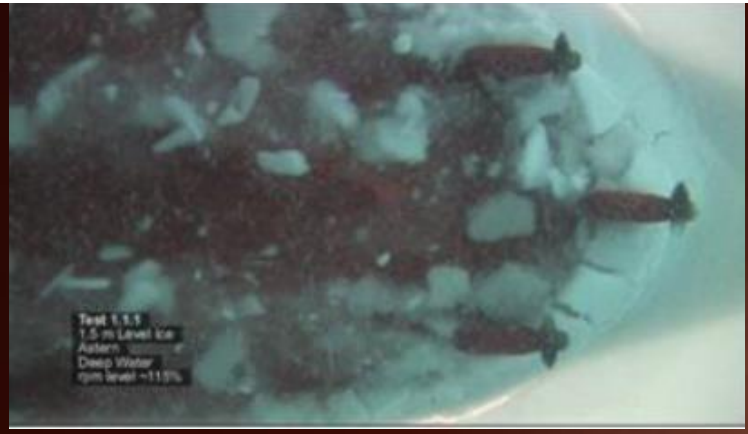
Example of globalization in the Arctic

- **Designed in Finland**
- **Built in South Korea**
- **Operating in Russia by international carriers**

15 built since the launch of the *Christophe de Margerie* in 2016

Yamal Mk I Dual Acting LNG Carrier Azipods

Qilak LNG



View taken from below the vessel in ice test tank

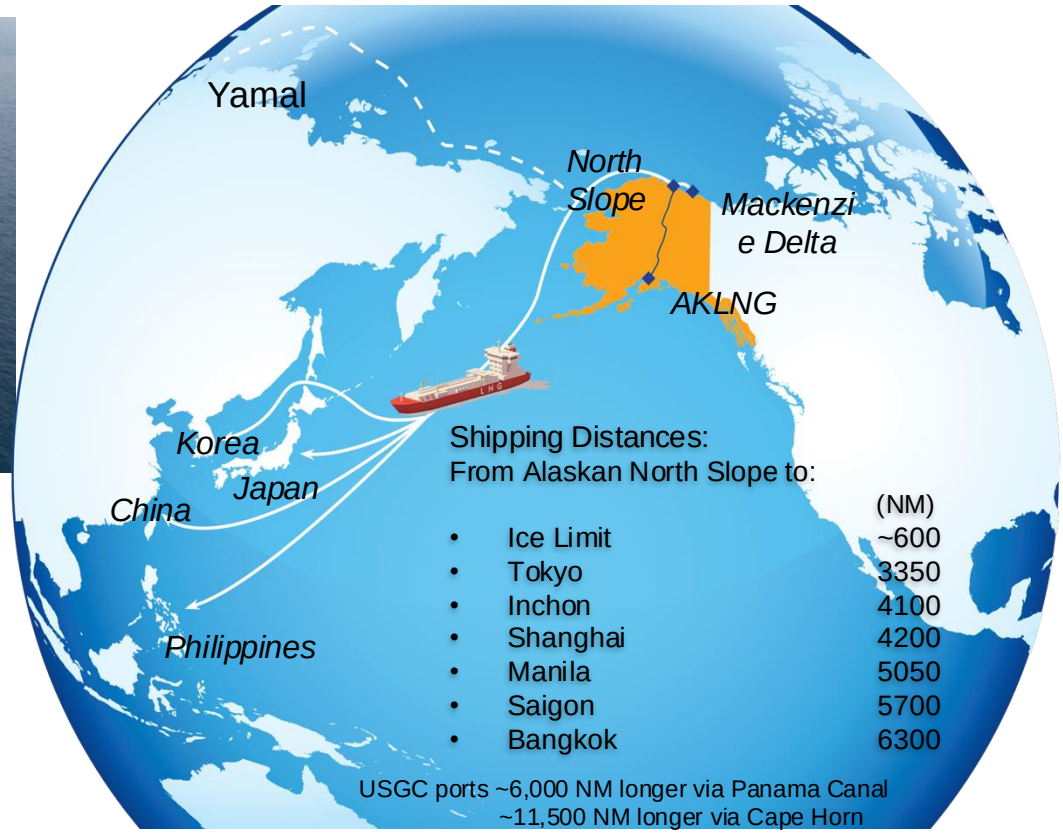
Ice breaking stern of LNG Carrier with three 15MW Azipods

LNG Shipping Solution for Arctic Waters


Vessel going bow first in open water


Vessel going astern in open water


Ice Management vessel



- Double Acting Technology (DAT) ice class LNG carriers have increased capability to traverse ice up to 2.1m thick
- The U.S. Coast Guard Polar Security Cutter (PSC) program has received multi-year funding commitments expected to complete 2 of 3 new heavy polar icebreakers for deployment coincident with Qilak.
- Air and water quality risks with an LNG project are far lower than previous oil exploration and production projects permitted in the region even during winter months
- Warming ocean temperatures have resulted in later ice formation and earlier breakup in the Beaufort, Chukchi and Bering Seas and also an increase in the proportion of annual ice which is easier to navigate through than multiyear ice. Southerly winds have left the Bering Sea with comparatively less ice in recent years

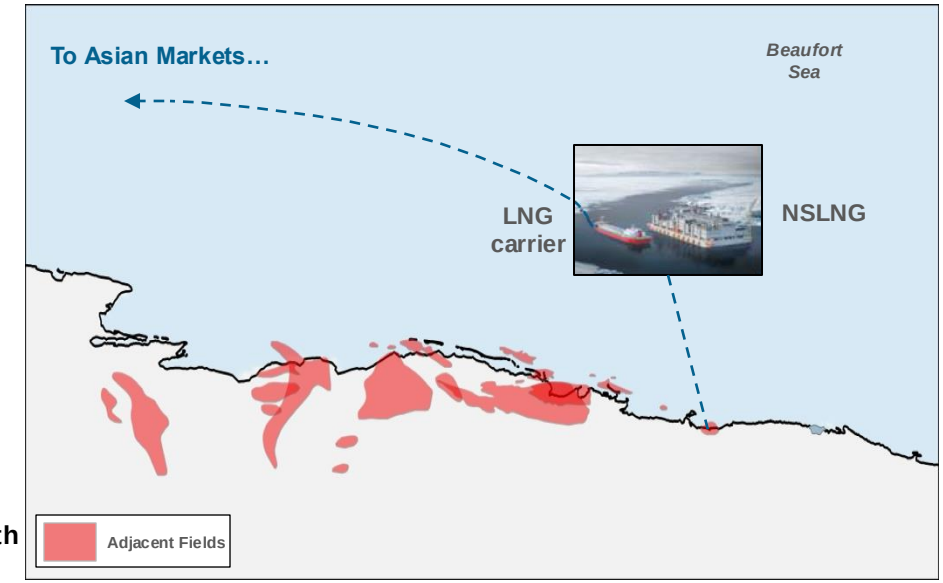
Prolific Natural Gas Resource Province

Substantial “trapped” natural gas resources in North Slope and Canada expected to provide decades of reliable feed gas

Resource Highlights

- **North Slope of Alaska is home to significant trapped natural gas resources**
  - Plans to expand to the Prudhoe Bay Unit field complex as volume commitments increase
- **In October 2019, Qilak LNG announced it had signed an HoA with ExxonMobil for the supply of gas for 20 years at Point Thomson, on the North Slope of Alaska, which has proven gas reserves of at least Tcf**
  - Developed conventional liquids-rich gas resource currently in cycling operation for the extraction of gas condensate
- **Total proved gas reserves on the North Slope of over 32 Tcf across gas fields owned by ExxonMobil, Hilcorp and ConocoPhillips in the Alaskan North Slope with probable gas reserves of 100 Tcf**
  - Preliminary discussions have begun on a gas supply from a neighboring field to support a second 4 Mtpa project
- **Qilak LNG has also begun discussions with the NWT government and producers on the Mackenzie River Delta, who completed a PFS for a similar concept.**
- **200 Tcf of estimated undiscovered gas resource in Arctic Alaska[1]**
- **Geopolitical support from Japan, Korea and other SEA countries**
  - US to strengthen its presence in Arctic to balance the initiatives from Russia and China;
  - Opening-up a large new gas province as reliable (US) source of gas for the future

Plans to Export LNG from Point Thomson



Qilak LNG executes HoA with ExxonMobil for the supply of Alaskan North Slope natural gas

ANCHORAGE – 23rd OCTOBER 2019

“The HOA foresees ExxonMobil providing at least 560 MMscfd of natural gas to Phase 1 of the Qilak LNG 1 Project, based on the design concept of offshore liquefaction and loading, and icebreaking LNG carriers, to export 4 Mtpa of LNG over 20 years […] The project seeks to capitalize on recent developments in Arctic LNG technology allowing natural gas to be directly exported from the North Slope of Alaska. This concept would significantly reduce the capital cost compared to projects that require a long-distance pipeline and a large minimum LNG order.”

Source: Company Materials.

1 According to 2012 USGS Arctic oil and gas resource assessment and the Alaska DNR.

Exporting LNG from Alaska's North Slope

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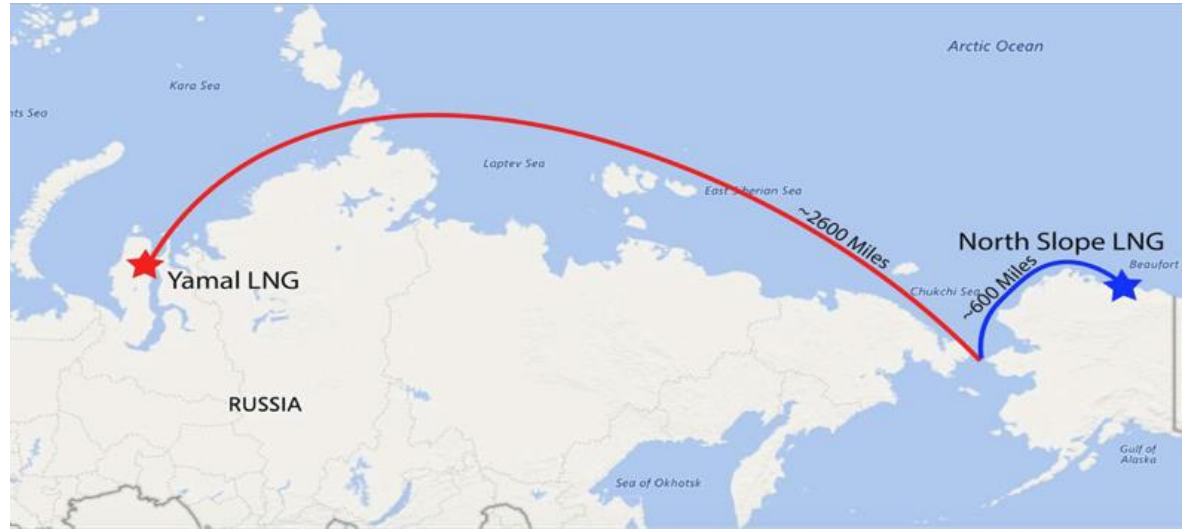
Reduced shipping cost to Asia vs Yamal

- **Yamal LNG is a 2,600-mile trip to the Bering Strait, whereas Qilak LNG will be only 600 miles**



Round Trip + 6 Port Days

- **Asia in Summer: 22 days**
- **Asia in Winter: 25 days**

Near Shore LNG Facility (NSLNG)

- **Built under controlled conditions in a shipyard (can be pre-commissioned)**
- **Floated to site and ballasted down on seabed (displacement 270,000t)**
- **Storage in hull, LNG plant on topsides, dock for unloading**
- **Dimensions: 340m x 80m x 33.5m**

Qilak LNG Investment Highlights

Qilak LNG

ExxonMobil is a Reliable Supplier that will Provide Treated (Liquefaction Spec Gas Supply) Gas; and is an Experienced Upstream Operator Globally and in the Arctic

4 Mtpa
Export Capacity of Qilak LNG 1 Terminal

Management Team with Deep Experience and Strong Political Support in Alaska, East Asia and Washington, D.C.

560 MMcfd
Minimum feedgas supply in ExxonMobil HoA

Cost-Advantaged LNG Solution with Significant Savings vs. USGC, Western Canada, East Africa and AUS/PNG - Target LNG Quality ~1,060 BTU/scf, Suitable for All Key Far East Markets Including Japan, Korea and China

20 Years
Duration of feedgas HoA with ExxonMobil

Investment Highlights At a Glance

Opportunity to Open a New Leading Global Gas Province to LNG Development Beginning with Developed Resource at Point Thomson (Potential of 20+ Mtpa in a Rising Market)

$1,000 - $1,250
Expected capex per ton of liquefaction capacity[1]

Buyer Interest in Core Asian Markets to Downstream Projects (~13 Mtpa). MOUs in Place with China, Japan, Philippines, and Thailand

<$6 / MMBtu
Expected delivered cost to East Asia

Proven, Cutting-Edge Technology Solution to Mitigate Arctic Challenges and Risks

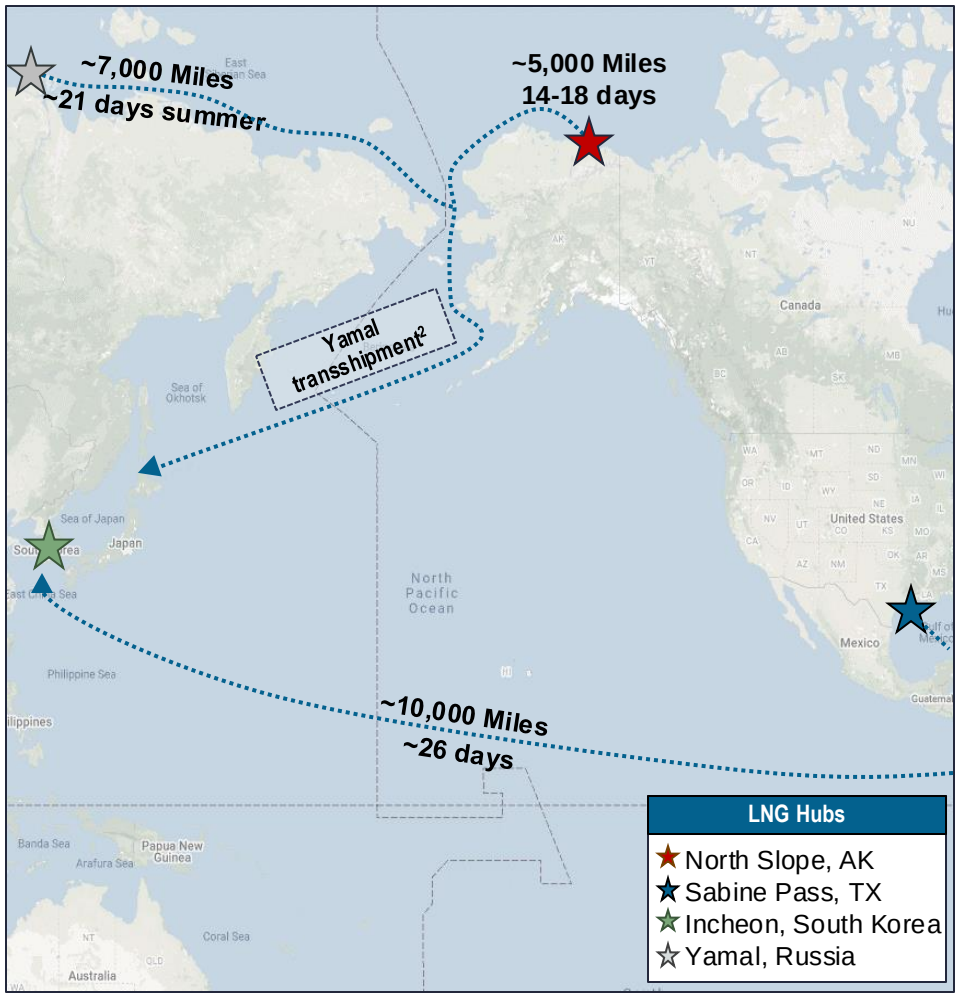
14 Days
Shipping days to premier East Asian offtakers

Source: *Company materials.*
1 Capex per ton dependent on volume and results of feasibility study.

Asia's Closest U.S. Source of Natural Gas Offered by Qilak LNG

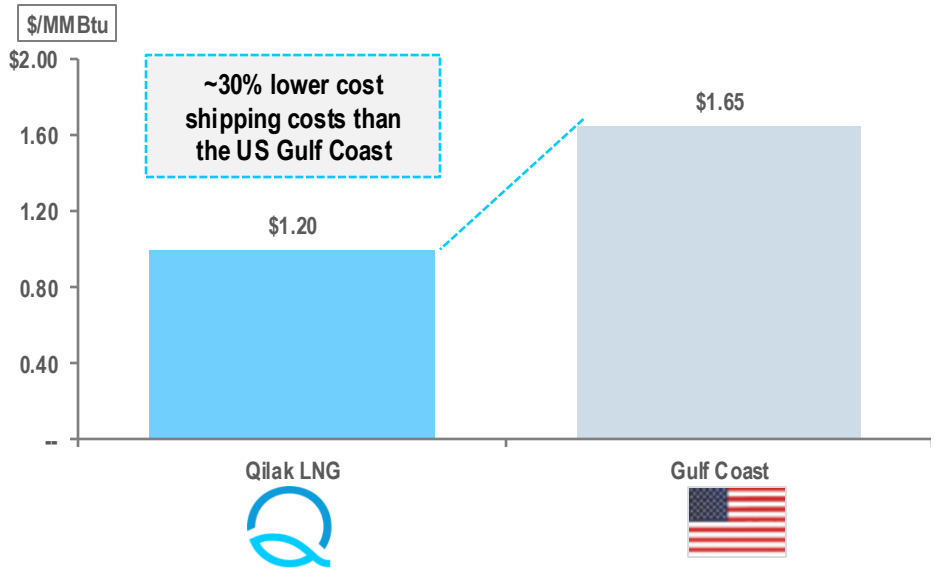
Lower upstream costs from a prolific conventional source and proximity to Asian demand provide a differentiating LNG proposition

Qilak LNG is ~2,000 Miles Closer to Market than Yamal LNG[1]



Qilak LNG Shipping Costs Superior to USGC LNG

- **50% shorter route to Asian markets**
- **Avoids the Panama Canal fees and bottlenecks**
- **Long Term geopolitical benefits for Korea, Japan, Philippines from circumventing passage through potentially conflicted South China Sea**
- **Fewer vessels required due to shorter distance**
  - ~5,000 miles from Qilak LNG to Asia
  - ~10,000 miles from USGC to Asia
- **Capability to ship year-round has been demonstrated by performance data from Yamal LNG and shipping simulations**



Source: Company materials and Wood Mackenzie.

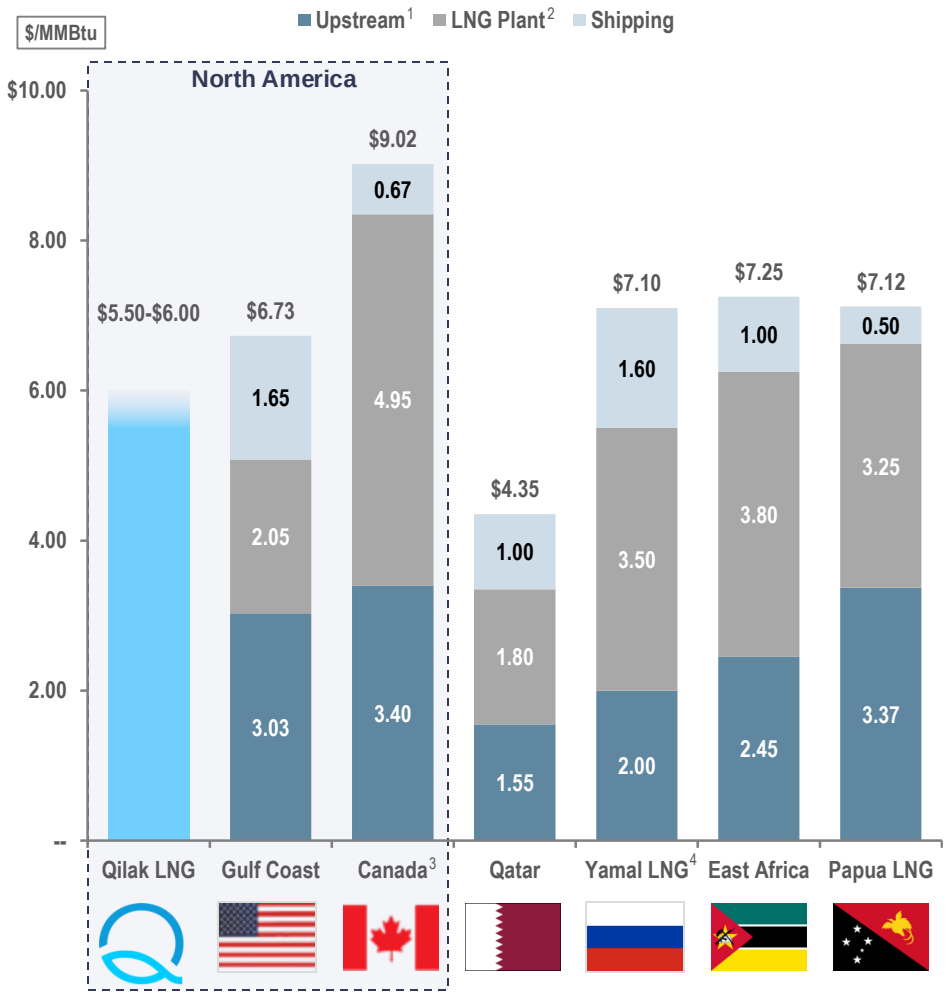
1 Travel times represent time to complete one-way trip.

2 Transshipment adds up to three days to travel time.

Qilak LNG is the Lowest Cost North American Provider of LNG to Asia

Qilak LNG can deliver low cost, conventional Alaskan gas to East Asian markets below $6.00/MMBtu

Cost Advantage of Qilak LNG Delivered to East Asia



Favorable Cost Structure with Unique Commercial Construct

- **Low-decline, large and predictable resource base for decades of supply**
  - No "core exhaustion" currently being realized by US shale plays
- **LNG facility positioned next to the resource requires a short pipeline of 6 to 9 miles, and less market variability on gas supply**
  - Gas supply has no exposure to gas cost basis differential, no linkage or (opportunity) cost related to Henry Hub
  - Consistent source with stable properties simplifies Gas Treatment Plant, which is within scope of the Gas Supplier ExxonMobil
- **One Tier I upstream partner with single strategy**
  - No complicated agreements among multiple U.S. L48 gas producers
- **Provides supply and transportation route diversification for buyers**
- **Strong historical relationships between Alaska and Asian markets**
- **Ability to offer a suite of commercial creative contracting options**
  - Fixed / stable price contracts
  - Pricing linked to local gas or power markets
  - Contract linked to JKM or Henry Hub indices
  - Crude-linked with caps and floors

Years of Remaining Tier I Feed Gas Supply

Upstream	Qilak LNG	Marcellus	Utica	Haynesville
Years of Tier I Gas[5]	**30+**	<10	<5	<5

Source: Company materials and Wood Mackenzie.

1 Gulf Coast Upstream assumes 12 mo. Henry Hub average x 1.15 as of 8/7/2020.
2 Includes CAPEX, OPEX, overhead, interest and tax for Qilak LNG.
3 Western Canadian LNG estimate for Montney resource from the Canadian Energy Research Institute.
4 Yamal 2 based on Oxford Institute for Energy Studies analysis.
5 Gas cost of supply below $2/MMBtu. Assumes 10% of basin resource supplied to LNG for U.S. L48 plays at 12 Mtpa.

Anticipated Project Timeline / Steps

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Pre-Construction

2025	Complete Feasibility Studies	Award pre-FEED Contract
2026	NEPA Filing	Award FEED Contract
2027	Complete FEED	Continuation of Detailed Design
2028	Target FID	

Construction

2029	LNG Facility Begins Construction	Award Contract for LNGC and Icebreaker Construction			
2030	LNGC and Icebreaker Construction				
2031	Pipeline Infrastructure Installation				
2032	Complete Pipeline Infrastructure Installation	LNG Facility Installation	Commissioning	LNG Plant Start-Up	First LNG Cargo (Jan 2033)

Environmental, Social and Corporate Governance

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Supplying the developed and developing economies of Asia with natural gas represents an opportunity to reduce global carbon emissions

1 Environmental

- Qilak is committed to reducing greenhouse gas emissions by using gas as a bridge fuel
- Upstream fugitive methane emissions from the Point Thomson conventional gas field are orders of magnitude less than from typical L48 unconventional gas fields which supply USGC LNG projects
- Investors looking to make “green” (sustainable) investments in LNG should prioritize the Alaskan Arctic (Qilak) versus the USGC and Western Canada due to lower global GHG impacts.
- All CO_2 removed from feed gas will be sequestered and will leverage the latest in new technology and carbon accounting

2 Social

- Extensive engagement with local stakeholders to minimize impact on subsidence activities, e.g., ongoing dialogue with the Alaska Eskimo Whaling Commission (AEWC)
- Qilak will maximize local hire during the engineering, construction and operational phases and investigate ways to provide affordable fuel to Alaskan coastal communities
- Project will generate significant tax revenues to support local communities and for the Alaskan State

3 Corporate Governance

- Maintenance of Arctic Food Security to native communities is a core corporate value
- Qilak will provide the opportunity for local native corporations to invest in the project
- Aspirations to become a leader in sustainable Arctic shipping
- Currently investigating the Arctic Economic Council investment protocol and other commitments to sustainability and inclusion

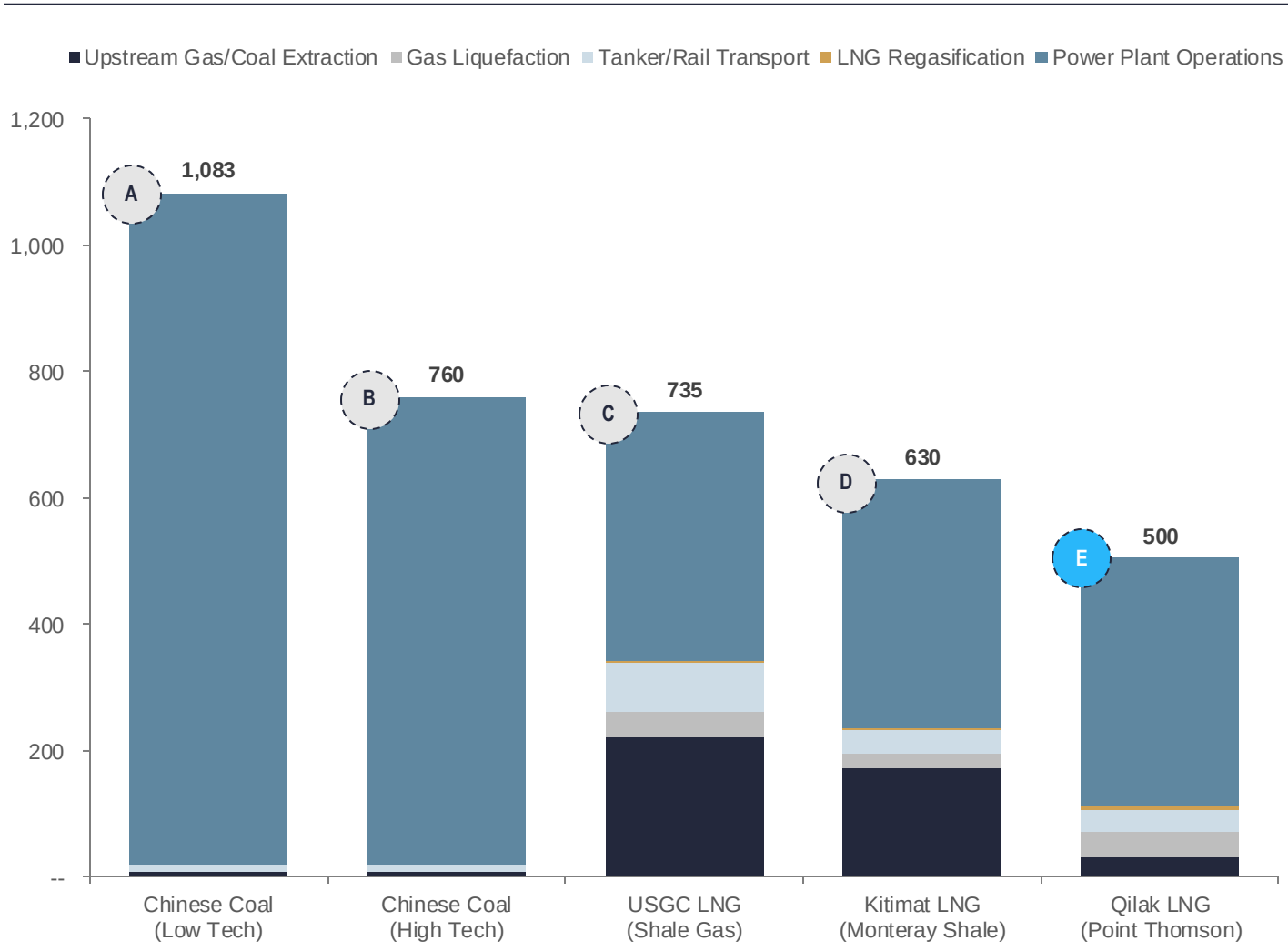
Qilak – North American LNG Project with the Lowest Greenhouse Gas Emissions

Qilak LNG

Peer-reviewed scientific analyses have concluded that the level of methane emissions from the North Slope are approximately two orders of magnitude less than from the gas fields that supply the U.S. Gulf Coast LNG plants

Production of LNG in the Arctic is up to 31% more efficient than in hot regions (e.g. GOM, Middle East)

Relative 100-Year Greenhouse Gas Emissions Across LNG Projects (Kg Co_2e/MWh)



Source: Cody Floerchinger et al, NETL.

Qilak LNG is Positioned to Benefit From the Anticipated LNG Supply-Demand Gap

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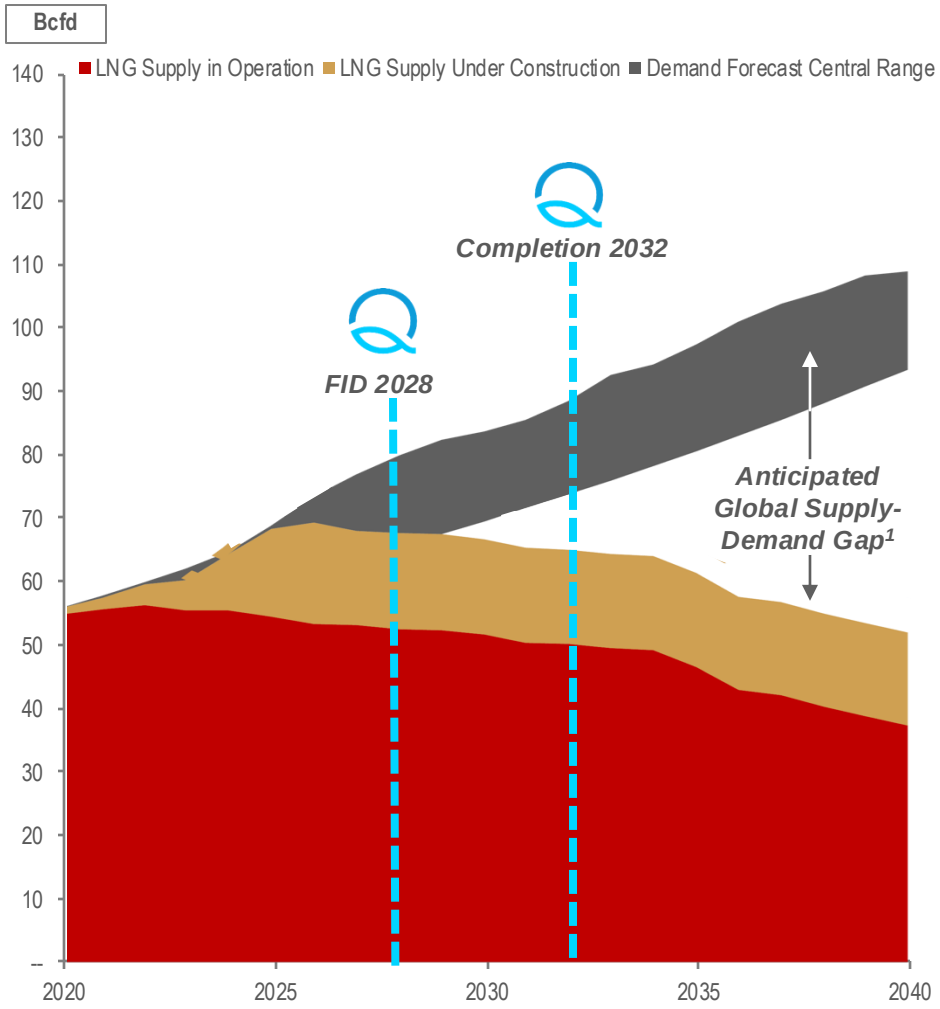
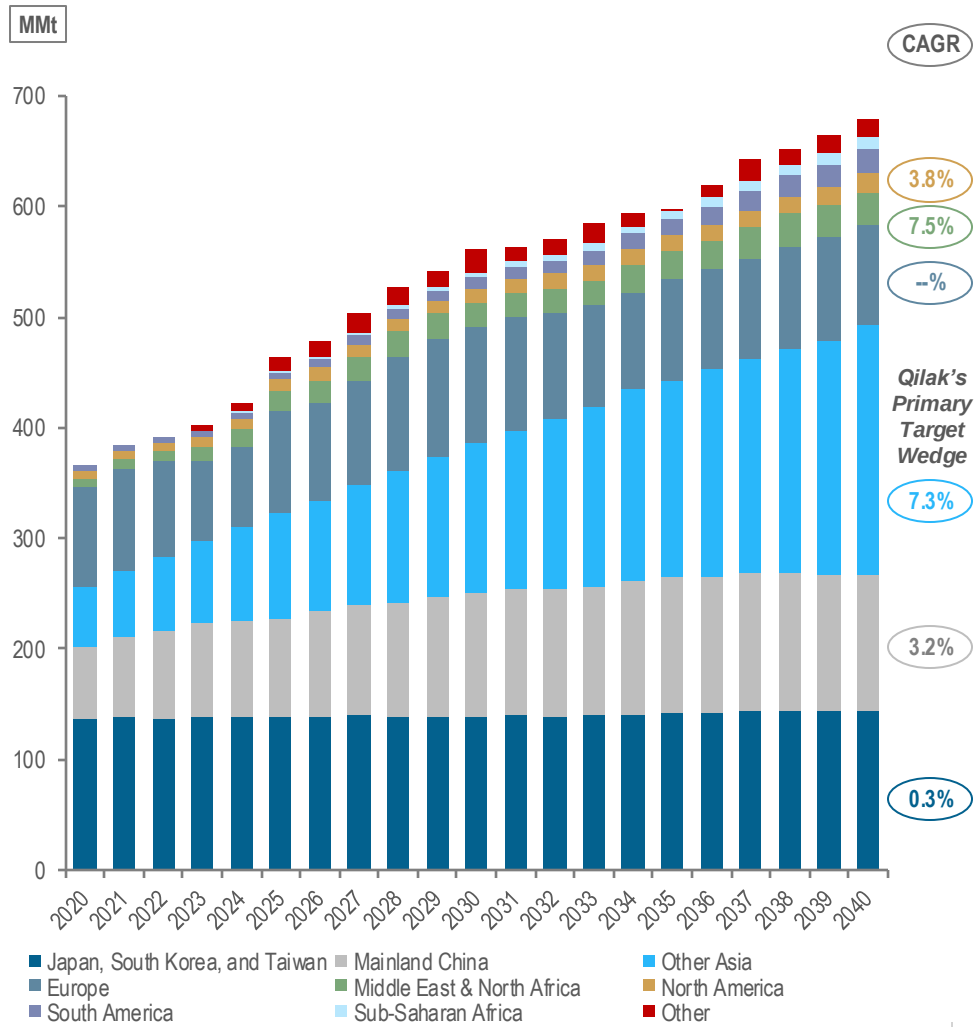
Longer-term global GDP growth, particularly in hydrocarbon-poor countries, will continue to support LNG growth, with need for significant expansion of LNG supply beginning in 2026

Emerging LNG Supply-Demand Gap



LNG Demand Growth Through 2040



Source: HIS Markit, Shell LNG Outlook 2020, Wood Mackenzie.

1 Driven largely by forecasted growth in LNG demand across Asian markets and lack of required FID projects.

Gas to Alaskans

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Providing an affordable supply of gas to remote Alaskan communities is a priority for Qilak

Alaska Railbelt:

- Preference is to use LNG produced in Alaska over foreign LNG from Canada or Mexico
- Three options should be assessed:
  - Qilak to build one Jones Act compliant LNGC to deliver LNG from the North Slope to a distribution hub (e.g. Nikiski has 3 existing LNG tanks)
  - Obtain a Jones Act waiver to allow Qilak LNGCs to deliver within Alaska
  - Qilak LNG cargo swap with vessels originating from West Coast ports in Canada or Mexico, which would eliminate need for Jones Act compliant vessels

Coastal Communities:

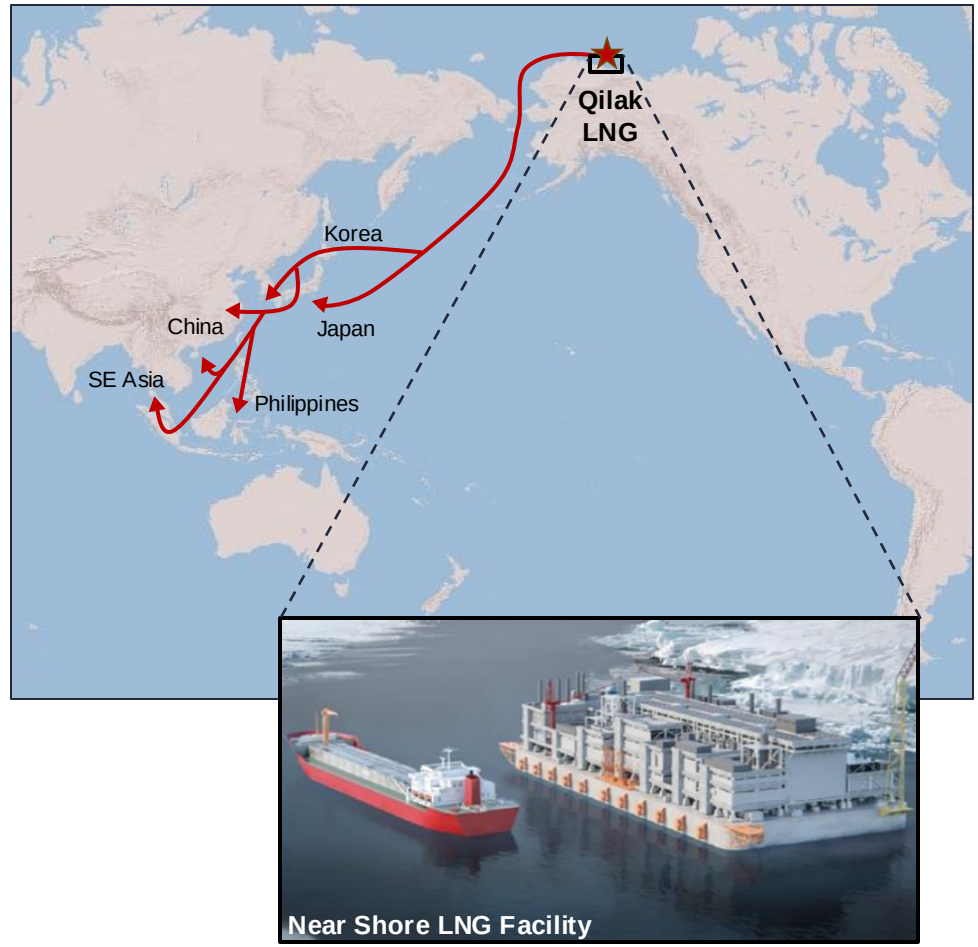
- LNG could be delivered to coastal communities in ISO containers (filled at Nikiski or offshore using New Fortress Energy's ISO Flex System)
- Recommend updating AEA's 2014 study

Project Summary

Highly competitive opportunity to commercialize prolific Alaskan gas resource using Near Shore LNG ("NSLNG") technologies

A pioneering approach to moving North Slope gas to market

- **Since 2017, Russia has moved approximately 16.5 million tons per year of LNG from Yamal, year-round, by icebreaking tanker – much of it through almost daily ship passage of the Bering Strait.**
  - Scalable opportunity through "design one, build many" philosophy
- **Facility expected to export 4 Mtpa of LNG to customers in East Asia**
- **No Jones Act restrictions associated with Near Shore LNG Facility**
- **Transaction to be structured as equity in Qilak**
  - Post-transaction, Qilak to remain controlling shareholder
  - Subsequent capital raise expected to finance post-FID development
- **Qilak ambition is to access and monetize 30+ Tcf of proved reserves in North Slope of Alaska (another 100 Tcf of probable reserves)**
  - Heads of Agreement signed with ExxonMobil to provide 20-year feed gas supply from Point Thomson (6-8 Tcf)
  - Gas supply projected to last well beyond 20 years
  - Potential for multiple projects to address broader stranded gas opportunity
  - 20-year project to sell $38Bn in LNG[1] with approximately $5Bn CAPEX and identified offtake
- **Qilak LNG targeting completion by 2032, at a time where LNG demand is forecasted to exceed current LNG supply under construction**
- **Several Downstream projects are under consideration that would provide Qilak LNG with access to key growth markets across Asia**



Qilak LNG – Senior Management

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Qilak's management teams has extensive experience and critical relationships in the LNG sector and beyond

	**Mead Treadwell** Chairman & Chief Executive Officer	• Lt Governor of Alaska, 2010-14 Chair and Commissioner, US Arctic Research Commission 2001-2010 • Founding VP/CFO Yukon Pacific Corporation LNG project Co founder, two public technology companies
	**David Clarke** President & Chief Operating Officer	• Over 45 years of international Oil & Gas experience in operational, technical and project management roles • Extensive experience of developing challenging mega projects in ultra deep water and in Arctic regions
	**Nick Heather** Project Director	• 30 years in FPSO, Dual Activity Drill ships, FSO, Shuttle Tankers, LNGC, GBS, FLNG, and FSRP • Project delivery for Grand Banks, West Africa, Russia, Brazil, GOM, Australia and North Sea
	**Eiji Maezawa** Far East Representative	• 40 years of experience in international LNG/Oil/LPG business developments and SPA negotiations • Previously at Sojitz, Occidental Oil & Gas, Enron and Iwatani
	**Michael Zolotas** Chief Financial Officer	• Leading Investment Banker with 15+ years experience • Previously Managing Director in the Industrials Investment Banking team at Deutsche Bank

Feedback from Japan from Trump - Ishiba Summit

On February 7, Japanese Prime Minister Shigeru Ishiba met United States President Donald Trump for the first time at the White House.

Japanese Prime Minister Ishiba Shigeru and US President Donald Trump confirmed at their summit that the US will increase exports of liquefied natural gas to Japan.

At a news conference after the summit, Trump said, "Japan will soon begin importing historic new shipments of clean American liquefied natural gas in record numbers."

What the Japanese press and institutions are reporting:

- PM Ishiba: LNG prices from U.S. should be “reasonable” from the standpoint of Japanese benefit
- Alaska LNG (i.e. AKLNG) exports to Japan will provide a diversified LNG source, US/Japan energy security and reduction of Japan-US trade deficit
- LNG will be bought by private companies, taking account of price, re-sale possibility and extension-timing of existing contracts
- Inside Japanese government, besides the uncertainty of Alaska LNG project realization, uneasy voices have been heard about possibility of high pipeline cost could put on LNG price, resulting in higher domestic electricity bills than current level
- High ranking official of METI “LNG buyers who judge on LNG procurement have to focus on whether price of Alaska LNG can be cheaper than other competing LNG projects.” and the review of Alaska LNG at Japan side will be paying close attentions on how such commercial issues as price and re-sale possibility could meet Japan’s needs.

It is reasonable to think that follow-up to the summit will consider multiple Alaska LNG projects…

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Qilak LNG has urged Asian customers to study both LNG options from Alaska. There are several scenarios…

- A Japan working group (WG) scenario: to be established by METI (Ministry of Economy, Trade and Industry) and managed by JOGMEC (Japan Organization for Metals and Energy Security). Analyze respective economics of all options (geology, CCS, GBS and pipeline etc.)
- The WG would report to the Director, Resources Development Dept at METI) who may interview potential Japanese investors/buyers (to check their interest in investment in upstream/LNG plant (tolling)/pipeline and LNG off-take)
- U.S/Japan joint WG might be set up depending upon the progress of such WG activity in Japan and possibly triggered by METI Minister(Muto) to U.S./Alaska
- All options for exporting LNG from Alaska could be reviewed (AkLNG and Qilak LNG)
- Duration of WG review is currently unknown (unlikely to be concluded in 2025)

Korea – US working group

- South Korea and the US have agreed to establish a working-level group to discuss a gas pipeline project in Alaska, energy, shipbuilding, tariffs and non-tariff barriers, South Korea's Industry Minister Ahn Duk-geun said on March 4th, 2025

Way Forward

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Key benefits of completion of Feasibility Study

1. Tie down costs and economic viability and profitability of project, including projections for Alaska revenues from royalties, taxes.
2. Fulfill commitment to ExxonMobil/Point Thomson Unit and complete gas sales and operational procedures with them necessary to work together on project
3. Obtain commitments for LNG offtake from Asian buyers
4. Bring in partners for next phase of project
5. Have essential project description and data needed to begin permitting process

What does Qilak LNG seek in the market?

1. LNG Market is still growing, but customers want small order quantities; our size is good
2. Strategic and financial partners ready to join but de-risking with Feasibility Study and Permits is issue
3. 25% of Qilak LNG can meet Alaska's needs — QilakLNG is a viable option for coastal Alaska

What can the State of Alaska do to help?

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Support Federal Permitting Path:

- Offshore permitting path with MARAD/BOEM may require Executive Order, Legislation, or Lawsuit
- Obtain DOE export licenses; license already granted for Pt Thomson gas export for various projects

Reiterate State Support in the Marketplace:

- Governor has said State of Alaska supports both projects
- Qilak LNG founded as markets pushed back on AKLNG in first Trump Administration
- Backstop de-risking for all projects, if for one
- An AEA study re-do on Gas to Alaskans study could be State participation in QilakLNG feasibility study (SJR 11)

Summary:

- Don’t put all Alaska’s eggs in one basket.

(US Gulf states and Western Canada have multiple LNG projects, too)