



# **ALASKA MOVING FORWARD:**

## ***ALASKA LNG PROJECT UPDATE***

***ALASKA SUPPORT INDUSTRY ALLIANCE***

**JANUARY 26, 2017**



**[www.agdc.us](http://www.agdc.us)**

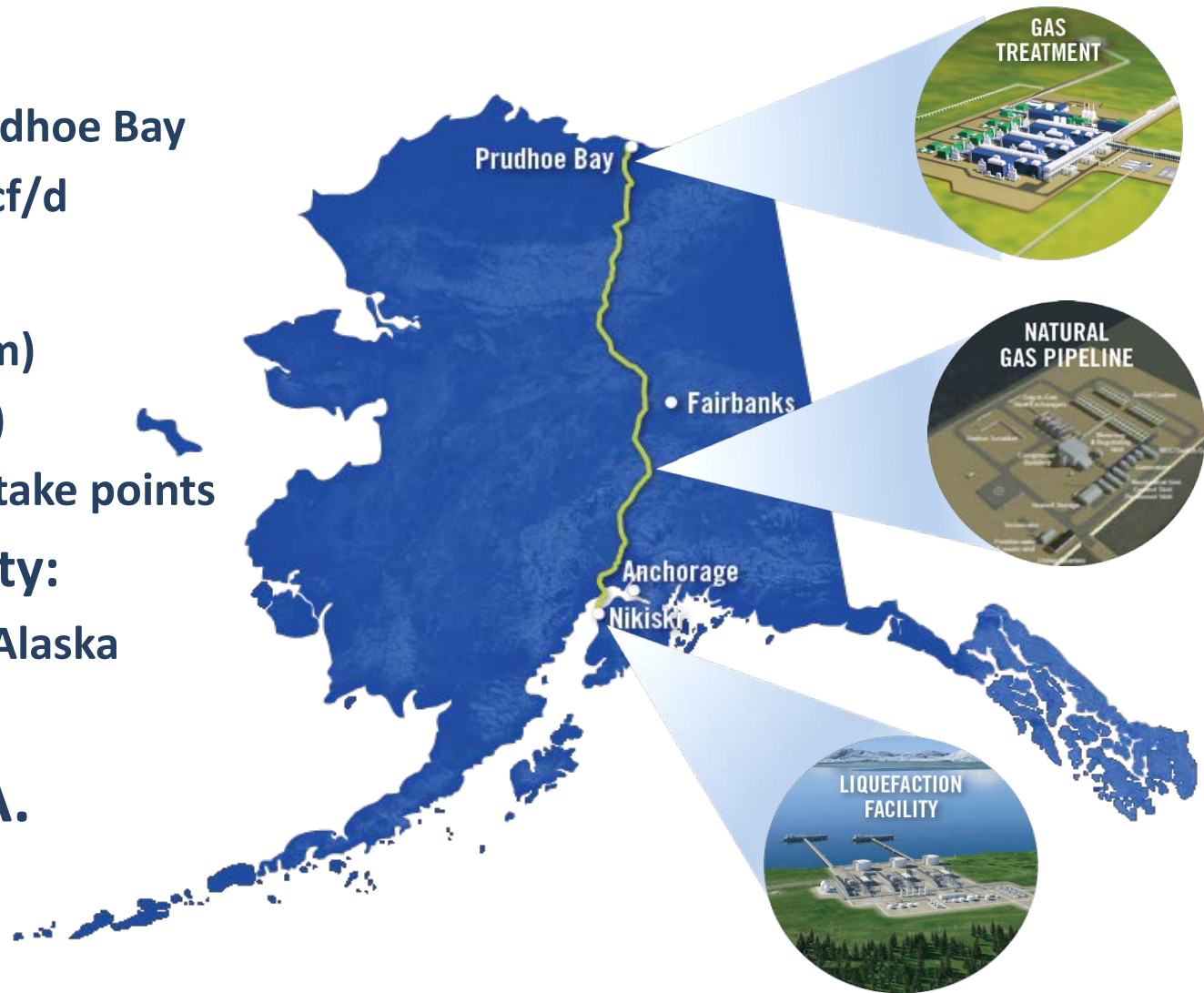
- **Alaska LNG Project Update**
- **AGDC Commercial Update**

# ALASKA LNG PROJECT

## Integrated Gas Infrastructure Project:

- **Gas Treatment Plant:**
  - 200 acre site at Prudhoe Bay
  - Deliver up to 3.5 Bcf/d
- **Pipeline:**
  - 800-miles (1,287 km)
  - 42-inch pipe (1.1m)
  - Several in-state offtake points
- **LNG Production Facility:**
  - Located in Nikiski, Alaska
  - 600 acre site

**Produce up to 20 MMTPA.**



Bcf = Billion cubic feet    MMTPA = Million Metric Tons Per Annum



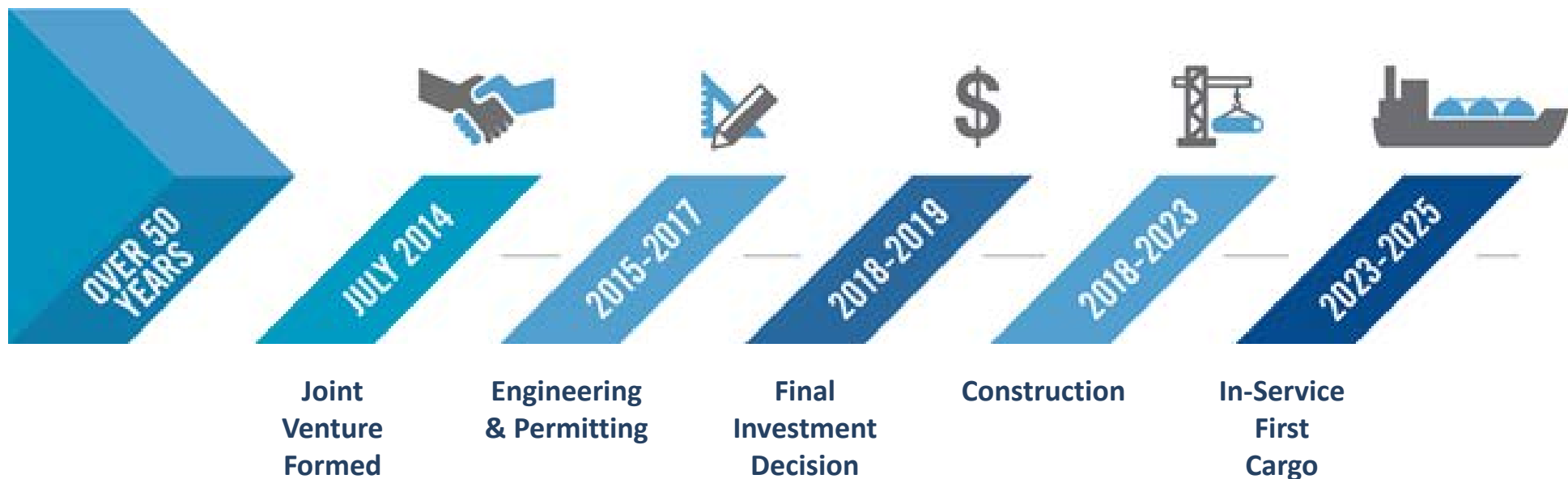
# ALASKA LNG PROJECT STATUS

- Pre-Front-End Engineering & Design (Pre-FEED) is formally complete.
  - Pre-FEED Joint Venture Agreement (JVA) was terminated effective December 31, 2016.
- Deliverables are complete and were accepted by co-venture parties (AGDC, ExxonMobil, BP and ConocoPhillips).
- Transition to AGDC project complete and project data transferred to AGDC systems.
- Other co-venture parties have withdrawn but supporting AGDC taking the role of sole project applicant for the Federal Energy Regulatory Commission (FERC) filing.
- ~\$500M investment in data, engineering, designs, and plans.
  - Design is a 3-train Gas Treatment Plant, 42-inch diameter pipeline, and 3-train LNG Plant.
- AGDC has unrestricted rights to Alaska LNG data.

# ALASKA LNG PROJECT STATUS

## 2017 Priorities:

- Progress the FERC Natural Gas Act (NGA) Section 3 application.
- Pursue alternatives to reduce cost of supply and align the project schedule with the market.
- Progress project priorities within current AGDC funding through calendar 2017.
- Engage potential customers and partners.



- FERC ensures the safe operation and reliability of USA LNG terminals, and is the lead federal agency that will prepare an EIS for the integrated Alaska LNG project.
- Three phases: Pre-File, (File), Draft Environmental Impact Statement (18 months), (Comment), and Final EIS (6 months)
- Project is currently in Pre-File
  - 2H 2016: Applicants submitted Resource Report 2<sup>nd</sup> drafts
  - 4Q 2016: FERC/Agencies returned about 3,000 comments
  - Jan 2017: AGDC became the sole Applicant
  - Jan 2017: AGDC engaged ERM as FERC's 3P contractor
  - 30 Jun 2017: AGDC target for FERC Section 3 filing

## Draft FERC Resource Reports become Exhibit F of the Section 3 Application:

1. Project Description
2. Water Use and Quality
3. Vegetation and Wildlife
4. Cultural Resources
5. Socioeconomics
6. Geological Resources
7. Soils
8. Land Use, Recreation, and Aesthetics
9. Air and Noise Quality
10. Alternatives
11. Reliability and Safety
12. PCB Contamination
13. LNG Information

- **Resource Reports identify environmental, technical, and economic factors contributing to environmental and social impacts.**
- **Used by FERC and other agencies for National Environmental Policy Act (NEPA) review and development of the EIS.**

<b>Exhibit A</b>	Articles of incorporation and bylaws
<b>Exhibit B</b>	Statement of corporate and financial relationships
<b>Exhibit C</b>	State authorization
<b>Exhibit D</b>	Agreement between the applicant and border facilities
<b>Exhibit E</b>	Safety and reliability statement
<b>Exhibit E-1</b>	Earthquake hazards and engineering
<b>Exhibit F</b>	Final Resource Reports
<b>Exhibit G</b>	Location of facilities
<b>Exhibit H</b>	Statement regarding additional federal authorizations

# PROJECT MANAGEMENT APPROACH

**AGDC will provide owner's oversight and seek strategic partnership with Lead Contractor, who will:**

- Support FERC NGA Section 3 application.
- Complete Class 3 and Class 2 cost estimates.
- Provide project management systems and controls.
- Manage engineering, procurement, and construction (EPC) contractors.
- Provide lump-sum, turn-key contract.
- Assign cost and schedule risk.





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# ALASKA'S STRATEGIC ADVANTAGE

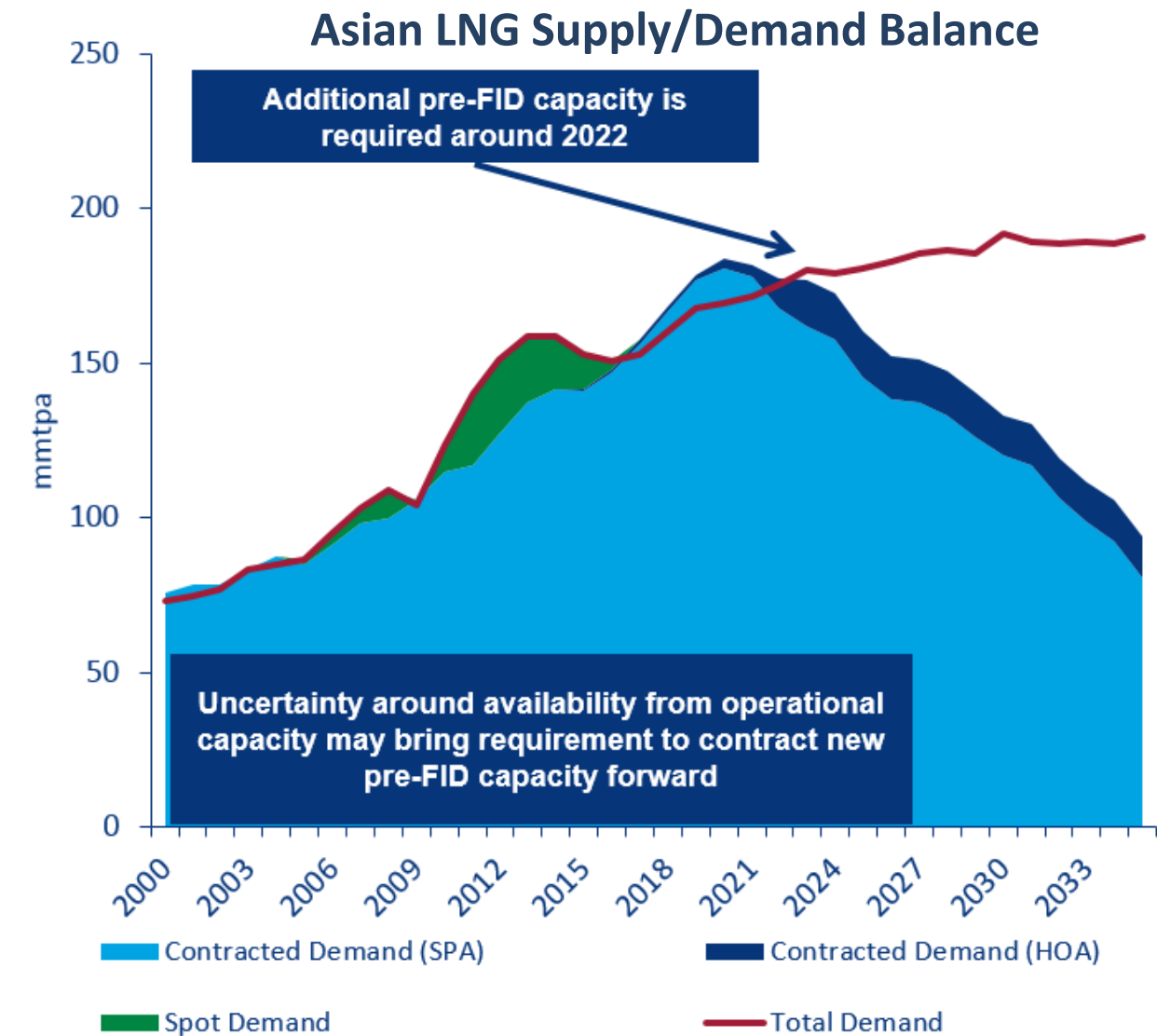
- Location advantage: 7 to 9 days to market.
- Temperature advantage: Cold temperature provides efficient LNG production.
- Political stability.
- Proven conventional resource.



A position in Alaska provides for optimized logistics

# GLOBAL LNG BALANCE

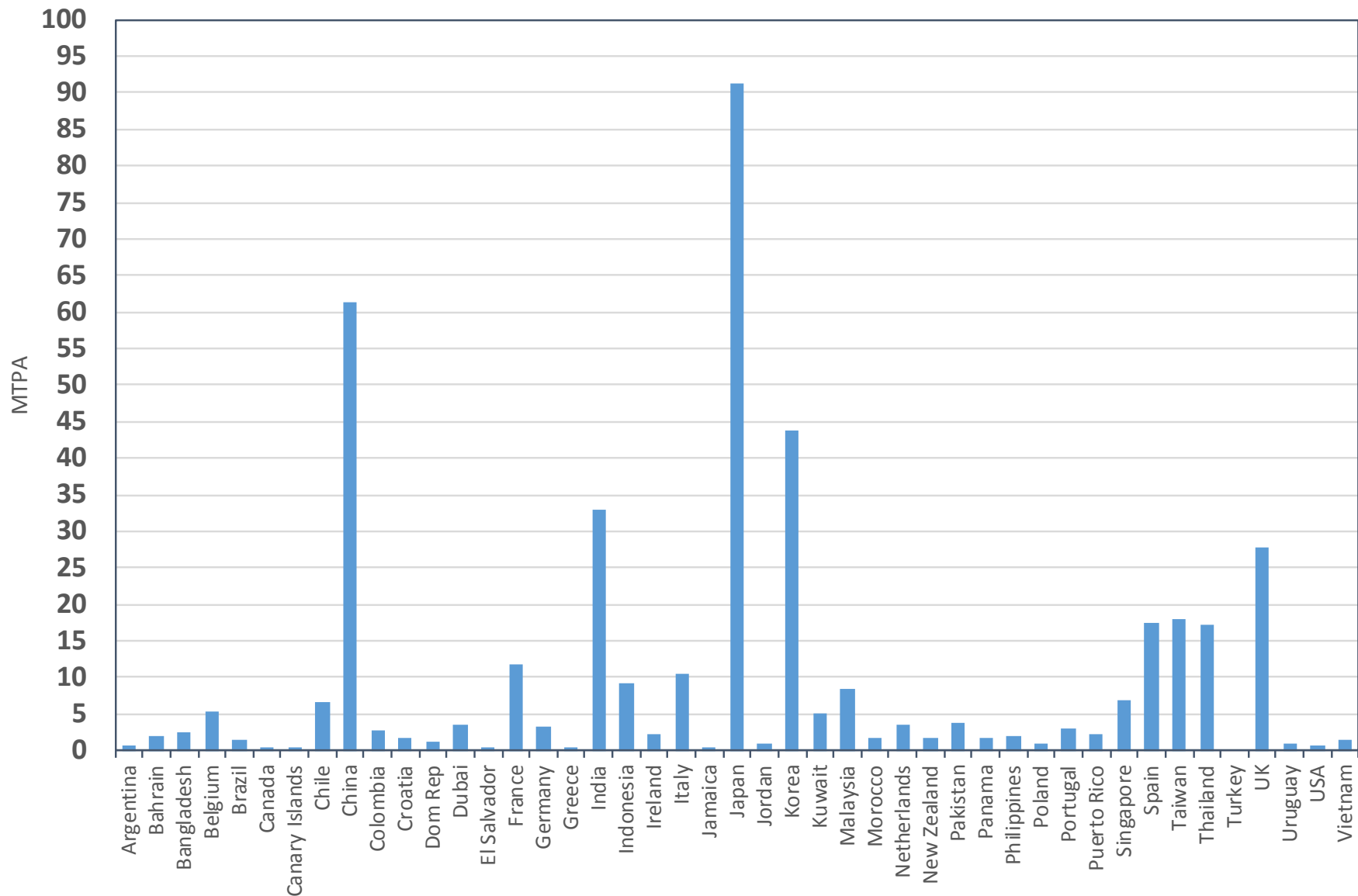
- Current global surplus.
- Equilibrium in early 2020's; new supply needed 2021-2025.
- Many supply projects chasing demand.
  - Brownfield
  - Greenfield
- Sellers must compete on more than just price.



Source: Wood Mackenzie

# GLOBAL DEMAND

LNG Demand in 2025 by Country

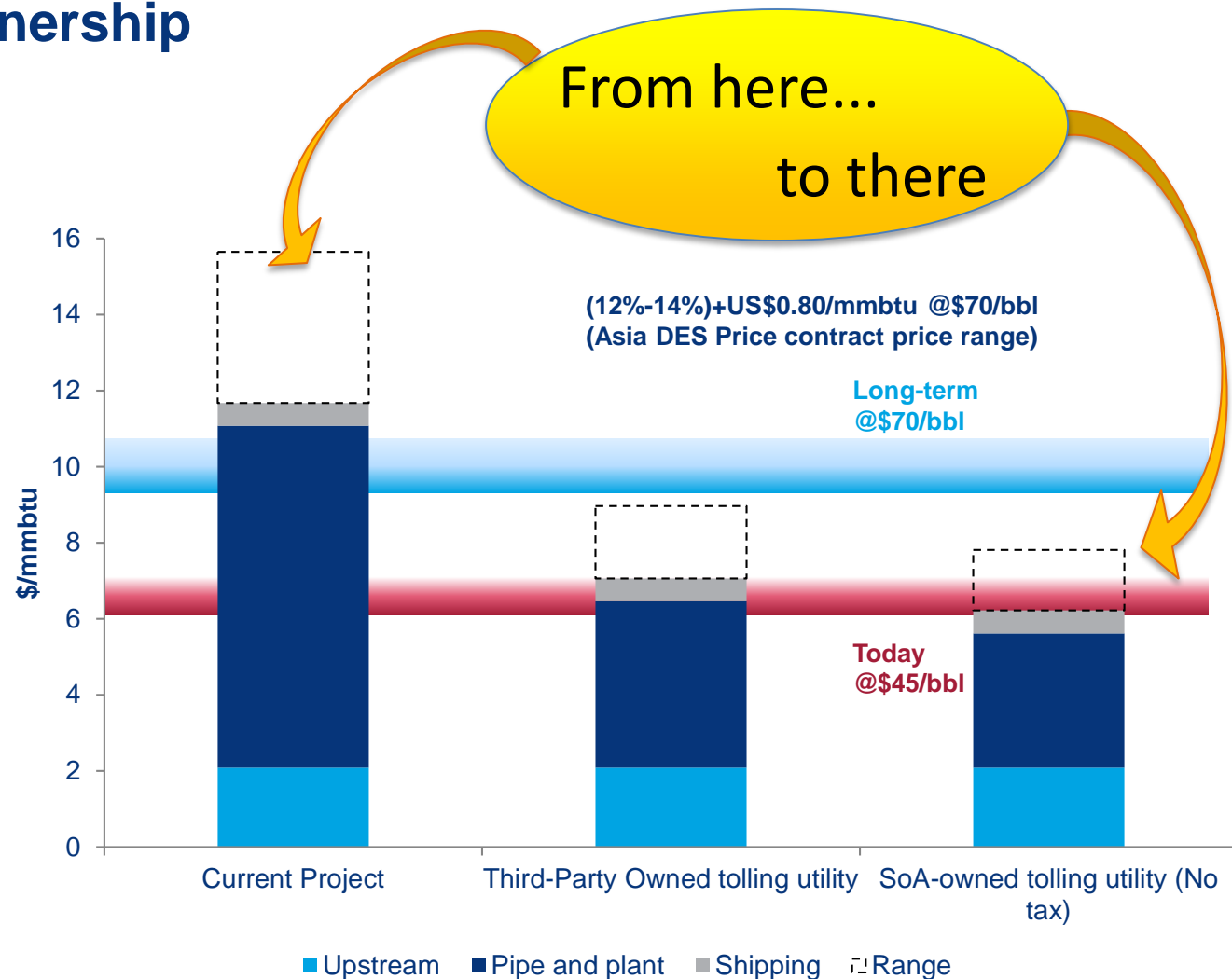





# REDUCING THE COST OF SUPPLY

## The introduction of State ownership

- Third party financing reduces cost.
- Tax exempt state ownership reduces cost of supply even further.



# OBJECTIVES AT AGDC

- 
- Operate as a corporation.
  - Every decision to be based on sound business principles.
  - More transparency with legislature, public, market.
  - Cooperative relationship with producers.
  - Engage major vendors more strategically.
  - Structure for 3<sup>rd</sup> party finance.
  - Secure long-term customer commitments.
  - Maintain 2023-2025 project in-service window.
  - Expand in-state gas availability.

## Three primary focus areas for 2017:

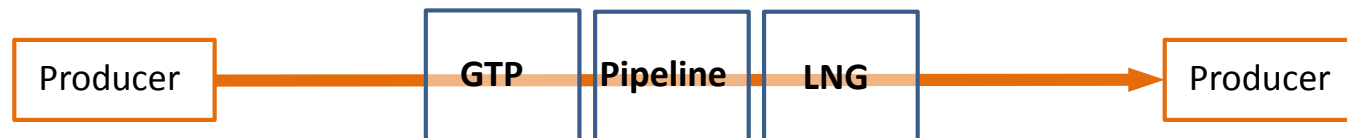
- **Commercial – Potential LNG and system customers actively engaged.**
  - Implement market intelligence strategy.
  - Open Houston and Tokyo satellite offices.
  - Complete land and export license agreements.
  - Augment contract staff in the commercial and finance arenas.
  - Secure conditional tolling and/or wellhead and offtake commitments.
  - Alaska LNG Summit.
- **Financial – Investment banker engaged for structured finance; EPC contractor.**
  - Secure financial advisor.
  - Commence investor presentations.
  - Complete project financing plan.
- **Regulatory – FERC filing**
  - Project website.
  - File FERC NGA Section 3 application.

- **Primary objective is to secure tolling agreements sufficient to underpin financing.**
- **Tolling structure is the basic commercial structure whereby customers contract for capacity on the segment components.**
  - **Most common system in the US gas pipeline arena.**
  - **Used for the majority of US LNG import and export capacity.**
  - **Well understood and accepted by financial community.**
- **Tolling customer contracts underpin low cost project financing and reduce owner risk.**

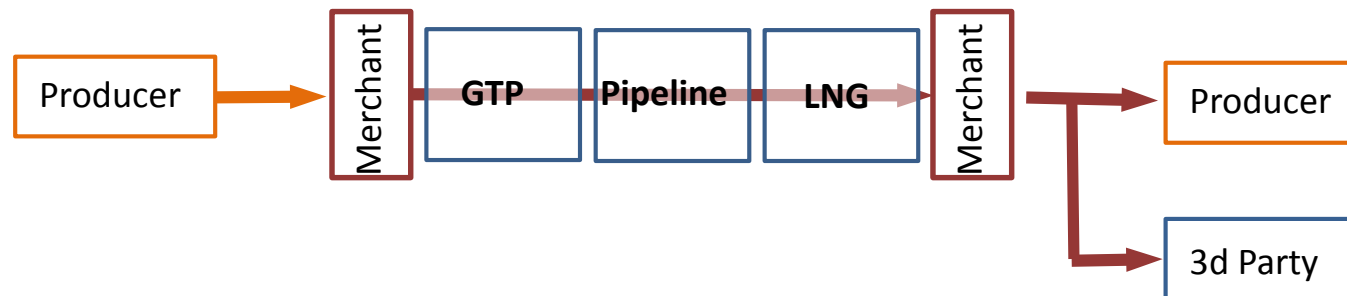


# THREE BASIC SERVICE MODELS

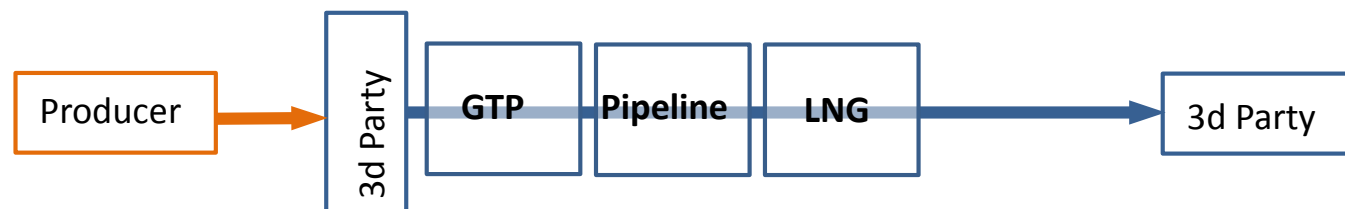
## Producer as Toller



## Merchant as Toller



## Third Party as Toller



The integrated pipeline and LNG project will provide multiple opportunities for stable infrastructure investment.

State led project opens the doors for diverse third party investors:

- Sovereign wealth funds
- Infrastructure funds
- Regional corporations
- Other interested parties



The Alaska LNG project is Alaska's project; it will be structured to be an attractive investment, and will welcome Alaskan investors.

## HOUSTON-BASED LNG TEAM



**John Godbold:** Over 20-years energy industry experience including El Paso Energy, Enron and as President and/or COO of various LNG development companies, specializing in early-stage project development strategy implementation for onshore and offshore LNG import and export facilities, commercial and technical contract negotiations, and regulatory permitting.



**Ian Salmon:** Over 20-years energy industry experience including multiple LNG projects (Bear Head LNG, Pangaea LNG, and several Qatar trains), specializing in project-finance structuring and commercial negotiations, Chinese speaker knowledgeable in commercial communications with Chinese and other Asian LNG markets.



**John Hattenberger:** Over 39-years experience in the global LNG and natural gas businesses, including Gazprom, BP, El Paso, Marathon, and the Government of Oman. Mr. Hattenberger specializes in commercial negotiations, marketing and trading, new business development, advises global clients regarding marketing, structuring, drafting, negotiating and closing commercial agreements for LNG projects in all global markets.



**Terry Mitchell:** Over 35-years' energy industry experience, including Amoco (BP), and independent power developers Calpine and Shell-Bechtel venture InterGen, specializing in energy-project infrastructure development, gas supply and transportation contracting, energy-market analyses, natural gas asset optimization, gas-portfolio strategic planning and LNG-project development and marketing.



**Chip Schuppert:** Over 30-years energy industry experience in the upstream and mid-stream sectors of the oil and gas industry with ConocoPhillips, specializing in LNG project development, negotiation of LNG Sale and Purchase agreements and commercial optimization, facilitating LNG customer relationships, development and alignment of project co-venturers, and navigation of host government regulatory processes.

## TOKYO, JAPAN OFFICE



**Masatoshi (Nick) Shiratori:** Over 37-years of experience in the oil and gas industry. Mr. Shiratori has worldwide knowledge of LNG commerce including trading business as well as shipping aspect as an Executive Vice President at the Mitsubishi Corporation Headquarters. He advises on the marketing and networking in Japan for AGDC projects. He is native speaking Japanese and fluent in English.

# AGDC LEADERSHIP OF AKLNG PROJECT

- AGDC leadership of the Alaska LNG project makes it more competitive.
- AGDC will advance the Alaska LNG project in 2017 and beyond.
- AGDC is governed by a Board of Directors, and staffed with employees and contractors who have the experience and expertise to advance the commercial, financial and regulatory priorities.
- AGDC will maintain/develop appropriate relations with Alaska businesses
  - Marketing JV MOU with ConocoPhillips
  - Cooperation Agreement with BP
  - Project Website (including business/stakeholder registration)
  - Supporting the competitiveness of Alaska content
- AGDC works, communicates and collaborates with State partners – DNR, DOR and DOL.
- AGDC will communicate often with legislature, other stakeholders, and the public as we advance the project.



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# Backup Slides

# AGDC Board of Directors



**Dave Cruz**  
Chairman



**Hugh S. Short**  
Vice-Chairman



**Joey Merrick**  
Secretary-Treasurer



**Heidi Drygas**



**Marc Luiken**



**David Wight**



**Warren Christian**

## Pre-Filing:

- Used to ensure project information will be acceptable to FERC.
- Draft Resource Reports are modified in response to agency comments.
- No set timeframe required.

## Draft EIS:

- FERC reviews NGA Section 3 application.
- 3<sup>rd</sup> party contractor drafts EIS document.
- 18 months from application submittal.

## 6 months to Final EIS:

- 3<sup>rd</sup> party contractor drafts EIS document.
- FERC approves application and issues Record of Decision (ROD).
- 6 months from issuing the Draft EIS.





## AGDC Project Management Team (PMT):

- AGDC staff provide owner's oversight.
- Lead Contractor provides bulk of resources in an integrated team.

Project Management Team  
(PMT)

