

03/17/2017

**Presentation:  
Potential LNG  
Opportunities  
in Houston,  
Alaska**

<TARGET><BILL></BILL><SUBJECT>03-17-2017 Presentation  
Potential LNG Opportunities in Houston,  
Alaska</SUBJECT><COMM>SRES30</COMM></TARGET>

# Agenda

- Goal
- What is LNG
- Technology
- Location
- Development / Transport
- Utilization
- Benefits / Summary



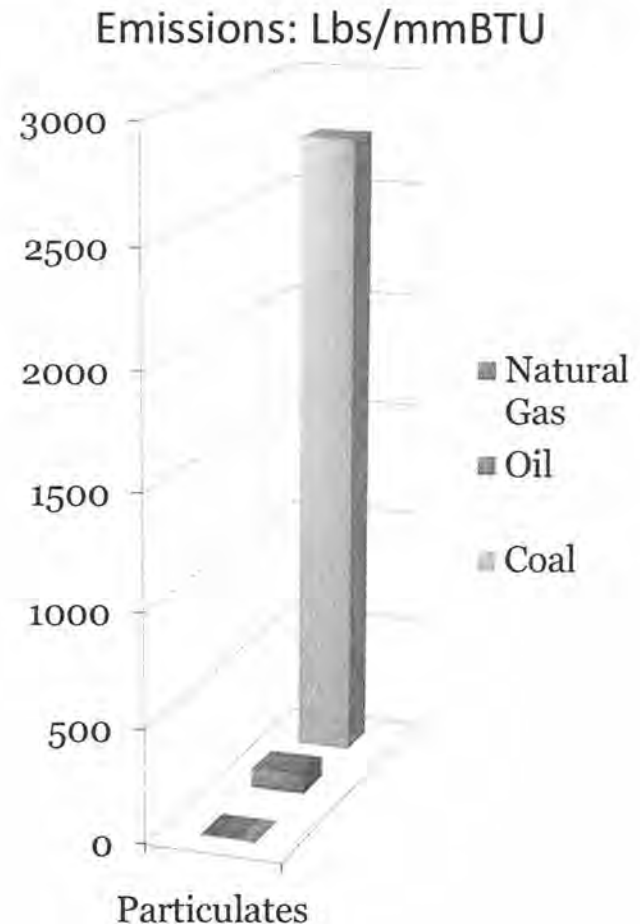
“Supporting the statewide transition from imported diesel to domestic energy”

# LNG for Alaska

“Supporting the statewide transition from imported diesel to domestic energy”

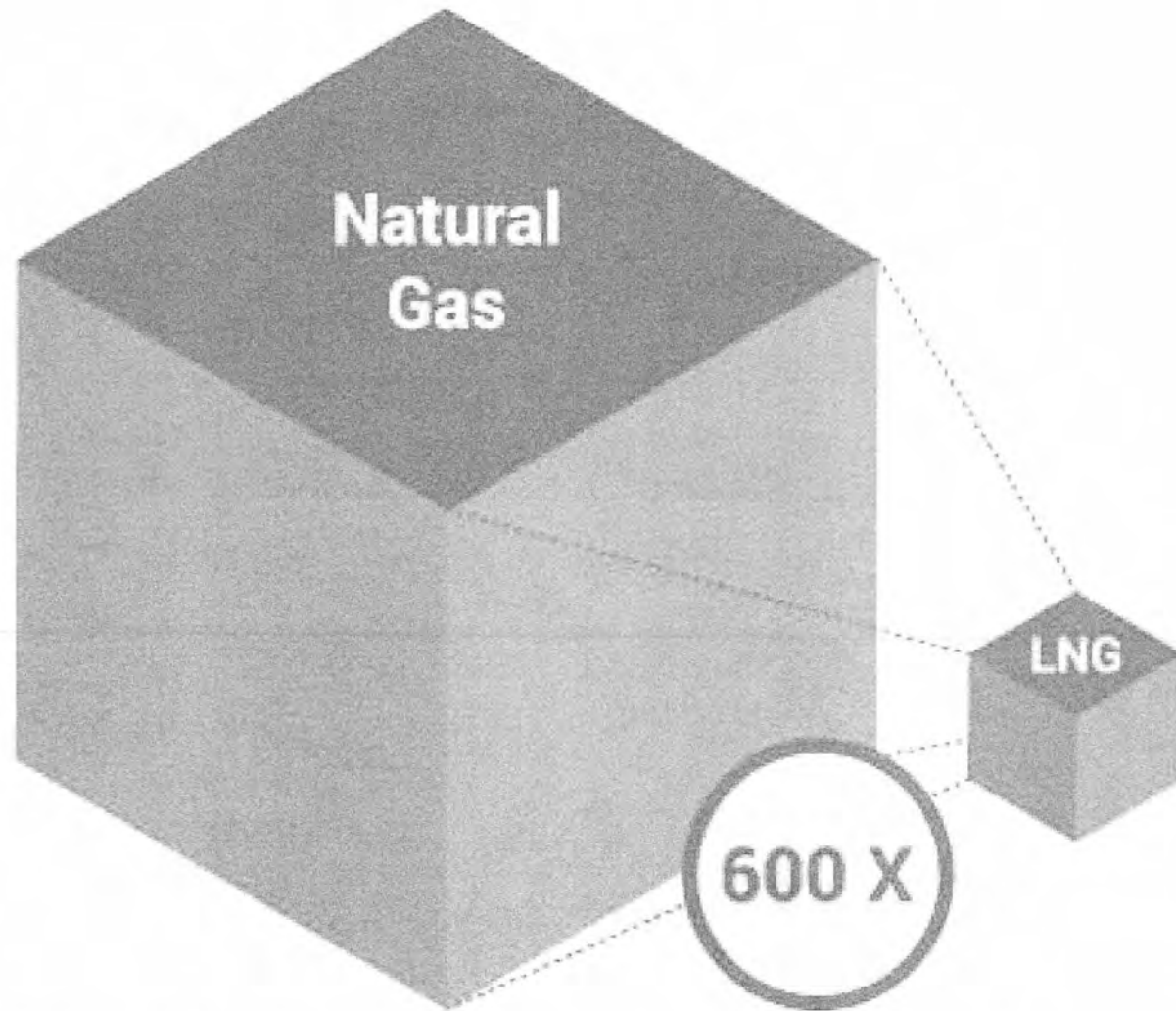
# Goal of Project

- Natural Gas Utilization
  - Domestic
  - Cost Effective
  - Low Emissions
- Diesel Power Generation
  - Imported
  - Expensive
  - Emissions
- Technology to densify is available



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# What is LNG?



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# Safety Moment - LNG

LNG is natural gas in its liquid state at  $<-260$  °F

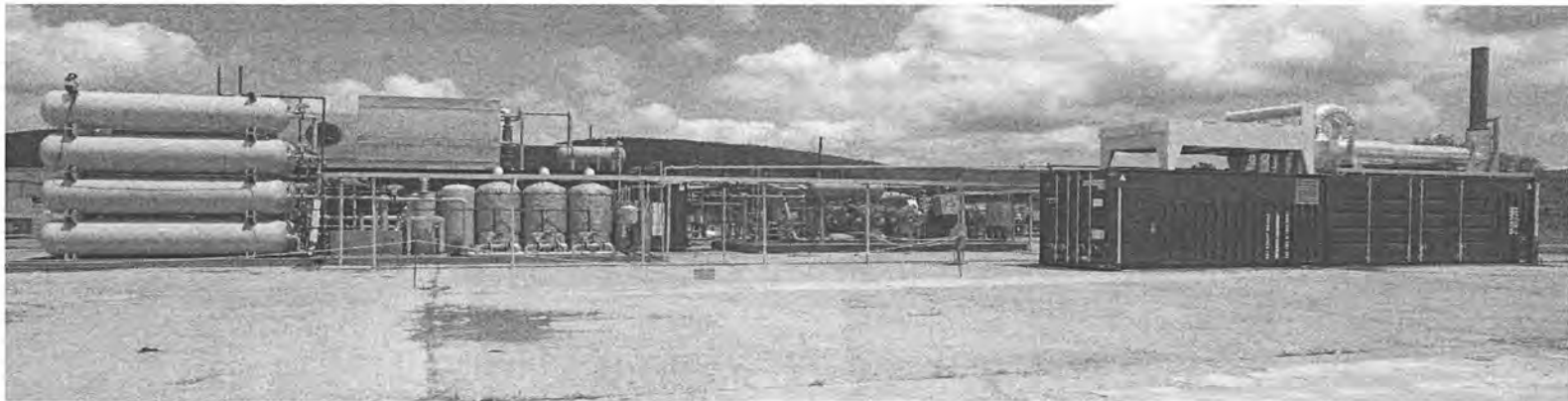
- Fire Hazards**
  - NOT flammable in its liquid state.
  - Must be vaporized in order to burn. Very slow burning and difficult fuel to ignite.
  - Requires a high temperature ignition source and an appropriate mixture with air (5% – 15% saturation.)
- Storage Hazards**
  - Stored at low pressures such as 30 psi
  - Spills vaporize to ATM
- Chemical Spill Hazards**
  - Non-toxic and non-corrosive.
  - Requires PPE to handle



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# Technology / Development

- Siemens Technology
  - Liquefaction
  - Modular
  - Scalable
  - Rapidly Deployable
- Engineering / Development / Operation
  - Northstar Industries
  - Liberty Energy Trust



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# Transportation

- AK Rail
  - North to Fairbanks
    - To Fairbanks storage
    - Truck to communities/mines
  - South to Ports
    - Marine to remote port
    - Remote port to truck
    - Truck to communities/mines
- ISO Tanks
  - Modular/Intermodal use



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# Utilization

- Industry
  - Mines
  - Fisheries
  - Forestry
- Communities
  - Schools / Clinics
  - Heating / Cooking
  - Water / Sewer
- Natural Gas Gensets
  - Power generation
  - Combined Heat & Power



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# Summary

- Technology is available
- Prime location in Houston
- Cost-effective rail transport
- Efficient use of energy
- Benefits
  - Economic Stability
  - Health & Education
  - Environment

Pieces are in place



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# For More Information

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# THANK YOU

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March 16, 2017

To the members of the Alaska Legislature



First and foremost we wish to thank you for the work that you do for the people of Alaska. In the days of declining revenue we know the task is daunting and you are forced to make some very unpopular decisions but we know they are made with the best interest of the future of Alaska in mind.

East West Pacific Consulting shares your concern for the future of Alaska and we look forward to giving back to Alaska as we feel Alaska has been very good to us! We are grateful to be working with the Knikatu Native Corporation and KI Holdings in developing their lands, Miller's Reach, in Houston Alaska. Knikatu Native Corp and East West Pacific Consulting of Wasilla have publically announced its proposal to welcome an LNG plant in Houston, Alaska. It will become a part of the Houston Rail Industrial Complex to be located on 1000 acres of KI Holdings. It is based on cost savings and expandability in the future. It is this LNG plant that we present to you as part of a vision for the future of Alaska.

At first, this project may be viewed as a competing interest with AIDEA's concept for the city of Fairbanks. Our vision is that this project is actually a completing interest proposal in support of AIDEA's ambitious goal to provide Liquid Natural Gas in quantity not only to Fairbanks, but much of Rural Alaska as well. EPA demands that Fairbanks be in compliance with federal air quality standards can be achieved, in a financially feasible and environmentally sound with the help of Dresser-Rands Modular LNGo system strategically placed at the Houston Railhead Industrial Park.

Thanks to the investment and foresight of Alaska's past leadership, a 180 rail car siding, the premier plant location and rail transportation assets are already in place. We are encouraged that every organization that has seen this presentation concurs that this project is indeed a completing interest proposal that holds for Alaska great opportunity to dramatically lower energy costs statewide. We welcome the opportunity to work cooperatively with AIDEA's team as they refocus their crucial funding to advance the Fairbanks LNG Effort to where it is now needed most; the expansion of the five phases of Natural Gas network throughout greater Fairbanks.

We are actively in discussions with Siemens Corporation's Dresser-Rand in making this plan a reality. They have identified strong and experienced affiliated private corporate entities that have expressed great interest in investing, building and operating the facility.

It is rare when any public and private partnership can have such a statewide impact that energizes so many Alaskans. No state agency in the nation has had a challenge as great as AIDEA's phenomenal 50 year mission to promote, develop, and advance economic growth and diversification in Alaska. Over that half century, AIDEA has positively impacted millions of Alaskans, working with thousands of private corporations to accomplish overwhelming goals that have benefited generations of Alaskans.

Dresser-Rand, Northstar Industrial, East-West Pacific Consulting, Knikatnu, Inc. and Knik Tribal Council as a team are excited about and looking forward to joining the ranks of AIDEA's half century of private corporate partners energizing Alaska. We see a great opportunity to work in a supporting role as AIDEA helps communities throughout Alaska grow beyond third world conditions with clean and economically viable LNG.

It is an honor to be able to present this plan to you. We would be happy to answer any questions you might have.

Again thank you for your attention in this matter and we look forward to moving ahead to safely and cost effectively gasifying the Alaskan interior.

**Sincerely**

**Roger Purcell, MBA  
Senior Consultant**