



Expanding Natural Gas Markets (PNWER)

July 13, 2015

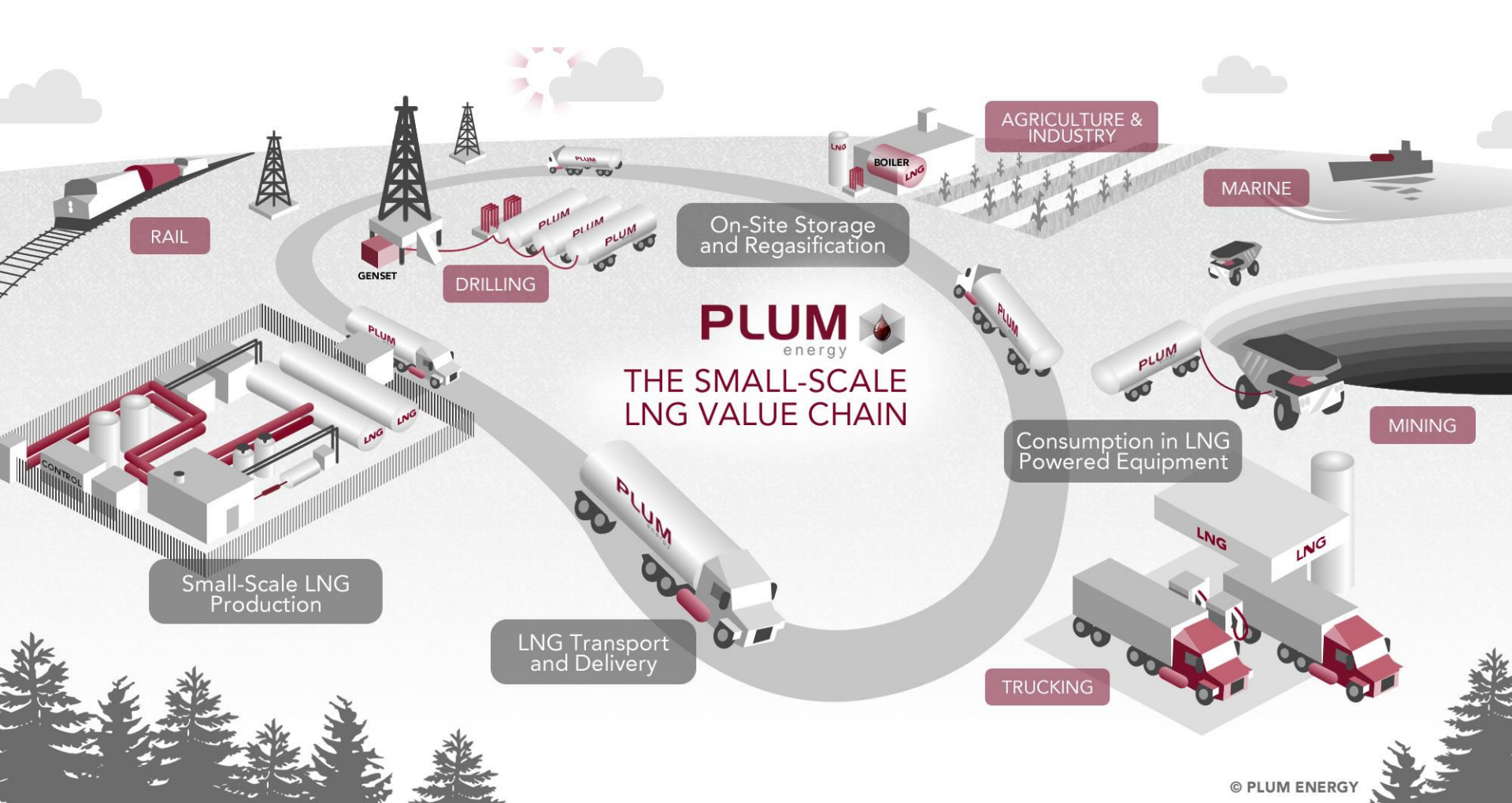
Ian Burkheimer
Director of Business Development
Plum Energy LLC

INTRODUCTION



Company

- Focused on development of small-scale LNG value chains
- Based in Seattle, WA
- Privately held with two outside shareholder
 - Avista Capital
 - World Fuels Service (Fortune 100)
- Key personnel involved in development and operation of several small-scale LNG production facilities
- Helped pioneer new markets in mining and drilling sectors
- Built two LNG production facilities in North Dakota in the last year



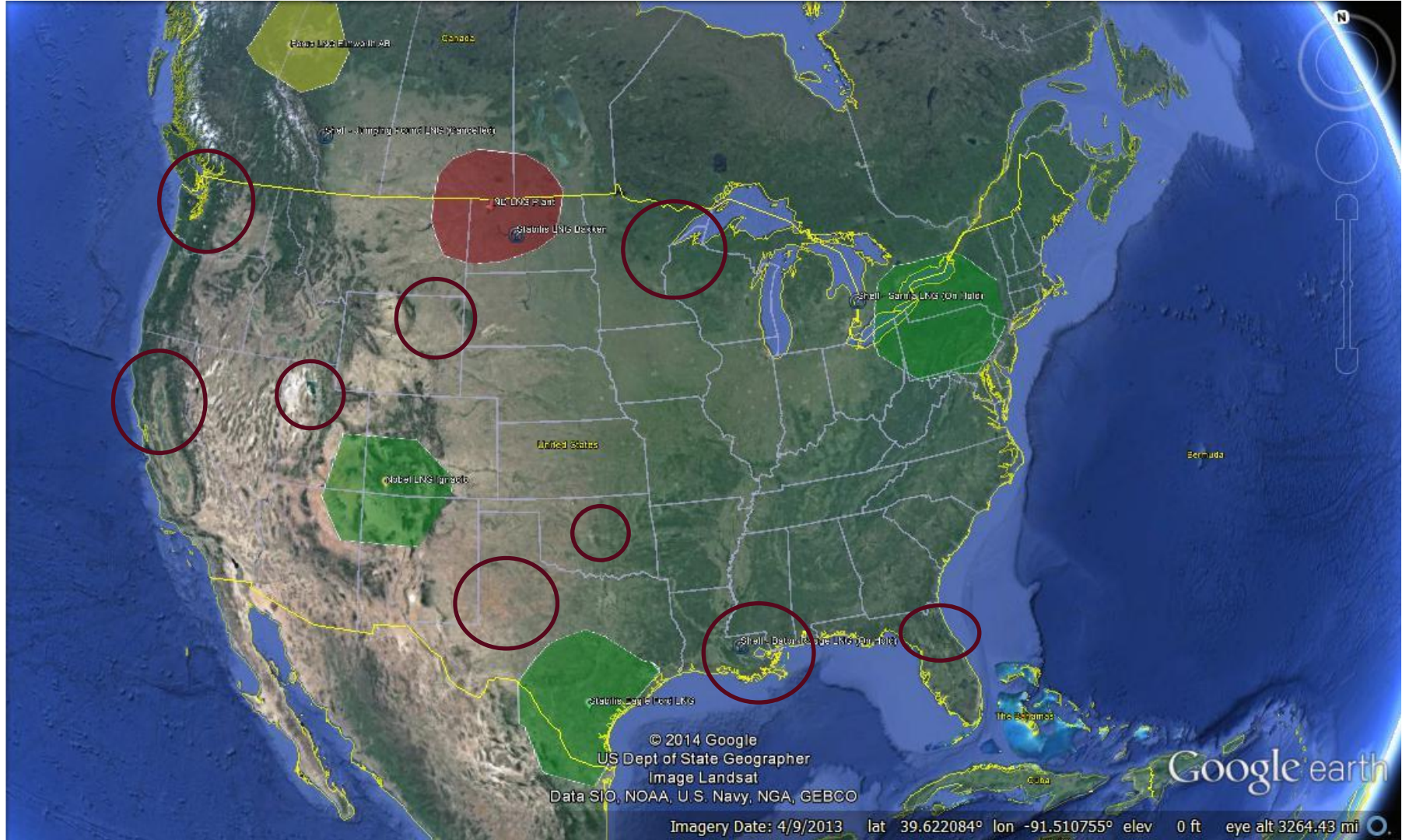
A person wearing a lab coat, a face mask, and gloves is working in a laboratory. They are positioned in the center of the frame, reaching up towards a piece of equipment that appears to be a scale or a balance. The background shows a typical lab environment with various pieces of equipment, including what looks like a fume hood or a similar enclosure. The lighting is somewhat dim, and the overall color palette is muted, with a reddish-brown tint overlaid on the image. A white horizontal bar is present in the lower third of the image, containing the text 'UPDATE FROM LAST YEAR'.

UPDATE FROM LAST YEAR

North Dakota LNG



Proprietary and Confidential



Exxon LNG Export

Exxon

Shell - King Island LNG Plant

QIL LNG Plant

Stavins LNG Dock

Shell - Sabine LNG Terminal

United States

Bermuda

Exxon LNG Export

United States

Shell - Belugas LNG Terminal

Stavins LNG Dock

The Bahamas

Cuba

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US Dept of State Geographer
Image Landsat
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

Google earth

Imagery Date: 4/9/2013 lat 39.622084° lon -91.510755° elev 0 ft eye alt 3264.43 mi

Pricing of LNG--Example

Item	Cost	Miles	LNG price (\$/Gallon)	DGE Price (X 1.68)
Feedstock for LNG	\$3.00/MMBTU		\$0.25	\$0.42
Liquefaction	\$5.45/MMBTU		\$0.45	\$0.75
FOB Price	\$8.00/MMBTU		\$0.70	\$1.17
Transport, Delivery, refueling	\$3.00/MMBTU	500	\$0.25	\$0.42
Delivered Price	\$11.00/MMBTU		\$0.95	\$1.59

Diesel Rack rates are in the \$1.80-2.00 range right now in many markets



OTHER PROJECTS

Off-Grid Applications

Oil and Gas



Asphalt Plants



Remote Communities





CASE STUDIES—MINING

Conversion of Mine-Haul Trucks to Bi-Fuel

Cat 793
converted
using EVO-
MT system
provided by
**Gaseous Fuel
Systems**



Mining

CAT 793's at coal mine in the Powder River Basin. Average diesel burn is ~700 gallons per day



Gold Mine in Africa that uses diesel to generate up to 20MW of power when grid goes down



New Refueling Infrastructure

- Refueling is critical in conversion to LNG as it cannot adversely impact production
- Many mines refuel several trucks at one time, often in multi-station refueling facilities
- Others require mobile refueling, or strategically placed single station fueling



Eagle Butte Mine Site



Ancillary Equipment for Mine Truck Conversion



- Mobile Re-fueler from Chart called an Orca
- Holds 3,500 gallons of LNG
- Submerged delivery pump can deliver ~50 gallons per minute at 210 psig

- Vertical 16,000 gallon tank
- Pump skid to pump 50-100 gpm
- Single refueling nozzle, expandable to 8



Ian Burkheimer
Director of Business
Development
Plum Energy LLC

16040 Christensen Road, Suite 208
Seattle, WA 98188
Cell: (253)237-2106
Email: Ian.Burkheimer@plumenergy.com



