

25th world gas conference "Gas: Sustaining Future Global Growth"

# Unconventional Gas – Transforming the Global Gas Industry

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Date: 7 June 2012

Venue:



Patron



Host

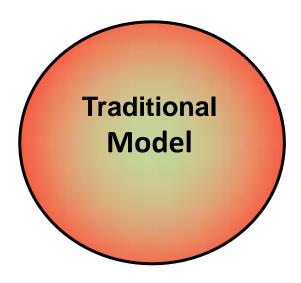
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### **Traditional Model for the Global Gas Industry**

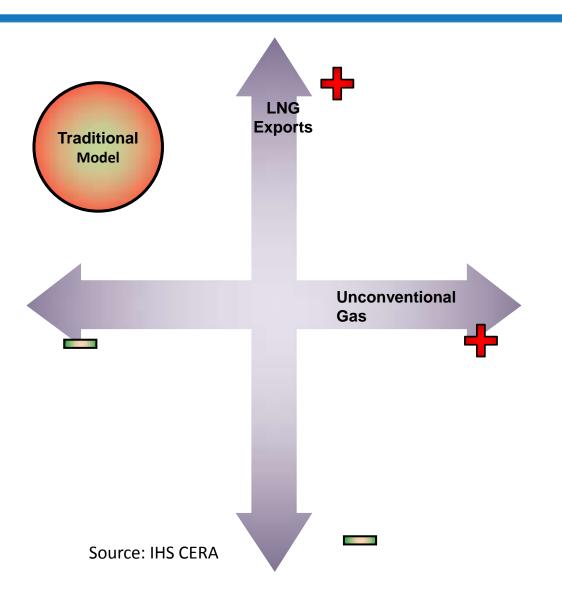




- Increased international trade
- Globalisation of gas markets
- Two groups of importing countries
  - Developing economies
  - Largest emerging economies
- Exporters--Russia, the Middle East, Australia, North and West Africa, and certain Central Asian states.

### Three Factors Undermining the Traditional Model





Shale

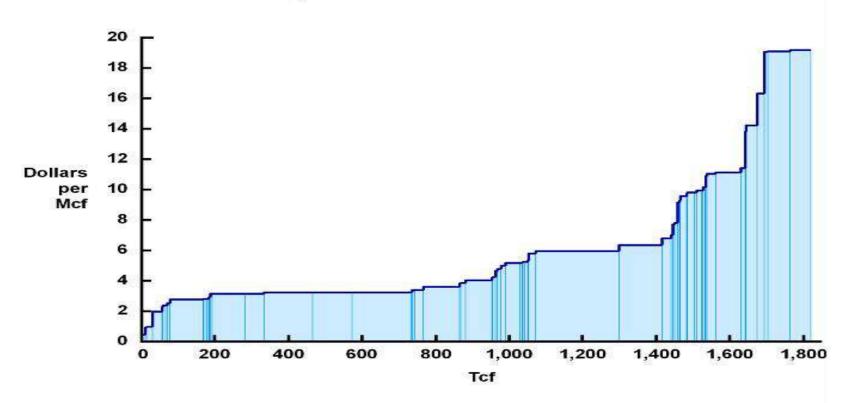
Deepwater Finds

Middle East





#### Breakeven Henry Hub Price for Natural Gas Resources



Source: IHS CERA.

Note: Includes proved, possible, and potential resources.

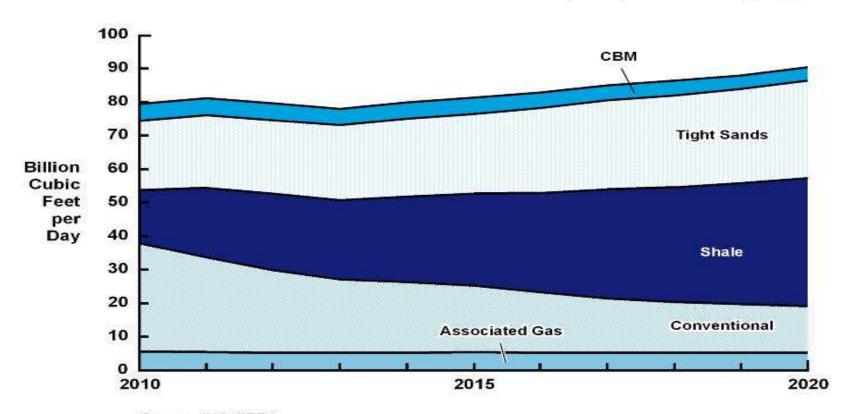
Mcf = thousand cubic feet.

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## Increasing North American Gas Production – Not Supply Constrained



#### North American Natural Gas Productive Capacity Outlook by Type



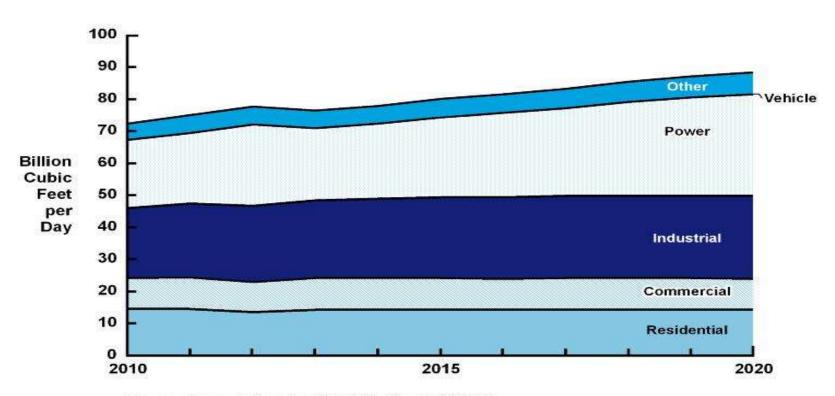
Source: IHS CERA.

20306-10

## North American Demand – In Search of Additional Markets



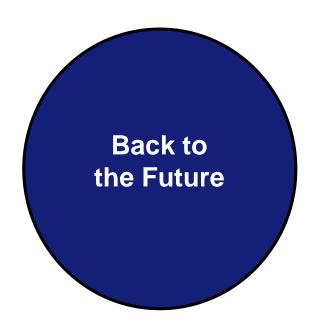
#### North American Natural Gas Demand Outlook



Source: Energy Information Administration, IHS CERA. 20306-11

### Model 1 – Limited Development of Unconventional Gas





- North America –export constrained
- Impact of unconventional gas in other parts of the world is significant but not revolutionary
- LNG trade--"business as usual"-returns to its traditional focus on Asia Pacific

### **Model 2: The Shale Gale Blows from North America**





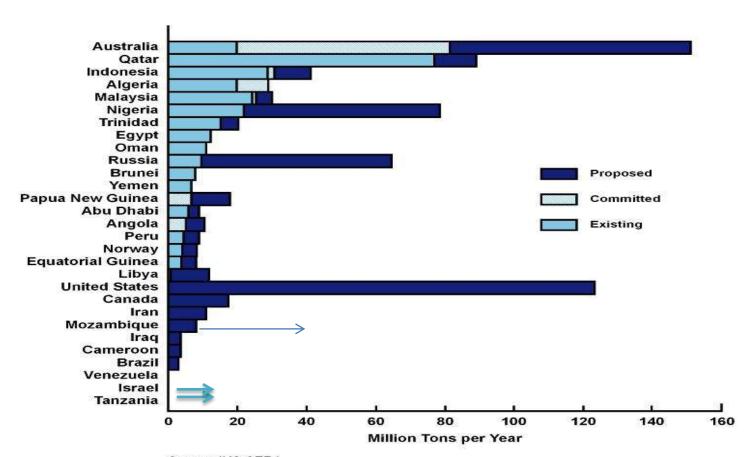
- The United States exports large quantities of LNG
- Revolutionary changes do not spread to the rest of the world
- Global LNG business grows as a result--market structure changes to accommodate this major new exporter





#### **Global Liquefaction Capacity**

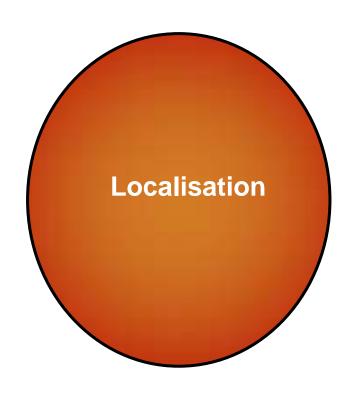
(existing, under construction, and proposed)



Source: IHS CERA. 20306-8

## Model 3: Unconventional Gas Develops Globally, But Used Locally

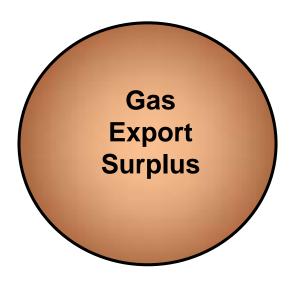




- Shale gas production increases internationally -- key emerging markets join North America to become largely self-sufficient in gas
- Globalisation of unconventional gas production techniques undercuts the globalisation of gas trade
- LNG industry begins to decline

## Model 4: Unconventional Gas Drives Increased Demand Uses



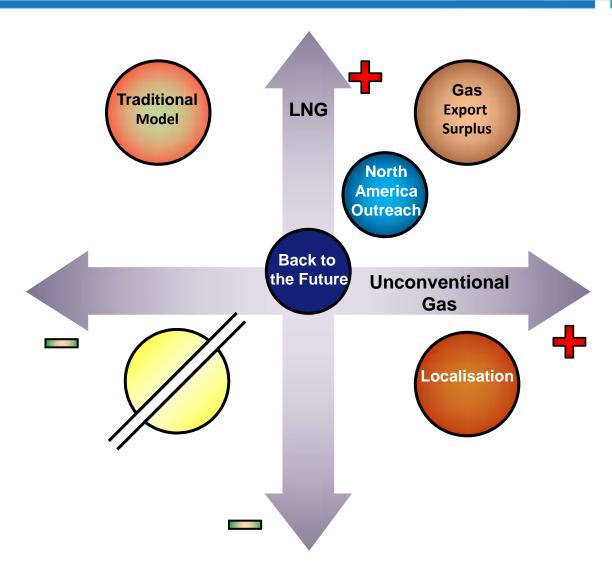


- Exports of "unconventional LNG" boom not only in North America, but also in other regions
- Global exports limited by declining number of aspiring importers
- Booming international unconventional gas drives prices down and demand up

### Four Models for the Global Gas Business







Source: IHS CERA

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