



GLOBAL IMPLICATIONS OF LNG AND UNCONVENTIONAL NATURAL GAS: THE COMING “DOUBLE HIT”

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Bethesda, Maryland

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The Unconventional Gas Revolution:

Policy, Strategic and Market Implications

Washington, DC – March 9, 2010

AGENDA

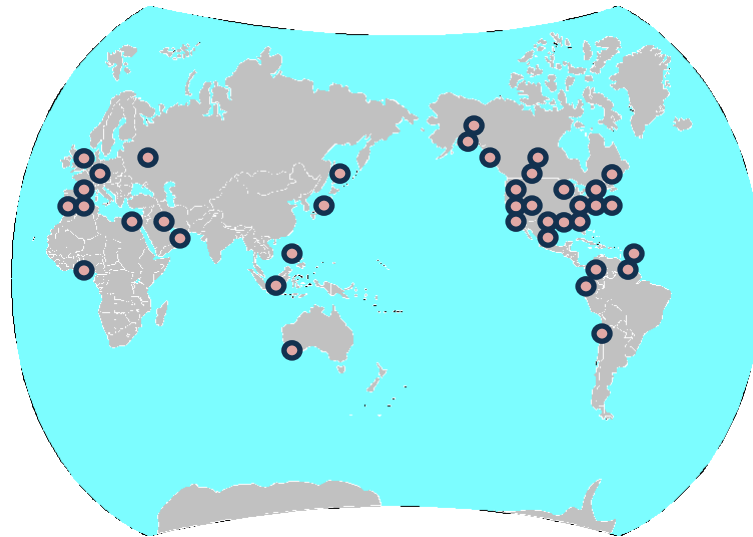
- Introduction
- Gas supply and demand expectations
- Pricing and trade consequences
- Shale gas-LNG-pipeline gas competition
- Looking ahead.

BSA – INDEPENDENT CONSULTANTS

Expertise

- Energy economics, rates, price risks, contracting.
 - Market research
 - Lender due diligence – power plants, storage, LNG
 - Litigation support/rate cases, 16 jurisdictions
- 500+ assignments since 3/84.
- Galway Group leadership in energy, LNG transactions and project management.

Major Assignments



***Clients: Energy traders,
power generators, utilities,
banks, governments,
universities.***

GALWAY GROUP OF COMPANIES:

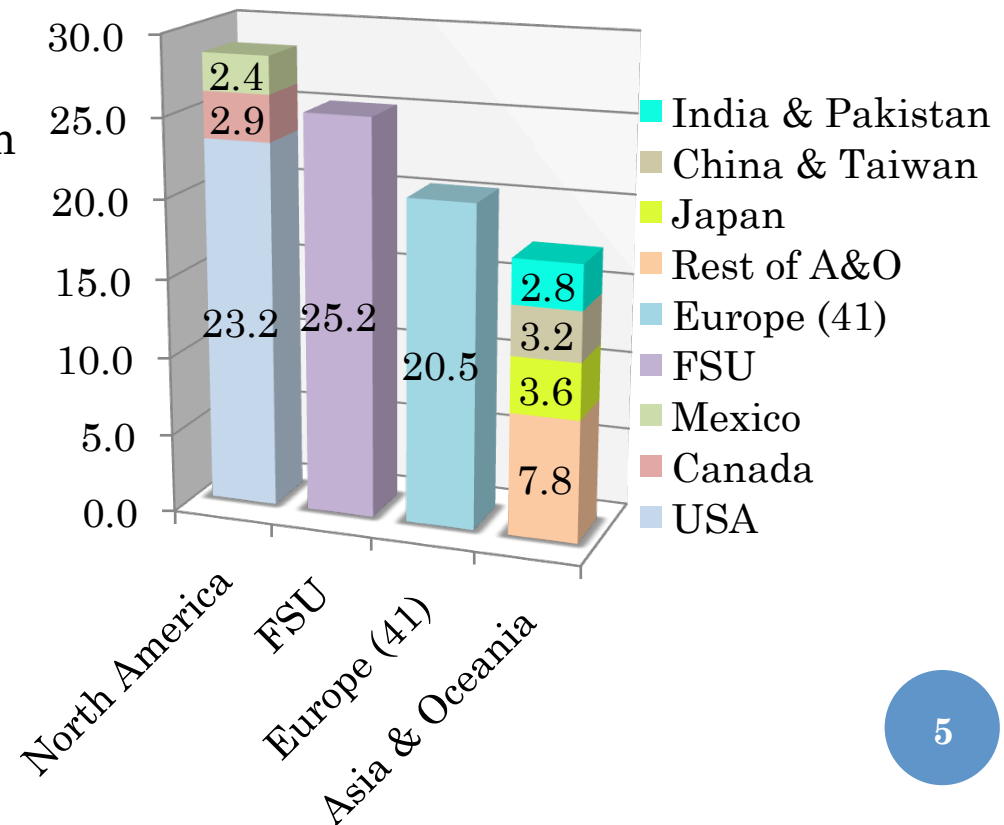
<i>Galway Energy Advisors</i>	Commercial advisors and energy consultants
<i>Benjamin Schlesinger and Associates, LLC</i>	Economic analysts and regulatory consultants
<i>SDG-Galway Energy Strategy Practice</i>	Alliance advising on global strategy and risk management
<i>Galway Capital</i>	SEC registered Broker/Dealer; provides M&A advice and advises on capital raises

FOUR GLOBAL GAS MARKETS ARE INCREASINGLY INTERRELATED VIA LNG.

World Gas Markets

- North America, 28.5 Tcf, is currently self-sufficient.
- Europe imports most gas from Russia, Algeria, West Africa (also, production in Norway, Netherlands).
- Eurasia (FSU), is self-sufficient – its gas exports mostly go to Europe.
- Industrial Asia is highly dependent on imported LNG.

Gas Demand in 2008, Tcf

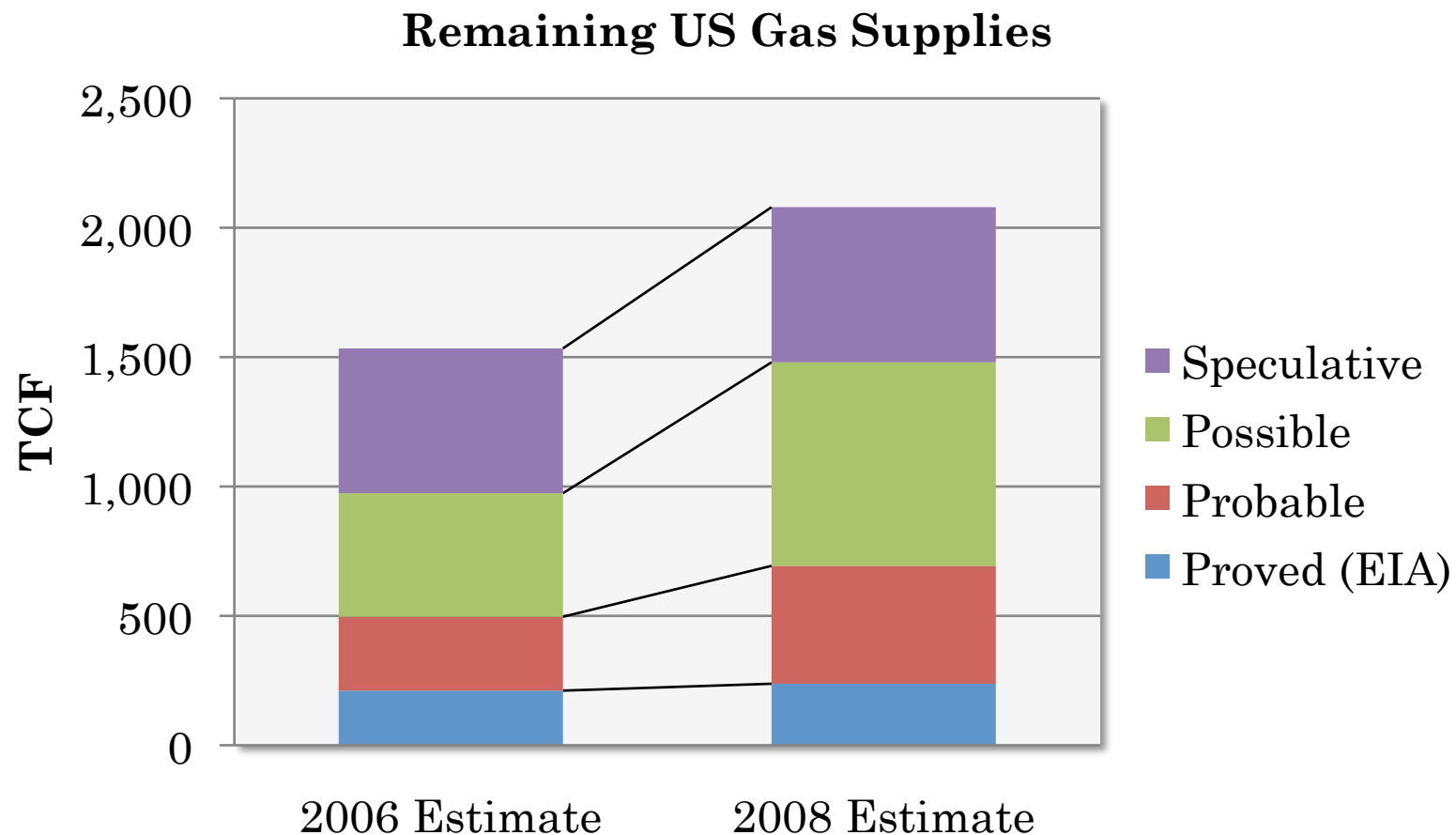


RIISING UNCONVENTIONAL GAS RESERVES ARE BEGINNING TO DESTABILIZE GLOBAL GAS MARKETS.

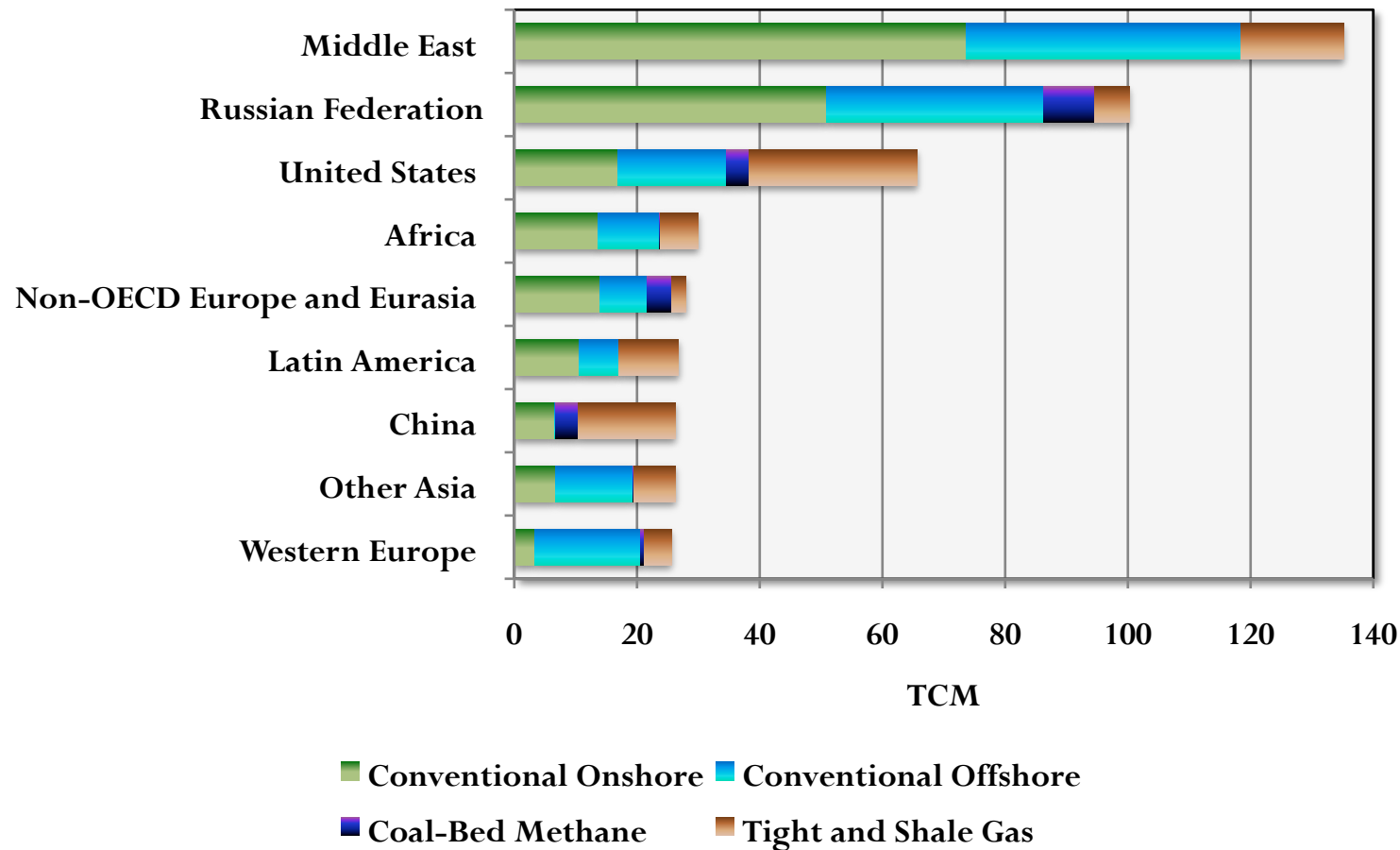


- Shale gas
 - Barnett Shale (East Texas)
 - Alabama/Oklahoma (Haynesville, Fayetteville, Woodford)
 - British Columbia (Horn River)
 - Appalachian/Quebec (Marcellus, Utica)
- Coal-bed methane
- Tight sands in the Rockies, Texas, elsewhere.

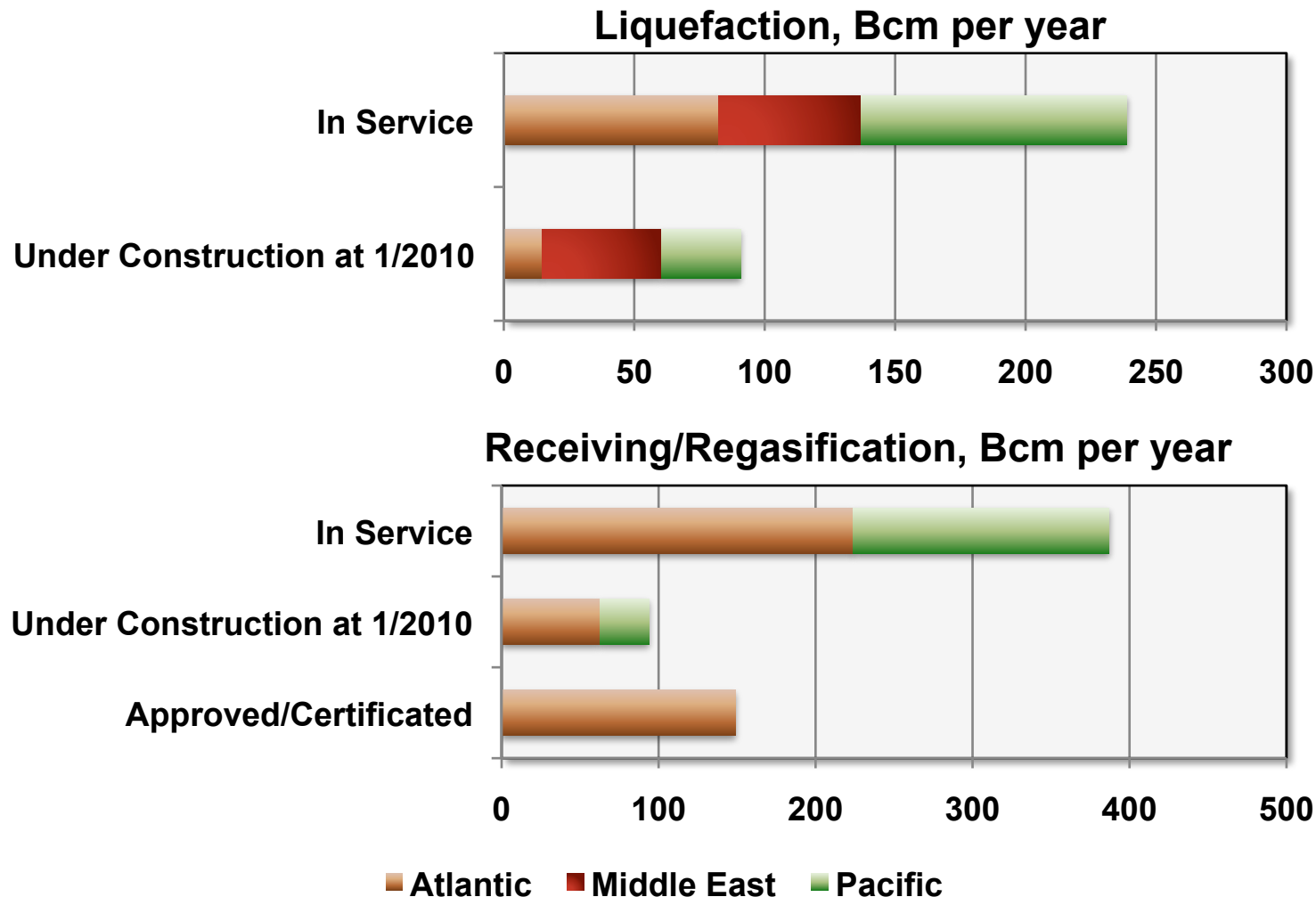
MOST OF NORTH AMERICA'S SHALE GAS BOUNTY IS CLASSIFIED FROM P50 TO P90.



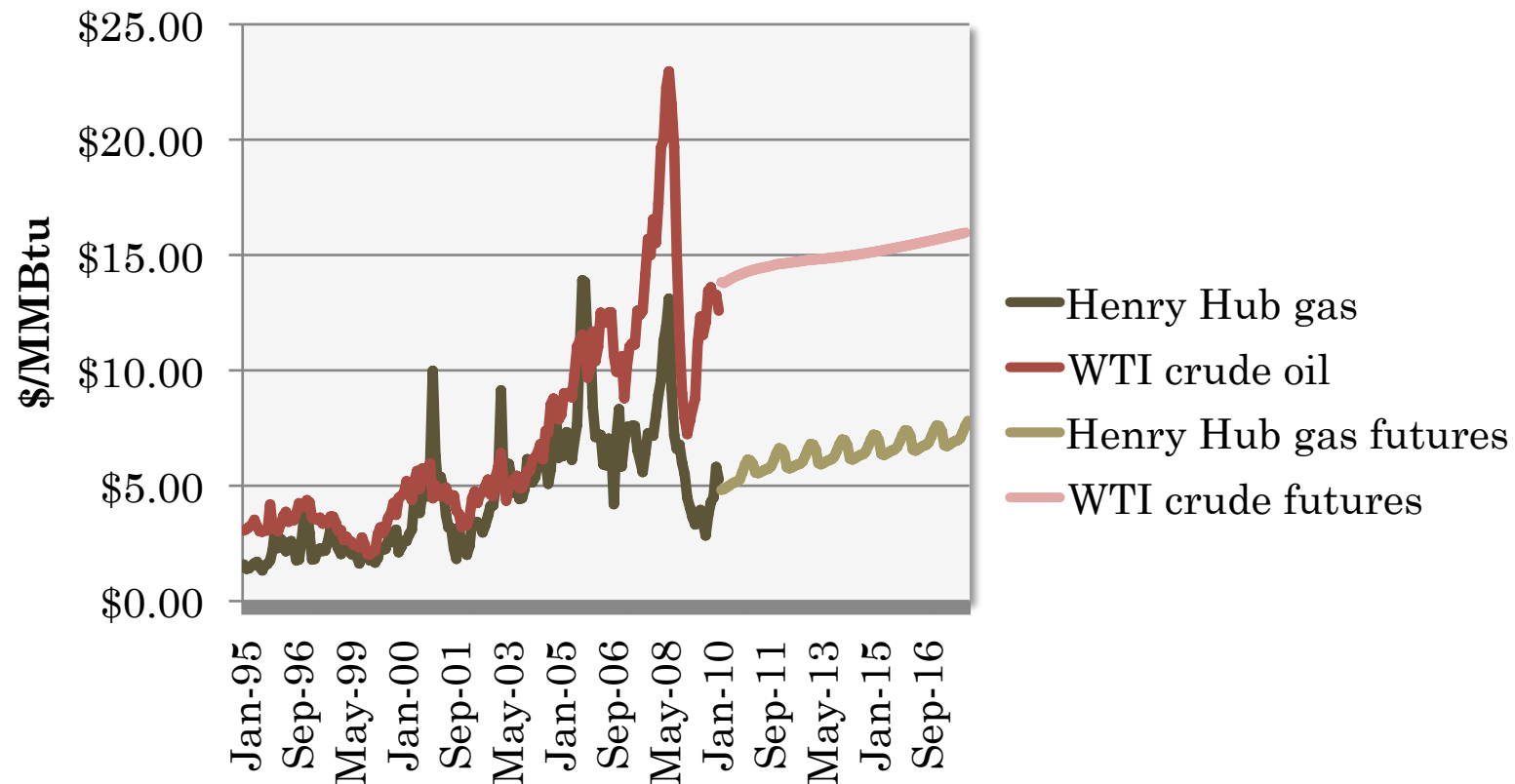
THE SHALE “HIT” RESEQUENCES MAJOR GAS RESERVE HOLDERS (P50 AND HIGHER).



THE “DOUBLE HIT” – WORLD GAS LIQUEFACTION CAPACITY WILL SHORTLY INCREASE BY 38%.

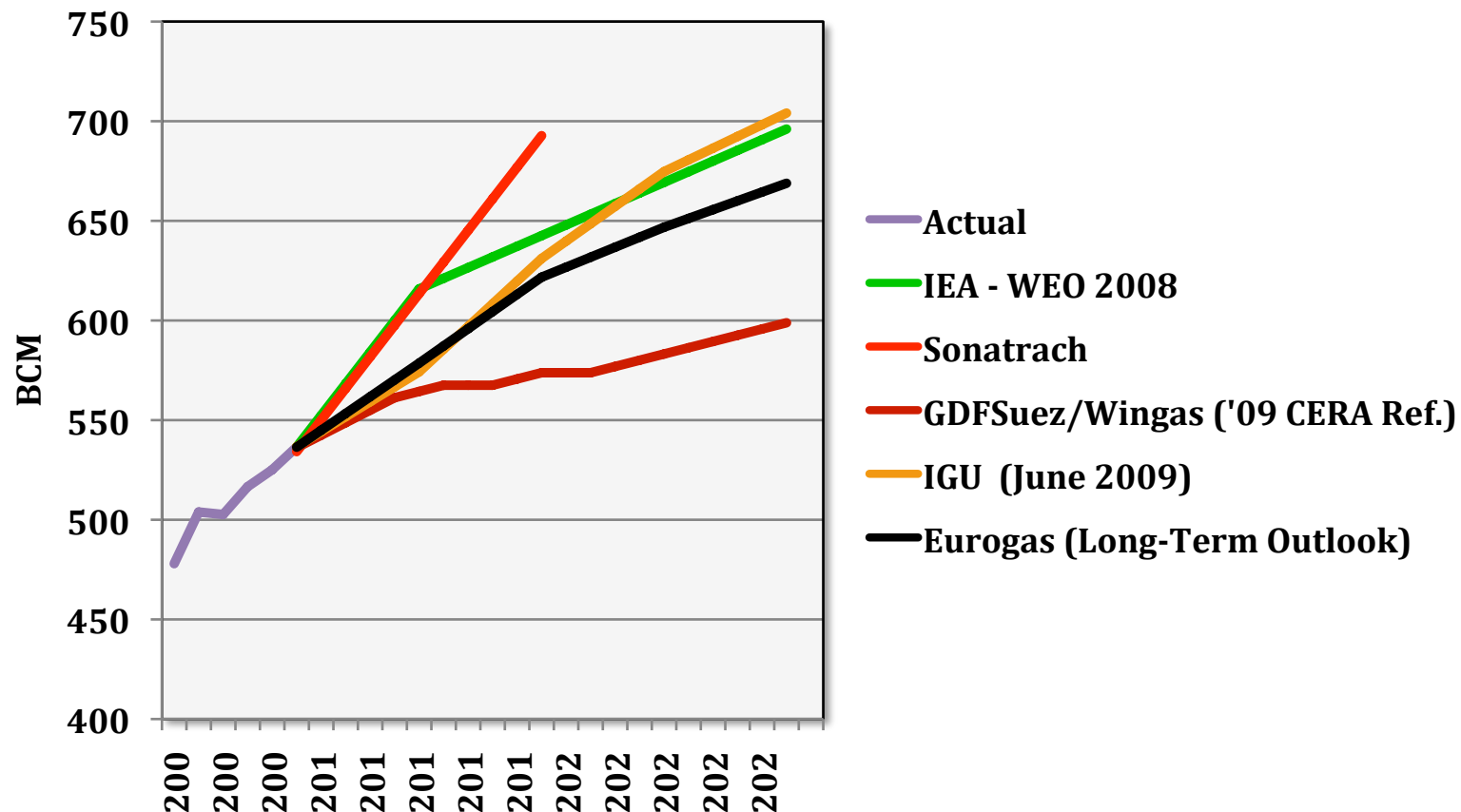


GLOBAL GAS CONTRACT PRICES, LARGELY TIED TO OIL, ARE STRESSED BY SPOT GAS PRICES.

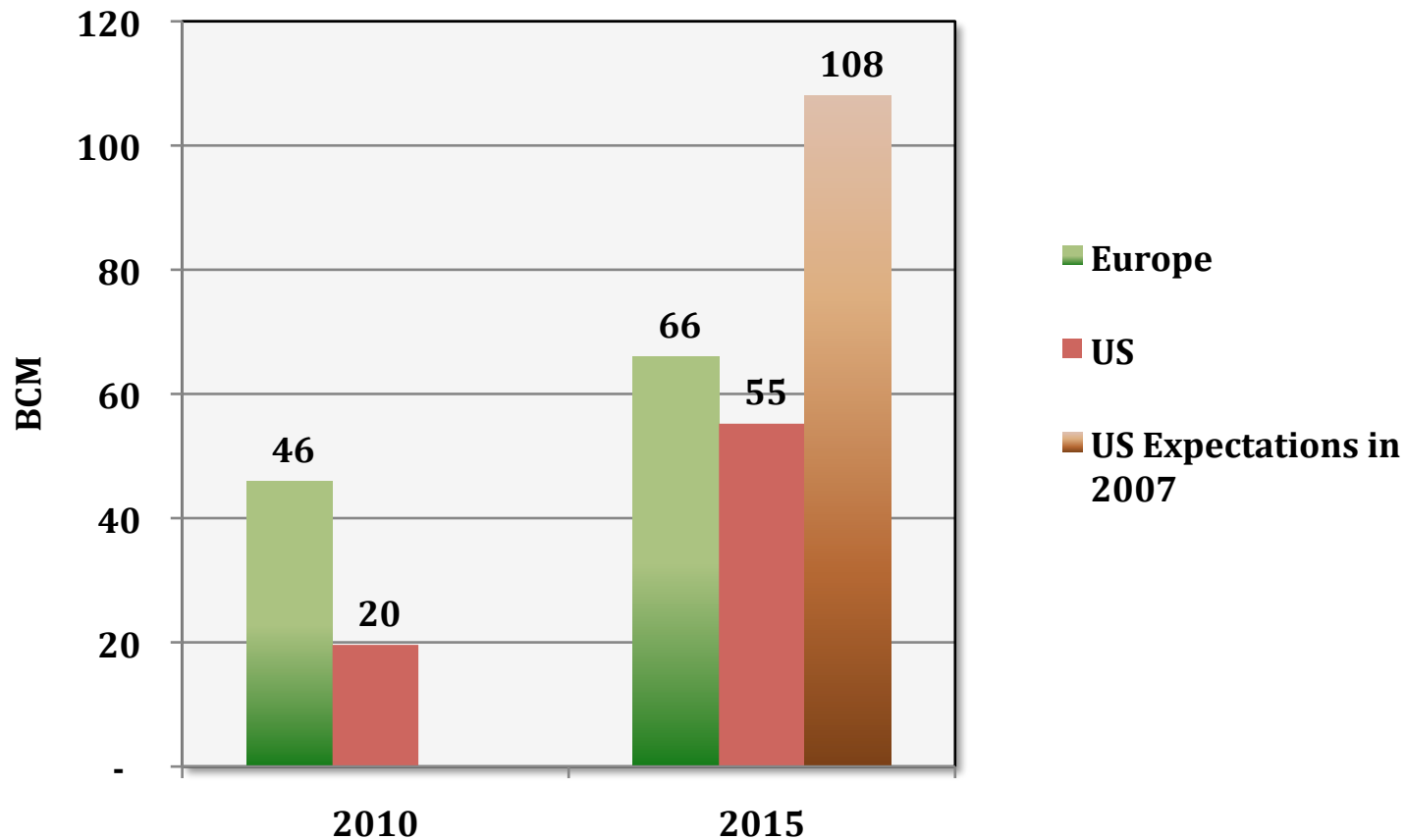


A wide supply-driven price gap has opened between contract and spot gas prices..."back to the future!"

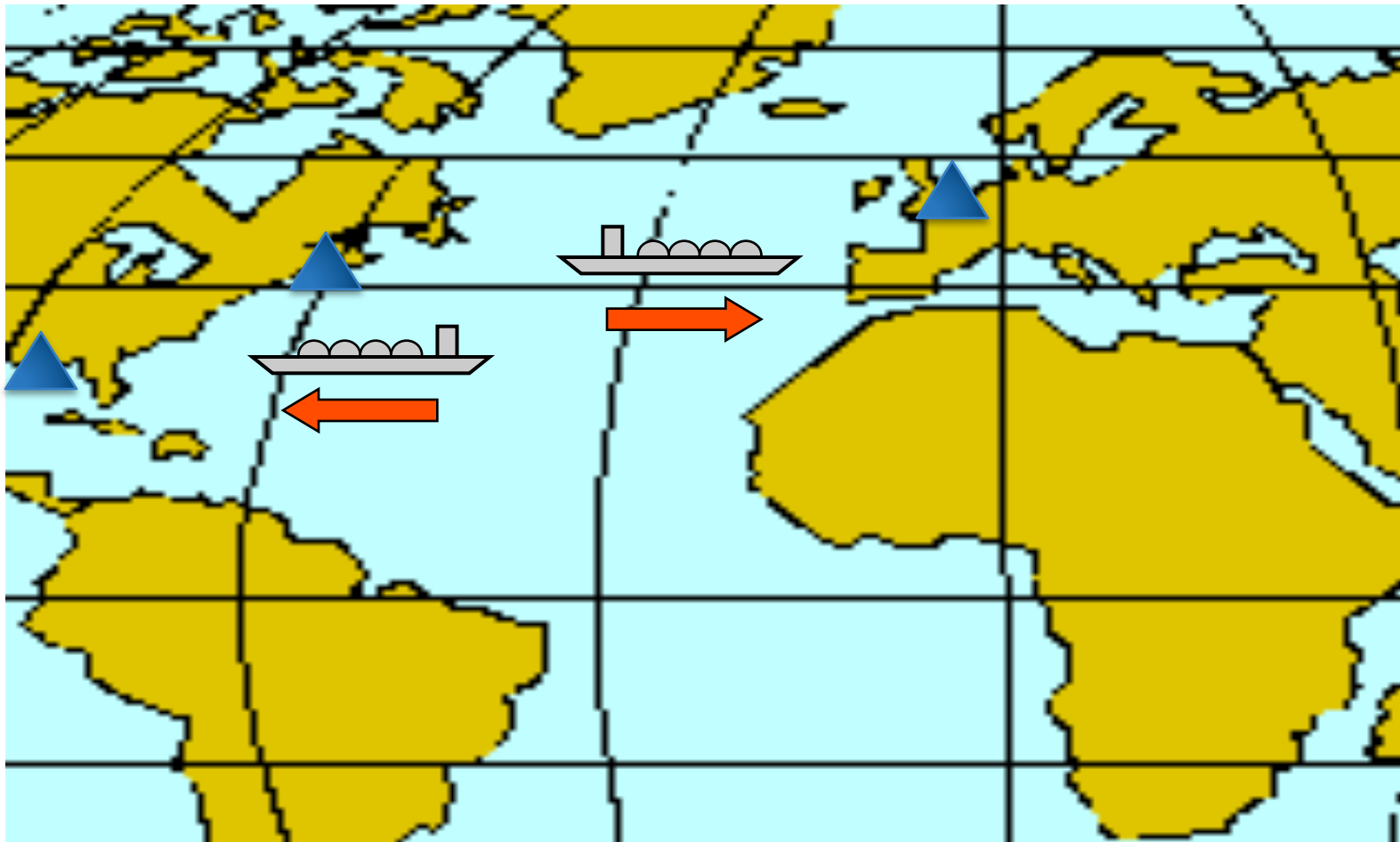
EUROPEAN GAS DEMAND IS SET TO CONTINUE GROWING, WITH NEW GAS-FIRED POWER PLANTS.



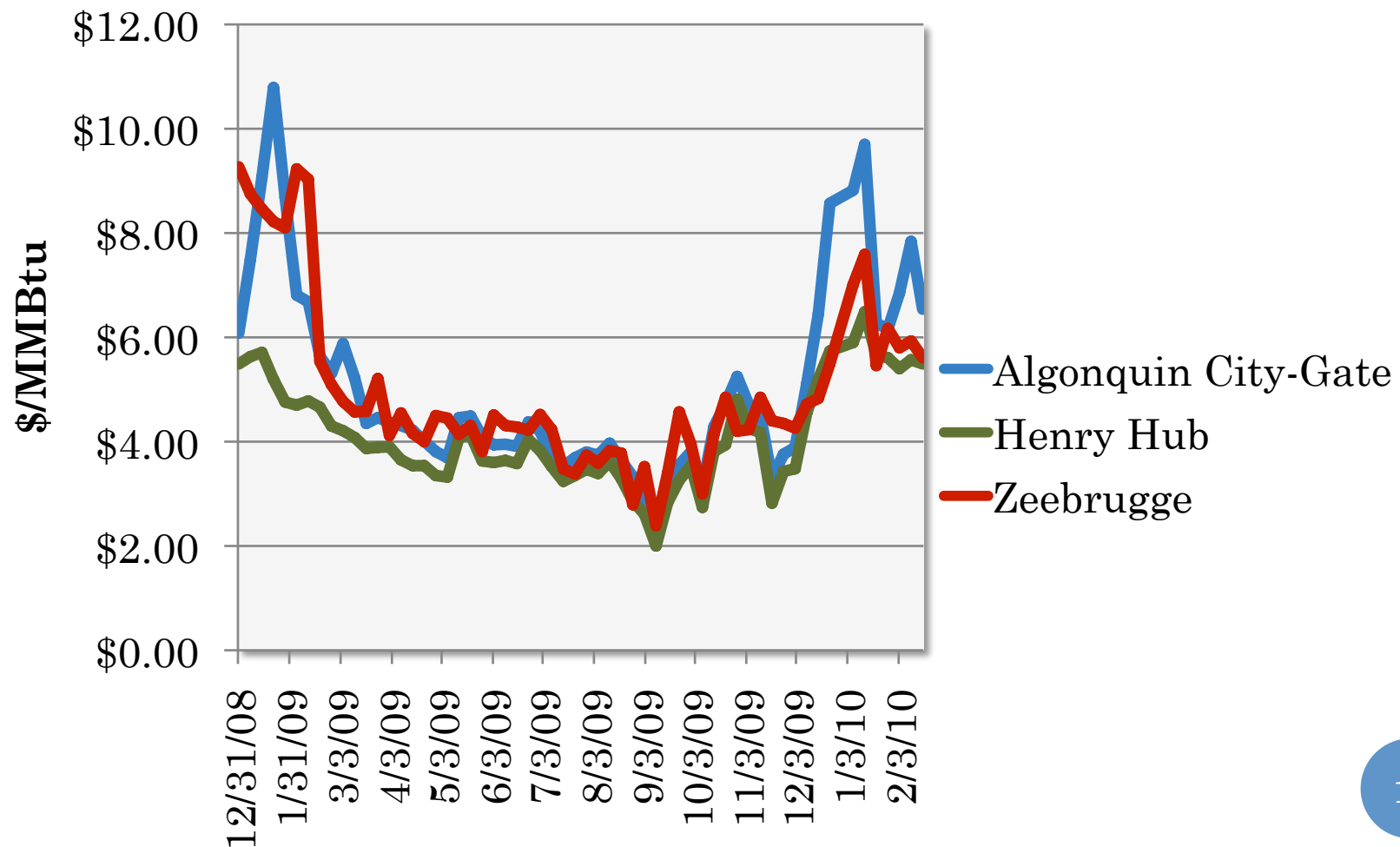
LNG IMPORT EXPECTATIONS HAVE CHANGED WIDELY IN NORTH AMERICA.



ATLANTIC LNG IS BOUNCING AMONG 3 MARKET CENTERS: NORTHEAST, HENRY HUB & EUROPE.



SPOT GAS COMPETITION IMPACTS MARKETS WITHIN AND BEYOND THE ATLANTIC.



IMPLICATIONS, COMMERCIAL RISKS...

- Uncertainty remains large – gas prices will be driven by such fundamentals as world economic growth, shale extraction technology, global LNG, carbon policy.
- A contract crisis brews in Europe – Gazprom has declared spot prices for 15% of exports through 12/2012.
 - It is likely that European gas contracts are better structured to withstand the shale-and-LNG-driven spot price onslaught than were the old US contracts (periodic price adjustments).
 - Movements in Asian markets are likely as well.
- A possible “triple hit” – major legislation and capex in renewables may ultimately curb world gas demand growth, further pressuring world gas contracts.



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