

7th Annual Rice Global Forum

October 12th, 2004

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The Future of the Natural Gas Market

Bank of America



Near-term Factors Affecting Gas Prices

- **Negative**
 - **Record working gas storage levels**
 - **Uncertain economic outlook**
 - **Permanent destruction in industrial demand**
- **Positive**
 - **Accelerating depletion**
 - **Limited drilling response to higher prices**



Long-term Factors to Consider

- **The Impact of LNG imports on US Supply and gas prices**
- **Percentage of global upstream spending on gas infrastructure development**
- **Potential implications of a gas cartel or centralized decision-making of gas exports**
- **Declining production per rig**
- **Drilling capacity given the continued improvements in drilling efficiencies**

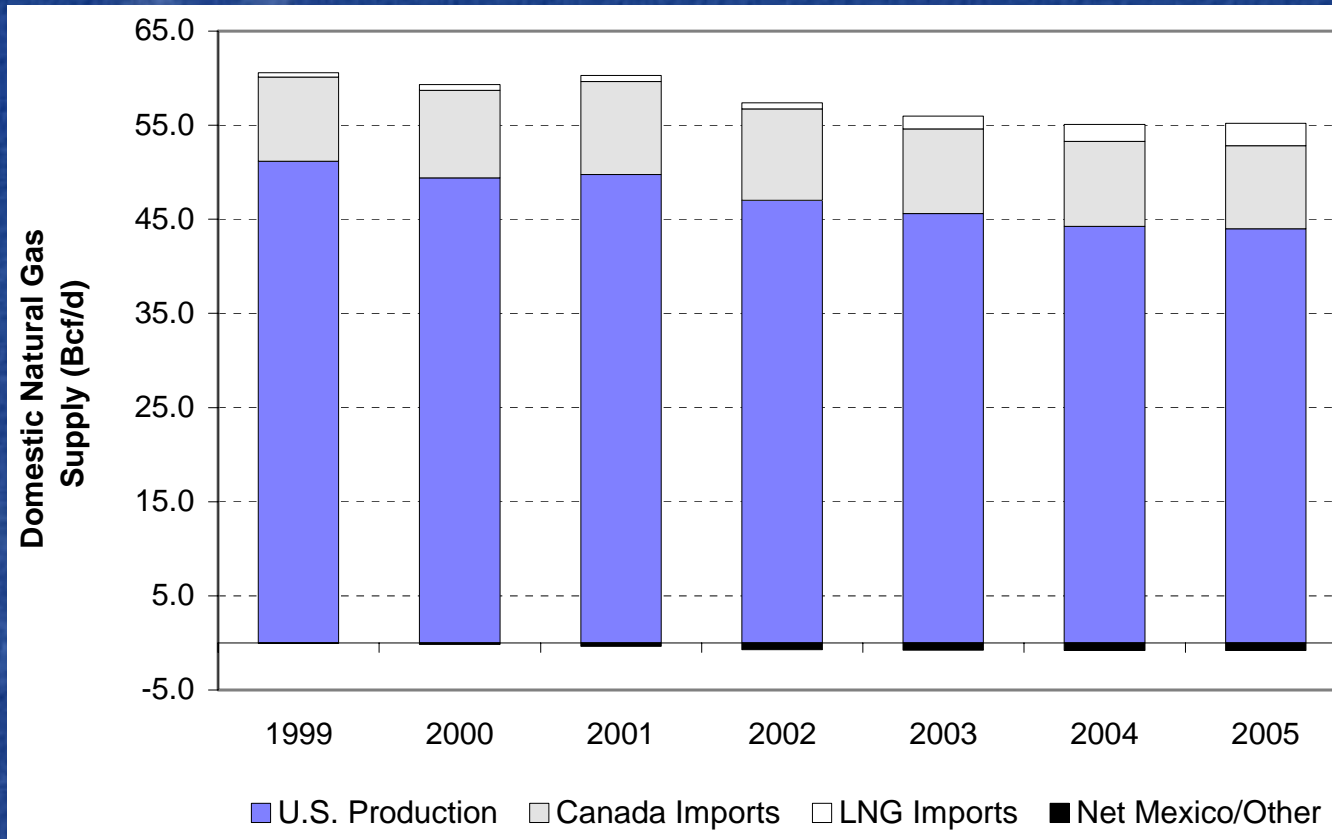


Near-term Natural Gas Supply/Demand Fundamentals

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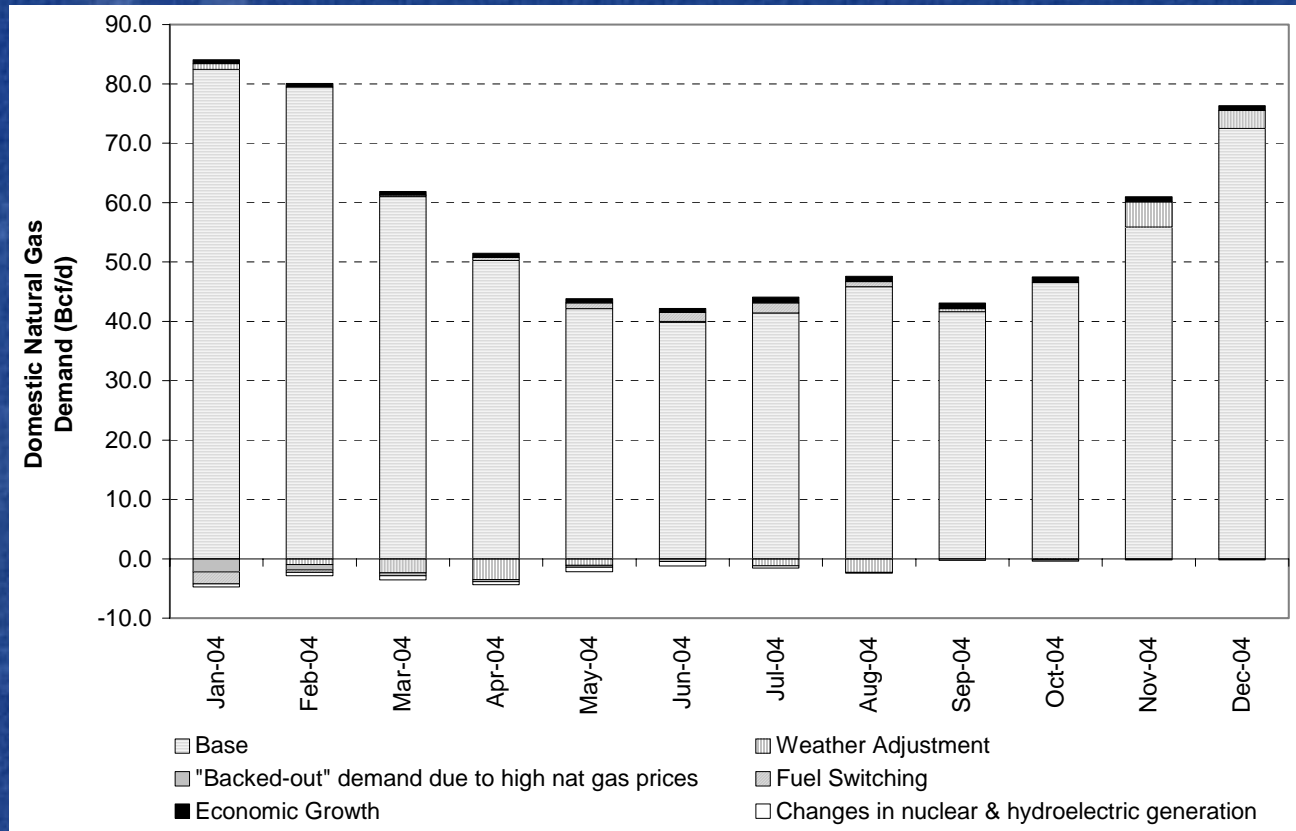
Total U.S. Natural Gas Supply Forecast



Source: EIA, BAS E&P Equity Research Team



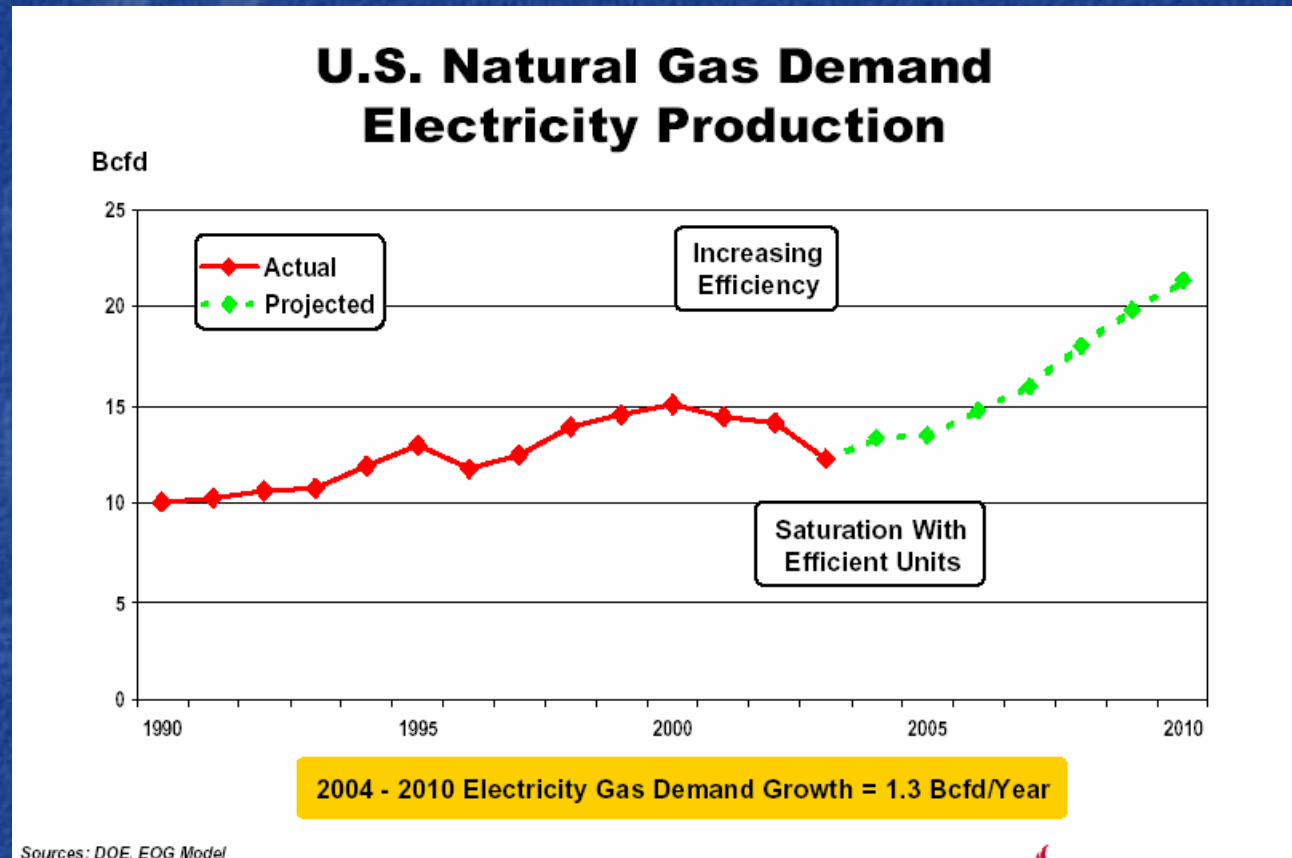
Total U.S. Natural Gas Demand Forecast



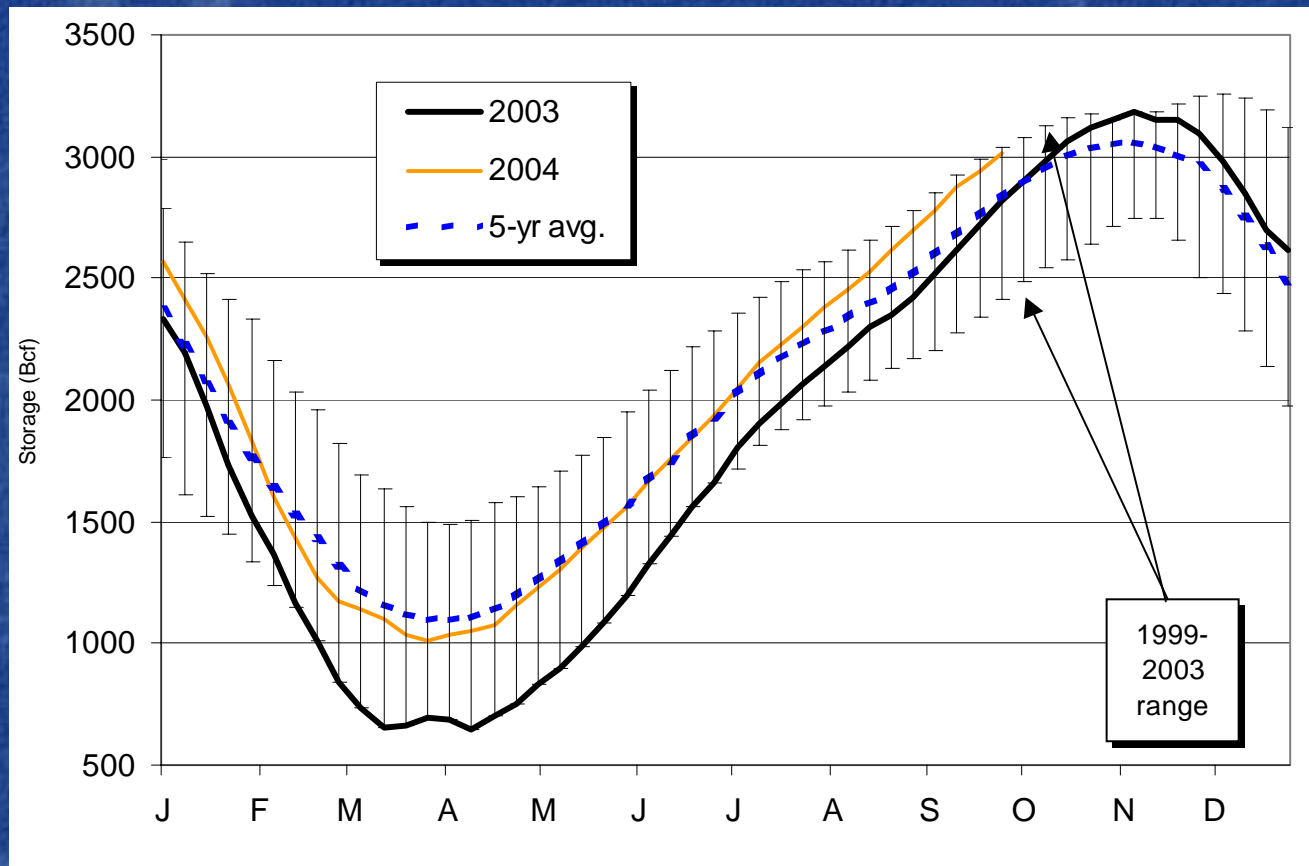
Source: BAS E&P Equity Research Team



Increasing Demand for Electricity Production



Working Gas Storage High



Source: EIA, BAS Analysis



Supply/Demand Factors

U.S. Natural Gas Supply/Demand Balance Nov 2004 – Oct 2005 Potential Scenario

| <u>Supply</u> | <u>Bcfd</u> |
|---------------|-------------|
| Domestic | (0.6) |
| Canada | 0.2 |
| Mexico | (0.3) |
| LNG | <u>0.4</u> |
| Total | (0.3) |

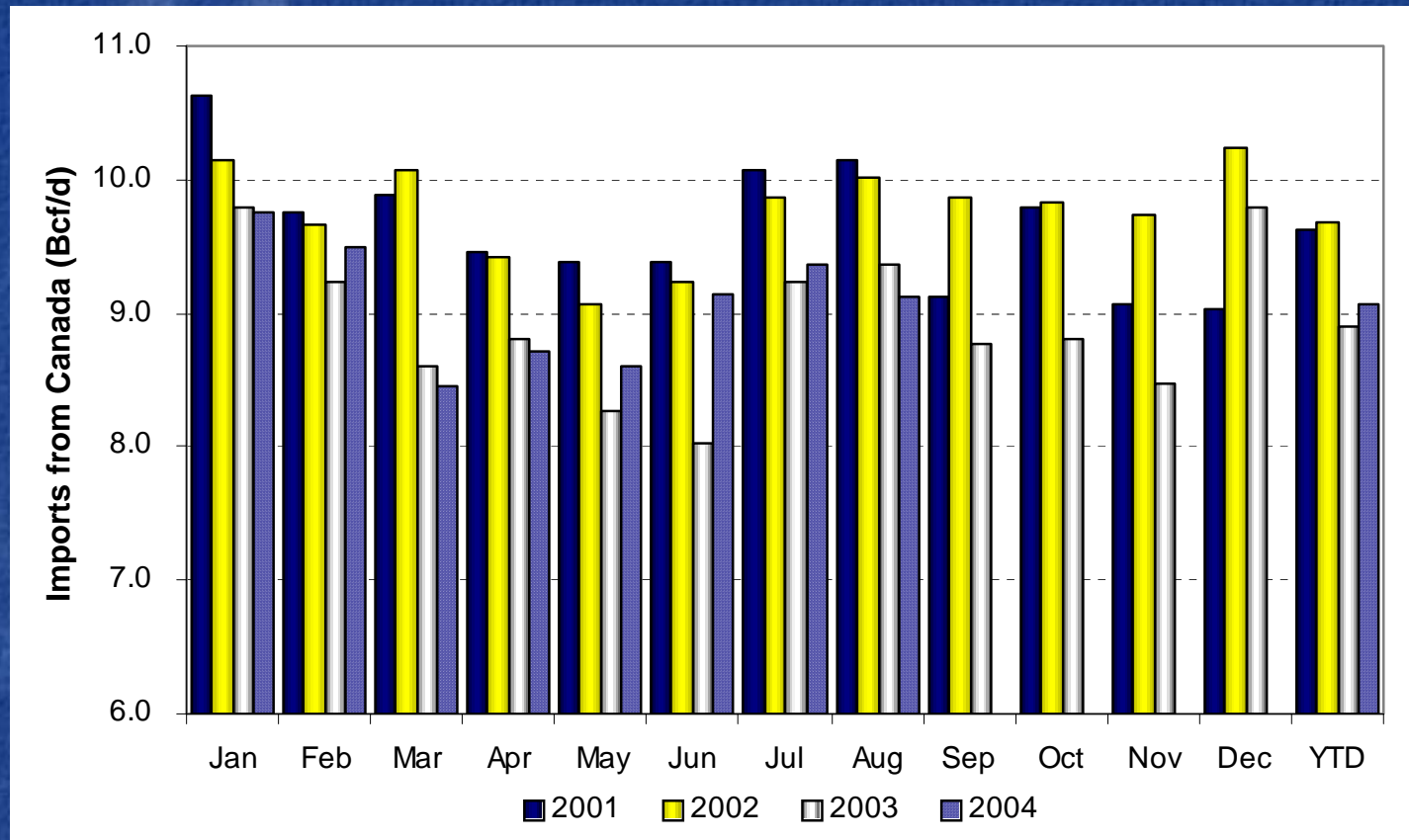
| <u>Demand</u> | <u>Bcfd</u> |
|---------------|-------------|
| Heating | 0.8 |
| Electric | 0.9 |
| Industrial | <u>0.0</u> |
| Total | 1.7 |

Supply/Demand Constriction of 2.0 Bcfd

Source: EOG Estimates



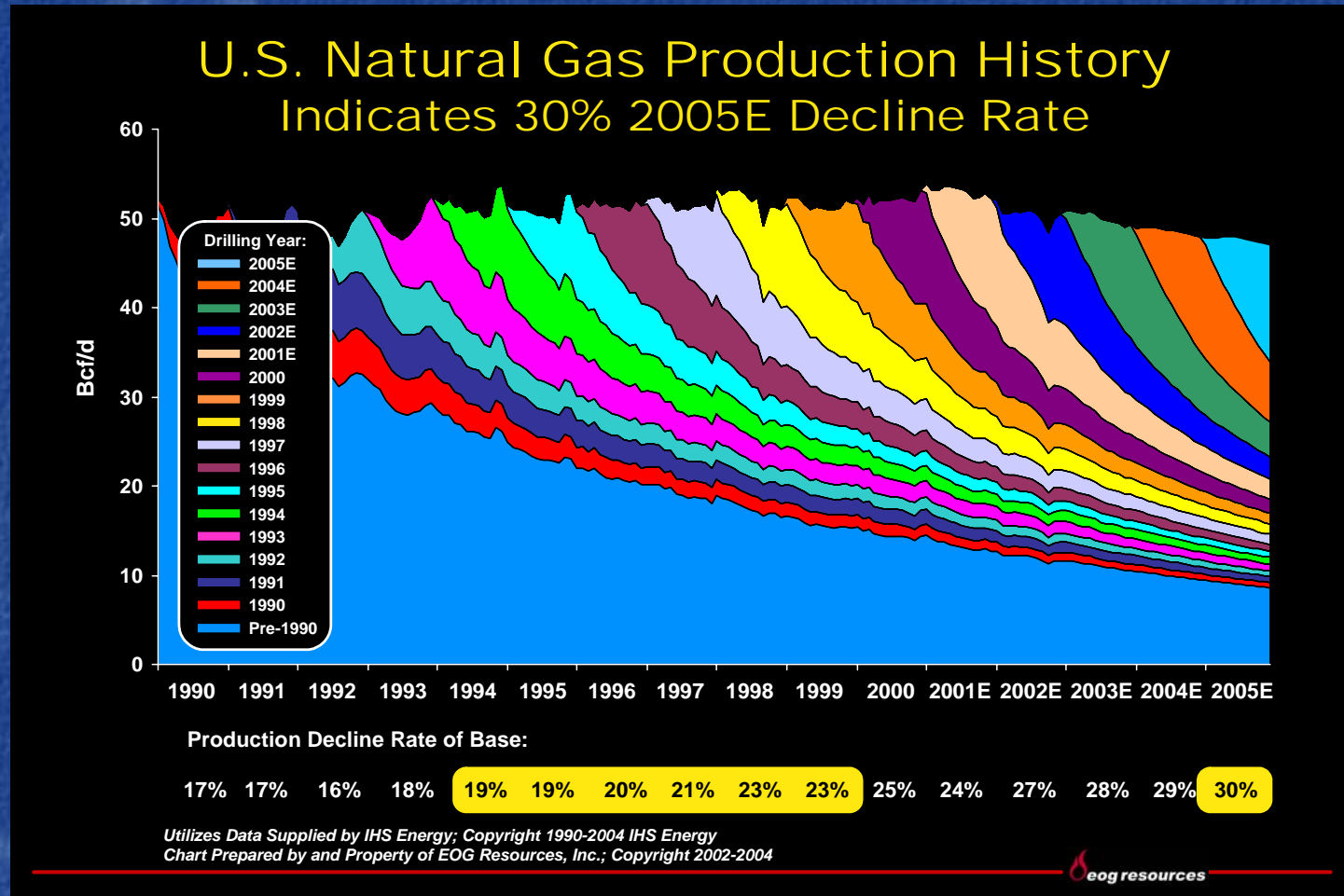
Canadian Imports Rising Slightly



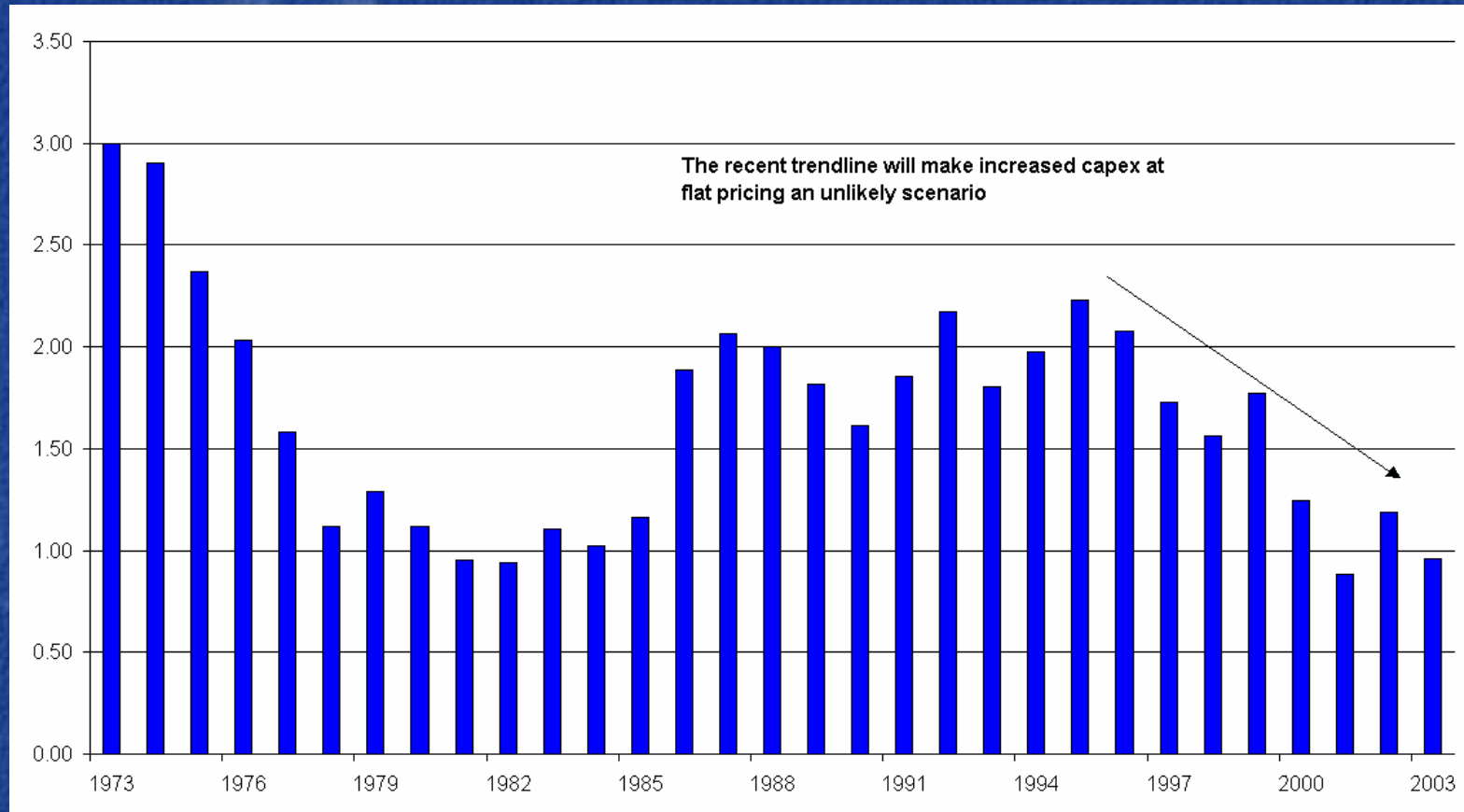
Source: National Energy Board, BAS E&P Equity Research Team



Accelerating Decline Rates in the US



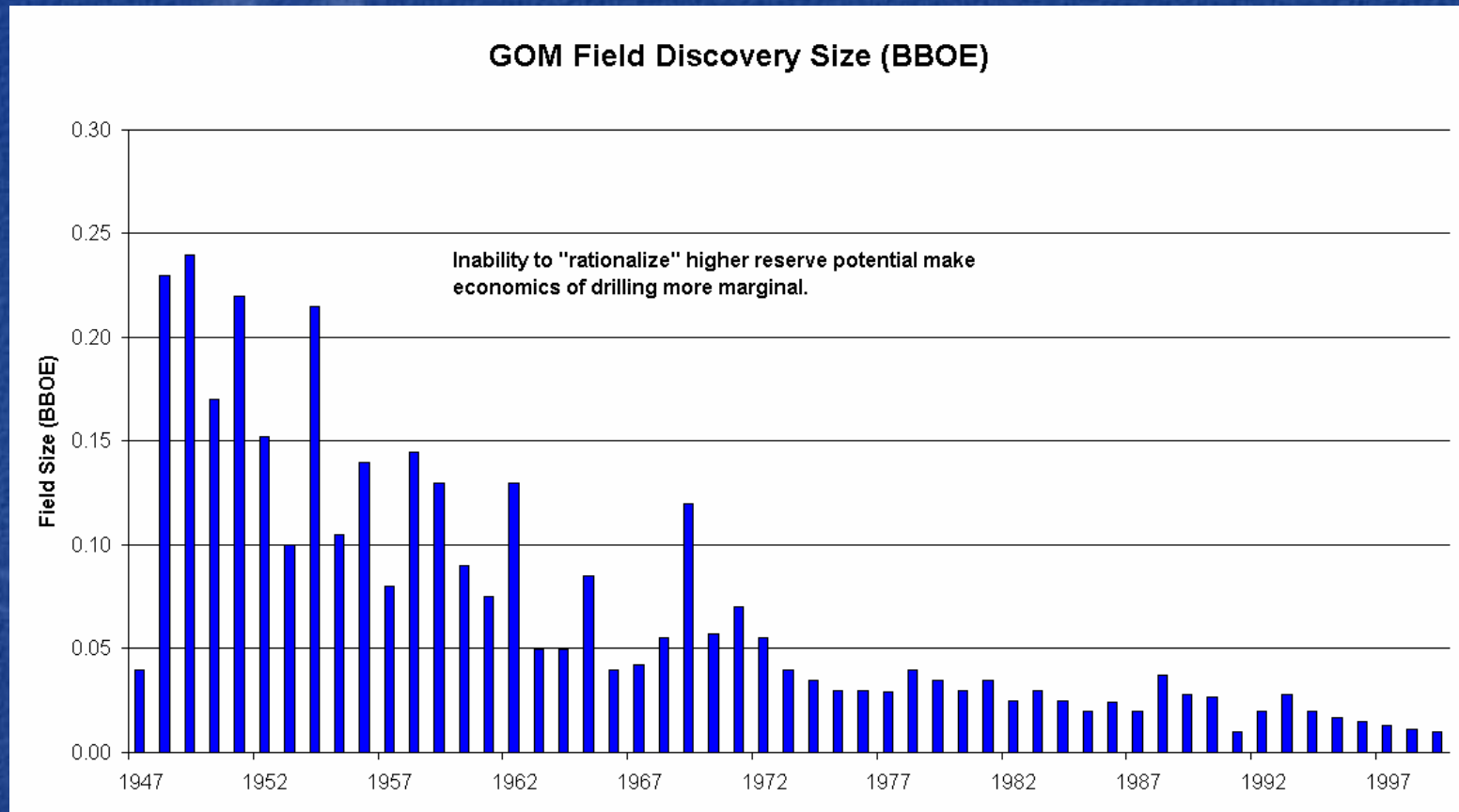
Natural Gas Production Per Well Falling



Source: EIA, BAS Analysis



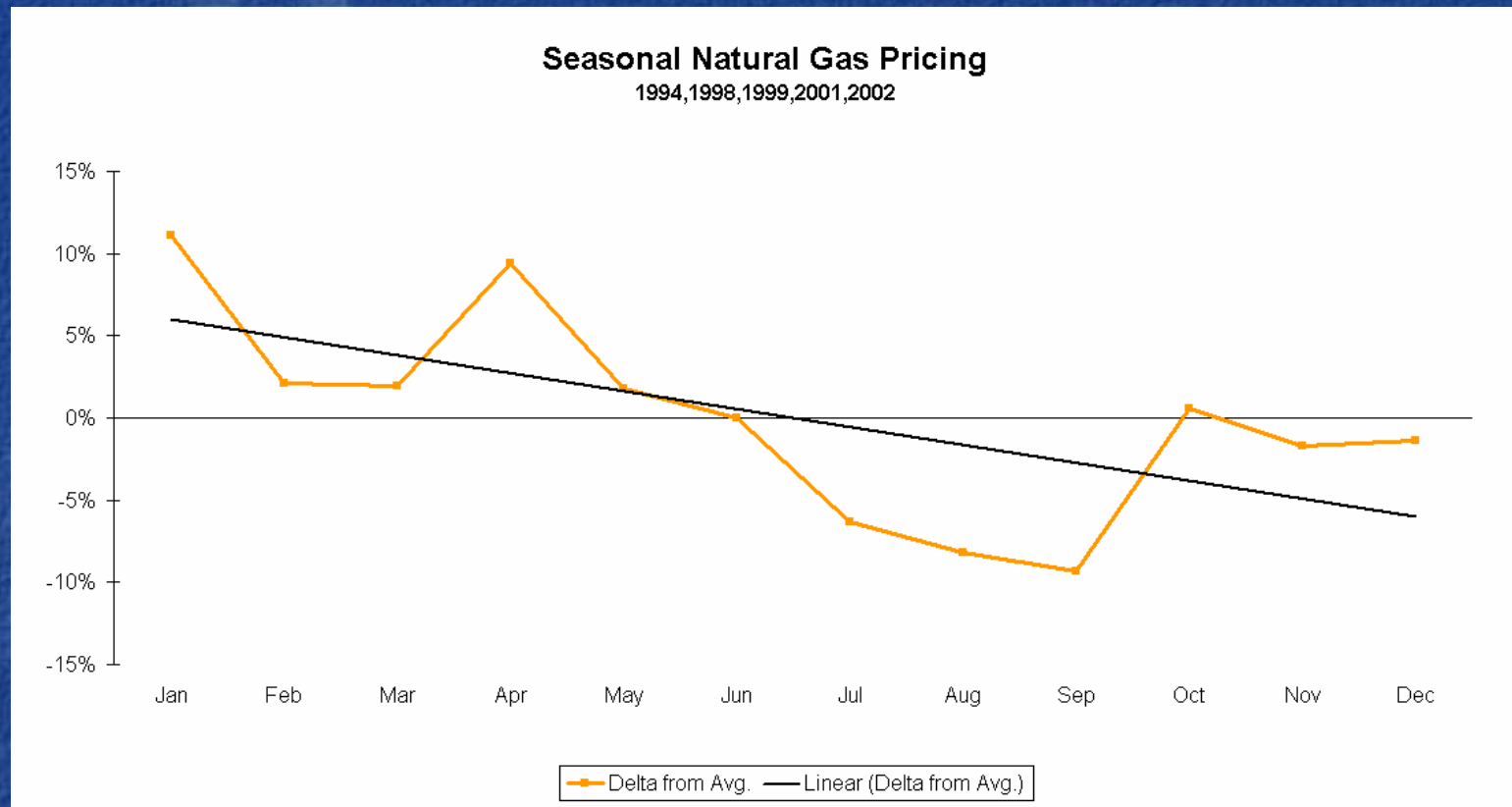
Reserve Sizes Shrinking



Source: MMS, EIA, BAS Analysis



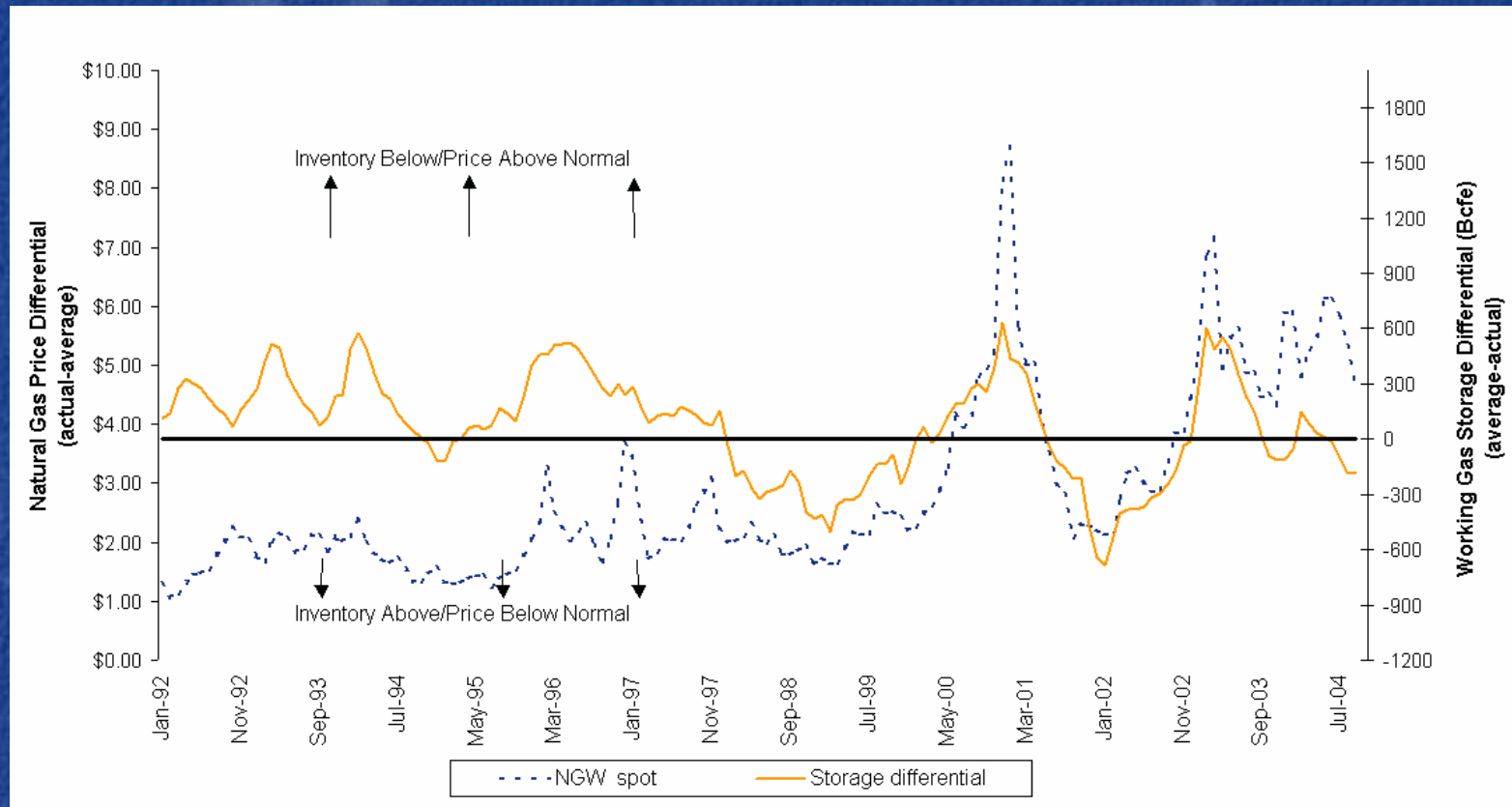
Seasonal Declines in Gas Prices During High Storage Season



Source: EIA, Bloomberg, BAS Analysis



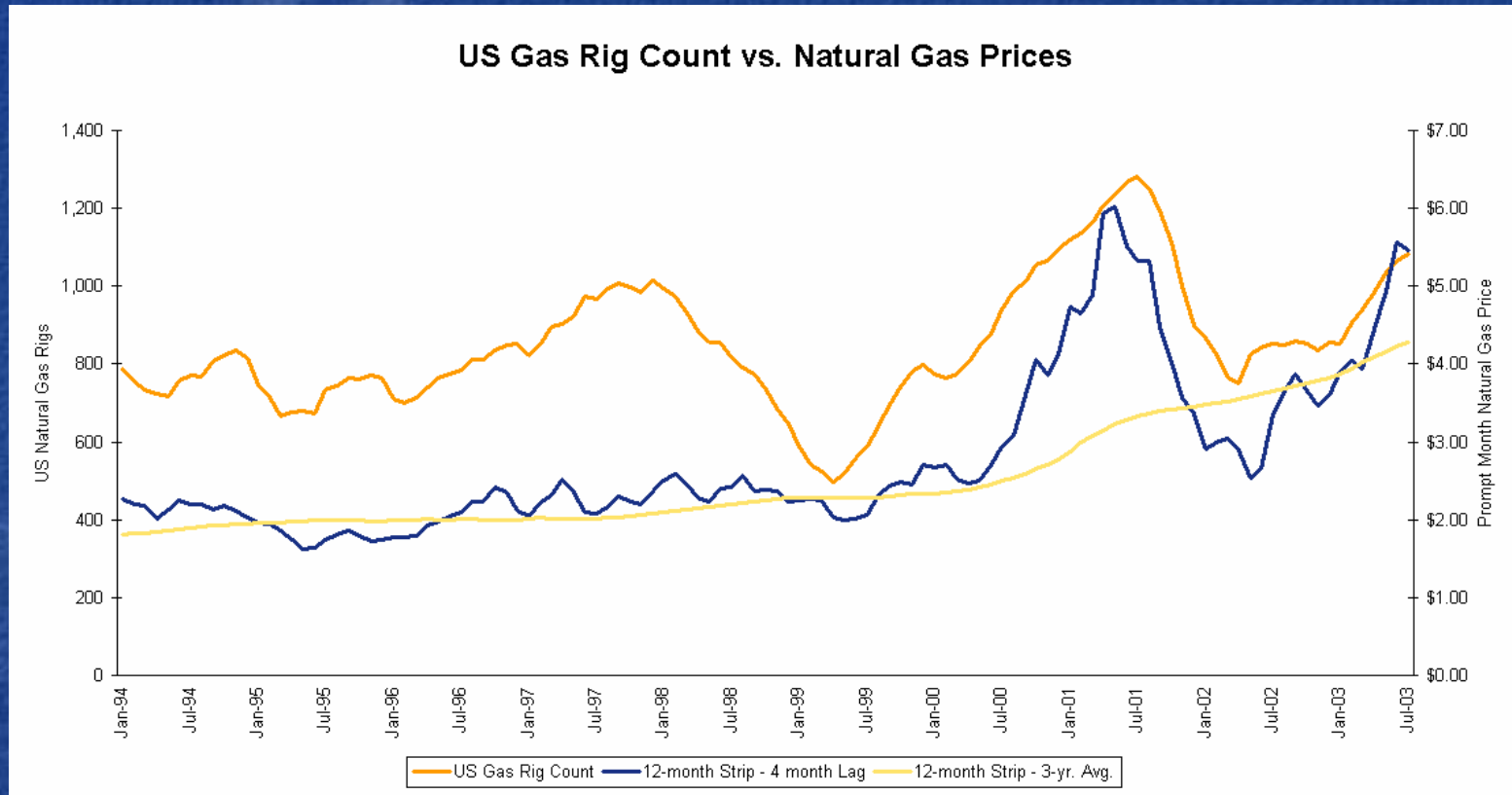
Gas Prices vs. Storage Differential



Source: EIA, Bloomberg, BAS Analysis



BAS Adjusted U.S. Gas Rig Count vs. Gas Futures Strip



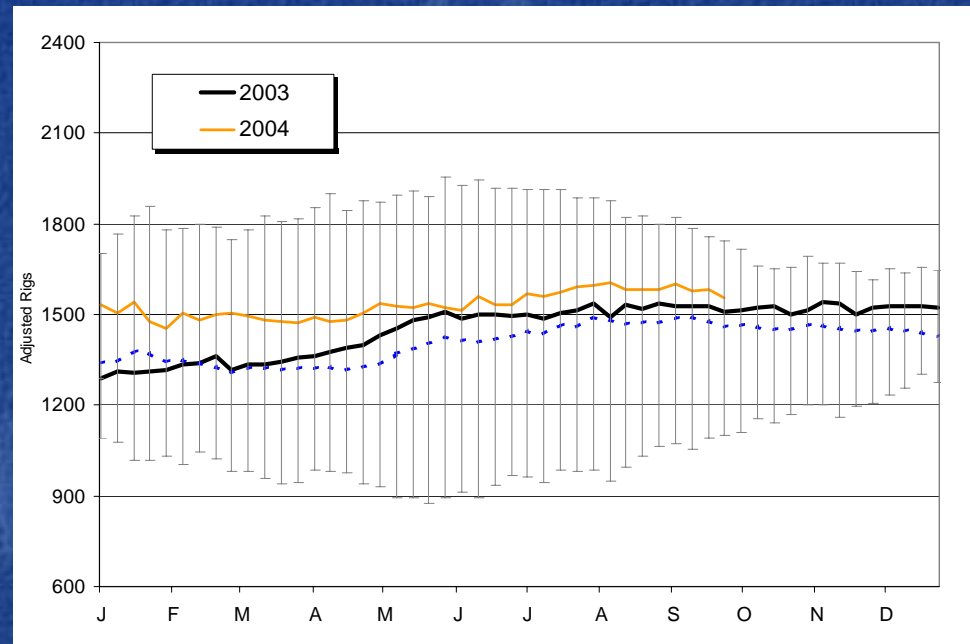
Source: Baker Hughes, Bloomberg, BAS Analysis



BAS Adjusted Natural Gas Rig Count

A Decent Proxy for Production

| <u>Weighting</u> | |
|--------------------------------------|-----|
| Estimated onshore gas rig count | 85% |
| + | |
| Estimated offshore gas rig count * 7 | |
| Total U.S. oil rig count | |
| | 15% |



Source: Baker Hughes, BAS Analysis



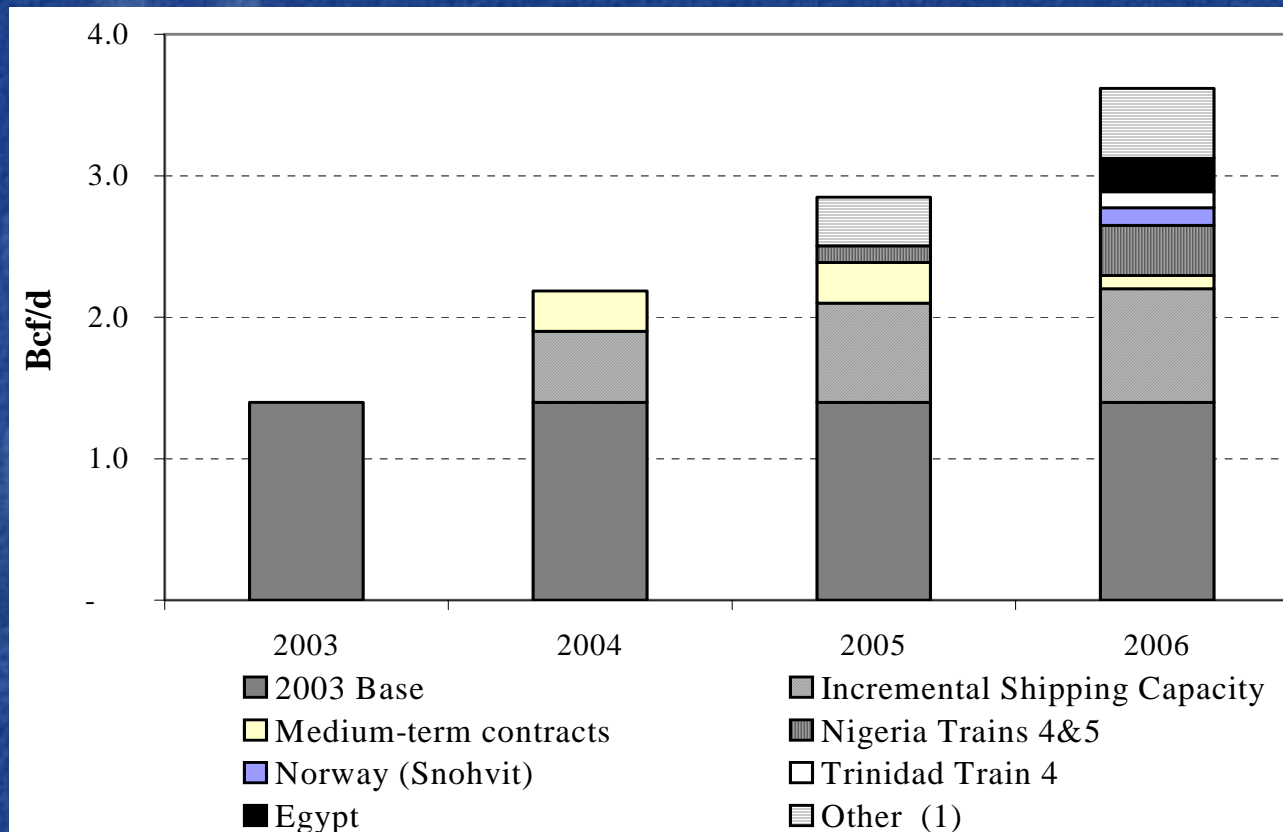
LNG

The Future of Natural Gas

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Projected U.S. LNG Import Volumes and Key Contributors (2003-2006E)

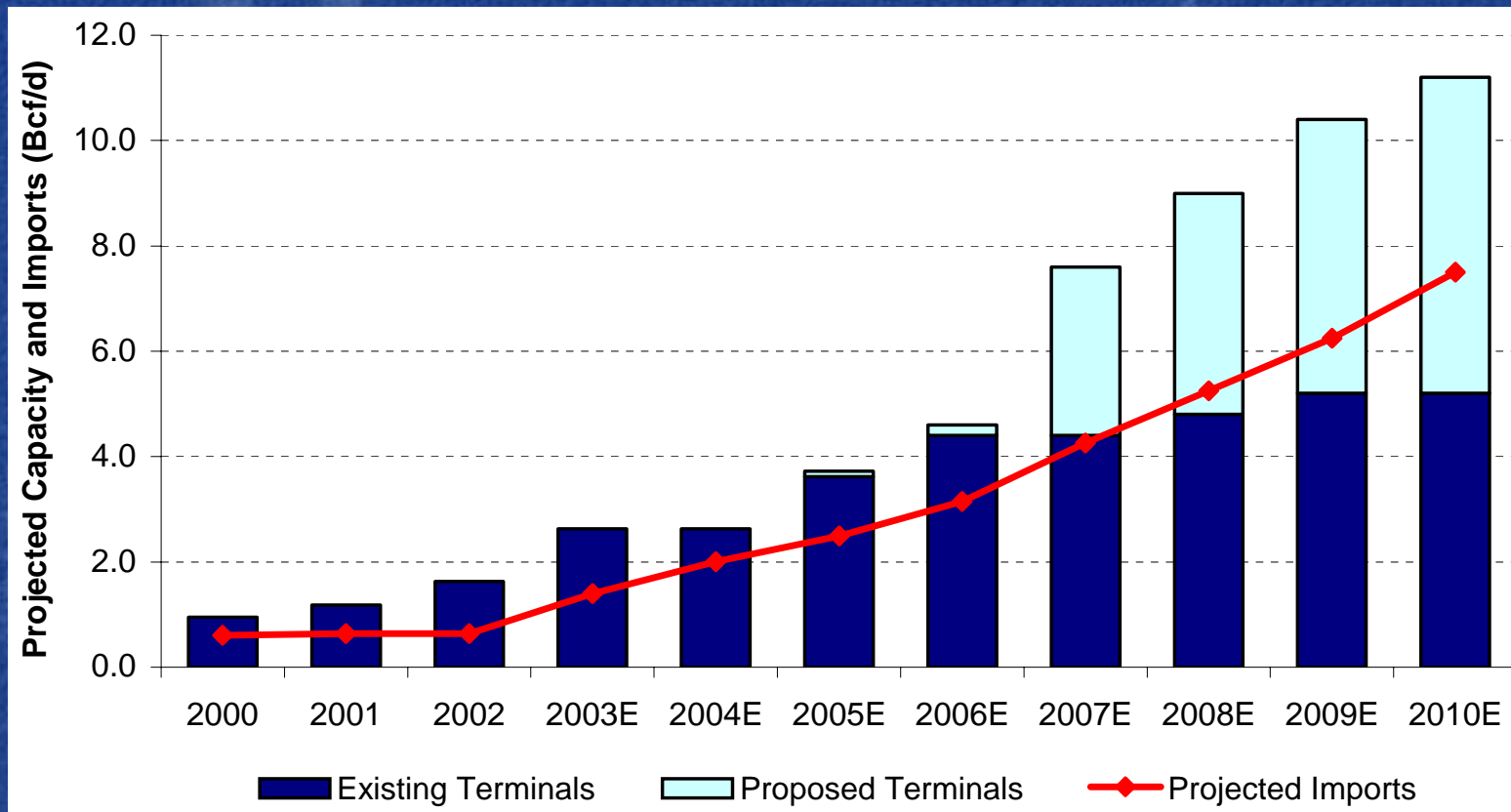


- (1) Potential supply from spot cargoes from liquefaction plants currently under construction with the majority of their output currently slated for markets outside of the U.S

Source: DOE – Office of Fossil Energy and BAS E&P Equity Research Team



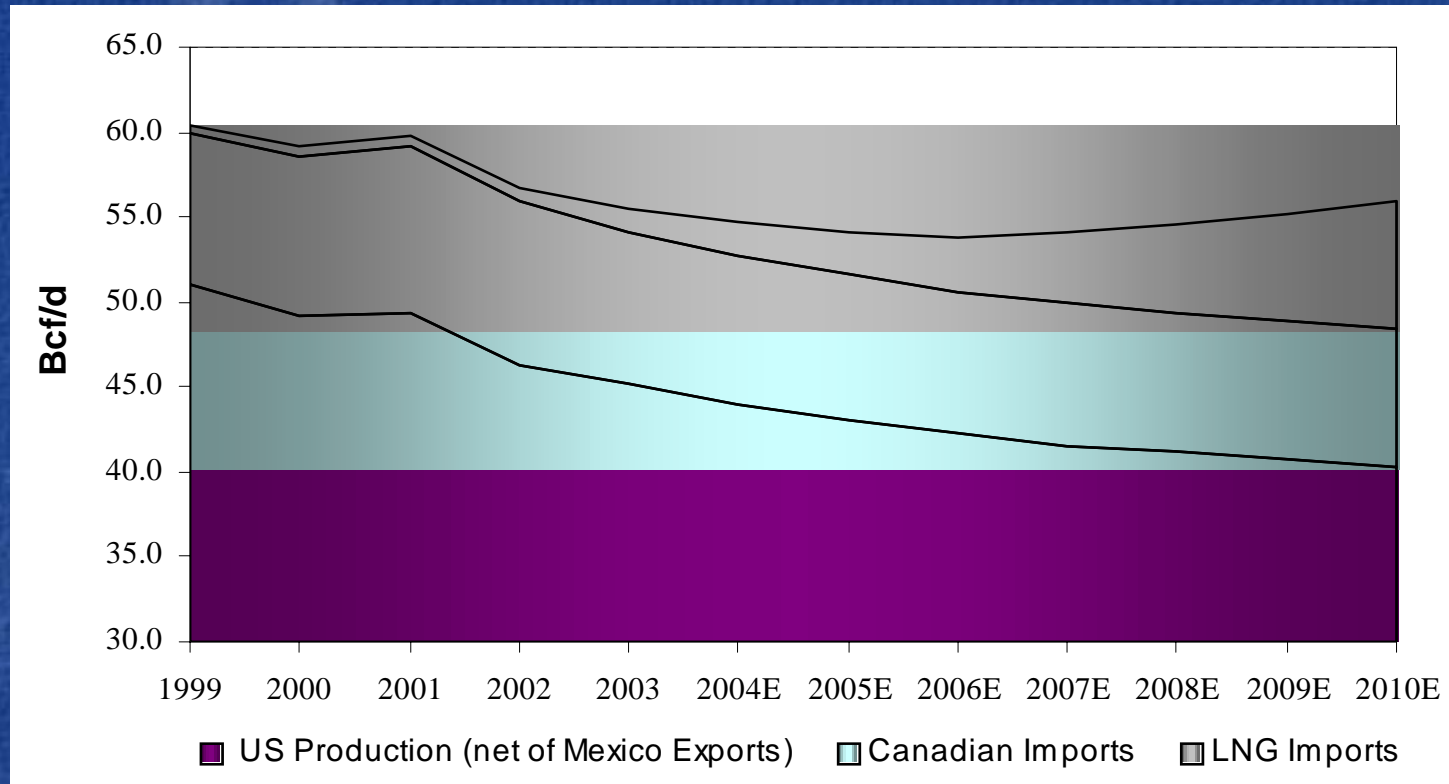
Projected U.S. LNG Imports and Capacity



Source: BAS E&P Equity Research Team



Historical and Projected Total U.S. Natural Gas Supply

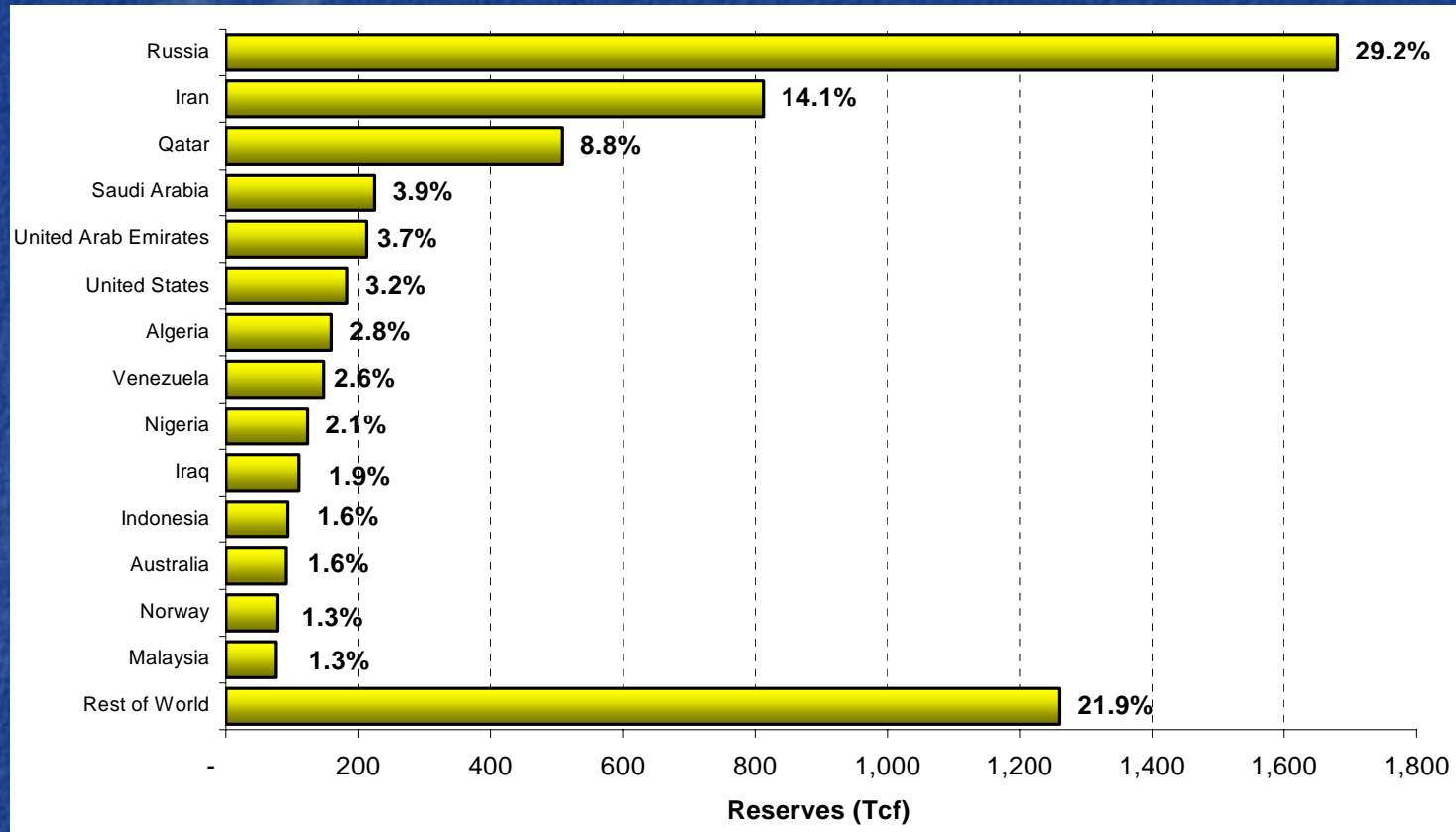


Source: EIA, BAS E&P Equity Research Team



World Natural Gas Reserves

As of January 2003

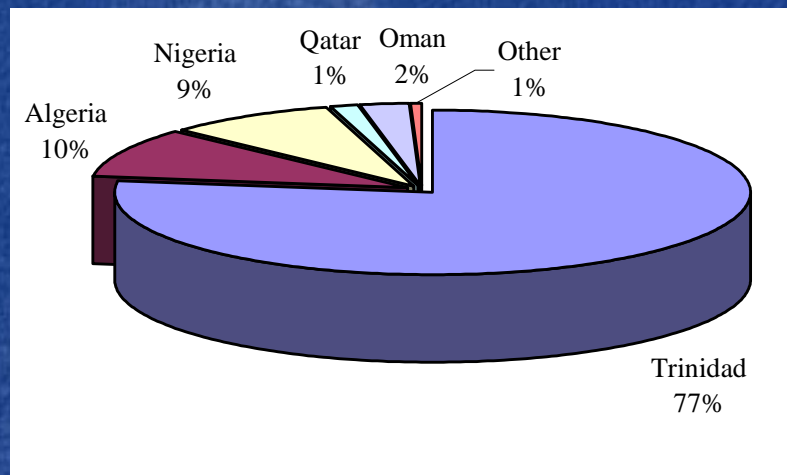


Source: EIA, BAS E&P Equity Research Team

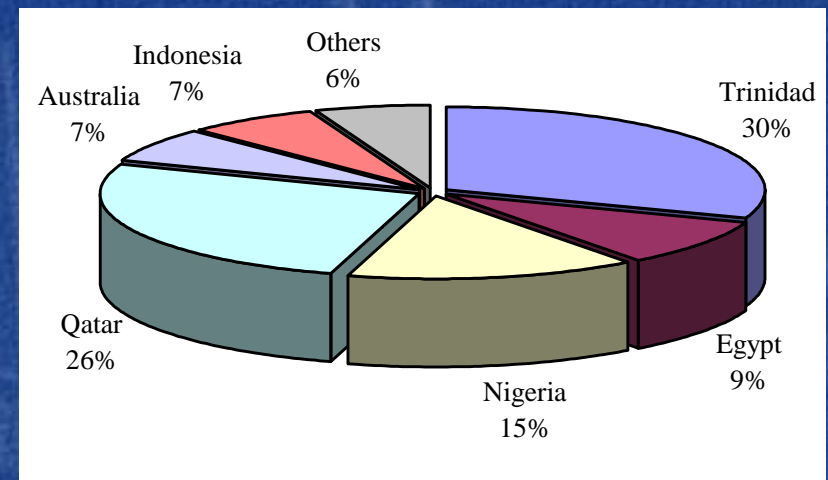


Current and Projected U.S. LNG Imports by Country

2003



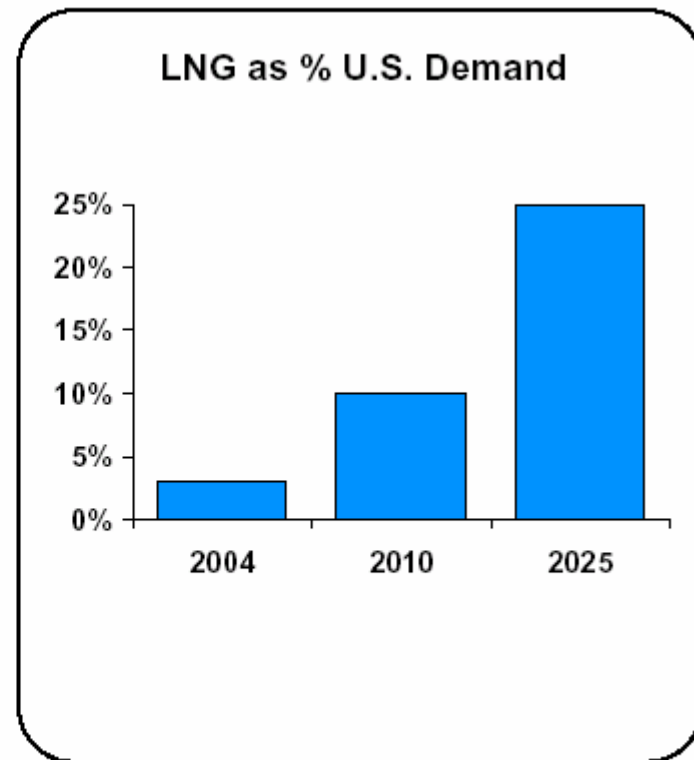
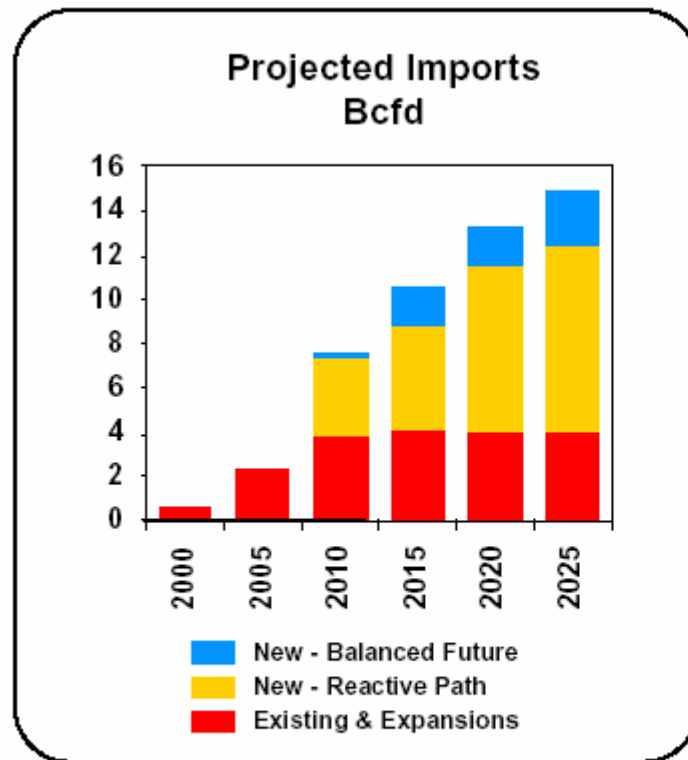
2010E



Source: DOE, BAS E&P Equity Research Team



Accelerating Imports for LNG

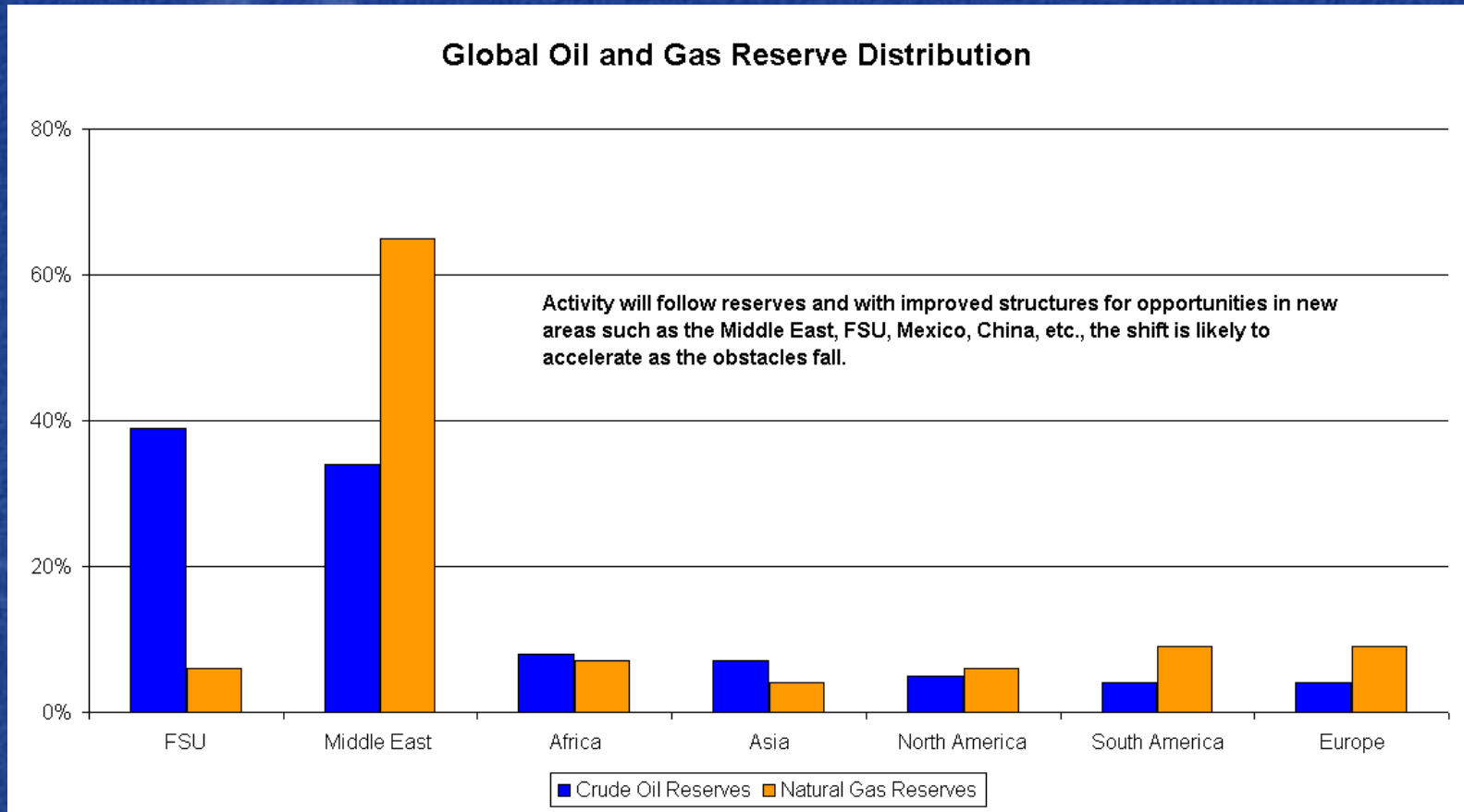


Conclusion: In 2025 - 75% of Domestic Gas Demand Must Be Met By Indigenous Sources

Source: National Petroleum Council, September 2003 Gas Study



The Reserves Aren't in the US



Source: DOE, BAS Data

