Natural Gas: Today’s Abundant, American Energy Solution

US Department of Energy
January 7, 2009
NYSE Listed: CHK

- #1 Producer of clean-burning U.S. natural gas
- #1 U.S. explorer with 121 active drilling rigs
- #1 Large-cap proved reserve growth; 12 Tcfe of estimated proved reserves
- #1 Gas resource play potential; 55 Tcfe of risked unproven potential
- #1 Inventory of U.S. onshore leasehold and 3-D seismic; over 10-year drilling inventory of 35,500 net drilling locations

- 2008 Top Managed Energy Company
  – Forbes’ Magazine
Chesapeake Leading US Explorer for Clean-Burning Natural Gas

Chesapeake operates in ~12 states 100% onshore & 100% domestic U.S.

Chesapeake vs. 5 Majors
Active U.S. Onshore Rigs

121
ConocoPhillips
46
Shell
30
ExxonMobil
14
Chesapeake
124
Smith Bits 1.05.09
Natural Gas – Today’s Answer for America’s Energy Needs

With a focus on the need for economic stimulus, national security, and a cleaner environment;

**Increased Domestic Natural Gas Production and Consumption Provides:**

- High-Quality American Jobs
- Greater American Capital Investment
- A Cleaner, Abundant American Energy
- Enhanced Energy Independence
The Answer to Clean Transportation Fuel Needs

- When used directly as CNG, natural gas provides
  - Up to 30% fewer CO2 emissions
  - Up to 70% fewer smog-forming pollutants
  - An answer to a carbon regulated world
    - Transportation sector emissions represent 40-70% of all pollution

OR

- Natural gas can be used indirectly as the power behind the “plug”
  - PHEV’s will require “clean” power for optimal environmental benefit
Let’s Use Energy that is Most Efficient

“Well to Wheels” Total Energy Consumption of Select Alternative Fuel Choices

Sources: The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) Model 1.8b
“Well to Pump” Efficiency of Various Alternative Fuel Choices

Sources: The Greenhouse Gases, Regulated Emissions, and Energy Use in Transportation (GREET) Model 1.8
CNG Reduces Fuel Price Volatility

Average Fuel Prices 2005-2008

- UNLEADED GASOLINE
- DIESEL
- CNG
Regardless of the Use, Natural Gas is the Answer!

Power Generation Alternatives

- **Coal?** - not economical or clean in a carbon regulated environment
- **Wind?** - clean but not yet scalable and lacks efficient transmission; not yet ready
- **Nuclear?** - not yet a viable source
- **Solar?** - not yet scalable and economical source
- **Natural Gas?** - clean, scalable, and economical
Regardless of the Use, Natural Gas is the Answer!

Transportation Alternatives

- **Gasoline** – supplied by foreign energy and not clean
- **Plug-In Electric Hybrids** – cleaner but will require more power generation
- **Bio-fuels** – improving but create market issues with other commodities and not an efficient total energy process
- **Natural Gas Vehicles/CNG** – clean, affordable and will need more backing for production growth

**BOTTOM LINE** – IN ORDER FOR AMERICA TO HAVE A CLEAN AND INDEPENDENT ENERGY FUTURE, THE U.S. MUST CONTINUE TO HAVE CONSISTENT NATURAL GAS PRODUCTION
The U.S. has experienced unprecedented production growth by utilization of new technology and drilling techniques.

Reduced demand has impaired the natural gas industry’s ability to produce this superior American energy source and reduced drilling activity can unnecessarily elongate the economic recovery period.

Lack of stable consumption of natural gas continues to create a volatile pricing environment.

If the US is to reduce foreign energy imports, we must reduce the demand for foreign, dirtier fuels and increase the demand for cleaner, premium domestic fuels.

Natural gas usage in the transportation sector is the most reliable and scalable opportunity.

With your support we can develop energy policy that puts a premium on clean burning, affordable, domestic energy sources and stimulates a more stable and predictable cost structure.
We Have Sufficient Supplies in the U.S.!

**U.S. Total Gas Supply Resource Base (Tcf)**

- 2006 Potential Gas Committee Supply Estimate (82 Years’ Supply at 2006 Production Levels)
- 2008 NCI Supply Update of PGC Supply Estimate, Inclusive of Shale Assessment (88 Years’ Supply at 2007 Production Levels) 10% Increase over Column 1
- 2008 NCI Supply Update Adjusted for Industry Input (Maximum as of June 2008) (118 Years’ Supply at 2007 Production Levels) 47% Increase over Column 1

**Legend**
- Blue: Proved Reserves
- Green: Unproved Technically Recoverable Resource
U.S. Natural Gas Production Growth
Up 11% YOY 2007-2008

As of Oct 2008
Up 11% YTD (+5.2 Bcf/d)
Up 11% YoY (+5.8 Bcf/d)

Credit Suisse 1.5.09
Prolific Unconventional Shales are a “Game Changer”

<table>
<thead>
<tr>
<th>Shale Formation</th>
<th>Recoverable Reserves (Tcfe)</th>
<th>Production 2008 (mmcfepd)</th>
<th>Production 2012E (mmcfepd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barnett (TX)</td>
<td>30-50</td>
<td>4,300</td>
<td>5,800-6,400</td>
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<tr>
<td>Fayetteville (AR)</td>
<td>25-45</td>
<td>800</td>
<td>1,800-2,000</td>
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<td>Woodford (OK)</td>
<td>10-12</td>
<td>600</td>
<td>1,100-1,200</td>
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<tr>
<td>Haynesville (LA/TX)</td>
<td>250</td>
<td>100</td>
<td>3,000-6,000</td>
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<tr>
<td>Marcellus (NY, PA, WV)</td>
<td>50-75</td>
<td>25</td>
<td>300-600</td>
</tr>
<tr>
<td>TOTALS</td>
<td>432</td>
<td>5,825</td>
<td>16,200</td>
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Natural gas's price volatility can be improved dramatically with consistent demand for the strong supply. Increased diversification of demand to other sectors (transportation and power) will make natural gas consumption less seasonal.
Natural Gas is Today’s American Energy Answer

As a country, we have the opportunity to use natural gas TODAY and create an environment for:

– Cleaner air quality
– Increased energy independence
– Increased national security
– Stronger economy and more high-quality jobs
– An energy source that leads us efficiently into the future of clean, American energy