Perspectives on Future of Unconventional Resources

Short Course and Workshop on Shale Gas Monetization
La Torretta Lake Resort and Spa
Montgomery, Texas
March 28, 2014

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## A Decade Makes A Difference

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>• 60-year supply and falling</td>
<td>• 100+ year supply and growing</td>
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<tr>
<td>• Shale resources known but uneconomic to develop</td>
<td>• <strong>Flourishing production</strong> —</td>
</tr>
<tr>
<td>• Underground gas storage primarily traditional reservoir,</td>
<td>Vast shale resources now accessible</td>
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<tr>
<td>operationally not very flexible</td>
<td>• <strong>Storage boom</strong> with more flexible salt-cavern facilities and</td>
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<tr>
<td>• Pipeline capacity growing incrementally</td>
<td>additional market area storage</td>
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<tr>
<td></td>
<td>• 16,000+ miles of interstate pipeline added since <strong>2000</strong></td>
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<td>• <strong>Plentiful</strong> supplies and supply <strong>diversity</strong></td>
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Note: Approximate time period – 2001 to 2011
US Natural Gas Is Abundant

- Leading producer of unconventional gas
- Rapidly growing unconventional gas & liquids portfolio
  - Over 5 million acres in North America
  - Over 10 million acres worldwide
Natural Gas Supply Shifts

North America Gas Supply

- Local Conventional
- Local Unconventional
- LNG

Global Gas Supply

- Rest of World Unconventional
- North America Unconventional
- Rest of World Conventional
- North America Conventional

ExxonMobil 2014 Outlook for Energy
Growth in Unconventional Gas Production

Production by Type

<table>
<thead>
<tr>
<th>Type</th>
<th>2000</th>
<th>2020</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tight</td>
<td>0</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Coal Bed Methane</td>
<td>0</td>
<td>50</td>
<td>150</td>
</tr>
<tr>
<td>Shale</td>
<td>0</td>
<td>50</td>
<td>200</td>
</tr>
</tbody>
</table>

Production by Region

<table>
<thead>
<tr>
<th>Region</th>
<th>2000</th>
<th>2020</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>0</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>0</td>
<td>50</td>
<td>150</td>
</tr>
<tr>
<td>Rest of World</td>
<td>0</td>
<td>50</td>
<td>200</td>
</tr>
</tbody>
</table>
Liquids Supply

Global Liquids Supply

MBDOE

Biofuels
Other Liquids
NGLs
Oil Sands
Tight Oil
Deepwater
Conventional Crude & Condensate

Resources*

Trillion Barrels

* Source: IEA and USGS ExxonMobil 2014 Outlook for Energy
Technology Driven Liquid Fuels Supplies Expand Globally

**NGL by Region**
- **North America**
- **Russia-Caspian/Asia Pacific**
- **Africa**
- **Latin America**
- **Europe**
- **Middle East**

**Unconventional Oil by Region**
- **North America**
- **Latin America**
- **Russia Caspian/Asia Pacific**
- **Other**

ExxonMobil 2014 Outlook for Energy
Technology Improvements Across Shale Gas Process

1. Drilling

2. Hydraulic Fracturing

3. Production

4. Gas Treatments & Transportation
Operational Excellence

Best practices in unconventional gas build value through higher recoveries and increasing operational efficiency.

Drilling Performance, Barnett Shale 2005-2011
1,475 wells, Spud to Rig Release

Drilling Days Per Well
Total Measured Depth (ft.)

Drilling Days: -53% (28 days to 13 days)
Measured Depth: +15% (9,400’ to 10,800’)

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Summary

- Gas and liquids production from unconventional resources is an essential source of supply underpinning the outlook for demand.
- ExxonMobil has a substantial unconventional gas and liquids portfolio and continues to capture high-quality additions.
- ExxonMobil’s integrated approach in Unconventional Resources Research will allow it to continue to deliver differentiating technologies with focus on long-term profitability.
- ExxonMobil’s unique technical capabilities, access to ample field and production data, and extensive operational experience uniquely positions it to best develop all types of unconventional resources – US, North America, and broadly international.