The United States has significant natural gas and oil reserves. But many of these resources are increasingly harder to locate and bring into production.

To help meet this challenge, the U.S. Department of Energy’s Office of Fossil Energy over the years has amassed wide ranging expertise in areas related to deepwater resource location, production, safety and environmental protection. The goal of these activities has been to not only help overcome production and technical hurdles, but also improve the ability to drill in ever-deeper waters with greater margins of safety and environmental protection.

Only 30 years ago, “deepwater” production referred to offshore wells in water depths of several hundred feet. Today’s deepwater operations are generally in the 1,000-to-5,000 foot range, and ultra-deepwater production can occur in water depths of between 5,000 to 10,000 feet or more. According to the Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE), the Gulf of Mexico is one of the most important regions for U.S. offshore and deepwater resource production.

Facts About U.S. Offshore Oil and Gas Resources

- Comprise 21 percent (4.3 billion barrels) of total proved crude oil reserves (20.7 billion barrels).
- Comprise 5 percent (13.5 trillion cubic feet) of total natural gas proved reserves (272.5 trillion cubic feet).
- Account for 29 percent of total crude oil production, which was 5.7 million barrels daily in 2011.
- Account for 12 percent of total dry gas production, which was 23 trillion cubic feet in 2011.

Source: Energy Information Administration
It makes a significant contribution toward U.S. crude oil and natural gas production (see table). The area produces 94 percent of all U.S. offshore oil production and about 96 percent of offshore natural gas. Additionally, BOEMRE estimates the Central Gulf of Mexico alone holds more than 30 billion barrels of oil and nearly 134 trillion cubic feet of natural gas yet to be discovered.

The deepwater contribution to domestic oil and natural gas supplies is expected to grow in the years ahead, assuming ongoing technology solutions to production safety and environmental challenges (see table).

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### Projected Long-Range Production of U.S. Offshore Resources

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Crude Oil*</th>
<th>Natural Gas**</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2015</strong></td>
<td>1.74</td>
<td>2.05</td>
</tr>
<tr>
<td><strong>2020</strong></td>
<td>1.84</td>
<td>2.78</td>
</tr>
<tr>
<td><strong>2025</strong></td>
<td>1.50</td>
<td>2.35</td>
</tr>
<tr>
<td><strong>2030</strong></td>
<td>1.71</td>
<td>2.76</td>
</tr>
<tr>
<td><strong>2035</strong></td>
<td>1.83</td>
<td>2.93</td>
</tr>
</tbody>
</table>

* = million barrels per day; ** = trillion cubic feet.

### Ultra-Deepwater Technology

- Exploration
- Seafloor to reservoir
- Seafloor systems

- Seafloor to surface
- Surface facilities
- Technology validation and integration