PGC Resource Assessments, 1990-2010
Total Potential Gas Resources (mean values)

Total Potential Resources (Mean Values, Tcf)
- Coalbed gas resources
- Traditional gas resources (conventional, tight, shale)

- Shale gas, 686.6 Tcf (m.l.)
- Shale gas, 615.9 Tcf (m.l.)
- Shale gas, ~200 Tcf (m.l.)

(shale gas assessed but not reported separately)
Active Shale Gas Plays

Lower 48 States
The projected electricity mix gradually shifts to lower-carbon options, with generation from natural gas rising 37% and renewables rising 73%.
Greenhouse Gas Emissions per MMBtu of Fuel Consumed

Greenhouse Gas Emissions per Unit of Electricity Produced — Conventional and Advanced Generating Units

NOTES:
Based on GHG emissions per MMBtu of fuel consumed (See Table 1) and electricity conversion factors for conventional and advanced equipment as employed by the U.S. Energy Information Administration. Includes emissions of CO₂ and methane (methane GWP of 21 times CO₂ as per IPCC).
# Natural Gas Direct Use Has an Advantage Relative to Other Fuels

Checkmark given for each advantage a fuel source provides

<table>
<thead>
<tr>
<th>Advantage</th>
<th>Direct Use</th>
<th>Heating Oil</th>
<th>Electricity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Natural Gas</td>
<td>Coal</td>
<td>Coal CCS</td>
</tr>
<tr>
<td>Cost effective</td>
<td>✓ +</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource efficiency</td>
<td>✓ +</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource availability</td>
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</tr>
<tr>
<td>Enhances energy security</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Lowers carbon emissions</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Reliable / Proven Technology</td>
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<td>✓</td>
</tr>
<tr>
<td>Regulatory Certainty</td>
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</table>

AGA
American Gas Association
THANK YOU!

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