Economic Impact of the American Clean Energy and Security Act of 2009 (H.R. 2454) on the West Virginia Economy

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American Clean Energy and Security Act (ACESA) of 2009

- “…create clean energy jobs, achieve energy independence, reduce global warming pollution, and transition to a clean energy economy.”
- Title I – Clean Energy
- Title II – Energy Efficiency
- Title III – Cap and Trade Program
- Title IV – Rebates, Refunds, and Tax Credits
- Title V – Agriculture and Forestry Related Offsets
Major Sources of Impacts on the West Virginia Economy

- National Economic Performance
  - Decline in U.S. Real GDP
- Electricity Prices Increase
  - Residential, Commercial, and Industrial
- Coal Production Decreases
  - 28.8% Lower by 2030
Major Sources of Impacts on the West Virginia Economy

• Government Spending
  – Declines Due to Reduced Coal Production, Coal Prices, and Overall Economic Activity

• Energy Efficiency

• Energy Related Investment Spending
Impact of ACESA on the W.Va. Economy 2009-2030 (Base Scenario)
Change in W.Va. Gross Domestic Product with ACES/AR
Relative to the Reference Case, 2009-2030
(Base Scenario)
Change in W.Va. Total Employment with ACESA Relative to the Reference Case, 2009-2030
(Base Scenario)
Change in W.Va. Employment by Industry with ACESA Relative to the Reference Case in 2030 (Base Scenario)

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Employment Change</th>
<th>Industry Sector</th>
<th>Employment Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry and Fishing</td>
<td>-14</td>
<td>Real Estate and Rental and Leasing</td>
<td>-854</td>
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<tr>
<td>Mining</td>
<td>-2,262</td>
<td>Professional and Technical Services</td>
<td>-910</td>
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<tr>
<td>Utilities</td>
<td>-163</td>
<td>Management of Companies</td>
<td>-104</td>
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<tr>
<td>Construction</td>
<td>-1,296</td>
<td>Administrative and Waste Services</td>
<td>-794</td>
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<tr>
<td>Manufacturing</td>
<td>-321</td>
<td>Educational Services</td>
<td>-443</td>
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<tr>
<td>Wholesale Trade</td>
<td>-312</td>
<td>Health Care and Social Assistance</td>
<td>-3,175</td>
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<tr>
<td>Retail Trade</td>
<td>-2,243</td>
<td>Arts, Entertainment, and Recreation</td>
<td>-395</td>
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<tr>
<td>Transportation and Warehousing</td>
<td>-601</td>
<td>Accommodation and Food Services</td>
<td>-1,395</td>
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<tr>
<td>Information</td>
<td>-148</td>
<td>Other Services</td>
<td>-1,230</td>
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<tr>
<td>Finance and Insurance</td>
<td>-317</td>
<td>Government</td>
<td>-5,719</td>
</tr>
</tbody>
</table>
Risks and Alternative Scenarios

• Risks
  – Role of International Offsets
  – Timing, Cost, and Public Acceptance of Alternatives

• Two Alternative Scenarios Examined
  – Average Change in Coal Production from EIA’s Alternative Cases
  – Change in Coal Production from EIA’s No International/Limited Alternatives Case
Change in W.Va. Total Employment with ACESA Relative to the Reference Case, 2009-2030 (Average of EIA’s Alternative Cases)
Change in W.Va. Total Employment with ACESA Relative to the Reference Case, 2009-2030
(No International, Limited Alternatives Case)
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