Ghana’s Power Outlook
Currently, VRA contributes 75% of the total generation.
Supply Sources

- Hydro
- Thermal – Gas, LCO & DFO fired plants
- Solar

NB: VRA is in the process of upgrading all simple cycle plants to combine cycle plants

Benefits

- Enhancement of supply reliability
- Supply security
- Reduction of risk to inflow variability and fuel supply challenges
Challenges

• Inadequate generation capacity reserve
• Lack of Gas supply, limiting thermal generation

Mitigation Measures

• VRA is undertaking more generation projects. VRA is planning to add about 1,000 MW of generation capacity over the next 5 years.
  – This includes upgrade of simple cycle plants to combine cycle to reduce cost of supply.
• Pursuing Solar and wind energy projects
• To secure future gas supply reliability, VRA is pursuing the use of LNG to generate electricity
# VRA Installed Capacity

<table>
<thead>
<tr>
<th>Plants</th>
<th>Installed Capacity (MW)</th>
<th>Type</th>
<th>Fuel Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akosombo</td>
<td>1020</td>
<td>Hydro</td>
<td>Water</td>
</tr>
<tr>
<td>Kpong</td>
<td>160</td>
<td>Hydro</td>
<td>Water</td>
</tr>
<tr>
<td>TAPCO (T1)</td>
<td>330</td>
<td>Thermal</td>
<td>LCO/Gas</td>
</tr>
<tr>
<td>TICO (T2)</td>
<td>220</td>
<td>Thermal</td>
<td>LCO/Gas</td>
</tr>
<tr>
<td>T3</td>
<td>132</td>
<td>Thermal</td>
<td>LCO/Gas</td>
</tr>
<tr>
<td>TT1PP</td>
<td>110</td>
<td>Thermal</td>
<td>LCO/Gas</td>
</tr>
<tr>
<td>TT2PP</td>
<td>49.5</td>
<td>Thermal</td>
<td>DFO/Gas</td>
</tr>
<tr>
<td>MRP</td>
<td>80</td>
<td>Thermal</td>
<td>DFO</td>
</tr>
<tr>
<td>Solar</td>
<td>2</td>
<td>Renewable</td>
<td>Solar</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,103.5</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*LCO – Light Crude Oil  
*DFO – Distillate Fuel Oil
<table>
<thead>
<tr>
<th>Plants</th>
<th>Installed Capacity (MW)</th>
<th>Type</th>
<th>Fuel Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunon Asogli</td>
<td>200</td>
<td>Thermal</td>
<td>Gas</td>
</tr>
<tr>
<td>CENIT</td>
<td>110</td>
<td>Thermal</td>
<td>LCO/Gas</td>
</tr>
<tr>
<td>Bui HEP</td>
<td>133</td>
<td>Hydro</td>
<td>Water</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>443</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL GHANA</strong></td>
<td><strong>2546.5</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Demand Pattern per Customer Class for 2010 - 2012

- 2010
- 2011
- 2012

- Export
- Others
- VALCO
- Mines
- NEDCo
- ECG
Consumption Pattern per Customer Class for 2010 - 2012
Energy Supply for 2012-2013

- Total supply for 2012 = 12,122 GWh
- Projected supply for 2013 = 13,502 GWh
Capacity Balance in MW (2012 - 2025)

- Existing Generation
- Committed Generation
- Identified Candidate Generation
- Required Candidate Gen.
- Projected Demand
- Demand+18% Reserve
Demand Growth per Customer Class for 2002 - 2012

The average growth rate for all customer class is about 8% for the period.
Thank You