MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT OF VIETNAM

REPORT ON
THE STATUS OF BIOENERGY DEVELOPMENT IN VIETNAM

MSc. Nguyen Tien Long
Department of Science, Technology and Environment
Email: longnt.khcn@mard.gov.vn
Energy situation in Vietnam

**Total Primary Energy Supply**
- Natural Gas: 23%
- Non-Energy Commerce: 13%
- Electric: 10%
- Coal: 21%

**Crude Oil**
- 10%

**Oil Products**
- 21%

**Non-Energy Commerce**
- 23%

**Total Final Consumption**
- Natural Gas: 1%
- Oil Products: 35%

- Electric: 15%
- Coal: 20%

**Energy Use by Sector**
- Industry: 40%
- Transport: 22%
- Agriculture: 1%
- Commerce and Service: 4%
- Civil: 33%
## Agriculture situation in Vietnam

### Area, Product and residue production in Vietnam

<table>
<thead>
<tr>
<th>Content</th>
<th>Rice</th>
<th>Maize</th>
<th>Soybeans</th>
<th>Cassava</th>
<th>Peanut</th>
<th>Sugarcane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (1000 ha)</td>
<td>7,900</td>
<td>1,158</td>
<td>115</td>
<td>548</td>
<td>218</td>
<td>310</td>
</tr>
<tr>
<td>Production (1000 tons)</td>
<td>44,050</td>
<td>5,150</td>
<td>175</td>
<td>9,740</td>
<td>515</td>
<td>20,000</td>
</tr>
<tr>
<td>Dried residue yield (tons/ha)</td>
<td>7</td>
<td>8.54</td>
<td>3.4</td>
<td>5.3</td>
<td>4.2</td>
<td>22</td>
</tr>
<tr>
<td>Total residue production (1000 tons)</td>
<td>48,455</td>
<td>5,665</td>
<td>193</td>
<td>10,714</td>
<td>567</td>
<td>50,000</td>
</tr>
</tbody>
</table>

Source: Ministry of Agriculture and Rural Development, 2013
Agriculture situation in Vietnam

The development objective of Vietnam's agricultural sector by 2020, vision 2030

<table>
<thead>
<tr>
<th>Target</th>
<th>The period 2011-2020</th>
<th>Vision 2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP growth</td>
<td>3.5 - 4%</td>
<td>3 - 3.2%</td>
</tr>
<tr>
<td>The production value of agriculture, forestry and fisheries</td>
<td>4.3 - 4.7%/year</td>
<td>4 - 4.3%/year</td>
</tr>
<tr>
<td>Forest cover</td>
<td>44 - 45% in 2020</td>
<td></td>
</tr>
<tr>
<td>Export turnover</td>
<td>$40 billion</td>
<td>$60 billion</td>
</tr>
</tbody>
</table>

Source: According to Decision No124/QD-TTg, 02/2/2012 dated of the Prime Minister approving the master plan to develop the agricultural sector in 2020, with a vision to 2030.
Agriculture situation in Vietnam

What are the main issues?

- Efficient use of land, labor productivity is too low and uneven.
- Status of small production, dispersion still exists, especially in the northern and central provinces.
- Life is still poor farmers, increasing gap between rich and poor and between urban and rural.

Source: Ministry of Agriculture and Rural Development, 2013
Bioenergy in Vietnam

- **Policy framework of the Government:**

  - *Decision of “Vietnam National Energy Development Strategy to 2020, with a Vision to 2050”, No. 1855/QĐ-TTg, 27/12/2007* (to increase the proportion of Re Energy to 5% of total commercial Primary Energy in 2020, and 11% in 2050).

  - *Decision of "The master plan for the development of biofuels by 2015, with a vision to 2025”, No. 177/2007/QĐ-TTg, 20/11/2007* (2015: Bioethanol and Biodiesel production reach 250,000 Million tons, accounting for 1% total national filling demand; 2025: Bioethanol and Biodiesel Production will be 1.8 Million tons, about 5% total national filling demand).

  - *Decision of “Support the development of biomass power project in Vietnam”, No. 24/2014/QĐ-TTg, 24/03/2014.*
Bioenergy in Vietnam

- **Biomass energy potential of Vietnam:**
  - from about 25 million tones of forestry and agricultural residuals about 60 million tons.
  - Biogas potential of about 5000 million tones.

- **Opportunity:**
  - Fossil fuels are running out, rising world oil prices.
  - There are sources of biomass.
  - Agricultural production development.
  - Biomass power industry growth rate.
  - Policies and institutions of the state become more complete, convenient to bioenergy development.
  - There are many opportunities for cooperation with other countries in the ASEAN region and beyond.
Bioenergy in Vietnam

❖ Challenge:

• The purchase price of electricity from energy projects less attractive to investors. While the main barriers for the development of energy production costs.
• Investment spontaneous, lack of information and database for the overall planning and policy making not commensurate with the existing potential of the country.
• The policy and institutional support is incomplete.
• Price mechanism, bidding and practicing certificate ...
• Price of the applicable technology, difficult access to capital to develop energy projects.
• Awareness of community biomass is limited.
Bioenergy in Vietnam

**Conclusion**

- Fuel resources and energy and diversity of Vietnam has some highly competitive categories.
- Biomass currently accounts for a large proportion of energy consumption in Vietnam, but has not been much interested. The technology used is not efficient (environmental and economic).
- Continue to improve the policies and institutions of the state. Diverse sources of investment capital.
- So choosing the appropriate technology for potential biomass availability and in accordance with the ability of the provinces in Vietnam.
- Develop a roadmap for Bioenergy development in Vietnam is essential.
THANK YOU FOR YOUR ATTENTION!