CURRENT STATUS OF COAL DEMAND AND SUPPLY IN VIETNAM AND PLAN OF VINACOMIN IN THE COMING TIME

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Vinacomin is an economic Corporation with 100% owned by the State, plays an important role to ensure national energy security of Vietnam.

Vinacomin is the major coal producer in Vietnam accounting for 95% of total coal production, providing anthracite for power sector, industries using coal in national-wide and world-wide, investing in development of power plants; exploration and processing minerals; involving in the industries of chemical, engineering, construction materials, trading... supporting for the main industries of coal and minerals.

In 2012, the turnover of Vinacomin reached 4.5 billion USD; the production: 44.06 million tons of raw coal; consuming 39.2 million tons, in which local market: 24.8 million tons, export: 14.4 million tons.
Coal Resource

- Total coal resources until 1st Jan, 2011: 48.7 billion tons in which measured & indicated reserves (categories A+B+C₁) 2.75 bn. tons account for 6%; inferred (C₂) & prognostic resources (P): 94%.

- In North East area: 8.7 billion tons (anthracite).

- In Red River Delta coal basin: 39.4 billion tons (sub-bituminous).

- Some anthracite & fat coal deposits in the Northern Provinces and peat in Mekong river delta.
Current Status and Coal Demand of Vietnamese Market

- In recent years, the demand of coal for the domestic market in Vietnam has increased steadily every year. In five years, domestic coal demand has increased from 18 million tons (in 2007) to 24.8 million ton (in 2012).

- According to the Master Plan of coal industry development in Vietnam by 2020, with perspective to 2030, the total coal output will reach 55 million tons in 2015, 60 million tons (in 2020), 65-70 million tons (in 2025) and 65-75 million ton (in 2030).

- According to the balance of supply and demand, if the power plants put into operation on schedule under the Power Master Plan VII, Vietnam will need total 62-72 million tons of coal (in 2020); in which coal for power: 42-72 million tons, coal for other industries: 20-22 million tons. This means Vietnam has to import energy coal for thermal power plants in Southern area with amount from 10-12 million tons in 2020.
Coal Demand and Supply

Million tons

- Supply
- Power
- Demand

<table>
<thead>
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<th>Year</th>
<th>Supply</th>
<th>Power</th>
<th>Demand</th>
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<td>40</td>
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<td>50</td>
<td>72</td>
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<td>2025</td>
<td>62</td>
<td>62</td>
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<td>2030</td>
<td>65</td>
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<tr>
<td>2030</td>
<td>115</td>
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Coal Exportation

- Vietnam's exported coal has reduced from 24.8 million tons (in 2007) to 14 million tons (in 2012). The high quality coal has been exported to the EU, Japan, South Korea, Taiwan, India...; the medium quality dust coal has mainly been exported to China and other countries.

- In the future, when the demand of coal for domestic market arises, especially coal for thermal power plants, the average and low quality coal will be reduced and stopped exporting. By 2015, the export plan of Vinacomin will be significantly reduced to 9.0 million tons and continue reducing in the coming years.

- Inspire of the key responsibility is to ensure coal supply to the economy of Vietnam, Vinacomin will continue giving priority to provide coal stably for traditional customers including Japan as the signed contracts and will propose to the Vietnamese competent authorities to continue supplying coal for Japanese market in coming years.
Overview of Export Sales

2010 Exports Volume by Country
(> 30 countries)

- Japan: 8%
- Korea: 9%
- China: 77%
- Europe: 0%
- Others: 6%

Export Volumes (mill. USD):
- 2003: 6.5
- 2004: 10.5
- 2005: 14.7
- 2006: 21.8
- 2007: 24.1
- 2008: 17.9
- 2009: 24.1
- 2010: 18.8
- 2011: 18.8
- 2012: 14.4
- 2013: 11.0
- 2014: 11.0
- 2015: 2.0
Coal Importation

- Vinacomin was assigned by the Vietnamese Government as the key role to import coal for power plants in Vietnam. During time, Vinacomin has actively approached and investigated markets such as Indonesia, Australia, Russia to seek for sources of coal importing to Vietnam.

- Vinacomin has discussed the demand of importing coal with major thermal coal suppliers over the world and has signed some agreements on importing coal with the companies from Australia and Indonesia for some thermal power projects which are expected to use imported coal.

- Vinacomin is now also cooperating with big trading companies from Japan to seek for source of coal importing to the thermal power projects in Vietnam after 2016.

- In order to serve for importing coal, Vinacomin was assigned to make "The investment project of transshipment port for imported coal, supplying coal for thermal power centers in Mekong River Delta". JICA has supported Vinacomin and selected Sumitomo as a consultant to make FS of this project. Currently, JICA, Sumitomo and Vinacomin are actively coordinating to implement necessary works to complete the FS and submit to Vietnamese Government for approval.
Plan of Vinacomin In The Coming Time

- To ensure the coal supply to the economy in the coming period, Vinacomin has to enhance the activities of investigation, exploration, supplement of available coal reserves and increase productivity, expand the scale of mines and develop new mines, focus on investment in building deep underground mines with high productivity.

- Vinacomin was assigned by the State for management, exploration, technology testing and exploitation of coal in Red River Delta. Therefore, Vinacomin has been seeking for foreign partners to jointly research and test coal mining technology. Based on the test results, the appropriate coal mining technology and scale of exploitation will be determined.

- VINACOMIN will promote technological research, apply advance coal processing technology toward to diversification of products, create clean and environment-friendly products, build power plants using FBC/CFBC technology for the purpose of reducing environment pollution and increasing the operational efficiency.
Plan of Vinacomin In The Coming Time

• To ensure sustainable growth as the target set out in the context of the world economy is still in difficulty, significantly affects to the mining industry in general beside the internal difficulties such as deep mining condition, lack of investment capital for the development of new projects ..., Vinacomin always actively seek and willing to cooperate with partners over the world including Japan, particularly cooperate in the fields of mine development, coal plant construction, environmental treatment - mine rehabilitation, training - technology transfer in underground mining, arranging finance for the development projects, cooperation in trading coal, alumina; research - training and consultancy in term of technique, coal blending technology...

• Those are some sharing of the coal market in Vietnam as well as the plan of Vinacomin in the coming time.

• Vinacomin highly appreciates and would like to have support and close cooperation from partners and customers over the world including Japanese partners together with Vinacomin to develop the mining industry in Vietnam harmoniously, stably in the spirit of cooperation, trust and mutual benefit.
Thank you very much!