Shanxi Coal Bed Methane Development and Utilization (P100968)

Key Dates

Key Project Dates

- Bank Approval Date: 19-May-2009
- Planned Mid Term Review Date: 26-Nov-2012
- Original Closing Date: 31-Dec-2014

- Effectiveness Date: 18-Sep-2009
- Actual Mid-Term Review Date: 26-Nov-2012
- Revised Closing Date: 30-Jun-2016

Project Development Objectives

Project Development Objective (from Project Appraisal Document)
The development objective of the project is to increase the production and utilization of CBM/CMM to replace coal as a fuel for thermal use and to reduce GHGs and local air pollutants associated with coal combustion. The project development objective will be achieved by (a) enhancing the subsector’s policy framework and institutional capacity, and (b) supporting the exploration, production and liquefaction of CBM to increase market access.

Has the Project Development Objective been changed since Board Approval of the Project Objective?
No

Components

- CBM and LNG Development: (Cost $178.60 M)
- Institutional Strengthening and Capacity Building: (Cost $1.70 M)

Overall Ratings

<table>
<thead>
<tr>
<th>Name</th>
<th>Previous Rating</th>
<th>Current Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progress towards achievement of PDO</td>
<td>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
</tr>
<tr>
<td>Overall Implementation Progress (IP)</td>
<td>Moderately Satisfactory</td>
<td>Moderately Satisfactory</td>
</tr>
<tr>
<td>Overall Risk Rating</td>
<td>High</td>
<td>Substantial</td>
</tr>
</tbody>
</table>
Implementation Status and Key Decisions

Steady progress has been made in the project implementation: (i) the first LCBM train is now operational; (ii) the installation schedule of the 2nd LNG train is on track and is expected to be commissioned by June 2016; (iii) 20 testing wells have are in operation and additional wells have been drilled; and (iv) revised technical schemes of the remaining gas drilling territory have been agreed on with the provincial authority, and the gas drilling for the remaining wells will commence in January 2016.

A supervision was completed in November 2015, and the next supervision mission is scheduled in April 2016.

Risks

Systematic Operations Risk-rating Tool
<table>
<thead>
<tr>
<th>Risk Category</th>
<th>Rating at Approval</th>
<th>Previous Rating</th>
<th>Current Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political and Governance</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Macroeconomic</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
<tr>
<td>Sector Strategies and Policies</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Technical Design of Project or Program</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
<tr>
<td>Institutional Capacity for Implementation and Sustainability</td>
<td>--</td>
<td>Substantial</td>
<td>Substantial</td>
</tr>
<tr>
<td>Fiduciary</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Environment and Social</td>
<td>--</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>Stakeholders</td>
<td>--</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Other</td>
<td>--</td>
<td>High</td>
<td>Substantial</td>
</tr>
<tr>
<td>Overall</td>
<td>--</td>
<td>High</td>
<td>Substantial</td>
</tr>
</tbody>
</table>

Results

Project Development Objective Indicators

- Total amount of CBM/CMM produced and captured in Shanxi annually (Cubic Meter(m3), Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>3000000000.00</td>
<td>8100000000.00</td>
<td>8100000000.00</td>
<td>2000000000.00</td>
</tr>
<tr>
<td>Date</td>
<td>31-Dec-2008</td>
<td>31-Dec-2014</td>
<td>09-Dec-2015</td>
<td>30-Jun-2016</td>
</tr>
</tbody>
</table>

- Total amount of CBM/CMM utilized in Shanxi annually (Cubic Meter(m3), Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>2000000000.00</td>
<td>4500000000.00</td>
<td>4500000000.00</td>
<td>1500000000.00</td>
</tr>
<tr>
<td>Date</td>
<td>31-Dec-2008</td>
<td>31-Dec-2014</td>
<td>09-Dec-2015</td>
<td>30-Jun-2016</td>
</tr>
</tbody>
</table>

Overall Comments
Only yearly information can be provided by the provincial DRC and 2015 data is not available yet. So 2014 data is kept.

Intermediate Results Indicators
### The volume of CBM produced annually (Cubic Meter\(m^3\), Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value</strong></td>
<td>0.00</td>
<td>0.00</td>
<td>8350000.00</td>
<td>2500000000.00</td>
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<tr>
<td><strong>Date</strong></td>
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<td>31-Dec-2014</td>
<td>09-Dec-2015</td>
<td>30-Jun-2016</td>
</tr>
</tbody>
</table>

### The volume of LNG produced annually (Metric ton, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
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</thead>
<tbody>
<tr>
<td><strong>Value</strong></td>
<td>0.00</td>
<td>34209.00</td>
<td>45000.00</td>
<td>200000.00</td>
</tr>
<tr>
<td><strong>Date</strong></td>
<td>31-Dec-2008</td>
<td>31-Dec-2014</td>
<td>09-Dec-2015</td>
<td>30-Jun-2016</td>
</tr>
</tbody>
</table>

### The number of staff-week trained for both SECBMIH and Shanxi Province (Number, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value</strong></td>
<td>0.00</td>
<td>1153.00</td>
<td>1538.00</td>
<td>300.00</td>
</tr>
<tr>
<td><strong>Date</strong></td>
<td>31-Dec-2008</td>
<td>31-Dec-2014</td>
<td>09-Dec-2015</td>
<td>30-Jun-2016</td>
</tr>
</tbody>
</table>

### SECBMIH's Financial Sustainability - DSC Ratio (Number, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Value</strong></td>
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<td>4.86</td>
<td>4.86</td>
<td>1.40</td>
</tr>
<tr>
<td><strong>Date</strong></td>
<td>31-Dec-2008</td>
<td>31-Dec-2014</td>
<td>09-Dec-2015</td>
<td>30-Jun-2016</td>
</tr>
</tbody>
</table>
### SECBMIH's Financial Sustainability - Rate of Return on equity (Percentage, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>27.00</td>
<td>27.00</td>
<td>9.00</td>
</tr>
<tr>
<td>Date</td>
<td>31-Dec-2008</td>
<td>31-Dec-2014</td>
<td>09-Dec-2015</td>
<td>30-Jun-2016</td>
</tr>
</tbody>
</table>

### SECBMIH's Financial Sustainability - Ratio of current assets to current liabilities (Number, Custom)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Actual (Previous)</th>
<th>Actual (Current)</th>
<th>End Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>0.00</td>
<td>0.69</td>
<td>0.69</td>
<td>1.10</td>
</tr>
<tr>
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<td>31-Dec-2008</td>
<td>31-Dec-2014</td>
<td>09-Dec-2015</td>
<td>30-Jun-2016</td>
</tr>
</tbody>
</table>

**Overall Comments**

**Data on Financial Performance**

**Disbursements (by loan)**

<table>
<thead>
<tr>
<th>Project</th>
<th>Loan/Credit/TF</th>
<th>Status</th>
<th>Currency</th>
<th>Original</th>
<th>Revised</th>
<th>Cancelled</th>
<th>Disbursed</th>
<th>Undisbursed</th>
<th>Disbursed</th>
</tr>
</thead>
<tbody>
<tr>
<td>P100968</td>
<td>IBRD-77050</td>
<td>Effective</td>
<td>USD</td>
<td>80.00</td>
<td>80.00</td>
<td>0.00</td>
<td>40.96</td>
<td>39.04</td>
<td>51%</td>
</tr>
</tbody>
</table>

**Key Dates (by loan)**

<table>
<thead>
<tr>
<th>Project</th>
<th>Loan/Credit/TF</th>
<th>Status</th>
<th>Approval Date</th>
<th>Signing Date</th>
<th>Effectiveness Date</th>
<th>Orig. Closing Date</th>
<th>Rev. Closing Date</th>
</tr>
</thead>
</table>

**Cumulative Disbursements**
Restructuring History

Level 2 Approved on 18-Nov-2013

Related Project(s)

There are no related projects.