

Presentation on Business Opportunities

Pradeep Perera

Principal Energy Specialist

East Asia Regional Department

Energy Division (EAEN)

The logo of the Asian Development Bank (ADB), consisting of the letters 'ADB' in a white serif font on a dark blue square background.

The views expressed in this presentation are the views of the author/s and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy of the data included in this presentation and accepts no responsibility for any consequence of their use. The countries listed in this presentation do not imply any view on ADB's part as to sovereignty or independent status or necessarily conform to ADB's terminology.

PRC CPS (2011–2015) – Energy Sector Priorities

Scaled up energy efficiency

Contribute to energy intensity reduction in selected industries and provinces

Demonstrate new and immature renewable

Support early demonstration and deployment of new but relevant renewable technologies

Urban environment improvement

Low carbon and low emission heat and power supplies to urban areas

Cleaner coal and gas

CCS pilot and demonstration and natural gas-based CCS ready plant development

Intensify sector reforms

Develop technology road maps, trial market-based instruments, policy advice

On Going ADB EARD's Energy Sector Loan Projects

- Loan 2260-PRC & Loan 2658-PRC: Inner Mongolia Autonomous Region Environment Improvement Project (Phases I & II)
- Loan 2616-PRC: Tianjin Integrated Gasification Combined Cycle Power Plant Project
- Loan 2771-PRC: Shandong Energy Efficiency and Emission Reduction Project
- Loan 2611-PRC & Loan 2773-PRC: Guangdong Energy Efficiency and Environment Improvement Investment Program (Tranches 2 &3)
- Loan 2835-PRC: Hebei Energy Efficiency Improvement and Emission Reduction Project

Loan 2260-PRC & Loan 2658-PRC: Inner Mongolia Autonomous Region Environment Improvement Project (Phases I & II)

1. Improved central heating systems in 8 counties.
2. Provision of gas transmission and distribution systems for residential use and for transportation.
3. Potential opportunities involve supply of boilers, heat exchanges, heat and gas distribution pipes etc.
4. Institutional strengthening and capacity building.

Loan 2616-PRC: Tianjin Integrated Gasification Combined Cycle Power Plant Project

1. A 250 MW IGCC demonstration plant constructed at Tianjin.
2. The project is about to be commissioned and bulk of ADB funds are already utilized.
3. ADB will be financing civil works for some auxiliary facilities such as cooling water intakes, etc.
4. ADB also intend to demonstrate the capture and storage of CO₂.

Loan 2771-PRC: Shandong Energy Efficiency and Emission Reduction Project

1. The project is financing energy efficiency investments in two large industrial establishments.
2. The procurement opportunities include high efficient smelting furnace and waste heat recovery systems for a large copper manufacturer and parabolic trough based solar heat system for preheating feeding water for industrial boilers.
3. The project is establishing a revolving fund using the reflows from the two projects mentioned above. The projects to be financed under the second batch will be identified soon.

Loan 2611-PRC & Loan 2773-PRC: Guangdong Energy Efficiency and Environment Improvement Investment Program (Tranches 2 & 3)

- Tranche 1 of the project is already completed and new set of subprojects will be selected by PMO for financing using the revolving fund funded through reflows.
- Tranches 2 & 3 consist of 12 industrial energy efficiency projects of \$1 million-\$5 million.
- The projects are industrial retrofit projects involving efficient electric motors, lighting, transformers and small-scale waste heat recovery systems.
- The procurement is undertaken using commercial practices by the subborrowers.

Loan 2835-PRC: Hebei Energy Efficiency Improvement and Emission Reduction

1. The project involves establishing revolving fund to finance industrial energy efficiency projects.
2. The first batch of subprojects consists of eight subprojects ranging from \$5 million to \$25 million.
3. The procurement opportunities are coke dry quenching plants, waste heat recovery systems, efficient boilers, efficient motors, etc.
4. Most of the procurement will be undertaken using national competitive bidding procedures.

Proposed Lending Project to be approved in 2012-2013

- PRC (44011): Heilongjiang Energy Efficient District Heating Project
- PRC (44013): Shanxi Energy Efficiency and Environment Improvement Project
- Concentrated Solar Thermal Power Project with Thermal Storage in Qinghai

Heilongjiang & Shanxi Energy Efficient District Heating Project

1. Expanded coverage of district heating system in the 15 project cities and towns in Heilongjiang and Shanxi Provinces.
2. Improved energy efficient heat generation capacity in the three project cities.
3. Procurement opportunities include efficient boilers, heat exchangers, heat pipelines, SCADA systems and other measuring systems and coal mine methane capture systems.

Technical Assistance Projects

Approved TAs :

TA 7956-PRC: Developing Tianjin Emission Trading System

TA 8001-PRC: Study on Carbon Capture and Storage in Natural Gas-Based Power Plants

TA 7963-PRC: Enhancing the Energy Regulation System for Low-Carbon Development

TA in the Pipeline

PPTA for Qinghai Solar Thermal Project

Developing Shanghai Emission Trading System

Demonstrating Oxyfuel Technologies and CCS roadmap

Demonstrating carbon capture and Storage in Tianjin IGCC plant

TA 7956-PRC: Developing Tianjin Emission Trading System

1. Strategic policy advice on the overall design of the TETS is provided.
2. Detailed design of the TETS, including the trading rules and regulatory systems is prepared.
3. The trading platform and registry for the TETS is commissioned.

TA 8001-PRC: Study on Carbon Capture and Storage in Natural Gas-Based Power Plants

OUTPUTS:

1. A CCS road map for natural gas-based power plants is prepared.
2. Compare, pilot test and select efficient and cost-effective CO₂ capture technology.
3. CCS readiness plan developed and financing needs identified for the Gaojiang plant expansion.
4. Capacity assessed and strengthened for CCS-ready design and retrofit projects.
5. Implemented a public outreach campaign.

TA 7963-PRC: Enhancing the Energy Regulation System for Low-Carbon Development

OUTPUTS:

1. An integrated study on the PRC's current energy regulation system and legislation, and their adequacy for its future low-carbon transformation.
2. Policy recommendations on drafting the energy law and amending the electricity law.
3. Capacity development and information dissemination.

**Thank you and For more
information....**

Pradeep Perera

Principal Energy Specialist

pperera@adb.org

ADB