Early Warning System

ADB-47051-002

Chemical Industry Energy Efficiency and Emission Reduction Project

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Quick Facts

Countries	China
Specific Location	Dezhou, Zigong Shi
Financial Institutions	Asian Development Bank (ADB)
Status	Closed
Bank Risk Rating	A
Voting Date	2015-11-03
Borrower	People's Republic of China, China National Chemical Corporation Group
Sectors	Energy, Industry and Trade
Investment Type(s)	Loan
Investment Amount (USD)	$ 100.00 million
Loan Amount (USD)	$ 100.00 million
Project Cost (USD)	$ 181.73 million

Project Description

According to ADB website, the ADB is helping People’s Republic of China cut toxic emissions and power consumption at plants of the China National Chemical Corporation—the country’s largest producer of energy-intensive plastics products. The project is funding the testing of a mercury-free catalyst for PVC production at one plant and an energy efficiency system at another, which will cut power use and greenhouse gas emissions.

The proposed Chemical Industry Energy Efficiency and Emission Reduction Project will support demonstration of innovative technologies to improve energy efficiency and reduce emissions of pollutants from various plants belonging to the China National Chemical Corporation Group (ChemChina). It will also develop an innovative financing structure to leverage commercial cofinancing and mainstream energy service company (ESCO) participation from the beginning of project implementation. The innovative financing structure will be developed and firmed up during the early stage of the project preparatory technical assistance (PPTA) implementation.

The proposed first two subprojects include (i) demonstration of a new technology by Dezhou Shihua Chemical Co., Ltd. (DSC) to retrofit its polyvinyl chloride (PVC) production facility to reduce energy consumption by 40% and eliminate the use of mercury as a catalyst; and (ii) retrofitting the caustic soda production chain of Haohua Yuhang Chemical Co. Ltd. (HYC) with the current state-of-the-art technology that will consume 30% less energy.
As per the International Energy Agency, caustic soda and PVC production consumes about two-thirds of total primary energy in the chemical industry worldwide. By targeting these two energy-intensive production processes, the project aims for larger impact on energy efficiency and emission reductions in chemical industry in the PRC.
Similarly, by mainstreaming ESCO in the project's structure, the project will address a key barrier that has so far prevented industry-specific ESCO participation in energy efficiency retrofits in energy-intensive industries in the PRC. If proven successful, it may unleash ESCO model across energy-intensive industries.

Early Warning System Project Analysis

The Project has been classified by ADB as environment category "FI". The CGY and DSC subprojects have been classified by ADB as environment category A.

Investment Description

- Asian Development Bank (ADB)

ADB Loan 3308-PRC from the Ordinary Capital Resources amounting to US$ 100.00 million. Another loan from a Commercial - Local Bank amounting to US$ 81.73 million.

Financial Intermediary

Financial Intermediary: A commercial bank or financial institution that receives funds from a development bank. A financial intermediary then lends these funds to their clients (private actors) in the form of loans, bonds, guarantees and equity shares. Financial intermediaries include insurance, pension and equity funds. The direct financial relationship is between the development bank and the financial intermediary.

- China Construction Bank Corp (Financial Intermediary) **invests in** China National Chemical Corp Ltd (Client)

Private Actors Description

As stated by Bloomberg, China National Chemical Corporation Limited manufactures chemical products. The Company develops, manufactures, and sells advanced chemical materials, specialty chemicals, basic chemicals, and other products. China National Chemical also produces agrochemicals, tires, rubber products, and other products.

Haohua Yuhang Chemical Co.,Ltd. was founded in 2001. The Company's line of business includes the manufacturing of chemical preparations.
Dezhou Shihua Chemical Co. Ltd. manufactures and distributes chemical products. The Company produces polyvinyl chloride resins, liquid chlorine, hydrochloric acid, caustic soda, titanium dioxide, and other chemical products.

China Construction Bank Corporation provides banking services. The Company offers deposits, loans, fund management, foreign exchange, and other services. China Construction Bank provides its services to individuals, enterprises, and other clients.

Private Actor 1	Private Actor 1 Role	Private Actor 1 Sector	Relation	Private Actor 2	Private Actor 2 Role	Private Actor 2 Sector
China National Chemical Corp Ltd	Client	Industry and Trade	owns	Dezhou Shihua Chemical Co Ltd	Subsidiary	Industry and Trade
China National Chemical Corp Ltd	Client	Industry and Trade	owns	Haohua Yuhang Chemical Co Ltd	Subsidiary	Industry and Trade

Contact Information

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No contact information provided at the time of disclosure

ACCOUNTABILITY MECHANISM OF ADB

The Accountability Mechanism is an independent complaint mechanism and fact-finding body for people who believe they are likely to be, or have been, adversely affected by an Asian Development Bank-financed project. If you submit a complaint to the Accountability Mechanism, they may investigate to assess whether the Asian Development Bank is following its own policies and procedures for preventing harm to people or the environment. You can learn more about the Accountability Mechanism and how to file a complaint at: http://www.adb.org/site/accountability-mechanism/main

Bank Documents

- Chemical Industry Energy Efficiency and Emission Reduction Project [Original Source]
- Chemical Industry Energy Efficiency and Emission Reduction Project: Environmental Impact Assessment [Original Source]
- Chemical Industry Energy Efficiency and Emission Reduction Project: Environmental Impact Assessment [Original Source]
- Chemical Industry Energy Efficiency and Emission Reduction Project: Procurement Plan [Original Source]
- Chemical Industry Energy Efficiency and Emission Reduction Project: Project Administration Manual [Original Source]
- Chemical Industry Energy Efficiency and Emission Reduction Project: Report and Recommendation of the [Original Source]
- Climate Change Risk Assessment Note [Original Source]
- Contribution to the ADB Results Framework [Original Source]
- Country Economic Indicators [Original Source]
- Development Coordination [Original Source]
- Economic Analysis [Original Source]
- Environmental Impact Assessment [Original Source]
- Financial Analysis [Original Source]
- Financial Intermediary: Environmental and Social Management System Arrangement [Original Source]
- Financial Management Assessment for Project Entities [Original Source]
- Financial Management Assessment for the Financial Intermediary [Original Source]
- Hua Gong Xing Ye Jie Neng He Jian Pai Xiang Mu : Xiang Mu Shu Ju Biao [Original Source]
- Innovative Energy Efficiency and Emission Reduction Technologies [Original Source]
- Loan Agreement
- Loan Agreement (Ordinary Operations) for Loan 3308-PRC: Chemical Industry Energy Efficiency and Emis [Original Source]
- Project Administration Manual
- Project Agreement
- Project Agreement for Loan 3308-PRC: Chemical Industry Energy Efficiency and Emission Reduction Proj [Original Source]
- Project Disclosure PDF [Original Source]
- Project Procurement Risk Assessment Report for Procurement Agent [Original Source]
- Project Procurement Risk Assessment Report for Project Entities [Original Source]
- Risk Assessment and Risk Management Plan [Original Source]
- Sector Assessment (Summary): Energy [Original Source]
- Summary Poverty Reduction and Social Strategy [Original Source]