



## Developing Market-based Energy Efficiency Program in China (P132748)

EAST ASIA AND PACIFIC | China | Energy & Extractives Global Practice |  
Global Environment Project | Investment Project Financing | FY 2017 | Seq No: 10 | ARCHIVED on 19-Feb-2022 | ISR50234 |

Implementing Agencies: Huaxia Bank, People's Republic of China, Hebei PMO, China National Energy Conservation Center

## Key Dates

## Key Project Dates

Bank Approval Date: 16-Mar-2017

Effectiveness Date: 05-Sep-2017

Planned Mid Term Review Date: 12-Apr-2021

Actual Mid-Term Review Date: 07-Jun-2021

Original Closing Date: 30-Apr-2022

Revised Closing Date: 30-Apr-2022

## Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The objective of the project is to support development and implementation of China's priority energy efficiency and environment programs, with a focus on improving the results measurement and verification system and developing market-based mechanisms.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

## Components Table

Name

Component 1. Supporting market-based priority energy efficiency and coal cap control programs:(Cost \$8.80 M)

Component 2. Supporting result-based green energy financing in Jing-Jin-Ji Region:(Cost \$4.50 M)

Component 3. Supporting result-based environmental program in Hebei Province:(Cost \$4.50 M)

## Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	<span style="color: #ffc000;">□</span> Moderately Satisfactory	<span style="color: #ffc000;">□</span> Moderately Satisfactory
Overall Implementation Progress (IP)	<span style="color: #ffc000;">□</span> Moderately Satisfactory	<span style="color: #ff0000;">□</span> Moderately Unsatisfactory
Overall Risk Rating	<span style="color: #ffc000;">□</span> Moderate	<span style="color: #ffc000;">□</span> Moderate

## Implementation Status and Key Decisions

The project implementation is progressing despite substantial delays induced by the Covid-19 pandemic. The progress towards the achievement of the Project Development Objective (PDO) is rated Moderately Satisfactory. However, overall implementation progress is downgraded to Moderately Unsatisfactory, reflecting delays in implementation of some key activities that are linked to results indicators. US\$1.69 million has been disbursed in the first half of FY2022, marking the total disbursement to be US\$8.52 million and the disbursement ratio to be 48 percent. As confirmed during the Mid-Term Review (MTR) in May 2021, the overall project design is becoming even more relevant with the new commitments of the Government of China to carbon emission peaking before 2030 and carbon neutrality by 2060. The project is playing an instrumental role in developing a national policy framework for promoting energy efficiency and decoupling energy demand growth and economic growth, while also supporting the



implementation of key IBRD-funded Program-for-Results (P4R) operations in the Jing-Jin-Ji region and Hebei province. As agreed during the MTR, it is essential to extend the closing date of the Project for 18 months to cope with delays induced by the Covid-19 and ensure that the PDO is achieved and the results indicators meet the expected targets.

## Risks

### Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	Low	Low	Low
Macroeconomic	Moderate	Moderate	Moderate
Sector Strategies and Policies	Low	Low	Low
Technical Design of Project or Program	Moderate	Moderate	Moderate
Institutional Capacity for Implementation and Sustainability	Moderate	Moderate	Moderate
Fiduciary	Moderate	Moderate	Moderate
Environment and Social	Low	Low	Low
Stakeholders	Moderate	Moderate	Moderate
Other	--	Moderate	Moderate
Overall	Moderate	Moderate	Moderate

## Results

### PDO Indicators by Objectives / Outcomes

To support development and implementation of China's priority EE and environment program				
► Energy savings measurement, reporting and verification system improved and standardized (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	n.a.	Contracts signed in May 2020 and activities are under implementation.	Contracts signed in May 2020 and activities are under implementation.	MRV system for energy savings improved and standardized
Date	16-Mar-2017	04-Dec-2020	31-Jan-2022	30-Apr-2022
► Market-based mechanisms for energy savings designed and piloted (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No Market-based mechanism for energy savings designed or piloted	Contracts were signed in May 2020. Pilot EE trading scheme will be formulated by 2021 Q2.	Contracts were signed in May 2020. A national market-based energy consumption rights trading scheme is being designed building on lessons	Market-based EE trading mechanisms designed and piloted



			from pilot schemes that have been implemented in nine provinces.	
Date	16-Mar-2017	04-Dec-2020	31-Jan-2022	30-Apr-2022
► Energy and environment results verified for the Jing-Jin-Ji Region and Hebei Province (Text, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No results to be verified	Verification systems have been established and have been operational for both P4R.	Verification systems have been established and have been operational for both P4R.	Verification systems for green energy financing and environmental programs in JJJ Region and Hebei Province established
Date	16-Mar-2017	04-Dec-2020	31-Jan-2022	30-Apr-2022
Comments:	Verification systems have been established and have been operational for both P4R, with independent verifiers contracted. DLIs for the Innovative Financing for Air Pollution Control in JJJ PforR and the Hebei Air Pollution Prevention and Control PforR Operations were verified, including verification now fully completed in the case of the Hebei PforR which was closed on December 31, 2019			

### Intermediate Results Indicators by Components

Component 1. Supporting market-based priority energy efficiency and coal cap control programs				
► Capacity built for M&V system and market-based EE mechanism (Number of people trained) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	104.00	104.00	1,200.00
Date	16-Mar-2017	31-May-2021	31-Jan-2022	30-Apr-2022
Comments:	6 international study tours have been conducted. 64 people trained. There was a capacity building workshop regarding the MRV held on March 3rd 2021 in NECC. The participants were NECC staffs and the consultants of the activity "Developing MRV principles", about 40 people were trained. Once MRV methodologies and energy saving trading scheme are finalized, training workshops will be organized to build capacity for the new methodologies and trading schemes.			
► Energy savings M&V methodologies and guidelines developed (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	6.00	6.00	25.00
Date	16-Mar-2017	31-May-2021	31-Jan-2022	30-Apr-2022
Comments:	6 methodologies have been developed. The PMO submitted a revised procurement plan in December 2021 to launch the procurement of a contract (NDRC-2019-17) to develop further MRV methodologies based on the MRV principles and guidelines formulated under another contract (NDRC-2019-16) signed in May 2020. The new contract is expected to increase the number of MRV methodologies to meet the end target.			
► Energy consumption trading schemes designed and piloted (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target



Value	No	No	No	Yes
Date	16-Mar-2017	31-May-2021	31-Jan-2022	31-Dec-2020
Comments:	A draft EE trading mechanism has been designed and under NDRC internal review.			
Component 2. Supporting result-based green energy financing in Jing-Jin-Ji Region				
► Innovative financial products for green financing developed and piloted (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	3.00	3.00	3.00
Date	16-Mar-2017	31-May-2021	31-Jan-2022	30-Apr-2022
Comments:	The last innovative financial product-green bond, has been issued and verified in April 2020.			
► Case studies for the JJJ and Hebei PforR operations developed (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1.00	1.00	2.00
Date	16-Mar-2017	31-May-2021	31-Jan-2022	30-Apr-2022
Comments:	Huaxia has completed the case study of the operation of JJJ PforR Programs, drawing lessons from successes and difficulties met, resulting in recommendations for future similar projects. Hebei PMO will soon start procurement for the case study of the operation of Hebei PforR Program.			
► CO2 emissions avoided (thousand tons) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	2,840.00	2,783.50	1,969.00
Date	16-Mar-2017	31-May-2021	23-Dec-2021	30-Apr-2022
► Annual energy savings(Thousand tce) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1,164.00	1,140.80	800.00
Date	16-Mar-2017	31-May-2021	23-Dec-2021	30-Apr-2022
Comments:	Intermediate target largely exceeded			
Component 3. Supporting result-based environmental program in Hebei Province				
► Capacity for environmental results monitoring improved (Number of people trained) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	720.00	720.00	480.00
Date	16-Mar-2017	31-May-2021	31-Jan-2022	30-Apr-2022
Comments:	The target number 480 is over delivered.			



## Performance-Based Conditions

## Data on Financial Performance

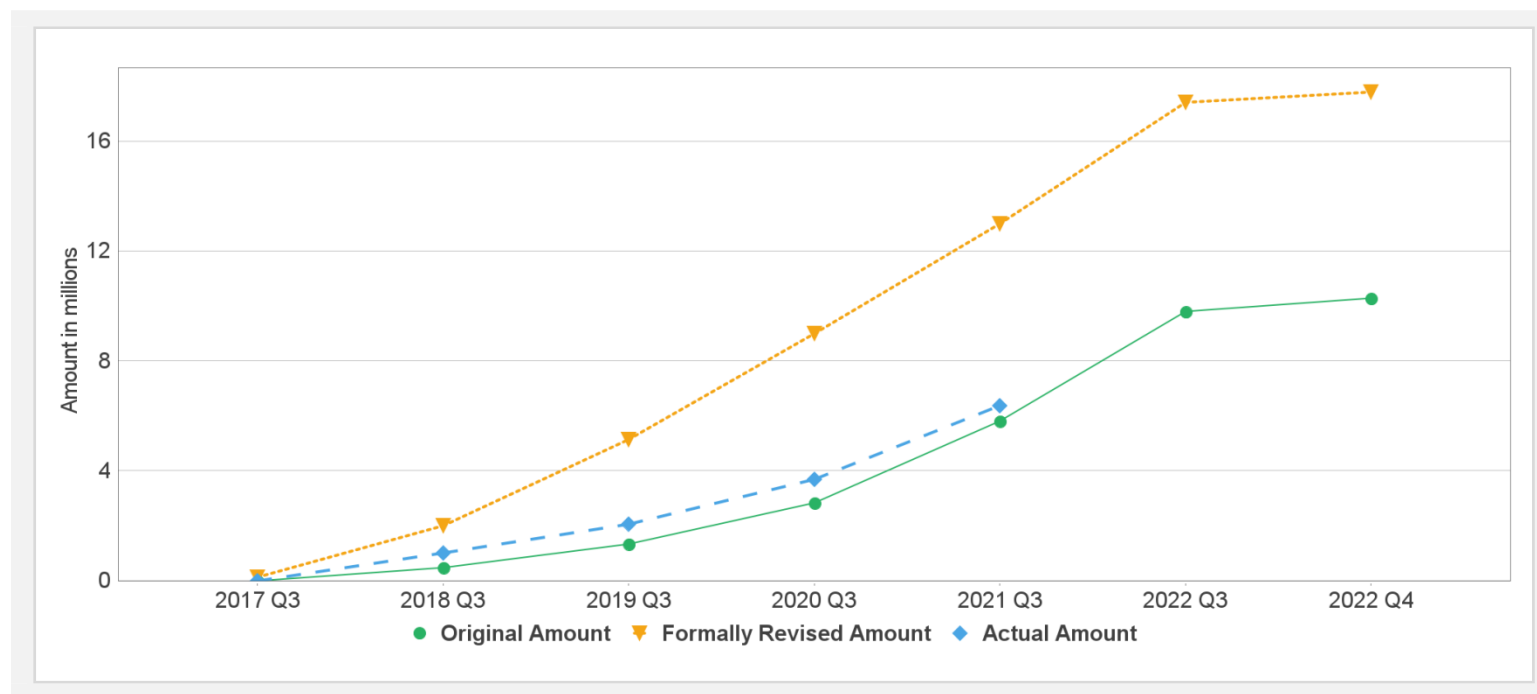
## Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P132748	TF-A4256	Effective	USD	17.80	17.80	0.00	8.52	9.28	48%

## Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P132748	TF-A4256	Effective	09-Jun-2017	09-Jun-2017	05-Sep-2017	30-Apr-2022	30-Apr-2022

## Cumulative Disbursements



## Restructuring History

There has been no restructuring to date.



---

#### **Related Project(s)**

There are no related projects.

---