



Urban Scale Building Energy Efficiency and Renewable Energy (P130786)

EAST ASIA AND PACIFIC | China | Energy & Extractives Global Practice |
Global Environment Project | Investment Project Financing | FY 2013 | Seq No: 11 | ARCHIVED on 19-Oct-2018 | ISR34339 |

Implementing Agencies: Ministry of Housing and Urban-Rural Development, Beijing Housing and Urban-Rural Development Commission, Beijing Development and Reform Commission, Ningbo Housing and Urban-Rural Development Commission, PEOPLE'S REPUBLIC OF CHINA, Center of Science and Technology for Construction (CSTC)

Key Dates

Key Project Dates

Bank Approval Date: 26-Apr-2013

Effectiveness Date: 26-Aug-2013

Planned Mid Term Review Date: 31-Oct-2016

Actual Mid-Term Review Date: 31-Oct-2016

Original Closing Date: 31-Dec-2018

Revised Closing Date: 31-Dec-2018

Project Development Objectives

Project Development Objective (from Project Appraisal Document)

The proposed project development objective is to improve selected national and city-level policies for (1) the promotion of low-carbon, adaptive and livable urban forms; (2) an increase in energy efficiency in public and commercial buildings; and, (3) the scale-up of commercially viable rooftop solar PV deployment. The global environment objective of the proposed project is to reduce carbon dioxide emissions from buildings in selected Chinese cities by supporting improved policy making and implementation in promoting low-carbon, adaptive and livable urban forms, increasing energy efficiency in public and commercial buildings, and scaling up commercially viable rooftop solar PV deployment.

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

No

Components

Name

1. Promoting the Development of Low-Carbon, Adaptive and Livable Urban Forms:(Cost \$8.76 M)
2. Improving Energy Efficiency in Public and Commercial Buildings:(Cost \$18.53 M)
3. Scaling up Commercially Viable Rooftop Solar PV Deployment:(Cost \$2.00 M)
4. Project Management:(Cost \$1.50 M)

Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	● Satisfactory	● Satisfactory
Overall Implementation Progress (IP)	● Moderately Satisfactory	● Moderately Satisfactory
Overall Risk Rating	● Substantial	● Substantial

Implementation Status and Key Decisions



Work under the project continues to progress, and the project is largely on track to meet its PDO goals. Numerous activities to promote sustainable and low-carbon urban forms, improve the efficiency of public and commercial buildings, and contribute to the scaling up of commercial distributed solar PV have been completed under the project.

Component 1. To support the low-carbon urban form work, a workshop hosted by Ningbo was held in September 2017. A plan was agreed for drawing lessons and conclusions for the overall urban form work that will be used to inform urban planning and policies in Chinese cities.

Component 2. Energy Performance Benchmarking and Disclosure (EPB&D) systems have been established in Ningbo and Beijing and work on certified green buildings has progressed in both municipalities. Construction on the new green building pilot at Ningbo University has been completed and the building is undergoing a one year of trial operation to obtain its energy efficiency rating (3 star). As an alternative to the retrofit green building at Ningbo University, Ningbo officials are augmenting a municipal composting facility by adding green building components. The project is under construction and scheduled to be completed by end-2018.

Component 3. Implementation of Component 3, which is supporting the Beijing solar PV project, has made good progress on the two-way metering program to measure carbon emissions, the on-line renewable energy monitoring system which is fully functional, the renewable energy education system in Beijing schools, and support to the RESCO business model for solar PV.



Risks

Systematic Operations Risk-rating Tool

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

Results

PDO Indicators by Objectives / Outcomes

Promotion of low-carbon, adaptive and livable urban forms				
▶ LOCAL urban planning and design principles recommended for inclusion in statutory urban planning standards and regulations (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
Increase in energy efficiency in public and commercial buildings				
▶ Energy performance benchmarking and disclosure (EPB&D) program for large public and commercial buildings developed at the national level and mandatory adoption by select cities. (Yes/No, Custom)				



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
Scale-up of commercially viable rooftop solar PV deployment				
▶Number of renewable energy service contracts signed (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	310.00	310.00	765.00
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
▶CO2 emissions reduction associated with GEF assistance (Tones/year, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	15,300.00	15,300.00	85,120.00
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018

Intermediate Results Indicators by Components

2. Improving Energy Efficiency in Public and Commercial Buildings				
▶National and city BEP&D pilot programs implemented (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	2.00	2.00	3.00
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
▶Selected building EE and green building policies in Beijing improved and new policies informed (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
▶Outreach to local stakeholders and training of local trades in Beijing (number of people trained) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1,750.00	1,750.00	1,000.00
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
▶Floor area of green buildings in Beijing received certificates (Square Meter(m2), Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	3,000,000.00	32,206,600.00	32,206,600.00	15,000,000.00



Date	01-Jan-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
►Bioclimatic and cost-optimal green building designs demonstrated in Ningbo (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	No	No	Yes
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
►Green building policies in Ningbo improved and new policies informed (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
►Outreach to local stakeholders and training of local trades in Ningbo (number of people trained) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	2,015.00	2,015.00	800.00
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
3. Scaling up Commercially Viable Rooftop Solar PV Deployment				
►Installed rooftop solar PV capacity under the Beijing Rooftop Solar PV Scale-up Project (Megawatt, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	42.90	42.90	100.00
Date	01-Jan-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
►Improved knowledge of local grid company about handling grid-connected rooftop PV systems (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
►Establishment of Beijing solar energy information portal (Yes/No, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	No	Yes	Yes	Yes
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018
►Renewable energy education delivery in public schools enhanced (number of demonstration laboratories established) (Number, Custom)				
	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	5.00	5.00	20.00
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018



1. Promoting the Development of Low-Carbon, Adaptive and Livable Urban Forms

▶Urban form studies completed (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	2.00	2.00	4.00
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018

▶Mayors and city planning officials trained (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	2,966.00	2,966.00	150.00
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018

▶City pilots of Local urban planning and design completed (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	1.00	1.00	3.00
Date	01-May-2013	30-Apr-2018	30-Apr-2018	30-Jun-2018

Data on Financial Performance

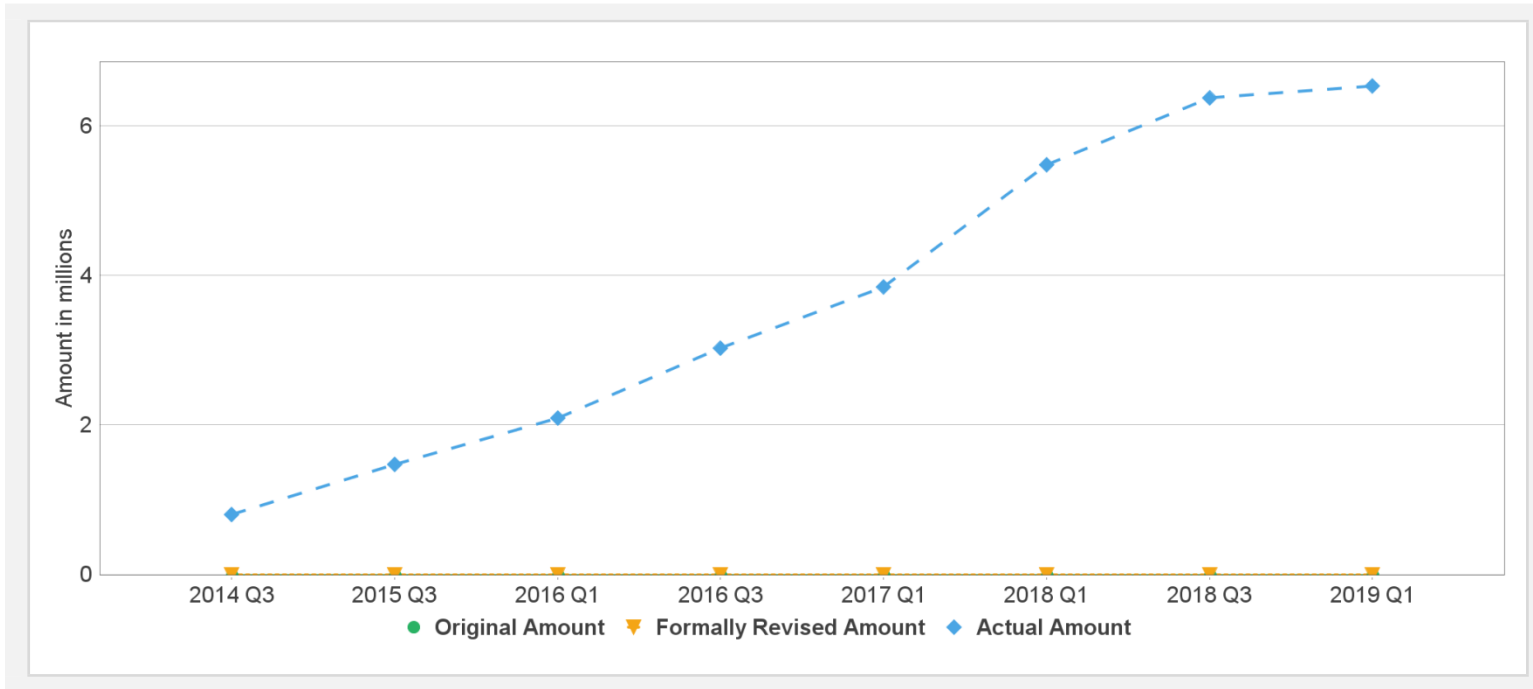
Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P130786	TF-14522	Effective	USD	12.00	12.00	0.00	6.53	5.47	54%

Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P130786	TF-14522	Effective	04-Jul-2013	04-Jul-2013	26-Aug-2013	31-Dec-2018	31-Dec-2018

Cumulative Disbursements



Restructuring History

Level 2 Approved on 31-Mar-2018

Related Project(s)

There are no related projects.