



## China, People's Republic of: Study of Clean Energy Supply for the Rural Areas in the Greater Beijing-Tianjin-Hebei Region

Project Name	Study of Clean Energy Supply for the Rural Areas in the Greater Beijing-Tianjin-Hebei Region	
Project Number	51031-001	
Country	China, People's Republic of	
Project Status	Approved	
Project Type / Modality of Assistance	Technical Assistance	
Source of Funding / Amount	<b>TA: Study of Clean Energy Supply for the Rural Areas in the Greater Beijing-Tianjin-Hebei Region</b>	
	Technical Assistance Special Fund	US\$ 400,000.00
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth	
Drivers of Change	Governance and capacity development Knowledge solutions Private sector development	
Sector / Subsector	<b>Energy</b> - Energy efficiency and conservation - Renewable energy generation - biomass and waste - Renewable energy generation - geothermal - Renewable energy generation - solar - Renewable energy generation - wind	
Gender Equity and Mainstreaming	No gender elements	
Description	The proposed knowledge and support technical assistance (TA) will increase rural clean energy supply in the greater Beijing Tianjin Hebei (BTH) region by assessing the current energy consumption and structure, and its impacts on air quality	

Project Rationale and Linkage to Country/Regional Strategy

In recent years, haze has become a serious problem in the PRC, especially in the greater BTH region. In 2015, only 186 days, or 51% of the days in the year, met air quality standards in Beijing. There were 46 heavily polluted days accounting for 13% of the year. The frequent occurrence of haze in this region has drawn extensive attention domestically and internationally. Haze not only poses a threat to public health, but also on socio-economic development. One study estimated that the severe haze in January 2013 may have resulted in approximately 700 premature deaths, 6,000 hospitalizations for cardiovascular disease, 5,500 hospitalizations for respiratory disease, and \$250 million in economic losses.

The main cause of the large-scale haze and largest source of particulate matter less than 2.5 micrometers in diameter (PM2.5) in the BTH region is raw coal combustion. As living standards have improved in the rural areas, households have transitioned from direct burning of traditional, low quality fuels straw, fuelwood, and other biomass to raw coal in household stoves and heating facilities. To date, coal accounts for more than 55% of domestic energy consumption in the BTH and its surrounding rural areas. This shift has resulted in adverse impacts on the environment and high levels of pollution emissions. Raw coal combustion, especially low-quality coal combustion, produces a large amount of PM2.5 and carbon monoxide. Comparing to the emission produced from the coal used for power generation, the pollutants from raw coal burning are 5 to 10 times more as these pollutants are directly emitted to the atmosphere without any treatment, which poses serious risks to the environment and public health. There is about 700 -800 million tons of raw coal used annually in the PRC. Therefore, reducing pollution emissions from rural and semi-urban energy consumption can greatly contribute to addressing the haze problem in the BTH and surrounding areas.

The Government of the PRC is committed to increasing the use of clean heating technologies. In May 2017, a joint notice was issued by the Ministry of Finance, Ministry of Housing, Urban and Rural Development, Ministry of Environmental Protection, and National Energy Administration on conducting the pilot work of clean heating in winter in the northern region. The central government will provide financial support to pilot cities in replacing dirty raw coal-based heating facilities with clean heating. The national government is also encouraging local governments to adopt policy measures that promote institutional innovation and attract private sector investments to scaled-up the replacement of coal-based heating facilities in additional cities.

The TA will focus on Beijing, Tianjin, Hebei, Shandong, and Henan, municipalities and provinces that have substantial biomass, solar, wind, and geothermal resource potential. The TA will help these local governments develop policy measures to optimize rural energy supply and improve air quality through the following knowledge building activities:

- (i) Conducting a survey to identify the status and structure of rural energy consumption.
- (ii) Assessing impacts of rural energy consumption on air quality.
- (iii) Proposing clean energy supply structures in pilot municipalities. And
- (iv) Assessing the market potential of clean energy uptake and development of a clean energy strategy.

Impact Air pollution reduced and public health improved in the greater BTH region

**Project Outcome**

Description of Outcome Rural energy structure and air quality improved in the greater BTH region

Progress Toward Outcome

**Implementation Progress**

Description of Project Outputs Survey of the status and structure of rural energy consumption in the greater BTH region conducted  
Report on the status and structure of rural energy consumption in the greater BTH region prepared  
Rural clean energy supply plan proposed  
Recommendations on the clean energy development strategy made to the government

Status of Implementation Progress (Outputs, Activities, and Issues)

Geographical Location Beijing, Hebei, Henan, Inner Mongolia, Liaoning, Shandong, Shanxi, Tianjin

**Summary of Environmental and Social Aspects**

Environmental Aspects

Involuntary Resettlement

Indigenous Peoples

**Stakeholder Communication, Participation, and Consultation**

During Project Design

During Project Implementation

## Business Opportunities

Consulting Services Consultants will be engaged in accordance with ADB Procurement Policy (2017, as amended from time to time) and the associated Project Administration Instructions. Consultants will be engaged to prepare the TA, using the individual selection method and output-based partial lump-sum contracts. In addition, a firm will be engaged using quality- and cost-based selection method and output-based, partial lump-sum contract for the complementary survey to prepare reports.

Responsible ADB Officer	Lu, Lin
Responsible ADB Department	East Asia Department
Responsible ADB Division	Energy Division, EARD
Executing Agencies	<i>Ministry of Agriculture 11 Nong Zhan Guan Nan Li, Beijing People's Republic of China</i>

## Timetable

Concept Clearance	21 Aug 2017
Fact Finding	07 Sep 2017 to 07 Sep 2017
MRM	-
Approval	13 Oct 2017
Last Review Mission	-
Last PDS Update	13 Oct 2017

Project Page	<a href="https://www.adb.org/projects/51031-001/main">https://www.adb.org/projects/51031-001/main</a>
Request for Information	<a href="http://www.adb.org/forms/request-information-form?subject=51031-001">http://www.adb.org/forms/request-information-form?subject=51031-001</a>
Date Generated	17 October 2017

ADB provides the information contained in this project data sheet (PDS) solely as a resource for its users without any form of assurance. Whilst ADB tries to provide high quality content, the information are provided "as is" without warranty of any kind, either express or implied, including without limitation warranties of merchantability, fitness for a particular purpose, and non-infringement. ADB specifically does not make any warranties or representations as to the accuracy or completeness of any such information.