

 Early Warning System

ADB-48114-001

Accelerating Investment in Distributed Energy in Rural Qingdao



### Quick Facts

Countries	China
Specific Location	Qingdao, Shandong Province
Financial Institutions	Asian Development Bank (ADB)
Status	Active
Bank Risk Rating	B
Voting Date	2015-07-02
Borrower	Government of People's Republic of China
Sectors	Energy, Technical Cooperation
Investment Type(s)	Grant
Investment Amount (USD)	\$ 0.35 million
Project Cost (USD)	\$ 0.35 million



### Project Description

The proposed TA is well aligned with Asian Development Bank's (ADB's) Strategy 2020 strategic development agenda of achieving environmentally sustainable growth. Moving developing member countries onto low-carbon growth paths by improving energy efficiency and expanding the use of clean energy sources has been identified as one of the key means of addressing climate change issues. The PRC: Country Partnership Strategy, 2011-2015 identified environmentally sustainable growth as one of the three pillars of ADB assistance to the PRC. The proposed TA will promote the utilization of low carbon technologies, thus addressing the air pollution.

This TA will aim to help the Qingdao Government to increase readiness for investment in distributed energy project in rural Qingdao. It will (i) select a pilot area in rural Qingdao for deployment of distributed energy, (ii) undertake cost-benefit analysis, (iii) propose cost-effective solution to provide reliable energy for pilot cluster communities, (iv) identify investment needs, (v) review and assess existing policies and standard, identify gaps, and (vi) recommend an appropriate business model to promote distributed energy based heating supply.

The key activities under the TA include the following:

(i) Select a pilot area in rural Qingdao. Locally available renewable resources, energy supply condition, and projected heat load will be assessed, and a pilot area for deployment of distributed energy will be selected in rural Qingdao.

(ii) Undertake cost-benefit analyses and propose a cost-effective solution. Case studies of similar communities in Europe and the PRC that use distributed energy—examining the supporting policy, development plan, available renewable resources, energy demand, adopted technology, financing arrangements, and environmental and social impacts—will be conducted for the pilot area. Suitable, innovative technical solutions will be proposed, with a focus on the most exploitable renewable sources based on local conditions, including wind, solar, biomass, geothermal, waste-to-energy, and wastewater treatment. Cost-benefit analyses will be undertaken and the most cost-effective technical solution for the pilot area in rural Qingdao will be selected.

(iii) Identify investment need. Investment needs in the short, mid-, and long term will be prioritized and possible financing sources identified.

(iv) Assess existing policies and standards. Existing national and local policies and standards for implementing distributed energy projects in rural Qingdao will be assessed, policy gaps identified, and recommendations made for changes.

(v) Recommend an appropriate business model. The most appropriate business model for sustainable implementation of distributed energy in rural Qingdao will be developed. Recommendations for private sector engagement will be made.

(vi) Disseminate technical assistance findings and recommendations. Capacity development training, including an overseas study tour and workshops, will be conducted. Consultation meetings will be held to disseminate TA findings and best practices (international and from other provinces in the PRC).

### IMPACT

Implemented distributed energy project in rural Qingdao

### CONSULTING SERVICES

The executing agency will be the Qingdao Municipal DRC. The implementing agency will be Qingdao Energy Group. The TA will be implemented over a period of 18 months, from 1 July 2015 to 31 December 2016. The TA will require 3 person-months of inputs from international experts and 24 person-months of inputs from national consultants. To reduce administrative burden and improve economy, efficiency and value for money, all consulting services under the TA would be engaged on output-based (lump-sum) contract.



---

### Investment Description

- Asian Development Bank (ADB)



---

### Contact Information

Qingdao Municipal Development & Reform Commission  
Foreign Economic Relations & Trade Div  
No. 11 Xiang Gang Zhong Road

#### 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

- [Accelerating Investment in Distributed Energy in Rural Qingdao: Technical Assistance Report](#) [\[Original Source\]](#)
- [Project Disclosure PDF](#)