

DEVELOPMENT COORDINATION

A. Major Development Partners: Strategic Foci and Key Activities

1. Energy has been one of the core sectors of Asian Development Bank (ADB) assistance to the People's Republic of China (PRC) since 1987 and is a core sector in its country partnership strategy, 2011–2015. So far, ADB has provided lending support of more than \$4.5 billion to finance 40 energy projects. Of the total loan amount, 55% was for energy conservation, energy efficiency, environment improvement, and emission reduction projects; 25% was for renewable energy projects (e.g., hydropower, pumped storage, solar, wind, and biomass); 12% was for thermal power generation; and 8% was for electricity transmission and distribution.

2. ADB's energy operations in the PRC have evolved from capacity addition in traditional power generation and transmission projects to advanced technology projects pioneering clean energy with substantial demonstration effects. Since 2006, all ADB energy sector operations have aimed to reduce emissions and improve energy efficiency. Energy projects have included (i) an innovative concentrated solar project in Qinghai Province, (ii) coal mine methane and coalbed methane projects in Shanxi and Liaoning provinces; (iii) multicomponent urban environment improvement projects in Inner Mongolia Autonomous Region and Liaoning Province; (iv) flexible financing through a multitranche financing facility for hydropower plants in Gansu Province; (v) energy efficiency projects in Guangdong, Hebei, and Shandong provinces; and (vi) energy-efficient district heating projects in Heilongjiang and Shanxi provinces. ADB's sector priorities will continue to be focused on energy efficiency and resource conservation, a scientific approach to development, and climate change mitigation.

3. ADB has provided 123 technical assistance (TA) projects in the PRC energy sector since 1987, valued at about \$70 million. The assistance (i) supported the preparation of loan projects; (ii) provided policy advice; and (iii) built the institutional capacity of governments and utilities in the PRC focusing on clean energy production, energy conservation, energy efficiency, and environmental management. Recently approved TA projects are strongly aligned with lending activities and complement support for demonstration projects. ADB seeks to play a leadership role in introducing cutting-edge technologies that can contribute to significant climate change mitigation—particularly in concentrated solar power, small hydropower, smart grid technology, and clean coal technology (such as integrated gasification combined cycle with carbon capture and storage). In the heating subsector, ADB has provided TA support for the government's heating tariff reforms and for promoting sustainable urban heating supply by formulating pro-poor national heating tariff guidelines and establishing an effective mechanism to collect heating tariffs.¹

4. The World Bank is another important multilateral financier of energy projects in the PRC. Since the early 1990s, it has provided more than \$6.2 billion, mainly for large thermal and hydropower generation, and power transmission and distribution projects. World Bank support has also included energy efficiency and renewable energy projects. Among the bilateral agencies, the Japan Bank for International Cooperation is the largest source of external assistance to the power sector in the PRC. It has provided \$670 million in concessional loans for power sector projects through its official development assistance window. It has also provided special credits to major cities to improve their environment by installing emission control devices and equipment in power plants and factories, and building water treatment

¹ ADB. 2001. *Technical Assistance to the People's Republic of China for Pro-Poor Urban Heating Tariff Reforms*. Manila (TA 3673-PRC).

facilities. German development cooperation through KfW has provided about \$400 million in mixed credits, mostly for power plants and turbine modernization projects. It has supported energy efficiency and renewable energy development. Other bilateral sources of export credits or mixed credits in the PRC energy sector include Australia, Canada, Denmark, France, Italy, Spain, the United Kingdom, and the United States.

5. The European Investment Bank is in its first phase of providing a China Climate Change Framework Loan (CCCFL) under the China–European Union (EU) Partnership on Climate Change. Launched during the China–EU Summit in 2005, the partnership encompasses the China–EU Action Plan on Energy Efficiency and Renewable Energies and the China–EU Action Plan on Clean Coal. The first phase of the CCCFL includes up to 14 projects for a total loan amount of €220 million. More than €500 million is being considered for the second phase. The projects financed under the first phase of the CCCFL range from renewable energy and energy efficiency to reforestation.

6. Table 1 shows other major development partners involved in the environment improvement, energy efficiency, and heating subsectors in the PRC.

Table 1: Other Major Development Partners in the PRC’s Heating Subsector

Development Partner	Project Name	Duration	Amount (\$ million)
Energy efficiency and conservation			
World Bank	Urumqi District Heating Project ^a	2011 (ongoing)	100.00
	Shanxi Gas District Heating Project ^b	2014–2019	100.00
Japan International Cooperation Agency	Inner Mongolia Autonomous Region Hohhot City Atmospheric Environment Improvement Project ^c	2006–2011	72.00 (¥7,400 million)
KfW	German Promotion Loan for Hohhot District Heating Project ^d	2014–2019 (ongoing)	0.48 (€0.35)

^a World Bank. 2013. *Implementation Status and Results, China Urumqi District Heating Project*. Washington, DC.

^b World Bank. 2014. *Shanxi Gas Utilization Project*. Washington, DC (P133531, approved on 28 March, for \$100 million).

^c Japan International Cooperation Agency. 2006. *Ex-Ante Evaluation. Inner Mongolia Autonomous Region Hohhot City Atmospheric Environment Improvement Project*. Tokyo.

^d Hohhot City Development, Investment, and Operation (Chengfa). 2014. *Onlending Agreement, Hohhot Chengfa Investment and Management*. Hohhot.

B. Institutional Arrangements and Processes for Development Coordination

7. Close cooperation among development partners has been pursued mainly through informal meetings and information exchange. ADB has established working relationships with the World Bank and other multilateral and bilateral agencies to discuss policy issues and exchange information on lending and TA operations. Both ADB and the World Bank emphasize the importance of improving energy efficiency, promoting clean energy, protecting the environment, and involving the private sector in clean energy financing. Given the increasing involvement of ADB and the World Bank in supporting energy efficiency improvements in the PRC, there is a need for more sector-specific collaboration and coordination between the two agencies to create synergy in supporting the energy sector in the PRC.

C. Achievements and Issues

8. Overall, ADB's experience with energy projects in the PRC has been positive. In general, projects are well-designed and smoothly implemented. Success is attributed to the extensive preparation for ADB interventions, the high degree of local ownership, and effective leadership in project management. ADB has worked closely with the government in harmonizing approval procedures to minimize implementation delays. Yet, start-up delays have occurred in previous ADB-funded district heating projects because of (i) slow mobilization of the domestic tendering company; (ii) a lack of familiarity with ADB's procurement procedures, which delayed disbursement; and (iii) slow opening of a project imprest account.

D. Recommendations

9. The project implementation issues indicated in para. 8 may be addressed by (i) thoroughly reviewing the key factors in project readiness that may delay start-up, (ii) providing training on ADB procurement and disbursement procedures, and (iii) commencing preliminary and detailed engineering design before loan approval. These measures have been taken into account in the design and preparation of the Low-Carbon District Heating Project in Hohhot in Inner Mongolia Autonomous Region. The project management office has already been set-up and has closely coordinated project preparation works with the Government of Inner Mongolia Autonomous Region, ADB, and North China Design Institute.