



China, People's Republic of: Shaanxi Accelerated Energy Efficiency and Environment Improvement Financing Program

Project Name	Shaanxi Accelerated Energy Efficiency and Environment Improvement Financing Program	
Project Number	48452-001	
Country	China, People's Republic of	
Project Status	Active	
Project Type / Modality of Assistance	Technical Assistance	
Source of Funding / Amount	TA 8981-PRC: Shaanxi Accelerated Energy Efficiency and Environment Improvement Financing Program	
	Technical Assistance Special Fund	US\$ 500,000.00
	TA 8981-PRC: Shaanxi Accelerated Energy Efficiency and Environment Improvement Financing Program	
	Financial Sector Development Partnership Special Fund	US\$ 100,000.00
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth	
Drivers of Change	Governance and capacity development Knowledge solutions Partnerships Private sector development	
Sector / Subsector	Energy - Energy sector development and institutional reform	
Gender Equity and Mainstreaming	No gender elements	
Description	<p>The proposed project is to establish a dedicated Green Financing Platform (GFP) to mobilize domestic financing by leveraging ADB loan proceeds for energy efficiency, distributed renewable energy and environment improvement investments in Shaanxi Province.</p> <p>The proposed GFP will offer three complementary financial products: (i) a Debt Financing Facility to provide entrusted loans, (ii) Credit Guarantee Facility to support the mobilization of cofinancing, and (iii) Lease Financing Facility to provide lease financing for purchase of energy efficient industrial equipment. The GFP will partner with two commercial banks active in Shaanxi province to offer entrusted loans and the partner banks are encouraged to provide cofinancing to match at least the ADB loan proceeds. The guarantee facility will provide credit guarantees to technically sound subprojects with high energy saving potential but lacking in collateral to meet the requirement of the commercial banks for providing cofinancing. This facility is likely to be particularly useful for ESCO projects and SME borrowers. SFHG will provide credit enhancement to the guarantees provided by SMEGC by making a cash deposit of not more than 20% of the guaranteed cofinancing loan amount in the beneficiary bank of the guarantee. This will ensure that the guarantee facility will have a minimum leveraging ratio of 5.</p>	

Project Rationale and Linkage to Country/Regional Strategy

PRC's 13th Five-Year Plan Strategy for Energy Saving & Emission Reduction: The PRC became the largest energy consumer in the world in 2009, and in 2014 it accounted for 21% of the global energy consumption. The highly energy intensive and coal dominated economic structure has exerted a heavy toll on the PRC's natural environment and it has become the major cause for the country's high level of greenhouse gas emissions and air and water pollution. In recognition of the gravity of the problem, the government has made promoting environmentally sustainable growth a key priority. The 13th Five Year Plan (2016_2020) include specific measures and targets to decouple the economic growth from energy consumption and carbon emissions and increase the share of non-fossil energy in primary energy consumption as well as to reduce the release of major air pollutants. These targets will contribute to the PRC's intended nationally determined contributions to reduce the carbon intensity by 60%_65% by 2030 compared to 2005, and achieve carbon peaking between 2027 and 2030. The national energy saving targets have been allocated to the provinces and additional incentives are provided by the PRC government to western provinces which are heavily dependent on coal and traditional energy intensive heavy industries to reduce energy intensity.

Opportunities for Achieving Energy Saving and Emission Reduction in Shaanxi Province: Shaanxi Province is a major coal, oil and natural gas producing province in the PRC and its industrial structure is heavily dependent on these resources as a feed stock as well as an energy source. Shaanxi Province aims to achieve further reduction of energy intensity by 15% by 2020 compared to 2015, and limit the growth of total energy consumption to 4% per annum. The SMEs in the Shaanxi province are particularly active in energy intensive industrial sectors such as coal chemical industry, non-ferrous metal and ceramic and building material. There are SMEs active in industrial waste material recycling and use traditional technologies and there are ample opportunities to recover the waste heat from industrial processes for electricity generation and also make use of industrial gases for productive purposes as well as to reduce air pollution by reducing the emission of industrial gases to the atmosphere. The Energy Service Companies (ESCO) which invests in energy saving upgrades based on a contractual arrangement to share the monetary value of energy savings with the host SME can play a significant role in facilitating technology transfer to SMEs.

Challenges of Energy Efficiency Improvement in SMEs in Shaanxi: The SMEs in traditional energy intensive industries particularly face several challenges in reducing the energy intensity. The recent economic downturns in the PRC and the collapse of price of coal and coal based industrial products have affected the profitability of these enterprises and their credit worthiness. At the same time, the monetary value of the energy savings has been reduced due to recent drop in coal prices. The PRC governments have also moved away from providing direct fiscal subsidies to energy efficiency investments to a more facilitating role of creating the enabling environment, enhancing the monitoring capacity of provincial agencies responsible for energy efficiency and establishing partnerships with financial institutions to provide green financing products.

Impact

Project Outcome

Description of Outcome

Progress Toward Outcome

Implementation Progress

Description of Project Outputs

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

Geographical Location

Summary of Environmental and Social Aspects

Environmental Aspects

Involuntary Resettlement

Indigenous Peoples

Stakeholder Communication, Participation, and Consultation

During Project Design

Relevant government agencies, the NDRC, Ministry of Finance, Shaanxi DRC, and Shaanxi Finance Bureau , and Shaanxi Financial Holding Group have been consulted to prepare the project.

During Project Implementation

The fact-finding mission agreed on the subprojects to be included in the first batch, the allocation of ADB loan proceeds among the subprojects and the different financial instruments to be offered by GFP, project implementing arrangements including roles and responsibilities of the different organizations involved in the project, project implementation schedule, design and monitoring framework of the project, action plan to mitigate financial management risks, auditing requirements, disbursement procedures of subprojects, and subproject selection criteria and approval procedure and loan covenants to be included in the legal documents.

The mission agreed to undertake the due diligence of subprojects which have prepared and completed the feasibility study reports and environmental impact assessments according to domestic procedures using PPTA resources.

The subprojects that have been identified include two energy services company (ESCO) projects that would invest in a series of industrial and building energy saving projects. The two ESCOs have technical expertise in (i) low temperature heat recovery from industrial plants using Organic Rankin Cycle Technology, (ii) top gas recovery from blast furnaces, and (iii) natural gas based tri-generation systems providing electricity, heating and cooling for commercial buildings. The identified subprojects include (I) industrial waste heat recovery and utilization projects, (ii) industrial waste gas recovery, (iii) pollution control in coal gasification and coke production plants and use of waste gases for power generation, (iv) distributed solar photovoltaic, (v) biogas and biofuel recovery for agriculture waste, (vi) use of geothermal energy for heat supply for residential areas, (vii) retrofitting industrial processes with high efficient equipment, and (viii) energy efficiency improvement in buildings and public facilities using natural gas based in generation technologies.

The identified subprojects include energy efficiency upgrades of existing industrial plants as well as greenfield renewable energy projects, and environment audits of existing industrial plants will be undertaken. An environmental due diligence on the host facility will also be undertaken for ESCO projects. The subproject selection criteria exclude subprojects requiring new land acquisition. There are several subprojects where the land has been acquired in the last 2 years and due diligence will be undertaken on the legacy issues related to recent land acquisition. The draft ESMS has been discussed with the implementing agency and key aspects have been agreed.

Most of the TA activities have been completed except for the preparation of several onlending and framework agreements (to be signed with the different project implementation organizations) essential for the disbursement of funds for the project. The recruitment of the national legal expert, who will facilitate the preparation of these agreements, is underway.

Business Opportunities

Consulting Services	The ADB staff resources will be supported by a team of TA consultants consisting of 12 person-months of international consultants and 23 person-months of national consultants to be recruited as individual consultants in accordance with the Guidelines on the Use of Consultants (2013, as amended from time to time).
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Responsible Staff

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Timetable

Concept Clearance	-
Fact Finding	-
MRM	-
Approval	29 Oct 2015
Last Review Mission	-
Last PDS Update	30 Mar 2017

TA 8981-PRC

Milestones					
Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
29 Oct 2015	26 Nov 2015	26 Nov 2015	30 Jun 2016	30 Dec 2017	-

Financing Plan/TA Utilization						Cumulative Disbursements		
ADB	Cofinancing	Counterpart				Total	Date	Amount
		Gov	Beneficiaries	Project Sponsor	Others			
600,000.00	0.00	0.00	0.00	0.00	0.00	600,000.00	29 Oct 2015	337,413.18

Project Page <https://www.adb.org/projects/48452-001/main>

Request for Information <http://www.adb.org/forms/request-information-form?subject=48452-001>

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