

INITIAL POVERTY AND SOCIAL ANALYSIS

Country:	China, People's Republic of	Project Title:	Qingdao Smart Low-Carbon District Energy Project
Lending/Financing Modality:	Project loan	Department/Division:	East Asia Department/Energy Division

I. POVERTY IMPACT AND SOCIAL DIMENSIONS

A. Links to the National Poverty Reduction Strategy and Country Partnership Strategy

The project contributes to the Twelfth Five-Year Plan of the PRC (2011–2015), which emphasizes resource conservation and environmental protection and gives priority to improving energy efficiency and developing cleaner energy sources. The project will support the plan targets for (i) reducing sulfur dioxide emissions by 10% through reduced coal consumption for district heating, and (ii) improving the efficiency of district heating supply by 20% and reducing losses from distribution systems. The project supports the goals of improving energy efficiency and resource utilization outlined in the PRC's Medium- and Long-Term Energy Conservation Plan (2005), and the 2006 Decision of the State Council on Enhancing Energy Conservation No. 28, which emphasizes energy conservation, particularly in the heating subsector. The project is consistent with ADB's Strategy 2020 which puts strategic priority on environmentally sustainable growth,^a and the country partnership strategy, 2011–2015 for the PRC which focuses on the strategic pillar on resource efficiency and environmental sustainability.^b The project also supports the Energy Efficiency Initiative of ADB.

The proposed project will upgrade the district energy (heating and cooling) system by introducing energy efficient European standard low temperature and smart district heating and cooling networks using various clean heat sources such as natural gas, wasted heat recovery, and solar, thereby improving the energy efficiency of district heating and cooling system and reducing emission of greenhouse gases and other air pollutants in Qingdao City.

B. Targeting Classification

General Intervention Individual or Household (TI-H) Geographic (TI-G) Non-Income MDGs (TI-M1, M2, etc.)

General Intervention. The project will provide cleaner and reliable heating services to the general public in the project area including the low-income households.

C. Poverty and Social Analysis

1. Key issues and potential beneficiaries.

The expected direct beneficiaries of the project are (i) residents including low-income households, (ii) students and patients, and (iii) heating and cooling users at commercial and government buildings in the project area (Lilun district). Indirect beneficiaries are population in surrounding districts of the project area through improved air quality. Access to cleaner, reliable, and affordable heating service is one of the basic needs of potential beneficiaries. Affordability might be considered a constraint among low-income households to access clean and reliable heating and cooling service.

2. Impact channels and expected systemic changes.

The project will provide better heating and cooling services to households including the low-income households in the project areas. The project will (i) reduce cases of respiratory diseases through improved indoor and outdoor air quality, reduce carbon monoxide poisoning by providing safer district heating services, and provide better medical environment by providing cleaner and reliable heating services; (ii) improve the living conditions through adequate and reliable heating services; (iii) reduce domestic chore for space heating; (iv) reduce heating expenditure by switching to centralized energy-efficient heating systems from individual household stove and decentralized heating systems; (v) provide better schooling environment during winter by providing cleaner and reliable heating and cooling services; and (vi) increase income through job opportunities created during construction and operation period.

3. Focus of (and resources allocated in) the PPTA or due diligence.

The PPTA will focus on (i) collecting social and poverty data; (ii) identifying project benefits by income groups; (iii) assessing affordability for accessing the heating services among income groups; (iv) assessing types of employment opportunities, and identifying effective measures to improve employment opportunities for local people including the poor and women; and (v) assessing labor retrenchment issue due to small and large coal-fired boilers closure.

4. Specific analysis for policy-based lending.

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II. GENDER AND DEVELOPMENT

1. What are the key gender issues in the sector/subsector that are likely to be relevant to this project or program?

Existing heating method using household heating stoves have a higher impact on women in terms of increasing (i) domestic chore for space heating, (ii) incidence of respiratory diseases related to indoor air pollution, and (iii) incidence of carbon monoxide poisoning and fire accident.

2. Does the proposed project or program have the potential to make a contribution to the promotion of gender equity and/or empowerment of women by providing women's access to and use of opportunities, services, resources, assets, and participation in decision making?

Yes No

Yes, the project will improve access to modern heating service, which is one of the basic urban infrastructures in cold climate region in gender inclusive manner. All sector-related gender issues will be resolved after project implementation (item 1 above). Also, the project team will advocate gender-balanced employment opportunities in heating business, where appropriate.

3. Could the proposed project have an adverse impact on women and/or girls or widen gender inequality?

Yes No

No, the project will not have adverse impact on women and/or girls or widen gender inequality.

4. Indicate the intended gender mainstreaming category:

GEN (gender equity theme) EGM (effective gender mainstreaming)
 SGE (some gender elements) NGE (no gender elements)

III. PARTICIPATION AND EMPOWERMENT

1. Who are the main stakeholders of the project, including beneficiaries and negatively affected people? Identify how they will participate in the project design.

Main stakeholders of the project are Qingdao Taineng Gas Group Limited, Qingdao Municipal Development and Reform Commission, Qingdao Finance Bureau, heat sources operators, communities, and businesses in the project areas. They have been participating in the project design through consultations and series of review and approval processes. Potentially affected communities have participated in public consultations during the domestic environment impact assessment preparation and will also have an opportunity to engage in project design improvement through potential public consultation meetings and other communication channels that will be set during the project preparation stage as well as project implementation.

2. How can the project contribute (in a systemic way) to engaging and empowering stakeholders and beneficiaries, particularly, the poor, vulnerable and excluded groups? What issues in the project design require participation of the poor and excluded?

Accessibility and affordability of district heating and cooling service among various income groups will be assessed during the PPTA implementation through social survey and interviews.

3. What are the key, active, and relevant civil society organizations in the project area? What is the level of civil society organization participation in the project design?

M Information generation and sharing **M** Consultation **N** Collaboration **N** Partnership

4. Are there issues during project design for which participation of the poor and excluded is important? What are they and how shall they be addressed? Yes No

The PPTA will seek opportunities to extend heating and cooling services to low-income housing.

IV. SOCIAL SAFEGUARDS

A. Involuntary Resettlement Category A B C F1

1. Does the project have the potential to involve involuntary land acquisition resulting in physical and economic displacement? Yes No

No. According to the draft feasibility study report, the proposed project will not entail permanent or temporary physical displacement or economic displacement as (i) heating pipelines will be laid underground within the existing right of way or roadways, (ii) heat exchangers, heat storage, small size natural gas boilers, rooftop solar collectors will be installed within the existing premises in the buildings, and (iii) heat and chiller pumps will be installed within the existing sewage plant.

2. What action plan is required to address involuntary resettlement as part of the PPTA or due diligence process?

Resettlement plan Resettlement framework Social impact matrix
 Environmental and social management system arrangement None

B. Indigenous Peoples Category A B C FI

1. Does the proposed project have the potential to directly or indirectly affect the dignity, human rights, livelihood systems, or culture of indigenous peoples? Yes No

2. Does it affect the territories or natural and cultural resources indigenous peoples own, use, occupy, or claim, as their ancestral domain? Yes No

3. Will the project require broad community support of affected indigenous communities? Yes No

4. What action plan is required to address risks to indigenous peoples as part of the PPTA or due diligence process?

- Indigenous peoples plan Indigenous peoples planning framework Social impact matrix
 Environmental and social management system arrangement None

V. OTHER SOCIAL ISSUES AND RISKS

1. What other social issues and risks should be considered in the project design?

- Creating decent jobs and employment(L) Adhering to core labor standards(L) Labor retrenchment(L)
 Spread of communicable diseases, including HIV/AIDS (L) Increase in human trafficking Affordability(M)
 Increase in unplanned migration Increase in vulnerability to natural disasters Creating political instability
 Creating internal social conflicts Others, please specify _____

2. How are these additional social issues and risks going to be addressed in the project design?

Standard assurances on labor and spread of communicable diseases will be included in the project agreement. Labor retrenchment plan due to small boiler closures will be prepared, if needed.

VI. PPTA OR DUE DILIGENCE RESOURCE REQUIREMENT

1. Do the terms of reference for the PPTA (or other due diligence) contain key information needed to be gathered during PPTA or due diligence process to better analyze (i) poverty and social impact; (ii) gender impact, (iii) participation dimensions; (iv) social safeguards; and (vi) other social risks. Are the relevant specialists identified?

- Yes No

2. What resources (e.g., consultants, survey budget, and workshop) are allocated for conducting poverty, social and/or gender analysis, and participation plan during the PPTA or due diligence?

A total of 3.5 person-months of social analysis and safeguard specialists (international for 1.5 person-months, and national for 2 person-months) will be hired to conduct social due diligence during PPTA implementation.