

**INTEGRATED SAFEGUARDS DATA SHEET
APPRAISAL STAGE**

Report No.: ISDSA14018

Date ISDS Prepared/Updated: 06-Oct-2015

Date ISDS Approved/Disclosed: 09-Oct-2015

I. BASIC INFORMATION

1. Basic Project Data

Country:	China	Project ID:	P148599
Project Name:	Hebei Clean Heating Project (P148599)		
Task Team Leader(s):	Yuriy Myroshnychenko, Emmanuel Py		
Estimated Appraisal Date:	21-Sep-2015	Estimated Board Date:	25-Feb-2016
Managing Unit:	GEE02	Lending Instrument:	Investment Project Financing
Sector(s):	Energy efficiency in Heat and Power (100%)		
Theme(s):	Pollution management and environmental health (40%), Climate change (10%), Other urban development (50%)		
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?			No
Financing (In USD Million)			
Total Project Cost:	248.33	Total Bank Financing:	100.00
Financing Gap:	0.00		
Financing Source			Amount
Borrower			148.33
International Bank for Reconstruction and Development			100.00
Total			248.33
Environmental Category:	A - Full Assessment		
Is this a Repeater project?	No		

2. Project Development Objective(s)

The proposed project development objective (PDO) is to improve the efficiency and environmental performance of heating systems in project areas of selected municipalities of Hebei Province.

3. Project Description

The project consists of an investment component “District Heating Subprojects” and a technical

assistant component “Institutional Capacity Building and Project Management Support”.

Component 1: District Heating Subprojects (estimated cost US\$245.83 million equivalent; US\$97.5 million IBRD financing , including interest during construction, commitment charge and Front-end-Fee). It will finance the construction and rehabilitation of district heating facilities in the four project cities (four subprojects) with a total heating area of 38.7 million m², including 13.5 million m² of new buildings. Each subproject is tailor fit to the needs of the participating city, but will also have common features aiming to modernize operations and make them more efficient.

Subproject 1.1. Chengde District Heating and Energy Efficiency Subproject (estimated cost US\$ 35.2 million; US\$ 19.5 million IBRD financing): The subproject is located in the Shuangqiao (old town) district of Chengde, a city in northeast Hebei Province. It will rehabilitate district heating (DH) facilities that serve the existing DH area of about 12.3 million m², and expand DH to additional 2.5 million m². The latter will include replacement of six small coal fired boilers that serve about 87,000 m² of existing buildings, and some 2.4 million m² of new buildings. The main investments will comprise: (a) extension of a DH primary network by about 5 km; (b) renovation of some 3 km of the primary network and 57 km of a secondary network; and (c) construction of 20 group substations, and 114 BLS. The implementing entity is the Chengde Heating Group Company, Ltd., a state-owned enterprise that is the largest DH company in Chengde.

Subproject 1.2. Zhangjiakou District Heating Subproject (estimated cost US\$73.395 million; US \$32.665 million IBRD financing): The subproject is located in Qiaodong District of Zhangjiakou, located in northwest Hebei Province. It will rehabilitate DH facilities that serve the existing DH area of about 3.5 million m², and expand DH to additional 5 million m². The latter will include connection to DH of about 2.6 million m² of existing buildings that are currently served by 99 small coal fired boilers, and 2.4 million m² of new buildings. The main investments will comprise: (a) extension of a DH primary network by about 20 km; (b) construction of 58 group substations, and 17 BLS; (c) conversion of two coal-fired boilers (2x64 MW) to natural gas (2x70 MW) for peak load supply and backup capacity; (d) construction of a pressure isolation station; and (e) installation of a Supervisory Control and Data Acquisition (SCADA) system. The implementing entity is the Zhangjiakou Dongyuan Heating Company, a state-owned enterprise and subsidiary of the Qiaodong Urban Construction and Investment Company. Dongyuan owns the 4x64MW coal-fired HOB plant, which will be partially converted to gas.

Subproject 1.3. Pingshan Xian (County) District Heating and Energy Efficiency Subproject (estimated cost US\$ 24.85 million; US\$ 12.67 million IBRD financing): The subproject is located in the urban area of Pingshan County, about 30 km west of Shijiazhuang, the capital of Hebei Province. It will rehabilitate DH facilities that serve the existing DH area of about 4.5 million m², and expand DH to additional 3 million m² of new buildings. The main investments will comprise: (a) extension of the DH primary network by about 6 km; (b) renovation of some 4 km of the primary network (c) installation of 27 group substations, and nine BLS, as well as rehabilitation/expansion of five group substations to eight group substations; (e) installation of heat meters for 1.9 million m² of the residential heating area (including horizontal piping renovation), and about 0.27 million m² of public buildings (e.g. schools, government offices); (f) automatic control systems for 46 existing substations; and (g) installation of a SCADA and central monitoring and control system for the DH system. The implementing entity is the Pingshan County Urban and Township Heating Co. Ltd. Heating Company, a state owned enterprise under the Pingshan Municipal Construction Bureau.

Subproject 1.4. Xingtai Xian (County) Industrial Waste Heat District Heating Subproject (estimated

cost US\$ 112.385 million; US\$ 32.665 million IBRD financing): The subproject is located in the northwest urban area of Xingtai County, in southern Hebei Province. It is one of the most polluted counties in the Province. It will construct DH facilities to serve about 8 million m², including some 2.3 million m² of existing and about 5.7 million m² of new buildings. The subproject will use industrial waste heat from nearby industrial (coking) facilities. The project investments will be split in two phases. Phase I is under implementation and comprise: construction of a waste heat water network of about 17 km within the coking plant area and some 24 km of the primary DH network outside the plant to provide DH to an existing heating area. It is entirely financed from the counterpart funds, and therefore procured based on the Chinese procurement rules. However, all the project related activities of Phase I will need to comply with the Bank safeguards requirements. Phase II will include construction of additional 28 km of the primary DH network, 130 group substations and 14 BLS, and installation of a SCADA system. The implementing entity is the RISUN Anneng Heating Company, Ltd, a new joint venture (JV) company, established for this project.

Component 2: Institutional Capacity Building and Project Management Support (estimated cost US \$2.5 million; US\$2.5 million IBRD financing). The component will finance technical assistance, training, workshops and study tours for the Hebei Project Management Office (HPMO) and the four heating companies, including: (a) project management support to the HPMO and the four heating companies; (b) capacity building support to the heating companies in district heating management, operation and maintenance, and World Bank project implementation procedures; (c) training, workshops and study tours to exchange and learn about good practices in the DH sector; and (d) technical assistance activities to tailor fit the needs of project's companies. All these activities will be provided by a management consulting company that will be procured under this Component.

4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

As indicated in Section 3 above, the proposed Project includes four subprojects in Hebei Province. The location of the subprojects is as follows: i) Shuangqiao District in Chengde Municipality, ii) Qiaodong District in Zhangjiakou Municipality, iii) Pingshan County in Shijiazhuang Municipality, and iv) Xingtai Municipality. The four project municipalities amount to a total of 5,000 square kilometers of area and a population of 2.2 million. About one quarter of total population in these counties is urban. Hebei Province belongs to the temperate continental monsoon climate featuring in distinct seasons. The annual frost-free period lasts 120 days to 200 days, with the annual average precipitation and the annual average air temperature respectively ranging from 300mm to 800mm and 4 °C and 13°C.

5. Environmental and Social Safeguards Specialists

Shunong Hu (GWADR)

Yiren Feng (GENDR)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	Investments under Component 1 include civil works for substations, transmission pipelines, and metering, depending on the scale and actual needs of each county. It is expected that environmental impacts during construction will be mainly related to small-scale construction of transmission pipelines and substations, e.

		<p>g. temporary disturbance to traffic and local communities along the sites for pipeline construction and near the sites for substations, disposal of spoil, nuisance of dust and noise. Environmental impacts during operation mainly include: (1) noise from the substations, building-level substations (2) air pollutants emission and noise of the peak boilers.</p> <p>Although the construction related impacts of the heating networks are site specific, limited and readily managed with mitigation measures, the project was classified as Category A given the scope of works, the potentially linked facilities (heating sources), the displacement of workers and social issues, and potential operating safety risks during the operation phase in line with OP4.01. The detailed information is provided in section II A (1).</p>
Natural Habitats OP/BP 4.04	No	The project is mainly in the urban and peri-urban areas of Hebei and these areas are already disturbed by intensive human activities. The initial screening of the project indicated that it will not convert, degrade or restore any natural habitats or critical natural habitats. This was confirmed during project preparation.
Forests OP/BP 4.36	No	The project will not finance activities that would involve significant conversion or degradation of critical forest areas or related critical natural habitats as defined under the policy. Hence this policy is not triggered.
Pest Management OP 4.09	No	The Project will not lead to purchase, nor use of any pesticides. This policy is not triggered.
Physical Cultural Resources OP/BP 4.11	No	A survey conducted by the EA team during the EA preparation confirmed that no physical cultural resources will be affected by the project. Chance-finding procedures was included in the EMP.
Indigenous Peoples OP/BP 4.10	No	Based on the social assessment conducted during project preparation, the proposed project will not trigger the Bank's OP 4.10 on Indigenous People. Consultations with local government agencies and affected people have been conducted for all subprojects and it was concluded that there are no ethnic minority communities, as defined by the Bank, in the project affected areas. Policy OP/BP4.10 is not triggered.
Involuntary Resettlement OP/BP 4.12	Yes	The policy was triggered during the early phase of project preparation when more components with potential land acquisition were still part of the Project, and alignments of heating pipelines had not been determined. An abbreviated resettlement plan (ARAP) was prepared by each subproject to address potential land acquisition

		<p>impacts. The ARAPs include compensation policies and due diligence review of related facilities, such as heating sources, primary heating stations, and related road construction. In the end, those components with potential land acquisition were dropped, and alignments of pipeline construction were selected to avoid any potential occupation of farmland.</p> <p>However, OP 4.12 is still triggered to land acquisition that has recently taken place in connection to Xingtai Subproject and Pingshan Subproject. The project includes construction of district heating systems in the four cities of Hebei Province. Heat will come from existing thermal generation plants and industrial waste heat. Two primary heating stations will be built on existing land plots with 52.84 mu of land area, including 50 mu land plot in Xingtai which had gone through land acquisition recently. Due diligence review was conducted for all heating sources, and two primary heating stations. The due diligence review included in the ARAPs found that land acquisition was done in compliance with national legislation and consistent with OP 4.12 objectives. (see details below).</p> <p>In addition, the ARAPs include measures to mitigate impacts of social impacts covered by OP 4.01 in relation to loss of employment and affordability. (see details below).</p> <p>For heating transmission, about 164 km of primary heating pipelines, and 243 heat exchange group substations will be constructed or rehabilitated. All heating stations will be built within existing housing estates. Construction of heating pipelines will involve 996 mu of temporary land occupation. All of them are urban road spaces, and no individuals will be affected.</p>
Safety of Dams OP/BP 4.37	Yes	<p>The proposed project will not finance the construction or rehabilitation of any dam. OP4.37 is triggered because under the Xingtai Sub-project, the Xingtai Risun Group uses industrial waste heat and receives the cooling water from the existing Yangwuowan reservoir that is located about 25 km northwest of Xingtai City.</p> <p>The Yangwuowan reservoir, with a design storage of 7.95 million m³, and downstream of the Baima River of the Ziya River, comprises a 14.5 m high homogeneous earth-fill dam, with a length of 240 m, a saddle dam with a</p>

		length of 500 m, and one open spillway, sluice tunnel through the dam. The dam and its appurtenances were built in 1958. The most recent remedial/rehabilitation works were completed in September 2009. A dam safety inspection was completed on October 30, 2010 and concluded that the dam operation was safe. An operation manual and emergency preparedness plan had been prepared and are in place at the reservoir management office under the Xingtai Yemengou Irrigation District Management Division of the Xingtai Water Affairs Bureau. The EMP includes an annual review of the operation and maintenance of the dam and its appurtenances by a competent dam safety expert satisfactory to the Bank. The review will be included in the external environmental monitoring report.
Projects on International Waterways OP/BP 7.50	No	Not applicable.
Projects in Disputed Areas OP/BP 7.60	No	Not applicable.

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The project will bring significant net positive environmental benefits by providing more energy efficient and hence cleaner heating services. It is expected that the project will greatly reduce air pollution in Hebei Province.

The environmental impacts during construction are mainly related to small-scale construction of transmission pipelines and substations, e.g. temporary disturbance to traffic and local communities along the sites for pipeline construction and near the sites for substations, disposal of spoil, nuisance of dust and noise. Environmental impacts during operation mainly include: noise from the substations, building-level substations, air pollutants emission and noise of the peak boilers, and safety issues. The adverse impacts are localized, limited and can be readily managed with accepted measures of good environmental codes of practice (ECOP) and site specific mitigation measures for potential adverse impacts during construction and operation. The relevant mitigation measures were incorporated into the EIA/EMP.

Although no significant adverse environmental impacts will be caused by the small scale construction of heating networks, this project has been classified as a Category A as per OP4.01 taking into account of potentially linked facilities (heating sources), the scope of the project, the displacement of workers and the potential operating safety risks during the operation phase.

The heating sources of the project are local power plants and industrial enterprises. All these power plants are main local industrial pollution sources. In Xingtai, Hebei China Coal RISUN Coking Co., Ltd is the main heat source and RISUN Anneng Heating Co., Ltd is the stand-by heat

source, both of the heating sources in Xingtai are chemical industrial enterprises. The risk problems of heat source renovation of the Xingtai Subproject which is associated with this Project have been determined during the design stage of this Project. In accordance with the "Interim Provisions on Supervision and Administration of Major Hazard Sources of Hazardous Chemicals" and "Hebei Province Methods for Classification of Major Hazardous Sources ", storage area, and phase III coking production area and gas pipelines of Hebei RISUN Coking Co., Ltd. are classified as Class 3, and Class 4 major hazardous sources respectively, and gas-fired boilers of Xingtai RISUN Anneng Heating Co., Ltd is classified as Class 3 major hazard source.

Due to the scope of the pipelines network construction, the construction of pipelines will have potential impacts on municipal public facilities and railway and highway. Pipeline construction may interrupt the existing underground pipelines and cables. In addition, pipeline crossing construction may also produce impacts on normal operation of railway and highway and, when serious, may impact traffic safety. Pingshan and Xingtai will involve the crossing of existing railway and expressway which is technically complicated and needs professional design, monitoring and construction. Before the commencement of construction, the underground pipelines and cables will be identified together with the associated management departments, and the construction plan will be prepared by the contractors and submitted to the supervisor for approval. For the crossing of the existing railway and highway in Pingshan and Xingtai, the construction plan will be prepared by the contractor for review and approval of the management of the railway and highway. Although the Project has no resettlement impacts due to the cancellation of components with potential land acquisition impacts, and finalized alignments avoided any farmland occupation, the closure of small boilers will have some social impacts. A total of 359 seasonal boiler workers will lose their employment due to the closure of 125 small boiler houses. For such impacts, based on consultation with key stakeholders, detailed reemployment plans have been prepared. Among 359 affected workers, 249 will be kept by heating companies or housing estates. The remaining 110 workers are planning to move to other areas, such as construction sites (59), service sector (23) and return home in countryside (28). Free skill training will be provided for both those who want to work in heating companies or those who will go to other sectors. The institutional arrangement is made for monitoring the implementation of reemployment plans to ensure the income and livelihood of the affected workers will be restored during project implementation. These mitigation measures are included in the ARAPs.

The potential operating safety risks during the operation phase is another concern of the project. The environmental risks during operation phase include natural gas and boiler explosion, The occupational safety risk is a major concern for the heating sources that will provide heating to the proposed project. The safety risks are identified to be: The workers may be injured by the exposure to steam from recovery of surplus heat or co-generation; The workers may be injured by the exposure to the electric devices that may cause electric shock in co-generation.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

Hebei Province has developed an ambitious target for air pollution reduction in September 2013 through its "Implementation Plan of the Action Plan for the Prevention of Air Pollution" which calls for reduction of NO_x, SO₂ and PM by 296,400t, 356,000t and 93,200t respectively during five years. This proposed project is an integral part of the Action Plan for the Prevention of Air Pollution. It is expected that the reduction or avoidance of NO_x (1692.6 t/a), SO₂ (78.76 t/a) and PM (25.68 t/a) will be achieved once the project is completed. It will contribute to improving air quality in Hebei Province.

The project will cause some indirect adverse environmental impacts, totally 125 small coal-fired boilers will be dismantled with the completion of the project. During the dismantling process, it will have potential limited impacts such as noise, fugitive dust and construction solid wastes, Environmental Management Plan for Small Boiler Demolition was prepared as part of the EMP of the project. Other induced impacts due to the proposed projects include: The residences will be connected with the district heating network, the affordability of these residents is a concern. However the government will provide the subsidies to the vulnerable families on the heating fee so as to mitigate the impact on the vulnerable families. The proposed project will induce urbanization and attract more people into the project due to improved living conditions. The proposed project is an integral part of the urban development plan which supplements the sectoral plans for sanitation and transportation which have already taken into account the increase in population and the associated demand for infrastructure services in the development planning. The proposed project is expected to help promote local business and trade and economic growth, as a result of increased population in the project area. This project will have social impacts, including affordability and loss of employment of temporary workers due to the shutdown of small coal-fired boilers. However these impacts are mitigated by subsidies to poor families (affordability) and reemployment plans for laid off workers; implementation of mitigation measures are included in the ARAPs.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

During the project design phase, the EA teams worked closely with project planners/ owners and the feasibility study teams to compare and evaluate alternatives. The EA identified, evaluated and compared various options for heating sources selection, pipeline alignment selection, heating exchange station selection, and optimal alternatives were selected based on the avoidance of (or least adverse) social and environmental impacts, as well as other engineering technology, and financial considerations for least cost solutions. A “no project” scenario was also considered as an alternative. Adequate engineering measures have been designed to mitigate the expected impacts, including noise reduction equipment etc.

As a result, the best heating sources were selected, and the pipeline alignment, the locations of the heating exchange stations were optimized so as to reduce land acquisition, decrease construction risks, minimize resettlement, avoid environmental sensitive sites, and minimize costs. Further optimization will be conducted during the detailed design.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

Although the construction related impacts of the heating networks are site specific and limited, the project is classified as Category A as per OP4.01, given the scope of works, the potentially linked facilities (heating sources), the displacement of workers and social issues, and potential operating safety risks during the operation phase. Environment Assessment (EA) reports were prepared in accordance with the relevant national laws, regulations, and technical guidelines, and standards applicable to the project, as well as the World Bank Safeguard Policies. The reports include an EA Executive Summary, Environmental Impact Assessment (EIA), and Environmental Management Plan (EMP). The EA Report has been prepared, incorporating the Bank’s comments, and found to be satisfactory.

The potential environmental and social impacts of the proposed project are thoroughly addressed in the EIA report, and the necessary mitigation measures have been developed in the EMP and ARAPs. It is concluded that these adverse environmental and social impacts can be adequately

avoided, minimized and mitigated with good management practice and mitigation measures as developed in EIA/EMP/ARAPs. A summary of the main impacts and mitigation measures is presented below:

Construction phase. To address the potential adverse impacts such as dust, wastewater, solid waste, noise, and social impacts during construction phase, preventive and mitigation measures have been developed in EMP to adequately avoid, minimize and mitigate these adverse environmental and social impacts. The main measures include but are not limited to: public consultation throughout the construction period to address public concerns and improve construction activities; proper management of solid wastes; careful scheduling of construction activities; restricting night-time construction; dust and wastewater pollutant control; use of low noise equipment and facilities; traffic management; etc. In addition, a management plan to dismantle small boilers was developed as a part of EMP to cope with identification, dismantle operation, storage, transportation and disposal of waste.

Operation phase. To address potential impacts during operation phase, a number of mitigation measures were adopted. They include but are not limited to: use of low noise equipment, installation of noise barrier, installation of low noise silencer, vibration-reduction facilities will be installed, collection and treatment of wastewater, and solid waste, EHS measures, monitoring of waste gas, wastewater and noise regularly of heating sources etc.

The due diligence review for the heating sources of the four subprojects have been conducted in the EIA, including Power Luanhe Power Plant (main heat source) and north-east countryside heat source plant (peak load heat-source) in Chengde, Xibaipo Power Plant in Pingshan, Hebei China Coal RISUN Coking Co., Ltd. (main heat source) and RISUN Anneng Heating Co., Ltd (stand-by heat source) in Xingtai, and Datang Power Plant (main heat source) and Dongyuan Heating Co., Ltd (stand-by heat source) in Zhangjiakou. The assessment of environmental risks, environmental management capacity, pollution treatment technologies, environmental performance etc. followed international standards and provided a thorough assessment of potential issues and their mitigation at each plant. The environmental performance of the heating sources was found to be in compliance with the respective environmental standards. In addition, prevention and monitoring methods for the possible risks have been developed in the Xingtai Subproject. The heat source enterprises will follow the requirements and implement monitoring measures. The due diligence review also showed that the industrial enterprises have established a system for occupational health and safety management in accordance with relevant laws and regulations, i.e. safety operation law. The performance of such a system is satisfactory.

The cumulative impact assessment has been conducted in the EIA by following the Good Practice Handbook- Cumulative Impact Assessment of IFC. Through consultation with the stakeholders, air pollutant emission load reduction (SO₂, NO_x and PMs), displacement of small boiler workers and affordability of heating tariff for poor households were selected as the VECs. It is expected that the reduction of NO_x (1692.6 t/a), SO₂ (78.76 t/a) and PM (25.68 t/a) will be achieved once the project is completed.

Implementation of this project will increase district heating coverage in project area to replace small coal-fired boilers and other non-centralized heating facilities, and will improve heating service quality. Improved ambient air quality will decrease the incidence of respiratory diseases and improve life quality of the residents. Project implementation is expected to increase employment opportunities and income of local residents. However, district heating to be achieved

by this Project will require payment of local residents for heating service and connection charge. Increased expenditure for heating service will have insignificant impact on majority of the households, but may be a burden for poor households. In addition, closure of existing small coal boilers will cause unemployment and loss on incomes of small amount of workers and new job opportunities are demanded. The occupational training would be provided for the unemployment of workers, and re-employment arrangements have been considered and would be carried out during the project implementation phase. The IAs and government have taken into consideration the affordability of poor families (low-income group) for connection to district heating services. The local government has committed to providing heating subsidy so as to alleviate the financial burden of the low-income groups.

The environmental risks during the construction and operation phase have been adequately identified in the EIA, the environmental risks during the construction phase include natural gas use, safety of pipeline construction, acetylene explosion. The environmental risks during operation phase include natural gas and boiler explosion. The risks prevention and mitigation measures in design, construction and operation phase have been prepared respectively as part of EIA/EMP to cope with these potential risks which include the institutional arrangement, mitigation measures and management system, emergency planning and response, training plan and monitoring plan.

A stand-alone EMP has been developed which details the policy bases, applicable environmental standards, environmental management organization and responsibilities, sufficient mitigation measures, capacity training plan, environmental monitoring program, and budget estimates of EMP implementation. The EMP measures were developed according to the World Bank Group EHS Guidelines. The EMP measures will be incorporated into bidding documents and contracts in order to ensure effective implementation.

Environmental management responsibility will be built into the relevant divisions of the overall project management structure, with dedicated management staff to ensure effective EMP implementation. A training plan will be implemented prior to/and during construction for project management staff, technical staff and contractors.

ECOP and site-specific management plans have been developed and incorporated into the EIA and the EMP. An environmental monitoring plan for noise, air and heating sources have been designed for both construction and operation phases of the project, and are incorporated into the EMP, which includes the monitoring location, monitoring parameters, methods, frequency and cost estimate. Environmental monitoring report will provide key and timely information, especially on environmental impacts and mitigation, to the borrower and the Bank to evaluate the success of environmental management.

For four subprojects, even though no new land acquisition will be involved since both permanent land acquisition and temporary land occupation are either within housing estates or on urban roads, ARAPs are still prepared to include due diligence reviews for recently acquired land areas, and other social impacts covered under OP4.01. They include

In Xingtai Subproject, land acquisition for primary heat station took place in 2013. The acquired land was farmland from Shixing Village, affecting 87 households. The compensation was set at CNY80,000 per mu, which was 20% higher than compensation rate set by provincial government. All compensation had been paid to affected households. No problem was reported.

In Pingshan, one section of urban road had recently completed land acquisition and resettlement in 2013, where proposed heat pipeline is to be built. It involves 94 mu of land areas with 74 mu housing land and 20 mu farmland, and demolition of 23000 square meters of houses, affecting 202 households and 698 persons, including 132 households to be relocated. The compensation for land is set at CNY350,000 per mu in cash or 260 square meters of new housing space per mu of land area. All affected households had selected option of receiving replacement housing for rehabilitation and signed compensation agreements, and replacement housing is under construction.

On other social impacts, due to close down of 125 small boilers, a total of 359 seasonal boiler workers will lose their employment. Based on consultation affected people, detailed reemployment plans have been developed by project sponsors. Among 359 affected workers, 249 will be kept by heating companies or property management companies. The remaining 110 workers are planning to move to other areas, such as construction sites (59), service sector (23) and return home in countryside (28). Skill training will be provided for both those who want to work in heating companies or those who will go to other sectors.

On issue of affordability, all four cities have adopted measures to assist low income households for both annual heating charge and one time secondary heat network improvement cost.

Although the Hebei PMO has extensive experience with the Bank, it is the first Bank's engagement with most subproject cities. The participating cities and heating companies lack experience with Bank funded projects and are unfamiliar with Bank's safeguards policies. The ARAP reports have been prepared by professional institutions with the required qualification and adequate experience with Bank's China projects. Safeguards training will be provided to the PMO staff and local implementation agencies prior to ARAP implementation.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

In accordance with the requirements of the China's EA Law and the World Bank, two rounds of public consultations were conducted by the EIA team during EA preparation. The key stakeholders included relevant government agencies such as traffic police bureau, cultural relic bureau, environmental protection bureau, highway administrative bureau, and some public utility institutions such as water supply company, gas company, electricity company, and project affection residents, including poor family, female householder family, the disabled etc. The first round was held from January to April 2015 through meetings, field interviews and questionnaire surveys among project affected people, experts and relevant key stakeholders. It focused on environmental screening to define public concerns, to assist identification of key environmental issues and risks, to get public response and comments on the initially developed mitigation measures for the potential adverse impacts identified before finalizing EA TORs. The main concerns raised by the public were construction related impacts, safety of gas use, and affordability issue. All these concerns have been addressed in the ARAPs and EIA/EMP. The second round took place from March to May 2015 after the draft EIA report had been prepared. During the consultations, the key findings of draft EIA report and proposed mitigation measures were explained and the issues raised by the participants clarified and answered. The consultation revealed that the public strongly supports the project as it was expected due to improvements in air quality and in the level of heating services in the project areas of the four municipalities. As a follow up to public consultations, public concerns have been carefully considered in the impact assessment and development of mitigation measures. The proposed measures were found

satisfactory by the participants of the consultations.

The feedback received during the consultations has been taken into accounting while preparing project design, subproject feasibility studies, ARAPs, SA and EMP.

The EMP and ARAPs were disclosed locally on the website of the local government on:

- August 24, 2015 for the EIA/EMP;
- For the four subprojects' ARAPs: July 10 (Zhangjiakou), July 30 (Xingtai), August 24 (Pingshan), and August 27 (Chengde).

The EMP and ARAPs were disclosed at the Bank Infoshop on September 15, 2015, and September 16, 2015 respectively.

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	15-Aug-2015
Date of submission to InfoShop	15-Sep-2015
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	25-Sep-2015
"In country" Disclosure	
China	24-Aug-2015
<i>Comments:</i> Disclosed in Hebei Province	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	15-Aug-2015
Date of submission to InfoShop	16-Sep-2015
"In country" Disclosure	
China	27-Aug-2015
<i>Comments:</i> Disclosed in Hebei Province.	
For the four subprojects' ARAPs: July 10 (Zhangjiakou), July 30 (Xingtai), August 24 (Pingshan), and August 27 (Chengde).	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment			
Does the project require a stand-alone EA (including EMP) report?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]

OP/BP 4.12 - Involuntary Resettlement		
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Is physical displacement/relocation expected? Provided estimated number of people to be affected	Yes [<input type="checkbox"/>]	No [<input checked="" type="checkbox"/>] TBD [<input type="checkbox"/>]
Is economic displacement expected? (loss of assets or access to assets that leads to loss of income sources or other means of livelihoods) Provided estimated number of people to be affected	Yes [<input type="checkbox"/>]	No [<input checked="" type="checkbox"/>] TBD [<input type="checkbox"/>]
OP/BP 4.37 - Safety of Dams		
Have dam safety plans been prepared?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have the TORs as well as composition for the independent Panel of Experts (POE) been reviewed and approved by the Bank?	Yes [<input type="checkbox"/>]	No [<input type="checkbox"/>] NA [<input checked="" type="checkbox"/>]
Has an Emergency Preparedness Plan (EPP) been prepared and arrangements been made for public awareness and training?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
The World Bank Policy on Disclosure of Information		
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
All Safeguard Policies		
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have costs related to safeguard policy measures been included in the project cost?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>] NA [<input type="checkbox"/>]

III. APPROVALS

Task Team Leader(s):	Name: Yuriy Myroshnychenko, Emmanuel Py	
<i>Approved By</i>		
Safeguards Advisor:	Name: Peter Leonard (SA)	Date: 07-Oct-2015

Practice Manager/ Manager:	Name: Julia M. Fraser (PMGR)	Date: 09-Oct-2015
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