



Mongolia: COMBINED HEAT AND POWER PLANT NUMBER 5 PROJECT (CHP5)

Project Name	COMBINED HEAT AND POWER PLANT NUMBER 5 PROJECT (CHP5)		
Project Number	46915-014		
Borrower/Company	CHP5 Project Company Limited		
Country	Mongolia		
Location			
Approval Number			
Type of ADB Assistance / Amount	Loan	USD 150.00 million	Proposed
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth Regional integration		
Drivers of Change	Knowledge solutions Private sector development		
Sector / Subsector	Energy - Energy sector development and institutional reform		
Gender Equity and Mainstreaming	No gender elements		
Responsible ADB Department	Private Sector Operations Department		
Responsible ADB Division	Infrastructure Finance Division 2		
Responsible ADB Officer	Kimura, Hisaka		
Project Sponsor(s)			
Description	COMBINED HEAT AND POWER PLANT NUMBER 5 PROJECT (CHP5)		
Objectives and Scope	<p>The proposed ADB loan and PRGs will support construction and operation of a 463.5 megawatt (MW) of electricity and 587 MW thermal heat combined heat and power generation facility. The plant will be developed on a build-own-operate-transfer basis by a consortium, comprising ENGIE, Posco Energy, Sojitz and Newcom Group. Power generated by the Project will be sold to the National Power Transmission Grid pursuant to a Power Purchase Agreement, while heat generated by the Project will be sold to the Ulaanbaatar District Heating Grid in the form of hot water pursuant to a Heat Purchase Agreement.</p> <p>The Project will be located on an approximate 45 hectares of land within the Khuliin Valley, approximately 16 kilometers southeast of Ulaanbaatar. The Project's design, construction and operation will incorporate international best practices. The plant is configured to have three identical CHP blocks, each consisting of a circulating fluidized bed (CFB) boiler which will be coupled with a steam turbine/generator unit. Hot water for distribution to the district heating network will be produced from the steam extracted from the turbines. The plant will be capable of generating 463.5 Megawatts (MW) of gross electricity in condensing mode through 3 x 154.5MWe generation units or 587MW of thermal energy for district heating and 426MWe of gross electricity whilst operating in combined heat and power mode. CFB boiler technology is widely utilized because of its high efficiency, high reliability, and relatively low SO₂ and NO_x emissions.</p> <p>The Project will also require the development of associated facilities, including: (a) a 220kv transmission line, (b) district heating network, (c) additional railway sidings for coal transportation, (d) water supply line, (e) wastewater discharge pipeline, and (f) electricity substation. These associated facilities will be designed, constructed and operated by the Government.</p>		
Linkage to Country/Regional Strategy	<p>The Project is consistent with ADB's Country Partnership Strategy (CPS) for Mongolia (2012 2016) which aims to foster energy security by encouraging the provision of reliable, adequate, and affordable energy for inclusive growth in a socially, economically, and environmentally sustainable manner. To achieve these ends, the CPS specifically calls for the construction of a new, efficient CHP facility in Ulaanbaatar utilizing a PPP structure.</p> <p>The Project is consistent with ADB's Energy Policy, which requires energy operations to be aligned with ADB's overall strategy, which emphasizes energy security, energy efficiency and universal access to energy.</p> <p>ADB's Energy Policy also recognizes that to meet the electricity needs of the region, large capacity additions will be required for which coal-based generation will grow. However, ADB will encourage DMCS to adopt available cleaner technologies, such as fluidized bed combustion to help mitigate the adverse effects of coal-fired heat and power production.</p>		

Safeguard Categories	
Environment	A
Involuntary Resettlement	B
Indigenous Peoples	C

Summary of Environmental and Social Aspects

Environmental Aspects	The Project is classified A for environmental. The Project will employ comprehensive pollution control measures. ADB will ensure the ESIA requires robust environmental management that will be further developed by the contractor into detailed site specific environmental and social management plans. Project agreements will obligate the contractor to implement these plans, monitor progress and periodically report to ADB.
Involuntary Resettlement	The Project is classified B for involuntary resettlement. A resettlement plan will be developed by the Project, in compliance with ADB's Safeguard Policy Statement
Indigenous Peoples	The Project is expected to be classified C for indigenous peoples categorization. The Project is not expected to have any impact on ethnic minorities.
Stakeholder Communication, Participation, and Consultation	ADB will support the Project in developing a stakeholder engagement plan and ensure that all of ADB's policies and guidelines are followed. Four scoping consultations took place in August 2015 and two ESIA disclosure consultations took place in October 2015.

Timetable for assistance design, processing and implementation

Concept Clearance	27 Apr 2012
Due Diligence	
Credit Committee Meeting	-
Approval	30 Jan 2014
PDS Creation Date	27 Nov 2013
Last PDS Update	20 Nov 2015

Project Page	https://www.adb.org/projects/46915-014/main
Request for Information	http://www.adb.org/forms/request-information-form?subject=46915-014
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