

China, People's Republic of: Integrated Wastewater Management Project

| Project Name | Integrated Wastewater Management Project | | |
|------------------------------------|---|-----------------------------|--|
| Project Number | 50164-001 | | |
| Borrower/Company | China Water Environment Group Investment China Water Environment Group Limited | | |
| Country | China, People's Republic of | | |
| Location | | | |
| Approval Number | 7491/79, 7491/3643 | | |
| Type or Modality of Assistance | 7491 Complementary Financing Scheme | USD 100.00 million Approved | |
| | 7491 Loan | USD 150.00 million Approved | |
| Strategic Agendas | Inclusive economic growth | | |
| Drivers of Change | Private sector development | | |
| Sector / Subsector | Agriculture, natural resources and rural development - Water-based natural resources management Water and other urban infrastructure and services - Urban sewerage | | |
| 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) | China Water Environment Group Limited | | |
| Description | Restoring the health of river and lake ecosystems and improving resilience to water-related disasters are increasingly important priorities of the Government. According to the Ministry of Environmental Protection, 28% of the available surface water of the country's seven major rivers and 31% of the water of key lakes and reservoirs are unfit for human consumption. Once polluted to this degree, traditional pollution mitigation measures, such as standalone wastewater treatment facilities, are usually insufficient to recovery a water ecosystem. In response, an increasing number of local governments are adopting a more comprehensive approach, whereby they engage engaging private operators to mitigate pollution and restore the health of river and lake ecosystems through multiple, interlocking subprojects tendered under a single basin-wide concession. The project will support the implementation of integrated wastewater management concessions targeting environmental services for rivers and lakes. The ADB loan will support CWE in designing, constructing, and operating a series of facilities spanning several components, including (i) wastewater treatment plants; (ii) sludge treatment plants; (iii) sewage conveyance and interception pipelines; (iv) other civil works, such as the dredging of rivers and lakes, riverbank reinforcements, odor treatment, and landscaping; and (vi) the development of wetlands. | | |
| Objectives and Scope | The project will contribute to mitigation of water pollution in rivers and lakes in the PRC, which will be accomplished through expanded wastewater management services under integrated concessions in selected central and western provinces. CWE will select subprojects located in urban sections of key rivers and lakes designated as government priority areas for environmental protection. For each subproject, CWE will develop and operate facilities as PPPs governed under concession agreements signed with city or county governments. | | |

Linkage to Country/Regional Strategy By supporting a new form of PPP, environment management, and inclusive growth, the project addresses three of the five strategic priorities of ADB"s country partnership strategy for the PRC: managing climate change and the environment, supporting inclusive economic growth, and supporting institutional and governance reform. In particular, the project aligns with this strategy"s sector focus on environmental protection, and strongly complements ADB"s initiatives in the management of water-based natural resources, including flood management, wetland conservation, water resources development, and the protection of biodiversity and ecosystems

The project aligns with ADB"s water policy aims to reverse the degradation of water resources caused by agricultural, industrial, and municipal effluents. ADB"s Water Operational Plan, 2011 -2020 also identifies wastewater management as a key operational focus in rapidly industrializing countries like the PRC. The project is an example of the type of intervention envisaged by the plan, which promotes water as a core investment area and raises ADB"s water investment target to \$2.0 billion- \$2.5 billion each year by 2020, with an additional \$500 million per year targeted in private sector lending.

Safeguard Categories

| Environment | В |
|--------------------------|---|
| Involuntary Resettlement | В |
| Indigenous Peoples | С |

Summary of Environmental and Social Aspects

Environmental Aspects

Each subproject"s potential environmental impacts during civil construction works include the generation of dust, air emissions, noise, wastes, soil erosion, and water pollution which are expected to be short-term and localized. The key construction risk related to dredging and embankment include potential loss and/or damage the channel habitat. During the operations phase, key environmental impacts could include (i) noise impacts due to plant operations; (ii) water quality impacts due to poor effluent quality; (iii) odor and health risks due to poor sludge management; and (iv) health and safety risks due to the buildup of gases, particularly in underground wastewater treatment facilities. Potential environmental impacts associated with construction and operation can be mitigated by following international engineering best practices and implementing an appropriate environmental management plan. Initial environmental examinations will be prepared for ADB-funded subprojects in accordance with ADB"s SPS. Prior to the first disbursement, CWE will update its environmental and social management system (ESMS) satisfactory to ADB, which will include screening procedures to avoid subprojects with the potential to be classified as category A for environment, involuntary resettlement, and indigenous peoples.

Involuntary Resettlement

An audit of company operations found that land required for existing projects had been acquired in accordance with local laws and to a standard consistent with ADB"s SPS. New facilities are expected to be constructed in sparsely populated suburban areas classified as development zones or reserved land. This will reduce the impacts on local populations from the acquisition of land and rights-of-way. If the reserved state-owned land is insufficient for future subprojects, collective land will be acquired. Underground pipelines are laid along roads and rivers, which induce temporary land occupation impacts only. CWE will work with government agencies to ensure that subprojects avoid or minimize the need for residential or arable land, but, where displacement impacts are unavoidable, CWE will put in place action plans commensurate with impacts, in accordance with ADB"s SPS requirements. CWE will comply with national labor laws and, pursuant to ADB"s Social Protection Strategy (2001), will take measures to comply with the internationally recognized core labor standards.

Indigenous Peoples

No subproject impacts on distinct and vulnerable ethnic minority groups were detected in past subprojects, and none are expected from future subprojects.

Stakeholder Communication, Participation, and Consultation Information disclosure and consultation with affected people will be conducted in accordance with ADB requirements.

Timetable for assistance design, processing and implementation

| Concept Clearance | 27 May 2016 |
|--------------------------|-------------|
| Due Diligence | |
| Credit Committee Meeting | 10 Oct 2016 |
| Approval | 18 Nov 2016 |
| Last PDS Update | 30 Jan 2017 |

| Project Page | https://www.adb.org/projects/50164-001/main |
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| Request for Information | http://www.adb.org/forms/request-information-form?subject=50164-001 |

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