



Project Summary Information

Date of Document Preparation: November 11, 2021	
Project Name	Liaoning Green Smart Public Transport Demonstration Project
Project Number	000406
AIIB member	People's Republic of China
Sector/Subsector	Transport / urban transport
Status of Financing	Approved
Project Description	<p>The Project will, above all, substitute modern battery electric buses (BEBs) for existing diesel-fueled or gas-fueled buses in five small and/or medium cities in Liaoning, including Fuxin City, Hu'ludao City, Jinzhou City, Panjin City, and Yingkou City (together Project cities). Also, public transport management systems in the Project cities will be upgraded using smart digitalized platforms. The Project will demonstrate that: (i) BEBs are viable options to zero-emission public transport systems in Liaoning; and (ii) smart public transport management system can enhance the efficiency of public transport, provide better services, and attract more passengers to use public transport in the Project cities.</p> <p>Key Project activities include:</p> <ul style="list-style-type: none"> (i) procurement of about 1,285 BEBs. (ii) construction of about 286 new bus chargers. (iii) installation of smart public transport management systems and supporting software and equipment in the Project cities, which include automated fare collection terminals, automatic vehicle location system, real-time driving assistance and safety systems, passenger information systems, depot management system, and bus stop management system, etc. (iv) construction of the Liaodong Bay Intercity Bus Service Center in Panjin, (v) construction of the New Green Bus Maintenance Workshop in Fuxin, and (vi) technical support and capacity building to the five bus companies on BEBs and smart public transport technology.

Objective	To improve the quality and efficiency of public transport service and urban environment by replacing existing fossil-fueled buses with BEBs and applying digital technology to public transport management systems in five small and medium-sized cities of Liaoning Province.
Expected Results	<p>Upon completion, the Project is expected to achieve the following results:</p> <ul style="list-style-type: none"> • Net CO₂ emissions reduced by 20,960 tons of CO₂ equivalent per year¹. • CO emissions reduced by 2,154 tons per year. • NO_x emissions reduced by 200 tons per year. • SO₂ emissions reduced by 89 tons per year. • Particulate matter (e.g., PM₁₀, PM_{2.5}) reduced by 2.16 tons per year. • Public transport punctuality increased to 70% from 43% of the whole bus fleet. • Passenger satisfaction ratio increased to 88% from 76% of passengers using BEBs. • Bus real-time information sharing ratio increased to 100% from 71% of the whole bus fleet.
Environmental and Social Category	Category B
Environmental and Social Information	<p>The Bank's Environmental and Social Policy (ESP), including the Environment and Social Standards (ESSs) and the Environmental and Social Exclusion List apply to this Project. ESS 1 (Environmental and Social Assessment and Management) is applicable to the environmental and social aspects of the Project. ESS 2 (Involuntary Resettlement) and ESS 3 (Indigenous Peoples) are not triggered, because (i) all Project activities are conducted on the lands owned by the government or bus companies, and (ii) there are no indigenous peoples in the Project areas.</p> <p>Environmental aspects. The Project will reduce fossil fuel consumption and increase energy efficiency of public transport. Anticipated impacts will be site-specific and mainly limited to the construction stage for the service center and maintenance workshop and installation of chargers. The environmental impacts will be relating to dust, noise and construction waste. Disposal of replaced diesel-fueled or gas-fueled buses and used batteries will follow domestic policies and administrative regulations. The mitigation measures have been included in the contracts for implementation.</p>

¹ Indirect carbon emissions in the electricity generation are deducted.

	<p>Social aspects. The Project is expected to generate largely positive social benefits to the overall population. The Project area of influence includes the urban areas and some suburbs of Fuxin, Hu'ludao, Jinzhou, Panjin, and Yingkou and covers a wide range of stakeholders including residents across socio-economic categories. The social risks for the Project are envisaged to be minimal.</p> <p>Existing grievance redress mechanism in each Project city will be used for the Project, with some necessary upgrade and improvements to ensure proper coverage of concerned issues. These GRMs have been reviewed in accordance with the requirement of the Bank's ESP.</p> <p>Consultation and Information Disclosure. Consultations have been conducted during ESIA preparation. This will continue during Project implementation, in accordance with national guidelines on restrictions imposed due to the COVID-19 pandemic. The English and Chinese versions of ESIA, including executive summaries of the ESIA has been posted on the websites of Liaoning Urban and Rural Construction and Renewal Project Management Company² and AIIB³, with hard copies made available in the Project sites before construction starts.</p>		
Cost and Financing Plan	The Project's cost estimate is about USD214.26 million, of which AIIB will provide a loan of Euro 130 million (approximately USD150 million equivalent), local government USD 42.41 million, and bus companies USD 21.85 million.		
Borrower	People's Republic of China		
Implementing Entity	People's Government of Liaoning Province		
Estimated date of loan closing	May 2026		
Contact Points:	AIIB	Borrower	Implementing Entity
Name	Mr. Hongliang Yang	Ms. Yue Ding	Mr. Gang Wang
Title	Principal Investment Operations Specialist	Deputy Director	Deputy Director

² Client website: <http://www.lnxmgl.com/html/xinwenzhongxin/2021/0730/75.html>

³ AIIB website: <https://www.aiib.org/en/projects/details/2021/approved/China-Liaoning-Green-Smart-Public-Transport-Demonstration-Project.html>

	Infrastructure Investment Department, Region 2	Department of International Economic and Financial Cooperation, Ministry of Finance	Liaoning Urban and Rural Construction and Renewal Project Management Company
Email Address	hyang@aiib.org	dingyue@mof.gov.cn	lucrpo@vip.163.com
Date of Concept Decision	May 2021		
Date of Appraisal Decision	August 2021		
Date of Financing Approval	November 2021		

Independent Accountability Mechanism	<p>The Project-affected People’s Mechanism (PPM) has been established by the AIIB to provide an opportunity for an independent and impartial review of submissions from Project-affected people who believe they have been or are likely to be adversely affected by AIIB’s failure to implement its Environmental and Social Policy in situations when their concerns cannot be addressed satisfactorily through Project-level Grievance Redress Mechanisms or AIIB Management’s processes.</p> <p>For information on how to make submissions to the PPM, please visit https://www.aiib.org/en/policies-strategies/operational-policies/policy-on-the-project-affected-mechanism.html.</p>
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