

China: Liaoning Green Smart Public Transport Demonstration Project

1. Project Information

Project ID:	P000406	Instrument ID:	L0406A
Member:	China	Region:	Eastern Asia
Sector:	Transport	Sub-sector:	Urban transport
Instrument type:	<input checked="" type="checkbox"/> Loan:130.00 Euro million <input type="checkbox"/> Guarantee	Co-financier(s):	
ES category:	B	Borrowing Entity:	Ministry of Finance, China
Implementing Entity:	People's Government of Liaoning Province		
Project Team Leader:	Hongliang Yang		
Responsible DG:	Supee Teravaninthorn		
Responsible Department:	INF2		
Project Team Members:	Jingjing Zhao, Team Member; Suzanne Shaw, Economist; Christopher Damandl, Project Counsel; Liu Yang, Alternate Counsel; Yogesh Malla, OSD - Financial Management Specialist; Xiaowei Guo, OSD - Procurement Specialist; Chongwu Sun, OSD - Environment & Social Development Specialist; Jingjing Zhao, Back-up PTL		
Completed Site Visits by AIIB:	May, 2022 Virtual meetings		
Planned Site Visits by AIIB:	Sep, 2022 physical/virtual mission		
Current Red Flags Assigned:	0		
Current Monitoring Regime:	Regular Monitoring		
Previous Red Flags Assigned:			
Previous Red Flags Assigned Date:			

2. Project Summary and Objectives

The objective of the Project is to improve the quality and efficiency of public transport service and urban environment by replacing conventional fossil-fueled buses with battery electric buses (BEBs) and applying digital technology to public transport management systems in five small and medium cities of Liaoning Province.

The Project will, above all, substitute modern 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.

Key Project activities include:

(i)

procurement of approximately 1,285 BEBs.

(ii)

construction of approximately 286 new bus chargers.

(iii)

installation of smart public transport management systems and supporting software and equipment in the Project cities, which include smart operations and management platform, automated fare collection terminals, automatic vehicle location system, real-time driving assistance and safety systems, passenger information systems, depot management system, bus stop management system, control center upgrade, and data analytic and cloud infrastructure, etc.

(iv)

construction of the Liaodong Bay Intercity Bus Service Center in Panjin.

(v)

construction of the New Green Bus Maintenance Workshop in Fuxin.

(vi)

technical support and capacity building to the five bus companies on BEBs and smart public transport technology. A team of project management consultants will be engaged, covering technical, financial management, procurement, and environmental and social matters. The consultants will provide technical assistance to the bus companies and help PMO collect data, monitor progress, and verify the implementation results. Trainings will be provided to strengthen PMO's and bus companies' knowledge and understanding on the use of BEBs and smart public transport technology. Good practices and lessons learned during the Project implementation will also be summarized and shared with the wider audience.

3. Key Dates

Approval:	Nov. 11, 2021	Signing:	Dec. 27, 2021
Effective:	Mar. 14, 2022	Restructured (if any):	
Orig. Closing:	May. 31, 2026	Rev. Closing (if any):	

4. Disbursement Summary (EUR million)

Contract Awarded:		Cancellation (if any):	0.00
Disbursed:	0.33	Most recent disbursement (amount/date):	0.33/Mar. 14, 2022
Undisbursed:	129.68	Disbursement Ratio	0.25

		(%) ¹ :	
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5. Project Implementation Update

The legal agreements were signed on December 27, 2021, and declared effective on March 14, 2022.

Project procurement has been started and is currently ongoing. Request for Expression of Interest for consulting services under the loan has been posted on AIIB's, UNDB's, and PMO's websites. It is expected that procurement of consulting services can be completed in Q3 2022. Soon after that, procurement of electric buses will be started in Q3/Q4 2022.

Components	Physical Progress	Environmental & Social Compliance	Procurement
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Financial Management:

The PMO is responsible for the overall Project financial management. The Project shall be implemented at the city-level by five city bus companies, while PMO shall be responsible for overall coordination, management, and monitoring. PMO will prepare, consolidate, and submit on semi-annual basis the Interim Unaudited Financial Reports (IUFs) within 45 days from the end of each such period. The audited consolidated Project financial statement for each year of Project implementation will be submitted within 6 months from the fiscal year-end.

6. Status of the Grievance Redress Mechanism (GRM)

The physical part of the project has not started. No complaint was recorded as per the project management office.

7. Results Monitoring

The physical part of the project has not started yet. No results can be reported for this reporting period.

Project Objective Indicators #1

CO2 emissions reduced per year

Year	Target	Actual	Comments, if any
Dec. 31, 2025	20960	0	

Project Objective Indicators #2

CO emissions reduced per year

Year	Target	Actual	Comments, if any
Dec. 31, 2025	2154	0	

Project Objective Indicators #3

¹ Disbursement Ratio is defined as the volume (e.g. the dollar amount) of total disbursed amount as a percentage of the net committed volume.

NOx emissions reduced per year

Year	Target	Actual	Comments, if any
Dec. 31, 2025	200	0	

Project Objective Indicators #4

SO2 emissions reduced per year

Year	Target	Actual	Comments, if any
Dec. 31, 2025	89	0	

Project Objective Indicators #5

PM reduced per year

Year	Target	Actual	Comments, if any
Dec. 31, 2025	2.16	0	

Project Objective Indicators #6

Public transport punctuality increased

Year	Target	Actual	Comments, if any
Dec. 31, 2025	70	48	

Project Objective Indicators #7

Passenger satisfaction ratio increased

Year	Target	Actual	Comments, if any
Dec. 31, 2025	88	79	

Project Objective Indicators #8

Bus real-time information sharing ratio

Year	Target	Actual	Comments, if any
Dec. 31, 2025	100	75	

Intermediate Result Indicators #1

Electric buses procured and put in operation

Year	Target	Actual	Comments, if any
Dec. 31, 2025	1285	0	

Intermediate Result Indicators #2

Electric chargers installed

Year	Target	Actual	Comments, if any
Dec. 31, 2025	286	0	

Remarks:
