

Semi-annual Environmental Monitoring Report

PUBLIC

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Kyrgyz Republic: Urban Transport Electrification Project

Prepared by the Department of Transport and Transport Road Infrastructure Development of the Bishkek Mayor's Office for the Asian Development Bank (ADB).

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Abbreviations

ADB	Asian Development Bank
BEB	Battery Electric Buses
BMO	Bishkek Mayor's Office
BTD	Bishkek Trolleybus Department
DTaDRTI	Department of Transport and Development of Road Transport Infrastructure of the Bishkek Mayor's Office
EMP	Environmental Management Plan
ES	Environmental Specialist
IEE	Initial Environmental Examination
PMU	Project Management Unit
SAEMR	Semi - Annual Environmental Monitoring Review
SSEMP	Site Specific Environmental Management Plan
UTD	Urban Transport Department

1 INTRODUCTION

1.1 Preamble

1. This report represents the Semi - Annual Environmental Monitoring Review (SAEMR) for Urban Transport Electrification Project.
2. This report is the second EMR for the project.

1.2 Headline Information

3. The Department of Transport and Development of Road Transport Infrastructure of the Bishkek Mayor's Office, which serves as the project management unit (PMU) currently running PMU staff mobilization process and it has not been finalized yet.
4. The Initial Environmental Examination (IEE) of the Project with Environmental Management Plan (EMP) was prepared in 2020 and approved by ADB.
5. According to IEE of the Project the anticipated impacts and corresponding mitigation measures during the construction phase of the project are:
 - Air pollution from dust emissions during rehabilitation, movement of earth materials and emission from movement of heavy equipment and construction vehicles. This will be mitigated by good construction practices such as water spraying on road surface and work areas, covering all materials during transportation, and proper maintenance of construction vehicles and equipment;
 - Water pollution accidental spillage of oil and other lubricants from construction equipment. The potential spillages will be mitigated by timely removal of the polluted soil and checking of the construction machines for leaks.
 - Soil & Site Contamination. It will be ensured that spill prevention trays are provided and used during refueling. Also, on-site maintenance of construction vehicles and equipment will be avoided as far as possible. In case on-site maintenance is unavoidable, tarpaulin or other impermeable material will be spread on the ground to prevent contamination of soil.

- Noise pollution from construction activities that causes a nuisance to local communities will be mitigated through consultation with communities regarding the schedule and time of noise-generating construction activities, and the use of noise limitation techniques on construction equipment;
 - Hazardous and Non-hazardous waste. Waste management plan will be developed prior to the start of construction. This plan will cater to sorting of hazardous and non-hazardous materials prior to disposal, placing of waste bins at the sites within the project area and at the project site at work sites along the Green Corridor for waste disposal. Licensed waste contractors will be engaged to dispose off all non-hazardous waste material that cannot be recycled or reused.
6. According to ADB Safeguard Policy Statement, the Project has been classified as Category B.

2 PROJECT DESCRIPTION AND CURRENT ACTIVITIES

2.1 Project Description

7. The project is aligned with the following impact: transition to environment-friendly modes of transport promoted. The project will have the following outcome: environmental, health, and economic impacts of Bishkek's public transport sector reduced.
8. Output 1: Zero-emission tailpipe bus fleet in Bishkek municipality upgraded. Output 1 will encompass the procurement of (i) 120 modern battery electric buses (BEBs); (ii) 35 100kW and 35 300 kW chargers, including cabling, electrical and civil works; and (iii) substation infrastructure. All BEBs will include universal accessibility design features to serve the needs of disabled and elderly passengers as well as women with children. In addition, BEBs will be equipped with security features, such as cameras and panic buttons, to cater to the needs of female and vulnerable passengers.
9. Output 2: Bus depot infrastructure upgraded. In at least one existing trolleybus depot additional weather-protected parking facilities, and rain shields for charging infrastructure will be established to accommodate the fleet of 120 BEBs. In addition, pavement improvements will be implemented.
10. Output 3: Pilot green mobility corridor established. A BEB pilot corridor will be established to reduce congestion in the city center, demonstrate improved traffic and parking management, and increase bus speed and service reliability. This output consists of (i) the provision of a dedicated busway lane which will increase average commercial bus speeds from 15 km per hour to 20 km per hour; (ii) improvements to at least three traffic junctions, including improvements to signalization synchronization, signage and road markings, and safe pedestrian crossings; and (iii) introduction of a new parking policy along the length of the corridor. The parking policy will address (i) the physical formalization of parking infrastructure, especially along the demonstration corridor; (ii) management and revenue collection of on-street parking; and, (iii) potential application of a parking levy on off-street, non-residential parking as a future revenue source for the overall public transport system. The parking policy is key to the overall project for

two reasons: (i) existing uncontrolled parking conditions will interfere with the safe and reliable operation of the dedicated bus services on the demonstration corridor; and (ii) parking represents a potential revenue source that can be hypothecated to the public transport system to ensure ongoing financial sustainability.

11. Output 4: Bishkek bus operation sustainability improved. Output 4 will support the municipality in improving its management of urban mobility and the efficiency and financial sustainability of public transport operations through (i) the reduction of operational expenditures per vehicle-km travelled by 10%; (ii) an enhanced institutional framework and urban mobility management system; (iii) development of a transport demand model to allow better route and operational decision making; (iv) professionalization of the business model including revenues from private sector opportunities in advertising, commercial sales, and parking management; (v) delivery of capacity-development training sessions on electric bus operation and maintenance, infrastructure maintenance, and business opportunity development, with at least 20% of the training participants being women; (vi) knowledge and skill development of bus drivers and conductors to handle incidents of violence against women and other vulnerable groups; and (vii) an employment priority program to ensure at least 20% of the bus drivers are women.
12. The proposed modernization of Bishkek's large bus fleet, with state-of-the-art large BEBs, is a move to address the chronic issues of public buses to enable a shift away from the unsafe, overcrowded, and highly polluting minibuses.

2.2 Project Contracts and Management

13. The BMO acts as the project's Executing Agency, will provide the proceeds of the loans and grants as grants to the two implementing agencies: the Bishkek Trolleybus Department (BTD) and the Urban Transport Department (UTD).
14. The BTD is responsible for the implementation of outputs 1 and 2, while the UTD is in charge of outputs 3 and 4.

15. The functions of the project management group (PMU) will be performed by the Department of Transport and Road Infrastructure Development of the Bishkek City Hall. The PIU's responsibilities include overseeing the activities of the two implementing agencies in project implementation, procurement, contracts and general project administration, as well as ensuring compliance and reporting.

16. The staffing table for the PIU is approved. From September 2023 The process of selection of employees for the Project Implementation Unit (PIU) (Package-CS-4) has begun. To date, contracts have been concluded with the following 6 PIU specialists:

- 1) Contract with the Purchasing Specialist dated September 6, 2023;
- 2) Contract with the Financial Manager dated October 23, 2023;
- 3) Contract with Electrical Engineer dated October 23, 2023;
- 4) Contract with the Environmental Protection Specialist dated November 14, 2023;
- 5) Contract with Information Technology Specialist-Administrative Assistant dated November 9, 2023.

17. Implementation of procurement package-1 "Supply of a fleet of battery electric buses (BEB) and supply and installation of charging infrastructure.

On November 2, 2022, Contract was concluded between BTD and company "Anhui Ankai Automobile Co Ltd." for the package-1 "Supply of a fleet of battery electric buses (BEB) and the supply and installation of charging infrastructure.

2.3 Project Activities During Current Reporting Period

18. Implementation of procurement Package-2: Procurement of construction works for the modernization of bus depot parking facilities, substations and electrical work (Package-2).

On August 25, 2023, in accordance with BTD Order No. 15/187 A, a tender commission was created for the purpose of procurement of construction work

for the modernization of bus depot parking facilities, substations and electrical work (Package-2).

Opening of bids for the modernization of two depots was carried out as scheduled on November 17, 2023. Completion of the evaluation of the only submitted bid of XT ZHONGSHAN WOLI LIGHTNING TECHNOLOGY CO. LTD. (China) completed and approved by members of the tender commission on November 28, 2023 with the decision:

- 1) reject the bid of XT ZHONGSHAN WOLI LIGHTNING TECHNOLOGY CO. LTD. (China) in accordance with clause 20.2 of Section 1 (Instructions to Bidders) of the tender documentation.
- 2) Conduct a re-tender based on updated tender documentation with division of the scope of work into two lots in order to correspondingly reduce the quantitative parameters of the qualification criteria for such division. And thereby, help increase the number of local contractors participating in the re-tender.

It was decided to hold a new tender with a revision of the tender documentation.

2.4 Description of Any Changes to Project Design

19. Not applicable in the reporting period.

2.5 Description of Any Changes to Agreed Construction methods

20. Not applicable in the reporting period.

3 ENVIRONMENTAL SAFEGUARD ACTIVITIES

3.1 General Description of Environmental Safeguard Activities

21. No on-site environmental safeguard activities have been applied since the construction activities have not commenced yet.

3.2 Site Audits

22. No on-site audits have been applied since the construction activities have not commenced yet.

3.3 Issues Tracking (Based on Non-Conformance Notices)

23. No on-site issues tracking has been applied since the construction activities have not commenced yet.

3.4 Trends

24. Not applicable since the construction activities have not commenced yet.

3.5 Unanticipated Environmental Impacts or Risks

25. Not applicable since the construction activities have not commenced yet.

4 RESULTS OF ENVIRONMENTAL MONITORING

4.1 Overview of Monitoring Conducted during Current Period

26. No on-site monitoring has been applied since the construction activities have not commenced yet.

4.2 Trends

27. Not applicable since the construction activities have not commenced yet.

4.3 Summary of Monitoring Outcomes

28. Not applicable since the construction activities have not commenced yet.

4.4 Material Resources Utilisation

4.4.1 Current Period

29. Not applicable since the construction activities have not commenced yet.

4.4.2 Cumulative Resource Utilisation

30. Not applicable since the construction activities have not commenced yet.

4.5 Waste Management

31. Not applicable since the construction activities have not commenced yet.

4.5.1 Current Period

32. Not applicable since the construction activities have not commenced yet.

4.5.2 Cumulative Waste Generation

33. Not applicable since the construction activities have not commenced yet.

4.6 Health and Safety

4.6.1 Community Health and Safety

34. There were no incidents which have occurred during the reporting period which resulted in or could have resulted in Community Health and Safety issues, since no construction works commenced yet.

4.6.2 Worker Safety and Health

35. Not applicable during the reporting period.

4.7 Training

36. No trainings has been conducted during the reporting period.

5 FUNCTIONING OF THE SEMP

5.1 SEMP Review

37. No contract award yet.

6 GOOD PRACTICE AND OPPORTUNITY FOR IMPROVEMENT

6.1 Good Practice

38. Not applicable since the construction activities have not commenced yet.

6.2 Opportunities for Improvement

39. Not applicable during the reporting period.

7 SUMMARY AND RECOMMENDATIONS

7.1 Summary

40. Not applicable during the reporting period.

7.2 Recommendations

41. Not applicable during the reporting period.