

## Executive Summary

1. The Baku Metro Expansion Project – Phase I (the Project) is a sovereign-backed loan of USD180 million to the Republic of Azerbaijan. The total Project cost is USD212.4 million, including USD32.4 million in government counterpart financing. The loan has a tenor of 20 years with a 3.5-year grace period and expected closing date 30/06/2030. It will be implemented by Baku Metropolitan Closed Joint Stock Company, overseen by AZCON and the Ministry of Digital Development and Transport, through a dedicated Project Implementation Unit. The Project is part of the Government's larger Baku Metro Expansion Program.
2. The Project aims to improve the service reliability, maintenance efficiency, and operational safety of the Baku Metro system, enabling future expansion of the metro system through the construction and equipping of the Darnagul and Khojasan depots, and enhancing the targeted station safety, environmental, and social performance on the Green Line.
3. The Project is Paris-aligned, with 100% (USD180 million) of AIIB financing qualifying as climate mitigation. Additionally, elements of the project qualify as climate adaptation finance, with an estimated share of 15% of the EPC contract. The Project directly supports Azerbaijan's Sustainable Development Goals, Azerbaijan's climate mitigation strategy, and its international commitments by enabling shifts to lower-emission public transportation.
4. Implementation readiness is ensured through a dedicated PIU, supported by consultants and a construction supervision engineering firm. Procurement will follow AIIB's Policy and Directive on Procurement Instructions for Recipients, using international competitive tendering. A Project Operations Manual will guide financial management, monitoring and environmental and social compliance, supported by AIIB's supervision missions.
5. ES risks are classified as Category B, moderate, in accordance with AIIB's Environmental and Social Policy (ESP). ESMP and SEP have been prepared and disclosed on both the Baku Metro's and AIIB websites on Dec. 5, 2025. ESMP framework has also been prepared to guide ES instruments for subsequent metro expansion phases.
6. The Project aligns with AIIB's priorities on Green Infrastructure and Technology-enabled Infrastructure, AIIB's Transport Sector Strategy, and Sustainable Cities Strategy. It will enable subsequent phases of the Baku Metro Expansion Program, which AIIB expects to support.

<b>Project No. and Name</b>	P000969 Baku Metro Expansion Project – Phase I		
<b>AIIB Member</b>	Azerbaijan		
<b>Borrower</b>	Republic of Azerbaijan		
<b>Guarantor</b>	Republic of Azerbaijan		
<b>Project Implementation Entity</b>	Baku Metropolitan CJSC		
<b>Proposed AIIB financing (USDm)</b>	USD180.00	<b>Instrument type/subtype</b>	Loan/Direct Sovereign
		<b>Currency of financing requested</b>	US Dollar
<b>Sector (Subsector)</b>	Transport (Urban transport)	<b>E&amp;S Category and Comments (if any)</b>	B, The Project is classified as Environmental and Social (ES) Category B, with key ES risks and impacts that are primarily construction-related, including noise, dust, traffic disruption, community safety, and occupational health and safety. The Project's sites are not immediately adjacent to residential or commercial properties. Involuntary land acquisition is not required, and there are no pending or legacy issues with the land areas of the depots that were allocated by the Government of Azerbaijan more than 10 years ago. The ES risks and impacts are considered manageable with

		<p>appropriate mitigation measures and are assessed as moderate. The Project establishes the institutional foundations, such as the Environmental and Social Management System (ESMS) and Grievance Redress Mechanism (GRM), that future AIIB-financed phases may adopt and build upon.</p>
<b>Project Objective</b>	<p>To improve service reliability, maintenance efficiency, and operational safety of Baku Metro system operations and enable future expansion of the metro system through the construction and equipment supply of the Darnagul and Khojasan depots and enhancement of targeted station safety, environmental, and social performance.</p>	
<b>Project Description</b>	<p>The Project includes two main components as follows:</p> <p>Component 1 – Infrastructure Development:</p> <p>1.A. Darnagul Depot: Construction and equipment supply for the Darnagul depot.</p> <p>1.B. Khojasan Depot: Construction and equipment supply for the new Khojasan depot.</p> <p>1.C. Enhancement of Existing Stations: Enhancing the environmental, social, safety, and climate performance of the existing Green Line stations.</p> <p>Component 2 – Technical Services:</p> <p>1.D. Consultancy Support and Capacity Building: Provision of consulting services for project preparation, design review, construction supervision, environmental and social impact assessment, and implementation support.</p> <p>The Baku Metro Expansion Project – Phase I (the “Project”) is a stand-alone investment financed by AIIB, with a proposed loan of USD180 million, alongside funds from the State of Azerbaijan. The Project constitutes the foundational phase and enables the Government of Azerbaijan’s broader USD2.455 billion Baku Metro Expansion Project (the “Program”), a top-priority multi-phase initiative of the Republic of Azerbaijan aimed at enhancing sustainable urban mobility in the city of Baku.</p>	

	<p>The Project’s primary objective is to establish the essential operational backbone, the Darnagul and Khojasan depots, required for network-wide growth and reliability. By providing the essential stabling and maintenance capacity, this infrastructure directly resolves a critical bottleneck: it enables the urgently needed separation of the Red and Green Lines at the May 28 Station interchange. This operational decoupling is pivotal, as it enhances current service reliability and unlocks the core network capacity mandatory for all subsequent expansion. The Project is designed to set the technical, environmental, and fiduciary precedents for the future Program network expansions. While AIIB finances only Phase I (the “Project”), the broader Program’s full scope includes the planned AIIB-supported Green Line extension (Phase II), rolling stock renewal (Phase III), the parallel ADB-financed expansion of the Purple Line, and digitalization components. Future phases will be subject to separate appraisal, demonstrated implementation readiness, and approval. The success of this first phase is crucial for laying the foundation for the entire Program implementation.</p>		
<b>Implementation Period</b>	<b>Start Date:</b> March 01, 2026 <b>End Date:</b> December 31, 2029	<b>Expected Loan Closing Date</b>	June 30, 2029
<b>Co-financing type</b>	Standalone	<b>Following other Financier’s E&amp;S Policy?</b>	No
<b>Lead financier</b>		<b>Following other Financier’s Procurement Policy?</b>	No
<b>Financing Plan</b>	<p>For Phase I: The total financing is provided by AIIB and the Government of Azerbaijan. AIIB contributes USD 180.0 million, accounting for 85% of the total financing for Phase I. The government provides USD32.4 million (including 18% value-added tax), making up 15% of the total.</p> <ul style="list-style-type: none"> <li>• In Component 1, AIIB offers USD165.00 million, which is 85% of the financing for this component, and the government provides USD29.79 million, constituting 15%.</li> <li>• For Component 2, AIIB contributes USD15 million (85% of its financing), and the government provides USD2.7 million (15% of its financing).</li> </ul>		

<b>Policy Assurance</b>	The Project has passed a policy compliance review. No derogation or exception to the Bank's operational policies is required.
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<b>Risk</b>	
<b>Key Risks</b>	<b>Mitigation Measures</b>
Program/Project Preparation Risks - Technical designs - Inadequate Design is carried out by a consulting firm to which the Design contract is directly awarded	<p>1) Baku Metro has formally established the PIU to ensure effective oversight of the technical design quality.</p> <p>2) Baku Metro contracted an International senior technical advisor to provide technical guidance and oversight throughout the design preparation process.</p> <p>3) Baku Metro contracted Istanbul Metro Advisory Services to provide design review advisory support.</p> <p>4) AZCON has mobilized its project implementation unit team to provide additional support to Baku Metro throughout the design preparation process.</p> <p>5) The mobilization of a Design Review and Construction Supervision Consultant is envisaged prior to the contractors' access to the site. The Terms of Reference was prepared by Baku Metro, reviewed by AZCON, and received substantial support from AIIB PT.</p> <p>Main Responsible Entity/Risk owner: Baku Metro PIU Support: Istanbul Metro Advisory Services</p>
Program/Project Preparation Risks - Procurement of large and complex packages - Timely processing, review and approval of procurement packages.	<p>1)The PIU Director is a qualified senior procurement specialist with experience with MFBs financing of major infrastructure projects in Azerbaijan (gained from Azerbaijan Railway Company)</p> <p>2)The PIU has identified a qualified local senior procurement specialist and is at the final stage of contracting: expected by mid-February 2026.</p> <p>3)The Project procurement goes through PPMS-based procurement tracker with milestone alerts.</p> <p>4)The ToR of the Design Review and Construction Supervision consultant includes a component on procurement support.</p> <p>Main Responsible Entity/Risk owner: Baku Metro PIU Support: Design Review and Construction Supervision Consultant (Implementation Support component)</p>
Program/Project Preparation Risks - Time delays and cost overrun - While Baku Metro operates under time pressure, cost overrun, quality and safety can come at risk and may	<p>1) AIIB Project team will continue to closely work with Baku Metro and seek solutions for mobilizing additional resources in Project Planning and Management.</p> <p>2)While the Project is a top priority of the Republic of Azerbaijan; the institutions are working well together. AIIB Project Team set up regular weekly meetings with the PIU, AZCON and MDDT and regular meetings with the technical and ES team. AIIB Procurement Specialist is working closely with PIU to troubleshoot potential challenges. All efforts are directly supported at the higher decision-making process,</p>

cause implementation delays.	including the leadership of Baku Metro, MDDT, and AZCON. Main Responsible Entity/Risk owner: Baku Metro PIU Support: Design Review and Construction Supervision Consultant (Implementation Support component)
<b>ECap</b>	17.32USDm 9.62%

<b>Strategic Alignment</b>	
<b>Alignment with AIIB's thematic priorities</b>	Green infrastructure; Technology-enabled Infrastructure
<b>Alignment with AIIB's strategies</b>	Transport Sector Strategy; Sustainable Cities Strategy

<b>Key Outcomes</b>			
<b>Indicator</b>	<b>Unit of measure</b>	<b>Baseline (Year)</b>	<b>Target (Year)</b>
Reliability: Mean Kilometers Between Failure (MKBF)	Kilometers	25,000 (2025)	35,000 (2029)
Availability: Fleet availability rate	Percentage	68 (2025)	>80 (2029)
Maintainability: Mean Time To Repair (MTTR)	Hours	8 (2025)	6 (2029)

<b>Climate Action</b>		
Climate Finance	Adaptation Finance	USD0.00
	Mitigation Finance	USD180.00
	Dual Benefit	USD0.00
	Total	USD180.00

<b>Other Key Financing Requirements</b>	
<b>Conditions of Effectiveness</b>	<ol style="list-style-type: none"> <li>1. A subsidiary agreement acceptable to AIIB has been duly executed between the Borrower and Baku Metro.</li> <li>2. A Project Operations Manual (POM) has been developed in a form and substance acceptable to the Bank.</li> <li>3. A Project Implementation Unit (PIU) is duly staffed, with terms of reference and resources satisfactory to AIIB, including an Environment and Social, Procurement, and Financial Management Specialist.</li> </ol>
<b>Key Conditions for 1<sup>st</sup> Disbursement</b>	N/A
<b>Key Covenants</b>	<ol style="list-style-type: none"> <li>1. Project procurement shall be conducted in accordance with AIIB's Procurement Policy (June 26, 2024, as amended from time to time) and the Directive on Procurement Instructions for Recipients (PIR) (July 26, 2024, as amended</li> </ol>

	<p>from time to time).</p> <p>2. The Project shall comply with applicable laws of the Republic of Azerbaijan and AIIB's Environmental and Social Framework (ESF, 2024), including the Environmental and Social Policy, applicable standards, and exclusion list, as well as all requirements set out in the Project's ES instruments and monitoring reports.</p> <p>3. Baku Metro shall submit semi-annual ES reports to AIIB, promptly inform AIIB of any unanticipated ES risks or impacts, and report any compliance breaches.</p>
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<b>President</b>	Jiayi Zou
<b>Chief Investment Officer</b>	Konstantin Limitovskiy
<b>Director General</b>	Xiaohong Yang
<b>Manager</b>	Evren Dilekli
<b>Project Team Leader</b>	Mohamed Sameh
<b>Co-PTL</b>	Rafael Rashid
<b>Project Team Members</b>	<p>Alberto Alcubilla Arribas, Climate Specialist</p> <p>Arrad Tabandeh, Economics Officer</p> <p>Drona Ghimire, Environment Specialist</p> <p>Ebrima Ceesay, Project Lawyer</p> <p>Guoping Yu, Procurement Specialist</p> <p>Hanting Qi, Admin Assistant</p> <p>Mengmeng He, Finance Officer</p> <p>Nanyan Zhou, Investment Officer</p> <p>Noah Silverman, Investment Associate</p> <p>Shodi Nazarov, Financial Management Specialist</p> <p>Suu Tran Quy, Social Development Specialist</p> <p>Vardan Khachatryan, Investment Officer</p>



**Sovereign-backed Financings**

**Approval Project Document**

**P000969 Baku Metro Expansion Project – Phase I**

**Indicative approval route:** President  
**Exceptions to delegation triggered:** None

## Currency Equivalents

As of Aug. 30, 2025

Currency Unit – Azerbaijani Manat (AZN)

USD1.00 = AZN1.70

## Fiscal Year

January 1 – December 31

## Abbreviations

AIIB	Asian Infrastructure Investment Bank
AYNA	Azerbaijan Land Transport Agency
CIDCA	China International Development Cooperation Agency
CJSC	Closed Joint-Stock Company
CO <sub>2</sub>	Carbon Dioxide
COVID-19	Coronavirus Disease
CPMD	Construction Project Management Department
EIRR	Economic Internal Rate of Return
ES	Environmental and Social
ESAP	Environment and Social Action Plan
ESDD	Environmental and Social Due Diligence
ESF	Environmental and Social Framework
ESIA	Environment and Social Impact Assessment
ESMP	Environment and Social Management Plan
ESMPF	Environment and Social Management Planning Framework
ESP	Environmental and Social Policy
ESS	Environmental and Social Standards
FM	Financial Management
GAP	Gender Action Plan
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GRM	Grievance Redress Mechanism
IAD	Internal Audit Department
ISO	International Organization for Standardization
IUFR	Interim Unaudited Financial Report
LMP	Labor Management Plan
LTIFR	Lost Time Injury Frequency Rate
MDDT	Ministry of Digital Development and Transport
MKBF	Mean Kilometers Between Failure
MTTR	Mean Time To Repair
NDC	Nationally Determined Contribution
OECD	Organisation for Economic Co-operation and Development
OHS	Occupational Health and Safety
PIE	Project Implementation Entity
PIU	Project Implementation Unit
POM	Project Operations Manual
PPM	Project-affected People's Mechanism
PPP	Public-Private Partnership

PT	Project Team
RAP	Resettlement Action Plan
RMF	Risk Management Framework
RPF	Resettlement Policy Framework
SDG	Sustainable Development Goal
SEP	Stakeholder Engagement Plan
SPN	Standard Procurement Notice
TBM	Tunnel Boring Machine
ToR	Terms of Reference
USD	United States Dollar
VOC	Vehicle Operating Cost
VOT	Value of Time

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## 2. Context

**2.1 Country and Macroeconomic Overview:** Azerbaijan is an upper-middle-income economy, with an income per capita of USD7,600 (around USD26,000 in purchasing power parity) and a population of 10.4 million in 2025. Oil and gas are central to Azerbaijan's economy, accounting for around 30% of gross domestic product (GDP), some 50% of fiscal revenues, and more than 90% of exports. Azerbaijan's 4.3% GDP contraction in 2020 (due to pandemic disruptions and oil market volatility) transitioned to 5.6% growth in 2021 through coordinated policy support. The recovery accelerated in 2022 and 2023, with GDP expanding by 13.85% and 8.79% respectively, driven by hydrocarbon revenues. Baku, Azerbaijan's capital and largest city, accounted for most of the non-oil sector's 6.3% growth in 2023, with its thriving construction, tourism, and transportation sectors, evidenced by major infrastructure projects and international events. In 2024, Azerbaijan maintained 4.1% growth while reducing inflation to 4.9%.<sup>1</sup> While Azerbaijan's economic model still faces challenges—including hydrocarbon dependence and banking sector vulnerabilities—Baku's emergence as a driver of economic diversification offers a pathway to more sustainable growth. With Azerbaijan's strategic investments, its capital city is poised to lead the economy's next development phase, even as projected 2025 growth of 3.5% reflects balanced energy/broad-based expansion, directly advancing its priorities of green infrastructure and climate financing.

**2.2** Since 2024, the Government of Azerbaijan has implemented comprehensive economic reforms to enhance macroeconomic stability and accelerate diversification from hydrocarbons. Key measures included fiscal consolidation, curbing expenditure growth, monetary tightening (350-basis-point policy increase) to combat inflation, and 14 streamlined regulatory processes to improve the business climate (resulting in +6 points on the World Bank's report-rating on Women, Business and the Law).<sup>2</sup> These reforms yielded significant outcomes by Q4/2024: investor confidence rebounded, foreign direct investment increased, the non-oil current account deficit narrowed to 4.2% of GDP, and price stability improved with inflation, declining from 12.6% in Q1/2024 to 6.2% in Q4/2024. Reflecting these improvements, Fitch upgraded Azerbaijan's sovereign credit rating from 'BB+' to investment grade (BBB-) in 2024 and has since reaffirmed this rating. Moody's followed in 2025, raising the rating to 'Baa3' (investment grade) while maintaining a positive outlook, citing sustained reform efforts to reduce fiscal reliance on hydrocarbon revenues. Meanwhile, in December 2024, S&P affirmed its 'BB+' rating with a stable outlook.

**2.3 Sector Overview:** Car dominance has caused significant urban mobility challenges in Baku, with vehicle ownership reaching 229 per 1,000 people in 2020,<sup>3</sup> a rate that significantly exceeds regional peers such as Tbilisi (approximately 180 per 1,000) and Yerevan (approximately 190 per 1,000). This over-reliance on private vehicles creates a triple burden for the city: (a) worsening traffic congestion, evidenced by an 18% decline in vehicular speed since 2015; (b) deteriorating road safety conditions, resulting in about 200 annual road fatalities and (c) increasing pollution levels, with the transport sector contributing 25% of

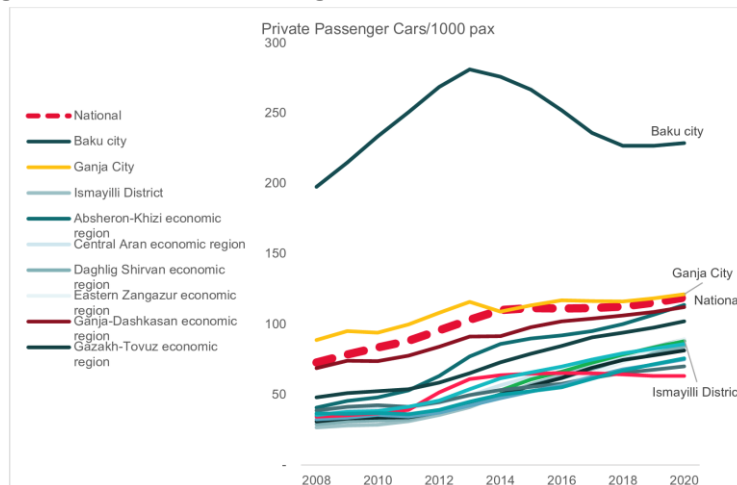
<sup>1</sup> World Bank. [Macro Poverty Outlook: Azerbaijan. October 2025.](#)

<sup>2</sup> Azerbaijan has moved up by 35 ranks in that report-rating on Women, Business and the Law in 2024, rising to the 69th place among 190 economies from the 104th place in the previous year. <https://azranking.az/en/article/dunya-bankinin-qadin-biznes-ve-huquq-reytinginde-azerbaycan-son-bir-ilde-35-pille-irelileyib>

<sup>3</sup> Mejia, A. and Kodukula, S. 2023. Transport Needs Assessment of Azerbaijan Cities in the DTEE Project. [Project Report - Decarbonizing Transport in Emerging Economies - Azerbaijan]. Wuppertal Institute and International Transport Forum.

greenhouse gas (GHG) emissions while compounding existing environmental impacts from the oil industry (Figure 1).

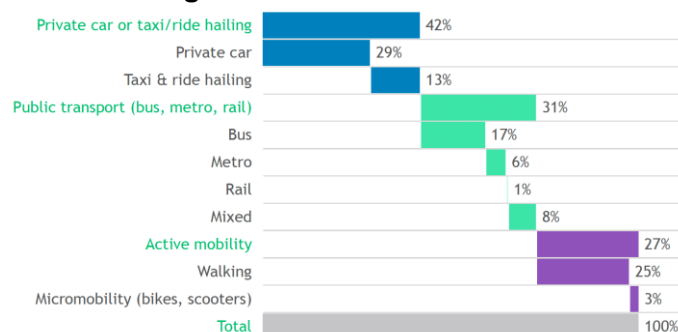
**Figure 1. Private Passenger Car Motorization in Azerbaijan**



Source: Mejia, A. and Kodukula, S. 2023. Transport Needs Assessment of Azerbaijan Cities in the DTEE Project. [Project Report - Decarbonizing Transport in Emerging Economies - Azerbaijan]. Wuppertal Institute and International Transport Forum.

2.4 Baku is a monocentric city with Baku City Center and Khatai accounting for 65% of trips, and Sumagit as the second biggest cluster of trips (19%). The number of motorized trips in Baku is estimated at 4.8 million per day, i.e., 2.06 motorized trips per day per person, with a 31% share of public transport.<sup>4</sup> The Baku Metro system serves as the critical foundation for sustainable urban mobility in the capital, currently transporting 650,000 passengers daily and accounting for 30% of all public transport trips (Figure 2). Recognizing the system's vital role, the State Program 2025-2030, officially approved on Jan. 30, 2025, establishes the strategic priority of metro expansion to enhance citywide connectivity and accessibility while supporting Azerbaijan's sustainable development objectives and GHG reduction targets. This program builds upon the innovative digital twin modeling platform developed through a collaboration between the Azerbaijan Land Transport Agency (AYNA) and the Boston Consulting Group (BCG), which used thousands of surveys and a large dataset to simulate urban mobility patterns across the city of Baku.

**Figure 2. Baku Modal Share**



Source: BCG, Travel Demand Surveys and Analysis, 2023.

<sup>4</sup> BCG, Travel Demand Surveys and Analysis, 2023.

**2.5 Addressing Key Development Challenges—Project Contributions:** The Baku Metro Expansion Project (the “Program”) is a strategic response to Azerbaijan’s most pressing urban development challenges, addressing key priorities in sustainable urbanization, economic productivity, environmental resilience, and technological innovation. As Baku grows toward a population of 2.5 million, providing affordable and reliable public transportation, while alleviating growing congestion and addressing emissions, becomes essential. The Project, with its primary focus on depot infrastructure and capacity expansion, establishes the foundational capacity for future metro network growth. Aligned with Azerbaijan’s commitments under the Paris Agreement, the Project will incorporate energy-efficient technologies and climate-resilient design features, such as flood-proof systems to ensure long-term operational sustainability against climate impacts projected through 2050. The expansion of the Green and Purple Lines<sup>5</sup> will support the sustainable urban development of the City of Baku. For instance, the extension of the Green Line under Phase II, expected to be supported by a subsequent Asian Infrastructure Investment Bank (AIIB) financing, lends itself to transit-oriented development (TOD) urban planning models. Its primary goal is to connect the rapidly developing eastern districts and suburbs of the city to the central metro network. Together with the White City,<sup>6</sup> the Green Line extension will support urban regeneration, facilitating the transformation of post-industrial zones into vibrant, livable, and sustainable communities.

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<sup>5</sup> The expansion of the Purple Line is expected to be supported under parallel financing by the Asian Development Bank (ADB).

<sup>6</sup> White City is a large, flagship urban regeneration project on the site of a former oil refinery and industrial zone in eastern Baku. It aims to transform a large, contaminated post-industrial brownfield into a modern, sustainable, and mixed-use district. Its Master Plan includes residential areas with a range of apartments and houses; commercial spaces with offices, business hubs, and retail centers; social infrastructure with schools, hospitals, parks, and cultural facilities, and sustainability with emphasis on green building standards, energy efficiency, and ample green space. The Connection to the Metro is essential to make the development viable and attractive.

### 3. Rationale

3.1 **Project Objective.** To improve service reliability, maintenance efficiency, and operational safety of Baku Metro system operations, and enable future expansion of the metro system through the construction and equipping of the Darnagul and Khojasan depots and enhancement of targeted station safety, environmental, and social performance.

3.2 **Expected Beneficiaries.** The Project will enable the subsequent Program phases to deliver broad benefits across Baku's urban mobility system. Public transport users will be the primary beneficiaries, metro passengers will enjoy improved reliability and frequency, bus commuters will benefit from better-integrated schedules, and pedestrians and cyclists will gain from enhanced last-mile connectivity through upgraded sidewalks and potentially new bike lanes near stations. The Project supports Baku's transformation into a sustainable metropolis by strengthening its integrated transport network. Indirect beneficiaries include Baku Metro teams, who will work with modern maintenance facilities that improve system efficiency. These upgrades lay the groundwork for future expansion and promote multimodal mobility citywide.

3.3 **Expected Results.** The Project is expected to deliver immediate measurable improvements in the reliability, availability, maintainability, and safety (RAMS) of Baku Metro system operations and to enable the future expansion of the metro system. The completion of the Darnagul and Khojasan Depots is necessary to accommodate the expansion of rolling stock, reduce the risk of schedule disruption, and maintain the train intervals during peak hours. Baku Metro and the Ministry of Digital Development and Transport (MDDT) have discussed and agreed upon the Project indicators that will gauge the expected results of the Project. Annex 1 outlines the Project's provisional Results Monitoring Framework (RMF).

- (a) Reliability: Mean Kilometers Between Failure (MKBF).
- (b) Availability: Fleet availability rate.
- (c) Maintainability: Mean Time to Repair (MTTR).
- (d) Safety: Lost Time Injury Frequency Rate (LTIFR).

3.4 Additional indicative Program-level indicators have been included in the RMF to inform the Program subsequent phases. They will guide the design of the RMF for Phase II.

3.5 **Strategic Fit for AIIB.** The Project demonstrates strong alignment with AIIB's thematic priorities and strategies:

- (a) **Green Infrastructure:** The Project supports the government's broader Baku Metro Expansion Program, which enables the transition to lower-emission public transportation, an important part of Azerbaijan's climate mitigation strategy and its international commitments, including its updated Nationally Determined Contributions (NDC). The Project provides important components to the improvement and expansion of the Baku metro system and qualifies as 100% climate-mitigation finance.
- (b) **Technology-enabled Infrastructure:** The Project will provide innovative technology and process upgrades to depots and stations to increase operational flexibility, improve maintenance processes and technologies, and enhance energy efficiency and user safety while reducing environmental impact. These will support the future

expansion of the line under Phase II and serve as a demonstration for further improvements to the Baku metro system.

**3.6 Transport Sector Strategy:** The Project and larger metro development Program are strongly aligned with AIIB's Transport Sector Strategy by advancing the objectives of modernizing and upgrading the existing urban transport infrastructure. The Project supports the construction of critical enabling facilities, including new depots at Darnagul and Khojasan, and the strengthening of operational systems and maintenance processes, which are essential for ensuring reliable and efficient metro operations. By removing existing capacity constraints and addressing operational bottlenecks that limit service frequency and system resilience, the Project facilitates the development of core trunk linkages within Baku's urban transport network.

**3.7 Sustainable Cities Strategy:** Both the Project and Program are well aligned with AIIB's Sustainable Cities Strategy, which emphasizes enhancing urban livability, resilience, and low-carbon growth. By improving the operational efficiency of the Baku metro system, the Project strengthens the city's core public transport network and promotes sustainable urban mobility. These interventions directly support the Strategy's objectives of improving urban infrastructure, reducing GHG emissions, and enhancing city resilience through climate-adaptive design and energy-efficient systems.

**3.8** The Project aligns with Azerbaijan's Sustainable Development Goals (SDGs). By promoting sustainable urban mobility, it will contribute to improving connectivity across Baku, providing equitable access to jobs and services for low- and middle-income citizens. Enhanced transport efficiency is also expected to boost economic activity, directly contributing to SDG 9 (Industry, Innovation, and Infrastructure) and SDG 11 (Sustainable Cities and Communities).

**3.9 Paris Agreement Alignment (PAA) and Climate Finance.** In line with the AIIB methodology for assessing the alignment with the mitigation and adaptation goals of the Paris Climate Agreement, the Project is assessed as aligned. In line with the joint multilateral development bank (MDB) methodology for tracking climate mitigation finance, it is estimated that USD180 million of the Project cost contributes to support mitigation; and in line with the joint MDB methodology for tracking climate adaptation finance, it is estimated that 15% of the engineering, procurement and construction (EPC) cost of the Project will be allocated to climate adaptation.

### **3.10 Value Addition by AIIB.**

- (a) **Environmental and Social (ES) Good Practices.** Beyond the provision of financing, the Project and its overall support will significantly enhance the government Program's adherence to rigorous international standards for environmental safeguards, gender and social inclusion, health and safety, procurement, and financial management. This includes:
  - (1) Mandatory green certification for all new buildings under the Program, starting with the Project's Darnagul and Khojasan depots, to deliver verifiable carbon dioxide (CO<sub>2</sub>) emission reductions in line with Azerbaijan's NDC under the Paris Agreement and SDG 13 (climate action).

- (2) Systematic application of international ES standards and protocols, ensuring robust stakeholder engagement, participatory approaches, and transparent grievance redress mechanisms.
- (b) **Design and Operational Improvements.** Implementation of climate-resilient design standards (e.g., ISO 55000), smart asset management systems, and operational protocols that directly support SDG 11.2 (sustainable transport systems) and SDG 13.
- (c) **Institutional Capacity Support.** Beyond the provision of financing, AIIB's participation will provide technical support. This will be instrumental in building Azerbaijan's institutional capacity for modern, technology-driven urban rail infrastructure. This is achieved through:
  - (1) Targeted knowledge transfer and implementation support, including regular technical guidance and progress tracking meetings between the Project Team (PT) and the Project Implementation Unit (PIU).
  - (2) Structured training and capacity-building programs for the Baku Metro and MDDT.
- (d) **Approach Structure.** The overall structure of the Project and the Program, supported by AIIB's strategic oversight, offers the following significant advantages:
  - (1) **De-risking downstream investments:** Each phase allows for performance verification and compliance with ES and operational standards, reducing implementation risk for subsequent phases and ensuring that lessons learned are systematically incorporated.
  - (2) **Incremental, measurable results:** The Project's investments in depot modernization eliminate critical single points of failure in train maintenance and storage, increasing train availability and service reliability. These improvements are foundational for the safe and efficient expansion of the network in later phases.
  - (3) **Integrated financing and support:** AIIB's loan for the Project covers preparation and implementation support and construction supervision.
  - (4) **Elevated Project visibility:** AIIB's involvement raises both international and domestic visibility of the Project, reinforcing Azerbaijan's commitment to sustainable urban transport and climate change mitigation.

**3.11 Value Addition to AIIB.** The Project and the Program are aligned with AIIB's commitment to financing green, technology-driven transport and both fulfill the AIIB's strategic priorities for climate-smart infrastructure. Successful implementation in Azerbaijan, given its regional strategic position, could establish a replicable model. A key component is building the institutional capacity of Baku Metro through knowledge transfer on environmental and procurement safeguards. Furthermore, the Project's focus on climate-resilient infrastructure and energy-efficient systems demonstrates AIIB's ability to deliver innovative solutions while modernizing legacy transport networks.

**3.12 Lessons Learned.** Lessons learned from prior metro projects financed by AIIB, particularly the Izmir Metro in Türkiye and the Tbilisi Metro in Georgia, have been systematically integrated into the Project and the overall Program design and implementation framework of the Baku Metro Expansion Program. These projects offer valuable regional precedents, given their geographic proximity and the similarity of their urban development

challenges to those faced in Baku. Experience from AIIB's urban projects shows the importance of effective asset management and promoting forward-thinking urban planning, particularly in cities with rapidly growing populations, outdated transport systems, and limited fiscal capacity. This ensures sustainable and manageable infrastructure development that can address future needs. The incorporation of these lessons learned is expected to be instrumental in maximizing implementation effectiveness and ensuring long-term operational sustainability for the Program. Regional insights have highlighted four critical success factors, each of which has been comprehensively addressed in the Program's technical, institutional, and operational design:

- (a) Capacity Building and Institutional Strengthening. A recurring lesson from AIIB metro projects is the importance of strengthening the capacity of implementing agencies. The Project and the overall Program would require the addition of skilled consultants or new staff to supplement the existing workforce, especially for ES assessments and technical design reviews.
- (b) Effective Stakeholder Engagement: Effective Stakeholder Engagement requires early and continuous involvement of stakeholders in the decision-making process, ensuring that their inputs and concerns are addressed.
- (c) Planning, Procurement, and Adequate Packaging: It is imperative to develop a robust Project Delivery Strategy thoroughly tailored to the Project and the subsequent phases under the Program's unique characteristics and local market capacity constraints, with the mobilization of qualified engineers and contractors.
- (d) Risk Management and Safety Measures: Safety concerns, both during construction and operation, have been a major challenge in metro projects.
- (e) Quality of Technical Design: The necessity of basing all technical designs on exhaustive geotechnical investigations and detailed assessments of existing built-environment conditions has been considered.
- (f) Environmental and Social Safeguards: The proactive integration of ES safeguards through LEED-certified depot designs and targeted community engagement programs is essential to effectively mitigate noise and dust impacts during construction, thereby preventing implementation delays while fostering crucial local stakeholder support.

## 4. Project Description

4.1 **Project Sequencing:** The Project constitutes a foundational phase and key enabler of the government's broader USD2.455 billion Baku Metro Expansion Project (the "Program"), a top priority of the Republic of Azerbaijan.<sup>7</sup> Its primary objective is to establish the essential operational backbone, the Darnagul and Khojasan depots, required for network-wide growth and reliability. By providing the essential stabling and maintenance capacity, this infrastructure directly resolves a critical bottleneck: it enables the urgently needed separation of the Red and Green Lines at the May 28 Station interchange. This operational decoupling is pivotal, as it enhances current service reliability and unlocks the core network capacity mandatory for all subsequent expansion. As the initial phase of the government Program, its successful implementation is strategically important. The Project is also designed to set the technical, environmental, and fiduciary precedents for Phases II (Green Line extension) and III (rolling stock modernization). These efforts will be synergistically complemented by the parallel, ADB-financed expansion of the Purple Line. The success of this first phase is seen as crucial for laying the foundation for the entire Program's implementation.

4.2 **The Project** includes two key components:

**Component 1. Infrastructure Development.** This component will finance the procurement of the contracts for the following subcomponents:

- I.A. **Darnagul depot:** Construction and equipment supply of the Darnagul depot.
- I.B. **Khojasan depot:** Construction and equipment supply of the new Khojasan depot.
- I.C. **Existing stations enhancement:** ES, safety, and climate performance enhancement of the existing stations on the Green line.<sup>8</sup>

**Component 2. Technical Services.** This component will finance the Project-related services contracts as follows:

- I.D. **Consultancy Support and Capacity Building.** Related consulting services for the preparation, design review, construction supervision, ES impact assessment, and implementation support to the Project and subsequent phases of the Program activities, as may be required. These may also include activities aiming to strengthen Baku Metro's technical, ES performance, and climate resilience, project management, financial and operational performance improvement, institutional capacity building, technical international cooperation, and study visits.

4.3 **AIIB expects to support Phase II to cover the Green Line Extension** from "Khatai" to "Hazi Aslanov". This includes four stations and approximately 8.6 kilometers (km) of inter-station tunneling with tunnel boring machines (TBM), with an implementation period Q3/2026 - 12/31/2030. It will also cover related **Consultancy Support and Capacity Building**.

4.4 Phase II is under preparation. AIIB's subsequent support is contingent on satisfactory progress in phase design and ES safeguard preparations, ensuring implementation readiness.

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<sup>7</sup> Terminology Note: Throughout this document, the "Project" refers exclusively to AIIB-financed Phase I (Darnagul & Khojasan Depots and station ES/safety enhancements). The "Program" refers to the Government of Azerbaijan's multi-phase Baku Metro Expansion Program (Phases I–III) financed through a combination of domestic and external sources. Future AIIB support (e.g., Phase II) remains subject to separate appraisal and approval.

<sup>8</sup> Prior to issuing No Objection for the enhancement contracts, ES documents must have been completed and disclosed as applicable, in line with AIIB's ES Policy and Framework.

This phased approach maintains momentum and quality control by formally linking each stage's start to the verified completion of its predecessor's technical and ES deliverables. With the current progress in design and ES safeguards documents. Its implementation is planned for 2026-2030. Phase III will advance in parallel during 2027-2030.<sup>9</sup>

4.5 Indicative triggers for AIIB's initiation of Phase II include satisfactory progress in both Project design advancement and ES preparatory work to ensure each subsequent phase reaches the requisite implementation readiness threshold. These include preparation and disclosure of the ESMP for Phase I. This phased approach ensures systematic quality control while maintaining project momentum. The sequential conditioning of the phases provides all stakeholders with clear implementation benchmarks while safeguarding AIIB's operational standards, particularly regarding the timely fulfillment of all prerequisite technical assessments.

4.6 **Cost and Financing Plan.** Table 1 presents the cost estimates and financing plan for the Project and the indicative Program. The procurement and financing plan for Phase II remains under review by Baku Metro, with ongoing consultations with AIIB to determine optimal packaging. AIIB financing for Phase II is currently estimated at USD700 million. Final amounts will be determined in close consultation with the MDDT, Baku Metro, Ministry of Economy (MoE), and Ministry of Finance (MoF).

**Table 1. Project Cost and Financing Plan**

Item	Financing			
	AIIB		Government of Azerbaijan*	
	USD million	%	USD million	%
<b>Phase I</b>	<b>180.00</b>	<b>85</b>	<b>32.40</b>	<b>15</b>
Component 1	165.00	85	29.70	15
Component 2	15.00	85	2.70	15
<b>Phase II**</b>	<b>700.00</b>	<b>85</b>	<b>126.60</b>	<b>15</b>
<b>Total</b>	<b>880.00</b>	<b>85</b>	<b>159.00</b>	<b>15</b>

\* The Government of Azerbaijan will finance the 18% value-added tax. The financing of land acquisition and resettlement, if any, during the Phase II tranche, while in principle is to be financed by the government, Baku Metro solicited the AIIB PT to explore possibilities for financing by the AIIB second loan tranche.

\*\* AIIB financing for Phase II is indicative subject to separate appraisal and approval."

4.7 **Financing Structure:** The Program is structured for implementation in multiple phases. Approval is being sought for the Phase I (the "Project") on a stand-alone basis. Phase II of the Program, with an estimated financing of USD700 million, will be appraised by the AIIB PT in 2026. The request for AIIB support for the rolling stock, under Phase III, will be subject to confirmation by both MDDT and Baku Metro.

4.8 For Phase III (Rolling Stock), Baku Metro is considering the different alternative financing modalities, and implementation is expected from Q1 2027 through 2030.

#### 4.9 Implementation Arrangements and Readiness

<sup>9</sup> Depending on multiple factors, Phase III cost estimates are expected to be USD400-500million.

#### 4.9.1 Implementation arrangements.

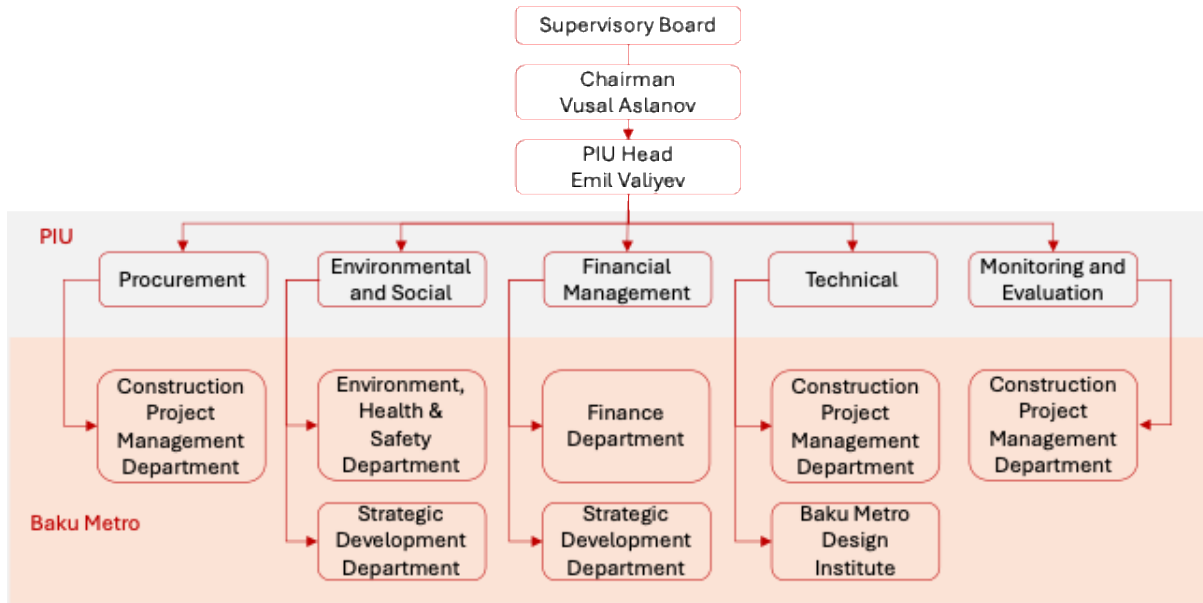
- (a) **Project Implementation Plan:** Baku Metro will serve as the Project Implementing Entity<sup>10</sup> of the Project and subsequent phases of the Program under the oversight of AZCON<sup>11</sup> and MDDT. As this is Baku Metro's first AIIB-financed Project, close coordination, regular oversight and targeted training have been planned from the outset to ensure full alignment with AIIB policies and procedures throughout both preparation and implementation phases. AZCON will be responsible for the high-level oversight, guidance, and monitoring of the Project and subsequent phases of the Program, including approval of major funding allocations and investment frameworks, monitoring legal and regulatory compliance, and facilitating coordination among governmental and international stakeholders.
- (b) **Project Implementation Unit:** Baku Metro has established a dedicated PIU to coordinate the preparation of the Project and the subsequent phases of the overall Program and to manage day-to-day implementation activities, including the key functions: procurement and contract management, ES safeguards, and financial management (Figure 3). The PIU will also coordinate with the internal departments within the Baku Metro, such as Procurement, Construction Project Management Department (CPMD), Finance and Strategic Development Departments, and external stakeholders, including AIIB and the Asian Development Bank (ADB), as applicable. To support the Project implementation, the PIU will also mobilize monitoring and evaluation (M&E) specialist(s) and multi-disciplinary engineers. These engineers will operate within the CPMD and will report to both the CPMD and the PIU, ensuring a cohesive working arrangement within the organization.
- Baku Metro drafted the Terms of Reference (ToRs) for the key functions of the PIU, identified as Procurement, E&S, and Financial Management, and they have been reviewed by AIIB. Qualified candidates have been identified and are expected to be onboard during Q1/2026. Additionally, to further strengthen the PIU's capacity, Baku Metro will allocate internal resources and engage individual consultants and/or an implementation support company, as needed. Consultants engaged by AIIB will be procured in accordance with AIIB's procurement policies. Baku Metro will prepare a fit-for-purpose Project Operations Manual (POM) with AIIB's support to guide Project implementation.

**Figure 3. PIU Organization and Interface with Baku Metro Departments**

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<sup>10</sup> Also referred to as Recipient in AIIB Directive on Procurement Instructions for Recipients (PIR).

<sup>11</sup> AZCON was established by Presidential Decree on Nov. 7, 2024, to provide oversight on the main state-owned companies in the transport and communication sectors in Azerbaijan.



(c) **Procurement arrangements.**

- (1) Procurement of Goods, Works, Non-Consulting and Consulting Services contracts financed in whole or in part by the AIIB loan shall be conducted in accordance with the AIIB's Procurement Policy (June 26, 2024, as amended from time to time) as well as the Directive on Procurement Instructions for Recipients (PIR) (July 26, 2024, as amended from time to time). Given that Baku Metro is a state-owned enterprise (SOE) as per AIIB's Procurement Policy, the specific procurement provisions under Section 2 Procurement by Public Entities under the PIR shall apply to the procurement of the Project (Phase I). AIIB's Project Procurement Management System (PPMS) will be used to prepare, clear, and update Procurement Plans and conduct all procurement transactions. Accordingly, all the procurement activities under the proposed Project will be entered, tracked, and monitored online through the system.
- (2) Baku Metro will implement all Project procurement activities, from planning, design, and tendering to contract award and supervision. The dedicated PIU, established under Baku Metro, is responsible for procurement and contract management of the proposed Project.
- (3) The Project Delivery Strategy (PDS), including a Procurement Plan (PP), is being updated by the PIU in response to AIIB's comments. It defines procurement arrangements, including contract packaging, cost estimates, selection of templates of tender documents, procurement methods, review methods, and procurement timelines, which will constitute the basis for the Project procurement. The PIU will complete its engagement with the market prior to the loan negotiations to inform a tailored strategy for works procurement, including minimum qualification requirements, the version of the International Federation of Consulting Engineers (FIDIC) book selection, and construction duration. The PDS will be finalized by the PIU and shared with AIIB prior to loan negotiations of the Project. AIIB issued no objection to the Procurement Plan for the Design Review and Construction Supervision Consultant and the three PIU individual consultants, including procurement, financial management, and ES consultants, through PPMS in September 2025.

- (4) **Advance Procurement and Retroactive Financing** will be expected under the proposed Project, subject to a limit of 20% of AIIB's total loan amount and for eligible expenditure incurred and paid not earlier than 12 months prior to the actual signing date of the loan agreement. Any Project activities considered for retroactive financing will have to be implemented in accordance with the AIIB's Procurement Policy and its ES Policies and requirements. Based on the anticipated Project timeline, procurement of the following activities may begin prior to the loan signing date: (i) the contract of the Environmental and Social Consulting Services (Contract No.: BMEP/P1/CS-01) was awarded in July 2025; (ii) the procurement of the local environmental and social consultant of the PIU is ongoing and expected to be finalized by mid-February 2026. The Request for Expression of Interests (REOI) for Design Review and Construction Supervision Consulting Firm by QCBS is expected to be advertised by the mid-February 2026; (iii) the financial management specialist, procurement and ES specialist were identified and their contracting is in-progress: the FM specialist has been contracted, the ES and Procurement specialist are expected to be contracted by end of mid-February 2026 and (iv) other contracts, including procurement of civil works of depots by International Open Competitive Tendering, are planned for Q2/2026. Each procurement process by QCBS or IOCT may normally take six to eight months from issuing the Specific Procurement Notice (SPN)/Tender Document/Request for Expression of Interests, to the contract award.
- (d) **Financial Management Arrangements:** Baku Metro will be responsible for the overall Project financial management (PFM) and disbursements. The cash-based accounting system will be followed for Project accounting. Baku Metro will maintain Project accounts and have custody of supporting documents. The Project's financial progress will be reported quarterly in Interim Unaudited Financial Reports (IUFs), submitted within 45 days after the end of each quarter.
- (e) **ES Arrangement.** Contractors will implement ES mitigation measures within their scope and maintain relevant records. The Supervision Consultant will conduct regular ES supervision and inspections, providing necessary guidance. The PIU's ES staff will oversee implementation, ensure compliance with ES requirements, hold monthly coordination meetings with the Consultant, and contractor and prepare semi-annual ES monitoring reports for submission to Baku Metro, AIIB, and relevant authorities. To strengthen ES management, the Project will promptly recruit one Social Safeguard Officer and one Environmental Safeguard Officer to support the PIU. The Design and Supervision Consultant will include ES specialists, and contractors must ensure sufficient ES capacity. Capacity-building initiatives, including ES training, will be provided to all implementation stakeholders.
- (f) **Project Operations Manual (POM):** To ensure effective monitoring and reporting, Baku Metro is expected to develop a POM in consultation with and to the satisfaction of AIIB, which will be a condition for loan effectiveness. The POM will provide comprehensive guidance on the respective roles, responsibilities, and coordination between the PIU and other relevant stakeholders to cover the entire Program cycle. It will make concise and effective references to applicable AIIB policies, frameworks, and requirements.

4.9.2 **Implementation period.** The Project targeted completion date is Dec. 31, 2029.

### 4.9.3 Implementation readiness

(a) Status of feasibility studies, procurement, and land acquisition:

- (1) **State Program 2025-2030.** The Project is part of the State Program on the Improvement of Transport Infrastructure in Baku City and Surrounding Areas 2025-2030, officially approved on Jan. 30, 2025. It establishes the strategic priority of metro expansion to enhance citywide connectivity and accessibility while supporting Azerbaijan's sustainable development objectives and greenhouse gas reduction targets.
- (2) Onboarding of the three key PIU specialists: The three specialists have been identified, and their appointment is targeted to be completed in February 2026. Availability of PIU resources and ToRs to the satisfaction of AIIB shall be included as a covenant for effectiveness.
- (3) **Demand analysis** was carried out and augmented by the granular data from the “Digital Twin” of mobility in the city, which is a detailed simulation of traffic flows and passenger demand performed by the Boston Consulting Group (BCG). The modelling also assessed alternatives to the proposed line design and subsequently selected the chosen “with-project” scenario as the optimal expansion. Based on this comprehensive digital twin simulation of the urban mobility patterns in Baku, MDDT and Baku Metro completed an assessment of the priority actions. These represent the components of the Project.
- (4) **Technical designs** of the depots, tunneling, and stations are being developed through a collaboration between the Baku Metro Design Institute and an international consultancy firm from Türkiye, combining deep knowledge of the existing network and operational needs with Türkiye’s leading experience in similar projects. Baku Metro initially completed the preliminary designs for the two depots. Furthermore, Baku Metro entered into negotiations with Istanbul Metro Advisory Services to undertake the review of the Preliminary Design, Final Design, and Tender Documents. The PIU shared the ToR with the PT on Oct. 6, 2025, with adequate scope and resources. The agreement was concluded in November 2025.
- (5) **Environmental and Social Assessment and Management.** For the Government’s Program, covering Phase I and informing Phase II preparations, five ES frameworks (Environmental and Social Management Planning Framework, Stakeholder Engagement Plan, Labor Management Procedure, Land Acquisition and Resettlement Planning Framework, and Gender Framework) were drafted and shared with AIIB in October 2025 by Baku Metro for review. The final ES Framework documents were disclosed on Baku Metro’s and AIIB websites on Dec. 5, 2025, together with the Phase I-specific specific Environmental and Social Management Plan (ESMP) for the depots. The Gender Action Plan (GAP) for Phase I was finalized and will be publicly disclosed on Baku Metro’s website by Jan. 16, 2026. The Environmental and Social Due Diligence (ESDD) for the ES risks and impacts of the 10 existing stations was completed prior to the Loan Negotiations, ensuring that any required ES actions for the stations are appropriately reflected in the Legal Agreements. The Environmental and Social Management Planning Framework for the Program

has comprehensive provisions on ES assessment and management for all AIIB-financed components, including the 10 stations. The PIU will manage the ES aspects of the Program, including ES planning, implementation, and monitoring.

- (6) **Design Review and Construction Supervision.** The ToR for the Design Review and Construction Supervision Consultant for the Project is at a very advanced stage. AIIB has conducted multiple rounds of reviews and revisions on the ToR, which will then be finalized by Baku Metro. It is expected that the consultant will be mobilized in Q3/2026. The target date for the launch of the procurement procedure for the Design Review and Construction Supervision contract is the end of Jan. 2026.
- (7) **Tender Document.** The Tender documents with the final design for the Darnagul and Khojasan works, respectively are being reviewed by Baku Metro and Istanbul Metro Advisory Services. Their issuance is expected in Q2/2026.
- (8) The POM covers multiple areas. The Project Procurement Manual, covering the Project procurement procedures, has been completed. The rest of the POM is expected to be completed by the end of Q1/2026.
- (b) Required clearances/approvals for Project implementation: **Project budget approvals.** Annual budgets will be prepared for each Project component, detailing estimated costs and required permits. This financial planning ensures efficient resource allocation and supports timely Project delivery. Budgets will be approved by the CEO of Baku Metro, the Supervisory Board, and the MoF. However, the new Supervisory Board of Baku Metro is yet to be established. Until this is completed, AZCON and the MoF will approve the budget.

4.9.4 **Monitoring and Evaluation.** The Baku Metro PIU will be responsible for monitoring the Project's progress and performance, following the results indicators outlined in the RMF. Monitoring findings will be consolidated into progress reports to be submitted to AIIB (Table 2). The POM will define the specific monitoring responsibilities, coordination arrangements, and reporting protocols, ensuring transparency and accountability throughout implementation.

**Table 2. Reporting Requirements**

No.	Report	Frequency
1	<p><b>Project progress reports</b>, including:</p> <ul style="list-style-type: none"> <li>- Progress achieved by output as measured through the indicators' performance targets in the RMF.</li> <li>- Key implementation issues and solutions.</li> <li>- Updated implementation plan for the next six months.</li> <li>- ES section summarizing ES performance and compliance, including implementation of ES mitigation measures, stakeholders' engagement activities, grievances and incidents, actions taken for resolution, key findings, corrective actions, and recommendations for future improvements.</li> </ul>	Semi-annual

No.	Report	Frequency
2	<b>Interim Unaudited Project Financial Report</b> including: <ul style="list-style-type: none"> <li>- Clear tracking of funding received, and its uses, and financial progress.</li> <li>- Breakdown of project expenditures by project activities and disbursements by sources of finance.</li> <li>- Identification of variances from the approved budget.</li> <li>- Key financial statements specific to the Project.</li> </ul>	Semi-annual
3	<b>Project's Audited Financial Statements</b> Annual Project financial statements will need to be audited by an external auditor. The external auditor will conduct the Project audit based on International Standards on Auditing and in line with the ToR agreed with AIIB. The audit reports, including the audit opinion, audited project financial statements, and Management Letter (letter on internal control weakness), will be provided to AIIB within six months after the end of each fiscal year. The audit reports, excluding the Management Letter, will be publicly disclosed by the client.	Annual
4	<b>Project's Completion Report</b> The Project Completion Report evaluates a Project's full cycle, measuring how well it met objectives and its overall impact. It reviews timeline, budget, and major design changes, as well as FM and ES safeguards. The report assesses sustainability, highlights key achievements, notes areas for improvement, and captures lessons learned for future projects. Borrower feedback is included to provide insight into their experience and outcomes.	End of the Project

**4.9.5 Mid-term Review.** A mid-term review will be conducted once 50% of the loan amount has been disbursed, or within two years of loan effectiveness, whichever occurs earlier, to assess implementation progress, evaluate the performance of Baku Metro's PIU, and verify alignment with AIIB's policies and operational requirements. The review will focus on contract progress, ES risk management (performance, compliance, and effectiveness), disbursement efficiency, and overall monitoring of the Project's objectives. Lessons learned during the first implementation phase will inform any necessary adjustments to the POM and institutional arrangements for the remainder of the implementation period.

**4.9.6 AIIB's Implementation Support.** AIIB will conduct supervision and implementation support missions twice a year, and periodic technical review visits to provide necessary implementation support at various Project stages. Implementation support is envisaged to be financed through the loan by contracting individual consultants and/or consulting firm/s. Most of the implementation support is expected to be primarily financed from the loan. Additional tailored implementation and capacity building support is currently under discussion with the China International Development Cooperation Agency (CIDCA).

## 5. Project Assessment

### A. Technical

5.1 **Project Design.** The Baku Metro Expansion Program has been the subject of multiple comprehensive assessments. These include the preparation of the following: (a) the conceptual development scheme of the Baku Metro lines, (b) the Action Plan for the implementation of the State Program on the development of Baku Metro in 2011-2015, and (c) the general plan of Baku City (2020–2040). In 2023, MDDT conducted a prioritization assessment, using the existing approved metro development plans as the basis for developing a rational, realistic metro development plan aligned with key mobility demand trends. Four key development directions were formulated after analyzing the current demand for the movement of people in the city of Baku:

- (a) Connect the flow from Sumgait/Khirdalan to the center of Baku.
- (b) Provide a short route from the eastern residential areas (e.g., Khatai) to the business part of the city, without overloading the Red Line.
- (c) Optimally connect populated remote western areas (Bailovo, Badamdar).
- (d) Shorten the route to the center for residents of the northern urban and suburban areas (e.g., Binagadi, M.E. Rasulzade).

5.2 Development priorities and key strategic forks have been defined, and non-priority areas for the next ten years have been deprioritized. The highest priority actions were defined as the minimum required development plan, included in all other scenarios as follows:

- (a) Network expansion:
  - (1) Extension of the Green Line from the station "Khatai" to the station "H. Aslanov."
  - (2) Extension of the Purple Line from the station "November 8" to Babek Avenue.
- (b) Addressing operational bottlenecks:
  - (1) Separation of the Red and Green Lines at the May 28 Station.
  - (2) Completion of construction and equipment of 2 depots: "Darnagul" (Green Line) and "Khojasan" (Purple Line).
  - (3) Construction of a reversible dead end behind the station "Icherisheher" to reduce the interval on the Red Line.

Table 3 summarizes the risks associated with the Darnagul and Khojasan depots, illustrating the need to complete their construction.

**Table 3. Depots-associated Risks**

Lack of power for issuing trains to the line	Lack of space for placement and repair of wagons
When leaving the Narimanov depot, trains pass through a dangerous section at a speed of 20 kilometers per hour (kph).	There is a place in the Narimanov depot to accommodate ~30 trains, i.e., ~20 trains have to be left at stations overnight.
The time to complete the section is at least 1:40 mins, only five seconds more than the target interval of 1:45 min (34 pairs), which will create disruptions in the schedule.	Due to the renovation of the station "Kh. Aslanov" and the installation of a lathe in the "Narimanov" depot, there will be no room for another 12 trains.

The Khojasan depot has been partially built; if the number of trains increases, difficulties will arise with issuing trains.	At the Khojasan depot, when the Purple Line is expanded, there will be a lack of space for repairs and overnight storage of trains.
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### 5.3 The Project focuses on the Darnagul and Khojasan Depots and the enhancement of the existing stations on the Green Line:

- (a) **Darnagul Depot Site.** The Project aims to develop a train maintenance depot that meets operational needs and allows trains to return to the rail line. This includes axle adjustments, equipment verification, diagnostics, and overnight train accommodation. The depot will be accessed via two parallel tunnels, located 1,700 meters (m) from the Azadlig metro station and 1,300 m from the Darnagul metro station. The Depot master plan includes a depot repair building, administrative and residential facilities, a locomotive maintenance shop, water reservoirs, a sewage pump house, and other essential workshops and areas. It will feature two sections: one for routine inspection and another for daily repair activities. Construction is expected to utilize a monolithic reinforced concrete frame and slab foundation, with equipment such as cranes and excavators. Water pipelines and sewage systems will need to be relocated in accordance with the agreement with "Azersu" OJSC. Sufficient space is available within the Baku Metro-owned land plot for depot construction. The estimated construction duration is 1.5 years, with around 100 employees engaged in operations. Soil disposal permission has been granted for the excess soil. In the future, include developing an underground pedestrian crossing and rehabilitating green spaces post-construction. A no-project alternative evaluation has also been conducted.
- (b) **Khojasan Depot Site.** On Dec. 23, 2022, the Khojasan Electric Depot and the Khojasan Station were put into operation. It serves the Purple Line of the Baku Metro and is situated in a semi-urban area, fenced by the Baku Metro. It serves as train storage with capacity for over 30 trains and includes a maintenance hall for heavy repairs (jacks and cranes) and workshops for light maintenance (wheel lathe, brake testing, and HVAC system inspections and repairs). The site also has a control tower integrated with Baku Metro's system, energy systems, and an operational base that supports metro line extensions. The plan is to construct new energy-efficient depot buildings and stabling yards equipped with maintenance technologies and integrated within the Purple Line infrastructure to support the extension of the Purple Line to Babek Avenue and accommodate servicing the additional 35 trains.

5.4 The depots are critical enablers of the Baku Metro Expansion Program, serving as the backbone for operational reliability, safety and scalability. They ensure sufficient stabling capacity for the expanded fleet, facilitate efficient maintenance and enhance flexibility in train scheduling and deployment. This is particularly vital given the severe overcapacity at the Narimanov Depot, which was originally designed for 160 cars but is currently operating at nearly double its intended capacity. This congestion not only compromises safety and maintenance standards but also restricts the integration of new rolling stock and advanced control systems. The construction and modernization of the Darnagul and Khojasan depots under Phase I directly address these constraints. These facilities are designed to accommodate the projected fleet expansion from 321 to 631 cars over the next five to seven years, supporting the operational demands of the Green Line extension (Phase II) and the

rolling stock modernization (Phase III). In parallel, the ADB-financed Purple Line expansion further underscores the need for robust depot infrastructure to ensure system-wide reliability. By preventing bottlenecks and overcrowding, the depots mitigate the risk of service disruptions across the expanded network. Their strategic role is indispensable to sustaining high-frequency, safe, and reliable metro operations, while also enabling the separation of the Red and Green Lines at the May 28 Station—a pivotal move to unlock core network capacity. The depots thus transform operational capacity into strategic momentum, anchoring the Program's long-term commitment to sustainable urban mobility.

**5.5 Enhancement of existing stations along the Green Line.** Baku Metro has requested the inclusion of ES, safety, and climate resilience upgrades for 10 existing stations on the Green Line within the scope of the Project. This strategic addition reflects the organization's commitment to enhancing operational sustainability and passenger safety across the existing network. To support this initiative, a consulting firm will be contracted in accordance with AIIB's procurement framework and policies. The engagement will be financed from the Project loan and will focus on conducting diagnostics and scoping of the proposed interventions. To support these activities, the ESDD consultant is carrying out ES screening based on rapid site visits, stakeholder consultations, and high-level assessments of ES risks, impacts, and potential benefits for each station. The ESDD consultant will also provide guidance on the type and scope of ES documentation required for each type of intervention, ensuring alignment with AIIB's Environmental and Social Framework (ESF, 2024). The ESDD has been completed before the loan negotiation for the Project, and the ES instruments have been disclosed on the website of Baku Metro and AIIB on Dec. 5, 2025.

**5.6 Phase II focuses on the extension of the Green Line from Khatai to Hazi Aslanov.** Phase II of the Program is designed to expand the Baku Metro system's connectivity and capacity by extending the Green Line from Khatai Station to Hazi Aslanov Station. This extension includes: Four new stations along the corridor (Y14-Y17) and approximately 8.6 km of tunnel boring machine (TBM). The extension is integral to the development of the Baku White City urban transformation plan, which will enable turning the historical Black City in Baku into a new residential urban space, aligning closely with Baku's Master Plan (2020–2040). The Green Line expansion will connect the White City's new residential area with the city center.

**5.7 Technical designs** of the depots and the ES, safety, and climate resilience enhancement of the existing stations on the Green Line are subject to close collaboration between the Baku Metro Design Institute and a leading engineering firm from Türkiye with extensive experience in Metro infrastructure, which has been specifically mandated to review and enhance the initial designs prepared by the Baku Metro Design Institute. The technical designs are prioritizing the implementation of green building principles, aligned with international sustainability benchmarks, cost efficiency in both construction and long-term maintenance; universal accessibility, ensuring full compliance with standards for passengers with disabilities; integration with existing metro lines and other modes of transport; environmentally and culturally sensitive architecture, respecting Baku's urban heritage; safety during both construction and operation phases; and minimization of land acquisition and expropriation needs. Baku Metro has also agreed to establish and mobilize an advisory panel to review the design further and provide a technical report on the necessary enhancements to align with international best practices and AIIB requirements. Baku Metro entered into

negotiations with Istanbul Metro Advisory Services to carry out the review services. The PIU shared the ToR with the PT on Oct. 6, 2025, with adequate scope and resources. The agreement was concluded in November 2025.

**5.8 Operational Sustainability.** Baku Metro’s ability to ensure the long-term operation and maintenance of the upgraded depot facilities, lines, stations, and rolling stock is supported by its institutional framework, operating under the MDDT and as part of AZCON, with guaranteed public funding for urban rail systems. The operational expenditures (including personnel, energy, spare parts, and preventive maintenance) will be covered through Baku Metro's annual budgetary allocations, which consistently include provisions for lines, rolling stock maintenance, and depot operations. Furthermore, the Project's Economic Analysis incorporates corporate revenues from operations, the main cost-recovery mechanism. With a defined capital investment program and clear maintenance protocols across its operational zones, Baku Metro possesses the institutional capacity to effectively manage the modernized facilities, ensuring the Project's technical reliability and financial viability throughout its operational lifecycle. Comprehensive details of Baku Metro's funding sources, along with their alignment with Azerbaijan's evolving urban transport regulatory framework, were presented during the Appraisal phase.

## **B. Economic and Financial Analysis**

**5.9 Economic Analysis.** Although Phase I remains the scope of AIIB financing at this stage, the economic analysis evaluates the full Government Program as the costs and benefits are inherently system-wide. This approach is expected to provide a more accurate and meaningful assessment. The economic viability of the Program is assessed using a preliminary CBA by comparing the with- and without-project scenarios. The evaluation covers 30 years of Project economic life from 2026 to 2055, including five years of construction for the metro expansion, from 2026 to 2030, and 25 years of operation, from 2031 to 2055. The analysis was developed by incorporating findings from the “Digital Twin” of the city prepared for Baku Metro, which provides detailed data for the demand analysis. While the CBA covers the full Program to reflect system-wide benefits, only Phase I is under AIIB financing and approval at this stage; subsequent phases remain subject to separate appraisals and approvals.

**5.10** The economic costs of the Program include the capital cost of the infrastructure and rolling stock, electrification and signaling, and telecommunications. The general operations and maintenance (O&M) cost of the metro system is also considered. A standard conversion factor of 0.93 was used to derive the economic value of the costs.

**5.11** The quantifiable economic benefits comprise passenger time value of travel (VOT) savings, vehicle operating cost (VOC) savings, reductions in GHG emissions, producer surplus from fare revenue, and externalities savings. The largest share of benefits comes from VOT savings, driven mainly by modal shifts and improved metro connections, followed closely by VOC savings from fewer vehicles on the road.

**5.12** Transport demand forecasts are estimated using a regression model with real GDP as the key explanatory variable, and the coefficient of interest represents demand elasticity with respect to output. Modal shift was modelled by considering relative travel times across modes.

The client provided the average trip time across modes, including for the metro with and without the project.

5.13 This analysis considers the overall Program as economically viable, with the economic internal rate of return (EIRR) and economic net present value (ENPV) estimated to be 12.99% (above the 9% social discount rate) and USD1,135 million, respectively. A sensitivity analysis has also been conducted by (a) increasing costs by up to 15%, (b) decreasing benefits by up to 15%, and (c) combining the increase in costs and decrease in benefits. In all scenarios, the Program is still economically viable. Delaying the construction time by a year also does not affect the Program's viability.

5.14 Additionally, the Project's cost-effectiveness is considered at this stage. Since there are no major benefits from the depots themselves, a qualitative approach is used. Specifically, the current conceptual design of the depots represents the option with the fewest requirements: both in terms of land acquisition and resettlement. In fact, the alternative options—entailing a different technological arrangement would have required additional land. This highlights the optimality of the current design.

5.15 **Financial Analysis.** The Project's financial viability is assessed in terms of fiscal sustainability, budgetary impact, and the Project Implementing Entity's (PIE) capacity to manage and operate the investment, rather than through revenue generation or cost recovery. Baku Metro has a well-established budgeting process and will finance O&M costs through annual public budget allocations.

5.16 Based on 2027 financial projections, the metro system under the Program begins to generate sufficient farebox and other revenues (including advertising) to cover all O&M costs. Moreover, Baku Metro is projected to stop receiving budgetary support for its operating expenses from 2031, when the large CapEx program is completed, and it begins generating positive free cash flow. The support amount has historically varied year over year but is anchored to projected passenger volume. Moreover, by directly borrowing the Project debt, the Government of Azerbaijan effectively guarantees to make the payments, therefore contributing to the financial sustainability of the operation, as the government will only contribute 19% of the total project cost via state funding. During the projected period (until year-end 2055), using a weighted average cost of capital (WACC) of 6.9%, the Financial Net Present Value (FNPV) is estimated to be -USD1.6 billion, and the Financial Internal Rate of Return (FIRR) is estimated at -8.9%. This result is not unusual for capital-intensive public-sector projects such as rail-based mass transit, and it supports the view that public financing is the appropriate vehicle for the Project. The high EIRR (12.99%) illustrates its potential spillover effects.

## **C. Fiduciary and Governance**

5.17 **Procurement capacity assessment.** Baku Metro is a company that was founded pursuant to Decree No. 289 of the President of the Republic of Azerbaijan on Feb. 27, 2014, as a legal successor to Baku Metro and Azertunelmetrotikinti Joint Stock Company. The company is currently operating three lines with 27 stations and a total length of 40.66 km. The PIU has been established under Baku Metro, which is responsible for procurement and contract management of the proposed Project. The PT conducted assessments of the Baku

Metro and the PIU during both the Concept and Appraisal missions to identify potential procurement-related risks associated with the proposed Project.

5.18 The findings of the assessment and potential risks include:

- (a) Although Baku Metro has constructed three metro lines, including the recent Purple Line, which opened in 2016 (the first two stations) and 2022 (the third station on the extension), it has not undertaken any MDB-financed projects. Baku Metro may not be familiar with AIIB's procedures and requirements, which could lead to delays in the procurement process and contract implementation.
- (b) The PIU Director, hired from the Railway Company, has extensive project and procurement experience with MDB-financed projects, including those with the World Bank. However, the other staff in the Baku Metro and PIU do not have prior MDB project experience.
- (c) There are currently no full-time procurement specialists and only a few staff in the PIU, who may not have sufficient capacity to support the preparation and implementation of such a large and complex project efficiently and in compliance with high standards.

5.19 Proposed **mitigation measures**. To mitigate these potential risks, the following measures are proposed or adopted:

- (a) The PIU prepared the Procurement Management Manual, which is part of the POM and was reviewed by AIIB, to provide guidance on procurement procedures and requirements for AIIB-financed contracts.
- (b) AIIB provided procurement training on its procurement requirements and procedures and will continue to provide such training to the PIU, including contract management throughout the Project implementation.
- (c) AIIB has developed the eight-hour Procurement e-learning Modules for the Recipients, which are now freely accessible by the Recipients through a link on the AIIB's website, at <https://learn.aiib.org/>. The PIU staff are encouraged to participate in self-paced learning courses and obtain a completion certificate upon satisfactory completion.
- (d) Additional staff or consultants, including a full-time procurement specialist, shall be mobilized soon to strengthen the PIU's capacity prior to implementation of the proposed Project.
- (e) The Design Review and Construction Supervision Consulting Firm will be engaged to support the PIU in reviewing design changes during contract implementation and to supervise construction quality, progress, and cost of the works contracts.
- (f) It is also recommended that additional staff or consultants be mobilized to strengthen the PIU's capacity prior to the implementation of the proposed Project. Based on the assessment, as the full-time procurement specialist and additional staff are still being hired at the appraisal stage, the procurement capacity-related risks for the Project remain rated "High" at the Appraisal Stage. However, the risk may be reduced subject to the mitigation measures agreed to and implemented during the preparation and implementation stages of the Project.

5.20 **Financial Management**: The final FM assessment was conducted during the Appraisal stage. The review covered the accounting system, budgeting, cash flow, financial

reporting, auditing, and internal controls at the Baku Metro. Based on the results of the FM assessment, the residual FM risk is “Medium,” and the following measures were agreed upon: (a) Baku Metro will develop an FM Manual to be a part of the POM; (b) Baku Metro will involve a few finance staff members in the Project implementation in addition to the dedicated finance person previously assigned; (c) Baku Metro will assign its current internal auditor to include the Project activities in the scope of their regular audit exercise and (d) Baku Metro’s finance team will work closely with AIIB to prepare the first IUFR and the Statement of Expenditure (SOE) before obtaining approvals from the Baku Metro management, as they have no experience dealing with the AIIB’s FM and disbursement requirements.

5.21 Baku Metro has a Finance Department (FD) staffed with almost 90 positions at different levels. Only very few positions are temporarily vacant. A deputy to the CFO was nominated as the PIU’s FM Specialist. The deputy has not been involved in the finance aspects or the work of Baku Metro for some time and is now engaged in Project preparation. Additionally, two accountants from the finance team are expected to be assigned to support the FM Specialist. The PIU finance team will work closely with the PIU Director and the CFO. Further actions are required to formalize the extended finance team’s engagement in the Project and ensure oversight of FM arrangements and segregation of duties during implementation.

5.22 Baku Metro’s finance team prepares the annual budget with the executing departments. The annual budget is approved by Baku Metro’s CEO, the Supervisory Board and the MoF. Since the new Supervisory Board of Baku Metro is currently in the process of being established, the budget will be approved by AZCON and the MoF. The budget execution is recorded in the Baku Metro’s ERP (1C accounting software), and monthly reports are generated. In addition, a note on the budget versus actual figures is prepared. Baku Metro has confirmed that a similar approach will be applied to prepare the proposed Project budget.

5.23 A POM will be prepared for the proposed Project. The FM Manual, as a part of POM, will also describe the Project’s FM arrangements, including key internal control mechanisms to be followed in the application and use of Project funds. A specific focus will be on ensuring the completeness of accounting transactions, the reliability of accounting data, the flow and accountability of funds, and the proper authorization and documentation of all Project expenditures.

5.24 Baku Metro uses the 1C ERP for its accounting, which is satisfactory for both entity and Project accounting. All purchase orders and vendor payments are run through the 1C. A separate firm is onboarded to develop configurations and perform modifications in 1C. There are daily backups of accounting records. Baku Metro confirmed that the 1C ERP will also be used for the proposed Project. According to the internal documentation retention policy, accounting records will be stored in physical form in Baku Metro for at least 10 years. Baku Metro has developed its Chart of Accounts, which will be used for the Project’s purpose with some modifications to reflect disbursement categories, Project components and sources of financing.

5.25 Baku Metro also uses the 1C ERP to produce financial reports in accordance with IFRS. The 1C ERP can support the generation of Project-specific financial reports, such as IUFR and Project Financial Statements (PFS), for presentation to AIIB and external auditors. Therefore, Baku Metro will either use information from 1C’s generated reports to complete the

spreadsheet versions (MS Excel) of IUFR and annual PFS or modify 1C to automate report generation. The format and content of IUFRs will be agreed upon after the loan signing but before its effectiveness

5.26 Baku Metro has an Internal Audit Department (IAD) with five qualified personnel, including the Head of Department, two Chief Auditors and two Auditors. The Law of the Republic of Azerbaijan sets the minimum qualification requirements for the Head of Internal Audit. The IAD reports directly to senior management and to AZCON, which exercises supervisory oversight of the Baku Metro.

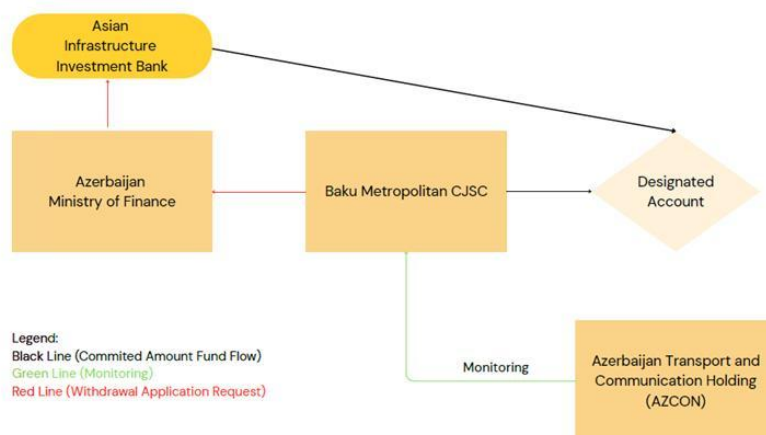
5.27 Baku Metro engaged Deloitte Azerbaijan to conduct regular independent external audits of its financial statements. Regulatory requirements mandate that the audited report be issued by July 1 each year, and the audits will be conducted in accordance with the International Standards on Auditing (ISA). Baku Metro will engage an audit firm acceptable to AIIB for the project. The firm will conduct an external audit of the Project Financial Statements (PFS) in accordance with AIIB-approved ToRs and ISAs. Baku Metro will furnish audited financial statements (and any accompanying Management Letter) to AIIB no later than six months after the end of each fiscal year. Baku Metro will also prepare the ToR for the external auditor for the Project and work with AIIB before the Project audits to confirm whether Deloitte Azerbaijan can still perform this role.

5.28 **Disbursements:** AIIB will handle all disbursements in accordance with its disbursement procedures. Disbursements will be transaction-based and comprise the advance, direct payment, and reimbursement methods for retrodirective financing. The PIU will prepare the withdrawal applications, supported by the requisite documentation, and submit them to the MoF for approval before submitting them to AIIB for review and disbursement processing. Under the advance payment method, the PIU will work with AIIB on the documentation on a quarterly basis. The designated account will be established and maintained by Baku Metro, thereby ensuring direct accountability at the Project implementation level. The threshold of the direct payment method and the ceiling of the designated account will be detailed in the disbursement letter and finalized during negotiation.

5.29 Eligible expenditures incurred and paid 12 months prior to the loan signing date, that meet procurement requirements and are included in the project description, can be claimed from AIIB as retroactive financing. This will be restricted to 20% of the amount committed.

5.30 A financial management specialist from Baku Metro will work with AIIB on the onboarding process to the AIIB Client Portal (ACP). Accounts in ACP will be assigned to Baku Metro and the MoF, as specified in the authorized signatory letter. Disbursement requests will then be submitted through ACP (Figure 4).

**Figure 4. Funds Flow**



5.31 **Governance and Anti-corruption:** AIIB ensures that the projects it finances are implemented in compliance with its Policy on Prohibited Practices (PPP, 2016). AIIB’s PPP applies to the Project. AIIB will closely monitor the preparation of tender documents, tender/proposal evaluation, and contract award and execution under the financing during Project implementation. AIIB reserves the right to investigate, directly or indirectly through its agents, any Prohibited Practices as defined in the PPP in relation to the Project and to take necessary measures to prevent and redress any issues in a timely manner, as appropriate.

5.32 **Cybersecurity:** Baku Metro’s strategic objective to modernize the system and optimize automation aligns with its broader goals of improving operational efficiency and enhancing passenger experience. However, this digital transformation significantly increases the system’s exposure to cyber threats. As critical infrastructure, the metro system is a potential target for attacks ranging from data breaches to disruptive and even safety-critical incidents. Recognizing this, the PT has prioritized cybersecurity as a pillar of the Project’s planning and implementation phases. To proactively manage these risks, the PT discussed the need to conduct a comprehensive cybersecurity assessment with Baku Metro during the appraisal. In September 2025, Baku Metro shared its work-in-progress on a corporate digital strategy that would cover cybersecurity, among other digitalization elements, to the satisfaction of AIIB PT.

**D. Environmental and Social**

5.33 **Environmental and Social Policy and Categorization:** The Project (Phase I) includes the construction of the Damagul and Khojasan Depots, along with related services, including preparation, construction supervision, and implementation support. Phase I also includes enhancing the ES and safety performance of 10 existing stations. AIIB’s Environmental and Social Framework (ESF, 2024) which includes the Environmental and Social Policy (ESP), the Environmental and Social Exclusion List (ESEL) and most specifically the Environmental and Social Standards (ESS) 1 on Environmental and Social Assessment and Management and the ESS 2 on Land Acquisition and Involuntary Resettlement, will apply to the Project. The two depot sites under the Project are in semi-urban areas, fully owned and demarcated by Baku Metro. Key ES risks and impacts of the Project will include construction-related disturbances such as noise, dust, and traffic disruption, though the sites do not directly adjoin residential or commercial properties. Based on the results of the ES impact assessment to date, the Project is expected to have a limited number of ES risks and impacts that are

moderate, site-specific, largely reversible, and can be managed using good practice in an operational setting. Therefore, the Project is classified as Category B for ES risks and impacts following the provisions of AIIB's ESF.

**5.34 Environmental and Social Instruments:** For the two depots (Darnagul and Khojasan) under the Project, specific interventions and locations are confirmed, and the enhancement of ES and safety performance for the 10 existing stations will be further detailed during implementation. Hence, the Project has prepared both site-specific and framework-level environmental and social instruments. These include:

- (a) **Site-specific instruments** are prepared for the two depots. The instruments include detailed ES assessments such as an Environmental and Social Management Plan (ESMP), a Labor Management Plan (LMP), and a Gender Action Plan (GAP). An Environmental and Social Action Plan (ESAP) has also been prepared for implementation. The existing Environmental Assessment (EA) for the Depots, prepared under national law, has been reviewed for alignment with AIIB's ESSs, with gaps addressed through ESMPs. Site-specific ESMPs for the depots are prepared following field surveys and meaningful consultation with the communities and other stakeholders. As no land acquisition is required for the depots and there are no known pending/legacy issues with the depot land (the land was acquired more than 10 years ago by the government), no action is required by the Project regarding land acquisition. To improve the existing 10 stations, ES Screening is underway and will be completed before the Project Loan Negotiation. Based on the ES Screening findings, specific ES instruments will be prepared alongside the detailed engineering design to ensure that construction does not commence without the corresponding ES document. Based on the results of the ES Screening, any required ES actions will be included in the Legal Agreement for Baku Metro to carry out. The ESMPF for the Project has comprehensive provisions for ES assessment and management of all AIIB-financed components, including the existing ten stations.
- (b) **Framework ES Documents** provide overarching guidance for the Project, including an Environmental and Social Management Planning Framework (ESMPF), Stakeholder Engagement Plan (SEP), Labor Management Procedure (LMP), Land Acquisition and Resettlement Planning Framework (LARPF), and Gender Framework (GF). These frameworks provide guidance for ES planning, implementation and monitoring for the entire scope of the current Project, as well as for potential future AIIB-supported follow-on project(s) and establish ES compliance requirements throughout the Project lifecycle. These frameworks are applicable to AIIB-financed components. The ES Framework documents were disclosed on both Baku Metro's and AIIB websites on Dec. 5, 2025.

**5.35** Additionally, an Associated Facilities (AF) Assessment has been conducted by an external ES Consultant engaged by the Baku Metro to identify any associated facilities linked to the Project and to determine appropriate ES management measures. The consultant's assessment concluded that there is no associated facility linked to the current Project.

**5.36 Environmental Aspects:** The Project is expected to deliver significant ES benefits, including improved urban mobility, reduced traffic congestion, and promotion of low-emission transport. However, risks during construction and operation include noise, vibration, air quality degradation, waste generation and utility disruptions. Occupational and community health and

safety and resource efficiency are also key considerations. Site visits confirmed that both depots are located in semi-urban areas, with Darnagul Depot currently used for temporary storage and featuring a pedestrian underpass that serves as a community connector. Khojasan Depot includes an operational station and maintenance facility, with available land for expansion. Though surrounded by residential and commercial establishments, neither site directly abuts adjacent structures, and sufficient space exists within Baku Metro's landholdings for construction.

5.37 Project risks, while moderate and site-specific, can be mitigated through standard measures. Site-specific ESMPs are developed, alongside stakeholder consultations with residents, businesses and underpass users. The assessment conducted by an independent ES consultant using site-specific and framework ES instruments, such as the ESMPs and ESMPF, provides information on ES baseline conditions, risks and impacts, and mitigation strategies and measures related to the Project.

5.38 **Social Aspects:** The Project will generate substantial social benefits to the project communities, including: (a) enhanced mobility with improved accessibility and reduced travel times, (b) universal access with International Good Practices-compliant station designs<sup>12</sup> meeting AIIB's Inclusion Standards and (c) economic growth with strengthened connections to commercial/cultural centers. While the benefits are clear, the Program and Project (Phase I) may carry certain risks, especially during construction, such as (a) labor risks: occupational health/safety hazards, (b) safe tunnels and buildings designs, (c) land acquisition and resettlement and income/livelihood impacts, (d) stakeholder engagement: inadequate community engagement, (e) displacement: physical/economic displacement risks and (f) gender-related risks.

5.39 The ES consultant has also assessed Baku Metro's social risk management systems. Baku Metro will be responsible for establishing a Project-specific Environmental and Social Management System (ESMS), appropriate to scale and characteristics of the Project and commensurate with the level of its ES impacts and issues in line with the Good International Industry Practice (GIIP).

5.40 **Occupational Health and Safety, Labor and Employment Conditions:** The Project poses OHS risks, particularly during construction activities, involving excavation, heavy machinery and confined-space work. Potential hazards include accidents, exposure to hazardous materials, and noise-related health impacts. Compliance with national labor laws and international standards will be ensured, covering: (a) safe working conditions with gender-adaptive personal protective equipment (PPE), (b) regular OHS training and (c) emergency protocols. Labor management practices will emphasize (a) non-discrimination and equal opportunity and (b) protection of workers' rights, including those of migrant and subcontracted labor. The ESMPs and other ES assessments have evaluation related to OHS risks/impacts and labor conditions and identified relevant mitigation measures for implementation. The ToR of the Construction Supervision Consultant has been strengthened with AIIB PT's support to

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<sup>12</sup> Or equivalent universal station designs.

comprehensively cover OHS responsibilities and to empower its role in verifying the contractor's compliance with the approved safety methodology.

**5.41 Stakeholder Engagement, Consultation and Information Disclosure:** The stakeholder engagement involves multiple actors, including public institutions such as the MDDT, Ministry of Environment and Natural Resources (MENR) and AYNA, along with maintenance personnel, trade unions, private contractors, international partners, directly affected communities, transit users and the general population. Stakeholder consultations have been carried out during the preparation of the Project. Stakeholder engagements are a continuous process and will be conducted by the Project implementers to (a) systematically consult on all potential impacts and risks, (b) ensure transparent disclosure of project information and (c) accommodate each group's preferred communication methods. All stakeholder feedback and concerns will be formally recorded and incorporated into (a) project policies and regulatory frameworks, (b) environmental and social management instruments and (c) ongoing project design and implementation. The engagement process will feature (a) regular consultation rounds throughout all project phases, (b) targeted outreach to vulnerable groups and women and (c) establishment of accessible grievance mechanisms. The key framework documents, including the ESMF and SEP, will be developed through inclusive consultations with affected residents, businesses and transport users. The PIU will ensure: (a) compliance with AIIB's ESF, (b) timely disclosure of all ES documents and (c) continuous integration of stakeholder input.

**5.42 Project Grievance Redress Mechanism (GRM):** AIIB's Policy on the GRM applies to the Project. The aim of the GRM is to ensure that Project-affected Peoples (PAPs) have access to a fair review of their cases and legal remedies. The GRM shall protect both PAPs/communities and laborers from: (a) damages and violations, such as gender-related issues, in a gender-sensitive manner and (b) any negative impacts that the Project implementation may cause. During the April 2025 field mission, the PT discussed with the Baku Metro and relevant agencies the requirements for establishing and maintaining a Project-specific GRM to receive, review and respond to complaints and/or grievances of affected persons in a timely and effective manner. A GRM for the workers will also be established to manage workplace-related issues and complaints. As specified in its ToR, the ES consultant will propose the GRMs in consultation with relevant stakeholders. The GRMs will be reflected in the final Project documents and will be in place and functional after the Project approval. Baku Metro committed that dedicated staff will be allocated to manage the GRMs functionally and effectively, once established. The GRMs in English and a summary in Azerbaijani will be disclosed by Baku Metro on its website to ensure accessibility and adaptability, and in hard copy at each phase area. This documentation will also be disclosed on AIIB's website.

**5.43 ES Capacity:** Although the Baku Metro OHS Unit is responsible for occupational health and safety matters, its overall ES capacity is limited. There is currently no dedicated ES unit, nor staff with relevant expertise or skill sets in these areas. Even within OHS functions, additional capacity strengthening is needed, for example, in crowd and egress safety, tunneling hazards, emergency preparedness for underground works, and incident/accident management, response, and reporting. Accordingly, measures to enhance ES capacity are essential. These measures will include strengthening the PIU by recruiting ES consultants, ensuring the inclusion of ES specialists within the Design and Supervision Consultant team,

and requiring contractors to establish adequate ES capacity. The Project will recruit, as soon as possible, one Social Safeguard Officer and one Environmental Safeguard Officer to support the PIU in managing ES aspects. Capacity-building initiatives, including ES training, will be provided to all Project implementation stakeholders. The Project's Site-Specific and Framework ES Documents outline various measures to support this capacity enhancement. Furthermore, there is a broader institutional need within Baku Metro to strengthen ES capacity in line with international good practices and national ES regulations. In this regard, Baku Metro intends to undertake an institutional ES capacity assessment, develop an Environmental and Social Management System (ESMS), and implement capacity-building initiatives. These initiatives may include training programs, the preparation of guidance notes and tools, and the development of standardized templates for ES assessment and management aligned with international standards.

**5.44 AIIB's Project-Affected People's Mechanism (PPM):** AIIB's Policy on the Project-affected People's Mechanism (PPM) applies to the Project. The PPM has been established by 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 ESP in situations when their concerns cannot be addressed satisfactorily through the Project-level GRM and the processes of AIIB's Management. For information on AIIB's PPM, please visit <https://www.aiib.org/en/about-aiib/who-we-are/project-affected-peoples-mechanism/how-we-assist-you/index.html>. The PPM availability will be disclosed along with the ES instruments on the Baku Metro's website.

**5.45 ES Monitoring and Supervision Arrangements:** National environmental legislation requires the approvals of environmental assessments by the relevant state agency and periodic monitoring of compliance by the competent local authority. During project implementation, the contractor will be responsible for implementing all ES mitigation measures within its scope of work and for maintaining records of mitigation activities and ES compliance. Instrumental monitoring of noise, vibration and air pollution may also be required. The Supervision Consultant will conduct regular ES supervision and inspections, providing guidance and instructions as necessary. The Consultant's ES staff will inspect on-site implementation of ES instruments, verify compliance, identify corrective actions, and prepare monthly reports summarizing the Project's ES performance and adherence to applicable requirements. These reports will be submitted to the PIU for review and follow-up. The PIU's ES staff will provide overall ES oversight throughout project implementation, ensuring that mitigation measures are properly executed and all ES requirements are met. The PIU's ES staff will also hold monthly coordination meetings with the Supervision Consultant and the contractor to review ES progress, discuss non-compliance issues, and agree on necessary corrective measures. The PIU, with support from the Supervision Consultant, will monitor overall compliance, including the implementation of mitigation measures and corrective actions, and will prepare semi-annual ES monitoring reports for submission to Baku Metro, AIIB, and relevant national authorities.

## **E. Climate Change**

**5.46 Paris Alignment.** The Baku Metro Expansion Program is among the universally aligned activities supporting the Paris Agreement's mitigation goals (BB1) through its

integrated approach to sustainable urban mobility. It directly supports Azerbaijan's NDC conditional target of 40% GHG reduction by 2050 by:

- (a) Deploying energy-efficient technologies.
- (b) Implementing efficient building designs for depots/stations.
- (c) Enabling modal shift through improved metro services.

5.47 The interventions planned for the Project aim to sustain these benefits by enhancing life-cycle efficiency gains through improved maintenance systems and ensuring the operational performance of the expanded system.

5.48 During screening, the PT found that some climate hazards are likely to materially affect the Project (increased temperatures, heatwaves and water stress). The PT has conducted a detailed Climate Resilience Assessment of the Project, following AIIB's three-step methodology, to assess its alignment with the adaptation goals of the Paris Agreement (BB2). This assessment re-evaluated the climate hazards likely to materially affect the depots and developed mitigation measures, including annual tCO<sub>2</sub>e reduction targets.

5.49 The Project qualifies as 100% climate mitigation finance (USD180 million) under category 8.6. "Land-based, airborne, or waterborne vehicles transporting passengers or freight with zero or low direct emissions, or associated infrastructure" of the Joint MDB common principles. Some elements of the project also qualify as climate adaptation finance under type 1 (adapted infrastructure), with an estimated share of 15% of the EPC contract, to be determined once the EPC contract is finalized. The Project's total climate finance would be USD180 million (100% of AIIB's investment).

5.50 **Green building certificate:** The applicability of sustainability certifications, such as BREEAM or LEED (for certified depot designs), will be determined at a later stage, once the design has progressed sufficiently to assess compliance with the relevant criteria.

5.51 The PT has conducted a GHG (and other non-GHG pollutants) analysis across all Program phases to work out the climate and pollution impact. The relative emissions assessment of the Program (all three Phases) shows a reduction in GHG emissions of 184,162 tCO<sub>2</sub>e/year. The estimated GHG reduction applies to the full Baku Metro Expansion Program. Phase I qualifies as 100% climate mitigation finance as it enables this system-wide modal shift by resolving critical operational bottlenecks.

## F. Gender Aspects

### 5.52 Gender Aspects.

- (a) **The Gender Action Plan (GAP) for the Project** has been prepared by the ESDD consultant and is in its final stage of consultation with the PIE. As the Project depots are not adjacent to residential areas, community gender impacts are limited. The primary focus is therefore on the workforce, addressing: OHS for female employees, equal opportunity in hiring and compensation, and prevention of gender-based violence and sexual harassment (GBVH). Measures to manage these risks were identified through stakeholder consultations. Furthermore, the GAP is a living document; it will be updated and disclosed upon completion of the impact assessment for the 10 existing stations, if any additional gender-related risks are identified.
- (b) **A broader Program-level Gender Framework (GF)** is established to ensure consistency of the Project's GAP and subsequent Program phases. The GF institutionalizes gender-responsive design and implementation, mandating inclusive infrastructure with universal accessibility and safety-by-design principles, including step-free access, optimized lighting, visibility, and integrated emergency systems; and equitable implementation, enhancing equal employment opportunities, safe working conditions for women, GBVH prevention measures, and gender-sensitive procurement. It also addresses the need for accountability and monitoring through a robust system using gender-disaggregated data and involving local women to track efficacy and ensure continuous improvement. The GAP for Phase II will be developed in accordance with this framework, and a detailed gender impact assessment will be conducted once the Green Line design is finalized.
- (c) **Institutional Transformation and Strategic Partnership.** Gender-related efforts are amplified by the collective work of the Baku Metro, AIIB, and ADB teams. Baku Metro is undergoing a transformative journey. Supported by a top-tier international advisor, Baku Metro is integrating gender equality into its core Environmental, Social, and Governance (ESG) and Human Resources strategy. This includes increasing women's representation in leadership roles, ensuring a gender-diverse workforce at all levels, advancing equal pay, and strengthening anti-GBVH policies. AIIB will reinforce this initiative by aligning it with the best international practices and monitoring progress against agreed indicators, supported by the ESDD consultant outputs. In parallel, ADB is mobilizing a consultant to carry out a low-carbon Transit-Oriented Development (TOD) assessment that will explicitly analyze the distinct mobility needs of women and men, identifying entry points for women's employment and leadership in the TOD ecosystem.

## G. Risks and Mitigants

5.53 The following table summarizes key risks and mitigation measures. Risks are rated as High (H), Medium (M), or Low (L) based on likelihood and impact. The Risks and Mitigants section (Table 5) identifies **8 distinct risks**, covering major Project lifecycle domains, across preparation and implementation phases. These are grouped under categories like technical design, land acquisition, financial management, procurement, time/cost overruns, and E&S risks. Each risk includes:

- A qualitative assessment rating (High/Medium/Low)
- One or more mitigation measures, linking mitigants to concrete actions and reflecting lessons learned from prior AIIB projects.

The PT paid particular attention to design tailored measures, identified throughout the project assessment. Risks will be reviewed semi-annually by the PIU and AIIB, with updates to Table 5 reflected in semi-annual reports.

**Table 5. Summary of Risks and Mitigating Measures**

Risk Description	Assessment (H/M/L)	Mitigation Measures
<b>Program/Project Preparation Risks</b>		
<b>Technical designs risks</b>		
<ul style="list-style-type: none"> <li>▪ Inadequate design is carried out by a consulting firm to which the design contract is directly awarded.</li> </ul>	H	<ul style="list-style-type: none"> <li>▪ Baku Metro has formally established the PIU to ensure effective oversight of the technical design quality.</li> <li>▪ Baku Metro contracted an International senior technical advisor to provide technical guidance and oversight throughout the design preparation process.</li> <li>▪ Baku Metro contracted Istanbul Metro Advisory Services to provide design review advisory support.</li> <li>▪ AZCON has mobilized its project implementation unit team to provide additional support to Baku Metro throughout the design preparation process.</li> <li>▪ The mobilization of a Design Review and Construction Supervision Consultant is envisaged prior to the contractors' access to the site. The Terms of Reference was prepared by Baku Metro, reviewed by AZCON, and received substantial support from AIIB PT.</li> </ul> <p><u>Main Responsible Entity/Risk owner:</u> Baku Metro PIU</p> <p><u>Support:</u> Istanbul Metro Advisory Services</p>
<b>Program/Project Implementation Risks</b>		
<b>Implementation capacity</b>		
<ul style="list-style-type: none"> <li>▪ Limited pool of qualified specialists available for PIU's staffing mobilization.</li> </ul>	M	<ul style="list-style-type: none"> <li>▪ The PIU's core competences, FM, ES and Procurement, have been largely secured with the identification of local qualified specialists. The finalization of their contract is expected to be completed by mid-February 2026.</li> </ul>

Risk Description	Assessment (H/M/L)	Mitigation Measures
		<ul style="list-style-type: none"> <li>▪ Online training (incl. AIIB procurement and disbursement e-learning) will be undertaken by PIU staff by end of Q1/2026.</li> <li>▪ Baku Metro plans to advertise the procurement of international specialists in line with AIIB procurement requirements, to increase the outreach beyond the national pool of specialists.</li> </ul> <p><u>Main Responsible Entity/Risk owner:</u> Baku Metro PIU</p> <p><u>Support:</u> AIIB PT</p>
<b>Land acquisition and resettlement</b>		
<p>Potential delays due to land acquisition and resettlement legacy-related aspects.</p>	M	<ul style="list-style-type: none"> <li>▪ Land acquisition and resettlement for the two depots were largely completed in 2014-2015, in accordance with the laws of Azerbaijan.</li> <li>▪ Baku Metro confirmed that there are no unresolved grievances, or ongoing livelihood, resettlement or compensation issues relating to the depot project land.</li> <li>▪ An independent ESDD consultant carried out meaningful stakeholder consultation, and no unresolved grievances were identified.</li> <li>▪ ES instruments and frameworks documents, ESMP, SEP, and LARPF, were prepared and disclosed on both the Baku Metro and AIIB's websites.</li> <li>▪ A Project GRM will be set up and any grievance will be addressed in accordance with standard practices.</li> </ul> <p><u>Main Responsible Entity/Risk owner:</u> Baku Metro PIU</p> <p><u>Support:</u> Independent ESDD Consultant</p>
<b>Financial management</b>		
<ul style="list-style-type: none"> <li>▪ The absence of a specific project FM Manual may lead to shortcomings in the application and use of Project funds.</li> <li>▪ Finance staff's limited experience with MDB's requirements may also lead to inadequate financial reporting at the initial stage.</li> </ul>	M	<ul style="list-style-type: none"> <li>▪ The proposed mitigation measures have been described in the FM paragraphs. Baku Metro will prepare a dedicated FM Manual that clearly defines roles, responsibilities, internal controls, fund flow procedures, documentation standards, and segregation of duties for AIIB-financed activities. The POM, including the FM Manual, will be completed prior to the loan effectiveness. The POM is currently at an advanced stage, and its completion is expected by</li> </ul>

Risk Description	Assessment (H/M/L)	Mitigation Measures
		<p>the end of February 2026.</p> <ul style="list-style-type: none"> <li>▪ The PIU has mobilized a full-time qualified local FM specialist with extensive experience with Baku Metro finance system. Additional international resources would be mobilized on an ad hoc basis.</li> <li>▪ E-learning modules were made available to the PIU on the AIIB disbursement system.</li> <li>▪ A component for implementation support, covering financial management, has been included in the Support component under the Supervision Consultant ToR.</li> </ul> <p><u>Main Responsible Entity/Risk owner:</u> Baku Metro PIU</p> <p><u>Support:</u> Design Review and Construction Supervision Consultant (Implementation Support component)</p>
<b>Procurement of large and complex packages</b>		
<ul style="list-style-type: none"> <li>▪ Timely processing, review and approval of procurement packages.</li> </ul>	H	<ul style="list-style-type: none"> <li>▪ The PIU Director is a qualified senior procurement specialist with experience with MDBs financing of major infrastructure projects in Azerbaijan (gained from Azerbaijan Railway Company)</li> <li>▪ The PIU has identified a qualified local senior procurement specialist and is at the final stage of contracting: expected by mid-February 2026.</li> <li>▪ The Project procurement goes through PPMS-based procurement tracker with milestone alerts.</li> <li>▪ The ToR of the Design Review and Construction Supervision consultant includes a component on procurement support.</li> </ul> <p><u>Main Responsible Entity/Risk owner:</u> Baku Metro PIU</p> <p><u>Support:</u> Design Review and Construction Supervision Consultant (Implementation Support component)</p>
<b>Time delays and cost overrun</b>		
<p>While Baku Metro operates under time pressure, cost overrun, quality and safety can come at risk and may cause implementation delays.</p>	H	<ul style="list-style-type: none"> <li>▪ AIIB Project team will continue to closely work with Baku Metro and seek solutions for mobilizing additional resources in Project Planning and Management.</li> <li>▪ While the Project is a top priority of the Republic of Azerbaijan; the institutions</li> </ul>

Risk Description	Assessment (H/M/L)	Mitigation Measures
		<p>are working well together. AIIB Project Team set up regular weekly meetings with the PIU, AZCON and MDDT and regular meetings with the technical and ES team. AIIB Procurement Specialist is working closely with PIU to troubleshoot potential challenges. All efforts are directly supported at the higher decision-making process, including the leadership of Baku Metro, MDDT, and AZCON.</p> <p><u>Main Responsible Entity/Risk owner:</u> Baku Metro PIU</p> <p><u>Support:</u> Design Review and Construction Supervision Consultant (Implementation Support component)</p>
<b>E&amp;S risks and impacts during construction and operation</b>		
<ul style="list-style-type: none"> <li>▪ There are capacity constraints that pose challenges in ensuring the effective and timely application of environmental and social (E&amp;S) policies, requirements, mitigation measures, and monitoring for each intervention—particularly during project preparation and implementation.</li> </ul>	M	<ul style="list-style-type: none"> <li>▪ To address this, the PIE hired an ESDD consultant to support project preparation. In addition, the Project will allocate resources for E&amp;S capacity strengthening, based on the capacity assessment conducted during preparation. AIIB staff will provide guidance, as well as supervision and monitoring, to ensure compliance and effective implementation.</li> </ul> <p><u>Main Responsible Entity/Risk owner:</u> Baku Metro PIU</p> <p><u>Support:</u> Independent ESDD Consultant</p>

## Annex 1: Results Monitoring Framework

### 1. RMF for the Project (Phase I)

<b>Project Objective (PO):</b>	The objective of Phase I is to improve service reliability, maintenance efficiency and operational safety of Baku Metro system operations and enable future expansion of the metro system through the construction and equipping of the Darnagul and Khojasan depots and enhancement of targeted station safety, environmental and social performance.							
Indicator Name	Unit of measure	Base-line Data 2025	Cumulative Target Values			End Target 2029	Data source (Baku Metro data) / Methodology	Responsibility
			2026	2027	2028			
<b>Project Objective Indicators:</b>								
1. Reliability: Mean Kilometers Between Failure (MKBF)	kilometer (km)	25,000	-	-	-	35,000	Maintenance logs / average distance travelled by train before a failure	Baku Metro
2. Availability: Fleet Availability Rate	%	68	-	-	-	> 80	Operational logs / % of scheduled trains fit for service on any given day	Baku Metro
3. Maintainability: Mean Time to Repair (MTTR)	hour	8	-	-	-	6	Repair logs / average time required to repair or restore a train to full operational condition.	Baku Metro
4. Safety: Lost Time Injury Frequency Rate (LTIFR)	%	8	-	-	-	< 3.0	H&S records / the number of lost time injuries per million hours worked	Baku Metro
<b>Intermediate Results Indicators:</b>								
1. Construction physical progress	%	0	20	50	80	100	Contractor and Construction Supervision progress reports Annually	Baku Metro
2. Additional Depots put in service	number	-	-	-	-	2	Annually	Baku Metro

<b>Project Objective (PO):</b>		<b>The objective of Phase I is to improve service reliability, maintenance efficiency and operational safety of Baku Metro system operations and enable future expansion of the metro system through the construction and equipping of the Darnagul and Khojasan depots and enhancement of targeted station safety, environmental and social performance.</b>						
<b>Indicator Name</b>	<b>Unit of measure</b>	<b>Base-line Data 2025</b>	<b>Cumulative Target Values</b>			<b>End Target</b>	<b>Data source (Baku Metro data) / Methodology</b>	<b>Responsibility</b>
			<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>		
3. Training on compliance with Safety standards	0	0	2	2	2	6	Interim and annual reports	Baku Metro

Note: These indicators apply to Phase I; broader Program-level indicators are included in Annex 1 for the Program future phases.

2. Indicative RMF for the Program (Contextual – Not Performance Targets for Phase I)<sup>13</sup>

Broader Program Objective (PO):		The objective of the Program is to enhance the reliability, efficiency, safety, and climate performance of Baku’s metro system through sequenced investments that remove operational bottlenecks, expand system capacity, and strengthen institutional capabilities for sustainable and resilient operations.								
Indicator Name	Unit of measure	Baseline Data 2025	Cumulative Target Values					End Target 2031	Data source / Methodology	Responsibility
			2026	2027	2028	2029	2030			
<b>Project Objective Indicators:</b> (Outcome indicators measure each aspect of the PO statement and are to track progress toward the achievement of the PO)										
1. Sustainability: Annual GHG avoided due to metro ridership	tCO <sub>2</sub> eq/ year	N/A	-	-	-			150,352	To be estimated based on Avoided emissions = Baseline emissions* - Project emissions**	Baku Metro/ AYNA
2. Efficiency: Peak-Hour Train Frequency	trains per hour (minute-interval)	4.5–5 min	-	-	-	<4.5	<4.0	≤3.0 min	Average headway (minutes) between trains on each line during weekday morning peak (e.g., 7:30–9:00 AM)  Annually	Baku Metro
3.1 Accessibility: % of new stations with step-free access (elevators/lifts)	%	0	-	-	25%	50%	75%	100%	Proportion of stations equipped with elevators or ramps connecting street, concourse, and platform levels	Baku Metro

<sup>13</sup> These indicators inform future phases design and are not attributable to Phase I performance.

Broader Program Objective (PO):	The objective of the Program is to enhance the reliability, efficiency, safety, and climate performance of Baku’s metro system through sequenced investments that remove operational bottlenecks, expand system capacity, and strengthen institutional capabilities for sustainable and resilient operations.									
Indicator Name	Unit of measure	Baseline Data 2025	Cumulative Target Values					End Target 2031	Data source / Methodology	Responsibility
			2026	2027	2028	2029	2030			
3.2 Accessibility: % of new stations with tactile guidance paths	%	0	-	-	25%	50%	75%	100%	Presence of tactile paving for visually impaired passengers on platforms and circulation routes	Baku Metro
3.3 Accessibility: % of new stations with Wheelchair accessible ticket control barriers.	%	0	0	0	25%	50%	75%	100%	Percentage of new metro stations equipped with at least one wheelchair-accessible ticket control barrier per paid-area entrance	Baku Metro
<b>Intermediate Results Indicators:</b> (To measure key intermediate results under each component that are necessary for showing progress toward achieving PO. They can capture outputs or short-term outcomes.)										
1. Construction physical progress	%	0	0	10	30	55	80	100%	Contractor and Construction Supervision progress reports Annually	Baku Metro
2. Cumulative length of newly constructed metro tunnels and tracks (km) completed and handed over for commissioning	kilometer (km)	0	0	0	0	3	6	8.7	Contractor and Construction Supervision progress reports Annually	Baku Metro
3. Additional Metro station count	unit	0	0	0	1	2	3	4	Contractor and Construction	Baku Metro

<b>Broader Objective (PO):</b>	<b>Program</b>	<b>The objective of the Program is to enhance the reliability, efficiency, safety, and climate performance of Baku’s metro system through sequenced investments that remove operational bottlenecks, expand system capacity, and strengthen institutional capabilities for sustainable and resilient operations.</b>								
Indicator Name	Unit of measure	Baseline Data 2025	Cumulative Target Values					End Target 2031	Data source / Methodology	Responsibility
			2026	2027	2028	2029	2030			
									Supervision progress reports Annually	

\* Baseline emissions represent emissions from cars, buses and the existing metro under the hypothetical scenario in which the proposed AIIB-financed project interventions would not be implemented and the passenger demand would continue to be met by cars, buses and the existing metro. A sample-based survey of passengers on the upgraded metro should be conducted in 2031 to identify the mode each passenger would otherwise have used for the same trip. The survey results will inform the modal shares of cars, buses, and the existing metro under the baseline scenario. Based on modal shares, total passenger traffic in 2031, average trip distance by mode, and applicable emission factors (gCO<sub>2e</sub> per passenger-km), the baseline 2031 emissions can be estimated.

\*\* Project emissions will be estimated based on 2031 ridership for the upgraded metro, car and bus passenger traffic, average trip distance by mode, and applicable emission factors (gCO<sub>2e</sub> per passenger).

Note: These indicators inform future phases design and are not attributable to Phase I performance.

## Annex 2: Azerbaijan Country Credit Fact Sheet

1. **Background.** Azerbaijan is an upper-middle-income economy, with an income per capita of USD7,600 (around USD26,000 in purchasing power parity) and a population of 10.4 million in 2025. Oil and gas are central to Azerbaijan's economy, accounting for around 30% of gross domestic product (GDP), some 50% of fiscal revenues and more than 90% of exports. Supported by these inflows, Azerbaijan made rapid economic progress, reduced poverty and improved human development and transitioned into an upper-middle-income economy. It has built large fiscal and external buffers and invested heavily during the oil boom years. However, crude oil production and export volumes have been gradually declining since 2010, with gas production and exports only partially offsetting the contraction in oil. The continued decline in hydrocarbon reserves poses a medium-term challenge to the economy.

2. Azerbaijan's economy grew at an average annual rate of around 14% between 2002 and 2010, bolstered by high foreign direct investment in the oil sector, rising oil and gas production, and exports amid high oil prices. Growth decelerated following the great financial crisis and further declined since 2015 due to a collapse in oil prices, which led to a period of macroeconomic volatility and banking stress. Since then, macroeconomic management has generally improved, with the introduction of a fiscal rule, a gradual move toward inflation targeting and a fiscally conservative policy mindset.

3. In 2020, due to public health restrictions, the slump in oil prices and the OPEC-agreed oil production cuts, Azerbaijan's economy contracted by 4.2%. Despite only a moderate stimulus package of around 3% of GDP, the fiscal balance shifted from an 8% of GDP surplus in 2019 to an estimated 6.4% of GDP deficit in 2020, mostly due to a sharp decline in oil revenues. The transfers from the state oil fund to the budget (and its sales of foreign exchange) have increased, as envisaged in such cases.

Key Economic Indicators	2020	2021	2022	2023	2024	2025	2026	2027
Real GDP growth 1/	-4.2	5.6	4.7	1.4	4.1	3.5	2.5	2.4
Inflation (end-of-period)	2.6	12.0	14.4	2.1	4.9	5.2	4.0	4.0
Fiscal balance	-6.4	4.2	6.0	7.9	3.2	-1.3	-1.7	-2.4
Public debt	21.3	26.4	17.3	21.8	20.9	21.0	22.2	22.7
Gross public financing needs	...	...	-5.3	-0.9	1.7	2.6	2.3	2.7
Current account balance	-0.5	15.1	29.8	11.5	7.8	7.8	4.1	0.5
External debt	21.6	15.1	9.7	9.8	8.8	8.8	8.9	9.0
FX reserves (USD billion)	6.4	7.1	9.0	11.6	11.0	11.2	...	...
Exchange rate, AZB/USD 2/	1.7	1.7	1.7	1.7	1.7	1.7		

Source: IMF country report April 2025; in percent of GDP unless indicated otherwise; 2025-2027 = projections

Notes: 1/ percent change, year-on-year; most recent data from central bank; as of September 18.

4. **Recent Developments.** Following the post-pandemic rebound, growth slowed in 2023 due to low oil prices, sluggish demand from key trading partners, a slow pace of structural reforms, and limited economic diversification. However, growth picked up again in 2024, reaching 4.1%, supported by stable hydrocarbon GDP as moderate growth in gas production offset declining oil output. Inflation also rose in 2024 but remained within the central bank's

target range, with the continued Azerbaijani Manat–United States Dollar peg helping to contain imported inflationary pressures.

5. Azerbaijan has committed to reducing greenhouse gas (GHG) emissions by 35% from 1990 levels by 2030 and by 40% by 2050, which will be hard to achieve under current policies. In fact, transport emissions tripled from 2000 to 2019. Electricity generation is the second-largest source of emissions, with energy consumption heavily dependent on fossil fuels and renewable energy use relatively low. According to the World Bank, decarbonizing the economy could cumulatively cost about 3.2% of GDP over the next four decades.<sup>14</sup> The Government of Azerbaijan has recently developed a program for economic diversification focused on digital technologies, human capital and new areas of industrial exports. It also commits Azerbaijan to substantial investments toward the clean energy transition, including renewable energy, electric mobility and energy efficiency, as well as enabling reforms such as cost-reflective energy pricing.

6. **Economic Outlook and Risks.** Expectations are for a gradual recovery, even if it is weak. Growth is expected to reach around 2.5% in the medium term with continued structural decline in oil production. Uncertainty relates to the global economic environment and the trajectory of oil prices. In the longer term, Azerbaijan will need to diversify its economy to improve its growth prospects.

7. Azerbaijan's public and external debt remains sustainable. Azerbaijan has exceptionally high fiscal and external buffers accumulated during the period of high oil prices, and the government is a net creditor. Net sovereign assets are estimated at 71% of GDP vis-à-vis a very low public debt of around 20% of GDP (excluding guarantees to oil sector projects and the banking sector, totaling an additional 30% of GDP). Public debt is expected to remain stable in the near future.

8. The non-oil primary deficit narrowed in 2024 to 20.5% of non-oil GDP, down from 22.1% in 2023, driven by strong non-oil tax revenue growth. The non-oil primary balance target has been met since the fiscal rule was reintroduced in 2022. The government also increased its public debt ceiling to 30% of GDP (previously 20%).

9. In 2024, Fitch upgraded Azerbaijan's sovereign credit rating from 'BB+' to investment grade (BBB-) and has since reaffirmed it. Moody's followed in 2025, raising the rating to 'Baa3' (investment grade) while maintaining a positive outlook, citing sustained reform efforts to reduce fiscal reliance on hydrocarbon revenues. Meanwhile, in December 2024, S&P affirmed its 'BB+' rating with a stable outlook.

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<sup>14</sup> World Bank Group. 2023. [Azerbaijan: Country Climate and Development Report](#).