Transmission Infrastructure financed by the Government of Azerbaijan to connect Banka and Bilasuvar Solar Power Plants to the grid

Environmental and Social Due Diligence Report (ESDD)

DRAFT REPORT

30 January 2025

Client: Azerenerji Open Joint-Stock Company

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Table of Contents

Abbreviations

ADB	Asian Development Bank
AIIB	Asian Infrastructure Investment Bank
AZURE	Azerbaijan Scaling-up Renewable Energy Project
EBRD	European Bank of Reconstruction and Development
ESDD	Environmental and Social Due Diligence
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standard
E&S	Environmental and Social
GoA	Government of Azerbaijan
LRP	Livelihood Restoration Plan
MENR	Ministry of Environment and Natural Resources
OHL	Overhead transmission line
RAP	Resettlement Action Plan
RPF	Resettlement Policy Framework
SEA/SH	Sexual Exploitation and Abuse / Sexual Harassment
SEP	Stakeholder Engagement Plan
SPP	Solar power plants
SS	Substation
WPP	Wind power plant

Executive Summary

"Azerenerji" Open Joint Stock Company ensures the operation of the country's electric power system, coordinates the generation and transmission of electricity, centrally controlled power plants, substations, system-organizing high-voltage - 110, 220, 330, 500 kV power transmission lines and their dispatcher management tools. By applying new technologies, it organizes the increase of generation capacity and the reconstruction of high-voltage power transmission lines in the country. At the same time, it conducts energy exchange operations with foreign countries. Its shares belong to the state. The proposed Project “Azerbaijan Scaling-Up Renewable Energy Project” is expected to strengthening and development of renewable energy transmission network infrastructure in Azerbaijan.

The Project will comprise construction of a 260 km OHLs (three lines), one 500/330/10 kV substation, and installation of a 330 kV bay in Absheron substation. The Azerenerji has divided the entire renewable integration project into two phases based on priorities of the government, i.e. Phase-I (hereinafter referred as Project) – where the GoA will finance the construction of 330 KV part of 500/330/10 kV Navahi substation, connection of Bilasuvar and Banka solar power plants to the Navahi substation with 330 kV lines and to Absheron substation with 500 kV line, temporarily operating at 330 kV.

The Azerbaijan Scaling-up Renewable Energy Project (AZURE Project), which will be financed by the World Bank (WB), is a key part of the overall initiative and comprises the following:

Component 1: Absheron-Garadagh Wind IPP Connection and Transmission Network Expansion (US$168.4 million IBRD, including US$18.6 million contingencies), including following two sub-components:

(a) **Subcomponent 1.1: Connection of Absheron-Garadagh Wind IPP and 330 kV Expansion** (US$33.8 million), including new transmission lines: (i) 65 km OHL single circuit 330 kV from Absheron-Garadagh wind plant substation to Navahi substation, (ii) 19 km OHL single circuit 330 kV from Absheron Garadagh wind power plant substation to Gobu PP substation, (iii) 22 km OHL double circuit 330 kV from Navahi substation to Alat substation, and (iv) expansion of 330 kV bays at Gobu PP substation.

(b) **Subcomponent 1.2: 500 kV Expansion** (US$ 134.6 million), including (i) new transmission 235 km single circuit OHL 500 kV from Azerbaijan TPP substation to Navahi substation (ii) supply and installation of equipment for 500 kV part of Navahi (2x 500 MVA) substation (ii) expanding the 500 kV bays at Absheron and Azerbaijan TPP substations.

The solar power plants are being developed by Masdar, with funding from Asian Infrastructure Investment Bank, Asian Development Bank and the European Bank for Reconstruction and development. The GoA is financing the construction of a new substation and three new OHLs which connect to the new substation.

The environmental and social risk classification of the AZURE Project has been determined to be “substantial,” which determines how the project shall be evaluated for compliance with the WB’s Environmental and Social Framework (ESF).

The permitting of the GoA items involved the preparation of necessary documents according to the national legislation. Some, such as the Environmental and Social Scoping Report, are common with project Azure. Other documents, specifically the Environmental and Social Impact Assessment (ESIA) was prepared for the GoA items in accordance with national regulations and WB’s ESF. The ESIA has been approved by the regulatory body, the Ministry of Environment and Natural Resources, which allowed site preparation and works to commence.

The national requirements for ESIA are not fully aligned with the WB’s ESF, indicating a potential non-compliance with the WB’s requirements, at least concerning the associated facilities, and possibly the voluntarily included OHLs. Specific gaps between the approved ESIA and the requirements of the ESF are outlined in the main body of the report. These include the level of environmental baseline data, as well as the assessment of certain social impacts.

Some of the gaps in the ESIA are being addressed by the contractor’s Environmental and Social Management Plans (C-ESMP). These include additional baseline information, plans for data collection, monitoring of performance and assessment. Training in environmental and social risk management is also included in the plans. Some improvements to the C-ESMPs have been recommended in this ESDD, including the need for further details on:

- Traffic management plan
- Firewater management plan
- Noise baseline and management plan
- Air quality management plan
- Waste management plan
- Management of labor influx
- Due diligence requirements for primary suppliers

A Corrective Action Plan (CAP) has been included in this ESDD report. Addressing the items in the CAP is considered necessary to bring the OHLs under construction into compliance with the ESF. The main actions for both OHLs are:

For Banka SPP - Navahi SS:

Action	ESF Policy addressed
Contractor to provide training on Occupational Health and Safety (OHS), Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) and contents of the contractor EMPs to **all workers**	**ESS2.** Labor and Working Conditions (OHS) **ESS4.** Community Health and Safety (SEA/SH)
All workers involved to construction of the OHL to sign contractor Code of Conduct	**ESS2.** Labor and Working Conditions

	ESS4. Community Health and Safety
Contractor to assign Social Risk and Stakeholder Engagement Specialist for management of and reporting on social risks	**ESS2.** Labor and Working Conditions (contractor management) **ESS10.** Stakeholder Engagement
Contractor to ensure that worker and stakeholder mechanisms are operational, with workers and stakeholders made aware of the grievance mechanism	**ESS2.** Labor and Working Conditions (worker grievance mechanism) **ESS10.** Stakeholder Engagement (stakeholder grievance mechanism)
Contractor to conduct an assessment on the availability and identification of lodging and attendant services in its camps that will be used by the incoming workers.	**ESS4.** Community Health and Safety (labor influx)
Contractor to conduct due diligence of primary suppliers	**ESS2.** Labor and Working Conditions (primary suppliers)
Contractor to install bird flight diverters for 33 km section of the OHL along the border of Shirvan National Park	**ESS6:** Biodiversity Conservation and Sustainable Management of Living Natural Resources

For Bilasuvar SPP - Navahi SS:

Action	ESF Policy addressed
Contractor to provide training on Occupational Health and Safety (OHS), Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) and contents of the contractor EMPs to **all workers**	**ESS2.** Labor and Working Conditions (OHS) **ESS4.** Community Health and Safety (SEA/SH)
All workers involved to construction of the OHL to sign contractor Code of Conduct	**ESS2.** Labor and Working Conditions **ESS4.** Community Health and Safety
Contractor to assign Social Risk and Stakeholder Engagement Specialist for management of and reporting on social risks	**ESS2.** Labor and Working Conditions (contractor management) **ESS10.** Stakeholder Engagement
Contractor to ensure that worker and stakeholder mechanisms are operational, with workers and stakeholders made aware of the grievance mechanism	**ESS2.** Labor and Working Conditions (worker grievance mechanism) **ESS10.** Stakeholder Engagement (stakeholder grievance mechanism)

Contractor to conduct an assessment on the availability and identification of lodging and attendant services in its camps that will be used by the incoming workers.	**ESS4.** Community Health and Safety (labor influx)
Contractor to conduct due diligence of primary suppliers	**ESS2.** Labor and Working Conditions (primary suppliers)
Contractor to install bird flight diverters for 2 km section of the OHL near the Mahmudchala wetland	**ESS6:** Biodiversity Conservation and Sustainable Management of Living Natural Resources

For Azerenerji E&S Management:

Action	ESF Policy addressed
PIU to provide training to other teams within Azerenerji, such as the departments responsible for design, land acquisition and supervision in Azerenerji Design Institute, on World Bank E&S requirements applicable to the OHLs	**ESS1.** E&S Risk Management: Capacity development of the Borrower, implementing institution or agency
PIU to establish a working relationship with the Azerenerji construction management team, with authority to ensure that E&S issues are addressed under the terms of the construction contracts. This may require the PIU to engage a full-time overseer for the contract management.	**ESS1.** E&S Risk Management: Capacity development of the Borrower, implementing institution or agency
PIU to introduce a formal system of recording supervision inspections, based on checklists that can be filled in on site.	**ESS1.** E&S Risk Management: Environmental and social performance of the project

1. Introduction

The Azerbaijan Scaling-up Renewable Energy Project (AZURE Project), which will be jointly financed by the World Bank and GoA, aims to strengthen and enable renewable energy development in Azerbaijan. For this purpose, the GoA will finance the following:

a) Construction of 500/330/10 kV 2x500 MVA Navahi substation
b) Construction of 500 kV single-circuit Absheron SS - Navahi SS OHL - 65 km
c) Construction of 330 kV double-circuit Bilasuvar SPP - Navahi SS OHL - 90 km
d) Construction of 330 kV double-circuit Banka SPP - Navahi SS OHL - 80 km
e) Installation of 330 kV bay at Absheron substation

The World Bank will finance the following:

Component 1: Absheron-Garadagh Wind IPP Connection and Transmission Network Expansion (US$168.4 million IBRD, including US$18.6 million contingencies), including following two sub-components:

(a) **Subcomponent 1.1: Connection of Absheron-Garadagh Wind IPP and 330 kV Expansion** (US$33.8 million), including new transmission lines: (i) 65 km OHL single circuit 330 kV from Absheron-Garadagh wind plant substation to Navahi substation, (ii) 19 km OHL single circuit 330 kV from Absheron Garadagh wind power plant substation to Gobu PP substation, (iii) 22 km OHL double circuit 330 kV from Navahi substation to Alat substation, and (iv) expansion of 330 kV bays at Gobu PP substation.

(b) **Subcomponent 1.2: 500 kV Expansion** (US$ 134.6 million), including (i) new transmission 235 km single circuit OHL 500 kV from Azerbaijan TPP substation to Navahi substation (ii) supply and installation of equipment for 500 kV part of Navahi (2x 500 MVA) substation (ii) expanding the 500 kV bays at Absheron and Azerbaijan TPP substations.

The environmental and social risk classification of the AZURE Project has been determined to be “substantial”; the second highest of the four available categories. This classification determines how the project shall be evaluated for compliance with the World Bank’s Environmental and Social Framework (ESF).

In the Project Information Document, the potential environmental impacts during construction were identified as: (i) construction wastes; (ii) construction activities; (iii) disturbance to flora and fauna; (iv) disturbance to biodiversity assets in statutory reserves; (v) habitat loss; (vi) disruption (and possible mortality) to migratory birds (behavior and pathways); and (vii) sediment loading into wetlands. Most of these potential impacts are related to the construction phase, although item (vi) will persist into the operation phase.

The potential social risks and impacts during construction were identified as: (a) adverse impacts disadvantaged & vulnerable communities; (b) labor and working conditions; (c) community health and safety; (d) sexual exploitation and abuse / sexual harassment

(SEA/SH); (e) permanent and temporary land acquisition or easement restrictions impacting rights and livelihoods; (f) physical resettlement; (g) cultural heritage; (h) inadequate stakeholder engagement and grievance management. Most of these potential impacts are related to the construction phase.

The World Bank's Environmental and Social Standards (ESSs) and their requirements will be directly applicable to the management of environmental and social risks and impacts for the activities listed above. Due diligence and risk management planning instruments in compliance with World Bank ESSs are being prepared or will be prepared for these activities. These activities do not fall withing the scope of this Environmental and Social Due Diligence (ESDD) assignment.

The objective of this ESDD is to evaluate the degree of compliance with the ESF of selected components of the GoA funded project. These components include (i) Construction of 330 kV double-circuit Bilasuvar SPP - Navahi SS OHL - 90 km; (ii) Construction of 330 kV double-circuit Banka SPP - Navahi SS OHL - 80 km), for which compliance is required.

For these mandatory and optional components, the objectives of the ESDD are to:

i. assess the work undertaken (and planned to be undertaken) on the components against the World Bank's ESSs,

ii. identify gaps between the environmental and social (E&S) risk management work undertaken (and planned to be undertaken) and measures that will enable the components to achieve objectives materially consistent with the ESSs, and

iii. propose corrective actions to rectify gaps that are identified for the OHLs financed by the GoA.

2. Project Description

2.1 Overview

GoA's "Renewables Grid Integration Project" involves development work on the Azerbaijan national power transmission grid to prepare the grid for increased availability of energy from renewable sources, plus the construction and implementation of three renewable power generation stations. To be ready for early generation time of Masdar's 2 solar power plants (1 April 2026) the GoA decided to split the project into 2 parts and finance the following components with the application of the national procurement and environmental legislation:

a) Construction of 500/330/10 kV 2x500 MVA Navahi substation
b) Construction of 500 kV single-circuit Absheron SS - Navahi SS OHL - 65 km
c) Construction of 330 kV double-circuit Bilasuvar SPP - Navahi SS OHL - 90 km
d) Construction of 330 kV double-circuit Banka SPP - Navahi SS OHL - 80 km
e) Installation of 330 kV bay at Absheron substation

The World Bank-supported AZURE Project is a key part of this overall initiative and comprises the following:

Component 1: Absheron-Garadagh Wind IPP Connection and Transmission Network Expansion (US$168.4 million IBRD, including US$18.6 million contingencies). This component will finance the transmission infrastructure required to evacuate power from the 240 MW Absheron-Garadagh Wind Power Plant and expanding the grid to enhance reliability [1] and stability for the integration of 1.8 GW of VRE in Azerbaijan's power system.

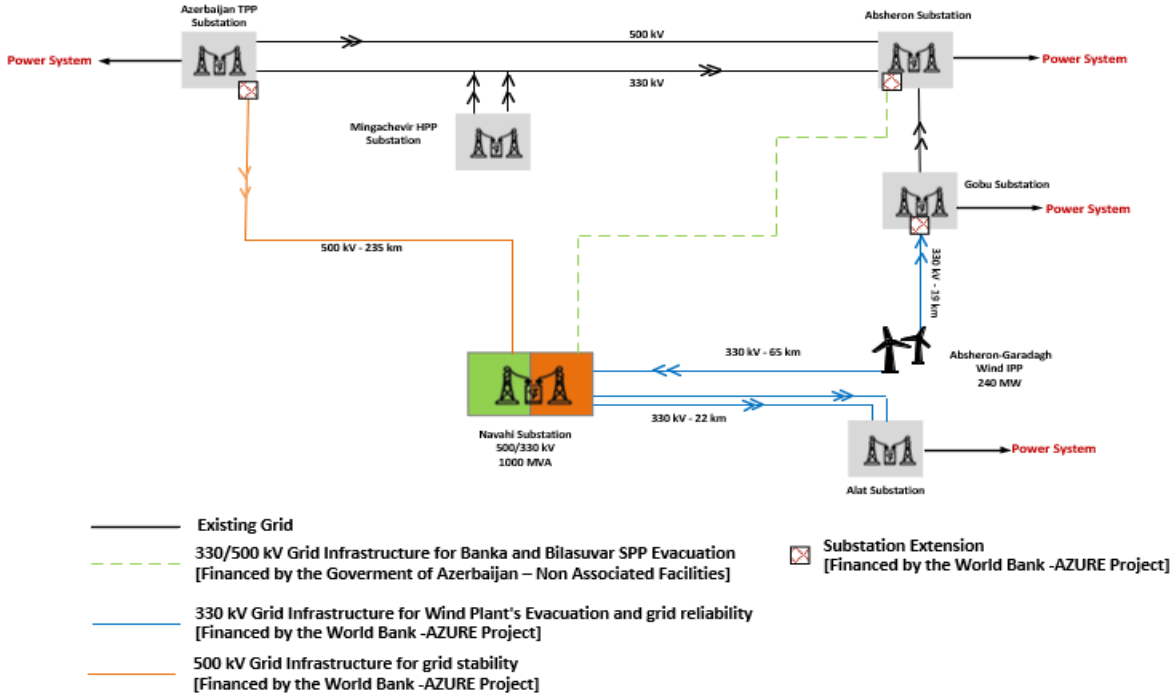
This component comprises the following (See Figure 1 below):

a. **Subcomponent 1.1: Connection of Absheron-Garadagh Wind IPP and 330 kV Expansion** (US$33.8 million), including new transmission lines: (i) 65 km OHL single circuit 330 kV from Absheron-Garadagh wind plant substation to Navahi substation, (ii) 19 km OHL single circuit 330 kV from Absheron-Garadagh wind power plant substation to Gobu PP substation, (iii) 22 km OHL double circuit 330 kV from Navahi substation to Alat substation, and (iv) expansion of 330 kV bays at Gobu PP substation.

b. **Subcomponent 1.2: 500 kV Expansion** (US$ 134.6 million), including (i) new transmission 235 km single circuit OHL 500 kV from Azerbaijan TPP substation to Navahi substation (ii) supply and installation of equipment for 500 kV part of Navahi (2x 500 MVA) substation (ii) expanding the 500 kV bays at Absheron and Azerbaijan TPP substations.

[1] Reliability describes the ability of a power system to withstand the failure or outage of a single component, such as a transmission line, transformer, or generator. In the event of an N-1 contingency, the system should continue to operate stably without triggering cascading failures or widespread outages.

Figure 1 – Infrastructure financed by the AZURE Project

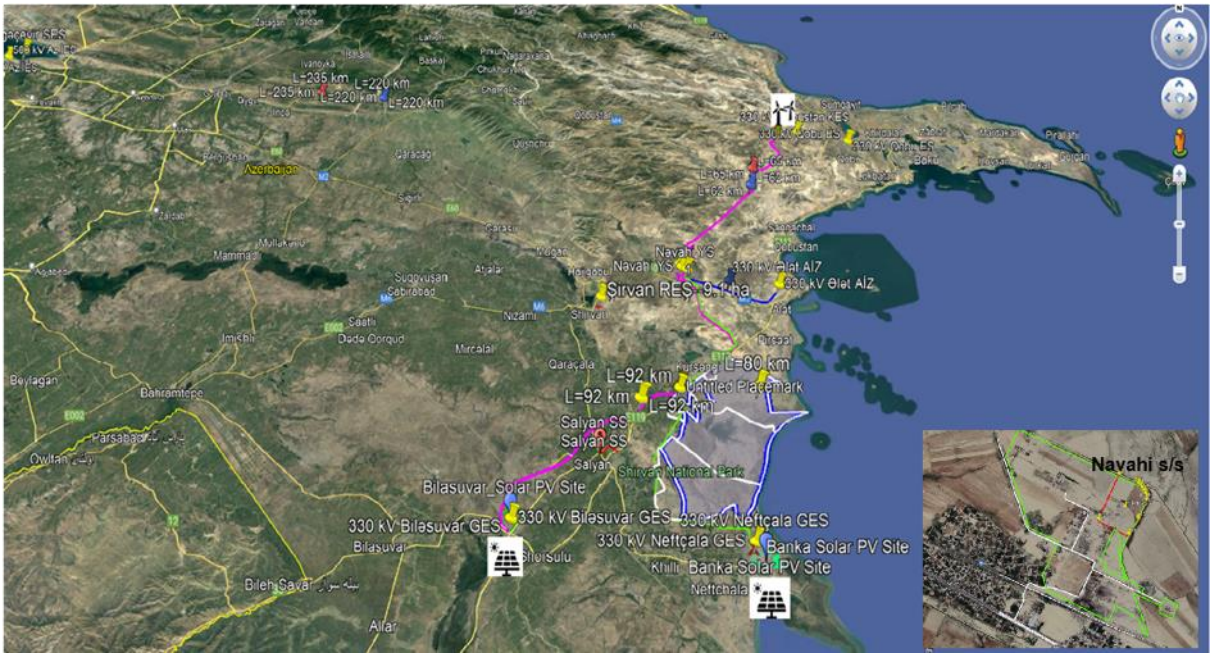


GoA, in partnership with Masdar plans to develop 1 GW of Variable Renewable Energy (VRE), including: (i) the 445 MW Bilasuvar Solar Independent Power Project (ii) the 315 MW Banka Solar IPP, and (iii) the 240 MW Absheron-Garadagh Wind IPP. To adhere to the contractual timelines of the Power Purchase Agreements (PPAs) for the two solar IPPs and expedite the implementation of the necessary connection infrastructure, the GoA will finance the minimal infrastructure required for energy evacuation from the solar IPPs during normal operations (See Figure 2 below). The planned infrastructure includes: (i) a 330 kV substation at Navahi, (ii) a 90 km double-circuit 330 kV transmission line from the Bilasuvar Solar IPP to the Navahi substation, (iii) a 80 km double-circuit 330 kV transmission line from the Banka Solar IPP to the Navahi substation, and (iv) a 65 km 500 kV transmission line from the Navahi substation to the Absheron substation.

The ESF applies to Banka SPP – Navahi SS and Bilasuvar SPP – Navahi SS. The ESDD assesses these two OHLs and proposes Corrective Action recommendations where the preparation and implementation of these OHLs are not in compliance with the ESF.

EBRD, AIIB and ADB's E&S standards apply to the Masdar components. The two new OHLs financed and managed by Azerenerji (Navahi SS-Banka solar power plant (SPP); Navahi SS-Bilasuvar SPP) are included in this ESDD's assessment and to inform the World Bank of issues that can become relevant in the World Bank-financed OHLs, but the two OHLs financed by Azerenerji are not associated facilities.

Figure 2. Map of Components



Dark purple line (going north: Navahi SS – Absheron SS – 65 km

Light purple line (going southwest): Navahi SS – Bilasuvar SPP – 90 km

Green line (going southeast): Navahi SS – Banka SPP – 80km

Absheron-Garadagh WPP

Bilasuvar SPP

Banka SPP

2.2 Infrastructure Financed by GoA

The project components that are being financed by the GoA are as follows.

- New **OHL from the Bilasuvar SPP to the Navahi SS**. This will be 330kV, double circuit with a length of 92km. The OHL mostly crosses semi-arid barren land, some of which is prone to seasonal flooding. There also some mud volcanoes near the route. The central section of approximately 30km, either side of the Kura river crossing, passes over an area of continuous agricultural fields. The Mahmudcala wetland is located several kilometres beyond the southern end of the OHL route, but some nearby low-lying land can flood, extending the wetland nearer on occasion.

- New **OHL from the Banka SPP to the Navahi SS**. This will be 330kV, double circuit with a length of 80km. The OHL mostly crosses semi-arid barren land, with several mud volcanos near the route. The central third of the route passes over an area of continuous agricultural fields. After this, the OHL joins the route of the Bilasuvar line. The first half of the route runs parallel to, and mostly outside, the

border of the Shirvan National Park and nature reserve. A short section will pass through the small territory (1.8 km, 7 towers) of the park.

2.3 AZURE Project financed by the World Bank

The project components that will be designed and installed under the AZURE Project, with World Bank funding, are as follows. Some comments are included about the sites, based on observations made by the ESDD team.

i) **Connection of Absheron-Garadagh Wind IPP and 330 kV Expansion** (US$33.8 million), including new transmission lines: (i) 65 km OHL single circuit 330 kV from Absheron-Garadagh wind plant substation to Navahi substation, (ii) 19 km OHL single circuit 330 kV from Absheron-Garadagh wind power plant substation to Gobu PP substation, (iii) 22 km OHL double circuit 330 kV from Navahi substation to Alat substation, and (iv) expansion of 330 kV bays at Gobu PP substation.

(ii) **500 kV Expansion** (US$ 134.6 million), including (i) new transmission 235 km single circuit OHL 500 kV from Azerbaijan TPP substation to Navahi substation (ii) supply and installation of equipment for 500 kV part of Navahi (2x 500 MVA) substation (ii) expanding the 500 kV bays at Absheron and Azerbaijan TPP substations.

2.4 Masdar Components

The renewable power generation facilities that will be developed by Masdar are as follows. Some comments are included about the sites, based on observations made by the ESDD team.

- **Development of a 445MW SPP near Bilasuvar**. The site is mostly semi-arid barren land. The Mahmudcala wetland is located several kilometres to the south, but some nearby low-lying land is prone to seasonal flooding, bringing the wetland nearer on occasions.

- **Development of 315MW SPP near Banka**, close to the mouth of the river Kura. The site is mostly semi-arid barren land, with fields to the north and west.

- **Development of a 240MW Absheron-Garadagh WPP**. Further details are expected to be available in April 2025. The SS has direct connection to the AZURE Project infrastructure and has thus been designated as an “associated facility” of the AZURE Project.

2.5 Scope of Activities for the ESDD

The scope of activities for preparing this ESDD has involved:

- Review of all available project documents

- Detailed review on the components of specific focus
- Visits to other project sites: Banka SPP, Bilasuvar SPP, certain portions of the two OHLs being financed by Azerenerji
- Meetings with key stakeholders
- Review of the ESF policy
- Determination of compliance with the ESF for the components of specific focus
- Preparation of the draft report

3. Methodology

3.1 Team

The environmental and social aspects of the ESDD, and overall coordination of the report covered by Iglim Ltd, who has more than 15 years' experience of providing environmental engineering consultancy services in Azerbaijan, including in renewable energy projects. Field visits and meetings were attended by Iglim's specialists Ilkin Kangarli (environmental specialist), Abidin Abbasov (biodiversity specialist) and Gulara Mammadova (social specialist).

This due diligence study is based on both a review of the documents that were supplied and on observations made on the sites and surrounding areas.

3.2 Main Tasks

The background research and preparation of the ESDD involved the following tasks:

- Discussions to finalize the scope of the ESDD
- Review of relevant documents
- Desk study
- Field visits
- Meetings with stakeholders
- Finalizing the report

Due to the scope of work and accelerated nature of the ESDD, it was not feasible to identify and consult with additional experts or organisations after particular specific issues had been identified.

The approach to these tasks is described below. The results informed the assessment which is described in the following sections.

3.3 Scope of Work

The scope of work for this ESDD was developed by the PIU of the Azerenerji. The agreed scope was to focus on compliance with the ESF of i) Banka SPP - Navahi SS OHL and ii) the Bilasuvar SPP – Navahi SS OHL in. The agreed scope also included an assessment of how the implementation of the Azerenerji-funded OHLs align with good international practice and to inform the preparation and the implementation of environmental and social risk management measures for the OHLs that will be funded by the GoA.

3.4 Review of Relevant Documents

The preparation of the ESDD involved reviewing the following project documents. Most documents were available from the start of the ESDD review.

Table 1. Documents Reviewed for the ESDD

Implementing Agency, Finance Partner	Documents reviewed
Azerenerji - GoA	Labor Management Procedures, draft, August 2024 Resettlement Policy Framework, draft, August 2024 Environmental and Social Commitment Plan, draft, August 2024 Environmental and Social Impact Assessment (GoA), October 2024 Environmental and Social Scoping Report, final, August 2024 Stakeholder Engagement Plan, draft, August 2024 Opinion by SEE of MENR
AZURE Project PIU - WB	Labor Management Procedures, draft, August 2024 Project Information Document, September 2024 Environmental and Social Commitment Plan, draft, August 2024 Environmental and Social Impact Assessment (Azure), draft, October 2024 Environmental and Social Scoping Report, draft, August 2024 Concept Environmental and Social Review Summary, March 2024 Stakeholder Engagement Plan, draft, August 2024 Resettlement Policy Framework, August 2024
Masdar – AIIB, EBRD, ADB	AIIB – Project Summary Information, 29 October 2024 Bilasuvar SPP - Environmental and Social Impact Assessment, 4 October 2024 Bilasuvar SPP - Stakeholder Engagement Plan, 8 October 2024 Bilasuvar SPP – Framework for Environmental and Social Management, 8 October 2024 Banka SPP - Environmental and Social Impact Assessment, 4 October 2024 Banka SPP - Stakeholder Engagement Plan, 8 October 2024 Banka SPP – Framework for Environmental and Social Management, 3 October 2024 Banka SPP – Social Compliance Audit Report, 8 October 2024 Banka SPP – Livelihood Restoration Plan, 9 October 2024 Asian Infrastructure Investment Bank, Azerbaijan: Bilasuvar Solar Power Project, Initial Environmental and Social Examination, October 2024

	Asian Infrastructure Investment Bank, Azerbaijan: Banka Solar Power Project, Initial Environmental and Social Examination, October 2024 Asian Infrastructure Investment Bank, Environmental and Social Framework, amended June 2024 Asian Development Bank, ESF, October 2024 (includes 10 ESS policies, compatible with the WB ESF) Asian Development Bank, Banka Solar Power Station PID, November 2024 Asian Development Bank, Bilasuvar Solar Power Station PID, November 2024 Asian Development Bank, Banka Initial Environmental and Social Examination, October 2024 Asian Development Bank, Bilasuvar Initial Environmental and Social Examination, October 2024 European Bank for Reconstruction and Development, Environmental and Social Policy October 2024 European Bank for Reconstruction and Development, Banka Solar Power Station PSD, November 2024 European Bank for Reconstruction and Development, Bilasuvar Solar Power Station PSD, November 2024

3.5 Additional Desk Study

Additional desk study was limited to identifying and reviewing further sources of background information, such as:

- Descriptions of the state reserve and park
- Technical issues
- Information about the project stakeholders

3.6 Field Visits

The objectives of the field visits were to:

- Familiarize the team with the project locations
- Make high-level observations on E&S issues
- Check and confirm the understanding obtained from the document review

The approach to field visits were to:

- Drive as a close as possible to the routes of OHLs to make general observations
- Stop at any locations on the OHLs that require closer inspection
- Stop at all facilities to make general observations
- Make more detailed walkover inspections of the priority facilities

The itinerary was:

Tuesday - 10 December 2024

Navahi SS	Site visit, walkover, drive around general area, meet with contractor, meet with relevant municipality officials
Road to Hajiqabul	View terrain on first section of OHL towards Banka and Bilasuvar

Thursday - 12 December 2024

Bilasuvar SPP	Site visit, walkover, drive around general area
Banka SPP	Site visit, walkover, drive around general area
OHL route	Drive along selected sections for general view, view route near Sirvan Park
Salmanli	OHL crosses the Kura river

3.7 Meetings

The objectives of the meetings were to:

- Familiarize the team with the project stakeholders
- Obtain first-hand information and opinions from stakeholders
- Discuss questions and issues arising from the document review
- Check and confirm the understanding obtained from the documents

Meetings were held with:

- AZURE Project PIU
- Azerenerji Institute Design Department, Supervision Department, Land Acquisition Department
- Ministry of Environment and Natural Resources (MENR)
- State Committee on Property Issues

Monday - 9 December 2024

Meet Azerenerji PIU in Baku	Introductions and project familiarization. Discussion about design process and feedback from ESIA process Confirm plans for visits and who is participating from Azerenerji
Meet MENR in Baku (EIA department)	Discuss ESIA compliance with national requirements
Meet State Committee on Property Issues	Discuss land acquisition implementation under national requirements, land acquisition completed to date under government financed sections

Friday 13 - December 2024

Meet Azerenerji PIU in Baku	Debrief on visits Questions and issues to be addressed
Meet Azerenerji Institute Design Department, Supervision Department, Land Acquisition Department	Discuss design of project components and supervision of contractors Discuss land acquisition implementation under national requirements, land acquisition completed to date under government financed sections

3.8 Limitations

Important gaps in the information available are:

- Valuation reports for land acquisition under the OHL tower footprints
- Clear understanding of the Government's methodology followed in compensation for affected persons
- Meetings with directly affected households/communities
- Limited time and seasonal periods over which some biodiversity studies were conducted
- Limited extent and scope of some baseline data sets

3.9 Reference Framework

The principal reference framework for this ESDD is the requirements and guidance contained within the ESF.

The World Bank has classified the project risk of the AZURE Project as "substantial" with regard to both environmental and social issues. It is assumed that this classification also applies to the related projects. This influences how some of the ESF are interpreted.

Eight of the ten ESS apply to this project. See the table below.

Table 2. Applicable World Bank ESSs

ESS	Objectives and Coverage
ESS1. Assessment and Management of E&S Risks and Impacts	ESS1 sets out the Borrower's responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank through Investment Project Financing, to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs). It covers the identification, evaluation and management of environmental and social risks and impacts; the adoption of a mitigation hierarchy; the adoption of differentiated measures to protect disadvantaged and vulnerable groups; and the support of national environmental and social systems.
ESS2. Labor and Working Conditions	ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker-management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions. It covers occupational health and safety; fair treatment, non-discrimination, and equal opportunity of workers; prevention of the use of all forms of forced labor and child labor; freedom of association and collective bargaining; and worker grievance mechanisms.
ESS3. Resource Efficiency and Pollution Prevention & Management	ESS3 recognizes that economic activity and urbanization often generate pollution to air, water, and land, and consume finite resources that may threaten people, ecosystem services and the environment at the local, regional, and global levels. The current and projected atmospheric concentration of greenhouse gases (GHG) threatens the welfare of current and future generations. At the same time, more efficient and effective resource use, pollution prevention and GHG emission avoidance, and mitigation technologies and practices have become more accessible and achievable. ESS3 covers sustainable use of resources; pollution prevention and management against adverse impacts on human health and the environment; emissions and climate pollutants; hazardous and non-hazardous waste; and pesticide use.
ESS4. Community Health & Safety	ESS4 recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. In addition, communities that are already subjected to impacts from climate change may also experience an acceleration or intensification of impacts due to project activities. ESS4 covers adverse impacts on the health and safety of communities; quality and safety in infrastructure design; traffic and road safety risks; communicable diseases risks; and emergency preparedness.
ESS5. Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	ESS5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons. Project-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood), or both. The term "involuntary resettlement" refers to these impacts. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.
ESS6.Biodiversity Conservation and Sustainable Management of Living Natural Resources	ESS6 recognizes that protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development. Biodiversity is defined as the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species, and of ecosystems. Biodiversity often underpins ecosystem services valued by humans. Impacts on biodiversity can therefore often adversely affect the delivery of ecosystem services.
ESS8. Cultural Heritage	ESS8 recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present and future. People identify with cultural heritage as a reflection and expression of their constantly evolving values, beliefs, knowledge, and traditions. Cultural heritage, in its many manifestations, is important as a source of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people's cultural identity and practice. ESS8 sets out measures designed to protect cultural heritage.

ESS10. Stakeholder Engagement and Information Disclosure	ESS10 recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation. The ESS covers systematic approaches to stakeholder engagement; differentiated approaches for disadvantaged and vulnerable groups; and grievance mechanisms.

The ESF requires borrowers to complete environmental and social assessments (ESA) for projects to which the ESF applies. This requirement also applies to associated facilities.

The ESF requires borrowers (and owners of associates facility projects) to engage with stakeholders, through information disclosure, consultation, and informed participation in a manner proportionate to the risks to and impacts on affected communities. This ESDD includes an assessment of the disclosure and consultation process for each project component.

The ESF requires borrowers (and owners of associates facility projects) to engage stakeholders an third parties to verify project monitoring information. This ESDD includes an assessment of the monitoring plans for each project component.

Comprehensive information concerning the regulatory framework in Azerbaijan has been included in all the ESIAs. This covers the ministries and agencies responsible, primary and secondary legislation, administrative procedures and international agreements.

Azerbaijan has legislation which establishes the requirements for EIAs to be prepared for certain projects and defines the qualifications required to produce such EIAs. Additional legislation provides the legal basis for protection of the environment, including ecology, the atmosphere, fresh water, the sea, soil, natural features and designated territories.

Social issues are covered by numerous and different parts of legislation concerning labor, community health, cultural heritage, and public consultations. Land-related issues are governed by the Land Code, Land Expropriation Law for State Needs and other relevant decrees and orders. The Azerbaijan EIA legislation itself has less coverage of social risks and impacts compared to the scope of social issues covered under the ESF. The EIA legislation, together with the Law on Protection of Public Health, is mainly focused on socio-economic impacts and health impacts. Assessment of land and resettlement impacts is not required under the EIA process and resettlement action plans are not required under other legislation.

4. Observations on Environmental Issues

4.1 Components funded by GoA

4.1.1 Banka SPP – Navahi SS OHL – Project Documentation

The main source of information concerning the Banka SPP – Navahi SS is the ESIA prepared for the GoA components by the Azerbaijan Scientific-Research and Design-Research Energy Institute. Additional information was obtained from the various documents listed in Table 1, observations made during the site visits and meetings, and general background knowledge of the ESDD team.

The new Banka SPP – Navahi SS is identified as sub-component № 1. The new OHL will be constructed on lands owned by state, municipalities and private landowners. Significant portion of the proposed new 330kV line will be constructed along the existing corridors. The Banka-Navahi OHL runs parallel edges of the Shirvan Nature Reserve, and 7 towers are located in the outskirts of the Shirvan National Park.

The development of this sub-component will involve four of the seven potential environmental issues that were identified in the PID and which lead to the risk classification for the project.

Table 3. Relevant Environmental Issues

Potential environmental issue	Relevance
Generation of construction wastes	☑
Emissions, noise, and construction machinery causing disturbance to communities	☑
Disturbance to flora and fauna in the project area	☑
Habitat loss due to construction of transmission towers and stringing of transmission lines	☑
Disruption of migrating birds breeding and feeding and collision with transmission lines	☑
Disturbance of biodiversity at the Shirvan National Park	☑
Increased sediment in sensitive wetlands and water courses due to earthworks	☑

In general, the ESIA identifies and assesses most of the relevant issues, and addresses the key issues with respect to the ESF standards. Specifically, the document identifies:

- Key receptors
- Project risks
- Mitigation strategies
- Monitoring responsibilities

The main relevant environmental information that is contained with the ESIA is summarized below, together with suggestions for additional material, in case the document is revised. In particular, the baseline data that inform the assessments and monitoring plan could be more clearly structured and presented.

Table 4. Key Issues from a Review of Documents referring to the Banka-Navahi OHL

Issue	Summary of Information	Suggestions
Relevant Legislation	As per regulations enacted by GoA, it is mandatory for Azerenerji to seek requisite clearance prior to construction from agencies. (Page 118/119)	The specific clearances and agencies should be listed, together with the status.
Geological	Strata are young and clay-rich. No stability issues identified. Excavations will be limited, dust measures will be in place. Topsoil will be stripped and stockpiled for restoration. A summary of the seismic zoning is included.	Based on experience from other projects, and meetings during this ESDD, the conservation and reuse of topsoil, as described in the ESIA, will be controlled by MENR, Dust during construction could be a short-term issue. The designs will need to include appropriate seismic parameters to ensure limited hazards during earthquakes.
Traffic movements during construction	There will be no need to construct new access road. The document states that in the absence of Azerbaijani or Lenders' guidance, UK guidance - UK Institute of Air Quality Management (IAQM) was followed. The document 'Land-Use Planning & Development Control: Planning for Air Quality) in a sensitive area, states that an assessment is required if there will be more than 100 annual average daily traffic movements. The ESIA concludes that this threshold will not be exceeded (Page 227).	This general statement covers the project but there are no definitive data about planned traffic movements. A traffic movement plan should be prepared, as part of the contractor's work plan and C-ESMP.
Dust management	This subject is covered generally for the project.	Traffic movements will cause higher levels of air pollution which residents at the nearest villages will face. A traffic management plan would help to assess this impact. Local air quality measurements could be undertaken during construction to establish baseline and potential impacts.
Noise management	This subject is covered generally for the project but there is no statement specific to construction of the OHL.	A noise monitoring strategy should be included in the C-ESMP. This should include defining standards which can

Issue	Summary of Information	Suggestions
		be used for monitoring and compliance.
Construction Waste Management	This subject is covered generally for the project but there is no statement specific to construction of the OHL.	A detailed waste management plan should be prepared as part of the contractor's work plan, detailing types, quantities and fate of the wastes.
Fire management	There is no statement specific to construction of the of the OHL. Fire could involve waste materials, vehicles, fuel stores, offices and substation cooling oils, with various associated emissions.	A fire management plan should be developed as part of the contractor's HAZOP for site, and be included in the C-ESMP
Fire wastewater management system	There is no statement specific to construction of the OHL. Fire wastewater may contain chemicals that are hazardous to the environment and is a potential source of contamination. Uncontrolled flow of the water can also form a pathway to receptors.	A strategy for collection, storage and disposal or treatment of fire water would be prudent, which may include a stand-by lagoon. The ESIA mentions oil and grease separation from surface water. This should also apply to firewater.
Wastewater management	The installation of temporary services is mentioned, without specific details	Wastewater management will need to be controlled during implementation and a WM Plan is required. These aspects are addressed in the C-ESMPs.
Stormwater Management	Drainage will be designed to route water runoff from the substation to designated places to avoid flooding of access roads and nearby areas. Storm water management shall conform to governmental agency requirements. No significant impacts on water drainage patterns are expected. (Page 119)	Clarify: Legislation Current rainfall and stormwater management system (baseline) Extrapolate additional stormwater from hard surfaces at new substation to determine any additional requirements (potential impact) Assess if current systems are adequate if not state what additional requirements are and include in construction plan (mitigation)
Impact of electromagnetic fields	The project will include protection for workers in the 500kV section, possibly by means of an earthed screen.	The design proposals should be checked by the HSDE team, when details are available.
Impact on Wetlands	The nearest identified wetland is 20 km from the site. As hydrogeology is not an issue at this site there is unlikely to be any impact.	This distance and the hydrological and hydrogeological conditions indicate that the potential for impact on the wetland is low.
Climate	There is no statement specific to construction of the OHL.	There are no operational activities which will produce long term emissions of GHG.

Issue	Summary of Information	Suggestions
		Construction works will produce GHG and possibly other fugitive emissions during and potential fugitive emissions for a short period. If relevant, these could be modelled and offset in approved schemes or GHG credits (carbon credits) purchased from the voluntary emissions market.
Biodiversity management	There is no statement specific to construction of the OHL.	There are no mitigation measures for biodiversity and bird collision risks. OHL will pose hazard to migratory birds, particularly near the Shirvan National Park. ESDD team recommends to install bird flight diverters across the borders of the Shirvan NP.

Table 5. Key Issues from a Review of Documents referring to the Bilasuvar-Navahi OHL

Issue	Summary of Information	Suggestions
Relevant Legislation	As per regulations enacted by GoA, it is mandatory for Azerenerji to seek requisite clearance prior to construction from agencies. (Page 118/119)	The specific clearances and agencies should be listed, together with the status.
Geological	Strata are young and clay-rich. No stability issues identified. Excavations will be limited, dust measures will be in place. Topsoil will be stripped and stockpiled for restoration. A summary of the seismic zoning is included.	Based on experience from other projects, and meetings during this ESDD, the conservation and reuse of topsoil, as described in the ESIA, will be controlled by MENR, Dust during construction could be a short-term issue. The designs will need to include appropriate seismic parameters to ensure limited hazards during earthquakes.
Traffic movements during construction	There will be no need to construct new access road. The document states that in the absence of Azerbaijani or Lenders' guidance, UK guidance - UK Institute of Air Quality Management (IAQM) was followed. The document 'Land-Use Planning & Development Control: Planning for Air Quality) in a sensitive area, states that an assessment is required if there will be more than 100 annual average daily traffic movements. The ESIA concludes that this threshold will not be exceeded (Page 227).	This general statement covers the project but there are no definitive data about planned traffic movements. A traffic movement plan should be prepared, as part of the contractor's work plan and C-ESMP.

Issue	Summary of Information	Suggestions
Dust management	This subject is covered generally for the OHL.	Traffic movements will cause higher levels of air pollution which residents at the nearest villages will face. A traffic management plan would help to assess this impact. Local air quality measurements could be undertaken during construction to establish baseline and potential impacts.
Noise management	This subject is covered generally for the project but there is no statement specific to construction of the OHL.	A noise monitoring strategy should be included in the C-ESMP. This should include defining standards which can be used for monitoring and compliance.
Construction Waste Management	This subject is covered generally for the project but there is no statement specific to construction of the OHL.	A detailed waste management plan should be prepared as part of the contractor's work plan, detailing types, quantities and fate of the wastes.
Fire management	There is no statement specific to construction of the of the OHL. Fire could involve waste materials, vehicles, fuel stores, offices and substation cooling oils, with various associated emissions.	A fire management plan should be developed as part of the contractor's HAZOP for site, and be included in the C-ESMP
Fire wastewater management system	There is no statement specific to construction of the OHL. Fire wastewater may contain chemicals that are hazardous to the environment and is a potential source of contamination. Uncontrolled flow of the water can also form a pathway to receptors.	A strategy for collection, storage and disposal or treatment of fire water would be prudent, which may include a stand-by lagoon. The ESIA mentions oil and grease separation from surface water. This should also apply to firewater.
Wastewater management	The installation of temporary services is mentioned, without specific details	Wastewater management will need to be controlled during implementation and a WM Plan is required. These aspects are addressed in the C-ESMPs.
Stormwater Management	Drainage will be designed to route water runoff from the substation to designated places to avoid flooding of access roads and nearby areas. Storm water management shall conform to governmental agency requirements. No significant impacts on water drainage patterns are expected. (Page 119)	Clarify: Legislation Current rainfall and stormwater management system (baseline) Extrapolate additional stormwater from hard surfaces at new substation to determine any additional requirements (potential impact) Assess if current systems are adequate if not state what additional

Issue	Summary of Information	Suggestions
		requirements are and include in construction plan (mitigation)
Impact of electromagnetic fields	The project will include protection for workers in the 500kV section, possibly by means of an earthed screen.	The design proposals should be checked by the HSDE team, when details are available.
Impact on Wetlands	The nearest identified wetland is 20 km from the site. As hydrogeology is not an issue at this site there is unlikely to be any impact.	This distance and the hydrological and hydrogeological conditions indicate that the potential for impact on the wetland is low.
Climate	There is no statement specific to construction of the OHL.	There are no operational activities which will produce long term emissions of GHG. Construction works will produce GHG and possibly other fugitive emissions during and potential fugitive emissions for a short period. If relevant, these could be modelled and offset in approved schemes or GHG credits (carbon credits) purchased from the voluntary emissions market.
Biodiversity management	There is no statement specific to construction of the OHL.	There are no mitigation measures for biodiversity and bird collision risks. OHL will pose hazard to migratory birds, particularly near the Mahmudchala wetland. ESDD team recommends to install bird flight diverters for the section near the wetland.

The conclusions concerning the content of the ESIA are set out below.

Table 6. Conclusions on ESIA

Item	Status	Comments
Project Screening	Adequate	The document describes the screening for the overall project and the sub projects
Environmental & Social Responsibilities	Adequate	The document sets out the environmental responsibilities for the overall project, which includes Navahi substation
Project Stakeholders	Adequate	The project stakeholders are identified
Baseline Data	Incomplete	The document describes current state of the sites, but the baseline data, such as current air quality, are not presented As another example, there is much information on flora and fauna generally in Azerbaijan, but little specific information about populations in the project area. This may imply that the sites are not critical locations or sensitive habitats, which should be confirmed. Data collection is affected by seasonal

		changes, and follow-up surveys should be undertaken in spring time to ensure that site areas are better characterized. Project-specific data have been obtained and are included in the C-ESMPs.
Risk Assessment & Mitigation	Incomplete	There is a good section on the basis for the risk assessment Table 8.9 presents qualitative assessment of 87 impacts. This appears to be reasonably comprehensive Mitigation measures are primarily statements of proposals by the designer, and possibly contractors. The document would benefit from a clearer description of the risks and the linkage with mitigation strategies.
Project Monitoring	Adequate	This section is well covered by the document

4.1.2 OHLs – Implementation

During the preparation of this ESDD, additional documents were submitted concerning the implementation of the construction works. These comprised the Environmental and Social Management Plan (C-ESMP) which was prepared by the Contractor for the OHLs.

The various aspects of the C-ESMP document have been developed to address the key subjects, stating the scope, relevant legislation, reference documents, responsibilities, operational procedures and mitigation measures. Forms are used where applicable, which seem to be based on standard templates. The main observations from our review are summarized in the table below.

Table 7. Observations on the C-ESMP for OHLs

Section	Key Observations
Environmental Management Plan	1. Document produced by Contractor (Azenco) 2. Describes overall project 3. Addresses ESIA issues from GoA EISA document 4. Produced individual Plans
Training	1. Training plan included 2. Induction, OHS, tool-box talks and pre-start meetings 3. Induction training to include CESMP requirements 4. Seminars planned on EHS subjects 5. Posters and written materials are planned
Air Pollution Plan	6. Relevant Legislation identified 7. Has pre-construction air quality data 8. Dust management plan in place 9. Air Quality management plan in place 10. Mitigation strategies identified 11. Quarterly monitoring of key air quality parameters

Traffic Management Plan	1. Recognises that there will be some congestion caused. 2. Traffic management plan a. to address congestion issues. b. to minimise impact on local community 3. Plan to engage with public regarding traffic issues 4. Mitigation issues addressed for: a. Air pollution b. Noise & vibration c. Health & safety d. Stakeholder engagement and grievance e. Local employment and procurement f. Labour rights
Waste Management Plan	1. Relevant Legislation identified 2. Includes both waste and wastewater 3. Waste management for construction addressed 4. Domestic waste management addressed
Emergency Response Plan	1. Responsibilities for emergency action clearly identified 2. All aspect covered. e.g.: First aid, spillage, fire etc. 3. Risk assessment of potential emergency undertaken.
Flora & Fauna Protection Plan	1. Relevant Legislation identified 2. Baseline defined by site survey 3. Issues during construction identified. 4. Reforestation through planting of trees as required 5. Mitigation strategies identified
Noise & Vibration Management plan	1. Relevant Legislation identified 2. (Procedures for noise management identified 3. Procedures for vibration management identified 4. Mitigation strategies identified 5. Routine monitoring by contractor (ambient noise measurements do not appear to have been made, these will need to be undertaken soon, during non-working times.

Overall, the documents materially comply with the ESF and are a suitable basis for monitoring the construction works. Recommendations are made in Table 8 which will ensure compliance. The critical element will be the implementation of the monitoring and control procedures in this ESMP.

Table 8. Feedback on the C-ESMP

Plan Criteria	Recommendations
Training	Details of course outlines and documents should be provided to the PIU for review as soon as they are available.
Air Pollution Plan	Continuous monitoring is required during construction
Noise monitoring	Baseline measurements should be obtained.
Traffic Management Plan	Actual traffic movements should be estimated to assess impact of additional traffic flows on an already busy national highway.

Waste Management Plan	This addresses waste and wastewater. There should also be a section on stormwater management as part of water management. Wastewater management also needs to be strengthened, especially to ensure commitments are followed on site.
Emergency Response Plan	Firewater management has not been included. Given that firewater contains chemicals harmful to the environment it is important to add procedures for fire water management and disposal/treatment to this plan.

4.1.3 Precautions for Overhead Transmission Lines

The ESIA for the GoA project includes descriptions of the environmental and social conditions along the OHLs. The other sections, such as description of the legislative framework, also apply to the overall project. Overall, the impressions were satisfactory.

Key issues which were examined during the field visits are:

Encroachment on the Shirvan National Park. A decision was made to locate several pylons inside the boundary of the park, due to the need to maintain sufficient distance from housing. The main impacts were expected to occur as a result of construction activities.

Inspection of the site informed us that the potentially affected area of the park is currently used as farmland. It seems likely, from a review of images on Google Earth, that this is not a recent adjustment, and this part of the park may have been in use as arable land when the park boundary was defined in 2003. The authority responsible for management of the park, the MENR, is aware of the situation. In meetings, representatives stated that they accepted that the location of the OHL was justified and that they did not have plans to assimilate the farmland into the park. The representatives also said that the administration of the NP currently negotiating the land offset (i.e., handing over this protrusion section of the NP to the local authorities and receiving an alternative land parcel which is already visited by the NP habitats being not suitable for agricultural activities) with the local executive power of Salyan region.

This situation means that construction activities will affect farmland, rather than the state reserve. If the land reverts to park in the future, which seems unlikely from discussions with MENR, the impacts at that time will relate only to operation.

With respect to the two protected areas, Shirvan National Park (encroached by Banka – Navahi OHL) and Shirvan State Sanctuary falling within 1 km radius of the project, (and any other protected/ conserved areas), the ESIA clearly stated that Azerenerji obtained required permissions/clearances from Biodiversity Management Authorities. The ESIA clearly states that any other impacts on these areas due to project related activities, such as construction activities, noise, vibrations, transportation, etc. were duly assessed. ESDDR recommends installation of bird flight diverters in identified sections (IBAs).

Please see below figure for the recommended sections for installation of bird flight diverters.

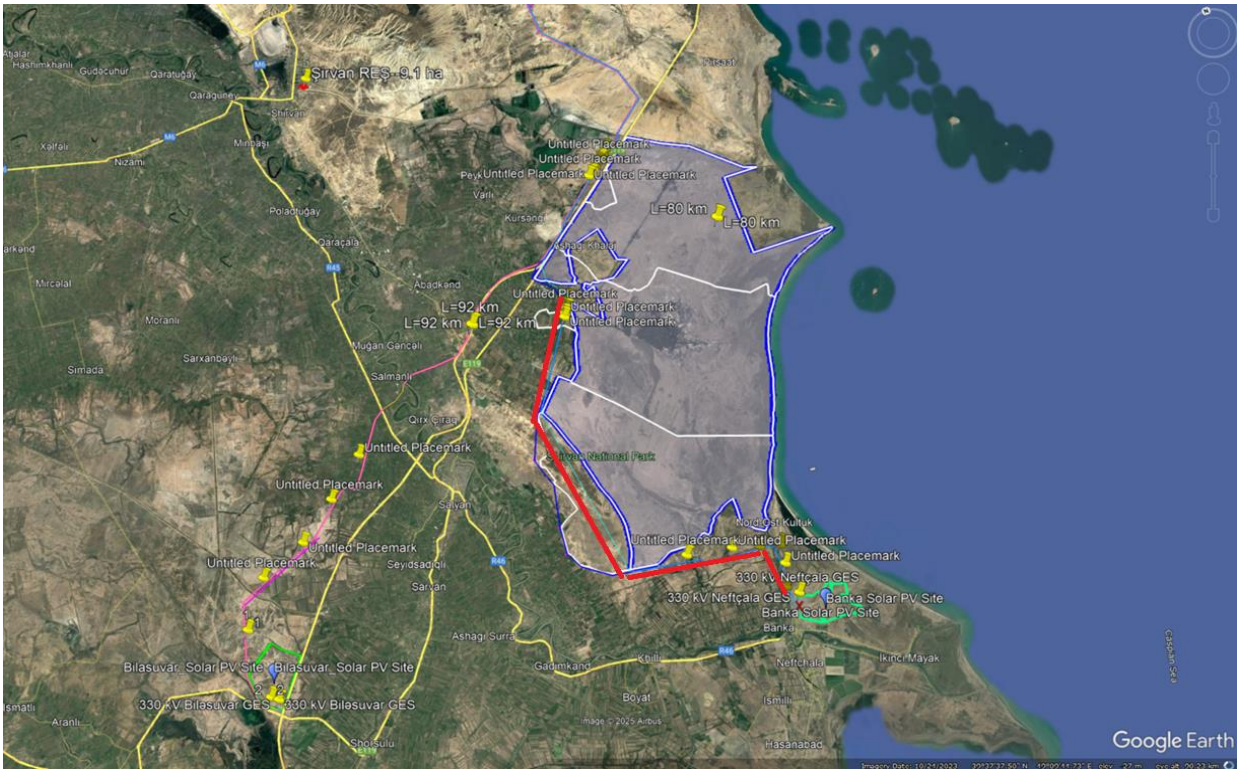


Figure 3. Banka SPP - Navahi SS bird flight diverters installation section (red line)

Proximity to the Mahmudchala Wetland. The ESIA notes that the Bilasuvar SPP – Navahi SS OHL is within 1km of the Mahmudchala lake, which is an important bird wintering area. The risks to birds are identified as collision with wires when in flight and electrocution when perched near pylons. The design approach is to adopt protection measures, rather than change the OHL route, partly to avoid impacts on nearby agricultural land. This seems to be a reasonable suggestion because there are extensive wetlands (more than (70 km2) in this area, and avoidance of flight routes might not be practicable. Furthermore, the nearest wetland to the OHL seems to vary seasonally and can dry out at times.

The ESDD recommends the following measures to mitigate impacts to birds:

- No construction activities during key migration periods (October-November and March-April).
- Locate project-infrastructure (camps etc) further from the wetland.
- Install high quality Bird Flight Diverters (BFD) on all wires for 2 km section of the OHL (see Figure below).

Figure 4. Bilasuvar SPP - Navahi SS bird flight diverters installation section (red lines)

It is advised to coordinate the bird protection measures with the approach of the Bilasuvar SPP project (to be constructed by Masdar), which is also close to the wetland. This will need to be based on a risk assessment, considering issues such as species, behavior and timing.

ESDD recommends to install the bird flight diverters as per the scheme provided below, i.e. every 5 meters on each wire to increase the visibility for birds. ESDD also recommends to conduct 2 years post construction monitoring for bird fatalities to be conducted once per month.

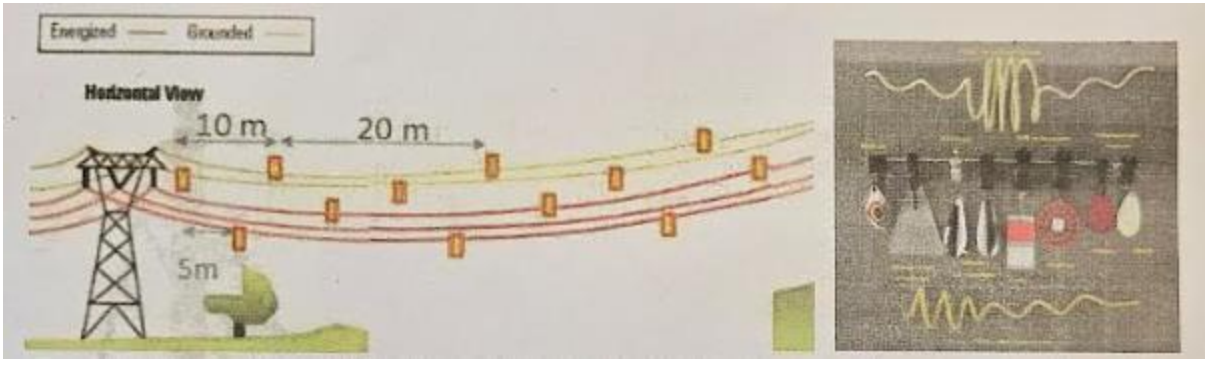


Figure 5. Examples of bird flight diverters that can be attached to the power lines to reduce bird collision

A C-ESMP has been prepared for the OHLs, comprising 11 volumes.

4.2 Masdar Components

4.2.1 Banka and Bilasuvar Solar Power Plants

The documents concerning these two SPPs have been reviewed as part of this due diligence assessment, to provide background information and project context.

A detailed review and assessment have not been presented, because this task is under control of others.

In general, the ESIA documents were prepared by “5 Capitals” and are high quality in terms of scope, content and presentation. The documents are easy to follow and cover all key issues regarding the environmental impacts during construction and operational phases. The documents contain comprehensive details of:

- Project Screening
- Environmental & Social Responsibilities
- Project Stakeholders
- Baseline Data
- Risk Assessment Criteria
- Potential impact receptors
- Mitigation strategy
- Project Monitoring

Most of the potential negative impacts are identified in the construction phase, with limited impacts from operations. The identified potential negative impacts and range of mitigation measures for both SPPs are summarized briefly below.

Table 8. Negative Impacts and Mitigation Measures for SPPs

Potential impact	**Range of mitigation measures**
Dust	Route management, water spraying, speed controls, materials management, dust masks for workers
Gaseous emissions	Vehicle emissions compliance, inspections, location of fixed plant, engine management, respirators for workers
Noise	Works timing, selection of equipment, location of fixed plant, management procedures, hearing protection for workers
Land degradation	Materials management, topsoil conservation, designated roadways, reseeding, erosion prevention
Accidental leaks and spills	PPE use, equipment and procedures for clean-up
Loss of habitat	Work in site boundaries, speed controls, fencing, checks and notification

Direct mortality of fauna	Work in site boundaries, designated roadways, speed controls, fencing, checks
Disturbance of flora and fauna	Work in site boundaries, speed controls, fencing, checks and notification
Poaching	Management procedures
Introduction of invasive species	Site controls and checks
Waste generation	Suitable containers, collection procedures, use licensed contractors
Hazardous wastes	Asbestos survey, management procedures, use licensed contractors
Access disruption	Works phasing, traffic management
Vulnerable groups	Management structure and procedures
Local customs	Training of no-local workers, policy, grievance mechanism

Three of the impacts are assigned magnitudes of “moderate”, these being land degradation, possibility of invasive species and waste management. The magnitudes of the others impacts are assessed as minor to negligible. All residual impacts are classified as negligible after mitigation.

The potential risk for bird collisions with PV panels was discounted due to lack of evidence. The ESIAs discuss the potential risks of collision and electrocution from OHLs, but do not assess the risks as these are covered by other project items. The documents note that mitigation measures include a range of markers to increase line visibility, to reduce collision risk, and the consideration of perching sites, including insulator spacing.

5. Observations on Social Issues

5.1 Azerenerji Components

Azerenerji commissioned the Azerbaijan Scientific-Research and Design-Research Energy Institute to develop an ESIA for the "Renewables Grid Integration Project," which covers the Azerenerji facilities under the scope of this ESDD (Navahi SS; Navahi SS-Banka SPP OHL; Navahi SS -Bilasuvar SPP OHL; Navahi SS-Absheron-Garadagh SS OHL). The ESIA was developed to comply with both the Azerbaijan National laws and regulations, and the World Bank's ESSs. This ESIA did not cover the facilities that will be financed by the World Bank under the AZURE Project, the Banka and Bilasuvar SPPs, and the Absheron-Garadagh WPP.

According to MENR correspondence, Azerenerji submitted this ESIA to the MENR on 29 July 2024 and MENR approved the ESIA on 1 October 2024. The ESDD team did not find the ESIA disclosed on a MENR web page.

The ESIA is disclosed on the Azerenerji website here:
https://www.azerenerji.gov.az/azureproject

Consultations on the Azerenerji funded facilities, as well as the contents of this ESIA and E&S documents were held from 30 September 2024 to 2 October 2024 in Hajigabul, Salyan, Bilasuvar and Neftchala regions.[2] The consultations meetings were attended by residents of villages hosting the OHLs.

OHLs: Azerenerji stated that no land clearance was required for the OHLs. Construction at three OHLs started on 26 September 2024 as well, which was also confirmed by the current ESDD. The construction works in OHLs were stopped on 10 October 2024 with the request of the WB to allow completion of this ESDD.

By 11 October 2024, a total of 50 pylons were erected: 8 pylons along the Navahi SS – Banka SPP OHL; 24 pylons along the Navahi SS – Bilasuvar SPP OHL; and 18 pylons along the Navahi SS – Absheron-Garadagh SS OHL.

As of 15 December 2024, a total of 203 pylons were erected, after construction of OHLs restarted based on the World Bank's reassessment of the three OHLs as not "associated facilities."

Before the start of construction Azerenerji has undertaken the process of acquisition of the private lands affected by the project works. Azerenerji also prepared RAP based on the asset valuation campaign conducted by independent valuation company who performed asset valuation, conducted baseline socio-economic survey for the PAPs

[2] A separate set of consultation meetings were held in July 2024 as part of the scoping phase of the ESIA.

based on the property ownership list provided by Cadastral Office. The compensations paid to the PAPs were based on the valuation reports provided by the engaged valuation company (REC INVEST LLC).

Total compensation amount paid so far to the PAPs of 2 OHLs reached 200,000 AZN.

The information on social risks and impacts in the ESIA as compared to relevant World Bank ESSs is summarized in the below table.

Table 9. Key Social Issues in the ESIA covering the Azerenerji Components

Social Issue	Summary of Information in ESIA & Assessment Against Relevant ESS
Relevant Legislation and Gap Analysis	The ESIA covers relevant national legislation on identification, assessment and management on social impacts; labor and working conditions; community health and safety; land acquisition and expropriation; cultural heritage; and disclosure and consultations. The ESIA also has a gap analysis table comparing the national requirements and World Bank ESSs, and proposing gap filling measures. Some of these measures are specific and technical gap filling measures, while the measures in the land acquisition section refer to (presumably) the Resettlement Policy Framework (RPF), by stating that "assessment of impacts, compensation and rehabilitation measures consistent with ESS5 will be applied, as outlined in the Project Resettlement Action Plan." (*A Resettlement Action Plan was not prepared. The ESDD team assumes that the ESIA is referring to the RPF that was prepared for the AZURE Project.)*
Baseline Information	**Social Baseline, including land use**. The ESIA covers socio-economic demographic information on districts and villages close to the Azerenerji components, as well information on available public services (such as schools, clinic, water and wastewater supply) in the most proximate villages. *Under good international practice, the social baseline for affected and surrounding communities would also cover a more granular understanding of these communities, as well as an identification of disadvantaged and vulnerable groups in relation to project activities and direct impacts, based on a census, sample household surveys, or focus group discussions. (ESS1)* *Similarly, for those who will be affected by land acquisition and expropriation, the social baseline would cover a full census and asset valuation of all of those that are expected to be affected, including an identification of informal or seasonal users of land. (ESS5)* **Cultural Heritage**. The ESIA also covers physical cultural heritage sites that are proximate to the Azerenerji components. *Focus group discussions or consultation meetings can also be used to elicit any issues relating to intangible cultural heritage. (ESS8)*
Mitigation Hierarchy	**Avoidance or minimization of impacts**. The ESIA notes that based on the scoping study, the alignment of the OHL lines was changed to avoid

Social Issue	Summary of Information in ESIA & Assessment Against Relevant ESS
	impacts on the cultural heritage site in Aghsu region (Aghsu Medieval Open Archeological Museum Complex) and to minimize the impacts on Sirvan National Park. The OHL lines also avoid passing directly though residential areas. *An asset valuation for those that will be affected by the land acquisition under the OHL components may have provided input to avoidance or minimization of certain impacts. (ESS5)*
Identification and Assessment of Social Risks and Impacts	**Labor and Working Conditions**. The ESIA identifies and assesses labor and working conditions risks, such as those related to the size and type of work force that will be involved in the construction of Azerenerji components (including required minimum age, gender considerations); occupational health and safety (OHS) risks specific to component activities; and worker accommodation risks on site and in nearby villages. **Community Health and Safety**. The ESIA identifies and assesses community health and safety risks, such as road safety risks, communicable diseases risks, and sexual exploitation and abuse/sexual harassment (SEA/SH) risks. These risks are identified as potential risks due to the nature of the activities; site-specific studies to assess the scope, likelihood and magnitude of the risks were not conducted. **Land Acquisition**. The ESIA recognizes that potential land acquisition impacts from component activities can create adverse impacts for households, such as permanent land taking for the OHL towers. In addition, for land use changes through easements in the OHL corridor, the ESIA states that: "The easement zones established around the OHL will potentially impose restrictions on land use, limiting activities such as building construction, tree planting, and certain agricultural practices. These restrictions can disrupt community development plans, hinder local businesses, and affect the overall quality of life for residents. Property values in the vicinity of the transmission line may also be negatively impacted due to the visual intrusion and perceived health risks associated with high-voltage power lines." The ESIA further notes that: "Socially, the project could affect local communities through land acquisition, displacement, and changes in land use. Engagement with affected communities is essential to address their concerns, ensure fair compensation, and provide livelihood restoration programs." Despite the identification of these potential risks, the ESIA has only assessed the adverse impacts for the land taking for the OHL towers, noting that a total of 126 landowners will be affected by the support towers, and not assessed any of the other above-mentioned impacts. *Under international good practice and/or to comply with the requirements of ESS5, the ESIA should assess the actual adverse impacts of component activities, covering:* *- current crop use on the OHL tower bases*

Social Issue	Summary of Information in ESIA & Assessment Against Relevant ESS
	- easement zones established around the OHL (how limitations may impact existing assets and crops, livelihoods, and property values) *- households other than landowners, such as renters, informal users, grazers etc.* *- livelihood impacts that may necessitate livelihood restoration interventions* *- any community or other use on government-owned parcels* *- construction of access roads referred to in different parts of the ESIA* *The assessment of these impacts would need to be done through a full census, full asset valuation and full or sample-basis household survey of all of those that are expected to be affected, including the identification of all landowners, renters, formal, informal and seasonal users of land for the OHL tower footprints and along the 60-meter-wide OHL Right of Way. (ESS5).* **Cultural Heritage**. The ESIA identifies and assesses the impacts on physical cultural heritage proximate to Azerenerji components. *Focus group discussions or consultation meetings can also be used to assess any issues relating to intangible cultural heritage. (ESS8)*
Identification of Disadvantaged and Vulnerable Groups	The ESIA has identified the following groups as disadvantaged and vulnerable: - Persons who are elderly - Families who have lost both parents (orphans or whose father or mother died) - Families where a disabled child is present, or a disabled parent is present - A family who is on a low income and lives below the national poverty line. This is classified by the State Statistical Committee for 2020 (the most recent published data available) to comprise a monthly household income of 195 AZN (USD 115) or less, or a household in substantial debt - A widower raising two or more children under the age of 14, living separately from other relatives - Mothers or fathers who are bringing up the children in a single-parent family - Families in which both parents are unemployed - Single retired persons living on their own - Internally Displaced Persons (IDP) household - People with poor health status, or illiteracy in a farmer or herder household - People who are discriminated against in society due to their ethnicity, belief system, health status (including HIV), sexual or gender orientation/self-identity. The ESIA states that “the project will take differential measures to ensure that vulnerable and disadvantaged groups are not disproportionately affected and can benefit equitably from the project.”

Social Issue	Summary of Information in ESIA & Assessment Against Relevant ESS
	Under good international practice, the ESIA would include: *- identification of specific disadvantaged and vulnerable groups in relation to specific project activities and direct impacts (such as people who farm on land informally without title or people without bank accounts who may have trouble managing compensation cash payments)* *- assessment of how risks and impacts from project activities may disproportionally affect such disadvantaged and vulnerable groups* *- differentiated measures by which the project will reach them, involve them and compensate them.* *This identification and assessment would be based on a census, sample household surveys, or focus group discussions. (ESS1, ESS5, ESS10)*
Mitigation and Management of Social Risks and Impacts	**Labor and Working Conditions**. The ESIA covers mitigation and management measures to manage labor and working conditions impacts, such as those for terms and conditions of employment, nondiscrimination and equal opportunity, SEA/SH risks, minimum age of workers, OHS, and management of contractors and primary suppliers. The ESIA states that "awareness-raising sessions on gender-based violence (GBV) will be conducted for all workers." **Community Health and Safety.** The ESIA covers mitigation and management measures to manage community health and safety risks, such as traffic and road safety, community exposure to communicable diseases, safety of services (specifically, construction use not impacting availability of water to communities), management and safety of hazardous materials, and emergency preparedness and response. *From December 13 to 18, Azerenerji delivered OHS and SEA/SH trainings to Navahi and OHL contractors and surrounding communities. Based on the commitments in the ESIA, these trainings should also be delivered to all workers. (ESS2, ESS4)* *Currently, the ESIA has preventative measures for managing SEA/SH risks, such as Codes of Conduct. An assessment on the available service providers working on SEA/SH issues along the OHL and especially Navahi would contribute to an assessment of how to manage SEA/SA risks once they have taken place. (ESS2, ESS4)* **Land Acquisition**. For management of risks and impacts due to land acquisition, the ESIA refers to the management measures in the RPF prepared for the World Bank-financed AZURE components and states that: "To mitigate these social impacts, a comprehensive Resettlement Action Plan has been developed, involving extensive stakeholder consultations to understand the concerns and needs of affected communities. Compensation schemes will be developed to fairly address the loss of land and livelihoods. Additionally, community engagement programs will be established to provide clear information about the project, address misconceptions, and explore opportunities for local benefits, such as job creation and infrastructure improvements."

Social Issue	Summary of Information in ESIA & Assessment Against Relevant ESS
	"Also, a cadastral list of the lands crossed by the OHL route on each line was drawn up, and based on this list, a separate Resettlement Action Plan was prepared for each OHL. The size of the land area to be purchased for each support, the amount of compensation to be paid is clearly indicated in the plan." "For land acquisition that causes economic displacement of people, appropriate measures to assist with restoration of livelihoods and standards of living will be included in the respective land acquisition and resettlement documents, which are to be prepared once the detailed Project design is verified and detailed data on affected land property and its value is available." *The ESIA has appropriately identified the relevant mitigation and management measures that need to be in place for addressing land acquisition impacts. However, currently construction on the OHL lands have started without any such Resettlement Action Plans (RAPs) in place, which does not comply with World Bank's ESS5. (ESS5)* *An issue that has not been covered the RPF and should be included in the management and mitigation measures for the OHL construction is the need for contractors to protect topsoil on agricultural lands and restore topsoil when construction ends, in cases where their access for OHL towers requires them to go through agricultural fields. For Navahi SS, the land clearance started in May 2024 without due diligence on potential land usage on and surrounding the site. There is a basic access road to access the Navahi SS site, but if any widening or rehabilitation for this access road is planned during the Navahi SS construction, the same issues on topsoil restoration and compensation for damaged crops should be addressed for any surrounding fields that may be impacted. (ESS4, ESS5)*
Monitoring of Social Risks and Impacts	The ESIA covers monitoring indicators for labor and working conditions, grievances received from workers and affected stakeholders, and stakeholder consultation meetings. The ESIA notes that monitoring indicators for land acquisition will be specified in the RAPs. *RAPs have been prepared for the OHL construction and includes monitoring indicators to monitor land acquisition impacts. (ESS5)*
Implementation Arrangements	The ESIA describes the implementation arrangements for the implementation of environmental and social management measures, including responsibilities of Azerenerji, and the contractors. Contractors' responsibilities include preparation of contractors ESMP and other relevant documents prior to commencement of works. *The contractor for OHLs has prepared contractors' ESMP and other relevant documents. These are listed and discussed in the relevant section of the ESDD. The contractor for the OHLs (whose construction started on September 26 as well) prepared and submitted contractors' ESMP and other relevant documents at the end of December 2024. These are listed and discussed in the below portions of the ESDD. A supervision engineer is currently not in place. Functions of supervision engineer is performed by Construction Supervision Department of Azerenerji. (ESS1, ESS2, ESS3, ESS4, ESS5, ESS6, ESS8, ESS10*)

Social Issue	Summary of Information in ESIA & Assessment Against Relevant ESS
Identification of Project Stakeholders	The ESIA, in Section 6, refers to the SEP which was prepared for the World Bank-financed AZURE components. The ESIA and the SEP have appropriately identified the affected and interested stakeholders for the components, as well as disadvantaged and vulnerable groups.
Disclosure of Information	The ESIA has been disclosed on the Azerenerji website: https://www.azerenerji.gov.az/azureproject
Stakeholder Engagement	Stakeholder consultations for the Azerenerji components were initially conducted on 4 and 11 July, 2024 in Navahi, Salyan, Banka and Bilasuvar villages to inform local communities of the planned construction activities and answer any questions they may have. A total of 107 community members attended these consultations. Questions covered local employment opportunities, whose lands would be affected by the proposed construction activities, and quality of local electrical power. Stakeholder consultations on the Azerenerji ESIA, as well as the RPF, LMP and SEP were conducted from 30 September 2024 to 2 October 2024 in Hajigabul, Shamakhi, Aghsu, Ismayilli, Goychay, Aghdash, and Yevlakh regions and, Mingachevir town. The consultations meetings were attended by 373 stakeholders (95 women, 278 men). The SEP has been updated to reflect these consultations. *Information disclosure and stakeholder engagement about project activities, and E&S impacts and mitigation measures needs to take place prior to the start of any project activities. Especially for land acquisition impacts, stakeholder engagement and participation are required during the planning stage of activities; consultations on the resettlement plans need to happen prior to the start of any project activities. In this case, the construction work on the OHLs started on 26 September 2024, when the consultations on the RPF took place between 30 September 2024 and 2 October 2024, which does not comply with the World Bank's ESS1, ESS5 and ESS10. (ESS1, ESS5, ESS10)*
Grievance Redress	The ESIA, in Section 6, refers to the SEP which was prepared for the World Bank-financed AZURE components. The grievance redress mechanism agreed upon in the SEP will be used for both Azerenerji components and AZURE components. *Currently, no questions, inquiries, complaints or grievances have been received through the grievance redress mechanism at any of the sites, from when initial community consultations were held in July 2024 to date. This strongly suggests that communities may be unaware of the grievance mechanism or unwilling to use it, making it not accessible or effective. (ESS10)*

5.1.1 Contractor's E&S documents

Contractor's Environmental and Social Management Documents. In accordance with the Azerenerji ESIA, as well as the LMP and SEP prepared for the AZURE components, the OHL's contractor, Azenco QSC, prepared a set of contractor's environmental and social management documents. The documents developed address key environmental and social management issues, describing scope, relevant legislation, reference documents, responsibilities, operational procedures, and mitigation measures.

Based on the ESDD review, with reference to the ESIA, LMP and SEP, social risk and impact management measures that are not sufficiently covered in the contractor's environmental and social risk management documents are summarized below.

Table 10. Recommendations for Additional Social Management Measures in Contractor Documents

Azenco's Management Plans	Additional Social Management Measures Recommended
Environmental and Social Management Plan	The ESIA states that "if contractor has significant control or influence over primary suppliers, contractor to monitor supplier and require improvement in labor safety practices or remedies in case of child or forced labor." *Under good international practice and to comply with ESS2, there should be measures in the ESMP to conduct due diligence on primary suppliers to identify potential risks of child labor, forced labor and serious safety issues which may arise in relation to primary suppliers. (ESS2)* *Parameters to be monitored (and reported to Azerenerji on a periodic basis) under the ESMP should include records of contractor and community consultation meetings; awareness sessions or trainings delivered to the community by the contractor; and grievances received. (ESS1, ESS10)*
Community Protection Plan	*There should be a commitment for Azenco to pay any damages caused to community lands, crops or equipment in a prompt manner, and to protect topsoil on agricultural lands and restore topsoil when construction ends, for example if such impacts occur when the access road to OHLs is being paved. This is especially important as during consultations, communities repeatedly brought up grievances on past contractors destroying crops and local roads with heavy equipment with no compensation and no rehabilitation. (ESS4, ESS5)*
Labor Management Plan	*The incoming work force (approximately 35 not local workers) will not have accommodation at the construction site but will be staying at Navahi village (population around 3000) during construction (about 18 months). An assessment on the availability and identification of lodging and attendant services in Navahi village would be appropriate under the LMP. (ESS2)*

Grievance Committee Plan	*The Grievance Committee Plan should include commitment by Contractor to periodically report on grievances received to Azerenerji. (ESS1, ESS10)* *If a grievance on SEA/SH issues is received, Azenco should report to this to Azerenerji immediately upon receiving the grievance. (ESS2, ESS4, ESS10)*
SEA Prevention Response Plan	*Currently, the SEA Prevention Response Plan has preventative measures for managing SEA/SH risks, such as Codes of Conduct. An assessment on the available service providers working on SEA/SH issues in or around Navahi would contribute to more responsive management of SEA/SA risks once they have taken place. (ESS2, ESS4)*

Site visit. A site visit was conducted to the Hajigabull, Neftchala, Salyan and Bilasivar regions (OHLs encroach these regions) on 10-11 December 2024. The OHLs are 90-80 km from Baku city in the southeast direction.

Contractor's Organization for Environmental Management. The contractor ESMP lists environmental and social staff of the contractor as an Environmental Manager, an OHS Manager, a Social Risks Specialist, and a Stakeholder and Community Liaison Specialist. Currently, Azenco engaged an Environmental Manager and an OHS Manager on site, including a Social Risks Specialist, and a Stakeholder and Community Liaison Specialist.

Labor and Working Conditions. Azenco estimates that construction will take place over 12 months, with 300 to 350 workers at peak construction times. They anticipate that 10 to 15 workers will be hired locally, with a few women workers for cooking and cleaning on the premises. The LMP states that "a quota of 20% of the total workforce will be allocated to local hires," which will be fulfilled by Azenco's planning.

According to the LMP, contractor workers should go through training on OHS, Codes of Conduct, SEA/SH, worker grievance mechanism and emergency prevention and preparedness within a month after hiring. From December 13 to 18, Azerenerji delivered OHS and SEA/SH trainings virtually to OHL contractors, and at Navahi, Salyan and Bilasuvar villages to communities. Based on the commitments in the ESIA and the contractor's environmental and social management plans, the contractor should deliver these trainings and trainings on the procedures and measures covered in the contractor management plans to all Azenco workers before construction resumes. All workers should also sign the Code of Conduct before any construction work resumes.

There are onsite first aid resources for workers, and the Environmental Manager confirmed that there are several pre-identified health facilities in nearby towns for workers to be transported to for more serious injuries.

Billboards for OHS and fire safety

A grievance box or other intake mechanism has not been established for workers on site. Per the LMP and the contractor's LMP this will need to be established before construction works begin.

Land Acquisition. The site for the Navahi substation is located on government land. The site has been cleared of vegetation and leveled in May 2024 so it is not possible to know whether there were informal users on the land before construction. Some of the fields surrounding the site are being used for cropping and grazing.

Figure 6. Cultivated land plot near Shirvan National Park

Grievance Mechanism. A grievance box or other intake mechanism has not been established for community members on site; there are no informational signs or posters for community members either. Per the SEP and the contractor's Grievance Plan these will need to be established before construction works begin.

The team met with the Mayor of Navahi Municipality who reported no grievances or feedback on the Navahi SS construction, other than an appreciation for the local employment opportunities it may provide,

5.1.2 Overhead Transmission Lines[3]

Applicable Environmental and Social Management Documents. The Azerenerji ESIA, prepared based on national laws and regulations and World Bank ESSs, is applicable to the Azerenerji OHLs. The approved and disclosed ESIA refers to World Bank ESSs, as well as the RPF, LMP and the SEP prepared for the AZURE Project.

It is worth noting that all approved and disclosed Masdar documentation for the Banka and Bilasuvar SPPs, which will be financed by and comply with the environmental and social standards of AIIB, ADB and EBRD, consider the Navahi SS-Banka SPP and Navahi SS-Bilasuvar SPPs OHLs as "associated facilities" under their environmental and social policies and note that:

> *"Although the Government of Azerbaijan is developing the transmission line which connects the Banka [and Bilasuvar] project[s] to the Navahi substation, the commitment plan and associated mitigation measures and monitoring will be agreed with the World Bank and will be required to follow World Bank's Environmental and Social Standards. The World Bank are therefore still overseeing any gaps in the building and design of transmission line and ensuring alignment with their requirements including those related to land acquisition…*
>
> *…the development of the OHL[s] will require compliance with the World Banks ESS (specifically ESS5). This will be required even for the sections of the OHL[s] that will not receive financing from the WBG."*

Based on this reliance, AIIB and EBRD's due diligence documents only make a summary reference to these OHLs and their potential land acquisition impacts. AIIB and EBRD have not requested Azerenerji or Masdar to prepare documents and plans for identification, assessment, compensation and other mitigation of land acquisition impacts for these GoA-funded OHLs. Their due diligence documents rely on their assumption that the World Bank will ask for the production of such social assessments and resettlement plans.

According to Azerenerji's current ESIA, contractor's ESMP documents and RAPs should be prepared before construction activities begin on the three OHL lines in question: Navahi SS-Banka SPP (80km), Navahi SS-Bilasuvar SPP (90km) and Navahi SS-Absheron SS (65km). Such RAPs for the three OHLs were not available to the ESDD team for review. Contractor's ESMP documents were submitted to the ESDD team on 24 December 2024.

Contractor's Environmental and Social Management Documents. Azenco LLC, the contractor responsible for the construction of the three OHLs, has prepared a set of contractor's environmental and social management documents. These documents are

[3] This section covers the Navahi SS – Banka SPP OHL, the Navahi SS – Bilasuvar SPP OHL, and the Navahi SS – Absheron SS OHL financed by the GoA. It **does not** cover OHLs that will be financed by the World Bank under the AZURE Project. The three OHLs covered here are not considered "associated facilities" to the AZURE Project.

almost identical to the management plans developed by Azenco JSC and address key environmental and social management issues, describing scope, relevant legislation, reference documents, responsibilities, operational procedures, and mitigation measures.

Based on the ESDD review, with reference to the ESIA, LMP and SEP, social risk and impact management measures that are not sufficiently covered in the contractor's environmental and social risk management documents are summarized below.

Table 11. Recommendations for Additional Social Management Measures in Contractor's Documents

Azenco Management Plans	Additional Social Management Measures Recommended
Environmental and Social Management Plan	The ESIA states that "if contractor has significant control or influence over primary suppliers, contractor to monitor supplier and require improvement in labor safety practices or remedies in case of child or forced labor." *Under good international practice and to comply with ESS2, there should be measures in the ESMP to conduct due diligence on primary suppliers to identify potential risks of child labor, forced labor and serious safety issues which may arise in relation to primary suppliers. (ESS2)* *Parameters to be monitored (and reported to Azerenerji on a periodic basis) under the ESMP should include records of contractor and community consultation meetings; awareness sessions or trainings delivered to the community by the contractor; and grievances received. (ESS1, ESS10)*
Community Protection Plan	*There should be a commitment for Azenco LLC to pay any damages caused to community lands, crops or equipment in a prompt manner, and to protect topsoil on agricultural lands and restore topsoil when construction ends, for example if such impacts occur when the contractor accesses lands for the erection of electrical towers. This is especially important as during consultations, communities repeatedly brought up grievances on past contractors destroying crops and local roads with heavy equipment with no compensation and no rehabilitation. (ESS4, ESS5)*
Grievance Committee Plan	*The Grievance Committee Plan should include commitment by Azenco LLC to periodically report on grievances received to Azerenerji. (ESS1, ESS10)* *If a grievance on SEA/SH issues is received, Azenco LLC should report to this to Azerenerji immediately upon receiving the grievance. (ESS2, ESS4, ESS10)*
SEA Prevention Response Plan	*Currently, the SEA Prevention Response Plan has preventative measures for managing SEA/SH risks, such as Codes of Conduct. An assessment on the available service providers working on SEA/SH issues along the OHL routes would contribute to more responsive management of SEA/SA risks once they have taken place. (ESS2, ESS4)*

Site Visit Observations / Current State of Works. During site visits to the Navahi SS, Banka SPP, Bilasuvar SPP and Absheron-Garadagh SS, the ESDD team observed that installation works of towers under all three lines had started from the ends of the OHL lines (except at Bilasuvar SPP site). Construction at three OHLs started on 26 September 2024. The construction works in OHLs were stopped on 10 October 2024 with the request of the WB to allow completion of this ESDD. By 11 October 2024, a total of 50 pylons were erected: 8 pylons along the Navahi SS – Banka SPP OHL; 24 pylons along the Navahi SS – Bilasuvar SPP OHL; and 18 pylons along the Navahi SS – Absheron-Garadagh SS OHL.

Based on reporting from the OHL contractors, as of 15 December 2024, a total of 203 pylons were erected, after construction of OHLs restarted based on the World Bank's reassessment of the three OHLs as not "associated facilities."

Newly installed OHL Towers at Navahi, towards Banka and Bilasuvar

Newly installed OHL towers at Banka, going going towards Navahi

Newly installed OHL towers at Baku-Gazakh highway encroachment, going towards Navahi

From December 13 to 18, Azerenerji delivered OHS and SEA/SH trainings to Navahi and OHL contractors and surrounding communities. Based on the commitments in the ESIA and as a first order of business, these trainings should also be delivered to all workers of OHL contractors.

The Navahi SS-Banka SPP OHL route passes through Sirvan National Park, in which seven towers will be installed. The ESDD team visited this portion of the OHL, where works have not yet started. The locations for the seven towers, while inside the national park, will be sited on agricultural land cultivated with grains. The Sirvan National Park authorities have informed MENR that since this area is close to residential areas in Hesenli village, the area has no protection value for animals and that the Park authorities have been renting this area out to villagers for cropping. It is not clear if the leases are formal or legal; the denomination for the land to be acquired for the towers would not be considered “agricultural.” Moreover, the representatives also said that the administration of the NP currently negotiating the land offset (i.e., handing over this protrusion section of the NP to the local authorities and receiving an alternative land parcel which is already visited by the NP habitats being not suitable for agricultural activities) with the local executive power of Salyan region.

In other areas where the ESDD team observed the OHL corridors, it was observed that many plots of government land are used by grazers and their herds. While the installation of the OHL towers and restrictions on the RoW corridor may not deprive the herders of all land that is available, it may result in their loss of access to certain grazing areas and have an impact on their livelihoods which would be eligible losses for compensation under ESS5. Systematic consultations along the OHL corridor would be the only way to identify such affected persons.

Land Acquisition Impacts Determined to Date, based on Available Documentation. Under Azerbaijan’s current practice, land acquisition and compensation during OHL construction only covers the land under the direct footprint of the OHL towers and formal landowners and leaseholders on those footprints.

All of the information presented below represents land under the OHL tower footprints and not land along the OHL corridor. This applies to information on affected households as well; the numbers represent landowners or formal leaseholders affected by the tower footprints and no other land users covered under ESS5. The ESDD team was unable to obtain any documented and verifiable information beyond the information below.

For the two OHLs in question, the affected households reside in Salyan, Neftchala, Bilasuvar and Hajigabul regions. The lands are used for agriculture cultivation or grazing. Based on the ESIA dated July 2024, 126 households are affected by land acquisition for the OHL tower footprints. Based on the previous draft ESDD prepared by Iqlim dated October 2024, 72 landowner households, 3 landowner businesses, and 9 leaseholder households are affected by the same land acquisition. According to the latest information received from Azerenerji dated January 2025, 83 landowner households and 8 leaseholder households are affected by the land acquisition for the OHL tower footprints. The total area of land acquisition for the OHL tower footprints is 10,037.97 square meters.

As of 20 December 2024, compensation of households impacted by the Navahi SS-Bilasuvar SPP and Navahi SS-Absheron-Garadagh SS OHL towers has been completed (from September to October), with compensation for the Navahi SS-Banka SPP ongoing (October – ongoing). Approximately 175,000 AZN has been disbursed for compensation, with an estimation that the total compensation budget will approach 200,000 AZN.

Land Acquisition for OHLs as Implemented under Azerbaijan Laws / Gaps with Requirements of World Bank ESS5. Overall gaps between land acquisition and resettlement under Azerbaijan laws and ESS5 requirements has been covered under the AZURE Project RPF. This section only highlights the gaps and potential issues for land acquisition practices for OHLs.

- **Under Azerbaijan's current practice, land acquisition only focuses on the land under OHL towers**. Azerbaijan Scientific-Research and Design-Research Energy Institute, which is under the umbrella of Azerenerji but independent of the Azerenerji PIU, shares the design and the OHL alignment with the State Committee on Property Issues responsible for cadastral and deed titling. The State Committee on Property Issues then determines the landowners for each of OHL tower locations based on their records and GPS location measurements in the field. They do not conduct a census comparing the landowners and users on the ground versus the title holders in official records. They do not do an asset or a crop valuation. They do not cover any lands that are in the Right of Way (RoW) corridor for the OHL, 30 meters on either side of the actual OHL.

- **Similarly, the compensation only focuses on the land under the OHL towers, for owners or formal leaseholders of land**. Once the State Committee on Property Issues shares the names of the landowners on the title deeds with Azerenerji, Azerenerji will then set a fixed price based on the market value for the size of land required for the OHL tower footprints. This is a fixed price per tower footprint along the OHL corridor; it is not clear whether valuation methodology considers location, productivity or proximity to markets/roads of the individual plots as factors in valuation.

  Having recognized this as a potential issue, Azerenerji has engaged the services of a third-party Valuation Consultant to re-assess the valuation for the OHL tower footprints for these three OHLs and commits to topping up the compensation for the tower footprint lands if the Valuation Consultant determines a higher value than the compensation that has already been paid.

  Azerenerji then pays this compensation to one of the landowners, having them sign a form (see Annex 1) consenting to i) the compensation for the land under the OHL tower and ii) the restrictions on the RoW of the OHL corridor. The ownership of the land under the OHL tower is not transferred from the landowner to Azerenerji, which likely results in the landowner being responsible for property taxes for this portion of land despite not being able to benefit from it. If the landowner refuses to

sign the form or objects to the compensation amount, they have a formal legal recourse through the courts; this is not explicitly included in the information form.

Compared to the World Bank ESS5 requirements, these practices pose the following gaps and issues:

Eligibility of persons to be compensated.

- Only landowners with title deeds are eligible for compensation; other renters or users of land are not eligible for compensation. There may also be an equity issue with the compensation being paid to one of the landowners, with only one signature required rather than the entire list of landowners that may have rights to the property. This may cause disputes and/or judicial proceedings against the government or between the different landowners. This may also mean that more than often, the compensation is paid to a male landowner rather than a female landowner.

  Under ESS5, formal and informal landowners, renters, users and grazers can be eligible for different types of compensation.

Eligibility of losses to be compensated / entitlements.

- OHL corridor RoW: In Azerbaijan, the RoW extends to 30 meters on each side of the OHL, with restrictions on not building or growing anything on this land that exceeds 10 meters. The Azerenerji ESIA notes that in addition to restrictions on what can be done on the land, the RoW may lead to devaluation of the land for sale or rental purposes.

  Under ESS5, these types of restrictions on land use constitute a loss that should be compensated. These restrictions are often called "easements" on land. Valuation of the loss can be calculated in different ways, such as 20% of the market value of the affected land.

- Assets and crops: There is not a systematic way to compensate for possibly lost assets and crops on the footprint of the OHL towers. During consultations, community members discussed past experiences with OHLs where they were not compensated for crops or trees. The lands are often agricultural and formally building structures are not allowed even before the introduction of the OHL. However, it is possible that owners or users have also invested in fences, sheds etc on these lands. Since there is no asset and crop valuation as part of the acquisition process, these are not planned for and budgeted. There is encouragement for contractors to let the farmers harvest crops before construction and pay damages for damaged crops during construction access, but this is not a fixed entitlement. In consultations for the project, communities repeatedly brought up grievances on past contractors destroying crops and local roads with heavy equipment, with no compensation and no rehabilitation to follow.

Under ESS5, assets and crops that are affected/destroyed/prohibited by land use restrictions on land that is acquired by the government should be compensated at replacement cost. Crops or assets destroyed in temporary and acquisition is also required to be compensated.

- Transitional costs and livelihood losses: The law in Azerbaijan does not provide provisions for compensation for transitional costs that may be incurred by affected people or any livelihoods losses that may be incurred by affected people for the land acquisition for OHL towers or the easement along the OHL corridor.

  Under ESS5, transitional support will be provided as necessary to all economically displaced persons, based on a reasonable estimate of the time required to restore their income-earning capacity, production levels, and standards of living. Similarly, ESS5 requires measures to be put in place to allow affected persons to improve, or at least restore, their incomes or livelihoods.

Necessary processes for planning and implementation of land acquisition.

- Census, asset valuation and household surveys: Under the Azerbaijan system, beyond identification of landowners by the title deeds of the plots that will be affected by the OHL towers, no further census, asset valuation or household surveys are required.

  ESS5 requires a full census and asset valuation of all affected persons. Depending on the scope of resettlement and impacts, ESS5 may also require a sample-based or full household survey.

- Stakeholder participation in planning processes: Under the Azerbaijan system, Azerenerji will inform landowners whose land will be acquired for the OHL towers and have a dialogue on compensation price, restrictions on land use along the OHL corridor, and the need for consent to the land acquisition and restrictions, formalized by the consent form included in Annex 1.

  Under ESS5, decision-making processes related to resettlement and livelihood restoration should include options and alternatives from which affected persons may choose, and meaningful participation of affected communities and persons should take place during the consideration of alternative project designs, and throughout the planning, implementation, monitoring, and evaluation of the compensation process, livelihood restoration activities, and relocation process – with an additional emphasis on obtaining women's perspectives.

- Development of a fixed plan and budget for resettlement: A Resettlement Plan with a specific budget is not required under Azerbaijan law.

  ESS5 requires that resettlement planning is reflected in a Resettlement Action Plan with a budget allocated for compensation, transitional allowances, livelihood

restoration measures and stakeholder engagement, as well as monitoring and contingencies.

Identification of disadvantaged and vulnerable affected persons, livelihood restoration measures.

- As noted earlier, there is no provision in Azerbaijan law that necessitates the identification of disadvantaged vulnerable affected persons for their meaningful participation in land acquisition processes and for potential additional support. Obtaining the signature of a single landowner for the acquisition of OHL towers and providing compensation to this landowner may likely be resulting more disadvantaged members of the households or land users to be overlooked in the compensation process.

  ESS5 requires the provision special assistance to women, minorities or vulnerable groups who may be disadvantaged in the land acquisition process.

In conclusion, it will take significant additional efforts compared to standard practice to align Azerbaijan land acquisition practices for OHLs with World Bank's ESS5, whether for these three OHL lines that were assessed or for future OHL lines to be constructed under the AZURE Project.

6. Review of Azerenerji OHLs against the ESF

6.1 Overhead Transmission Lines

This section covers the Navahi SS – Banka SPP OHL, the Navahi SS – Bilasuvar SPP OHL, and the Navahi SS – Absheron-Garadagh SS OHL financed by the GoA. It does not cover OHLs that will be financed by the World Bank under the AZURE Project. The three OHLs covered here are not considered "associated facilities" to the AZURE Project. However, the agreed scope for the ESDD also includes an assessment of how the implementation of the GoA-funded OHLs align with good international practice, per the request of Azerenerji, and to inform the preparation and the implementation of environmental and social risk management measures for the OHLs that will be funded by the World Bank under the AZURE Project. Therefore, the table below is included to reflect the assessment of environmental and social issues that would need to be addressed for these three OHLs to be implemented in a manner consistent with the World Bank ESF. The comments may also apply to the similar EBRD, ADB and AIIB policies, if these institutions consider the three OHLs to be associated facilities for the Masdar components they are financing.

Table 13. Environmental and Social Issues not Aligned with the ESF

Requirement	Observations/Findings
ESS1: Assessment and Management of Environmental and Social Risks and Impacts	
Social Baseline	Under good international practice, the social baseline for affected and surrounding communities would cover a more granular understanding of these communities, as well as an identification of disadvantaged and vulnerable groups in relation to project activities and direct impacts, based on a census, sample household surveys, or focus group discussions.
Identification of disadvantaged and vulnerable groups	Under good international practice, the ESIA would include: - identification of specific disadvantaged and vulnerable groups in relation to specific project activities and direct impacts (such as people who farm on land informally without title or people without bank accounts who may have trouble managing compensation cash payments) - assessment of how risks and impacts from project activities may disproportionally affect such disadvantaged and vulnerable groups - differentiated measures by which the project will reach them, involve them and compensate them. This identification and assessment would be based on a census, sample household surveys, or focus group discussions.
Construction ESMP	Ensure sufficient inspection of the implementation of mitigation measures. This will require coordinating the activities of the various agencies. The PIU should coordinate closely with Azerenerji's construction management team to ensure that E&S issues are included in the

	supervision protocols. These should be based on the monitoring and assessment procedures in the C-ESMPs. The Azerenerji construction management team should also be able to enforce compliance with the ESMP. The PIU should coordinate site monitoring and management activities with the supervisor for the World Bank project, as soon as this company / individual is appointed.
Monitoring	The PIU should introduce checklists of E&S issues that need to be monitored during site inspections. These can be filled-in on site to ensure that all relevant subjects are covered. The checklists should be based on the ESMP and be shared with the Contractor, for use by the HSE manager. The format and content of the checklists should be agreed with the World Bank.
Contractor management plans	No contractors' management plans documents were initially available to the ESDD team for the OHL lines, for which construction has commenced [26 September 2024]. This temporary non-compliance was rectified by provision of undated copies (apparently drafts) the C-ESMPs for the OHLs shortly before submission of the ESDD report..
ESS2: Labor and Working Conditions	
Training for workers (On OHS, SEA/SH and other issues)	From December 13 to 18, Azerenerji delivered OHS and SEA/SH trainings to Navahi and OHL contractors and surrounding communities. Based on the commitments in the ESIA, these trainings should also be delivered to all OHL contractor workers. All OHL contractor workers should sign the Codes of Conduct.
Contractor management plans	No contractors' management plans documents (LMP, Codes of Conduct, Emergency Preparedness, Worker Health and Safety documents) were initially made available to the ESDD team for the OHL lines, for which construction commenced 26 September 2024. This temporary non-compliance was rectified by provision of undated copies (apparently drafts) the C-ESMPs for the OHLs shortly before submission of the ESDD report.
ESS3: Resource Efficiency and Pollution Prevention and Management	
Site and camp wastewater	The camps for workers were not checked in detail. However, as the Navahi camp is using a simple soakaway for sewage, it is possible that the same approach is used in other camps. The contractor should use watertight sewage tanks on all sites, as written in the ESMP, with arrangements for regular collection of contents by tanker, and disposal at treatment facilities. The PIU/supervisor will need to control this issue
Dust control	Dust suppression is addressed in the documents and the contractor has a program of atmospheric dust monitoring. This should be carried out on a daily basis, when works are active.
Restoration	Construction activities create disturbance of the ground surface along the corridor and access points, as well as the pylon sites. These can be short-term effects that recover with suitable restoration. The site supervision and monitoring should ensure that suitable restoration (such as filling ruts,

	replacing topsoil conservation, replanting trees) is carried out to an acceptable standard. The topsoil conservation measures are described in the ESIA and C-ESMPs.
ESS4: Community Health and Safety	
SEA/SH	Currently, the ESIA has preventative measures for managing SEA/SH risks, such as Codes of Conduct. An assessment on the available service providers working on SEA/SH issues along the OHL would contribute to an assessment of how to manage SEA/SA risks once they have taken place.
Damages to community assets	Management and mitigation measures should be in place for the OHL construction is the need for contractors to protect topsoil on agricultural lands and restore topsoil when construction ends, in cases where their access for OHL towers requires them to go through agricultural fields. This is especially important as during consultations, communities repeatedly brought up grievances on past contractors destroying crops and local roads with heavy equipment, with no compensation and no rehabilitation.
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	
Resettlement planning	The ESIA has appropriately identified the relevant mitigation and management measures that need to be in place for addressing land acquisition impacts. However, currently the construction on the OHL lands have started without any such Resettlement Action Plans (RAPs) in place, which does not comply with World Bank's ESS5. There are no verifiable records that compensation has been paid to all landowners and leaseholders affected by installation of OHL towers prior to installation of OHL towers on their land. There are no verifiable records that compensation has been paid for crops or assets that may be affected. There is no clear budget for land acquisition and resettlement implementation.
Valuation of assets and census	No asset valuation or census has been conducted by those that are affected by land acquisition and land restrictions along the OHL corridor. For those who will be affected by land acquisition and expropriation, the social baseline would cover a full census and asset valuation of all of those that are expected to be affected, including an identification of informal or seasonal users of land.
- Identification of all affected households, including any informal users, grazers, squatters **- Identification and assessment of loss of assets, crops, livelihoods**	Under international good practice and/or to comply with the requirements of ESS5, the ESIA should assess the actual adverse impacts of component activities, covering: - current crop use on the OHL tower bases - easement zones established around the OHL (how limitations may impact existing assets and crops, livelihoods, and property values) - households other than landowners, such as renters, informal users, grazers etc.

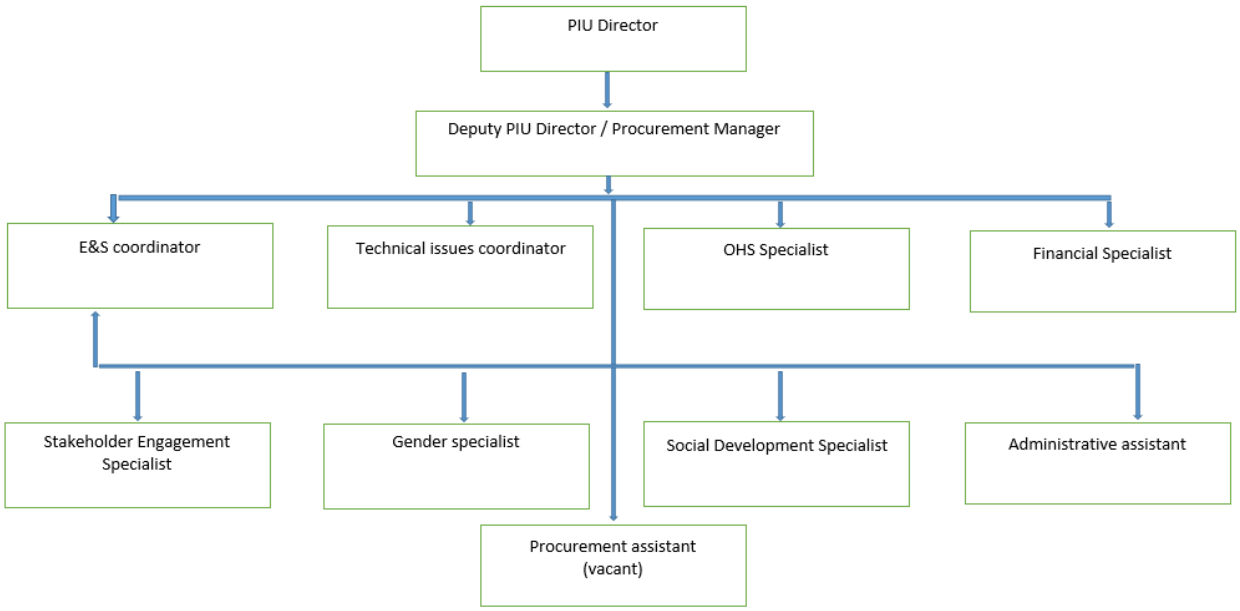
- Identification of disadvantaged and vulnerable groups	- livelihood impacts that may necessitate livelihood restoration interventions - any community or other use on government-owned parcels - construction of access roads referred to in different parts of the ESIA The assessment of these impacts would need to be done through a full census, full asset valuation and full or sample-basis household survey of all of those that are expected to be affected, including an identification of informal or seasonal users of land.
Compensation for all losses	Compensation is being provided for land only, and only land under the footprints of OHL towers. Under international good practice, compensation would need to be provided for easements and restrictions on land use, crops, assets, livelihood losses. Additionally, transitional allowances and support disadvantaged and vulnerable persons should be considered.
Livelihood restoration	There are no assessment of livelihood losses and no plans to provide livelihood restoration measures.
Grievance Mechanism	It is not clear whether affected households in the OHL corridors have been informed on grievance mechanism.
Resettlement monitoring	There are no RAPs prepared for the OHL construction and therefore no monitoring indicators to monitor land acquisition impacts. Not having a baseline assessment of land, assets and affected households will make monitoring more challenging.
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	
Shirvan Park	The section of affected park is currently used by local residents as farmland, and so the potential impacts of construction inside the park are reduced. However, some of the potential risks to wildlife from operations remain and should still be addressed. Whilst it seems to be unlikely, the intentions of the MENR concerning future inclusion of this land into the national park should be confirmed, in case additional procedures are necessary for this eventuality.
Mahmudchala wetland	It is recognized that the wetland is close to the OHL from Bilasuvar, and the general need for mitigation of impacts on birds is mentioned. The details of the mitigation measures should be coordinated with the Bilasuvar SPP project, which will be developing detailed proposals.
Tree cutting	The need for cutting trees should be confirmed and controlled, together with plans for mitigation
ESS8: Cultural Heritage	
Intangible cultural heritage	There is no assessment on whether there is any intangible cultural heritage along the OHL corridor. Focus group discussions or consultation meetings can also be used to elicit any issues relating to intangible cultural heritage.
ESS10: Stakeholder Engagement and Information Disclosure	

Stakeholder engagement	Sequencing: OHL installation and construction works may have started prior to engagement with affected households in the OHL corridor.
Grievance mechanism	It is not clear whether affected households in the OHL corridors have been informed on grievance mechanism.
Coordination	The PIU will need to be aware of all inspections by government agencies and to receive results. If possible, PIU personnel should accompany the inspections to ensure first-hand acquisition of monitoring data. It would be beneficial for the PIU to coordinate these inspections, if possible.

7. Azerenerji's E&S Management

The AZURE PIU has been established in anticipation of the World Bank-funded AZURE Project and the implementation of its components. At the same time, it is now responsible for ensuring that the environmental and social performance under the Azerenerji components deemed "associated facilities" meet the requirements of the World Bank ESF. These components are the Navahi SS and the Absheron-Garadagh WPP.

According to the environmental and social management documents of the AZURE Project, the organizational chart of the PIU will be as follows:



According to the Environmental and Social Commitment Plan (ESCP) for the AZURE Project, which has been finalized and adopted by Azerenerji, the PIU hired and maintains qualified staff and resources to support management of environmental and social risks and impacts of the AZURE Project, including one environmental specialist, social development specialists, a stakeholder engagement specialist, gender specialist and an OHS specialist prior to project effective date.

The Supervision Engineer role will be taken by a consultancy company, and procurement is expected to be completed in May 2025. The PIU personnel and supervisory engineers from Azerenerji will also provide input, and the PIU has increased the number of site visits for this purpose.

The start of construction in the "associated facilities" (specifically Navahi SS) and OHLs before the approval of the AZURE Project creates a challenge for the PIU's ability to manage environmental and social risks and impacts related to Navahi SS. Especially the

absence of the Supervision Engineer impacts the environmental and social supervision capacity of the PIU to oversee contractor performance in works that have already started.

In addition, the departments in Azerenerji Institute overseeing the design, procurement, contracting, land acquisition and supervision of Azerenerji components outside the AZURE Project are not familiar with World Bank's environmental and social requirements that are different from the Azerbaijan national legislation and systems.

For effective environmental and social risk management, the key roles that the PIU needs to play in the environmental and social management of the project is to ensure that:

- There is a regular supervision of all relevant environmental and social aspects, including contractor environmental and social performance against the stated requirements in the environmental and social documents prepared.
- Full data are recorded from supervision and reported periodically to Azerenerji management and the World Bank.
- Environmental and social performance is reviewed after each supervision and reporting period.
- Recommendations for improvements are then included into contract responsibilities.
- Contract management is coordinated with environmental and social requirements, specifically, contractor invoice approvals from the procurement side are conditioned on satisfactory environmental and social performance of the contractor in addition construction completion milestones.
- There is regular communication with other teams within Azerenerji, such as the departments responsible for design, land acquisition and supervision in Azerenerji Institute, on World Bank environmental and social requirements applicable to the AZURE Project components, Navahi SS and Absheron-Garadagh WPP. This communication should ensure that there is coordination on the sequencing of activities, such as the preparation and implementation of relevant environmental and social management measures before any construction activities take place.
- The PIU provides training and awareness raising to other teams within Azerenerji, such as the departments responsible for design, land acquisition and supervision in Azerenerji Institute, on World Bank environmental and social requirements applicable to the AZURE Project components, Navahi SS and Absheron-Garadagh WPP
- The PIU coordinates the activities of various other agencies and ministries to ensure that assessments and inspections are carried out on a regular basis, with participation of the PIU. The agencies may likely to set their own timetables, but the PIU will need to incorporate these into its monitoring plan.
- The PIU communicates directly with Masdar, and the associated international finance institutions supporting Masdar if needed, on a quarterly basis on the progress of civil works, as well as the status and implementation of environmental and social management plans and measures.

8. Corrective Action Plan

To ensure the completion and monitoring of the Corrective Action Plan outlined below, the AZURE PIU will visit the relevant construction sites twice a month to ensure that contractors are implementing action items outlined in the Corrective Action Plan and implementing works in accordance with the stated requirements in the environmental and social documents prepared.

If any deficiencies are found with respect to contractor performance on environmental and social aspects, the PIU will record these observations and agree with the contractor on how these should be remedied, with a timeline. The AZURE PIU will include these findings and agreed actions in project monitoring reports that are submitted to the World Bank on a regular basis, as part of project implementation.

No.	Reference Standard & Key Requirement	Gap / Area for Improvement Identified	Corrective Action	Deadline	Completion Indicator	Responsibility	Estimated Cost
For Banka SPP - Navahi SS OHL							
1	**ESS2.** Measures relating to occupational health and safety will be applied to the project. The OHS measures will take into account appropriate, industry-specific environmental health and safety guidelines.	According to the LMP, contractor workers should go through training on OHS, Codes of Conduct, SEA/SH, worker grievance mechanism and emergency prevention and preparedness within a month after hiring. This has not been done during previous construction period.	Contractor to provide training on OHS, SEA/SH, and contents of the contractor EMPs to **all** Azenco workers engaged in construction of OHLs	**28.02.2025**	Training delivered to **all** workers; training records and attendance shared with Azerenerji	Azenco	Low
2	**ESS2.** The Borrower will provide appropriate measures of protection and assistance to address the	Azenco workers have not yet signed the Code of Conduct included in contractor E&S documents.	**All** Azenco workers at Navahi SS to sign contractor Code of Conduct	**28.02.2025**	Signed Code of Conduct documents for **all** workers shared with Azerenerji	Azenco	None

No.	Reference Standard & Key Requirement	Gap / Area for Improvement Identified	Corrective Action	Deadline	Completion Indicator	Responsibility	Estimated Cost
	vulnerabilities of project workers, including specific groups of workers, such as women.						
3	**ESS2.** The Borrower will make reasonable efforts to ascertain that third parties who engage contracted workers are legitimate and reliable entities and have in place labor management procedures applicable to the project that will allow them to operate in accordance with the requirements of this ESS.	The contractor ESMP lists environmental and social staff of the contractor as an Environmental Manager, an OHS Manager, a Social Risks Specialist, and a Stakeholder and Community Liaison Specialist. Currently, Azenco has planned for an Environmental Manager and an OHS Manager on site when construction resumes, and not for a Social Risks Specialist, and a Stakeholder and Community Liaison Specialist.	Contractor to assign Social Risk and Stakeholder Engagement Specialist to site for management of and reporting on social risks	**28.02.2025**	Contractor employed a staff with relevant qualifications and responsibilities and informed PIU accordingly	Azenco	Part of contractor works (already included in their C-ESMP)
4	**ESS2.** A grievance mechanism will be provided for all direct workers and contracted workers to raise workplace concerns. Such workers will be informed of the grievance mechanism at the time of recruitment and the measures put in place to protect them against any	A grievance box or other intake mechanism has not been established for workers or community members on site; there are no informational signs or posters for workers or community members either.	Contractor to ensure that worker and stakeholder mechanisms are operational, with workers and stakeholders made aware of the grievance mechanism	**28.02.2025**	Grievance boxes at construction site, grievance posters/sign at construction site and municipal offices	Azenco	Low

No.	Reference Standard & Key Requirement	Gap / Area for Improvement Identified	Corrective Action	Deadline	Completion Indicator	Responsibility	Estimated Cost
	reprisal for its use Measures will be put in place to make the grievance mechanism easily accessible to all such project workers. **ESS10.** The Borrower will respond to concerns and grievances of project-affected parties related to the environmental and social performance of the project in a timely manner. For this purpose, the Borrower will propose and implement a grievance mechanism.						
5	**ESS4.** The Borrower will take measures to avoid or minimize impacts that may be associated with the influx of temporary or permanent project labor.	The incoming work force (approximately 80-100) will not have accommodation at the construction site but will be staying at nearby villages during construction (about 18 months). If not managed, this can create conflict between workers and community.	Contractor to conduct an assessment on the availability and identification of lodging and attendant services that will be used by the incoming Azenco workers.	15 March 2025	Contractor reports to Azerenerji on accommodation arrangements for workers	Azenco	Low
6	**ESS2.** As part of the environmental and social assessment, the Borrower will identify potential	Contractor has already procured construction materials from primary suppliers. Contractor has not conducted a due	Contractor to conduct due diligence of primary suppliers	31 March 2025	Contractor reports to Azerenerji on due diligence	Azenco	Low

No.	Reference Standard & Key Requirement	Gap / Area for Improvement Identified	Corrective Action	Deadline	Completion Indicator	Responsibility	Estimated Cost
	risks of child labor, forced labor and serious safety issues which may arise in relation to primary suppliers. Where there is a significant risk of serious issues related to primary supply workers, the Borrower will require the relevant primary supplier to introduce procedures and mitigation measures to address such safety issues	diligence of these primary suppliers.					
7	ESS3. Portalets in construction sites and ensure that it is pumped out and treated in appropriate facility for disposal.	The portalets has been organized by the Contractor in construction sites.	The portalets should be disposed of by pumping the wastewater into tankers and transporting the wastewater to a designated sewage treatment facility for treatment and disposal.	15 March 2025	Copy of the contract for wastewater disposal services	Azenco	Medium
8	ESS6: Bird flight diverters (BFD) for sensitive sections of the OHL	Contractor were informed on necessity to install BFDs for bird sensitive areas	BFDs will be installed on every 5 meters for 33 km section of the OHL	31.05.2025	Pictures with installed BFDs and bird monitoring reports	Azenco	Medium
For Bilasuvar SPP – Navahi SS OHL							
1	**ESS2.** Measures relating to occupational health and safety will be applied to the project. The OHS measures will take into account appropriate,	According to the LMP, contractor workers should go through training on OHS, Codes of Conduct, SEA/SH, worker grievance mechanism and emergency prevention and preparedness	Contractor to provide training on OHS, SEA/SH, and contents of the contractor EMPs to **all** Azenco workers engaged in construction of OHLs	**28.02.2025**	Training delivered to **all** workers; training records and attendance shared with Azerenerji	Azenco	Low

No.	Reference Standard & Key Requirement	Gap / Area for Improvement Identified	Corrective Action	Deadline	Completion Indicator	Responsibility	Estimated Cost
	industry-specific environmental health and safety guidelines.	within a month after hiring. This has not been done during previous construction period.					
2	**ESS2.** The Borrower will provide appropriate measures of protection and assistance to address the vulnerabilities of project workers, including specific groups of workers, such as women.	Azenco workers have not yet signed the Code of Conduct included in contractor E&S documents.	**All** Azenco workers at Navahi SS to sign contractor Code of Conduct	**28.02.2025**	Signed Code of Conduct documents for **all** workers shared with Azerenerji	Azenco	None
3	**ESS2.** The Borrower will make reasonable efforts to ascertain that third parties who engage contracted workers are legitimate and reliable entities and have in place labor management procedures applicable to the project that will allow them to operate in accordance with the requirements of this ESS.	The contractor ESMP lists environmental and social staff of the contractor as an Environmental Manager, an OHS Manager, a Social Risks Specialist, and a Stakeholder and Community Liaison Specialist. Currently, Azenco has planned for an Environmental Manager and an OHS Manager on site when construction resumes, and not for a Social Risks Specialist, and a Stakeholder and Community Liaison Specialist.	Contractor to assign Social Risk and Stakeholder Engagement Specialist to site for management of and reporting on social risks	**28.02.2025**	Contractor employed a staff with relevant qualifications and responsibilities and informed PIU accordingly	Azenco	Part of contractor works (already included in their C-ESMP)
4	**ESS2.** A grievance mechanism will be provided for all direct	A grievance box or other intake mechanism has not been established for	Contractor to ensure that worker and stakeholder	**28.02.2025**	Grievance boxes at construction site, grievance posters/sign at	Azenco	Low

No.	Reference Standard & Key Requirement	Gap / Area for Improvement Identified	Corrective Action	Deadline	Completion Indicator	Responsibility	Estimated Cost
	workers and contracted workers to raise workplace concerns. Such workers will be informed of the grievance mechanism at the time of recruitment and the measures put in place to protect them against any reprisal for its use Measures will be put in place to make the grievance mechanism easily accessible to all such project workers. **ESS10.** The Borrower will respond to concerns and grievances of project-affected parties related to the environmental and social performance of the project in a timely manner. For this purpose, the Borrower will propose and implement a grievance mechanism.	workers or community members on site; there are no informational signs or posters for workers or community members either.	mechanisms are operational, with workers and stakeholders made aware of the grievance mechanism		construction site and municipal offices		
5	**ESS4.** The Borrower will take measures to avoid or minimize impacts that may be associated with the influx of temporary or	The incoming work force (approximately 80-100) will not have accommodation at the construction site but will be staying at nearby	Contractor to conduct an assessment on the availability and identification of lodging and attendant services that will be used by the	15 March 2025	Contractor reports to Azerenerji on accommodation arrangements for workers	Azenco	Low

No.	Reference Standard & Key Requirement	Gap / Area for Improvement Identified	Corrective Action	Deadline	Completion Indicator	Responsibility	Estimated Cost
	permanent project labor.	villages during construction (about 18 months). If not managed, this can create conflict between workers and community.	incoming Azenco workers.				
6	**ESS2.** As part of the environmental and social assessment, the Borrower will identify potential risks of child labor, forced labor and serious safety issues which may arise in relation to primary suppliers. Where there is a significant risk of serious issues related to primary supply workers, the Borrower will require the relevant primary supplier to introduce procedures and mitigation measures to address such safety issues	Contractor has already procured construction materials from primary suppliers. Contractor has not conducted a due diligence of these primary suppliers.	Contractor to conduct due diligence of primary suppliers	31 March 2025	Contractor reports to Azerenerji on due diligence	Azenco	Low
7	ESS3. Portalets in construction sites and ensure that it is pumped out and treated in appropriate facility for disposal.	The portalets has been organized by the Contractor in construction sites.	The portalets should be disposed of by pumping the wastewater into tankers and transporting the wastewater to a designated sewage treatment facility for treatment and disposal.	15 March 2025	Copy of the contract for wastewater disposal services	Azenco	Medium
8	ESS6: Bird flight diverters (BFD) for sensitive sections of the OHL	Contractor were informed on necessity to install BFDs for bird sensitive areas	BFDs will be installed on every 5 meters for 2 km section of the OHL	31.05.2025	Pictures with installed BFDs and bird monitoring reports	Azenco	Medium

No.	Reference Standard & Key Requirement	Gap / Area for Improvement Identified	Corrective Action	Deadline	Completion Indicator	Responsibility	Estimated Cost
Azerenerji E&S Management							
1	**ESS1.** The Borrower will work with the Bank to identify measures and actions to address any capacity development issues pertaining to the Borrower, any relevant national, subnational or sectoral implementing institution, and any implementing agency.	Azerenerji departments outside the PIU responsible for design, supervision and land acquisition are not fully informed of World Bank E&S requirements	PIU to provide training to other teams within Azerenerji, such as the departments responsible for design, land acquisition and supervision in Azerenerji Institute, on World Bank E&S requirements applicable to the OHLs	15 March 2025	Training delivered	AZURE PIU	Low
2	**ESS1.** The Borrower will monitor the environmental and social performance of the project. The Borrower will ensure that adequate institutional arrangements, systems, resources and personnel are in place to carry out monitoring.	The start of construction at Navahi SS before the AZURE Project is approved and a supervision engineer is in place impacts capacity of PIU to oversee contractor E&S performance at Navahi SS.	PIU to establish a working relationship with the Azerenerji construction management team, with authority to ensure that E&S issues are addressed under the terms of the construction contracts. This may require the PIU to engage a full-time overseer for the contract management.	15 March 2025	Internal protocols to establish the link Minutes of meetings with the contractor to show involvement of the PIU Correspondence to the contractors concerning issues raised above	AZURE PIU	Low (if current staff used), moderate if additional staff required.
3	**ESS1.** The Borrower will monitor the environmental and social performance of the project. The Borrower will ensure that adequate institutional	The start of construction at Navahi SS before the AZURE Project is approved and a supervision engineer is in place impacts capacity of PIU to oversee contractor E&S	PIU to introduce a formal system of recording supervision inspections, based on checklists that can be filled in on site. This should be based on the procedures defied in the C-ESMPs and	15 March 2025	Copies of completed forms	AZURE PIU	Low

No.	Reference Standard & Key Requirement	Gap / Area for Improvement Identified	Corrective Action	Deadline	Completion Indicator	Responsibility	Estimated Cost
	arrangements, systems, resources and personnel are in place to carry out monitoring.	performance at Navahi SS.	approved by the PIU. Reporting should be based on approved formats that will inform the PIU and provide a basis for intervention. The reporting should also flow to the WB, which will approve the system.				
4	**ESS1.** The Borrower will monitor the environmental and social performance of the project. The Borrower will ensure that adequate institutional arrangements, systems, resources and personnel are in place to carry out monitoring.	The PIU does not have a Social Specialist in place to oversee social risks and impacts, and their management.	PIU to hire a Social Specialist with sufficient qualification and experience to oversee social risks and impacts, and their management.	28 February 2025	Social Specialist hired and working at the PIU	AZURE PIU	Medium

Annex A Form for Compensation for OHL Tower Footprints

_____ "___"_____2024

65 km long 500 kV Agreement to place the supports of the single-circuit Navahi YS – Absheron YS power transmission line and provide access to the land

1. I, _____
(name, surname),
Legal certificate of ownership with extract number _____
owned by me based on
on the plot of land located at (hereinafter the plot of land)
500 kV single-cycle Navahi YS – Absheron YS I agree to the placement of power line supports and access to the land.

2. I confirm that compensation in the amount of _____manats was paid by Azerenerji OJSC for laying the support of the power transmission line on the plot of land owned by me in the size of _____, and I am fully satisfied with the amount of compensation given.

3. I undertake the following obligations:
- of "Shirvan REŞ" LLC for the purposes of technical and operation, restoration and overhaul, or to prevent or eliminate accidents and their consequences , as well as to enable the delivery of necessary materials create; approval of the "Dimensions of protection zones of electrical networks and requirements for conducting economic work in those areas" approved by the decision of the Cabinet of Ministers of the Republic of Azerbaijan No. 261 dated May 16, 2024 to comply with the restrictions regarding the presence of a power transmission line protection zone in a part of the land area owned by me in accordance with the Requirements for making";
- Azerenerji OJSC to remove the power transmission line and supports from my land;
- to inform Azerenergy OJSC about the expropriation or lease of the land within 10 days from the date of conclusion of the relevant contract .

4. By signing this agreement, I confirm that I am familiar with the provisions of the Law of the Republic of Azerbaijan dated May 11, 2010 No. 998-IIIQ "On Personal Data" and the rights and duties in the field of personal data protection have been explained to me. I confirm my consent to the processing of the data specified in this agreement in electronic form, including the transmission in electronic form through open communication channels through the Internet .

5. day it is signed, and during its use, the plot of land is considered to be encumbered in favor of Azerenerji OJSC .

Identity document:

serial_____number _____issuing authority_____issued date_____

Address for sending correspondence:

Phone:

Owner/Tenant: _____
full name, signature (to be filled in manually)

Annex B List of People Met

Rustam Qasimov, Advisor to President of Azerenerji, Azerenerji

Nizami Ahmadov, Head of Mapping and Land Registration Department, State Property Committee

Mubariz, Deputy Head of State Expertise Division, MENR

Ayshat Ağayev, Head of Design Division, Azerenerji Institute

Alakbar Bakshaliyev, Head of Land Acquisition, Azerenerji Institute

Rais Bagiyev, SS Design Manager, Azerenerji Institute

Rashad Aslanov, Environmental and Social Manager, Azenco (Contractor for OHLs)

Semaye Ismayilova, Mayor, Navahi Municipality