

Environmental and Social Monitoring Report

PUBLIC

Project Number: 52224-001
Annual Report 2022
February 2023

Kazakhstan: Total Eren Access M-KAT Solar Power Project

Prepared by M-KAT Green Limited Liability Partnership for the Asian Development Bank (ADB).

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M-KAT SOLAR POWER PLANT

ANNUAL ENVIRONMENTAL & SOCIAL REPORT

This report includes the required answers to the questionnaire and the Environmental and Social Action Plan implementation status with the supporting documents numbered according to the action they support.

1. COMPANY DETAILS

Client Name:	M-KAT Green
Client Address:	Kabanbay Batyr Avenue, 15A, Nur-Sultan city, 010000
Country:	The Republic of Kazakhstan
Client authorized representative:	<p>I certify that, to the best of my knowledge and belief, the information contained in this report is true, complete and correct in all material respects and does not omit any material fact necessary.</p> <p>Signature:</p> <p style="text-align: center;">Thierry Plaisant, General Director</p> <p>Date: 25/02/2023</p>
Contact Details:	<p>Telephone: +7 771 110 8239 Mobile: +7 771 110 8239 E-mail: thierry.plaisant@total-eren.com</p>
Reporting Period: 2022	<p style="text-align: center;">Unless otherwise stated, the information provided below is for this reporting period only.</p>

PART A. CORE QUESTIONS

2. PROJECT UPDATE

Project Name (As given in the Project Legal Documentation):	M-KAT Solar Power Plant
Project OP ID (As given in the Project Legal Documentation):	50025
Please provide a summary update on the project implementation. If the project includes production or manufacturing please also include :	The project is in operation phase

3. ENVIRONMENTAL AND SOCIAL ACTION PLAN (ESAP) STATUS UPDATE

Using the guidance provided below, please provide an ESAP status update as an attachment to the Annual Environmental & Social Report. Please use the template provided under Annex 1 for the update. The ESAP for the Project is included in the Legal Documentation.

For each ESAP action item, please complete the two steps below and note under the ESAP Status column:

1. Interpret your implementation status using the below guidance:

Exceeding Target (ET):

The project has gone beyond the requirements of the defined ESAP target and evaluation criteria within the defined timeframe.

Achieved Target (AT):

The project has achieved the ESAP action targets and fulfilled the evaluation criteria within the defined timeframe.

On Target (OT):

The project is on target for achieving ESAP action targets and fulfilling the evaluation criteria within the defined timeframe.

Minor Delay (MD):

The project has not achieved the ESAP action targets within the defined timetable but has put systems, processes, or mitigation measure in place, which are working towards addressing the deficiencies within a reasonable timeframe. In such case, please specify the new target date.

Significant Delay (SD):

No significant progress has been made towards achieving the ESAP action targets within the defined timeframe. In such case, please specify the new target date.

Not Applicable yet (NA):

The defined ESAP action is not applicable yet, e.g., if the project is currently at design stage and the defined ESAP action will be applicable only during the operational stage.

2. Comment on implementation status: Provide a brief commentary on the chosen status. For actions with delays or changes, explain the reasons for the delay or changes, actions planned to meet the requirements and estimated completion date for the action. Please note that any material change to the action plan(s) or deadlines agreed with the Bank must be satisfactory to the Bank.

4. GENERAL

4.1. Have any new environmental, social or gender ¹ issues been identified which were not foreseen by or contemplated in the Environmental and Social Action Plan?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
4.2. Have there been any accidents or incidents that have caused damage to the environment, affected cultural property, or created liabilities for the Client?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
4.3. Have there been any suspensions, closures, penalties, fines and/or corrective action plans imposed by environmental, health and safety, labour authorities on the Company or the Contractors?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
4.4. Have there been any exceedances of the emission and discharge standards that apply to the project (either by regulation or as defined under the ESAP / ESMP/ EU Directives)?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
4.5. Have there been any court cases filed or determined against the Client in the reporting period that are related to labour, health and safety, environment, land acquisition, damage to third party assets, etc.?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>

¹ Within the Bank's Environmental and Social Policy, "social" refers to those issues which pertain to project-affected people and their communities and workers and related to socioeconomic status, vulnerability, gender identity, human rights, sexual orientation, cultural heritage, labour and working conditions, health and safety and participation in decision making.

5. HUMAN RESOURCES MANAGEMENT

Unless otherwise noted, the questions in this section apply to both direct employees and non-employee workers (e.g. contractors and other 3 rd party employees working on the project site or performing work directly related to the core functions of the project).			
	Total	Recruited in the reporting period	Dismissed in the reporting period
Number of direct employees:	Men: 17 Women: 9	Men: 16 Women: 4	Men: 3 Women: 1
Number of contracted workers:	Men: 27 Women: 2	Men: 0 Women: 0	Men: 0 Women: 0
Number of seasonal / temporary workers:	Direct Employees: Men: 0 Women: 0	Contracted Workers: Men: 124 Women: 27	Men: 0 Women: 0
Number of employees:	International (%) 1	National (%) 99	Local (%) ² 24
<p>Last year, there was a significant amount of precipitation during the winter season. This led to the accumulation of snow on the solar panels, which required the panels to be cleaned to ensure their proper functioning. During the summer season, a considerable number of contractors were hired to mow the grass in the generation field. This was likely done to maintain the efficiency and cleanliness of the solar generation area.</p> <p>The contract with METKA, a company or organization that might have been involved in the site's operations, came to an end. As a result, most of the site workers who were previously working under the METKA contract were hired by our team to continue their work directly. 4 employees of METKA decided to leave on their own.</p>			
5.1. Were there any collective dismissals as defined in article 1 of EU Directive 98/59 ³ and/or as defined in the national labour code affecting the directly employed workforce during the reporting period?			Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
5.2. Are any collective dismissals planned for the directly employed workforce in the next year?			Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
5.3. Were there any changes to: <ul style="list-style-type: none"> worker representation at Client facilities? status of collective agreements? 			Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
5.4. Have workers raised any grievances concerning the project, Client, or contractors including working conditions or any type of discrimination, harassment or bullying during the reporting period?			Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
5.5. Have there been any strikes or other collective disputes related to working conditions at the Client in the reporting period?			Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>

6. HEALTH AND SAFETY (H&S) DATA

6.1	<p>Please provide information on any accidents / incidents that have happened to employees, contractors or other third parties during the reporting period? Please confirm circumstances, severity of the accident (fatal, serious, minor etc.), status of investigation and remedial action taken.</p> <p>No incident has been recorded during 2022.</p>
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² From directly affected/neighbouring communities

³ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31998L0059&from=EN>

6.2	<p>Please provide information on the H&S training provided to employees or contactors during the reporting period? Please provide the training topics and the numbers of workers that have been trained.</p>																								
<table border="1"> <thead> <tr> <th>Trainings</th> <th>Number of workers trained</th> </tr> </thead> <tbody> <tr> <td>1. Electrical Safety</td> <td>205</td> </tr> <tr> <td>2. Fire Safety</td> <td>205</td> </tr> <tr> <td>3. OHS</td> <td>205</td> </tr> <tr> <td>4. Industrial Safety</td> <td>15</td> </tr> <tr> <td>5. First Aid</td> <td>205</td> </tr> <tr> <td>6. Anti-terror</td> <td>205</td> </tr> <tr> <td colspan="2"></td> </tr> <tr> <th>Drills</th> <th>Number of workers involved</th> </tr> <tr> <td>1. Evacuation</td> <td>205</td> </tr> <tr> <td>2. Fire Fighting</td> <td>205</td> </tr> <tr> <td>3. Security</td> <td>205</td> </tr> </tbody> </table>		Trainings	Number of workers trained	1. Electrical Safety	205	2. Fire Safety	205	3. OHS	205	4. Industrial Safety	15	5. First Aid	205	6. Anti-terror	205			Drills	Number of workers involved	1. Evacuation	205	2. Fire Fighting	205	3. Security	205
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6.3	<p>Please provide information on the number of H&S inspections / audits which have been carried out during the reporting period? Please confirm if these were carried out by the Client or by an independent OSH expert and if any actions are outstanding.</p> <p>Some H&S inspections were carried out in 2022 :1 - Contractor HSE O&M manager conducted an internal HSE audit for PV and high voltage (03/01/2022); 2 - Operator HSE Manager, audited by PV (20.04.2022), HV & Security company (19.04.2022); 3 - HSE Manager of the Operator, passed the audit of PV, HV and security (09.09.2022).</p>																								
6.4	<p>Major developments and achievements related to H&S management during the reporting period: new safety measures, safety awards / initiatives.</p> <p>The major developments related to H&S management were led by the takeover of the O&M activities by the O&M contractor (TESK) from the subcontractor (Metka)</p> <ol style="list-style-type: none"> 1. The 2-year O&M contract with METKA company was expired without extension. TESK decided to internalize these services. In the takeover process, almost all former Metka employees were hired by TESK. All the workers on the site except one who agreed to join were accepted into the team. There were no layoffs, lawsuits, nor dismissals during the takeover. 2. In the summer of 2022, certification of workers was carried out in accordance with the requirements of the legislation of the Republic of Kazakhstan. 3. In October 2022, an annual medical examination was organized for site workers; 4. All employees have completed the necessary training in electrical safety, labor protection, road safety, industrial safety and first aid; 5. Additional video surveillance cameras have been installed in the beginning of 2022 allowing faster responds to emergency situations occurring on site; 																								
6.5	<p>Please provide information on the road traffic collisions that have happened to employees or contactors during the reporting period including the number of accidents, fatalities, major injuries, minor injuries, damage only and the investigative process undertaken. Summarise remedial action taken.</p> <p>No road traffic incidents have been recorded during 2022.</p>																								

7. STAKEHOLDER ENGAGEMENT

7.1 Please provide information on the implementation of the stakeholder engagement plan agreed with the Lenders and summarise interaction with stakeholders during the reporting period, including:

- meeting or other initiatives to engage with members of the public or public organisations, civil society, communities, including vulnerable groups during the report period. Please describe how you have made such meetings and interactions accessible to both men and women of all ages, all social groups, and those who speak minority languages.
- Summarise any coverage in media on environmental, health and safety and social issues related to the project, and,
- interaction with any environmental or other community groups.

Regular meetings and consultations have been held with representatives of the local administration, both in the Shu city and the nearest settlement of Alga to maintain constant contact with local communities. Communication has been established with the local public association "Council of Elders" of the Alga rural district, as well with the Youth Center of the Shu district.

Please describe any changes to the Stakeholder Engagement Plan:

No change has been done in the SEP in 2022. An updated stakeholder mapping is under development.

7.2 How many complaints or grievances did the project receive from members of the public or civil society organisations during the reporting period? Please split by stakeholder group and by issues and provide status update on % of resolved and unresolved complaints. Summarise main issues raised in the complaints or grievances and explain how they were resolved:

In 2022, we received in some periods new complaints from villagers regarding the impact of our site on the village water supply. We organized an open-door meeting to show our connection to the municipal water network and introduce our water usages limited to the supply of the security guard accommodation camp. We also got acquainted with the water utility company which confirmed that the complaints were not technically founded.

The Water Reduction Plan has been implemented during the monitoring period:

1. The level of water consumption is recorded monthly.
2. Regular maintenance of pipelines and equipment installed in the kitchen and bathrooms.
3. A detailed analysis of water consumption during washing of solar panels is being carried out. Water consumption does not exceed the number of passport values of the brush.

7.3 What information on environmental and social issues was put in the public domain during the reporting period? Please attach a copy or the link.

The project NTS, SEP, SEP and ESAP are still present on the Total Eren's website.

<https://www.total-eren.com/en/m-kat-solar-plant/>

No additional publications.

Is the project Categorised A by the EBRD?

No:

PART B QUESTIONS FOR PROJECTS WITH SPECIFIC CONDITIONS

8. WATER USE AND EFFICIENCY

Does the project involve production or manufacturing with a high-water demand (greater than 5,000 m ³ /day)?		Yes: <input type="checkbox"/>
		No: <input checked="" type="checkbox"/>
Total volume of water drawn from water source(s) in m ³ during the reporting period	463 m ³	
Total volume of potable water drawn from water source(s) in m ³ during the reporting period (if available)	41.7 m ³ (Potable water consumed from the pipeline village of Alga).	

Total units of production/manufacturing (please define the units in the response)	No production
Water source (well, water network, etc.)	<p>Potable water is supplied from the municipal network. Additional water is transported from another source mainly for panels cleaning.</p> <p>The reason for the decrease in water consumption was increased control, which made it possible to keep records of consumption and eliminate damages (pipeline leaks) in time. Despite the large number of seasonal workers involved in grass mowing and snow removal, the contractor provided food and drink for workers outside the site. Showers were not provided by TESK.</p>

9. GREENHOUSE GAS (GHG) EMISSIONS

Are the direct and indirect ⁴ GHG emissions of the project more than 25,000 tonnes/year CO ₂ -equivalent?	No: <input checked="" type="checkbox"/>
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10. LAND ACQUISITION

Was there any land acquisition associated with the project during the reporting period?	
<p>There were no changes during the reporting period. Since the lease period for the northern access road was coming to an end, M-KAT decided to extend the lease period for the land plot. In addition, the northern access roads provide faster access for emergency vehicles in the event of an emergency. An application to extend the lease of a land plot must be submitted before the lease expires.</p>	
Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/> If yes, please provide answer to the following:	
Number of communities affected:	None
Number of people affected:	landowners: None land users: None
Have any persons been physically displaced? If yes how many?	None
Permanent land use:	
Temporary land use:	
Overall Status of land acquisition:	
Is there a Resettlement Framework/ Resettlement Action and/or Livelihood Restoration Plan (RAP/LRP) developed for the Project?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>

11. GENDER

Is there a Gender Action Plan (GAP) developed for the Project?	Yes: <input type="checkbox"/> No: <input checked="" type="checkbox"/>
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⁴ Indirect emissions from the grid electricity

12. COMMUNITY DEVELOPMENT

Please summarise the social or community development initiatives undertaken by the Client during the reporting period, and associated expenditure: Comment on whether the community has input into the selection of initiatives to be supported.

In order to get feedback from the local population, a public meeting was held with the participation of opinion leaders, namely: with the leaders of the council of veterans, with the leaders of youth associations and with the leadership of the local executive authorities.

As the main result of the meeting, it was decided to direct the accumulated funds, about 35,000 USD to the construction of a mini soccer field. The 35,000 USD amount corresponds to the non-spent CSR budgets from 2020 and 2022 and the CSR budget for 2023. A MoU was signed in February 2023 between the Alga village municipality, a local public foundation and MKAT Green for the project implementation which could occur by mid-year.

For the celebration of the Independence Day of the Republic of Kazakhstan, a charity donation of 500\$ was provided for which memorable souvenirs for veterans were bought and donated.

M-KAT SOLAR POWER PLANT ENVIRONMENTAL AND SOCIAL ACTION PLAN IMPLEMENTATION STATUS

No	Action	Environmental and Social Risks (Liability/Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources/Responsibility	Time-frame	Target and Evaluation Criteria for Successful Completion	Implementation status (ET, AT, OT, MD, SD, NA)	Comments on Implementation Status
PR 1. Environmental and Social Appraisal and Management (ADB SR 1. Environment and Social Protection Strategy)								
1.1	<p>Appoint designated Community Liaison Officer and provide to the EHS manager sufficient training in ISO 14001 and 45001 standards to enable her to develop the EHS and Stakeholder Management System and plans for the Project and implement them. Ensure full compliance with national legislation.</p>	Delays in project implementation due to noncompliance with ESAP	EBRD PR1, par.15, best practice ADB SPS SR1	Staff time, training cost/ Top management, Site Manager	a.b. After start of Bank financing or before construction (whichever comes first) c. for the loan duration	<p>a. CLO appointed. Training undertaken</p> <p>b. EHS documentation found adequate by a qualified consultant</p> <p>c. Full compliance with national legislation</p>	AT	<p>a. CLO appointed and trained in 2019</p> <p>b. A new HSES manager was recruited in April 2022. He is in charge of H&S management.</p> <p>c. Full compliance with national legislation.</p>
1.2	<p>Include into tender documentation and Contractor's contract a provision on compliance with EBRD and ADB's EHS social and labour protection requirements, and ADB Social Protection Strategy including full compliance with national labour legislation and take measures to comply with ILO's core labour standards. Select contractors that demonstrate adequate capability in EHS and labour management including managing subcontractors. Ask contractors to develop an EHS plan agreeable to the Company before starting any activities. Audit the contractor adherence to the EHS aspects of the contract, ensure timely correction of deviations. Include in Contractor's contract a provision on compliance with national and local labor laws and measures to comply with the core labor standards.</p>	Work delays / Good relations with authorities	EBRD PR1, par.20, ISO 14001, ISO 45001 Kazakh norms (SNiP, SanPiN, GOST), sectoral guidelines, EBRD policy. ADB SPS Prohibited Investment List, ADB SPS,; ADB Social Protection Strategy	-*EPC contractor time/ Legal and procurement dept., EHS manager	During tender packages preparation and construction	<p>EPC Contractor HR policy aligned with the national labour legislation. Tender documents include ESAP requirements. Criteria for assessing contractors EHS and labour management capabilities established. Contractor EHS plan approved by the Company</p>	NA	<p>Compliance with EBRD ESP and national requirements is requested in EPC contract. HSE Plan has been developed.</p> <p>No longer applicable after construction completed</p>

No	Action	Environmental and Social Risks (Liability/Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources/Responsibility	Time-frame	Target and Evaluation Criteria for Successful Completion	Implementation status (ET, AT, OT, MD, SD, NA)	Comments on Implementation Status
1.3	To the extent practicably possible obtain from the monocrystalline modules suppliers available information on their suppliers EHS impacts like occurrence of silicosis in quartz miners, silicon furnaces operators working condition, forced labour and worst forms of child labour as well as silicone tetrachloride recycling or disposing practices that prevent hydrochloric acid leachate escape	Risk of exposure to public criticism/Good company image	EBRD PR1 International Labour Organisation conventions 29 and 105 and 182, ADB SPS SR1	None/Site manager	Prior to procurement	Available with the supplier information is obtained	NA	The solar panels supplier EHS report obtained but it described only the plant itself and did not include its suppliers of raw material. As little leverage is available to demand further information, it was considered that no more action was possible. No longer applicable after installation completed
PR 2. Labour and working conditions (ADB SR 1. Environment and ADB Social Protection Strategy)								
2.1	Ensure that contractor and its subcontractors have a worker representative and a human resource policy which is disclosed to workers. Provide one grievance mechanism accessible to all project related workers with the ability to complain anonymously, and include in each answer a roadmap for an unsatisfied worker to take the grievance further.	Risk of work related conflicts and damage to assets / Better worker relations and company image among the local community	EBRD PR2 , par.20, ADB SPS SR1, Best practice	None / EHS manager	Prior to construction	Human resource policies of all involved in the project entities have provision for worker representation and are disclosed. Provision for anonymous complaints have been made and answers contain a roadmap for further complaints.	NA	A worker representative was elected. The grievance handling mechanism was disclosed. All workers have the ability to complain anonymously. No longer applicable after construction completed

No	Action	Environmental and Social Risks (Liability/Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources/Responsibility	Time-frame	Target and Evaluation Criteria for Successful Completion	Implementation status (ET, AT, OT, MD, SD, NA)	Comments on Implementation Status
2.2	Produce annual report on implementation of grievance mechanism, types of grievances and resolutions, and compliance with national labor laws and core labor standards. Request the contractor to monitor subcontractors working conditions and timely disbursement of wages by addressing related complaints through grievance handling mechanism		ADB Social Protection Strategy		During construction	Annual report on compliance with labor regulations and standards and grievance mechanism effectiveness in place. Complaints on working conditions and delays in disbursement of wages resolved timely.	NA	Information on implementation of grievance mechanism is provided in this annual report. No separate report prepared because no grievances there have been recorded. No longer applicable after construction completed
2.3	Develop Contractor and Suppliers Management Plan applicable to all subcontractors and core suppliers. If temporary accommodation is used, the plan should follow the IFC/EBRD Worker Accommodation Guidelines (Appendix 1) and national sanitary standards.	Good company image	EBRD PR2 IFC/EBRD Worker Accommodation Guidelines ADB SPS SR1		Before EPC contractor is mobilised.	Plan considers the need for worker accommodation and is applied to subcontractors and core suppliers.	AT	The employees of the O&M Contractor, the O&M Subcontractor and the HV substation subcontractor are not accommodated on the site. The security company contracted by the O&M Contractor accommodates up to 30 people (guards, management). The Client supported the maintenance of the accommodation facilities made available to the Security Company.
PR 3. Resource Efficiency and Pollution Prevention and Control (ADB SR 1. Environment)								
3.1	Include control of the equipment exhaust excessive smoke in the internal audit checklist	Good company image	EBRD PR 3 RoK legislation, ADB SPS SR1	None/Site Manager	Prior to construction	Control inserted in audit checklist	NA	Control of the equipment exhaust excessive smoke was included into the HSE inspection checklist.

No	Action	Environmental and Social Risks (Liability/Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources/Responsibility	Time-frame	Target and Evaluation Criteria for Successful Completion	Implementation status (ET, AT, OT, MD, SD, NA)	Comments on Implementation Status
								No longer applicable after construction completed
3.2	Develop a waste management plan to include broken solar panels utilization. Request the contractor to provide waste memos to ensure appropriate disposal location and methods, and to include this requirement in the agreement with its subcontractors.	Risk of contamination removed. Valuable components of broken panels utilised	EBRD PR 3, ADB SPS SR1	HSE Manager	1. Prior to construction 2. Continuously from start of construction	1. Plan uses the reuse-reduce-recycle-recover-safe disposal hierarchy 2. Waste memos available	AT	1. Plan made by METKA. 2. The EPC Contractor contracted a specialized company in utilization of solar panels. Damaged PV Modules were removed from the site by this company after construction. 21 panels are in the MKAT warehouse. They are planned to be refurbished. Spare parts are ordered for their repair on site.
3.3	Request and control that oil drums are stored on a sheltered and bunded pad. Ensure that contractor controls fuel tank drivers use of trays under refuelling couplings and that places of small repairs of machinery have leakage containment and swapping material	Ground contamination, fines, cost of cleanup.	Best practice	Construction supervisor	During construction	Oil drums containment eliminates leakage risk. Refuelling tank trucks checks and vehicle parking areas checks available.	AT	There are no fuel storage facilities at the site. Vehicles are refueled at gas stations in Shu. A contract was signed with Sinoil for refueling equipment on request. The used oil is transferred to the local workshop for regeneration.
3.4	If water is used for panels washing, develop water use reduction plan WURP	Good company image	EBRD PR3	None/Site Manager	Before operation	Water use reduction plan in place and implemented	AT	WURP was developed based on water consumption assessment data during 2022, including 2 panel washing cycles.
PR 4. Health and Safety (ADB SR 1. Environment)								
4.1	Request the contractor to develop site specific HS plan with identification of risks and to transfer its OHS policy and system requirements to subcontractors through regular HS audits	Work site specifics and risk of rare accidents with severe consequences may be overlooked	ISO 45001, ADB SPS SR1	EHS Manager	Plan before construction, audit records during construction	OHS documentation shows that subcontractors HS performance effectively controlled	AT	All the staff and employees are taken to the HS induction and orientation training. Quarterly and monthly inspection documented with required mitigation measures and deadlines for completion.

No	Action	Environmental and Social Risks (Liability/Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources/Responsibility	Time-frame	Target and Evaluation Criteria for Successful Completion	Implementation status (ET, AT, OT, MD, SD, NA)	Comments on Implementation Status
4.2	For all high-risk works, add site specific risk assessments in the local permit-to-work system and enforce register of near misses with their in depth internal analysis For operation stage develop safety provisions for an individual electrician working alone	Risk generated by unusual conditions could be missed by HS instructions Electrocution without quick aid may lead to death or permanent disability	Legislative requirements	EHS Manager	Before operation starts	Permit to work has site specific risk assessment Near misses registered IWA provisions are in place	AT	After conducting an in-depth analysis of the potentially hazardous risks associated with high-voltage equipment, the HV workers were provided with personal protective equipment against thermal risks of an electric arc.
4.3	Ensure that the fire protection belt width is at least 4m at the northern part of the site and 5m at the southern end where grass is thicker and higher. Plough the belt before each summer	Unusually strong ground fire with strong wind may surpass a standard fire protection belt around the site and damage panels	Best practice	Site Manager	Before each summer	No records of ground fire damage to the plant assets	AT	In June-August 2022, fire-fighting grass cutting was carried out throughout the territory, including the high-voltage substation. A fire-prevention plowing of the entire perimeter of the object and a segment plowing between sections of the generation field were also carried out. METKA carried out fire-fighting plowing of the perimeter in April 2022.
4.4	If security guards use firearms, ensure that they know and have on site the instruction for firearms secure storage, handing over and use against vulnerable groups of population	Public unrest, injuries, company image damage, complaints	PR 4 par.17/ Legislative requirements/ EU regulations, ADB SPS SR1	Site Manager	Construction and operation	Instruction available on site and covers all vulnerable groups	AT	The security agency does not issue firearms to its employees. Security guards are equipped only with signalling and containment equipment.

No	Action	Environmental and Social Risks (Liability/Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources/Responsibility	Time-frame	Target and Evaluation Criteria for Successful Completion	Implementation status (ET, AT, OT, MD, SD, NA)	Comments on Implementation Status
PR 5 Land Acquisition, Involuntary Resettlement and Economic Displacement (ADB SR 2)								
5.1	Prepare Land Acquisition Closure Report including: a. Project summary b. Socio-economic and vulnerability status of 5 displaced persons (DPs) c. Minutes of the meetings/consultations held with DPs d. Entitlement matrix as per PR5 (including legislative requirements) e. Evidence and timing of the payment; f. Conclusions and recommendations: It needs to confirm or otherwise that payments were made in line with PR5 requirements/national laws.	Good company image	PR5 Best practice	None/CL O	Within 2 months after the investment	Closure Report in place and its recommendations followed	NA	LACR was approved by the Lenders. No longer applicable.
5.2	If panels cleaning is required, consider employing local women and Alga village families which in the course of the CLO monitoring are identified as having been affected by displacement of their cattle from the SPP area	Good company image	PR5 Best practice	Training time/Site manager	During operation	At least 25% of total staff during operations are women. Out of cleaners at least 50% will be women and from Alga village	AT	After an appropriate risk assessment, it was decided not to involve women in grass cutting. In 2022, 30% of local women were cleaning panels from snow and dirt.

No	Action	Environmental and Social Risks (Liability/Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources/Responsibility	Time-frame	Target and Evaluation Criteria for Successful Completion	Implementation status (ET, AT, OT, MD, SD, NA)	Comments on Implementation Status
PR 6. Biodiversity Conservation and Sustainable Natural Resource Management (ADB SR 1. Environment)								
6.1	Enforce driving along surfaced with chip rock passages and make vehicle parking area as small as possible.	Soil structure damage alters vegetation for long time / Good housekeeping	Best practice	None/Site Manager	During construction	Design and order of construction minimise risk of damage. Subcontractors contracts and performance audit checklist include this requirement.	AT	All project roads were covered with crushed stone 8 cm thick and rammed. The local warranty repair of the roadbed of the Central Road was carried out in 2022. Two parks for 10 cars were organized in the site.
6.2	Monitor vegetation reinstatement at damaged areas and soil for sign of wind erosion. If noted, apply effective erosion abatement measures.	Opportunity to minimise impact missed / good housekeeping	EBRD PR 6/ Best practice, ADB SPS SR1	Recultivation cost/Site Manager	Two vegetative seasons of operation	Monitoring information is inserted in Annual ES Report to EBRD and ADB	OT	No signs of wind erosion are observed after mowing the grass.
6.3	Prohibit staff and contractor contact with dead animal corpses, poaching and chasing of animals	Opportunity to minimise impact	Best practice	Site Manager	Prior to and during construction and operations	Prohibition is in the Code of behaviour	OT	Included in site induction. No finds during 2022. Warning signs "Beware of animals on the roads" are installed at the entrance.
PR 8. Cultural Heritage (ADB SR 1. Environment)								
8.1	a. Check that powerline, ORU and access road construction contractors conduct archaeological surveys b. If archaeological sites are found, consider the line relocation from the sites protection zone. Fence and mark the sites. Inform locals about the sites and their protection status c. If impact on sites is unavoidable exclude sites from the State Protection List, conducting the full detailed archaeological survey and excavation.	Fines and delays due to law violations. Negative public image.	Legislation EBRD PR 6, ADB SPS SR1	None/Site Manager	Before powerline and access road construction starts	a) Archaeological survey by licensed contractor in place b) Design avoids the sites protection zones. Letters to local councils with information on sites available. c) Authorities approve actions for the sites that will be under the project's impact	NA	No longer applicable after construction completed

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	d. Develop and require the earthwork conducting subcontractors to follow the chance find procedures					d) Chance find procedure is in place and adhered to by the subcontractors		
PR 10. Information Disclosure and Stakeholder Engagement (ADB SR 1, SR 2, and SR3)								
10.1	Implement the Stakeholder Engagement Plan with the grievance mechanism and update it annually. Conduct information dissemination and meeting with surrounding stakeholders to increase awareness on the future construction in their area and potential impacts, and availability of grievance procedure if they have any issues/concerns.	Community issues identified and expectations managed	PR 10. – meaningful consultation ADB SPS	Top management / CLO	Before and during construction and operation.	SEP is up to date and implemented in full Grievance records properly maintained.	OT	Regular contacts have been maintained with the Alga Mayor and the Shu district administration. No registered grievances throughout 2022 except some complaints related to the site impact on the village water supply. These complaints were not technically founded.
10.2	Provide general public access to information on the E&S performance of the Project and the Company	Large discrepancy between actual and perceived impact / Good company image	Best practice	CLO	During construction and operation.	Information disclosed according to SEP	SD	No information on environmental and social issues was put in the public domain during the reporting period. The project NTS, SEP and ESAP are still present on the Total Eren's website.
10.3	With Alga Public Governance Council develop and implement a Corporate Social Responsibility Program (CSR) for the Project and disclose it as per SEP. Allocate and disclose to the Public Governance Council the CSR budgets (on commissioning and annual). Use the following CSR actions selection criteria: 1.Action cost fits the allocated to the CSR budget and accounts for other needs; 2.Action does not overlap with the State programs; 3.Action benefit is sustainable;	Attain Community support and some community benefits from the project.	Best practice EBRD	Top management, CLO	Develop CSR during construction and implement after operation starts. After commissioning then on-going	Program agreed with stakeholders, disclosed as per SEP and implemented according to schedule	AT	In order to get feedback from the local population, a public meeting was held with the participation of opinion leaders, namely: with the leaders of the council of veterans, with the leaders of youth associations and with the leadership of the local executive authorities.

No	Action	Environmental and Social Risks (Liability/Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources/Responsibility	Time-frame	Target and Evaluation Criteria for Successful Completion	Implementation status (ET, AT, OT, MD, SD, NA)	Comments on Implementation Status
	4. Action benefits the local community and is not biased to a particular group or person.				annual summary of CSR related actions in annual report			<p>As the main result of the meeting, it was decided to direct the accumulated funds, about 35,000 USD to the construction of a mini soccer field. The 35,000 USD amount corresponds to the non-spent CSR budgets from 2020 and 2022 and the CSR budget for 2023. A MoU was signed in February 2023 between the Alga village municipality, a local public foundation and MKAT Green for the project implementation which could occur by mid-year.</p> <p>For the celebration of the Independence Day of the Republic of Kazakhstan, a charity donation of 500\$ was provided for which memorable souvenirs for veterans were bought and donated</p>
10.4	Report annually on project E&S issues and benefits and implementation of action plans to Lenders and other stakeholders	Ensure transparency on E&S issues	PR 10 – Information disclosure ADB SPS	CLO	Annually throughout Project implementation	Reports provided in time and fully completed. Monitoring reports disclosed	AT	The reports were provided on time.