TABLE OF CONTENTS

Page

1 INTRODUCTION

1.1 WHAT IS THE AMASRA HARD COAL MINE PROJECT?

The Amasra Hard Coal Mine Project is a planned coal mine project, located in the Black Sea region of Turkey.

The Project is owned and operated by Hattat Enerji ve Maden Ticaret A.Ş., a company of Hattat Holding A.Ş. Hattat Holding was founded in 1996 and incorporates 21 companies. It has operation rights for the Bartın coal sites, and methane research rights in Zonguldak, Amasra, Bartın and Kastamonu. Its aim is to produce hard coal and provide it for the use of Turkish industry, the Turkish economy and Turkish people.

Hard coal mining in the area started in 1960s by Turkish Hard Coal Enterprise (TTK). HATTAT was awarded the mining rights of the "Amasra Hard Coal Mining" in April 2005 following a public auction in 2004. HATTAT was granted the licence for an initial 20-year term, which can be extended upon request. HATTAT requested an extension from TTK and, following a legal process an extension was granted for the completion of preparatory activities prior to mining and the start of the mining licence period until June 2019.

The intention is to mine coal for transportation to coal users (principally coal-fired power plants) within Turkey. Coal will be shipped through a dedicated wharf facility. In total, approximately 5.3 million tonnes of material will be mined each year. After processing to remove impurities, approximately 4 million tonnes of coal will be produced in total each year.

The coal is of high quality and very valuable for industrial use. The coal's sulphur content, ash and dust emissions are also relatively low.

Mining facilities will include:

- Three mine shafts and associated underground mine galleries and facilities;
- Coal washing plants;
- Wharf for transportation of coal to customers;
- Water supply system
- Power transmission lines from a nearby substation in the close proximity of Shaft-2.

Figure 1-1 shows some of the key facilities located around Shaft 1.

The existing road network is sufficient to access the Project facilities and hence no additional road construction is needed. Currently the Project is in the Construction Phase and operational phase is planned to start in 2018.

HATTAT envisages an initial capital investment of approximately €735 million for the Amasra Hard Coal Mine Project. At present, c. €300 million has been spent by HATTAT. HATTAT is currently seeking financing for its Amasra Hard Coal Project.

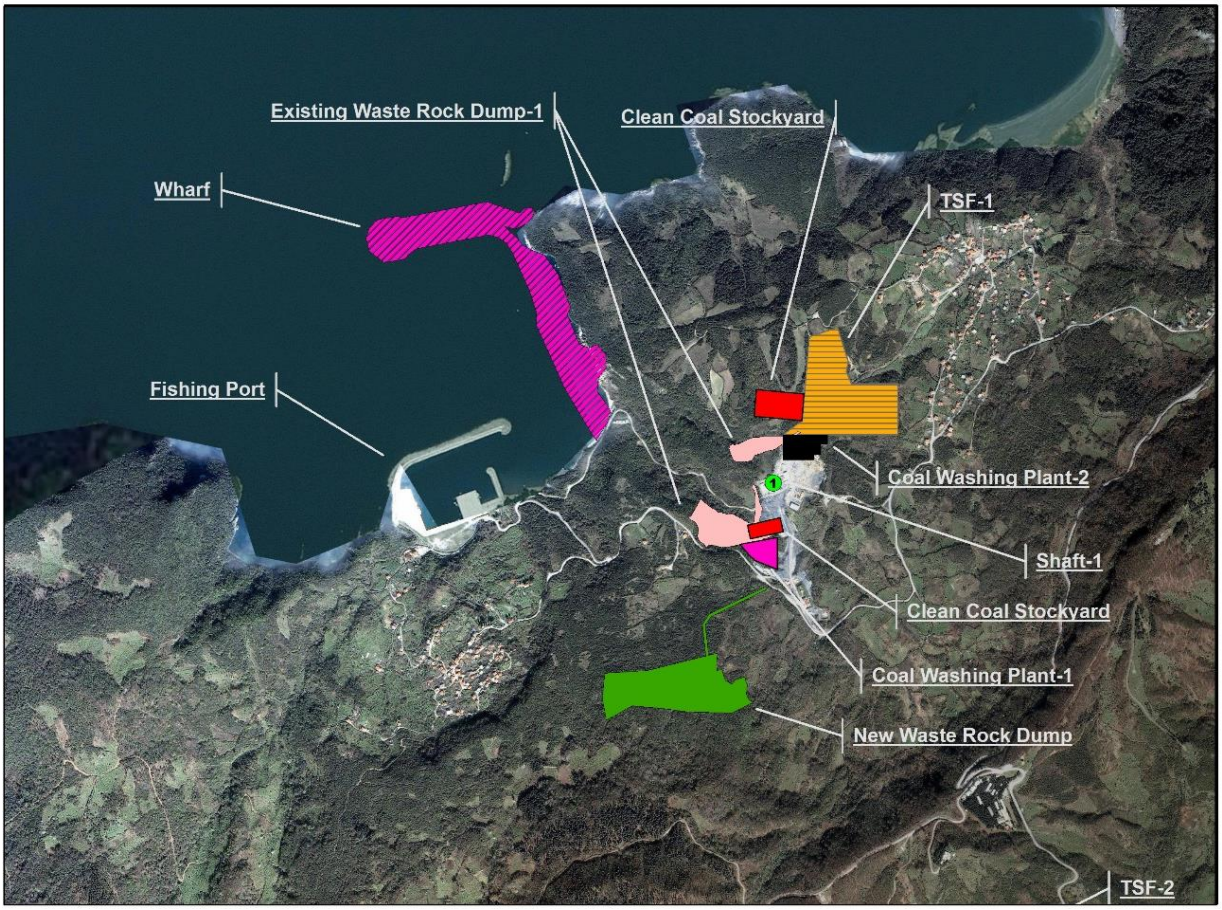

Figure 1-1. Location of the Key Facilities of the Project around Shaft 1.

1.2 WHERE IS THE AMASRA HARD COAL MINE PROJECT?

The Amasra Hard Coal Mine (Field B) is located near Amasra, in Bartın Province within the West Black Sea region of Turkey, as shown in Figure 1-2. Field A is a shallow coal field located above Field B and is being operated by TTK. The nearest town of Amasra is located immediately adjacent to Shaft 3 and has a population of approximately 7,000. The nearest main town is the Provincial capital of Bartın, 16 km to the south. The town of Bartın has a population of 56,577. Based on the targeted production, 3 shafts have been installed as part of the Project (see Figure 1-3, which also shows the locations of the nearest settlements Gömü, Tarlaağzı, and Kazpınarı).

Figure 1-2. Regional Location of the Project

Figure 1-3. Aerial View of Shaft Locations and Nearby Settlements

1.3 WHAT ENVIRONMENTAL AND SOCIAL STUDIES HAVE BEEN UNDERTAKEN?

Given the nature of the Project as a license acquisition of a hard coal mine that started in 1960s by Turkish Hard Coal Enterprise (TTK), the Project has been exempted from conducting an Environmental Impact Assessment (EIA) as part of the Turkish permitting regulations, although parts of the Project (such as the waste rock dumps, tailings facilities, etc.) did require an EIA to be conducted as part of Turkish regulations.

HATTAT commissioned ELC Group (part of Royal Haskoning), and subsequently ACE Sustainability Consulting Services, to conduct an assessment of potential environmental and socio-economic impacts and develop appropriate plans to prevent, minimize, and mitigate negative impacts. This ESIA report was developed by 2U1K Mühendislik ve Danışmanlık A.Ş. (2U1K), building on the EIAs prepared for Turkish permitting purposes and the work conducted by previous ESIA consultants. Golder South Africa conducted geochemical, subsidence, and water resources impact assessments.

The ESIA builds on the Turkish regulatory framework and provides a structure for the assessment and management of environmental and social risks and impacts that go beyond compliance with Turkish requirements while respecting the requirements and commitments set out in the various EIAs.

The ESIA Report is made up of the following chapters:

- Chapter 1 Introduction
- Chapter 2 Legal and Planning Policy Framework
- Chapter 3 Approach to Environmental and Social Assessment
- Chapter 4 Project Description
- Chapter 5 Alternatives
- Chapter 6 Stakeholder Consultation and Engagement
- Chapter 7 Air Quality
- Chapter 8 Biodiversity
- Chapter 9 Topography, Geology and Soils
- Chapter 10 Water Resources
- Chapter 11 Noise and Vibration
- Chapter 12 Landscape and Visual Amenity
- Chapter 13 Population and Society
- Chapter 14 Economics and Employment
- Chapter 15 Land Use and Ownership
- Chapter 16 Infrastructure and Services
- Chapter 17 Community Health, Safety & Security
- Chapter 18 Cultural Heritage and Archaeology
- Chapter 19 Cumulative Impact Assessment

As part of its Environmental and Social Management System, HATTAT has developed the following Management Plans and Frameworks to manage activities in compliance with Turkish requirements and international standards:

- Labour Management Plan
- Land Acquisition and Resettlement Framework
- Traffic Management Plan
- Chance Finds Procedure
- Contractor Management Plan
- Stakeholder Engagement Plan
- Grievance Mechanism
- Topsoil Management Plan
- Non-Mineral Waste Management Plan
- Mineral Waste Management Plan
- Hazardous Materials Management Plan
- Community Development Plan
- Conceptual Mine Closure Framework
- Local Content and Training Plan
- Water Resources Management Plan
- Air Quality Management Plan
- Noise and Vibration Management Plan
- Biodiversity Management Plan
- Community Health and Safety Management Plan
- Emergency Preparedness and Response Plan

1.4 WHAT IS THE PURPOSE OF THIS DOCUMENT?

This document is a non-technical summary, and it aims to summarize and describe, in non-technical language, the Amasra Hard Coal Mine Project, the key findings of the environmental and social impact assessment (ESIA) and outlines HATTAT's approach to the management and monitoring of identified environmental and social issues.

1.5 WHERE AND WHEN CAN I SEE THE ESIA?

This ESIA, the Management Plans and this non-technical summary were released by HATTAT on the date determined in coordination with lenders on its website (http://www.hattatenerji.com), and in hard copy at the HATTAT offices in Istanbul (Büyükdere Caddesi 3 Yol Mevki No: 235 80670 Maslak / İSTANBUL) and Amasra (Gömü 1 Nolu İşletmesi Çınar Yolu Mevkii No: 80/1 Gömü /Amasra / Bartın).

HATTAT will hold disclosure meetings, open to all attendees, at the office of the nearby villages around the project site and its Project office in Amasra. Details for the meetings venue, dates and content will be announced prior to such meetings.

1.6 CAN I MAKE COMMENTS ON THE ESIA?

For a period of 30 days, , anyone can comment on the ESIA via feedback forms provided online and at the Hattat offices. Hattat will then review, respond to, and incorporate comments into the final ESIA where appropriate.

2 PROJECT DESCRIPTION

The Amasra Hard Coal Project comprises the underground mining of coal, the washing of coal with water at the surface to remove impurities and waste and increase the quality of the coal, the storage of the resultant waste in permanent purpose-designed tailings storage facilities, and the shipment of coal from an adjacent wharf by ship to industrial coal users in Turkey.

2.1 WHAT IS THE AMOUNT OF COAL TO BE PRODUCED?

According to an Independent Technical Report (ITR) prepared by SRK in March, 2015, the “run of mine” (coal that can be mined and processed for sale) resource 101.12 Mt.

Most coal reserves in Turkey are of low quality, making it difficult to use. In Amasra, however, the coal is of high quality and very valuable for industrial use. The coal’s sulphur content, ash and dust emissions are also relatively low.

2.1.1 WHO FOUND THE MINERAL DEPOSIT?

The mineral deposit has been known for many years and mining has been undertaken within the licence area since the 1960s by TTK.

2.2 DOES THE PROJECT HAVE A MINING LICENCE?

HATTAT has been awarded the mining rights of the "Amasra Hard Coal Mining Field B" located within the borders of Amasra District of Bartın Province in the West Black Sea Region of Turkey. Operational rights of Amasra B Field were transferred to HATTAT with the TTK’s operation license. Details of operation license is provided below:

Table 2-1. Tabular Summary of Licences (number, type, area, expiry, owner)

License No	Access No	Type	Area (ha)	Expiry Date	Owner
72582	1155435	Group IV	430215.68	07.02.2045	General Directorate of Turkish Hardcoal Enterprise (TTK)

2.3 WHAT OTHER PERMITS DOES HATTAT NEED?

Summary of other permits in place is presented in Table 2-2.

Table 2-2. Status of Permitting Process

Permitting Process for the Mine

No	Permit / License	Status
1	Operation License	In place
2	Royalty Agreement with Order No. 0513630 dated 15.04.2005	In place
3	"No EIA Required" decision	In place
4	Forestry Permit	Partially in place (Permit application process continued for some remaining forestry areas)
5	Business and Working License	To be obtained at operation stage
6	Groundwater Withdrawal Permit	In place
7	Permit To Purchase and Use Explosives	In place
8	Environmental Permit	In place
9	Waste Management Plan	3-year Hazardous Waste Management Plan and Non-Hazardous Waste Management Plan is in place Waste management plan for the waste rock dumps and tailing storage facilities will be prepared
10	Reinstatement Plan	To be obtained at the stage of mine closure
11	Access Road Permit	To be obtained in case of access road construction
12	Approval for Precautions Against Fires and Explosions	To be obtained at operation stage

Permitting Process for the Wharf

No	Permit / License	Status
1	Occupancy Permit	To be applied at the start of operation stage.
2	Forestry Permit	Applied; in progress
3	License Certificate for Operation of Ship-Generated Waste Reception Facilities	To be applied before the wharf to start operation
4	Construction License	To be applied before start of operation stage.
5	EIA Positive Certificate dated 06.10.2016	In place for 7 years following the issuance of the EIA Positive Certificate.
6	Environmental Permit	To be applied at completion of the wastewater treatment plant.
7	Operation License	To be applied at completion of construction.

Permitting Process for the Coal Washing Plant

No	Permit / License	Status
1	EIA Positive Certificate	In progress: draft EIA was submitted to MoEU; currently through review process.
2	Environmental Permit	To be applied at completion of the wastewater treatment plant.
3	Forestry Permit	Applied; in progress
4	Operation License	To be applied at completion of construction.
5	License for the Tailing Storage Facilities	1. To be applied at completion of construction. 2. During the EIA stage as an appendix of the EIA report
6	Reinstatement Plan	To be obtained upon completion of the operational activities

2.4 WHAT STANDARDS WILL BE APPLIED TO THE PROJECT?

HATTAT will ensure that the Project complies with all Turkish legal requirements as well as with the Equator Principles, which are international standards. The Project will meet the most stringent requirements of the two.

2.5 WILL HATTAT PAY TAXES AND ROYALTIES?

It is expected that the Project will start operations in 2018. Table 14-9 shows that tax payments are expected to peak in 2029, and will gradually decrease in line with coal production.

The Project will also pay royalties based on its revenues, which will be transferred to the national treasury, the municipality, special provincial administrations, and to the affected villages, in accordance with the Mine Law. Table 14-10 provides an overview of total estimated Project royalty payments. No royalty payments are required until production commences.

The Project will continue disclosing information on taxes paid via its website (see: http://www.hemaenerji.com/bilgitoplumuhizmetleri/).

Table 2-3. Estimated Tax Payment of the Project by Years

Year	Expected Tax Payments (in Million Euro)
2020	10,7
2021	24
2022	40,1
2023	40,3
2024	38,2
2025	38,2
2026	40,4
2027	32,7
2028	32,3
2029	42,4
2030	39,4
2031	29,4
2032	26,2
2033	33,9
2034	26,9
2035	34,4
2036	21,2
2037	15,0
2038	15,2
2039	10,4
2040	11,5
2041	10,6
2042	10,9

Year	Expected Tax Payments (in Million Euro)
2043	11,1
2044	10,8
2045	11,2
2046	8,7

Source: HATTAT, 2017

Table 2-4 Estimated Royalty Payments

Entities for Royalty Payment	Total, in Euro
Total State Right (2%)	133.879.483
Government Rights (1%)	66.939.741
Treasury Share (1%)	33.469.871
Special Provincial Administration (0,5%)	16.734.935
Servıce Transfer Unıt to the Villages (0,5%) (Euro)	16.734.935
Munıcıpalıty Share (0,2%) (Euro)	13.387.948

Source: HATTAT,2017

2.6 WHO USES THE LAND NOW AND WILL THEY BE AFFECTED?

Land use in the Project Area of Impact mainly consists of uncultivated bushland and agricultural lands (consisting of trees, meadow, hazelnut groves, marginal agricultural land), forestlands, and privately owned residential lands. There is a rocky area in the borders of Gömü village, Kavşaksuyu Water Protection zone, in the borders of Kaman Village and industrial areas of Hattat.

Project land acquisition started in 2006. From 2006 to 2017 the Project prioritised the purchase of land through direct negotiations with the landowners. The Project negotiated the sale of several privately owned plots of land for the use of the Project (see Table 2-5).

Table 2-5. Land Acquisition, Rental, and Expropriation Timelines

Land Acquisition Method	Start date	Completion
Land Purchase	2006	2017
Expropriation	2017	2017
Rental lands of TTK	2006	2006
Rental lands of Forest	2006	On-going

The settlements that were affected by the purchase are Kum Neighbourhood, Gömü and Kazpınarı villages. The total size of the land purchased is 397,955 m^2. The total number of affected individuals is 66 and the most affected settlement is determined as Gömü Village. Table 2-6 provides an overview of the size of the land purchases to date, the number of affected owners, and settlements.

Table 2-6. Purchased Lands

Settlements	Purchased Land m^2	Number of Affected Parcel	Number of Affected Land Owners
Gömü Shaft-1	226,235	45	45
Kazpınarı Shaft-2	152,910	19	19
Amasra (Kum) Shaft-3	18,810	2	2

Source: Hattat

Several plots required for the construction and operation of the Project will be rented from the General Directorate of Real Estate (near the wharf area, approximately 163,000 m^2) and from the Bartın Provincial Forestry Department, as some parts of the Project site are designated as forestlands. Permitting for this currently ongoing. Several parcels and buildings are also rented from TTK. Several plots are being rented from private owners for Project drilling purposes. The rental contract specifies that the Project is committed to restore the land upon termination of the rental agreement.

It was not possible to reach an agreement on the sale of certain plots of lands which the Project requires for its construction and operational activities. Those plots are the subject of expropriation. As per the Expropriation Law, TTK, as the pertinent government authority, is responsible to manage the expropriation process related to the Project. TTK applied to the Ministry of Energy for the "Public Interest Decision" in order to start the expropriation process. In 2017 TTK established an ‘expropriation commission’ for each parcel, followed by the start of an official negotiation process with the landowners. It is expected that the expropriation process will be completed at the end of 2017. Table 2-7 summarizes the size of the land subject to expropriation and the number of affected land owners.

Based on information currently available, there is one permanently occupied house located on the plots subject to expropriation. The house is occupied by a retired family of two. No other houses or occupied dwellings are known to be located on the plots subject to expropriation. Based on available information, the land subject to expropriation is not used for agriculture production for livelihood purposes. Most of the land subject to expropriation is uncultivated bush land. Certain plots are used for commercial hazelnut production, and there is one small tea house currently in operation that will be subject to expropriation. No illegal land users have been identified so far.

HATTAT has agreed with TTK that TTK will complete the expropriation process as per Turkish law. Once that is completed, HATTAT will conduct further assessments as required under the IFC Performance Standards.

Table 2-7. Lands Subject to Expropriation

Settlements	Land to be Expropriated m^2	Number of Affected Parcel	Number of Affected Land Owners
Gömü Shaft-1	162,248	97	217
Kazpınarı Shaft-2	26,253	7	7
Amasra (Kum) Shaft-3	9,415	1	1

Source: Hattat

2.7 WHERE WILL WATER BE SOURCED FROM?

In addition to domestic requirements, water is required for mining activities including dust suppression during coal transportation, operation of underground mining equipment and drilling machinery, and concrete production for packwall system. During the construction phase, domestic and industrial water is supplied from the groundwater wells located in Kazpınarı near Shaft-2. Drinking water demand is furnished by bottled water.

During the mine operation period water will be sourced from:

- Five boreholes to be used out of a total of six water supply boreholes;
- Mine water generated from the underground inflows (contact water for use in processing);
- Pollution controlled dams constructed for the water management at the various facilities (for process use);
- Additional groundwater boreholes if augmentation is required.

Groundwater will require minimal treatment to improve the quality and make it fit for human consumption. Water treatment plants will be installed near Shaft-1 and Shaft-2, for treatment of extracted groundwater.

2.7.1 HOW WILL POWER BE SUPPLIED TO THE MINE?

The Project will have a peak power demand of 50 MVA throughout the life of the Project.

Three power transmission lines that will be fed from the national network are included within the scope of the Project. At present, a power transmission line of 31.5 kV has already been erected. As one (154 kV) of the additional lines needed for power supply has already been erected, only 31.5 kV additional line will be erected to supply additional power for Project activities. These transmission lines (154 kV and 31.5 kV) within the scope of the Project will be capable of meeting the power demand of all facilities and installation of 31.5 kV will be undertaken by HATTAT.

2.7.2 WHAT IS THE PLANNED PROJECT SCHEDULE?

According to the Mine Plan Schedule prepared by HATTAT, the first coal extraction from the production panels (East Block and Shallow West Block) is proposed to be started in May 2018. Then, in 2021, coal extraction will start in the West Block and this will be followed by the start of coal extraction in Southeast Block in 2028.

Construction of the Wharf is intended to start once Marine Baseline Study is finalized and baseline study will be started in Q4 of 2017 and it will be operational by Q3 of2019. As a consequence, the first 8 months of operations, coal will be transported by trucks using existing roads. Once the wharf is operational, the coal will be transported by vessel.

2.7.3 HOW MANY PEOPLE WILL WORK AT THE MINE?

As of 2017, there are 825 people working for the Project, of which 485 are direct employees. Sixty percent of the Project workers are local employees from local towns and villages.

The total number of personnel required during the construction period of the Project will be 1,370, and the total number of personnel required during the operating period will be 2,329 (see Table 2-8).

Table 2-8. Breakdown of the Workforce of the integrated Project

	Construction	Operation
Mine facilities	1,250	2,178
Coal Washing facilities	20	86
Wharf facilities	100	65
TOTAL	**1,370**	**2,329**

2.8 WHAT IS THE LAYOUT OF THE PROJECT?

The proposed layout of the integrated project is presented in **Figure 2-1**.

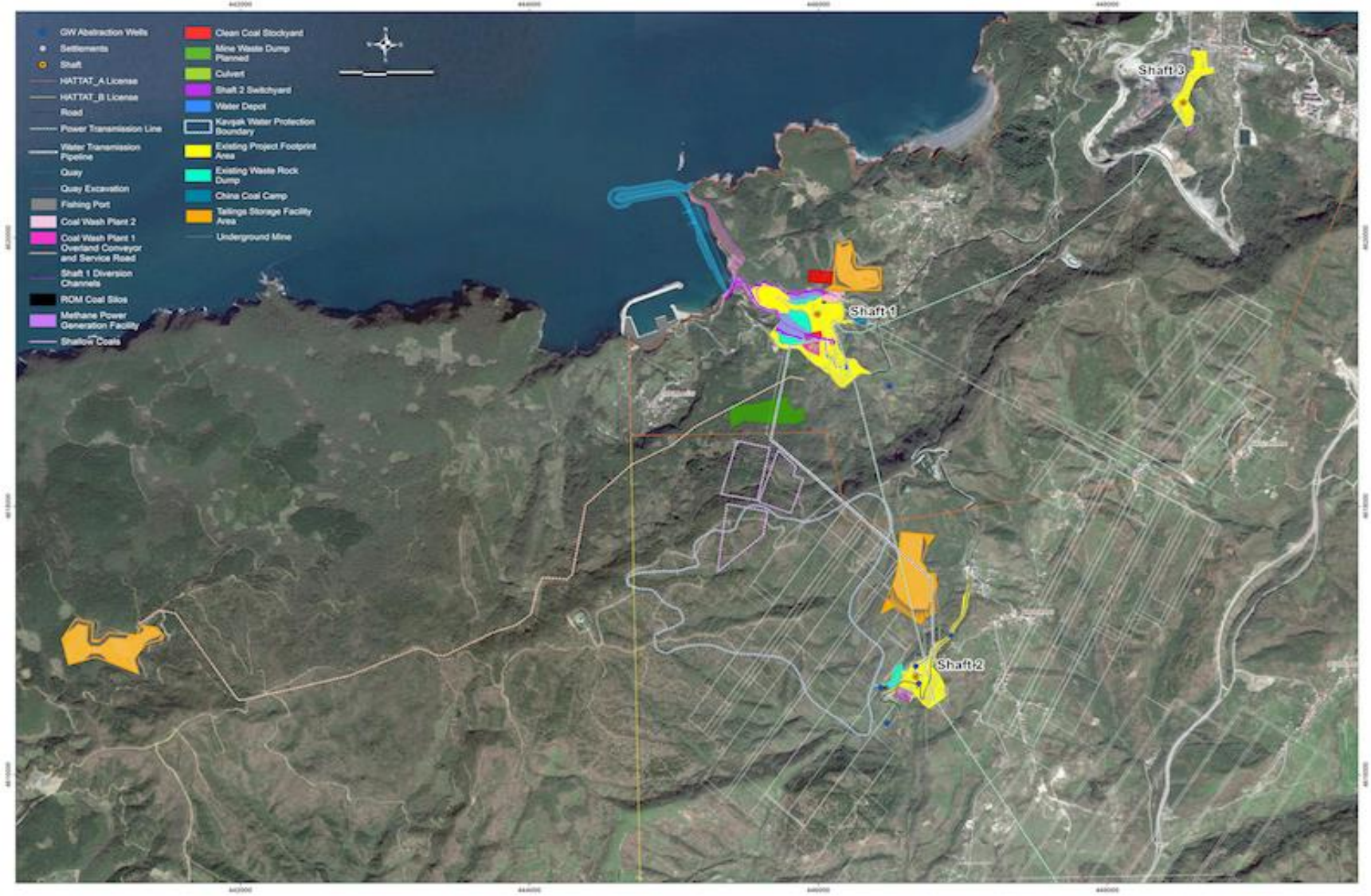

Figure 2-1. Project Layout

2.9 WHICH INFRASTRUCTURE HAS ALREADY BEEN BUILT?

Several above ground facilities for coal production at the shaft sites have already been constructed. Existing facilities and structures include head frames at Shaft-1, Shaft-3 and Shaft-2, skip and cage winder houses at Shaft-1, domestic waste water treatment plant at Shaft-1 and Shaft-2, final winder house at Shaft-2, cage winder house at Shaft-3 fuel station at Shaft-1, magazine (dynamite warehouse) drinking and fire fighting water storage at Shaft-1, tippler stations, concrete stations, boiler houses, water storage tanks, transformers, power lines, maintenance workshops, warehouse, personnel accommodation and social facilities, cabins and showers, temporary office building, training buildings, and security building at all 3 shafts, cooling tanks, 154/31.5 kV switchyard at Shaft-2 and laboratory.

2.10 HOW WILL THE COAL BE MINED?

Based on the targeted coal production, it was decided to drill three shafts with the following purposed for each:

	SHAFT -1	SHAFT -2	SHAFT-3
Purpose	Skip (production) and hoisting shaft	Skip and hoisting shaft	Ventilation and hoisting shaft
Function	• Production of coal (by double skip system) • Personnel and material transport (by cage system) • Clean air inlet	• Personnel and material transport (by cage system) • Clean air intake	• Personnel and material transport (by cage system) • air return • Main ventilation shaft Exhaust)

Coal will be mined underground principally by mechanised longwall mining and brought to the surface via an elevator. Hoisting of East Block coal is planned from Shaft-1 with a double-skip system, while surface inclined galleries will be used to extract the coal of West and Southeast Blocks. Hoisting of materials and personnel is planned from Shaft-1, 2 and 3 with cage systems.

Automated coal cutting machines (called “shearer loaders”) will produce 5000 tonnes of coal per day at the high thickness seams and for the medium thickness seams another shearer will be used will produce 3000 tonnes of coal per day. 13,000-15,500 tonnes daily coal production from three full-mechanized panels is planned. The typical underground set-up for longwall mining is shown on Figure 2-2.

For the shallow coal, a semi-mechanized system will be used.

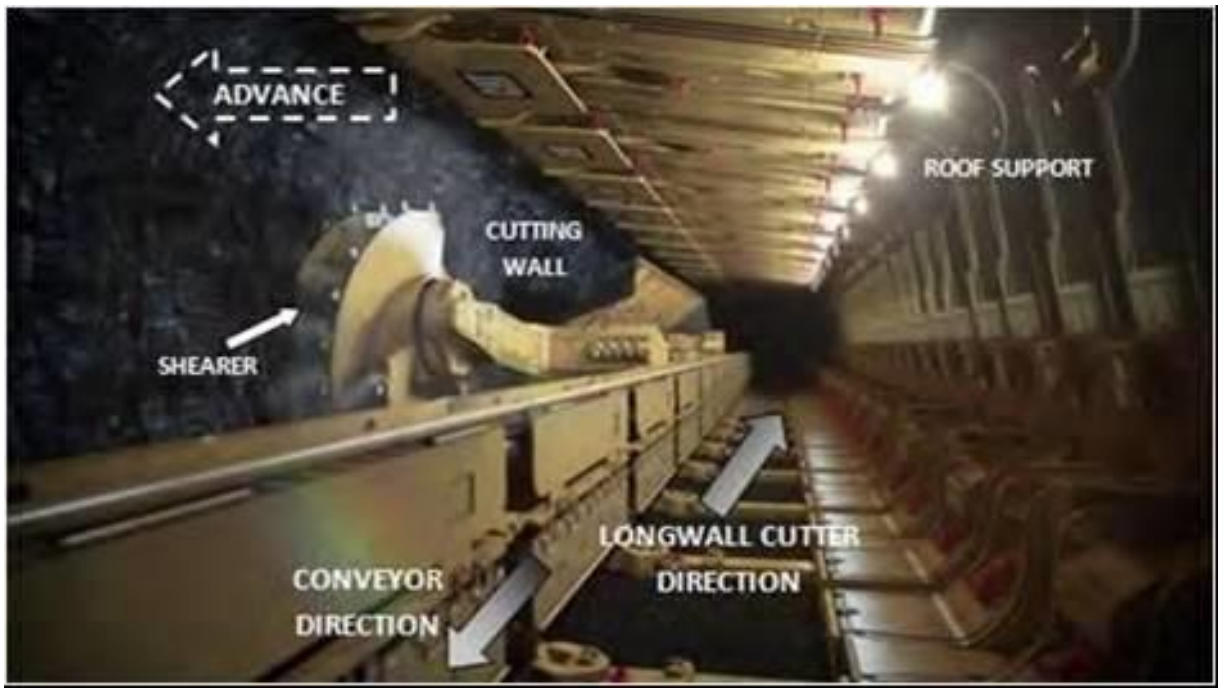

Figure 2-2. Typical set-up for Longwall Mining Process

An underground ventilation system will be developed.

The mining of coal leads to the generation of methane gas that was previously contained within the coal seams. The methane needs to be drained from the mine workings to remove fire and explosion hazards from the underground workings. A methane drainage plan has been developed for underground development, commercial operations and closure phases.

Due to the fact that there are no permeable rock layers above the coal bearing layers, no water inflow from the surface is anticipated to occur. Water inflows may occur where water percolates along dipping geological layers. Water drainage system will be installed to ensure the continuity and safety of the mining works.

Coal will be transported underground using belt conveyor systems to the bottom of Shaft 1 to be hauled to the surface. Personnel and materials will be transported to and from the surface by a cage system. A series of monorails and railways will be used underground to transport personnel and materials to the coal faces.

2.11 HOW WILL THE QUALITY OF COAL BE IMPROVED?

Coal hauled to surface will be processed in two coal washing plants in order to increase the quality of the coal. Quality of the coal is increased by mechanical removal of impurities such as rock, middlings (pieces of coal too small for commercial use), and other materials.

2.12 HOW IS COAL TRANSPORTED AND HANDLED?

HATTAT is planning to construct a new wharf to the east of the existing Tarlaağzı Fishing Port for shipment of the coal. Location of the wharf project is shown in Figure 2-3. The main reason for the maritime transport is relatively minor environmental impacts and the low cost of the maritime transport compared to other transportation means.

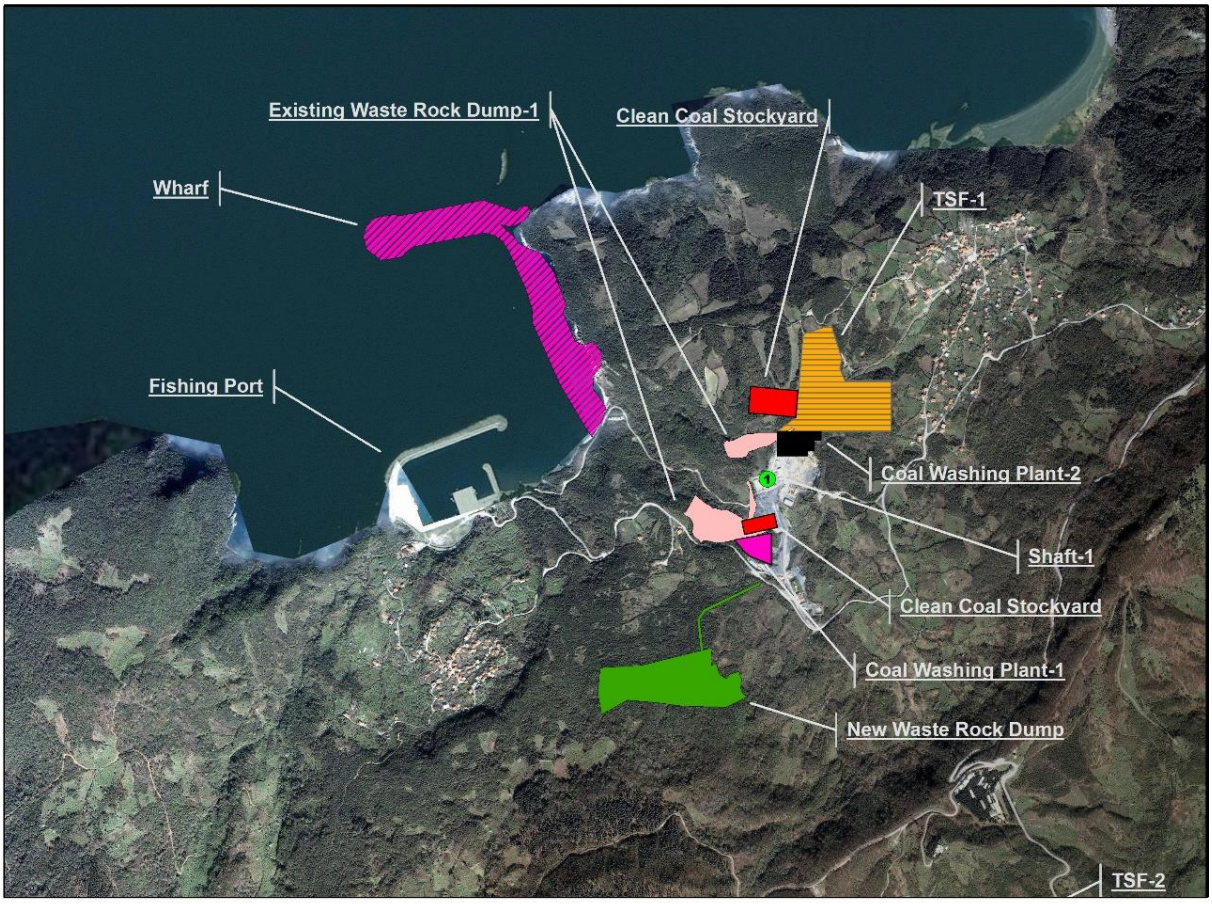

Figure 2-3. Location of the Proposed Wharf Project

The wharf is planned to be built on an area of 163,000 m^2 and involves reclamation works and construction of a breakwater, a quay structure and storage yards. Dredging will not be required because of the available depths in the bulk cargo quay basin. The loading process at the wharf will be carried out via covered conveyor belt systems directly onto the vessel, or if necessary from the storage yard behind the quay onto the vessel.

The operation of the wharf is envisaged to be started by mid-2019. Up to 5.7 million tons of coal annually produced from the HATTAT mine shafts will be transported to Çatalağzı and Eren Thermal Power Plants located in Zonguldak by maritime transport. According to the planned handling capacity of the bulk cargo quay, 173 bulk vessels of 30,000 DWT (dead weight tonnes) will be served annually. The proposed quay will also provide basic wharf services for the berthing vessels. Until the wharf becomes operational, coal will be

transported to the Bartin Cement Factory via road for a limited time period (estimated as 8 months, from the start of operations). Coal will be transported via the New Amasra - Bartın Road (see Figure 2-4.)

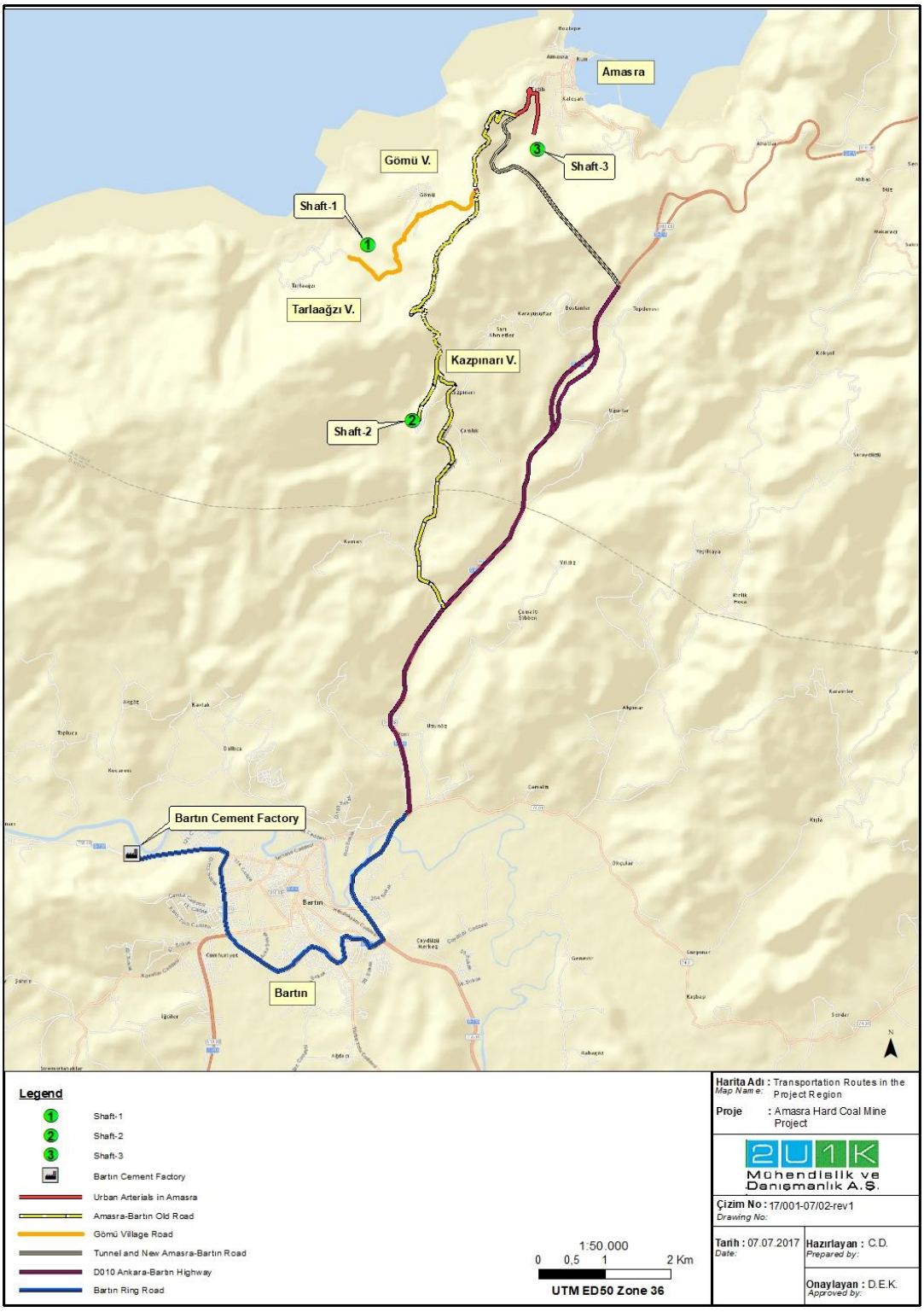

Figure 2-4. Transportation Network in the Area.

2.12.1 HOW WILL WATER BE MANAGED ONSITE?

Surface water management structures including supply pipelines, ponds for sedimentations, drainage channels and culvert boxes will be constructed.

The mine production areas in each of the shafts will produce contaminated water which has been in contact with coal and mineral waste, which pose a contamination risk to the natural stream flows and clean surface water. The installation of surface channels to intercept all contact water from mine production areas for re-use back into the mining process are planned. The surface water management system will separate clean and contact water and divert clear storm water into the existing natural flow paths. These management measures include pollution control dams, culverts, sumps, cut-off drains and closed conduits.

Specific water management designs have been developed for each operational area. Clean water will be diverted away from the impacted areas. Cut-off drains will be incorporated with new tailings facilities and waste rock dump to ensure that unimpacted water is returned to the environment.

2.13 HOW WILL WASTE BE MANAGED?

2.13.1 NON-MINERAL WASTE MANAGEMENT

HATTAT has adopted the principle of the waste management hierarchy for all non-mineral waste that will be segregated at source and removed from the site on a periodic basis for disposal by a licensed waste management contractor in a licensed waste management facility. Agreements with licensed contractors are in place for transportation and disposal of hazardous wastes, contaminated wastes, waste oils, end-of-life tyres, waste batteries and medical waste. Amasra Municipality is legally responsible for collecting all non-hazardous domestic waste from the mine and associated facilities. The final destination of municipal waste is the current dumpsite of Bartın Municipality. HATTAT has in place a waste inventory system as part of its existing Waste Management Plan that is approved by the Bartın Governorate. The inventory will be revised as necessary for the following stages of the Project, and will be maintained throughout construction, operation and closure stages.

2.13.2 MINE WASTE MANAGEMENT

Waste Rock material is generated from the construction of shafts, underground galleries and access ways to the coal seams. The material generated comprises claystone, siltstone, sandstone conglomerate and limestone.

Tailings waste comprises coarse and fine coal discard material resulted from the enrichment process of the coal. This may include inert materials as s rock from the roof/floor, coal dust and fines, filter press cakes from dewatering or thickening of the residue at the end of the washing process. Geochemistry results classified the coal discard as not potentially acid generating (Non-PAG).

The waste rock dumps (WRD) will be used to their capacity to support the underground development. The waste rock capacity at Shaft 1 is 2 million m3; and at Shaft 2 is 2.1 million m3. The amount of waste rock already dumped at Shaft 1 is 893,636 m3 and at shaft 2 is 143,383 m3. Deposition on these waste rock dumping facilities is done by end-tipped and the side slopes are at angle of repose. The deposition height varies from 10-15m. Both existing WRD use the natural slope along local stream for deposition. The waste rock material generated during the coal production will be deposited in the new waste rock dump (New WRD) area near Shaft 1 with a capacity of 2.5 million m^3.

The Project total combined capacity for tailings storage will be 13 million m3, split across 3 tailings storage facilities.

2.14 HOW WILL THE MINE BE CLOSED AT THE END OF ITS LIFE?

HATTAT will prepare a detailed mine reclamation and closure plan in line with Turkish regulatory requirements and international standards.

A mine closure framework has been prepared in order to set the principles for mine closure. After closure, site management and monitoring activities will continue until a state of safe and stable conditions is achieved and agreed with the relevant regulatory authorities. Closure phase of the mining is expected to lead to the retrenchment of the workforce over a number of years. Mine closure costs will be integrated into the financial model as provisions, accrued over the life of the Project, in order not to have financial limitations at the time of the closure phase.

2.14.1 WHAT IS THE STATUS OF THE THERMAL POWER PLANT?

The thermal power plant is a separate project from the mining project, and its progress and status are very uncertain at this stage. The thermal power plant is not required for the coal project to be commercially viable, as coal will be transported to power plants in the Project's vicinity for processing. As a result, the thermal power plant has been excluded from the project description and from this ESIA. In case the thermal power plant is going to be developed, a separate impact assessment and approvals process will be applied.

3 STAKEHOLDER ENGAGEMENT

Stakeholder engagement (including dialogue, consultation and the disclosure of information) is a key element of Project planning, development and implementation. Effective stakeholder engagement assists good design, builds relationships with local communities, and reduces the potential for delays through the early identification of risks, issues and opportunities. The Project is committed to a transparent and respectful dialogue with stakeholders throughout the life of the Project.

3.1 WHAT IS THE PROJECT APPROACH TO STAKEHOLDER ENGAGEMENT?

The Project will adhere to national requirements with regards to public consultation in the context of Turkish EIAs, and apply international standards for stakeholder engagement in the development of the ESIA, the disclosure of Project information, and its external grievance mechanism.

The objectives of the Project's approach to stakeholder engagement are to:

- Identify stakeholders that are affected and/or able to influence the Project and its activities;
- Establish a transparent and culturally appropriate process to ensure involvement of all affected stakeholders;
- Identify and consult with vulnerable peoples;
- Understand and manage community expectations;
- Ensure compliance with both Turkish legal requirements and international standards;
- Identify the most effective tools and methods to engage, consul, and disseminate Project information; and
- Provide a mechanism that enables stakeholder comments and complaints to be received and responded to.

3.1.1 STAKEHOLDER ENGAGEMENT CONDUCTED FOR TURKISH EIAS

Wharf and Facilities: The public participation meeting for the EIA for the Wharf was held on 24.04.2012 in Gömü Village. Local and national newspapers were used for the announcement of the details of the meeting. In addition, brochures were prepared to inform the public about the project and distributed to the participants. Residents from local communities, representatives of various professional groups and NGOs participated in the meeting. However, the meeting began with the protests of NGO representatives about the proposed thermal power plant, and as a result, the Provincial Directorate of Environment and Urbanisation cancelled the rest of the meeting.

Coal Washing Plant and Disposal Facilities: The public participation meeting was planned to take place on 24.03.2016 at Gömü Village at the Bartın Provincial Directorate of Environment and Urbanisation. The date, time, place and subject of the meeting were published in the local newspaper ten days prior to the date of the meeting. However, the meeting was cancelled by the authorities as a result of protests of local public and local NGOs against the proposed power plant project.

3.1.2 STAKEHOLDER ENGAGEMENT CONDUCTED FOR THE ESIA

As part of the socio-economic baseline survey, and in support of ongoing community engagement, a series of surveys, consultations, and discussions with identified stakeholders were held in early 2017. Information and issues raised from the key informant interviews and focus group discussions has been used to inform the scope of the ESIA.

Table 3-1 summarizes the key issues and recommendations raised by stakeholders during the key informant interviews and focus group discussions in the context of the ESIA.

It should be noted that there is significant opposition to the proposed power plant, however, due to the long history of mining in the area, communities, NGOs and authorities are very positive towards the mining sector in general and towards the Project in particular.

The perceived impacts, concerns and suggestions from stakeholders were used to inform the scope of the ESIA.

Table 3-1. Summary of Key Issues

	Perceived Impacts	Concerns and Suggestions
Community Level	• Employment opportunities	• Request to prevent damage to roads by Project traffic • Request to train Chinese workers about cultural codes • Uncertainty about the proposed power plant • Need to consider fishing areas near the wharf • Request to support tourism activities
Household Level	• Project compensation values are higher than the average • Increase in local economic activity • Improvement of social life due to in-migration of young generation	• There are concerns about land entry without permission • There are concerns about expropriation • The employment process is not transparent • Land rehabilitation should be applied after drilling works • There are cultural conflicts with Chinese workers (about nutrition habits, theft, dress codes) • Road expansion should be applied • Road rehabilitation should be applied • Tonnage limit should be applied for the heavy vehicles • Speed limit should be applied for Project traffic • Adequate announcements should be realized for the job opportunities • Local employment figures should be increased • The Project should not develop the proposed thermal power plant • The Shaft Ventilation system should not be used during night time as it makes too much noise
Governmental and Non Governmental Organizations	• Increase in employment opportunities • Increase in local economic activity • In-migration of skilled workers • Independence in the energy and mining sectors • Transfer of mining tradition to young generations • Development of mining-related industry	• Ensure that coal is not imported for the thermal power plant • Clarify employment plans • Employ local people rather than Chinese workers • Prevent impacts on tourism and fishery resources • Prevent impacts on drinking water resources

3.1.3 PLANNED STAKEHOLDER ENGAGEMENT ACTIVITIES

The Project will maintain on-going engagement with the national authorities, affected stakeholders and other interested parties to ensure that they are informed about the Project's progress, that they receive information on the environmental and social performance, impacts, mitigation, and monitoring efforts, that they can provide feedback on the effectiveness of any mitigation and management measures and that they have the opportunity to raise any concerns or grievances. A Stakeholder Engagement Plan has been prepared that outlines the details of the stakeholder engagement process and activities planned for the Project.

3.2 HOW CAN STAKEHOLDERS MAKE A COMPLIANT ABOUT THE PROJECT?

The Project has developed a grievance mechanism that any external stakeholder (such as a member of a neighbouring community, a member of the general public, an NGO, etc.) can use to submit a complaint or grievance about the Project. The grievance will be registered and investigated, and the Project is committed to reply to the aggrieved person with an acknowledgement of receipt within 2 working days, and to resolve the grievance within 30 days. Grievances can be submitted via the following channels:

- **Phone Number** : 0 (378) 325 45 25
- **Fax** . : 0 (378) 325 45 70
- **Adress** : Gömü 1 Nolu İşletmesi Çınar Yolu Mevkii No: 80/1 Gömü /Amasra / Bartın
- **E-mail** . : enerjigrubu@hattat.com.tr
- **Feedback Mechanism** : http://www.the Project Companyenerji.com/geri-bildirim
- **Website** : http://www.hattatenerji.com/geri-bildirim

3.3 WHAT IS HATTAT DOING TO HELP THE LOCAL COMMUNITY BENEFIT FROM THE PROJECT?

HATTAT currently works with village headmen and government representatives in the project area of influence to determine the development needs and priorities of local communities. The information obtained from these studies will be used to ensure that HATTAT's social investment plans and projects are useful and realistic and to integrate local employment and local procurement needs into the bases of HATTAT's community development projects. HATTAT will then develop a plan to co-ordinate social investment, local employment and local procurement issues in line with joint investment objectives and principles. HATTAT will use this information to plan long term social investments by taking consideration to closure time of the mine. A monitoring program will also be implemented to monitor social investments and social developments of the community.

Since 2013, HATTAT has provided various supports to strengthen existing infrastructure and services at village and institution level. HATTAT's social responsibility activities in the region up to now are presented in the table below.

Table 3-2. Infrastructure Support by HATTAT

Date	Place	Topic
2017	Amasra Marine Security	Cranes provided to the Coast Guard Commandership of Amasra
2017	Amasra Fishing Harbour	Trucks provided to fishermen for transporting their boats
2017	Kaman	Maintenance and repair of Kaman village road
2017	Bostanlar- Topderesi	Expansion and renewal of passenger waiting areas
2017	Tarlaağzı	Repair and maintenance of the village road after the landslide

Date	Place	Topic
2017	Amasra Bedesten	Expansion and improvement of the Bedesten road
2016	Kaman	Technical and financial support to repair drinking water pipeline in the village
2016	Tarlaağzı	Pipes provided for renewal works of Tarlaağzı drinking water supply network
2016	Kurucaşile	Trucks and fuel provided for road opening and repair after the flood disaster in the region
2015	Tarlaağzı	Materials provided for renewal of drinking and utility water pipelines and warehouses
2015	Tarlaağzı-Gömü	Maintenance, repair and asphalting works of village roads within the frame of the protocol made with Bartın Special Provincial Administration
2015	Gömü	Outside lighting of Mosque
2013	Amasra	Tractor granted to Amasra Municipality

Source: Community Relations Department of HATTAT

4 POTENTIAL IMPACTS AND MITIGATION

4.1 WHAT ARE THE KEY IMPACTS OF THE PROJECT?

Potential environmental and social impacts have been assessed and mitigation measures have been developed for each potential negative impact. These are summarised in *Annex A*.. It should be also noted that these impacts and mitigation measures will be monitored on a regular basis.

Potential impacts pertaining to the Closure Phase of the Project have been assessed at a high level only. A detailed impact assessment for Project Closure will be conducted at a later stage.

4.2 WILL THE PROJECT AFFECT AMASRA CASTLE?

Studies have confirmed that mining activities will have no impact on Amasra Castle. No mining will be undertaken underneath Amasra Castle and vibrations from mining operations will not reach Amasra Castle.

4.3 WILL THE PROJECT AFFECT TOURISM?

The coal mining sector has been in existence in Amasra for a number of decades, and the tourism industry in Amasra has grown during this period. The Project will not be significantly more visible than it is today and as it will not affect Amasra Castle, it is unlikely that the Project will have a significant effect on tourism.

4.4 WILL THE PROJECT AFFECT AIR QUALITY?

Studies have confirmed that with mitigation the Project will not generate significant air emissions. Measures will be put in place to minimise the generation of dust from mining and coal processing activities.

4.5 WILL THERE BE IMPACTS ON CRITICAL HABITAT?

No impacts to critical habitat were identified for land-based ecosystems. Monitoring studies are ongoing related to marine ecosystems. No sea-based construction of the Wharf will be undertaker until these studies have been completed and any necessary mitigation measures have been incorporated into construction and operations management plans.

4.6 WILL THE PROJECT CREATE OPPORTUNITIES FOR LOCAL EMPLOYMENT?

Yes. HATTAT is committed to maximize the opportunities for local employment and ensuring a fair distribution of jobs to all nearby settlements. Preferential employment will be given to

qualified local people. Hiring preference criteria will prioritize settlements directly affected by the current activities of the Project will have priority. Turkish nationals will always be given priority over expatriates.

There are currently, and there will be in the future, a number of foreign workers from China working for the Project. The percentage of Chinese workers in the Project is about 20% and it is expected that this percentage remains relatively stable over time. This is because these workers have a high level of knowledge and experience with the specific type of mining and equipment used in the Project. Such knowledge and experience currently does not exist among national workers.

The Project is also committed to prioritize procurement of goods and services from businesses in the Project Area where these they can ensure that prices are competitive, quality can be maintained, and periodicity of supply can be maintained.

4.7 HOW WILL HATTAT REACT IN AN EMERGENCY?

Several plans and procedures are in existence to identify and mitigate the chance of emergencies. Plans and procedures are also in place that outline actions to take in case an emergency occurs. For example, a Hazard Identification and Risk Assessment Procedure" has been established. An Emergency Preparedness and Response Plan is also prepared. According to the requirements of the relevant national legislation, for Wharf, a Spill Prevention, Control and Countermeasure Procedure included in Emergency Preparedness and Response Plan of HATTAT will be prepared.

4.8 HOW WILL HATTAT MANAGE THE HEALTH AND SAFETY OF ITS WORKERS?

HATTAT has an OHS team who is responsible for ensuring the proper OHS management in the Project activities. Moreover, Hattat is entitled to acquire the OHSAS 18001 certificate and preliminary certificate is issued in 10.11.2017.

ANNEX A - SUMMARY OF PLANNED MITIGATIONS

AIR QUALITY IMPACTS AND MITIGATIONS

Dust and exhaust emissions are identified as potential impacts caused by the movement of topsoil, coal and waste rock. The following mitigation measures are set out in the ESIA:

- Dust suppression measures for roads and working areas;
- Speed limits enforced on Project vehicles;
- Dust suppression measures for vehicle loads.

BIODIVERSITY IMPACTS AND MITIGATIONS (TERRESTRIAL & MARINE)

Terrestrial habitat impacts (loss of habitats, spreading invasive species, vehicle accidents) are identified as potential impacts caused by the removal of topsoil and vegetation, the alteration of natural habitats and surface water flow and increased human activity. The following mitigation measures are set out in the ESIA:

- Use of the mitigation hierarchy where possible to avoid impacts in the first instance, where that is not possible to minimise impacts and where impacts cannot be avoided to rehabilitate and restore when possible.

Marine biodiversity studies are ongoing. Once completed, they will be reported by HEMA. No marine construction related to the Wharf will be undertaken until the marine impact assessment has been completed and necessary mitigations have been built into HEMA construction and operations plans.

GEOLOGY IMPACTS AND MITIGATION

Geological impacts such as subsidence to underground infrastructure are identified, caused by underground mining activities and the construction of surface facilities. The following mitigation measures are set out in the ESIA:

- Secondary cement injection to increase resistivity to liquefaction and improve slide resistance;
- Installation of seismic connections for the attenuation of earthquake originated deformations;
- Concrete membrane coverage of infrastructure.

SOIL IMPACTS AND MITIGATION

Impacts to soil are identified, caused by stripping of vegetation and topsoil and the spillage of hazardous substances. The following mitigation measures are set out in the ESIA:

- Minimization of vegetation removal to the extent possible;
- Good construction site practices for protection of soils to be adopted by all contractors and sub-contractors;
- The Project will be designed, constructed and operated in accordance with the Turkish and international regulations and standards and therefore, risks will be as low as technically and financially feasible;
- An overall Site Rehabilitation Plan addressing both interim and final land rehabilitation requirements including topsoil management, soil stabilization, erosion potential and control and afforestation activities.

SUBSIDENCE RISK

Subsidence risks due to the impact of underground mining activities on surface facilities has been identified by the ESIA. The following mitigation measures are set out in the ESIA:

- Care positioning of underground galleries to avoid having settlements directly above;
- Partial extraction of coal to maximise natural underground support;
- Backfilling or support to extracted voids;
- Subsidence monitoring by interferometric synthetic aperture radar, airborne light detection and ranging and survey monitoring.

INLAND SURFACE WATER AND GROUNDWATER QUALITY IMPACTS AND MITIGATION

Impacts to surface water and groundwater quality are identified, caused by the construction and operation of mine facilities and the potential for mining activities to impact overlying aquifers. The following mitigation measures are included in the ESIA:

Construction Phase mitigations will include:

- Monitor water flows in appropriate streams.
- Clean water will be diverted away from the impacted areas.
- Cut -off drains will be incorporated with new tailings facilities and rock dumps to ensure that un-impacted water is returned to the environment.
- Water quality monitoring

- Install and maintain efficient oil and grease traps or sumps at refuelling facilities, workshops, fuel storage depots, and containment.
- Design and construct temporary drainage installations for recurrence periods of at least 25 year/24 hr storm interval
- Surface and groundwater water monitoring programmes
- Provide Cover drilling at all development ends.
- Continuous monitoring of groundwater pumping flows.
- Underground Flood Management Plan
- Install surface water and leachate management measures, separate and divert clean water through cut-off drains and conduits.
- Monitor seepage flow and quality.
- Stabilization of existing WRD's.
- Engineered leachate barrier design is required for proposed New WRD at Shaft 1 and seepage is required to be captured and treated before discharge.

Operations Phase mitigations will include:

- Quantify present and future water demand in the surrounding villages and towns.
- Monitor water flows in appropriate streams.
- Clean water will be diverted away from the impacted areas. Cut -off drains will be incorporated with new tailings facilities and rock dumps to ensure that un-impacted water is returned to the environment.
- Bio-monitoring.
- Quantify present and future water demand in the surrounding villages and towns.
- Monitor water flows at appropriate streams and springs.
- Monitor water levels and yield in production boreholes.
- Monitor spring flows.
- Subsidence monitoring.
- Water Balance maintained.
- Water quality monitoring to quantify potential impacts.
- Water Management Program developed (options such as recycled, reused, clean and dirty water separation and water treatment will be determined).
- Project facilities will be sized to contain a 1:100 year flood.

- Water quality monitoring programme.
- Install spill containment equipment and oil-water separators.
- Provide Cover drilling at all development ends.
- Continuous monitoring of groundwater pumping flows.
- Underground Flood Management Plan.
- Groundwater monitoring.
- Install surface water and leachate management measures, separate and divert clean water through cut-off drains and conduits.
- Monitor seepage flow and quality.
- Engineered barrier design is required for proposed New WRD at Shaft 1 and seepage is required to be captured and treated before discharge.

Post -closure mitigations will include:

- Monitor water flows in appropriate streams.
- Monitor spring flows and borehole water levels and yields.
- Subsidence monitoring.
- Routine (ongoing) monitoring (flow and quality).
- Install capping and vegetate to minimize water infiltration.
- Engineered cover for the WRDs and TSFs.

SEAWATER QUALITY IMPACTS AND MITIGATION

Impacts to seawater quality are identified, caused by the construction and operation of the Wharf and operation of mine facilities. The following mitigation measures are included in the ESIA:

- Not working outside of project foot print.
- Enrockment screens will be placed in order to mitigate impacts from sediment deposition.
- Using excavated material from land section of the construction as filling material
- Soil analysis for possible contamination, in case the use of external source as filling material
- Using wastewater treatment facility for the camp site or transfer of the sewage to a licensed wastewater treatment facility.

- Preparations of emergency response plan
- Installation of emergency spill kits
- Use of septic tanks for collection of wastewater.
- Transfer of wastewater to a licensed treatment facility.
- Preparations of emergency response plan
- Installation of emergency spill kits
- Preparations of emergency response plan
- Installation of emergency spill kits (i.e. booms, absorbents etc.).
- Biannual bathymetric measurements at wharf area.

NOISE AND VIBRATION IMPACTS AND MITIGATION

Noise impacts to the operation of machinery and are identified as potential impacts. The following mitigation measures are set out in the ESIA:

- Implementation of noise barriers, scheduling no construction activity at night time, continuous monitoring;
- Implementation of noise barriers;
- Insulating ventilation fans to a degree of 16 dB;
- Implementation of noise barriers (implementing noise barriers solves the problem sourced from shaft 2 also);
- Since minor effects observed no mitigation measures needed;
- 300 kg explosive limit in order to avoid any impact at nearest location;
- Constructing vibration insulation pads under the truck routes, operational measures.

POPULATION AND DEMOGRAPHY IMPACTS AND MITIGATION

Populations impacts to local communities related to the in-migration of workers and their families are identified as potential impacts. The following mitigation measures are set out in the ESIA:

- Maximise local employment;
- Incentivise Turkish, non-local workers to live in Amasra or Bartin;
- Provide accommodation at strategic locations to foreign Project workers;
- Update Code of Conduct to include behaviour in local communities;
- Provide cultural awareness training to non-local Project workers.

ECONOMY AND EMPLOYMENT IMPACTS AND MITIGATIONS

Economy and employment impacts to local communities related to the construction and operation of the project and its supply chain are identified as potential impacts. The following mitigation measures are set out in the ESIA:

- Project will continue disclosing information on taxes paid via its website (see: http://www.hemaenerji.com/bilgitoplumuhizmetleri/).
- The Project will implement human resource policies and procedures in line with IFC Performance Standard 2 on Labour and Working Conditions. Such policies are expected to provide more predictable employment opportunities for direct employees. In particular:
- The purpose of the Recruitment Policy and Procedure is to provide guidelines on a structured, formal, and transparent process to recruit new employees who exhibit the necessary levels of qualifications, skills and knowledge, based on an equal opportunity process. The document includes procedures for new hiring, advertising new positions, interviewing and checking references.
- The Local Employment and Training Plan is a key document in seeking to maximize the opportunities for local employment and ensuring a fair distribution of jobs to all nearby settlements. Preferential employment will be given to qualified local people. Hiring preference criteria will prioritize settlements directly affected by the current activities of the Project will have priority. Turkish nationals will always be given priority over expatriates, who will only be used where their particular skills and experience cannot be supplied by Turkish nationals. The Project will be supporting a range of local skill development programs.
- The Labour Management Plan has explicit commitments to work in good faith with trade unions and any other employee group seeking formal representation. The document also states that, at a minimum, the Project will not prevent by any means the formation of trade unions or other legally establish worker groups and that the Project and its contractors will comply with Turkish Labour Law concerning relations with authorized labour organisations and worker representatives. The Labour Management Plan also aligns potential collective redundancies with IFC PS 2.
- The Worker Grievance Procedure aims to provide all employees with a uniform process for the resolution of employment concerns not addressed by other existing human resources policy and plans. The procedure has been developed for situations in which an employee believes that the fair and consistent application of a policy affecting him or her has not been followed and that employee has been unable to resolve the issue within a particular work area or group.
- The Project is committed to prioritize procurement of goods and services from businesses in the Project Area where these they can ensure that prices are

competitive, quality can be maintained, and periodicity of supply can be maintained. The Project will also prioritise hiring local workers, where feasible.

- Regular and timely engagement with local fishermen and other users of local harbors and ports in order to discuss and agree on maneuvering routes and areas.
- Timely communication of the security zone to local fishermen and other users of local harbors, and coordinating the practical consequences of such security zone.
- Regular and timely communication to local fishermen and other users of local ports and harbors about wharf construction activities and the routes and frequency of Project vessels.
- Impact on fishermen's livelihoods will be continuously monitored and if negative impacts are found as a consequence of the Project then fishermen will be compensated in accordance with the Compensation Framework.
- The Project is committed to prioritize procurement of goods and services from businesses in the Project Area where these they can ensure that prices are competitive, quality can be maintained, and periodicity of supply can be maintained.
- The Project will assess inflationary impacts through is regular stakeholder engagement and consultation. If feedback includes comments about a rise in prices, a more formal monitoring system will be set up to monitor prices for staple goods on a regular basis. If inflation can be linked to the Project, the Project will consider targeted support programs.
- The Project will purchase at market rate the goods and services, land, and labor it procures.
- Being transparent and clear about Project activities and potential impacts. The ESIA will be shared on the Project website and regular stakeholder engagement and consultation will continue, including with tourism institutions. Project environmental and social performance will be regularly disclosed on the Project website as the Project progresses.
- Promote the tourism sector in Amasra District as part of the Project's Corporate Social Responsibility program.
- Implement all mitigation measures proposed as a result of the Visual Impact Assessment in Chapter 12, and those related to Cultural Heritage in Chapter 18.
- The Project will implement all mitigation measures proposed regarding Air Quality, Noise and Vibration
- The Project will implement the retrenchment procedure (part of the Labour Management Plan) in line with IFC PS2.

LAND USE IMPACTS AND MITIGATION

Land use impacts to local communities related to the acquisition and use of land for the construction and operation of the project are identified as potential impacts. The following mitigation measures are set out in the ESIA:

- The expropriation process and compensation process will be conducted in accordance with Turkish law, managed by TTK.
- In addition, by working together with TTK as much as possible, the Project will ensure that any physical displacement as a result of expropriation for land required for the Project will be conducted in accordance with IFC PS 5. In particular, the Project will ensure that engagement and consultation will be conducted and that compensation will be provided in accordance with IFC PS 5.
- The Project will conduct a census of all people affected by the expropriation process, in order to confirm the number of affected households and persons. An asset survey will be conducted to confirm the number, type, and qualities of the properties affected.
- The Project external/community grievance mechanism will be available to submit grievances related to the expropriation process and displacement caused.
- The Project will continue to prioritise those affected by Project land acquisition and expropriation for the recruitment of Project jobs.
- The Project will continue to prioritize land acquisition based on direct negotiation rather than expropriation in order to minimize expropriation and displacement.
- The expropriation process and compensation process will be conducted in accordance with Turkish law, managed by TTK.
- In addition, by working together with TTK as much as possible, the Project will ensure that any economic displacement as a result of expropriation for land required for the Project will be conducted in accordance with IFC PS 5. In particular, the Project will ensure that engagement and consultation will be conducted and that compensation will be provided in accordance with IFC PS 5.
- Any loss of or damage to crops caused by Project activities will be compensated
- The Project will minimize damage to crops by minimizing the area of disturbance caused by vehicle movement and other construction activities.

COMMUNITY HEALTH AND SAFETY IMPACTS AND MITIGATION

Community health and safety impacts related to construction and operation of the project are identified as potential impacts. The following mitigation measures are set out in the ESIA:

- Continue to implement measures to discourage unauthorized entry onto the Project Site by using fencing and the requirement for identity cards to enter the Site;
- Ensure that those providing security services are not implicated in past abuses;
- Ensure that those providing security services are adequately trained in the use of force and appropriate conduct toward workers and Affected Communities. Provide clear instructions on the objectives of their work and permissible actions. Instructions must be clear on when and how force may be used, specifying that security personnel are permitted to use force only as a matter of last resort and only for preventive and defensive purposes in proportion to the nature and extent of the threat, and in a manner that respects human rights;
- No firearms within the Project Area, except in the explosives magazine as needed;
- Ensure that those providing security services are trained on conflict resolution and crowd management;
- Implementation and wide distribution of the External/Community Grievance Mechanism; and
- Require the reporting and investigation of any use of physical force.
- Hire as many unskilled workers as possible locally. This will reduce the influx of Project workers not native to the Project area, and it will maximise local employment;
- In case non-local Turkish workers are hired (this is currently 20 percent of the Project workforce), these will be incentivised to live in Amasra or Bartin rather than in the villages surrounding the Project. Bartin is a large city, located in relative proximity to the Project, and it is well equipped to absorb influx;
- Provide accommodation to all Chinese Project workers (estimated at 20 percent of the Project workforce) in strategic locations, preferably within the Project fence. Currently, the Project provides accommodation in Kum Neighborhood, in Gömü, and within the Project fences. Accommodation will meet IFC worker accommodation guidelines;
- Implement all mitigation measures related to the treatment of water and waste as outlined in Chapters 10 and 17 respectively;
- As part of Project orientation training, include awareness raising of the prevention and treatment of communicable diseases;

- Continue the implementation of health checks for Project workers every six months; and
- Work with women in the communities to help prevent and manage communicable diseases, particularly due to women's primary role as caretakers of ill family and community members, and due to their vulnerability and their productive and reproductive roles.
- The Project site should be effectively and permanently blocked from all access to the public until such time that the site can be converted into a new beneficial land use based on changed conditions at the site, as well as alternative uses by local communities or other industries for roads, buildings and other structures. Where there is a risk of methane emanating from disused shafts and other workings, passive venting systems should be considered.

INFRASTRUCTURE AND PUBLIC SERVICES IMPACTS AND MITIGATION

Infrastructure and public services impacts related to construction and operation of the project are identified as potential impacts. The following mitigation measures are set out in the ESIA:

- Continue to compensate for any damage caused and provide regular maintenance, repair and asphalting of the road along the Project transport route.
- Ensure that trucks are not heavier than the maximum allowed tonnage.
- Adoption of best transport safety practices
- Regular maintenance of;
- Collaboration with local communities and responsible authorities to improve signage, visibility and overall safety of roads, particularly along stretches located near schools or other locations where children are present. Collaborating with local communities on education about traffic and pedestrian safety (e.g. school education campaigns);
- Coordination with emergency responders to ensure that appropriate first aid is provided in the event of accidents;
- One Project ambulance vehicle will be ready at all times at Shaft-1, together with necessary health personnel and the technical team (equipped with tow truck, cutter, etc.) to cope with any incident;
- Employing safe traffic control measures, including road signs, speed bumps, and flag persons to warn of dangerous conditions where necessary;
- Engagement with the authorities to extend the road through Gömü Village to two-way traffıc as the road crossing is narrow. If the Gömü Road cannot be improved as a two-way road, waiting pockets will be established at two spots; on the old Amasra-

Bartın Road and Gömü junction, such that crossing of two trucks at opposite directions can be avoided;

- Engage with the authorities to build a two-way pedestrian pavement. Pedestrian pavements will be supported with physical vertical safety elements;
- In Gömü village crossings, trees that block pedestrian-vehicle visibility will be cut and pruned regularly;
- Communication of traffic measures and Project road usage with muhtars; and
- Strictly apply the Project traffic route and prevent drivers from using alternatives routes.
- Inform local fishermen, other nearby port users, and the Port authority of scheduled Project vessel traffic in order to coordinate and plan for marine area use as necessary;
- Develop and implement procedures to regulate the safe movement of vessels near the wharf; and
- Develop and implement an emergency preparedness and response plan for Project marine emergencies that provides a coordinated response with the government, the port authority, and other ports in the Project area
- Hire as many unskilled workers as possible locally. This will reduce the influx of Project workers not native to the Project area;
- In case non-local Turkish workers are hired (this is currently 20 percent of the Project workforce), these will be incentivised to live in Amasra or Bartin rather than in the villages surrounding the Project. Bartin is a large city, located in relative proximity to the Project, and its infrastructure is better equipped to handle influx;
- Housing of foreign Project workers on the Project Site as much as possible.
- Implement and disseminate a community level grievance mechanism, through which local community members can submit concerns and complaints about influx and related negative impacts;
- Engage regularly with muhtars and relevant governmental agencies to discuss and monitor influx and any associated impacts.
- Implement the hierarchy of waste management options, in order to minimize waste: waste prevention as the preferred option, followed by reuse, recycling, recovery, and, as a last option, safe disposal.
- Support the municipality to improve its waste management services and capacity, including by using existing opportunities such as those provided by the Ministry of Environment and Urbanisation.

- At Project Closure, Project infrastructure will be removed from the Project site as much as possible. This will involve the transportation of such infrastructure, likely to be conducted by road. It will also generate wastes. Impacts related to Project Closure will be assessed in detail during the Project operations phase, in advance of Project closure.

CULTURAL HERITAGE IMPACTS AND MITIGATION

Cultural heritage impacts related to construction and operation of the project are identified as potential impacts. The following mitigation measures are set out in the ESIA:

- Develop and implement a chance finds procedure

  It is expected that no impacts on physical cultural heritage will occur at Project Closure. Impacts related to Project Closure will be assessed in detail during the Project operations phase, in advance of Project closure.