

Environmental and Social Impact Assessment Report – Non-Technical Summary

SUS Uzbekistan Waste to Energy
Project



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0811636



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ACRONYMS AND ABBREVIATIONS

Acronyms	Description
AoI	Area of Influence
CCRA	Climate Change Risk Assessment

Acronyms	Description
CHS	Community Health Safety
CO	Carbon Monoxide
EHS	Environment, Health and Safety
EP4	Equator Principles 4
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
GFD	Focus Group Discussions
GBV	Gender-based violence
GIIP	Good International Industry Practice
HCl	Hydrogen chloride
HF	Hydrogen Fluoride
H ₂ S	Hydrogen Sulfide
HR	Human Right
HRIA	Human Rights Impact Assessment
KBA	Key Biodiversity Area
KII	Key Informant Interviews
MSW	Municipal Solid Waste
MEEPCC	Uzbekistan's Ministry of Ecology, Environmental Protection and Climate Change
NO _x	Nitrogen oxides
NTS	Non-Technical Summary
PM	Particulate matter
SO ₂	Sulfur Dioxide
SEP	Stakeholder Engagement Plan
TCFD	Task Force on Climate-Related Financial Disclosures
WtE	Municipal solid waste

1. NON-TECHNICAL SUMMARY

1.1 INTRODUCTION

SUS Environment ("SUS" or the "Client") is developing a municipal solid waste-to-energy project in Samarkand, Uzbekistan. The Project was established pursuant to Presidential Decree No. PP-118 of 24 March 2025 and is being implemented by "SUS ENVIRONMENT SAMARKAND" FE LLC (the "Project Company"). The Project is intended to improve municipal waste management, reduce dependence on landfilling and generate electricity for the national grid.

ERM (Shanghai) Limited ("ERM") was engaged to prepare an Environmental and Social Impact Assessment (ESIA). The ESIA has been prepared with reference to applicable Uzbekistan legislation, EP4, the MIGA Environmental and Social Performance Standards (2013), the IFC Performance Standards (2012), and relevant WBG EHS Guidelines. This Non-Technical Summary presents the principal findings in accessible language and should be read together with the full ESIA, ESMP, SEP, CCRA and HRIA.

The ESIA describes the Project and alternatives; establishes environmental and social baseline conditions; assesses construction, operation and unplanned-event impacts; and identifies measures to avoid, minimize, restore or compensate for adverse impacts and enhance positive outcomes.

1.2 PROJECT DESCRIPTION

1.2.1 OVERVIEW AND LOCATION

The Project site is located adjacent to Samarkand city landfill on an industrial land parcel of 8 ha in Samarkand City, Samarkand Region, Uzbekistan. The Project will use Municipal Solid Waste (MSW) collected across the Samarkand region as the main feedstock and is intended to serve the entire Samarkand Region.

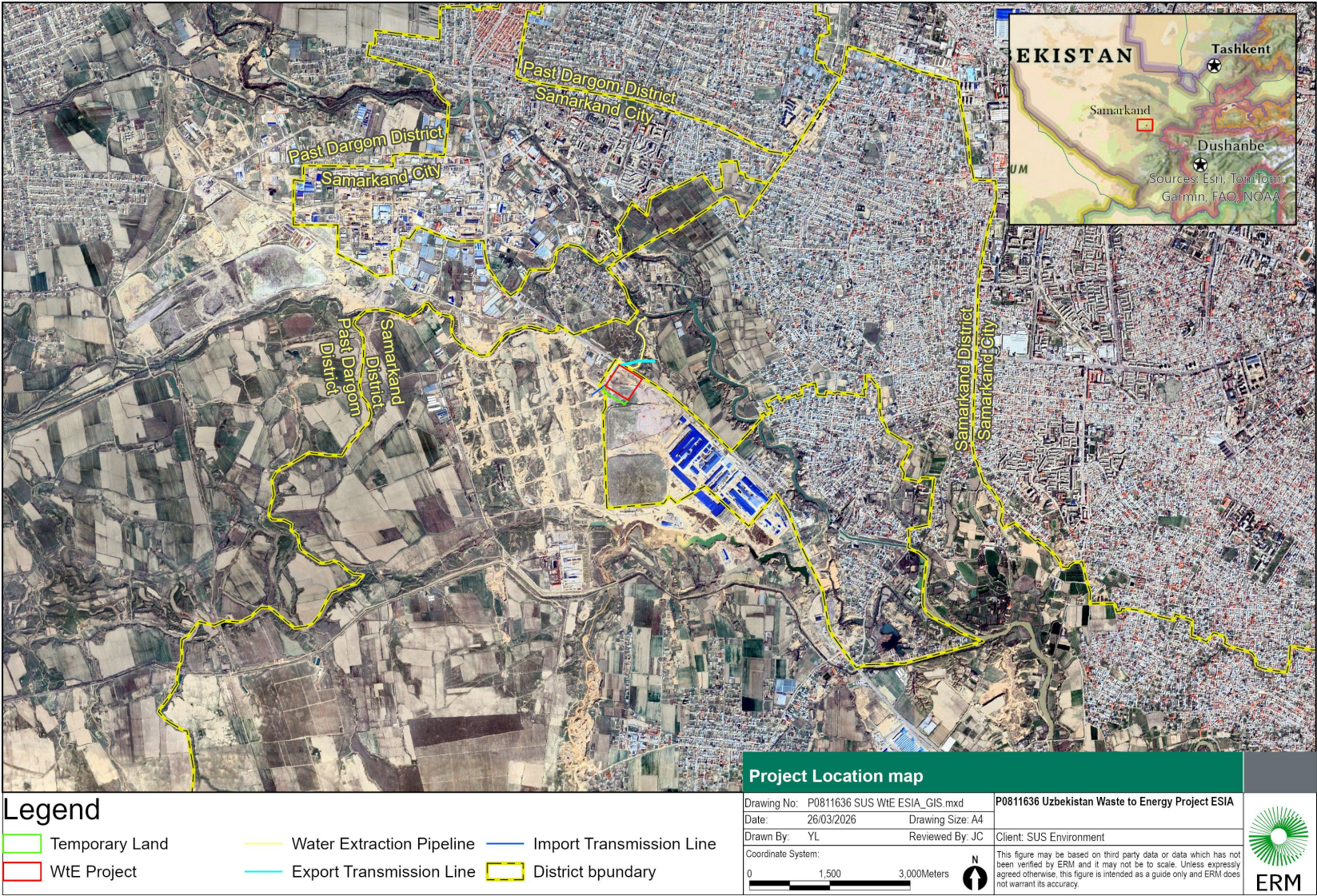
As the largest MSW landfill in the Samarkand region, most of the MSW generated in Samarkand region is currently disposed of at the Samarkand City Landfill and partly at other existing landfills. Once operational, the project will incinerate 1,500 tons per day of MSW collected across the Samarkand region for power generation and reduce landfilling.

The local government is responsible for the collection and transportation of MSW, while SUS is responsible for the receipt of MSW and incineration for electricity generation.

The Project is expected to generate approximately 371.4 million kWh of electricity annually, of which around 328.3 million kWh will be exported to Uzbekistan's national grid through a dedicated grid connection system. The facility will operate for approximately 8,000 hours per year and is designed for an operational life of approximately 30 years.

The Project location is shown in **FIGURE 1-1**.

FIGURE 1-1 PROJECT LOCATION



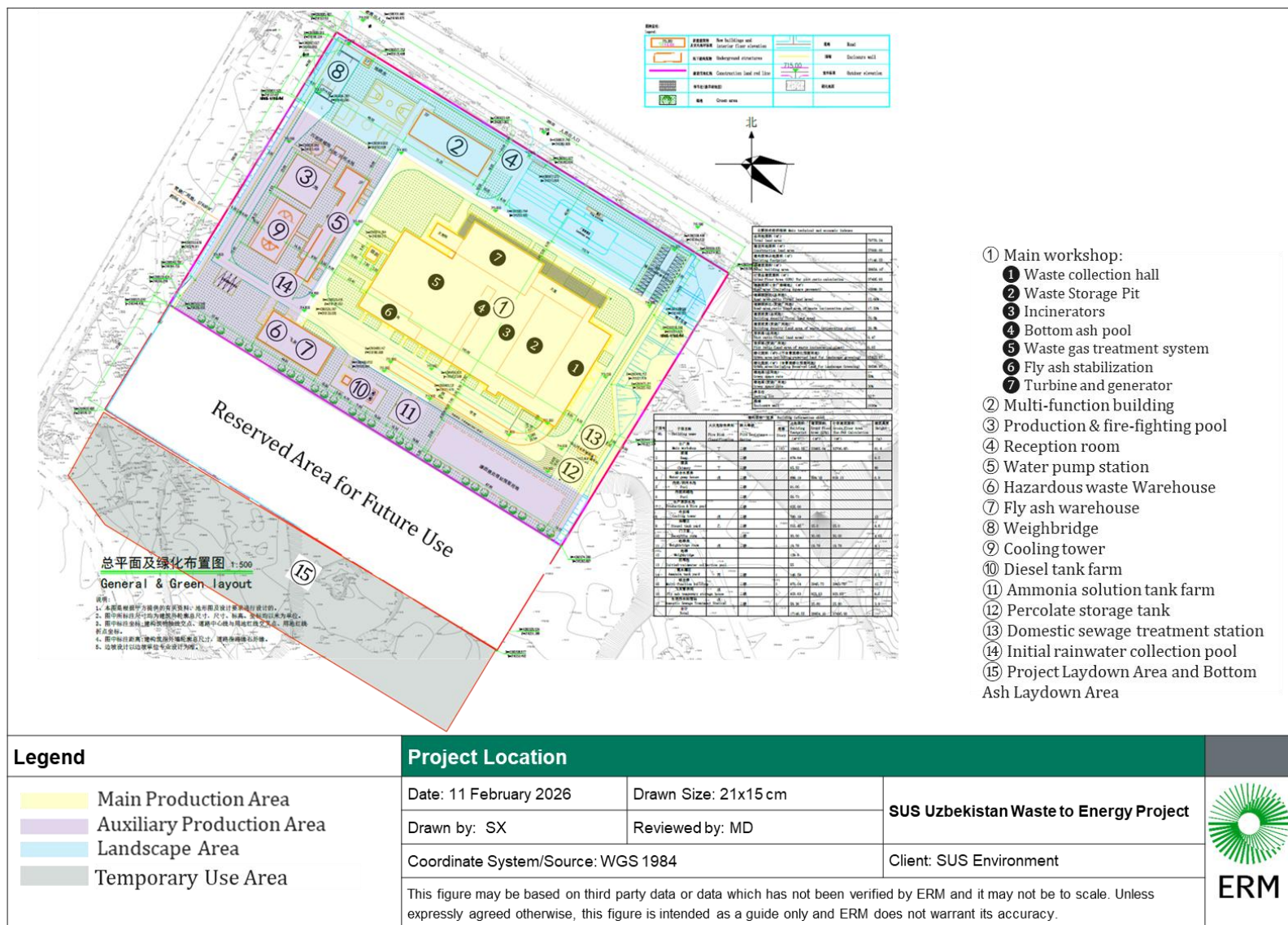
1.2.2 PROJECT COMPONENTS

The Project site is divided into three functional zones: the main production area, the auxiliary production area, and the landscape area.

- The main production area comprises the main workshop, the discharge stack and access ramp. The main workshop includes waste collection hall, waste storage pit, incinerators, flue gas treatment system, waste heat boilers, steam turbine, generator, fly ash stabilization system, power distribution unit and stacks.
- The auxiliary production area comprises the pump station, combined production and firefighting water tanks, cooling towers, two tank farms (oil and aqueous ammonia), water purification stations, wastewater treatment plants, hazardous waste storage room, storage yard of bottom ash and weighbridge.
- The landscape area comprises the administration building and gatehouse.

The Project layout is depicted in **Figure 1-2**.

FIGURE 1-2 LAYOUT OF THE PROJECT



1.2.3 PROJECT SCHEDULE

The construction work of the Project commenced in July 2025 and will be expected to last for approximately 24 months. The Project plans to be put into operation in July 2027.

1.2.4 PROJECT ACTIVITY

1.2.4.1 CONSTRUCTION ACTIVITY

The construction phase primarily includes the following activities:

- Land use permit processing
- Transportation of construction materials
- Clearance of the Project area and site formation
- Construction of WtE Plant, transmission line, water supply system
- Presence of workforce (residing in the temporary worker camps)
- Presence of security personnel
- Procurement of goods and services
- General utility supply

1.2.4.2 OPERATION ACTIVITY

The Project Company plans to commence operation for a period of 30 years commencing from 2027. The planned and potential unplanned events that could give rise to environmental and social impacts are as follows:

- Transportation of chemicals and waste
- Presence and operation of WtE Plant (excluding transmission Line, water supply system)
- Presence and operation of Transmission Line
- Presence of Workforce
- Presence of security personnel
- Procurement of goods or services
- General utility supply (including water supply system)

Potential unplanned events include:

- Fire accident and explosion
- Spill and leak of chemical (including on-site and during transportation)
- Traffic accidents

1.2.5 CONSIDERATION OF ALTERNATIVES

1.2.5.1 NO PROJECT ALTERNATIVE

The option to not proceed with the Project will result in the proposed project area remaining in its current environmental condition. No action alternative entails no change to the status quo, in other words, the plant construction and equipment installation activities will not be conducted. While this scenario would avoid direct environmental and

social impacts associated construction impacts, combustion emissions, ash generation, and technology/operational risks, it would also forgo a range of strategic national and local development opportunities.

In summary, while the no-project scenario would avoid specific site-level impacts, it would also result in missed opportunities to strengthen regional industrial capacity and generate employment. Given the project's strategic alignment with national policy and local development objectives, and the planned application of environmental and social safeguards, project implementation is considered preferable to the no-project alternative.

1.2.5.2 SITE SELECTION

The selection of the Project involved a thorough evaluation of alternative locations based on engineering, environmental and social considerations. During the feasibility study, SUS and Uzbekistan's Ministry of Ecology, Environmental Protection and Climate Change (MEEPCC) discussed WTE site selection. SUS suggested the site selection should consider four criteria: (1) proximity to an existing road for MSW transport; (2) proximity to a water source, given the project's high-water demand; (3) adjacency to existing power transmission lines for efficient energy export; and (4) exclusion from ecological protection areas.

Based on the above criteria, MEEPCC considered that the site should be located close to Samarkand City Landfill and proposed the project site. After an initial assessment by SUS, the site could meet the main selection criteria mentioned above. Both parties finally agreed on the project location.

The project's exterior facade has been thoughtfully designed to harmonize with the surrounding buildings' architectural character.

1.3 SUMMARY OF STAKEHOLDER ENGAGEMENT

1.3.1 SUMMARY OF STAKEHOLDER ENGAGEMENT HISTORY

Between April 2025 and February 2026, the Project conducted multi-stage stakeholder engagement activities including a public hearing, community profiling, Focus Group Discussions (FGDs), household surveys, and Key Informant Interviews (KIIs) with local communities, government authorities, public service providers, farms, nearby companies, and waste pickers. Stakeholder engagement was carried out across the EIA, scoping, and ESIA stages, with activities conducted in April 2025, January 2026, and February 2026, respectively.

During the public hearing held on 29 April 2025, for the EIA, representatives of relevant authorities and stakeholders presented information on the Project background, scope, and environmental commitments. The Deputy Mayor of Samarkand introduced the national context of waste management and the legal basis for the Project, and provided information on the Project's capacity, municipal solid waste supply arrangements, and electricity purchaser during operation. The Samarkand City Department for Ecology and Climate Change explained the public hearing procedures in accordance with applicable legal requirements, while the SUS representative presented the Project location, siting, and the company's commitments to control emissions, waste, noise, dust, gas, and wastewater in compliance with environmental and sanitary regulations under the supervision of relevant sanitary authorities. In addition, the Navruz chairperson expressed support for the project, noting that the company's activities will contribute to the development of the community, and resolutions from Navruz residents were presented during the hearing.

During the ESIA stage, stakeholder engagement activities were supported by the preparation and distribution of a Project flyer to provide stakeholders with accessible information on the Project. In addition, a standardized cover statement introducing the Project and the purpose of stakeholder engagement was incorporated into the interview materials to ensure stakeholders were adequately informed prior to consultations.

1.3.2 STAKEHOLDER ENGAGEMENT STRATEGIES

As an appendix to the ESIA, a Stakeholder Engagement Plan (SEP) has been developed to guide engagement strategies throughout the entire lifecycle of the Project. The Project's stakeholder engagement strategy is designed to ensure that all parties with an interest in or potentially affected by the Project are regularly informed, consulted, and engaged in a culturally appropriate and accessible manner. This includes establishing two-way communication mechanisms and addressing concerns and grievances in a timely and responsive way.

All engagement activities throughout the life of the Project will be documented in the Stakeholder Engagement Log. Grievances received during stakeholder engagement consultations will be recorded in the Grievance Register and processed through the Project's grievance redress mechanism.

1.3.3 GRIEVANCE MECHANISM

The SEP also includes a Grievance Mechanism that enables affected individuals to raise grievances, concerns, and inquiries to the Company, the Construction Contractor, and other suppliers. The mechanism incorporates provisions to address Gender-Based Violence (GBV)-related complaints, ensuring appropriate capacity and support are in place for survivors.

Grievances may be submitted in any language either in writing, by phone or in person to the following individuals of SUS:

Name: Youjie Zhao

Position: EHS manager

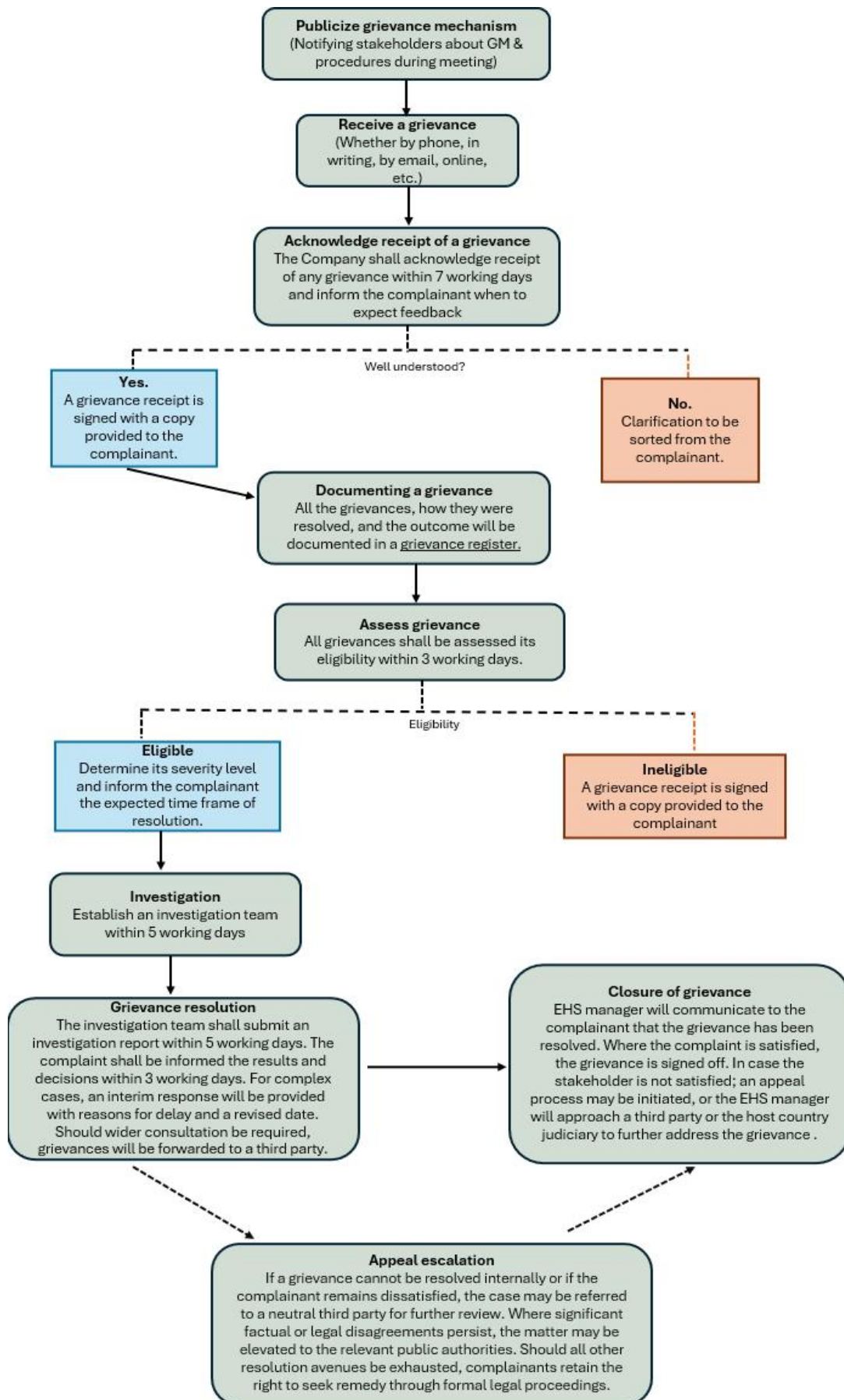
Contacts:

- Email: **zhaoyoujie@shsus.com**
 - Phone: **+998930037688**
-

Additionally, a secure grievance box have been placed at optimal locations, like the Information Office where CCTV/cameras are NOT installed.

All personnel and contractors will be trained to accept and forward grievances appropriately. Figure below summarizes the Project's grievance process flow:

FIGURE 1-3 GRIEVANCE PROCESS FLOW



1.4 SUMMARY OF MAIN ENVIRONMENTAL & SOCIAL IMPACTS

1.4.1 AIR

Construction phases

The potential air quality impacts from the construction activities of the Project include:

- Construction Dust: Construction works are associated with dust-generating activities (earthwork, traffic on unpaved areas and dusty material handling, like concrete batching). Dust can settle on nearby vegetation and structures, potentially leading to environmental and aesthetic concerns.
- Construction Traffic: Construction vehicular movement can result in an increase of emissions of Nitrogen Oxides (NO_x) and particulate matter (PM), leading to deterioration in air quality in surrounding areas.

Operation phase

The potential air quality impacts from the operation activities of the Project include:

- Flue gas emissions, e.g. PM, Sulfur Dioxide (SO₂), oxides of nitrogen and by association nitrogen dioxide (NO_x and NO₂), Hydrogen Chloride (HCl), Hydrogen Fluoride (HF), heavy metals, Dioxins and Carbon Monoxide (CO);
- Fugitive odor emissions (e.g. Ammonia (NH₃), Hydrogen Sulfide (H₂S) as an odor proxy noting that odor is a complex mix of multiple compounds) from waste storage pit during scheduled incinerator maintenance periods (during normal operations, no odor emissions will arise).
- Due to the limited emissions, the working and breathing loss from the storage tanks of hydrochloric acid, fuel oil, and ammonia will be excluded from the air dispersion modeling. Similarly, dust release from the silos of activated carbon for flue gas treatment, fly ash and lime will not be included in the modeling as these silos will be equipped with dust-removal units (baghouse dust collectors) and located within the enclosed main workshop.

1.4.2 GREEN HOUSE GAS (GHG)

During the construction phase, GHG emissions come mainly from the combustion of fossil fuels in construction machinery and vehicles, including excavators, cranes, graders, concrete pump trucks, and various transport vehicles used for the movement of materials, equipment, and personnel. Additional emissions may result from electricity consumption through temporary construction power supplies supporting activities such as lighting, welding and steel fabrication, concrete batching, water pumping, and the operation of site offices and worker accommodation facilities.

In the operation phase, emissions will primarily result from the controlled thermal treatment of Municipal Solid Waste (MSW), which generates direct process emissions of CO₂, CH₄ and N₂O. The Project is designed to be self-sufficient by utilizing its own generated power for internal operations, minor indirect emissions associated with the national grid may occur during infrequent maintenance or emergency shutdowns. Such

emissions are considered negligible and are excluded from the primary inventory due to the Project's role as a net energy exporter.

The total emission of scope 1 and scope 2 is estimated to be 2,821.82 ktCO₂e in construction phase. In operation phase, the gross emission of scope 1 is 251.62 ktCO₂e/year and avoided emission is 797.31 ktCO₂e/year, equal to a net emission of - 545.69 ktCO₂e/year.

1.4.3 NOISE

The Project Lifecycle has been reviewed to identify the Project activities with potential to generate noise (**Table 1-1**).

TABLE 1-1 POTENTIAL SOURCES OF NOISE FROM THE PROJECT LIFECYCLE

Project Activity	Potential Noise Sources
Construction Phase • Site clearance and earth work; • Identification and clearance of access roads; • Construction of temporary facilities, such as temporary living area; • Construction of building; and • Installation of equipment, transmission towers and transmission line, etc.	• Noise from the use of powered mechanical equipment for the activities during the construction phase.
Operation Phase • Waste collection and incineration; • Turbine and generator; • Utilities operation (e.g. freshwater treatment, cooling tower); and • Environmental protection facilities operation (e.g. flue gas treatment, wastewater treatment).	• Operational noise from equipment and utilities operation.

1.4.4 SOIL

In the operation phase, the potential soil contamination will be caused by:

- Leachate spilled during on-site transport be washed by rainfall into soil during on-site transport;
- Incineration emissions may disperse and deposit into soil, then leach into soil via rainfall;
- Generation of solid waste during the maintenance activities, including metal scrap, e-waste oil-containing waste and domestic waste;
- Generation of domestic and industrial wastewater; and
- Accidental discharge of oil-containing storm water from the transformer area (considered and analyzed under Unplanned Events).

1.4.5 Water

- Impacts on water resources, including
 - Water abstraction from groundwater during construction and from surface water during operation.
- Impacts on water quality, including:
 - Leachate spilled during on-site transport be washed by rainfall into groundwater during on-site transport.
 - Incineration emissions dispersion and deposit onto soil, then leach into groundwater via rainfall.
 - Leachate generated from waste storage and handling areas, which, if not properly collected and treated, may infiltrate into groundwater. The project has incorporated anti-seepage measures into its design. This scenario is assessed under Unplanned Events.
 - In the event of chemicals or leachate leakage into unpaved areas, infiltration may contaminate groundwater. This scenario is assessed under Unplanned Events.. and
 - In the event of a fire or explosion incident generating a substantial volume of firefighting water, failure to implement proper containment and collection measures may result in contaminated runoff discharging via the stormwater drainage system or uncontrolled discharge beyond the site boundary. Such discharges may potentially threaten the quality of both surface and groundwater. This scenario is assessed under Unplanned events..

1.4.6 WASTE

The Project will generate waste during both the construction and operation phases. Potential impacts associated with waste management, encompassing aspects such as storage, handling, collection, transportation, recycling, treatment, and disposal, are assessed in this ESIA.

1.4.7 BIODIVERSITY

- Site Clearing / Ground Preparation (the operation phase involves continued occupation of the Project site);
Construction activities such as land clearing, levelling, piling, and building works will permanently and temporarily remove small areas of landfill and barren land. These habitats are already heavily disturbed by human activities and have low ecological value. Common bird species using the landfill area are well adapted to urban environments and are expected to continue using nearby habitats. Threatened bird species recorded in the wider region do not rely on the Project site for breeding, nesting, feeding, or migration. Therefore, ecological impacts are expected to be very limited.
- Contractor Camps / Laydown Areas and Worker Accommodation.
During construction, approximately 400 contractor workers, 24 Project staff, and 4 security personnel will be present onsite. The temporary increase in workforce may lead

to minor disturbance through daily activities, increased traffic, waste generation, and use of site facilities. However, workers will be accommodated within designated areas, most staff will remain onsite or return to Samarkand City, and workforce numbers are relatively limited compared with the surrounding urban setting. As a result, impacts are expected to be limited.

1.4.8 CLIMATE CHANGE RISK

A Climate Change Risk Assessment (CCRA) was conducted to evaluate how future climate conditions may affect the Project over its lifetime. The assessment identified extreme heat, extreme cold, flooding, extreme winds, wildfire, and water stress/drought as the key physical climate risks.

Increasing temperatures and prolonged heatwaves are expected to have significant impacts on the Project's main facilities, utility systems, waste collection and storage areas, as well as worker health and safety. Conversely, extreme cold events may increase fuel consumption to maintain stable operations and create additional health and safety risks for outdoor workers. Flooding from intense rainfall events could disrupt site operations, although the overall risk is considered moderate.

The assessment also found that strong winds may pose moderate risks to worker safety, while wildfires could present significant health and safety concerns during operation. In addition, water stress and drought may affect the availability of water needed for facility operations and could impact both operational performance and workforce wellbeing. To address these challenges, climate resilience and adaptation measures will be incorporated into Project planning and management throughout the Project lifecycle.

1.4.9 COMMUNITY COHESION AND SOCIAL STRUCTURES

The presence of the Project and construction activities is expected to affect community cohesion and social structures in local villages through the presence of workforce during construction. In addition, presence of workers and security personnel during construction can lead to social tensions and increased competition for jobs and resources such as accommodation and goods. Considering the established village-level and project-level grievance mechanisms and the limited number of labor influx, the impact on community cohesion and social structures is assessed as Negligible.

1.4.10 LAND USE AND LIVELIHOODS

The Project footprint and associated infrastructure are on state-reserved land, and no physical or economic displacement from Project land acquisition was identified. However, the anticipated closure or changed operation of the wider landfill may affect approximately 30–40 community waste pickers, an estimated 60–100 Mugat waste pickers and a small number of landfill employees. Although landfill closure is a wider government action, these groups may experience reduced access to recyclable materials and income.

1.4.11 COMMUNITY HEALTH, SAFETY AND SECURITY

Impacts on community health may arise during construction as a result of air emissions, noise and vibration, and wastewater discharge from construction activities. Noise may

come from the transportation of construction materials, machines, and equipment. It might be also induced by the use of powered mechanical equipment for the activities during the construction phase. Noise disturbances may provoke stress and annoyance among local residents.

1.4.12 PUBLIC INFRASTRUCTURE AND SERVICES

Although the Project's resource requirements represent a small proportion of overall regional capacity, any incremental strain may still affect local households, especially those already experiencing seasonal water limitations or inconsistent municipal services, including electricity, gas and waste management.

1.4.13 OCCUPATIONAL HEALTH AND SAFETY

Construction Phase:

During construction, workers may be exposed to risks associated with heavy machinery, excavation works, trenching, pipeline installation, lifting operations and working at height. Potential hazards include being struck by equipment, entrapment, trench collapse, unstable ground conditions and accidental contact with underground utilities. The Project will implement safety training, safe work procedures, protective equipment, inspections and emergency preparedness measures to help protect workers and reduce accidents.

Operation phase:

During operation, workers may face risks from waste handling activities, hazardous gases, high-temperature boilers and incinerators, chemicals, ash management systems, fuel storage facilities, rotating machinery, electrical equipment, dust, noise and odors. Risks may include burns, chemical exposure, inhalation of harmful gases, electrical shock and machinery-related injuries. The Project will apply comprehensive health and safety management measures, including monitoring, equipment maintenance, safe operating procedures, personal protective equipment and emergency response planning to minimize these risks.

1.4.14 EMPLOYMENT AND LOCAL ECONOMY

The overall employment strategy will follow a phased transition approach: a relatively higher proportion of Chinese staff will be deployed at the initial stage of operations, with local employees gradually taking over the roles and responsibilities of Chinese staff in the subsequent phases until the localized staffing is fully realized.

- During the construction phase, the Project will engage an EPC contractor to recruit contracted workers, with more than half of whom are expected to be recruited from local Uzbek communities.
- During the operation phase, the number of direct Project workers is expected to be approximately 60-100 people.

The Project will first create corresponding job positions in sectors of administration, techniques, construction and daily labor for the local communities. Additionally, procurement contracts for items such as food or raw materials (including cables,

approximately 70% of which are expected to be procured locally) will also be sourced from local communities. The Project is therefore expected to generate direct positive impacts on local employment and local economy.

1.4.15 HUMAN RIGHTS

The Human Rights Impact Assessment (HRIA) identified potential risks related to labor and working conditions, labor practices in the supply chain, the conduct of security personnel, and access to information, participation and grievance mechanisms. Without appropriate management measures, these issues could affect workers' rights, fair employment practices and community wellbeing. To address these risks, the Project will implement human rights policies, labor protection measures, supply chain oversight, responsible security management, stakeholder engagement activities and accessible grievance channels. These measures will help ensure that workers and communities are treated fairly, can participate in project-related decisions, and have access to effective remedies when concerns arise.

1.4.16 UNPLANNED EVENTS

The possible scenarios leading to release of the hazardous substances as unplanned events include:

- Fire and Explosion;
- Leakage and Spillage of Hazardous Substances ; and
- Traffic and On-site Vehicle Incidents.

The potential impacts of the abovementioned hazard include:

- Impact on Ambient Air Quality;
- Impact on Soil and Groundwater;
- Impact on Labor and Working Conditions; and
- Impact on Community Health and Safety.

1.5 SUMMARY OF IMPACT SIGNIFICANCE AND MITIGATION MEASURES

The ESIA has assessed the potential impacts and proposed additional mitigation measures to reduce the level of the impact where necessary. Impact significance refers to the level of impact after considering existing embedded / in-place measures, while residual impact refers to the impact remaining after implementation of both the embedded measures and the additional mitigation, management and monitoring measures identified in this ESIA. These potential impacts are summarized in **Table 1-2**.

TABLE 1-2 SUMMARY OF IMPACT MATRIX AND MITIGATION MEASURES

Impact	Impact Magnitude / Likelihood		Receptor Vulnerability / Severity	Impact Significance				Summary of mitigation/enhancement measures
				Pre-Mitigation		Post-Mitigation		
Environmental: Air Quality								
Dust in Construction Phase	Negligible		Medium	Negligible		Negligible		No additional mitigation measures as impacts are assessed as negligible.
Traffic in Construction Phase	Negligible		Medium	Negligible		Negligible		No additional mitigation measures as impacts are assessed as negligible.
Operation Phase	Negligible	Small	Medium	Negligible	Minor	Negligible	Minor	Control air emissions through continuous stack monitoring, regular equipment maintenance, odor management, dust suppression, and good housekeeping.
Environmental: Water								
Impact on Water Quality	Small		Low	Negligible		Negligible		Conduct regular groundwater monitoring to track quality changes and use purchased freshwater instead of groundwater during construction to prevent adverse impact.
Environmental: Soil								
Contamination of Soil	Small		Medium	Negligible	Minor	Negligible		Prevent soil contamination through safe chemical storage, proper waste management,

Impact	Impact Magnitude / Likelihood		Receptor Vulnerability / Severity	Impact Significance				Summary of mitigation/enhancement measures
				Pre-Mitigation		Post-Mitigation		
								spill prevention, emergency response procedures, anti-seepage systems, and regular soil monitoring.
Environmental: Noise								
Noise from Construction Activities	Small	Medium	Medium	Minor	Moderate	Negligible	Minor	Reduce noise using low-noise equipment, maintenance, silencers, restricted working hours, worker hearing protection, community complaint management, and regular staff training.
Noise from Operation Activities	Negligible		Medium	Negligible		Negligible		
Environmental: Waste								
Waste generation and management (Construction phase)	Small		Low	Minor		Negligible		Apply waste reduction, reuse, recycling, and safe disposal practices. Use licensed waste contractors, track waste generation, manage hazardous wastes safely, control ash and sludge handling, and provide regular worker training.
Waste generation and management (Operation phase)	Medium		Medium	Moderate		Minor		
Environmental: Biodiversity								
Site Clearing / Ground Preparation (Construction and operation)	Small		Low	Negligible		Negligible		No additional mitigation measures as biodiversity impacts are assessed as negligible.
Employment and influx / presence of workforce and contractors (Construction)	Small		Low	Negligible		Negligible		
Social: Land Use and Livelihoods								

Impact	Impact Magnitude / Likelihood	Receptor Vulnerability / Severity	Impact Significance		Summary of mitigation/enhancement measures
			Pre-Mitigation	Post-Mitigation	
Impacts on Livelihood of Community Waste Pickers	Medium	Medium	Moderate	Minor	Support affected waste pickers and former landfill workers through livelihood assistance, skills training, employment information, local hiring opportunities, and coordination with government agencies on livelihood transition and reemployment.
Impacts on Livelihood of Mugat Waste Pickers	Medium	Medium	Moderate	Minor	
Impacts on Local Agriculture Due To Operation Phase Water Extraction	Negligible	Medium	Negligible	Negligible	
Impacts on Livelihood of Previous Landfill Employees	Small	Medium	Minor	Negligible	
Social: Community Health, Safety and Security					
Impact on Community Health from Construction-Related Environmental Emissions and Disturbances	Small	Medium	Minor	Negligible	Protect nearby communities through environmental controls, community engagement, health and safety management plans, worker codes of conduct, disease prevention measures, GBV/SEAH prevention programs, and accessible grievance mechanisms.
Impact on Community Health from Operation-Related Environmental Emissions and Disturbances	Small	Medium	Minor	Negligible	
Increased Risks of Communicable Diseases Due to the Presence of Construction Workforce	Small	Medium	Minor	Negligible	
Increased Risks of Gender-Based Violence Due to the Presence of Construction Workforce	Medium	Medium	Moderate	Minor	

Impact	Impact Magnitude / Likelihood	Receptor Vulnerability / Severity	Impact Significance		Summary of mitigation/enhancement measures
			Pre-Mitigation	Post-Mitigation	
Social: Public Infrastructure and Services					
Increased Pressure on Local Utilities and Services During Construction and Operation	Small	Medium	Minor	Negligible	Maintain transparent communication on project resource use, consult communities on potential impacts, disclose water and electricity consumption information, and ensure reliable local utility services while supporting energy supply benefits.
Positive impact on Local Grid and Entertainment Facilities	/	/	Positive		-
Social: Occupational health and safety					
OHS Risks During Project Construction and Operation	Large	Medium	Major	Moderate	Provide a safe and healthy workplace through strong EHS management systems, training, emergency preparedness, PPE, safe worker accommodation, regular inspections, and worker grievance channels
Impact on Occupational Health and Living Standards Through the Provision of Accommodation	Small	Medium	Minor	Negligible	
Social: Employment and Local Economy					
Contribution to Local Employment and Economy	/	/	Positive		Promote local economic growth by prioritizing local hiring, providing vocational training, supporting local businesses and SMEs, and sharing information on employment and procurement opportunities.
Social: Human Rights					
Impacts on Labor and Working Conditions of Project	Likely	High	Moderate	Low	Protect labor and human rights through policies against child and forced labor, fair

Impact	Impact Magnitude / Likelihood		Receptor Vulnerability / Severity	Impact Significance				Summary of mitigation/enhancement measures
				Pre-Mitigation		Post-Mitigation		
Workers								employment practices, supply-chain due diligence, security management standards, accessible grievance mechanisms, and worker-rights training.
Impacts on Worker’s Rights along the Project Supply Chain	Unlike ly	Likely	Medium	Low	Mode rate	Negli gible	Low	
Impacts on Community Security Associated with Employment of Security Personnel	Unlikely		Medium	Low		Negligible		
Impacts on Rightsholder to Participate/ Access to Remedy	Unlike ly	Likely	Medium	Mode rate	Low	Low	Negli gible	
Unplanned Events								
Fire and Explosion	Possible		Minor	Minor		Negligible		Prepare for emergencies through fire prevention, spill response planning, hazardous material controls, emergency equipment, staff training, evacuation procedures, and traffic management measures.
Impact from spills and leaks	Unlikely		Moderate	Minor		Negligible		
Traffic	Possible		Minor	Minor		Negligible		

1.6 ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

Environmental and Social Management Plan ("ESMP") have been prepared as Chapter 13 of the ESIA.

The Project Company is committed to providing resources and establishing the systems and components essential to the implementation and control of the ESMP. The ESMP sets out Project-specific mitigation measures arising from the impact assessment process and Good International Industry Practice ("GIIP"). The Project Company will support the implementation through a dedicated team with competent staff based on appropriate education, training and experience.

1.7 CONCLUSION

Once operational, the project will incinerate 1,500 tons per day of MSW collected across the Samarkand region for power generation and reduce landfilling.

In general, the E&S impacts are well understood and can generally be managed to acceptable levels through the implementation of environment, health and safety, labor, social and security management and mitigation measures implemented through a robust environmental and social management system and human resources ("HR") policy.

The Project is considered suitable for development and capable of complying with national and Lender requirements. The measures identified in the ESIA enable the Project to avoid, or where avoidance is not possible, minimize, mitigate or compensate for adverse environmental or social impacts and issues to workers, affected communities, and the environment. All commitments, obligations and statutory requirements will be monitored over the duration of the Project and reported regularly.