European Bank for Reconstruction and Development

Construction of Regional Waste Management Centre Kalenic

Environmental and Social Action Plan

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Abbreviation List

Abbreviation	Full name
AFD	French Development Bank
CESMP	Construction Environmental and Social Management Plan
CRB	Climate Resilience Benefit
DD	Due Diligence
E&S	Environmental and Social
EBRD	European Bank for Reconstruction and Development
EIA	Environmental Impact Assessment
EMP	Environmental Management plan
ESAP	Environmental and Social Action Plan
ESHS	Environmental, Social Health and Safety
ESIA	Environmental and Social Impact Assessment
ESMS	Environmental and Social Management System
ESP	Environmental and Social Policy
EU	European Union
FS	Feasibility Study
GDPR	General Data Protection Regulations
GET	Green Economy Transition
GHG	Greenhouse Gases
H&S	Health and Safety
HR	Human Resources
ISO	International Organization for Standardization
LARF	Land Acquisition and Resettlement Framework
LARP	Land Acquisition and Resettlement Plan
MBT	Mechanical Biological Treatment
MRF	Material Recovery Facility
NWMS	National Waste Management Strategy
OESMP	Operation Environmental and Social Management Plan
OHS	Occupational Health and Safety
PAP	Project Affected Person
PIU	Project Implementation Unit
PR	Performance Requirement
PUC	Public Utility Company
RS	Republic of Serbia
RWMC	Regional Waste Management Center
SEP	Stakeholder Engagement Plan
ToR	Terms of Reference

1 Introduction

About this Report

The European Bank for Reconstruction and Development (EBRD) and the French Development Agency (AFD) are each considering providing a sovereign loan to the Republic of Serbia to finance critical improvements in the solid waste management system across several secondary cities in the country.

The program aims to support the development of an integrated and modern solid waste management system in Serbia, via:

- The establishment of regional waste management systems (RWMS)
 articulated around a regional waste management centre covering several
 municipalities (particularly for the sanitary landfill), a solution identified as
 the most economically viable in the National Waste Management Strategy
 (NWMS);
- The establishment of primary sorting / recycling systems; and
- Treatment and recovery of biodegradable waste.
- Infrastructure necessary for collection (waste bins, containers, vehicles and transfer stations).

Arup (the "Consultant") has been appointed to perform an Environmental and Social (E&S) Assessment / Gap Analysis of the Project and Eko-Tamnava d.o.o UB (the "Company") existing operations ("the Assignment").

During the process, a number of areas were identified where the project should align more closely with Lenders requirements. This report presents the measures which are required to achieve compliance with the Lenders requirements, and these measures are therefore required to be implemented as part of the loan agreement.

This report details mitigation measures to prevent, reduce or minimise environmental and social impacts, and measures to improve the current environmental and social management practices and operational performance towards compliance with the Lenders Environmental and Social Performance Requirements throughout the lifetime of the project. It sets out what investment is likely to be required to deliver these measures, the timeframe for delivery and the criteria by which complying with the measures can be evaluated.

2 Environmental and Social Action Plan

The following environmental and social actions are required to meet the requirements of the EBRD's Environment and Social Policy (2019) and should be delivered within the timescale indicated. Responsibility for preforming the actions will lie with the Eko-Tamnava, Project Implementation Unit, as well as with the construction contractors.

No.	Action	Environmental & Social Risks (Liability /Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status		
PR1	Assessment and Management of Environm	Assessment and Management of Environmental and Social Impacts and Issues							
	 1. Managament System a) Formalize ESHS Management System based on: identified environmental, social and H&S impacts, in line with national, EU and Lender's requirements, In line with recognized international management system standards (e.g relevant ISO standards and lists of required documents and procedures). b) Eko-Tamnava to develop and communicate overarching Environmental, Social and H&S Policies as a part of the formal management system and ensure active implementation within the Company. 			Eko-Tamnava resources	a) prior to start of operation b) prior to start of operation	ESHS Managament system in place. Management system to include key components required by the national and EU legislation requirements, lenders requirements and ISO standards required documentation (ISO 9001, 14001, 45001).			
	2. Supplementary E&S impact assessment	Project related E&S risks have not been	PR 1, PR3	Eko-Tamnava resources / PIU /	Once the solution for	Supplementary E&S assessment undertaken and			

No.	Action	Environmental & Social Risks (Liability /Benefits)	EBRD PR,	Resources, Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status
	In parallel with developing the design documentation for all landfill components that are planned to be constructed, supplementary E&S impact assessment to be undertaken. (i.e. landfill degassing system, leachate treatment facility, waste treatment facility (MBT), composting plant and MRF) Any changes in the design/process/strategy (captured through change management procedure – see next ESAP Item) should be assessed against relevant local, EU and Lenders E&S requirements, and Supplementary E&S Impact Assessment prepared for such changes to inform the existing assessment. Supplementary E&S Impact Assessment to define specific mitigation measures for each component. Eko Tamnava to ensure that specific mitigation measures are included in relevant Project documentation (plans and procedures) and implemented.	identified and adequately mitigated.		External Consultant	additional facility is adopted and prior to start of construction each component.	approved by PIU and Lenders (and relevant national authorities if necessary), including as a minimum facilities that are expected to be constructed (i.e. landfill degassing system, leachate treatment facility, waste treatment facility (MBT), composting plant and MRF) together with any other design changes. Supplementary E&S impact assessment defines specific mitigation measures for each component. Relevant plans and procedures for construction and operation phase contain defined mitigation measures. Defined mitigation measures implemented.	
3.	Change Management Procedure should be developed at the Project level to capture any future design/process/strategy changes.	Missing on ESHS risk and impacts associated with the potential design changes.	PR1	Eko-Tamnava resources / PIU	Prior to start of procurement process.	Change Management Procedure developed. Change Management Registry in place.	

No.	Action	Environmental & Social Risks (Liability /Benefits)	(Legislative, EBRD PR,	Resources, Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status
4.	Socio-economic survey Eko-Tamnava d.o.o. to carry out socio- economic survey of the formal and informal waste pickers engaged on the non-regulated landfills in order to be used to develop Land Acquisition and Resettlement Plan (see under PR5).	Livelihood restoration measures are tailored to the affected people, their skills and needs	PR1 PR5	Local municipalities / Eko-Tamnava to coordinate the process	Within 6 months from signing of the loan agreement	Socio-economic survey conducted.	
5.	Closure of existing non-regulated dumpsites a) Prior to closure of each existing non-regulated dumpsite undertake Technical and E&S Assessment for each location b) Prior to closure of each existing non-regulated dumpsite develop Design for closure of each site c) Use of existing non-regulated dumpsites should stop as soon as RWMC Kalenic becomes operation. Technical and E&S Assessment, as well as Design for closure of each site need to take into consideration - landfill stability; settlement; cover soil; need for grading; recultivation; security (access and fencing); adequate monitoring, as well as leachate and	Further exploitation of non-regulated dumpsites could lead to negative E&S impacts	PR1 National Legislation EU Directives	Local municipalities / support to be provided by the Ministry of Environmental Protection	Separate for each location a) 6 months prior to closure b) prior to start of dumpsite closure works c) When RWMC Kalenic operation starts	a) and b) Design developed based on the Technical and E&S Assessment for each separate location. c) Existing non-regulated dumpsites no longer in use.	

No.	Action	Environmental & Social Risks (Liability /Benefits)		Resources, Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status
6.	Resources / ESHS Specialists / Eko-Tamnava / PIU Eko-Tamnava to ensure that environmental, health and safety, social and waste specialists are included throughout planning, procurement, construction and operation phases, in order to ensure that relevant Lenders' and EU requirements, together with local legislation requirements, are included in procurement process, implemented and monitored during the Project. PIU to include representative(s) of the 'Eko-Tamnava' as the entity responsible for planning and implementation and the future operator.	Inadequate EHSS performance and management during the Project implementation. Lack of timely reaction.	PR1	Eko-Tamnava / PIU	Before the start of procurement, construction and operation, respectively.	Relevant environmental, health and safety, social and waste specialists engaged is every/each phase (planning, procurement, construction, operation) respectively. PIU includes representatives of Eko-Tamnava.	
7.	Resources / ESHS Specialists / Contractor / Supervising Engineer Tender documentation for a) the Contractor / construction works b) Supervising Engineer to include requirements for the Supervising Engineer and Contractor to include in their team environmental, health and safety and social specialist.	Lack of relevant expertise leading to inadequate implementation of the ESHS standards.	PR1	Eko-Tamnava / PIU	a) Prior to start of procurement process for construction works b) Prior to start of the procurement for Supervising Engineer	Contractor(s) and Supervising Engineer Teams include environmental, health and safety and social specialist.	

No.	Action	Environmental & Social Risks (Liability /Benefits)	EBRD PR,	Resources, Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status
8.	ESHS Requirements and Managament Plans / Construction Phase a) Eko-Tamnava to define all relevant E&S requirements (national, Lenders, GIP) in a (framework) Environmental and Social Management Plan and include these in procurement process for the future Contractor to be used as a basis to develop Project Specific Construction E&S Management Plan(s). b) Project Specific Construction E&S Management Plan (CESMP) to include as a minimum:	Missing out on Project specific ESHS risks related to the construction phase of the Project.	PRI	a) Eko-Tamnava / PIU b) Future Contractor	a) Prior to start of procurement process b) Prior to start of construction works c) Before start of procurement process and approval of any future sub contract	a) Requirements for preparation of CESMP in line with EIA, ESAP, national requirements, EBRD PRs and good international practice included in procurement process. b) CESMP developed and implemented by future Contractor in line with EIA, ESAP, national requirements, EBRD PRs and good international practice. c) any future sub-contract contains same level of ESHS requirements in line with the main construction contract.	

No.	Action	Environmental & Social Risks (Liability /Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status
	Monitoring Plan, Reporting matrix with clearly defined frequency, performance indicators and progress information. CESMPs to be developed in in line with EIA, ESAP, national requirements, EBRD PRs and good international practice c) Eko-Tamnava and PIU to ensure through procurement process, that all relevant Project E&S requirements are cascaded down the supply chain by ensuring that the same level of requirements is included in Construction contracts (for Contactor), any future subcontract or supply contract.						
9.	Operation Phase ESHS Management Plans Eko-Tamnava to develop Operation E&S Management Plan(s) (OESMPs) in line with EIA, ESAP, national requirements, EBRD PR3 and good international practice. Operation E&S Management Plan(s) (OESMP) should include as a minimum: • Waste Management Plan, • Soil and groundwater contamination monitoring and management, • Leachate treatment and monitoring, • Pollution Prevention Plan,	Missing out on Project specific ESHS risks related to the operation phase of the Project.	PR1	Eko-Tamnava	Prior to start of operation.	OESMP developed and approved by PIU and Lenders.	

No.	Action	Environmental & Social Risks (Liability /Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status
	 Biodiversity Management Plan, OHS Management Plan, Emergency Preparedness and Response Plan, Traffic Management Plan, Community H&S Management Plan, Security personnel requirements, Grievance mechanism, Information disclosure and stakeholder engagement, E&S Monitoring Plan. 		20				
10.	Operational phase organization structure Eko-Tamnava to develop organizational structure for operational phase and ensure adequate resources and expertise (waste, environmental, social and H&S specialists). Organization structure to be approved by the Ministry and Lenders prior to start of operation.	Lack of adequate organizational structure and environmental, social and H&S specialist could lead to inadequate implementation of relevant ESHS requirements and standards for operational phase.	PR1	Eko-Tamnava	Prior to start of operation.	Organisational structure developed and approved by Ministry and Lenders.	
11.	Independent Monitoring	Delay in implementation of ESAP, timely	PR1	PIU Support for procurement / Supervising	PIU support prior to start of procurement /	Regular independent E&S monitoring in place.	

No.	Action	Environmental & Social Risks (Liability /Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status
	Ensure regular independent E&S monitoring through procurement and construction. Eko Tamnava to ensure independent operation review after 3 years of operation.	identification of Project risks, confirmation of adequacy of assessments, plans and other and other actions defined.		Engineer during construction / Independent E&S Consultant for review of operation	Supervising Engineer before start of construction works / Independent E&S Consultant 3 years after the start of operation	Regular independent reporting to Lenders ensured.	
PR2	Labour and Working Conditions	_					•
12.	Workers' Grievance Mechanism Eko-Tamnava d.o.o. to develop a unified procedure for registering and resolving workers' grievances in line with PR 2 and associated guidance1. Ensure that contractor and sub-contractor employees are aware of and have access to the grievance mechanism as well as develop their own procedures.	Workers' grievances are not adequately managed	PR2: Labour and Working Conditions	Eko-Tamnava d.o.o. resources	Six months after signing the loan agreement	Grievance mechanism developed Grievance register	
13.	Monitoring of contractors and suppliers performance – PR2 specific Eko-Tamnava to monitor contractors' and suppliers' performance in the area of labour	Ensure that contractors and suppliers comply with national legislation and PR2	Labour Law EBRD PR1 EBRD PR2	Eko-Tamnava d.o.o. resources	Annually or once during the course of engagement	Audit and monitoring reports on the performance of contractors submitted to EBRD	

¹ Employee Grievance Mechanism https://www.ebrd.com/cs/Satellite?c=Content&cid=1395268983074&d=&pagename=EBRD%2FContent%2FDownloadDocument

No.	Action	Environmental & Social Risks (Liability /Benefits)	EBRD PR,	Resources, Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status
	and HR issues in line with PR2. Monitoring to be performed once a year, or at least once during the course of engagement, if it is shorter than a year.						
14.	HR Manager Eko-Tamnava d.o.o. to appoint an HR manager who will be responsible for development and monitoring of overall HR strategies, systems, tactics and procedures across the organization and managing the recruitment and selection process and will serve as a bridge between management and employees' relations.	Ensure that labour issues are managed in line with national legislation and PR2	Labour Law EBRD PR1 EBRD PR2	Eko-Tamnava resources	When number of Eko- Tamnava employees reach 10.	HR manager appointed	
PR3	Resource Efficiency and Pollution Prevention a	and Control					
15.	Sourcing of materials The Contractor should adhere to international best practice and national legislation in their sourcing of any primary aggregates, sand, soils that may be required. Practice of obtaining material from existing borrow pits to be applied and avoid opening new ones. Eko-Tamnava to ensure that materials are sourced only from licensed borrow pits, plants, and operators.	Damage to natural resources.	PR3	Eko-Tamnava, Future Contractor	Prior to sourcing any construction material, PIU to approve.	Proof of origin of the material provided by the Contractor.	

No.	Action	Environmental & Social Risks (Liability /Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status
16.	Community Awareness Program on two bins system Eko-Tamanava in cooperation with Ministry and local municipalities to develop a Community Awareness Program/Campaign which will introduce two waste bins separation system, raise awareness and provide practical guidelines for the use of new system.	At the moment awareness of the public in 15 municipalities about the new waste management system is very low. Miscalculation of resources needed for waste collection/increased GHG emissions due to an unchanged waste composition mix	PR3	Eko-Tamnava / PIU / Ministry / local municipalities	Prior to start of use of the two waste bins system and periodically during operation.	Community Awareness Program/Campaign developed including guidelines and other educational material. Register of undertaken awareness/training sessions to be kept on fine (info on dates, locations, topics and list of participants)	
17.	CRB ratio Calculate CRB ratio considering the Total Project Value ²	CRB ratio is required to ensure that the climate resilience outcomes of a project can be assessed appropriately	PR3	Eko-Tamnava resources	Prior to confirmation of relevant design solutions.	CRB ratio calculated.	
18.	Disaster Risk Financing Strategy should be developed to assist the operator of the landfill in accessing financial risk protection, like adequate budget reserves, and risk transfer solutions, such as insurance (catastrophe	Compromising of landfill ground layer and consequential	PR3	Eko-Tamnava / with support from Ministry for	Prior to start of operation.	Disaster Risk Financing Strategy in place.	

² See page 24 of the Handbook for further details

No.	Action	Environmental & Social Risks (Liability /Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status
	insurance and weather risk coverage) – defined in FS	groundwater contamination		Environmental Protection			
19.	CO2 Emission Reporting The Company to prepare and submit to Lenders annual assessment report for CO2 emission in line with the relevant Lenders' requirements.	Total annual change in CO2e emissions are above EBRD threshold of 25.000 t CO2 limit. Reporting in line with Lenders' requirements.		Eko-Tamnava resources	Annually during operation.	Annual CO2 emission reports submitted to Lenders.	
PR4	Health and Safety						
20.	Emergency Preparedness and Response Plan(s) Eko-Tamnava d.o.o. Ub should develop Emergency Preparedness and Response Plan(s) in coordination with local authorities and other stakeholders for the operation phase in accordance with Lender's requirements local legislation and EIA. Plans should ensure adequate equipment and training and cover as a minimum following situations: flooding, fires, spills, leakage, explosion and explosion hazard zones, traffic accidents.	Risk associated with the lack of response in case of emergencies;	PR4	Eko-Tamnava resources	Prior to start of operation	Emergency Preparedness and Response Plans developed and include as a minimum following situations: flooding, fires, spills, leakage, explosion and explosion hazard zones, traffic accidents.	
21.	Operational Safety Management System Prior to start of operation, the Company to establish an Operational Safety Management System in line with internationally recognized	Management of overarching safety risks during landfill operation	PR4	Eko-Tamnava resources	Prior to start of operation	Operational Safety Management System established.	

No.	Action	Environmental & Social Risks (Liability /Benefits)	Requirement (Legislative, EBRD PR, Best Practice)	Resources, Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status		
	safety management systems (e.g. ISO standards), which will as a minimum include adequate operational procedures and working methods for hazardous materials management, OHS management, emergency preparedness and response, traffic management, security personnel requirements, community health and safety, and other as identified in EIA								
PR5	Land Acquisition, Involuntary Resettlement and Economic Displacement								
22.	Land Acquisition and Resettlement Plan (LARP) Eko-Tamnava d.o.o. to develop Land Acquisition and Resettlement Plan (LARP) in accordance with PR5, based on Land Acquisition and Resettlement Framework, once that detailed information regarding the land required for execution of the Project. The Plan should ensure: • past land acquisition is assessed against PR5 requirements and adequate remediation measures are identified, if required • provide relevant information about project activities related to land acquisition and the Grievance Mechanism	Land acquisition process is not conducted in line with PR5 requirements	EBRD PR5	Responsibility and resources of Eko-Tamnava d.o.o. / PIU / Local Municipalities	Upon completion of socio-economic survey but prior to the closure of non- regulated landfills used by municipalities.	Land Acquisition and Resettlement Plan in line with the LARF and socio economic survey in place and implemented.			

No.	Action	Environmental & Social Risks (Liability /Benefits)	EBRD PR,	Resources, Investment Needs, Responsibility	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status
	 fair compensation for loss of land and livelihood to legal owners, and to informal users, including waste pickers at existing dumpsites in all municipalities a census to identify all persons affected by loss of livelihood is identified and socio-economic survey is conducted, including waste pickers at existing dumpsites in all municipalities livelihood restoration measures are defined for formal and informal waste pickers at existing dumpsites in all municipalities additional assistance is provided for vulnerable PAPs, including formal and informal waste pickers at existing dumpsites in all municipalities 						
PR6	Biodiversity and Living Natural Resources						
-	See ESAP Items number 7 and 8.	-	-	-	-	-	-
PR8	Cultural Heritage						

No.	Action	Environmental & Social Risks (Liability /Benefits)		Investment Needs,	Timetable action to be completed by end of year	Target and Evaluation Criteria for Successful Implementation	Status
23.	Chance Find Procedure Clearly defined requirement for the Contractor to prepare Chance Find Procedure to be included in the procurement documentation.	Potential findings during the Project execution are not managed adequately.	PR1, PR8	Eko-Tamnava resources / Future Contractor	Prior to signing of the supervision and construction works contracts.	 a) Requirement for development of Chance Find Procedure included in construction contracts. b) Chance Find Procedure developed by Contractor(s) prior to start of construction works. 	
PR10	Information Disclosure and Stakeholder Engag	ement					
24.	Stakeholder Engagement Plan Eko-Tamnava d.o.o. to implement and regularly update the Stakeholder Engagement Plan, including the Grievance Management Procedure.	Ensure that people are informed and meaningfully consulted about environmental and social issues related to the Project. Ensure the grievances are addressed timely in a transparent manner.	PR10: Information Disclosure and Stakeholder Engagement	Eko-Tamnava resources / PIU	During the construction and operation phase	Stakeholders are informed and consulted about the Project Grievance register	