

ATOME Green Fertilizer Plant - PARAGUAY
Environmental and Social Action Plan (o ESAP)

No.	Aspect	Action	Deliverable	Delivery date
PS 1: Assessment and Management of Environmental and Social Risks and Impacts				
1.1	Environmental and Social Assessment and Management System	1. Finalize an environmental and social management system (ESMS) manual for the construction phase containing: (i) a policy; (ii) the identification of risks and impacts; (iii) management programs; (iv) a description of the required organizational capacity and competency; (v) emergency preparedness and response plans; (vi) stakeholder engagement plans; and (vii) monitoring and review procedures.	1. ESMS manual for construction phase.	1. Before first disbursement.
		2. Implement the ESMS for the construction phase.	2. Evidence of implementation	2. As part of the Environmental and Social Compliance Report (ESCR)
		3. Develop an ESMS for the operation phase that contains: (i) a policy; (ii) the identification of risks and impacts; (iii) management programs; (iv) a description of the required organizational capacity and competency; (v) emergency preparedness and response plans; (vi) stakeholder engagement plans; and (vii) monitoring and review procedures	3. ESMS manual for operation phase	3. Two months before the start of operations.
		4. Implement the ESMS for the operation phase.	4. Evidence of implementation	4. As part of the ESCR
1.2	Organizational Capacity and Competency	1. Finalize the E&S structured organization for the construction phase with defined roles, responsibilities and authorities that is commensurate to the nature and size of the project.	1. Organigram with description of job functions.	1. Before first disbursement.
		2. Implement the structured organization for the construction phase	2. Evidence of implementation	2. As part of the ESCR
		3. Develop an E&S structured organization for the operation phase with defined roles, responsibilities and authorities that is commensurate to the nature and size of the project.	3. E&S Organigram with description of job functions	3. Two months before start of operations.
		4. Implement the structured organization for the operation phase.	4. Evidence of implementation	4. As part of the ESCR
		5. Develop a Sustainable Procurement Process aligned with the principles established in the ESMS manual, that ensures that all goods and services have been produced or extracted in ways compatible with a rational management of the environment.	5. Sustainable Procurement Process	5. Before first disbursement.
		6. Implement the Sustainable Procurement Process for the construction phase	6. Evidence of implementation	6. As part of the ESCR
		7. Expand on the contractual obligations in the EPC contractor contract that obliges it to comply with the Paraguayan E&S legislation, ATOME's E&S policies and principles, and any other E&S condition required by the institutions financing the Project.	7. Copy of the contractual obligations.	7. Before the subscription of the construction contract.
		8. Include contractual obligations in the Operation and Maintenance (O&M) contractor contract that obliges it to comply with the Paraguayan E&S legislation, ATOME's E&S policies and principles, and any other E&S condition required by the institutions financing the Project.	8. Copy of the contractual obligations.	8. Before the subscription of the O&M contract.
		9. Develop a training program to enable workers to conduct their activities aligned with the principles established in the ESMS.	9. Training program	9. Within 60 days after first disbursement.
		10. Implement the E&S and OHS training program.	10. Evidence of implementation	10. As part of the ESCR
1.3	Identification of Risks, Impacts and Opportunities	1. Formalize the procedure for the identification and assessment of risks, impacts and opportunities for the construction phase, including those related to the San Rafael farm and the Ypeka'e fishermen community.	1. Procedure for the identification and assessment of risks, impacts and	1. Within 60 days after first disbursement.

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			opportunities for the construction phase	
		2. Finalize the current risk matrix for the construction phase to record identified risks, impacts, management measures, indicators of process and success, and other relevant information to manage such risks and impacts.	2. Risks, impacts and opportunities matrix for the construction phase.	2. Within 60 days after first disbursement.
		3. Formalize the procedure for the identification and assessment of risks, impacts and opportunities for the operational phase	3. Procedure for the identification and assessment of risks, impacts and opportunities for the operational phase	3. Two months before the start of operations
		4. Develop, for the operation phase, a matrix to record identified risks, impacts, management measures, indicators of process and success, and other relevant information to manage such risks and impacts.	4. Risks, impacts and opportunities matrix for the operation phase	4. Two months before the start of operations
1.4	Management Programs	1. Expand, the programs to manage all environmental and social risks and impacts for the construction phase to include details on who, when, where, how, and what the expected results of the proposed actions should be.	1. Set of environmental and management programs for the construction phase.	1. Within 60 days after first disbursement.
		2. Implement the set of programs	2. Evidence of implementation	2. As part of the ESCR
		3. Develop, for the operation phase, a set of programs to manage all environmental and social risks and impacts that detail who, when, where, how, and what the expected results of the proposed actions should be.	3. Set of environmental and management programs for the operation phase.	3. Two months before the start of operations.
		4. Implement the set of programs	4. Evidence of implementation	4. As part of the ESCR
1.5	Stakeholder Engagement	1. Update the stakeholder plan by incorporating: i) the identification, classification and communication strategy with each of the groups, including the Ypeka'e population; and ii) information related to land acquisition.	1. Updates stakeholder plan.	1. Within 60 days after first disbursement.
		2. Define, as part of the communication subprogram, the means to be used with each stakeholder to disseminate the activities and the participation mechanisms.	2. Definition of the means to communicate with the different stakeholders.	2. Within 60 days after first disbursement.
1.6	External Communications and Grievance Mechanisms	1. Produce, for the existing mechanism, an independent Grievance Mechanism for the community that: i) details the procedure for receiving and managing complaints; ii) differentiates complaints or claims, suggestions, petitions and information requests; iii) classifies each complaint according to its type so that it can be evaluated according to its magnitude or seriousness; iv) provides time frameworks for dealing with the claim; v) includes a procedure to communicate to the claimants how the claim was dealt with; vi) allows the claimants to appeal process; vii) allows anonymous claims; viii) can capture claims from vulnerable groups; and ix) does not hinder the claimants to use any other grievance mechanism provided by law.	1. External Grievance Mechanism	1. Within 60 days after first disbursement.
		2. Implement the external grievance mechanism.	2. Evidence of implementation	2. As part of the ESCR
PS 2: Labor and Working Conditions				
2.1	Human Resources Policies and Management	1. Update the current human resources policy applicable to all ATOME's as well as to all contracted or subcontracted workers to specifically declare: i) the Project's commitment to comply with all Paraguayan laws; ii) the freedom of workers to constitute or adhere to workers' organizations and to collective bargaining; iii) non-discrimination and equal opportunity in the workplace; and iv) the prohibition to use child or forced labor in the Project.	1. Human resources policy	1. Within 90 days after first disbursement.
		2. Implement the human resources policy.	2. Evidence of implementation	2. As part of the ESCR

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2.2	Grievance Mechanism for Workers	1. Develop an independent internal Grievance Mechanism applicable to own and contracted and subcontracted workers that: i) details the procedure for receiving and managing complaints; ii) differentiates complaints or claims, suggestions, petitions and information requests; iii) classifies each complaint according to its type so that it can be evaluated according to its magnitude or seriousness; iv) provides time frameworks for dealing with the claim; v) includes a procedure to communicate to the claimants how the claim was dealt with; vi) allows the claimants to appeal process; vii) allows anonymous claims; and viii) does not hinder the claimants to use any other grievance mechanism provided by law.	1. Internal Grievance Mechanism	1. 60 days after first disbursement.
		2. Implement the internal grievance mechanism.	2. Evidence of implementation	2. As part of the ESCR
2.3	Occupational Health and Safety	1. Present an Occupational Health and Safety Plan for the construction phase that includes: i) the identification of potential hazards to workers; ii) a set of preventive and protective measures; iii) a training program for workers; iv) procedures to document and report of occupational accidents, diseases, and incidents; and v) emergency prevention, preparedness, and response arrangements.	1. Occupational Health and Safety Plan for the construction phase	1. Before the start of construction.
		2. Implement the Occupational Health and Safety Plan for the construction phase.	2. Evidence of implementation	2. As part of the ESCR
		3. Present an Occupational Health and Safety Plan for the operation phase that includes: i) the identification of potential hazards to workers; ii) a set of preventive and protective measures; iii) a training program for workers; iv) procedures to document and report of occupational accidents, diseases, and incidents; and v) emergency prevention, preparedness, and response arrangements.	3. Occupational Health and Safety Plan for the operation phase.	3. 60 days before start of operations
		4. Implement the Occupational Health and Safety Plan for the operation phase.	4. Evidence of implementation	4. As part of the ESCR
PS 3: Resource Efficiency and Pollution Prevention				
3.1	Energy Efficiency	1. Develop an Energy Efficiency Plan for the construction phase that includes measures oriented to energy efficiency.	1. Energy Efficiency Plan for the construction phase	1. Before the start of construction.
		2. Implement the Energy Efficiency Plan for the construction phase	2. Evidence of implementation	2. As part of the ESCR
3.2	Water Consumption	1. Present a Water Management Plan for the construction phase that includes measures to reduce consumption and to avoid or minimize the alteration of water quality with the effluent discharges.	1. Water Management Plan for the construction phase	1. Before start of construction.
		2. Implement the Water Management Plan for the construction phase	2. Evidence of implementation	2. As part of the ESCR
		3. Present a Water Management Plan for the operation phase that includes measures to reduce consumption and to avoid or minimize the alteration of water quality with the effluent discharges.	3. Water Management Plan for the operation phase	3. 60 days before the start of operations
		4. Implement the Water Management Plan for the operation phase	4. Evidence of implementation	4. As part of the ESCR
3.3	Wastes	1. Present a Waste Management Plan (WMP) for the construction phase that: i) covers all wastes streams; ii) contains management measures for each type of wastes; and iii) requires contractors and subcontractors to either adhere to it or develop their own WMP in line with ATOME's WMP	1. WMP for the construction phase	1. Before the start of construction.
		2. Implement the WMP for the construction phase.	2. Evidence of implementation	2. As part of the ESCR
		3. Present a Waste Management Plan (WMP) for the operation phase that: i) covers all wastes streams; ii) contains management measures for each	3. WMP for the operation phase	3. 60 days before the start of operations

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		type of wastes; and iii) requires contractors and subcontractors to either adhere to it or develop their own WMP in line with ATOME's WMP		
		4. Implement the WMP for the operation phase.	4. Evidence of implementation	4. As part of the ESCR
3.4	Hazardous Materials	1. Present a Hazardous Materials Management Plan (HMMP) for the construction phase that includes: i) product acquisition specifications; ii) access to the site protocols; iii) the description of the unloading processes; iv) storage requirements; v) requirements for external transport; vi) protocols for transformation into waste; vii) product return or transference instructions; and viii) requirements for contractors and subcontractors to either adhere to it or develop their own HMMP in line with ATOME's HMMP.	1. HMMP for the construction phase	1. Before the start of construction
		2. Implement the HMMP for the construction phase.	2. Evidence of implementation	2. As part of the ESCR
		3. Present a Hazardous Materials Management Plan (HMMP) for the operation phase that includes: : i) product acquisition specifications; ii) access to the site protocols; iii) the description of the unloading processes; iv) storage requirements; v) requirements for external transport; vi) protocols for transformation into waste; vii) product return or transference instructions; and viii) requirements for contractors and subcontractors to either adhere to it or develop their own HMMP in line with ATOME's HMMP.	3. HMMP for the operation phase	3. 60 days before the start of operations
		4. Implement the HMMP for the operation phase.	4. Evidence of implementation	4. As part of the ESCR
PS 4: Community Health, Safety, and Security				
4.1	Infrastructure and Equipment Safety	1. Present a Traffic Plan for the construction phase.	1. Traffic Plan for the construction phase	1. Before the start of construction.
		2. Implement the Traffic Plan for the construction phase.	2. Evidence of implementation	2. As part of the ESCR
		3. Present a Traffic Plan for the operation phase.	3. Traffic Plan for the operation phase	3. 60 days before the start of operations
		4. Implement the Traffic Plan for the operation phase.	4. Evidence of implementation	4. As part of the ESCR
		5. Present a report that shows how the recommendations from HAZID, ENVID, HAZOP, LOPA, and SIL have been included in the design of the Project.	5. Report on how the recommendations from HAZID, ENVID, HAZOP, LOPA, and SIL have been included in the Project's design.	5. Before the start of operations.
		6. Present a report that shows how the recommendations from HAZID, ENVID, HAZOP, LOPA, and SIL are being implemented.	6. Report that shows how the recommendations from HAZID, ENVID, HAZOP, LOPA, and SIL are being implemented.	6. As part of the ESCR
4.2	Exposure to Disease	1. Present a set of measures to avoid the spreading of diseases among workers and with the surrounding communities.	1. Set of measures	1. Before the start of construction
		2. Implement the measures to avoid the spreading of diseases among workers and with the surrounding communities	2. Evidence of implementation	2. As part of the ESCR
4.3	Emergency Preparedness and Response	1. Present an Emergency Preparedness Response Plan ("EPRP") for the construction phase that includes: i) the analysis of potential emergency scenarios considering natural, contextual, and anthropogenic hazards (including those from climate change); ii) preventive measures; iii) procedures to be triggered in an event of a contingency; iv) requirements for the organization of the emergency response teams; v) a list of emergency contacts and communication systems and protocols; vi) procedures for interaction with local and regional authorities in health and	1. EPRP for the construction phase	1. Before the start of construction.

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		emergency resolution; vii) the description of the emergency facilities and equipment for emergency response (first aid stations, hoses, fire extinguishers, detection and alarm systems, etc.); vii) protocols for fire trucks, ambulances and other emergency services and vehicles; and ix) the description of the necessary training exercises, (drills and simulations) for ATOME's personnel (occluding contractors and subcontractors), other stakeholders and potential affected parties.		
		2. Implement the EPRP for the construction phase.	2. Evidence of implementation	2. As part of the ESCR
		3. Present an EPRP for the operation phase with similar characteristics to that of the construction phase EPRP.	3. EPRP for the operation phase	3. 60 days before the start of operations
		4. Implement the ERP for the operation phase	4. Evidence of implementation	4. As part of the ESCR
4.4	Security Personnel	1. Present a Security Forces Management Plan for the construction phase	1. Security Forces Management Plan for the construction phase	1. Before the start of construction
		2. Implement the Security Forces Management Plan for the construction phase	2. Evidence of implementation	2. As part of the ESCR
		3. Present a Security Forces Management Plan for the operation phase	3. Security Forces Management Plan for the operation phase	3. 60 days before the start of operations.
		4. Implement the Security Forces Management Plan for the operation phase	4. Evidence of implementation	4. As part of the ESCR
PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources				
6.1	Protection and Conservation of Biodiversity	1. Develop a Biodiversity Compensation Plan (BCP) that presents all needed measures to ensure no net biodiversity loss will be produced by the Project	1. BCP	1. Within 90 days after the first disbursement.
		2. Implement the BCP	2. Evidence of implementation	2. As part of the ESCR