

Disclosure Package **Annex B & C**: ESIA and ESMP for Sub- Projects with Categorization B of GCF co-financed projects with GIZ as Accredited Entity

Summary of Project Disclosure Package for FP198 Sub Project ENTO PIROW

Sub Project Grant Agreement Title / Name of Project	ENTO PIRUW
Implementation Country	Perú
Location of the project	Commercial Office: Avenida San Luis 2076 Office 302. District: San Borja. Lima, Peru Operations Center: 981 Huarochiri Avenue. Mayorazgo Urbanization. Tie. Lima, Peru Link to map: https://maps.app.goo.gl/k9HNqwxkMpEvTxFJ6
Facilities to be used	Commercial office: rented area of less than 100 meters. Laboratory: rented area of less than 100 square meters. Production plant: rented area between 100 and 300 square meters. Agricultural production center: company-owned area of more than 1,000 square meters. The company states that it has plans to expand the leased area for the production plant by an additional 50 square meters within the next 6 months.
Grant Period	May 2024 – February 2026
Volume Grant	100,000 EUR (in case of being selected for the CATAL1.5°T Acceleration Program)
Amount of Co-Finance / Own Contribution	TBC
Total Budget	TBC
Project Summary	Ento Piruw uses biotechnology to transform organic waste into insect protein for the formulation of animal feed (fish, chicken, beef and pork) and biofertilizers. They collect organic waste for the breeding of insects (Hermetia and Tenebrio) that are then processed in their production plant. In 2022, ENTO PIROW had sales of 242,857 USD.
Number of employees, organizational structure, and capacity for ESMP/ESMS implementation	The company has a top-down governance model, starting with general management, followed by five strategic directions: production, marketing, marketing, logistics, accounting, and <u>finance</u> . A distribution of the main areas of operation in the company is observed. The company currently has an anti-discrimination policy, which is promoted by the general management. Likewise, there is compliance with basic labor standards. Due to the structure of the company, it is observed that the implementation of the Environmental and Social Management Plan (ESMP) and the

	Environmental and Social Management System (ESMS) will be carried out by the general management, which will receive training during the acceleration program. However, the culture derived from the ESMP and the ESMS will be permeated throughout the organization.
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Table 1: **A.** The purpose, nature, and scale of the activities, and the intended beneficiaries & **B** The duration of proposed activities. This section describes the purpose that the venture would give to the resources, if selected in the CATAL1.5°T Acceleration Program.

Activity / Action	Purpose	Nature and scale of the activity/action	Materials used (including raw materials), waste generation, wastewater generation	Duration of the activity/action	Intended beneficiaries
1	Implement more breeding centers in areas with high rates of organic waste generation and crop losses.	In the last 12 months it had 797 customers. It has been financed with own resources and government funds. If selected, it will use the resources for the acquisition of equipment to complement the current production line, acquisition of materials and inputs that are used in the formulations/dosages of balanced feed in combination with protein, payment of nutrition specialists for the specialized formulation in breeding animals, payment of environmental specialists to optimize processes and reduce the CO2 footprint, as well as the evaluation of carbon extraction offsetting and neutralization, the introduction of a new line of ready-to-use animal products and the creation of new formulations for feeding larvae with new organic waste, and payment of procedures for certifications of good manufacturing practices, environmental, ISO, permits with government institutions that authorize the new production lines, Research & Commercial.	Materials Used <i>Raw Materials:</i> <ul style="list-style-type: none"> Protein sources (660 kilograms), Carbohydrate sources (1,650 kilograms) Lipid sources (990 kilograms). <i>Biodegradable materials:</i> <ul style="list-style-type: none"> Sack, container and wrapping: 68 kg <i>Recycled materials:</i> <ul style="list-style-type: none"> 10 tons of organic matter. Waste generated. <ul style="list-style-type: none"> Compostable organics: 23 kilograms of larval skin. Recyclable inorganics - paper and cardboard: 92 Kg. Recyclable inorganics – glass: 17 kilograms. 	Indefinite	Farmers of chickens, pigs, cattle and fish for self-consumption.
2	Raising the spectrum to new organic waste.			Indefinite	
3	Technologically improve production processes.			Indefinite	
4	Diversify sources of raw materials and increase the scale of production.			Indefinite	
5	Incorporating Insect Protein into the Animal Diet.			Indefinite	

			<p>Other usable organics:</p> <ul style="list-style-type: none"> As a result of the process, 300 kilograms of organic fertilizer are obtained. <p>Consumption</p> <ul style="list-style-type: none"> Monthly volume (cubic meters) of water used in the operation of the company: 8.1 cubic meters. Monthly volume (cubic meters) of wastewater generated by the project: 1.4 cubic meters. 		
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Table 2: C summary of stakeholder consultations and the planned stakeholder engagement process. Information about the virtual interview phase and delivery of additional information in the screening phase.

Consultation [if applicable, place]	Date	Participants	Information and/or further Engagements Planned
Mandate fit check (virtual)	01-23-2024	OM of entrepreneurship Tec de Monterrey GIZ LATAM C-KIC	Delivery of necessary documentary evidence identified in the Screening stage
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D. The available grievance mechanism(s) to receive complaints and facilitate the resolution of such from affected and potentially affected communities, groups, and individuals.

The Grievance Redress Mechanism (GRM) is a formal process for managing complaints and minimizing social risk linked to the CATAL1.5°T Initiative. The GRM process is published on the CATAL1.5°T (<https://catalist-initiative.eco/es>) website, and brochures and information about the GRM will be available to all Start-Ups.

- Annex A:** Sub Project Disclosure Form (mandatory)
- Annex B+C:** ESIA and ESMP (mandatory)
- Annex D: Land Acquisition (if applicable)
- Annex E: IPP (if applicable)

Tick box of the PS Categorization by the Sub-Project: ENTO PIROW, Perú

- A B C Does not apply *Performance Standard 1. Environmental and Social Assessment and Management System*
- A B C Does not apply *Performance Standard 2. Labor and working conditions.*
- A B C Does not apply *Performance Standard 3. Resource efficiency and pollution prevention*
- A B C Does not apply *Performance Standard 4. Community Health & Safety*
- A B C Does not apply *Performance Standard 5. Land acquisition and involuntary resettlement*
- A B C Does not apply *Performance Standard 6. Biodiversity conservation and sustainable management of living natural resources*
- A B C Does not apply *Performance Standard 7. Indigenous peoples*
- A B C Does not apply *Performance Standard 8. Cultural heritage*

Table 1: Environmental and social impact analysis (ESIA) and management plan (ESMP) (safeguard measures) of the FP198 Sub-Project ENTO PIROW, Perú

Performance standard (PS 1-8)	Risks of negative impact and type of risk	Risk mitigation measure	Assumed Risk mitigation effectiveness	Expected results of mitigation	Execution Period and Responsibility	Budget allocated for mitigation measures
<i>PS 1 Assessment and Management of Environmental and Social</i>	<i>Appearance or worsening of an impact due to not adequately managing a risk.</i>	<i>Establish a specific environmental and social management system (ESMS) that includes or complements the Environmental and Social Policy with: i) internal procedures to identify, evaluate and manage possible environmental risks and impacts (health and safety at work already exist); ii) procedures to implement</i>	<i>High</i>	<i>The environmental and social risks and impacts of the venture are identified, evaluated, and managed promptly and effectively through the ESMS.</i>	<i>12 months Board of Directors</i>	<i>In EUR</i>

Performance standard (PS 1-8)	Risks of negative impact and type of risk	Risk mitigation measure	Assumed Risk mitigation effectiveness	Expected results of mitigation	Execution Period and Responsibility	Budget allocated for mitigation measures
<i>Risks and Impacts</i>		<i>the environmental and social risk management program or plan; iii) define functions and person(s) for the implementation of the ESMS; iv) complaints response mechanism with responsible person and their functions; v) mechanism for evaluation and continuous improvement of the SGAS.</i>				
	<i>Risk from inadequate management of threats and hazards due to the lack of a comprehensive emergency preparedness and response plan.</i>	<i>Develop or complement an emergency response plan that includes: i) response procedures in emergency situations; ii) qualified human teams; iii) contacts and communication mechanism; iv) interaction with local authorities; v) equipment (fire extinguishers, first aid stations); vi) training program</i>	<i>High</i>	<i>The company is prepared to deal with emergency situations that may arise.</i>	<i>6 months Director of operations / Human resources</i>	
	<i>Stakeholders may be unaware of the project and the potential risks contained in the project</i>	<i>Develop a Stakeholder Engagement Plan that includes the identification of relevant stakeholders and mechanisms and procedures for the dissemination of information, the collection of stakeholder views, the incorporation of agreements into decisions, and feedback to the stakeholders consulted.</i>	<i>High</i>	<i>Adequate mechanisms are in place to promote stakeholder participation, reducing risks</i>	<i>12 months Board of Directors.</i>	
<i>PS 2 Labor and Working Conditions</i>	<i>Potential risks due to deficient or non-existent implementation measures of Human Resources Policies and Procedures</i>	<i>Establish mechanisms for monitoring and evaluating the implementation of corporate policies on environmental, social, gender, anti-discrimination, human resources, among others.</i>	<i>High</i>	<i>The gender policy, policies against child and forced labor, anti-discrimination policy and equal opportunities policy are effectively implemented</i>	<i>3 months Board of Directors</i>	

Performance standard (PS 1-8)	Risks of negative impact and type of risk	Risk mitigation measure	Assumed Risk mitigation effectiveness	Expected results of mitigation	Execution Period and Responsibility	Budget allocated for mitigation measures
	<i>Risk that workers will not be able to express their claims due to the lack of adequate grievance mechanisms with procedures, means, responsible parties and a gender focus, to receive, record, investigate, evaluate, resolve and follow up on the complaints and claims they present. workers, in particular, women workers.</i>	<i>Strengthen the existing complaints mechanism by defining, applying and disseminating procedures to receive, record, investigate, resolve and follow up on complaints; mechanisms to facilitate access and include anonymity as an option and protection of the complainant against possible retaliation. Disseminate and train in the use of the complaint's mechanism.</i>	<i>High</i>	<i>Complaints from women workers and male workers are addressed in a timely and appropriate manner, reducing the number of complaints and incidents of sexual exploitation, abuse and harassment (SEAH) over time.</i>	<i>3 months Board of Directors</i>	
	<i>Social benefits and other rights not incorporated in the employment contract (vacations, breastfeeding permits, service bonuses, social security, etc.)</i>	<i>Review and, where appropriate, update of the employment contract model to comply with regulations in Perú</i>	<i>High</i>	<i>Workers' rights are effectively respected</i>	<i>3 months Human resources</i>	
	<i>Possible risk of violence, harassment, or sexual harassment due to lack of training and awareness on gender issues and poor application of workplace violence and harassment prevention policies</i>	<i>Develop and implement gender training program.</i>	<i>High</i>	<i>In the opinion of various people, SEAH events are reduced.</i>	<i>6 months Human resources</i>	
		<i>Develop, implement, and disseminate a protocol for the prevention of violence, harassment, and workplace bullying</i>	<i>High</i>	<i>The number of complaints about SEAH is significantly reduced</i>		
	<i>Possible risks in production, maintenance and cleaning activities of machines and facilities; transportation and delivery of products, because not</i>	<i>Complement the occupational safety and hygiene program, by including: (i) the identification of possible risks for the health and safety of workers according to their job (ii) risk assessment, a risk map and a</i>	<i>High</i>	<i>The rate of serious accidents is minimal, and accidents are managed appropriately</i>	<i>6 months Human resources</i>	

Performance standard (PS 1-8)	Risks of negative impact and type of risk	Risk mitigation measure	Assumed Risk mitigation effectiveness	Expected results of mitigation	Execution Period and Responsibility	Budget allocated for mitigation measures
	<i>all workers know the risks and dangers of their workplace or the correct way to use personal protective equipment</i>	<i>intervention plan; (iii) prevention and protection measures implemented; (iv) training for workers and brigades; (v) mandatory occupational health and safety medical examinations; (vi) procedures for preparing statistics and reports on occupational accidents and illnesses; (vii) procedures for informing local health authorities about the occurrence of serious accidents; (viii) procedures for analyzing the causes of accidents and incidents that occur, to implement preventive and corrective actions; (ix) training of workers</i>				
PS 3 Resource Efficiency and Pollution Prevention	<i>Pollution to air, water or soil due to waste generation. Excessive or unnecessary consumption of water. Appearance or worsening of an impact due to not adequately managing the use of resources.</i>	<i>Develop and implement an environmental risk management plan, based on the diagnosis.</i>	High	<i>Increases efficiency in the use of resources</i>	6 months Director of operations	(Example)
		<i>Design of mitigation measures to control emissions, water use and adequate waste management</i>	High	<i>Increases efficiency in the use of resources</i>	6 months Director of operations	
PS 4 Community Health, Safety, and Security	<i>Risks to the health of the final consumer, if the quality and safety of the product is not controlled and ensured.</i>	<i>Develop and implement a risk management plan for the community, based on the diagnosis, which includes risk management, quality assurance and product safety, and procedures for the management and control of biological agents.</i>	High	<i>Effective measures are adopted to significantly reduce the probability of impact on consumers.</i>	6 months Director of operations	
PS 5 Land Acquisition and	No risk					

Performance standard (PS 1-8)	Risks of negative impact and type of risk	Risk mitigation measure	Assumed Risk mitigation effectiveness	Expected results of mitigation	Execution Period and Responsibility	Budget allocated for mitigation measures
<i>Involuntary Resettlement</i>						
<i>PS 6 Biodiversity Conservation and Sustainable Management of Living Natural Resources</i>	<i>Risk of escape or loss of control in the handling of insects or larvae, depending on the safety procedures that are managed, and which must be part of the emergency prevention and response procedures.</i>	<i>Prepare and implement a risk management plan that includes control procedures for the management of insects or larvae, integrated with emergency prevention and response procedures.</i>	<i>High</i>	<i>Escape risk is eliminated</i>	<i>6 months Director of operations</i>	
<i>PS 7 Indigenous Peoples</i>	<i>No risk</i>					
<i>PS 8 Cultural Heritage</i>	<i>No risk</i>					

Additional support for FP198 Environmental and Social Management Framework (ESMF) start-ups: CATAL1.5°T environmental and social support for climate start-ups.

As part of the CATAL1.5°T ESMF, the following complementary activities are carried out to implement measures to mitigate the adverse environmental and social effects of the accepted subprojects, in accordance with PS1:

1. Accepted ventures will receive support in the development of business plans, which will necessarily include environmental and social management plans. Environmental and Social Due Diligence will provide the necessary guidance to identify what type of management

plans are required in accordance with the **Green Climate Fund's (GCF) Interim Social and Environmental Safeguards** and guide companies in establishing and monitoring management plans.

2. The companies selected in the Acceleration program will benefit from a reimbursable subsidy of up to 100 thousand euros. The use of reimbursable grants will be governed by a grant agreement signed with each climate venture and the Executing Entity (Instituto Tecnológico de Monterrey), which will include environmental and social clauses on:
 1. Compliance with environmental and social requirements on excluded activities.
 2. Establishment of reasonable conditions of employment, protection of the workforce, establishment of a safe and healthy working environment.
 3. Non-violations of human rights.
 4. Zero tolerance for gender-based violence and sexual exploitation, abuse, and harassment.
 5. Cumplimiento de condiciones ambientales y sociales adicionales incluidas en los planes de manejo ambiental y social.
3. In addition, the Acceleration Program will offer mentoring on environmental, social and gender issues.
4. All reports will include environmental and social reports. Environmental and social reporting requirements will be defined in the business plans.
5. In preparation for graduation from the Acceleration Program, supported companies will receive assistance in the preparation of long-term environmental and social management plans.