Environmental and Social Review Summary (ESRS)

Project Name:	Greening the Caribbean: Piloting an E-Waste Circular Economy Model in St Lucia
Project Number	RG-G1065
Project Location:	Saint Lucia
Executing Agency:	Greening the Caribbean (GtC)
Type of Operation:	Non-Reimbursable Investment Cooperation provided by the Global Environment Fund (GEF)
ESRS Issuance Date:	November 2024

1. General Information of the Project and Scope of IDB Lab´s Environmental and Social (E&S) Review

The transaction is in favor of Greening the Caribbean ("GtC" or the "Company") to pilot the first circular-economy Integrated E-Waste Management ("IEWM") system in Saint Lucia. Business activities are conducted at the Materials Recovery Center. Outcomes targeted for this project investment are (i) Supporting the sustainable management of hazardous Chemicals and Wastes in the Caribbean. Hence, GtC will reinforce its capacity to recycle e-waste by doubling its capacity over 3 years; (ii) 36,000 kilograms of e-waste will be diverted from the landfills and converted to e-scrap for export; (iii) key upgrades to its safety and handling protocols will be implemented in line with international standards. The transaction will strengthen the technical and operational capacity of the GtC's Recycling Service Center facility and increase market share through an upgraded e-waste Marketing and Scale Strategy.

The environmental and social due diligence (ESDD) of the Transaction consisted of the evaluation of the technical, environmental, health, safety and social documentation presented by GtC. The ESDD included discussions with the Chief Operating Officer of the Company.

2. Environmental and Social Categorization and Rationale

Following the IDB Environmental and Social Policy Framework ("ESPF"), the transaction has been classified as Category B because it may generate, among others, the following potential impacts and risks: (i) labor and safety risks and occupational health ("OHS") of workers and in the supply chain including worker exploitation in the recycling sector and life and fire safety risks during operations; (ii) use of resources, such as electricity; (iii) soil and water contamination from toxic chemicals (like lead, mercury, cadmium, and flame retardants). These impacts and risks can be avoided or mitigated by adhering to generally recognized Environmental and Social performance standards, good international industry practices, environmental, health and safety ("EHS") practices, and design criteria as described in the following sections.

3. Environmental and Social Risks and Impacts

The ESDD indicates that the transaction will have impacts that must be managed in a manner consistent with the following Performance Standards: i) PS 1 - Evaluation and Management of Environmental and Social Risks and Impacts; ii) ND 2 - Work and working conditions; iii) ND 3 Resource efficiency and pollution prevention. No impacts are expected in a manner consistent with PS 4 - Community health and safety, PS5: Land Acquisition and Involuntary Resettlement, PS6: Conservation and Sustainable Management of Living Resources; ND: 7 Indigenous Peoples; ND8: Cultural Heritage; ND9: Gender Equality; PS10 - Participation of Interested Parties and Disclosure of Information.

4. Environmental and Social Context

The primary work of GtC in St Lucia is focused on the collection and management of the full range of waste streams, to address the pollution & health risks posed by the widespread mismanagement of e-waste. Contextual risks include child labor in general waste supply chain operations, E&S supply chain risks, and natural disasters (i.e earthquakes, hurricanes).

5. Environmental and Social Risks and Impacts and Proposed Mitigation Measures

PS 1 - Assessment and Management of Environmental and Social Risks and Impacts.

As part of this transaction, GtC will develop and implement a PS1-compliant Environmental and Social Management System ("ESMS") and submit examples of its implementation (such as , E&S screening tools, and E&S risk management procedures), together with an annual report to IDB Lab.

Policy: GtC has a Policy statement presented in the Health and Safety Handbook. The Company shall develop a PS1-compliant overarching policy. Additionally, GtC will develop a Supply Chain Policy to manage a sustainable e-waste collection. The Company will present to IDB LAB for review a copy of the overarching and Supply Chain Policy and management procedure and will include this supplier code of conduct in all contractual agreements with suppliers. The policies will be communicated internally to project staff and externally to all stakeholders, including business partners and contractors.

Identification of Risks and Impacts: The Health and Safety Handbok presents a risk matrix and a risk evaluation and prioritization plan that allows the identification and management of risks and impacts on its overall operations and those in the supply chain.

Management Programs: Existing procedures for day-to-day operations are listed in the GtC's Health and Safety Manual, and in the GtC's Human Resources Development Manual. The e-waste management of hazardous and non-hazardous waste follows procedures outlined in the "GIZ's 2019 e-waste Training Manual" published by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Germany. The Company will need to upgrade and implement formal, written ESMS procedures to avoid, minimize, and manage identified E&S risks and impacts, including those related to the supply chain.

Organizational Capacity and Competency: E&S issues are currently managed by the Chief Operating Officer ("COO") of the Company, who holds responsibility for overseeing E&S matters across operations. GtC will develop an E&S Training Plan for staff and supply chain workers of business partners.

Emergency Preparedness and Response ("EPR") Plans: The Company shall develop EPR plans and procedures to manage all emergency scenarios. In preparing the EPR plans, GtC will incorporate topics identified during the analysis of E&S risks and impacts, including unexpected hazard events. The emergency plans must consider possible unplanned scenarios such as fires, explosions, chemical spills, and medical emergencies. They will also include emergency contact information, and communication procedures. Additionally, the plans should include the availability of emergency equipment, employee training, and periodic drills to test readiness and capability to execute emergency response procedures.

Stakeholder engagement and External Grievance Mechanism: The Materials Recovery Center is on an industrial estate established by the Government of Saint Lucia for manufacturing operations. There are no people living within the project industrial site.

Monitoring and Review: The Company will need to develop a monitoring procedure to evaluate the effectiveness of its ESMS, including the creation of Key Performance Indicators ("KPIs") for critical environmental, labor, and social issues. This procedure will outline the monitoring process, including frequency, responsibilities, and internal audit protocols.

PS 2 - Labor and Working Conditions

The facility operates with a current workforce of 3-4 full-time persons. GtC offers an equal employment opportunity. All new employees at GtC must undergo induction training. The HR Policy is communicated to all employees during induction and covers terms of employment addressed in job offer letters, wages and benefits, hours of work, overtime arrangements and compensation, annual and sick leaves, non-discrimination, etc. GtC allows freedom of association, yet it does not have a worker's Union.

Protecting the Work Force: According to the national the Labor Code, the minimum age for hazardous work is 18. Child labor and forced labor are contextual risks in general waste recycling supply chain operations. The HR Policy includes a clear statement against the use of child or forced labor, specifying that GtC will only hire direct or temporary employees aged 18 years and older. For its suppliers, the Company must implement a "Child Labor and Forced Labor Monitoring Action Plan" in its supply chain to prevent child or forced labor by e-waste suppliers during collection operations and cease procurement from those found with cases of child or forced labor. Report any cases of child labor or forced labor in the Annual Report to BID LAB.

Occupational Health and Safety (OHS): Workers are usually exposed to a series of hazards as a result of using hand tools, handling loads, falling stored items, and contact with chemicals, among others. Prior to the start of each work assignment, a job safety assessment is conducted by the person in charge at GtC. At this time, risks and hazards are identified and discussed with the project team. Mitigation measures include proper use of Personal Protection Equipment (i.e. N95 dust masks, steel toe boots, full-face shields, etc.). GtC conducts group safety orientations, workshops, as well as individualized safety counselling. GtC has procedures for Incident Reporting and Investigation. The OHS statistics and accident rates are currently recorded and should be reported annually to IDB LAB. OHS training is addressed in the Health & Safety Handbook such as first aid, heat stress prevention, controls on handling hazmat materials, and assessment of hazardous and risk work situations.

Life & Fire Safety ("L&FS"): L&FS risks and nmanagement are described in the Health and Safety Manual. GtC will present to IDB LAB the L&FS engineering design and master plan. The design will comply with international Life and Fire Safety Standards, such as NFPA.

Internal Grievance Mechanism (IGM): The Company must implement a PS2-aligned internal grievance procedure for employees, including the requirement to provide feedback on anonymous grievances, and the specific steps for workers to raise any concerns, as well as the contact name of the person responsible for providing feedback on grievance resolutions. It should indicate that there will be no retaliation. The IGM procedure should be communicated to all employees during induction.

Workers in the supply chain: The e-waste supply chain is primarily supported by GtC's contractual and non-contractual clients. GtC has procedures to ensure principal suppliers do not employ child or force labor. Yet, requires monitoring.

PS 3 - Resource Efficiency and Pollution Prevention

The operational capacity of GtC currently produces approximately 15,000kg of e-scrap exports.

Resource Efficiency: Energy for the processing is obtained from the utility company. Water for domestic use, processing, and cleaning of the equipment is obtained from a municipal water source and rainwater harvesting.

Waste: At the facility, e-waste is categorized into IT equipment, household appliances, commercial, and industrial items. The e-waste is then manually dismantled using tools, guided by best practices outlined in "GIZ's 2019 e-waste Training Manual". The dismantled e-scrap is inventoried and prepared for export, with non-recyclable materials sent to the landfill. The e-waste contains a complex mixture of materials, some of which are hazardous. GtC understands that these can cause major environmental and health problems if the discarded devices are not managed properly. The operations carried out by GtC focus involves practices that include segregation, classification, use and/or final disposal of its components. Recyclable

waste recovered for export is ferrous metals (scrap and steel) totaling 48,210kg and non-ferrous metals (copper, aluminum, bronze, zinc, and manganese) totaling 52,830kg. Hazardous materials (i.e. lead, mercury, arsenic, cadmium, selenium, hexavalent chromium, flame retardants, refrigerants, used oils, etc.) recovered are disposed of in a licensed landfill, as it is required by national law. For monitoring activities associated with the management of hazardous and non-hazardous waste, GtC carries out tracking of waste generation trends by type and amount of waste generated.

Effluent: The effluent generated by domestic and industrial operations is discharged into a septic tank, stormwater is directed into the public drainage system. Effluent is not discharged into the environment.

GHG emissions: The operations implemented by the GtC do not have fixed sources of GHG emissions.

PS 4 - Community Health, Safety and Security

PS4 will not apply, GtC operations take place inside an industrial area without surrounding communities,

PS 5 - Land Acquisition and Involuntary Resettlement

PS5 is not triggered as no land acquisition will be required as part of the project.

PS 6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources

PS5 is not triggered as impacts on biodiversity are not expected as part of the project.

PS 7 - Indigenous Peoples (IP)

The Project is not expected to have adverse impacts on IP.

PS 8 – Cultural Heritage

PS8 is not triggered as the project will not have any impact on cultural heritage.

PS 9 - Gender Equality

Women are not expected to be affected by project operations.

PS10 - Stakeholder Participation and Information Disclosure

GtC has identified its external social actors and maintains dialogues to inform on project activities.

6. Environmental and Social Action Plan (ESAP)

To fully implement the ESAP obligations in line with the Performance Standard requirements, ESAP items must be examined with the specific description in the ESRS above, where the problem and avoidance/mitigation measures are fully described.

Topic	Activity	Deliverable	Deadline
ESMS	Develop and implement a PS1-compliant ESMS	PS1-compliant ESMS	1st disbursement (D) + 365 days
Policy	Develop PS1-compliant Overarching Policy	Overarching Policy	D + 60 days
Management Programmes	Develop and implement formal, written Management Programmes to handle identified E&S risks and impacts	Management Programmes developed	D + 120 days
Organizational Capacity and Competency	Develop an E&S Training Plan for staff and supply chain workers	E&S Training Plan	D + 60 days

Topic	Activity	Deliverable	Deadline
Emergency Preparedness and Response (EPR)	Develop EPR plans and procedures.	EPR Plan developed	D + 90 days
Monitoring and Review	Implement an internal monitoring and review program. The updated program shall add E&S KPIs.	Monitoring and review program implemented	D + 120 days
Supply Chain	1. Develop and implement Supply Chain Policy. 2. Implement a training program to ensure knowledge of the supply chain policy and procedures to staff and business partners	1. Supply Chain Policy 2. Supply chain training.	D + 60 days D + 90 days
Child Labour in supply chain	Implement a "Child Labour Monitoring Action Plan" in the supply chain and report annually to BID LAB	Child Labour Monitoring Action Plan implemented.	-D + 90 days -Report annually to BID LAB
OHS	Report OHS statistics to BID LAB	OHS statistics	Report annually to BID LAB
Internal Grievance Mechanism (GM)	Develop and implement an internal GM procedure communicated to all employees during induction.	Internal GM Procedure.	D + 60 days
Life and Fire Safety (L&FS) Master Plan	Develop and implement L&FS engineering design	L&FS engineering design implemented	D + 60 days