Environmental and Social Review Summary (ESRS)
Trinidad Tissues Limited – Trinidad and Tobago

Original language of the document: English
Issuance date: October 2023

1. General Information of the Project and Overview of Scope of IDB Invest's Review

Trinidad Tissues Limited ("TTL", the "Company" or the "Client") is one of the leading paper companies in the English-speaking Caribbean with a diversified portfolio. It manufactures jumbo semi-finished tissue, towel, napkin rolls from virgin pulps and secondary fiber which are converted into finished goods that are sold locally or destined for export. Product distribution extends across the entire Caribbean region, reaching markets outside of Trinidad and Tobago ("T&T") such as other CARICOM countries, the Dutch Antilles, Puerto Rico, Dominican Republic, and Cuba. Aligned with its regional and international growth strategy, the proposed investment involves i) the construction of a modern distribution center for finished goods (local and export), and ii) the acquisition of new equipment to enhance its operational efficiency (the "Project").

The Environmental and Social Due Diligence ("ESDD") included a site visit, meetings with the Client and a review of the Company's environmental management system, certifications, policies and procedures on occupational and environmental health and safety, waste management procedures, emergency response plans, and labor and human resources issues.

2. Environmental and Social Categorization and Rationale

The Project has been classified as a Category B operation in accordance with IDB Invest's Environmental and Social Sustainability Policy, since it will likely generate, among others, the following site-specific impacts: i) solid and liquid waste generation; ii) noise and vibration disturbance; iii) air and dust emissions; iv) occupational health and safety impacts; and v) traffic disturbance. These impacts are deemed to be of medium-low intensity, are generally limited to the Project site (located in an active industrial area), are largely reversible, and can be managed via measures that are readily available and feasible to implement in the context of the operation.

The Performance Standards ("PS") triggered by the Project are: i) PS1: Assessment and Management of Environmental and Social Risks and Impacts; ii) PS2: Labor and Working Conditions; iii) PS3: Resource Efficiency and Pollution Prevention; and iv) PS4: Community Health, Safety, and Security.

3. Environmental and Social Context

3.1 General characteristics of the Project's site

The Project site is approximately 30 kilometers (18 miles) north-east of the Port-of-Spain, in the O'Meara Industrial Estate area, town of Arima, Trinidad. The fenced unoccupied parcel (1.7 acres or 0.7 hectares) is directly adjacent to the west of the Client's existing manufacturing operations. It is covered primarily with gravely substrate interspersed with low-growing vegetation characteristic of highly disturbed urban lots.

3.2 Contextual risks

The economy of T&T has faced more than a decade of economic decline[1] in both productivity and competitiveness, considered typical of a hydrocarbon-dependent economy. The energy sector accounts for roughly 78% of exports resulting in a domestic economy which lacks both diversification and integration, and which is heavily exposed to price volatilities on world energy markets. Due to its British colonial history, the island is divided along ethnic and racial lines which impact political affiliation, and although citizens co-mingle, sharp divisions along ethno-political lines remain. About 20% of the population lives in poverty – both poverty and inequality are estimated to be on the rise[2] which in turn has resulted in social friction and tension.

Crime and violence continue to pose a serious challenge reducing the country's competitiveness, with homicides and violent crime concentrated in urban and low-income informal settlements. According to InSight Crime[3], high level of homicides remains partly related to drug-trafficking and organized crime. Though data for 2020 reflected a homicide rate of 28.2 per 100,000 inhabitants, which was a significant decrease compared to 2019 (one of the deadliest years in the country's history), it is still the fourth-highest level in the region, only surpassed by Jamaica, Venezuela, and Honduras. Some underlying reasons for the high levels of crime and violence relate to weaknesses in the criminal investigative system, limited effectiveness of the correctional system to reduce criminal behavior, a high social tolerance for family violence, and a related tendency to resort to violence to resolve personal grievances[4].

The latest Global Competitiveness Report[5] notes confrontational employer-employee relations ("EER"), poor transport infrastructure, and limited financing for medium, small, and micro enterprises ("MSME's) as factors which hamper the country's competitiveness – for EER the country is ranked at the bottom (141st out of 141 countries)[6]. Transport infrastructure (both freight and passenger) faces many challenges which include a low-quality road network, operational inefficiencies in public transport, heavy congestion in the urban areas, a high number of road

1 With an average growth rate of -1 percent between 2009 and 2019 and a drop of 7.8% in 2020

2 In the absence of consistent local data, according to the last publicly available Survey of Living Conditions published in 2016, 1 in 5 households was considered poor. Between 2005 and 2014, the percentage population of the poor increased from 16.7% to 24.5%.

3 InSight Crime is a foundation dedicated to the study of the principal threat to national and citizen security in Latin America and the Caribbean.

4 T&T Country Development Challenges Update, (CDC Update), June 2020

5 The Global Competitiveness assesses the ability of countries to provide high levels of prosperity to their citizens (https://www.weforum.org/reports/the-global-competitiveness-report-2020/)

6 T&T ranked 95th on infrastructure, with particularly low scores for transport infrastructure (118/132) and road connectivity (132/141) - World Economic Forum, 2019

accidents and collisions, outdated airport and port infrastructure, and deficient connectivity between Trinidad and nearby Tobago[7].

Despite much of the population having access to improved water supply with a large proportion having a water tap in their residence, it is unreliable and about half of the households have their own storage tanks. There is also a large volume of non-revenue water[8] representing between 40-50% of total water production due to leakages from ageing pipes and lack of water consumption meters. Though improved facilities are available, wastewater treatment remains low posing significant health and environmental risks, while the management of solid waste can be improved substantially. Missing stormwater drainage infrastructure and uncoordinated solutions to flooding have led to poor drainage facilities, especially in the capital Port-of-Spain.

The country also struggles to effectively manage the influx of migrants attempting to escape the political and economic crisis in Venezuela[9], serving as a transit point for vulnerable refugees and migrants traveling to Europe, North Africa, and elsewhere in the Caribbean. Sex trafficking was the most prevalent form of trafficking in the country with victims being women and girls primarily from Venezuela, Colombia, the Dominican Republic, and Guyana. The government has also reported an increase in male Venezuelan labor trafficking victims and domestic child sex trafficking victims[10].

Overall, there is a shortage of unskilled labor for jobs with poor working conditions and limited opportunities for upward mobility. Many of these jobs have now been taken up by members of the largely Venezuelan migrant population[11].

4. Environmental Risks and Impacts and Proposed Mitigation and Compensation Measures

4.1 Assessment and Management of Environmental and Social Risks

With the support of a dedicated Health and Safety ("H&S") team, the Company's current operation is managed through several local environmental permits and licenses issued by the Environmental Management Authority ("EMA"), Ministry of Energy ("MOE"), and Ministry of Health ("MOH") respectively. These include: i) Water and Air Pollution Rules Registration Certificates; ii) Certificate of Environmental Clearance ("CEC"); iii) Well Water License; and iv) permit for the storage of pesticides and toxic chemicals.

The Project will require additional approvals and permits which include: i) Town and Country Approval; ii) Evolving Tecknologies and Enterprise Company Limited Permit[12]; iii) Water and Sewerage Authority of T&T ("WASA") Clearance; iv) Fire Services Inspection; v) T&T Electricity Commission Approval; and vi) FM Global Insurance[13].

---

7 T&T ranks among the lowest in Latin America and the Caribbean (LAC) on the World Bank's 2018 Logistics Performance Index – 124th out of 160 countries and 17th in LAC

8 Water for which the water utility does not earn revenue.

9 On average the government has registered approximately 16,000 migrants from Venezuela

10 https://www.state.gov/reports/2023-trafficking-in-persons-report/trinidad-and-tobago/

11 https://bti-project.org/en/reports/country-report/TTO

12 Evolving TecKnologies and Enterprise Development Company Limited (e TecK) is a special purpose state agency under the Ministry of Trade and Industry. (MTI) to drive the economic diversification of T&T. e TecK's mandate is focused along the lines of asset management and development and facilitation of economic zones.

13 https://www.fmglobal.com/

The Client will prepare a permit register spreadsheet and ensure that all the requirements in such permits are monitored and complied with.

4.1.a E&S Assessment and Management System

The Company does not yet have an Environmental and Social Management System ("ESMS"). However, daily operations are guided by its Forest Stewardship Council ("FSC") Certification[14], and steps are underway to implement an Integrated Management System under ISO 9001, ISO 45001, and ISO 14001[15]. An internal audit for ISO 9001 is scheduled for June 2024.

The Client will therefore develop a formal ESMS to incorporate the necessary E&S elements.

4.1.b Policy

No E&S management policy has been formally adopted by the Company. As such, the Client will develop and adopt an E&S management Policy as part of its ESMS.

4.1.c Identification of Risks and Impacts

This process is currently managed across several departments as guided by its FSC certification, CEC, and other local regulations. However, as part of its ESMS, the Client will outline and maintain a process for identifying E&S risks and impacts linked to its activities and consistent with good international industry practice and local requirements. This will include an impact identification matrix.

4.1.c.i Direct and indirect impacts and risks

Alongside daily operations, construction activity may potentially generate the following site-specific impacts and risks: i) solid and liquid waste generation; ii) noise and vibration disturbance; iii) air and dust emissions; iv) occupational health and safety impacts; and v) traffic disturbance.

Prior to the commencement of construction for the Project, TTL will obtain all required approvals and permits and execute associated mitigation measures.

4.1.c.ii Analysis of alternatives

Project activities will be carried out within the boundaries of a self-contained industrial site. Therefore, no alternative assessment was carried out.

[14] Certificate registration code NC-COC-067538; FSC License Code FSC-C172340

[15] ISO 9001 sets out the criteria for a quality management system and is the only standard in the family that can be certified based on several quality management principles including a strong customer focus, the motivation and implication of top management, the process approach and continual improvement; ISO 45001 specifies requirements for an OHS management system, and gives guidance for its use, to enable organizations to provide safe and healthy workplaces by preventing work-related injury and ill health, as well as by proactively improving its OH&S performance; and ISO 140000 sets out the criteria for an environmental management system and can be certified to. It maps out a framework that a company or organization can follow to set up an effective environmental management system.

4.1.c.iii Cumulative impact analysis

The rapid cumulative impacts assessment considers the incremental effect of past projects already included in the baseline of the environmental components considered in the environmental analysis performed for the Project. There are no projects in execution in the Project's area of influence that could generate material incremental impacts to those generated by the proposed works. As for future projects, only other industrial activities are foreseen in the area under analysis, whose aggregated impacts are deemed to be non-material. Therefore, no cumulative impact mitigation plan was needed.

4.1.c.iv Gender risks

The island has a high femicide rate (2.9 per 100,000 women) which places it among Latin America and the Caribbean ("LAC") countries considered least safe for women – the prevalence of physical violence against women and girls ("VAWG") is as high as 28%. Several evidence-based reports confirm that rigid gender norms contribute to men's use of violence against their female partners[16]. A recent study performed by the Inter-American development Bank ("IDB")[17] indicates that though the status of women in the country is comparable to that of many middle-income developing nations with respect to most social indicators[18], there is still widespread violence (with approximately 1 of every 2 women experiencing a form of violence – physical, sexual, emotional, or financial – during their lifetime). Notwithstanding, the legal architecture to address VAWG is considered robust, with key pieces of legislation passed over the years, and the rights of women to be safe from personal harm and threat is generally enshrined in criminal law. However, the inefficacy of law enforcement and the lack of appropriately trained police officers continues to be major stumbling blocks for survivors of gender-based violence ("GBV"). The study also notes that the judicial system is plagued with inordinate delays, high costs associated with attorney and appeal fees, inconsistent bail matters, and witness reliability.

Male suicide rate (13.9 per 100,000 male population) is also problematic and exceeds that of females (3.6 per 100,000 female population)[19]. Rates are also at higher risk from drugs, gang-related and other criminally violent activities which have been on the rise.

Overall, recent data shows labor force participation rate among females is 47% while males is 63%. Vulnerable employment[20] among women is 13.1% and 22.4% for men. The general rate is lower for men and women in T&T compared to the average rate in LAC. Workers in this category are also the least likely to have formal work arrangements, social protection, and safety nets to guard against economic shocks – thus they are more likely to fall into poverty[21].

16 IDB Group Country Strategy with T&T (2021–2025), October 2021
17 National Women's Health Survey for T&T (2018)
18 This includes life expectancy, maternal mortality, education, and general wellbeing.
19 https://genderdata.worldbank.org/countries/trinidad-and-tobago/
20 Vulnerable employment is often characterized by inadequate earnings, low productivity and difficult conditions of work that undermine workers' fundamental rights. (ILO)
21 https://genderdata.worldbank.org/countries/trinidad-and-tobago/

4.1.c.v Gender Programs

Gender risks and impacts are managed by the Human Resources Department. The Company has a total of 72% women to 28% men in administrative positions, and 39% women to 61% men in senior and management level positions. Women security personnel are also employed by TTL. The Project is expected to create additional job opportunities for women. The Company supports women-owned businesses and has expressed a desire to assist similar informal enterprises. There are separate facilities on the job site for men and women. Assessments are done to evaluate the adequacy of the personal protective equipment ("PPE") for women workers (e.g., size, uniform adjustable to pregnancy, etc.). Work environment safety is also evaluated with options to transition to equivalent grade positions for pregnant and breastfeeding women to avoid hazards. Maternity leave is guided by the local Maternity Protection Act.

There is a written policy on sexual harassment and GBV included in the Company's Employee Policy and Core Labor Requirements Policy ("CLRP"). Under its Disciplinary Policy, offences of gross misconduct include sexual harassment and immoral conduct (e.g., engaging in sexual or lewd conduct). Sanctions for employees who have committed sexual harassment or GBV range from progressive discipline up to and including termination. The Client indicates training and programs to divulge the content of these policies, however, the do not apply to subcontractors.

The Client will provide evidence of training for the relevant policies and their communication to sub-contractors.

4.1.c.vi Climate change exposure

Due to its southerly location, T&T experiences two (2) relatively distinct seasonal climatic types: i) tropical maritime from January to May, with warm days and cool nights with relatively low rainfall; and ii) modified moist equatorial climate between June and December, characterized by hot humid days and nights. This results in a dry season from January to May, and a wet or rainy season from June to December[22].

As a small-island state, the country is vulnerable to temperature increases, changes in precipitation and sea level rise, especially along its coastal areas with associated coastal erosion. Relative to other Caribbean islands, it is less exposed to hurricanes due to its location in the southernmost portion of the region, however, a new natural hazard scenario considered for the country is the increased potential to be hit by tropical storms.

Based on the climate, topography, and urban infrastructure, the twin island (Tobago) is highly susceptible to risks from floods and landslides which occur during the rainy season. Heavy rains over the years have triggered flooding in low-lying urban centers and agricultural lands, as well as landslides along hilly areas. These impacts have been further intensified due to a loss of open space and permeable surfaces which have contributed to increased flood risk.

[22] World Bank

On the opposite end of the spectrum, the country also experiences long dry spells and droughts with projections for a decline in rainfall and increased temperature over the next several decades, which implies further water stress[23]. Trinidad is also prone to earthquakes due to several major fault lines which pass through the island.

Overall, climate change impacts are expected to disproportionally affect the poor and vulnerable, and while public institutions around disaster and emergency management are strong, the country lacks an updated legal framework through which to operate.

The primary hazards identified for the Project are therefore related to earthquake, precipitation, and drought, the latter of which can be exacerbated by the island's dual extremes. As a result, there is also risk from increased water scarcity and flooding. Given this exposure profile, the Project is classified as moderately exposed to physical climate-related hazards. As such, the Client will ensure the project design includes adequate mitigation and adaptation measures to offset potential impacts primarily due to risk from flood and water scarcity.

The Project is considered Paris Agreement aligned based on the analysis conducted in accordance with the IDB Group Paris Alignment Implementation Approach.

4.1.d Management Programs

E&S management programs are addressed through requirements under the FSC certification and processes developed to meet the ISO certifications. The Client will articulate these programs including the impact matrix as part of its ESMS.

4.1.e Organizational Capacity and Competency

E&S matters are managed by a team within the Mill Production Department through Superintendents for production and process improvement. This team is further supported by a Health, Safety and Security ("HSS") Manager and H&S officer from the Human Resource and Safety Department. Collaboration also occurs with other departments such as Quality Control, and Reliability and Projects.

4.1.f Emergency Preparedness and Response

The Company has a disaggregated set of emergency response procedures ("ERPs") covering floods, earthquakes, fire, and first aid. This is supported by an emergency response team. ERP is also captured in the Occupational Safety and Health Management Policy ("OSHMP").

A comprehensive consolidated EPR will therefore be developed as part of the ESMS and adopted for the Project. The ERP will include at minimum; i) additional emergency categories and situations including both natural and man-made disasters; ii) clearly defined response procedures for each category; iii) required equipment and maintenance protocols; iv) designated personnel and focal points; v) evacuation routes and meeting points; vi) training schedules and drill procedures; vii) emergency contacts communication flowchart; and vii) procedures for periodic review and update.

[23] https://www.climatelinks.org/sites/default/files/asset/document/2021-09/Trinidad%20and%20Tobago.May_.2021.Final_.pdf

4.1.g Monitoring and Review

In support of FSC and ISO certification, several key performance indicators ("KPIs) are monitored by the Company as part of its operations (e.g., occupational health and safety ("OHS"), carbon and water footprint, and energy consumption). There is also a detailed list of monitoring procedures guided by the Quality Department, along with general monitoring for parameters such as effluents, noise, air, and water quality. Product quality is validated through both onsite and international lab testing.

These procedures and processes will be reflected in the ESMS.

4.1.h Stakeholder Engagement

Stakeholder engagement is referenced under the Company's Corporate Social Responsibility commitment and channeled through the Sales and Marketing Department covering customer service, marketing, and business development.

The Client will develop a structured Stakeholder Engagement Plan ("SEP") as part of its ESMS to include a proper process for stakeholder mapping for its operations. A community liaison or public relations officer will also be designated.

4.1.h.i Disclosure of Information

The Company has a public website and Facebook page used to share information on its operations.

As part of its SEP, the Client will outline a specific information disclosure process for stakeholders considering their category, level, and type of interaction and activity being undertaken by the Company.

4.1.h.ii Informed Consultation and Participation

As part of its ESMS development, the Company will outline a process for conducting stakeholder consultation according to activities undertaken as part of daily operations, planned expansions or new business opportunities.

4.1.h.iii Indigenous Peoples

The Project will not generate any impacts to indigenous communities.

4.1.h.iv Private Sector Responsibilities Under Government-Led Stakeholder Engagement

The Company is guided by EMA requirements for projects requiring public stakeholder consultations.

4.1.i External Communication and Grievance Mechanisms

The ESMS will include an external grievance mechanism which will capture, and process claims from the community. This will be adopted for the Project.

4.1.i.i External communication

External communications are centered around the Company's webpage and Facebook page which presents news on general activities and company information.

4.1.i.ii Community grievance mechanism

The ESMS will outline a grievance mechanism for affected communities to adequately capture and process any claim from the community, related to Company's operations. Capture means will include additional channels beyond the current website option. The Client will provide evidence of dissemination and training on the grievance mechanism.

4.1.i.iii Provisions for addressing vulnerable groups' grievances

The grievance mechanism will capture and address grievances from all stakeholder groups (including vulnerable groups) relevant to the Client's existing operations and the Project.

4.1.j Ongoing Reporting to Affected Communities

The SEP will outline steps to ensure ongoing reporting to any communities and stakeholders affected by the Company's daily operation or the Project.

4.2 Labor and Working Conditions

4.2.a Working Conditions and Management of Worker Relationships

The Company currently employs more than 396 employees through its mill and conversion production plants. This comprises of 274 men and 122 women. Most staff (34%) are employed in the Converting Production Department, followed by the Reliability and Projects and Mill Production departments (16% and 15% respectively). Employment is managed with the assistance of an employment agency which is similarly guided by a set of core labor procedures.

The construction workforce for the Project (including sub-contractors) will be determined following a tender process for contractor selection.

4.2.a.i Human Resources Policies and Procedures

Details regarding labor and working conditions are covered comprehensively across several policies which include: i) Core Labor via the CLRP; ii) Employment; iii) Leave of Absence and Attendance; iv) Compensation and Benefits; v) Discipline; and vi) Procedures for Termination. The policies apply to

all team members of the Company's workforce and its operations. A Business Ethics Policy also outlines ethical guidelines for team members.

The Company also complies with the core labor requirements of its FSC Chain of Custody Certification.

4.2.a.ii Working Conditions and Terms of Employment

Employment conditions are guided by local T&T labor regulations. Company operations are continuous operating twenty-four (24) hours a day, seven (7) days a week. Working hours are established in accordance with staff members' terms and conditions of employment. These will be adopted according to the needs of the Project.

4.2.a.iii Workers' Organizations

Per the CLRP, the Company respects freedom of association and the effective right to collective bargaining. Workers can establish or join worker organizations of their own choosing and are guaranteed no retaliation or discrimination for doing so.

4.2.a.iv Non-discrimination and Equal Opportunity

The policies on Employment and Core Labor speak to providing equal opportunity in recruitment practices for open competition regardless of race, religion, origin, marital status, sex, ethnicity, or disability. There are further references regarding non-discrimination according to geographical origin, religion, or marital status.

Under the Disciplinary Policy, offences considered unacceptable or classified as gross misconduct include disruptive, toxic, intimidating, threatening and/or abusive behavior, and discrimination.

4.2.a.v Retrenchment

No jobs will be lost under the Project and no retrenchment is planned for the future.

4.2.a.vi Grievance Mechanism

The Company has an internal grievance mechanism via its Grievance Policy which applies to all permanent and temporary employees. Though it refers to the confidential resolution of grievance, the details on the process to facilitate this are not outlined. There is also no reference to sensitive matters such as sexual harassment.

The Client will therefore designate a grievance officer and revise the policy to include a description on i) additional grievance categories including sexual harassment, GBV and discrimination; ii) other specific channels for grievance reception (e.g., e-mail, WhatsApp, or other means); iii) identity protection procedures (i.e., confidentiality, anonymity, sexual harassment, etc.).

The Client will also outline separate procedures to address internal and external grievances within the ESMS.

4.2.b Protecting the Workforce

The Company's CLRP and OSHMP outlines measures as it relates to general health, safety, and security for employees.

4.2.b.i Child Labor

Sixteen (16) is the legal age for employment of young persons in T&T with exceptions, such as working outside of school hours in a family business in which only family members are employed, or during the holidays, once it is not hazardous to a child's physical and mental health[24]. The Company does not employ workers below the age of eighteen (18) and the CLRP makes explicit reference to prohibiting the worst forms of child labor. These measures extend to contractors and subcontractors.

4.2.b.ii Forced Labor

The CLRP states that the Company does not allow any forms of forced, compulsory and bonded labor. These measures extend to contractors and subcontractors.

4.2.c Occupational Health and Safety

Both the Company's CLRP and OSHMP outlines measures as it relates to general H&S for employees. Operations are guided by the local OSH Act. Safety accidents must be reported to the local Occupational Safety and Health Administration ("OSHA"). Critical accidents must be reported within 24 hours and 48 hours for non-critical. For environmental permits, reports are submitted to the respective authorities. PPE is assessed and provided for all plant-based staff, supported by a Job Safety Analysis ("JSA") performed for each job. External and internal testing on light, heat, air quality, temperature, humidity, and noise is also performed periodically. There is an annual training plan pertaining to areas such as evacuation, first aid, overhead crane operation, forklift certification, confined space rescue, hazmat training, and chemical handling.

Offences or grounds for dismal under the Disciplinary Policy include failure to comply with health, safety or security policies or procedures and tampering with fire suppression systems ("FSS").

For its current operations, the Client will provide a report on total man hours, near misses, lost time accidents and lost workdays. The current OSHMP will also be updated to incorporate elements of the comprehensive EPR.

4.2.d Provisions for people with disabilities

[24] https://labour.gov.tt/empowerment/labour-inspectorate/child-labour-in-trinidad-and-tobago#:~:text=In%20Trinidad%20and%20Tobago%2C%20sixteen,under%20sixteen%20(16)%20years

Given the high-risk nature of the activities involved in the operation of the facilities (e, g. milling, heavy lifting, equipment usage and working from heights), persons with disabilities would be exposed to risk. As such, no measures to include people with disabilities have been identified for the Project.

4.2.e Workers Engaged by Third Parties

Workers engaged by third parties are managed through the employment agency, while working conditions are covered under their Core Labor Policy and the Company's Employment Policy. The Company also has a *Contractors 3rd Party Requirements* document which outlines aspects regarding contractors and subcontractors' responsibilities, and environmental hazards and management.

4.2.f Supply Chain

Supply chain management falls under the Distribution Department staffed with a supply chain analyst, along with the Company's FSC certification which ensures the responsible use of fibers from well-managed forests, controlled sources, and recycled materials. Additionally, there is a supplier registration form for procurement which captures key supplier information.

4.3 Resource Efficiency and Pollution Prevention

4.3.a Resource Efficiency

Primary energy for the Project will be from the grid supply comprised of 12kv transformers for distribution. The electricity supply will be used to power the warehouse (e.g., automated racking system, lights, electric forklift) and offices (e.g., computers, lighting, air conditioning) with an estimated usage of 37,500 kWh per annum. Fuel sources diesel and liquefied petroleum gas ("LPG").

Some principles of cleaner production have been considered such as electric forklifts and pallet jacks which use electric battery technology. LED lighting will be used to reduce power consumption and heat generation. Plastic recycling will be promoted. The Company will continue to integrate sustainable practices, such as water, air, and paper recycling, to reduce effluent levels and minimize negative environmental impact. TTL also collaborates with local recycling organizations.[25]

The Client will i) share final designs for the Project incorporating sustainable design features; and ii) conduct annual energy audits.

4.3.a.i Greenhouse Gases

As of the second quarter of 2023, current operations have emitted roughly 9,166t$C0_2$e. Around 9,990 tCO_2e/year is expected for the Project from the electricity use.

Given the Company's planned expanded operational footprint, the Client will prepare a GHG Monitoring Plan for its operations.

[25] E.g., Solid Waste Management Company Limited ("SWMCOL") and ACE Recycling

4.3.a.ii Water Consumption

Water for current operations is acquired via a well. Once used, it is collected and sent through the Company's water treatment system. Following purification, it is reused in the manufacturing process. Several water tanks are located throughout the plant.

Water for the Project will be sourced from WASA with an estimated annual volume of 200,000 m^3.

Given the water intensive nature of its operations, the Client will submit and implement a Water Resource Management Plan ("WRMP") for existing operations and the Project which will include rainwater harvesting measures.

4.3.b Pollution Prevention

Final disposal of any effluents for existing operations and the Project, including solid waste, is covered by the CEC and Water Pollution Rules Registration Certificate ("WPRRC").

The Company also has an active recycling program addressing several types of materials inclusive of plastic, water, metal, paper, wood and recovered organic material. The Client works to recycle these materials both internally and in collaboration of external parties.

The Client will submit a current WPRRC[26].

4.3.b.i Wastes

Solid waste associated with operations include: i) plastics (e.g., include stretch wrap, poly, plastic straps, and PVC totes); ii) metal generated in 2 forms – raw material (pulp) bundled with wire bales and scrap metal material from old parts; iii) paper and office waste; and iv) wood products and pallets.

Liquid waste is generated from sanitary processes and stormwater.

The Client will prepare a waste management plan ("WMP") as for all waste streams including but not limited to solid, liquid, and hazardous waste.

4.3.b.ii Hazardous Materials Management

Primary hazardous waste associated with daily operations is linked to chemicals stored and used during the production process. A permit is required from the MOH. The Project will also produce approximately 1,320 kg of lithium/lead battery waste from electric forklifts every five (5) years.

The Client will submit a hazardous chemicals inventory. Hazardous materials management will be reflected in the WMP.

[26] WWG239 expired 2016

4.3.b.iii Pesticide Use and Management

A permit for the storage of pesticides is required from the MOH.

The Client will i) submit a pesticide inventory; and ii) not purchase, store, use, or trade in products that fall in WHO Recommended Classification of Pesticides.[27]

4.4 Community Health, Safety and Security

4.4.a Community Health and Safety

The Project's interventions are not expected to generate significant E&S impacts. However, its daily operations and construction activities may produce small-scale localized impacts associated with: i) solid and liquid waste generation; ii) noise and vibration disturbance; iii) air and dust emissions; iv) occupational health and safety impacts; and v) traffic disturbance. These impacts will be managed via the CEC, and Water and Air Pollution Rules Registration Certificates.

During the Project's operation phase, the Client will manage associated risk through the ESMS (which outlines an external grievance mechanism), ISO certifications, the WMP, and other existing applicable plans and procedures (e.g., CLRP, JSA's, OSHMP, and monthly monitoring protocols).

4.4.a.i Infrastructure and Equipment Design and Safety

Buildings are retrofitted with fire alarm systems, fire pumps, fire hoses, fire reels, fire hydrants, fire extinguishers and a sprinkler system. The Project design will incorporate these elements and regular training and drills will be conducted. Fire Services Inspection approval is also a local requirement for buildings. The Project will also be insured via FM Global Insurance[28], and the CEC requires that all buildings must be designed and constructed to comply with ISO 9001 along with other international codes and standards. Building design will also consider measures to withstand earthquakes.

The Client will therefore perform regular tests of the FSS for all facilities to ensure constant operational readiness, including: i) timely recharge of fire extinguishers; ii) periodic fire hose integrity tests; and iii) periodic test of water pump pressure and reach of water jets.

4.4.a.ii Hazardous Materials Management and Safety

Hazardous Materials will be managed through the MOH permit and WMP.

4.4.a.iii Ecosystem Services

The Project will not cause any material impacts on existing ecosystem services.

[27] According to Hazard Class Ia (extremely hazardous); or Ib (highly hazardous).
[28] https://www.fmglobal.com/products-and-services/products/climate

4.4.a.iv Community Exposure to Disease

General exposure risk to communicable disease or other illness will be managed through the relevant local permits.

4.4.a.v Emergency Preparedness and Response

The Client's emergency preparedness and response will be captured in its ESMS, OSHMP and updated ERP plan.

4.4.b Security Personnel

The manufacturing plant is securely fenced with access regulated by security at the main gate. The property is also monitored by security cameras. There are no armed persons employed by the Company.

Existing measures will be adopted for the Project.

4.5 Land Acquisition and Involuntary Resettlement

The parcel for the Project is vacant and wholly owned by the Client via private purchase. Therefore, no involuntary physical or economic displacement will be generated.

4.6 Biodiversity Conservation and Natural Habitats

The Project will generate no material impacts to biodiversity.

4.7 Indigenous Peoples

The Project will not affect any indigenous community, nor will it intersect any indigenous territory.

4.8 Cultural Heritage

The Project will not affect any cultural heritage. However, guidelines for chance finds procedures will be determined by the EMA and required CEC.

5. Local Access of Project Documentation

The documentation relating to the project can be made by contacting:
Bernard Hoeger
Country Manager
Email: bernard.hoeger@gbp.com.tt