Annex F: UNDP Social and Environmental Screening Procedure (SESP)

The completed template, which constitutes the Social and Environmental Screening Report, must be included as an annex to the Project Document. Please refer to the Social and Environmental Screening Procedure and Toolkit for guidance on how to answer the 6 questions.

Project Information

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1. Project Title	Energy Efficiency through the Development of Low-carbon RAC Technologies in Trinidad and Tobago
2. Project Number	5957 (GEF Agency Project ID)
3. Location (Global/Region/Country)	Trinidad and Tobago

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the Project mainstreams the Principles (see Guidance)

As a Small Island Developing State (SIDS), Trinidad and Tobago is particular vulnerable to the adverse impacts of climate change such as those related to global temperature increases, changes in precipitation and sea level rise. This UNDP-GEF project aims for social and environmental impacts that may reduce these impacts on vulnerable groups and by including them in the positive effect of the technological changes proposed. This country is highly representative of Refrigeration and Air Conditioning (RAC) penetration trends in the Caribbean region, due to experiencing accelerated economic growth patterns but also facing sustainability problems. High demand of these technologies with inefficient units –with high energy consumption and high global warming potential- puts more pressure on thermal power production at the national level and increases unhealthy indoor environments for building residents, visitors and housing dwellers. This situation, in turn, does not contribute to T&T iNDC´s commitment for developing a low-carbon economy in order to assist in the achievement of sustainable development goals. It also affects severely the citizen´s quality of life, especially for those that are not able to purchase the latest, more energy efficient, RAC climate-friendly technologies.

The project acknowledges the human rights of persons and issues of human rights that may likely to arise. The project looks at best practices to increase safety, transportation and handling of low GWP/HCFCs phase-out refrigerants through technical assistance interventions contributing to an appropriate use of these alternatives, like natural refrigerants; however, these pose one or more safety-related issues including sensitive parameters like high toxicity and high flammability, especially for end-users. This is why this project is a significant step with regards to human rights protection in terms of improving indoor health (breathing air) and living and working conditions (comfort temperatures).

Briefly describe in the space below how the project is likely to improve gender equality and women's empowerment

The project's main goal in the social area is to have positive impacts on women, men, youth and seniors. Each component of the project, whether it is enhancing national policies, accelerating market transformation and information outreach, considers the role women play in the different activities that are part of those components. Despite the fact that there is not much data available, one of the project's goals is precisely to include more gender-oriented objectives to reach out and empower women in the different activities. There is also a lack of availability of gender related information on the RAC sector, and maturity of the stakeholders as it relates to gender and gender related issues.

Therefore, during the project's implementation an analysis of the RAC sector as it relates to gender would be performed to establish a baseline. A capacity building and awareness campaign would also be launched starting with the immediate team on understanding gender in general and gender as it relates to climate change mitigation and adoption.

The project is designed with capacity building and awareness components that target training institutions, civil society, financiers and policy makers. This design encourages participation of marginalized groups as women and youths. There would be several employment opportunities emanating during and after the implementation of the project. There is also the potential for job creation opportunities will positively affect marginalized groups.

Briefly describe in the space below how the Project mainstreams environmental sustainability

This project has a high potential to improve air quality aspects as a co-benefit through the employment of new technology and more efficient operation of existing technologies, which reduces the amount of particulate matter released to the air and harmful gases. This may help reduce the development of respiratory diseases in indoor environments, and therefore indirectly in lower social costs, reduced workforce illness and absenteeism, and increased workforce productivity. However, the replacement of harmful fluorinated gases –CFCs, HCFCs and HFCs – with more climate-friendly alternatives such as the use of natural refrigerants, which have, lower Ozone Depletion Potential and lower Global Warming Potential, like Hydrocarbons (HC), Carbon Dioxide (CO2) and Ammonia (NH3). Although environmentally superior, these natural refrigerants are not free of other concerns, such as corrosion, toxicity, high pressures, flammability so they could also pose a health and safety hazard.

Furthermore, the project has also proposed to significantly reduce Ozone Depleting Substances (ODS) and increase energy efficiency in use of conventional RAC technologies in the commercial sector by introducing the District Cooling alternative which will decrease the current electricity capacity demand and avoid the use of ODS refrigerants. This centralized cooling technology requires a large and separate facility (plant) to host the chillers, boilers, and pumps and the system for the fresh water-cooling to operate this sort of centralized system. One issue that needs to be taken into consideration is any proposed site should not affect any critical maritime habitats or environmentally sensitive areas on either of the two islands.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? *Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any "Yes" responses). If no risks have been identified in Attachment 1 then note "No Risks Identified" and skip to Question 4 and Select "Low Risk". Questions 5 and 6 not required for Low Risk Projects.*	QUESTION 3: What is the level of significance of the potential social and environmental risks? *Note: Respond to Questions 4 and 5 below before proceeding to Question 6*			QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?
Risk Description	*Impact and Probability (I/P)*	*Significance (Low, Moderate, High)*	*Comments*	*Description of assessment and management measures undertaken to address the risk (for Moderate and High Significance risks only)*
Risk 1: Human Rights. Is there a risk that rights-holders do not have the capacity to claim their rights?	I = 2 P = 2	Low	Vulnerable end-users are well represented taking into consideration potential risks associated with the use of natural refrigerants and compliance with standards and labelling for energy efficiency. Over the long-run, the operation of a District Cooling Development should comply with environmental legislation, under the guidance and surveillance of the Environmental Management Authority (EMA), which is a key stakeholder of this Project.	
Risk 2: Gender Equality and Women's Empowerment: have women's groups raised gender equality concerns regarding the	I = 3 P = 2	Low	During the PPG phase, it was identified that there exist policy initiative regarding gender and	The project will undertake a detailed analysis of the sector, to establish and record the baseline information,

Project during the stakeholder engagement process?			climate change; however there exist limited knowledge and baseline data on gender issues specific to the energy sector including the cooling sector.	and to build knowledge capacity on topic of gender equality and women's empowerment.
Risk 3: Biodiversity and Natural Resources: are any Project activities proposed within or adjacent to critical habitats?	I = 3 P = 3	Moderate	This is a moderate risk as the project will consider the development of a District Cooling system. Due to the limited amount of land space in the country, special attention should be dedicated to the main facility in order to avoid disruptive operations that could affect the surrounding maritime habitats or any other sort of protected areas.	During the business development and pre-construction phases of the district cooling pilots, an environmental impact assessment and certificate of environmental clearance would be acquired for each site, under the guidance and surveillance of EMA.
Risk 2: Gender Equality and Women's Empowerment: have women's groups raised gender equality concerns regarding the Project during the stakeholder engagement process?	I = 3 P = 2	Low	The project will undertake a detailed analysis as a matter to promote and mainstream gender equality and women's empowerment during the PPG phase.	
Risk 3: Biodiversity and Natural Resources: are any Project activities proposed within or adjacent to critical habitats?	I = 3 P = 3	Moderate	This is a moderate risk as the project will consider the development of a District Cooling system. Due to the limited amount of land space in the country, special attention should be dedicated to the main facility in order to avoid disruptive operations that could affect the surrounding maritime habitats or any other sort of protected areas.	The feasibility study for the District Cooling is a critical step for the decision-making process to develop this alternative on a larger scale. This risk will be fully assessed and mitigated during the implementation of the project, under the guidance and surveillance of EMA).
	I= 2 P= 2	Low	The use of alternative natural refrigerants for refrigeration and air conditioning in the domestic	Under Output 1.2.1, the project is developing appropriate standards and guidelines on safety transportation, handling

Risk 4: Community Health, Safety and Working Conditions: does the Project involve large-scale infrastructure development?			and commercial sectors may pose health and safety hazards to end-users, such as corrosion, toxicity, high pressures, and flammability.	and use of low-GWP/HCFCs alternatives, enforced by the Environmental Management Authority (EMA).
Risk 5: Indigenous Peoples: are indigenous peoples present in the Project area?	I= 1 P= 1	Low	None	
Risk 6: Pollution Prevention and Resource Efficiency	I = 3 P = 3	Moderate	As mentioned in Risk 3, the operation of a District Cooling Development will be considered over the long-run, as an alternative for a major RAC end-use transformation in the commercial sector. The project does identify a potential risk due to increased unintentional release of ODS refrigerants due to leakage during retrofits, recovery and extended storage for eventual disposal.	This risk will be fully assessed and mitigated during the implementation of the project with specific attention on reducing the release of ODS. This would be done in collaboration with the local Refrigerant Recycling and Recovery Association (RRRA), with inputs from the EMA, to develop a mitigation strategy.

QUESTION 4: What is the overall Project risk categorization?

Select one (see SESP for guidance)		Comments
Low Risk	☐	
Moderate Risk	☒	The overall risk is assessed as moderate where the greatest risks stem from the implementation of pilot projects in the proximity of any category of protected areas and the introduction of refrigerants with some level of flammability or toxicity during the fostering of more climate-friendly RAC technologies that will be put in place by the incremental activities of this UNDP/GEF project. An ESMP will be developed during the initial phase of the Project's implementation.
High Risk	☐	

QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?

Check all that apply	Comments

	Principle 1: Human Rights	☒	During project implementation, the Project Manager will request a review of compliance of applicable SES requirements and will ensure that mitigation measures, if required, will protect end- users of low-carbon RAC technologies.
	Principle 2: Gender Equality and Women's Empowerment	☒	The project will ensure that gender empowerment, especially women inclusion, is transversally incorporated into the all aspects of the project, including capacity development.
	1. Biodiversity Conservation and Natural Resource Management	☐	
	2. Climate Change Mitigation and Adaptation	☐	
	3. Community Health, Safety and Working Conditions	☒	During the initial stages of project implementation, the Project will request a review of compliance with the IDB's social and environmental safeguards during the preparation of the business development phase for the District Cooling pilot (or any other of international recognition), in accordance with international protocols and means of verification.
	4. Cultural Heritage	☐	
	5. Displacement and Resettlement	☐	
	6. Indigenous Peoples	☐	
	7. Pollution Prevention and Resource Efficiency	☒	During the start of project implementation, the Project will request a review of compliance with the IDB's social and environmental safeguards during the business development phase for the District Cooling Pilots (or any other of international recognition), in accordance with international protocols and means of verification.

Final Sign Off

QA Assessor	Rosemary Lal	UNDP staff member responsible for the Project, typically a UNDP Programme Officer. Final signature confirms they have "checked" to ensure that the SESP is adequately conducted.
QA Approver	Sharifa Ali-Abdullah	UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have "cleared" the SESP prior to submittal to the PAC.
PAC Chair		UNDP chair of the PAC. In some cases, PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.