

Environmental and Social Assessment and Environmental & Social Management Framework (ESMF) regarding the Bio-SWEET project

ABSTRACT

This document presents the findings of the Environmental & Social Management Framework performed through this consultancy J. Nieuwendam

Consultant

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1. Scope and Objectives

This document presents the Environmental and Social Management Framework (ESMF) of the "BIO-ECONOMY EMPOWERMENT IN SURINAME'S INDIGENOUS COMMUNITIES THROUGH ACCESS TO WATER, ENERGY, AND TELECOMMUNICATIONS" ("the Program" or "BIO-SWEET"), a multiple works operation to by executed by the Energie Bedrijven Suriname (EBS) that includes a representative sample of ten subprojects in ten indigenous communities¹ in the Sipaliwini District of Suriname and which will include a number of additional subprojects to be determined during the Program's execution.

The ESMF describes how the EBS will manage the additional subprojects outside of the representative sample in accordance with the requirements of the Environmental and Social Policy Framework ("ESPF") of the Inter-American Development Bank ("IDB") and its Environmental and Social Performance Standards ("ESPS").

The IDB has assigned an Environmental and Social Impact Category of "B" to this Program based on its potential to generate low to moderate levels of negative impacts. As such, future subprojects must not have the potential to result in significant negative impacts and the Program therefore excludes "Category A" subprojects. The present ESMF describes applicable environmental and social policies and management programs, the organizational structure of the Program's environmental and social management team, the eligibility criteria for future subprojects, and how the EBS will supervise and report on the environmental and social performance of the future subprojects. This document was last updated on July 1st, 2024.

¹ Alalapadu, Apetina, Sipaliwini, Kwamalasamutu, Kawemhakan, Kumakapan, Pelelu Tepoe, Palumeu, Amotopo and Coeroeni.

2. Program Description

The BIO-SWEET Program is part of the larger project entailing the Conditional Credit Line for Investment Programs (CCLIP). The objective of this CCLIP is to support the Government of Suriname in its efforts to promote a just, clean and sustainable energy transition by increasing access to electricity, water, telecommunications services in rural areas and by promoting the decarbonization of the electricity sector.

The general objective of the BIO-SWEET is to promote the socio-economic development of villages in the Amazon rural areas of Suriname. The specific objectives are to: (i) provide villages in the Amazon rural areas of Suriname with reliable access to renewable energy-based electricity, potable water supply, and telecommunication systems and (ii) foster the development of a bio economy in the Amazon rural areas of Suriname with a gender and diversity perspective.

Component I. Infrastructure investments. This component will finance the provision of electricity, water and telecommunications services and their productive use in the Amazon rural areas of Suriname with four subcomponents. Given that the operation is structured as a multiple wo

rks investment loan, which entails the financing of several independent, but technically similar subprojects towards achieving project objectives, a representative sample for Component I of around 50% of the total investment will be defined in order to process and approve the operation.

Subcomponent I.1. Energy systems. Finances the supply, installation, and commissioning of solar mini-grids, resilient to natural phenomena and including the upgrade of the existing distribution network to provide 24/7 electricity supply in the Amazon rural areas. This subcomponent will also promote the efficient use of electricity in these villages.

Subcomponent I.2. Water systems. Finances the upgrade of the existing water intake, treatment and distribution to provide clean and reliable water supply to the villages in the Amazon rural areas. This component will also promote the efficient use of water in these villages.

Subcomponent I.3. Telecommunications systems. Finances the upgrade of existing and deployment of new distribution and access telecommunications infrastructure to provide reliable telecommunications services in the Amazon rural areas.

Subcomponent I.4. Bio-economy development and community awareness. Finances the implementation of productive and sustainable uses of electricity, water, and telecommunications, focused on bio-economy, within the Amazon rural areas. Also, it finances activities to strengthening the beneficiaries' commitment and ownership of the projects and technical training for women and indigenous women and support their participation in the installation and maintenance of the energy systems. The bioeconomic activities will be designed to maximize the benefits to women, indigenous population and afro descendants.

Component II. Institutional Capacity. Strengthens the institutional capacity of MNH and EBS to plan, design and supervise rural electrification and water projects. It will finance the following activities: (i) training of personnel in project management, rural electrification, water systems, digital technologies; and implementing the gender and diversity action plan of EBS (ii) **specialized** technical support for the design, coordination, and supervision of the works and (iii) managing environmental and social considerations of projects.

EBS

Energie Bedrijven Suriname (EBS) serves as the leading utility company tasked with energy production and distribution throughout Suriname. Its responsibilities in these areas have expanded in recent years.

While the Ministry of Natural Resources previously managed rural electrification through a dedicated division (DEV-Electrification Division), EBS is now transitioning to become a comprehensive energy provider nationwide. The EBS has several departments to address the following:

- Electricity Generation: Operates power plants to generate electricity using various sources such as thermal (using fossil fuels like diesel or heavy fuel oil) and hydroelectric power (utilizing the country's rivers and water resources).
- Transmission: Manages the transmission of electricity from power generation plants to distribution sub-stations using a network of transmission lines and infrastructure. This involves ensuring the efficient and reliable transfer of electricity over long distances.
- Distribution: Responsible for distributing electricity from substations to consumers, including residential, commercial, and industrial customers. This entails maintaining a network of distribution lines, transformers, and other equipment to deliver electricity to end-users.
- Customer Service: Supports its customers, including billing, metering, and responding to inquiries or complaints related to electricity supply.
- Infrastructure Maintenance: Maintains and upgrades its infrastructure, including power plants, transmission lines, substations, and distribution networks, to ensure the reliability and safety of the electricity supply.

Overall, EBS plays a crucial role in ensuring the availability, reliability, and accessibility of electricity to the population of Suriname through its activities in energy production and distribution.

IDB

The Inter-American Development Bank (IDB) is the main source of financing for sustainable, social, economic and institutional development in Latin America and the Caribbean.

The assessment phase was conducted in close collaboration with the Ministry of RoS and Ministry NH, as well as the VIDS, TTA as contractor and sub-contractor ACT-Suriname Amazon Conservation Team Guianas (prior known as Amazon Conservation Team Suriname) was hired as a subcontractor by Trama Tecno Ambiental (TTA) in the information gathering process for supporting the initial engagement strategy in t 10 previously mentioned indigenous villages in South-Suriname. The report prepared by ACT-Guianas under that consultancy assignment served as a key output deliverable for Trama Tecno Ambiental (TTA).

Trama Tecno Ambiental (TTA)

Trama Tecno Ambiental is a global consulting and engineering company with headquarters in Barcelona, Spain. Since its founding in 1986, fully committed to a sustainable energy development, TTA has been providing specialized services in distributed generation through renewable energies, energy management and efficiency, rural electrification, self-generation, integration of renewables in buildings, sustainable architecture, as well as, specialized training, education and technological development related to its activities.

Amazon Conservation Team Guianas (ACT-G)

The Amazon Conservation Team Guianas (ACT-G) is a nonprofit organization that is dedicated to protecting the Amazon rainforest. ACT-Guianas aims to achieve this via partnerships with the local native Indigenous and tribal peoples of Suriname, the traditional inhabitants and users of the rainforest. Respect for, and integration of, their traditional cultural knowledge is crucial for the protection of their land's ecosystems.

3. Legal and Policy Framework

This chapter describes the legal, sectoral, and institutional framework, considering the environmental, social, safety and occupational health areas applicable to the Program.

3.1 Relevant National and Sector Strategies and Policies

3.1.1 Energy

According to Suriname's draft Energy Policy Plan 2013-2033, the peak energy demand of the country's population is between 150 and 250 Mega Watt (MW). The needs in the energy sector such as access and security, are significant and require a coordinated and systematic approach in order to ensure sustainability. The GoS has prioritized the expansion, provision, and enhancement of basic amenities in both urban and rural areas across the country. The Medium-Term Development Plan (MOP) for the period 2022-2026 underscores the importance of creating conditions conducive to sustainable development. One of the intended outcomes from this plan is the implementation of programs to reduce CO2 emissions through the utilization of renewable sources for electricity generation. With a steadily growing annual energy demand, governmental actions are needed in order to ensure smooth economic growth within the country. It is therefore the objective of the Government to guarantee the country's electrical energy supply on a short as well as long term basis.

The **Electricity Act** and the **Energy Authority Suriname (EAS)** Act were adopted by the National Assembly in 2016. With this, the first steps were taken in the restructuring and regulation of the electricity supply sector. The Energy Authority Suriname is responsible for regulation, enforcement, information dissemination, and advisory functions.

The Energy Authority Suriname must, at least once every five years, in consultation with the electricity supply sector, prepare an Electricity Sector Plan (ESP), which can be adopted by government decree.

The ESP includes both the:

- Strategic plan, which looks at least 20 years ahead regarding further sustainability of the sector, as well as
- Technical plan, which maps out the needs for capacity expansion in production, transmission, and distribution for a period of 5 years.
- In addition, a Regulatory plan, which ensures that the implementation and oversight of regulation in the sector by the EAS are based on predictable business considerations. Not only technical and financial considerations, but especially environmentally friendly generation, transmission, and distribution systems.

Alignment with National and Sector Strategies and Policies

The main objectives of a NAMA (Nationally Appropriate Mitigation Action) are to achieve significant sustainable development and in parallel to mitigate GHG emissions in the interior of Suriname. The NAMA encourages the adoption of renewable energy solutions in the interior with the support of international financers, catalyzing a reduction in GHG emissions and increasing sustainable growth and development. The mandate for NAMA development is determined by Suriname's key policies, such as the INDC, Suriname's Energy Policy Plan 2013 – 2033 (draft), Medium-Term Development Plan (MOP) for the period 2022-2026. Suriname's Energy Policy Plan 2013-2033 (draft) provides the basis for NAMA development that will be further determined by the ESP based on the new Electricity Act 2016. The NAMA will build on the strategies set out within the ESP regarding a coherent policy for promoting the development of electricity generation using renewable energy technologies. Notwithstanding, there is need for formulation of a long-term NAMA vision and a clear

mandate assigned to a suitable coordinating and/or implementing body. The largest gaps exist in terms of human and institutional capacities. There is, for instance, a limited technical understanding of climate change mitigation and NAMA development at ministry, NGO, and private sector levels. Table 1 gives an overview of the country's key relevant policies, their descriptions and gaps in relation to the NAMA.

Policy	Description	Gaps
Intended	The sectors covered in this INDC are	Recording the Repowable Energy
Intended		Regarding the Relewable Energy
National	'Forests' and 'Renewable Energy'. Under the	sector, the INDC does not give a
Determined	Renewable Energy section, the INDC states	clear strategy nor actions in order
Contribution	that "Through existing efforts and with	to reach the proposed target.
(INDC), 2015	funding for implementation, Suriname is keen	
	to continue the transition of its energy sector	
	to ensure it stays above 25% renewable by	
	2025"	
Suriname's	The plan presents the long-term vision for the	Even though the policy mentions
Energy Policy	energy sector in Suriname and the	wide- scale development,
Plan 2013 -2033	policy/strategic framework (goals and	deployment and use of renewable
(Draft)	strategies). The Policy considers goals and	energy and provides broadly
	strategies that will facilitate access to electricity	mentioned strategies and actions
	for all, secure sustainable energy supply using	to achieve this, it still lacks a clear
	both renewable energy sources and fossil fuels,	renewable energy (RE) policy and
	and explore options for developing the	renewable energy solutions and
	country's indigenous energy sources.	targets for both on-grid and off-
		grid production and for the use of
		renewable energy in rural
		electrification. In addition, the
		policy lacks clearly defined roles
		and responsibilities for the
		renewable energy sector.

Table 1: Overview of relevant policies, their descriptions and gaps in relation to the NAMA Description

Electricity Act	Electricity Act 2016 strengthens the	The Act lacks a clear and
2016	institutional and regulatory framework by	comprehensive section about
	creating an Energy Authority Suriname	electrification for the communities
	(EAS), establishing a single-buyer scheme,	in the hinterland of Suriname. The
	and instituting cost-recovering tariffs and	promotion and regulation of off-
	focalized subsidies.	grid renewable energy for self-
	The Electricity Act provides guarantees for the	consumption in the interior is not
	energy produced from solar and wind plants	incorporated in the <i>Electricity Act</i> .
	connected to the national grid, and is a great	
	step towards incentivizing renewable energy	Currently, the GoS is in the
	sources in Suriname.	process of establishing the Energy
	The Act prescribes that the EAS regulates all	Authority.
	entities carrying out generation, transmission,	
	distribution or supply functions. However,	
	this applies only if these entities are	
	connected to the "landelijk net" i.e. the	
	national electricity grid that is operated by	
	EBS.	
Electricity Sector	The Electricity Sector Plan (ESP), to be	The ESP is still in preparation.
Plan	prepared at least every five years, establishes a	
	long-term strategic development plan for the	
	sector and provides guidance for taking	
	investment decisions, defining performance	
	targets, and setting electricity tariffs.	

3.1.2 Water

The water-related legislation in Suriname is outdated and does not meet current social needs. Some deficiencies in the existing legislation include the absence of rights and responsibilities for water users, insufficient control mechanisms, unclear delineation of roles and authorities, and the lack of water quality standards. Therefore, it is imperative to make adjustments or enact new legislation promptly.

Currently, there are four draft legislative documents related to water management: (1) a draft law on groundwater extraction, (2) a draft law on groundwater protection, (3) a draft law on water supply supervision, and (4) a draft law on the Surinamese Water Authority. These laws primarily address groundwater and drinking water regulations. These draft laws are undergoing review by a consultant, and subsequent State Decrees will be developed based on their recommendations. These new regulations are intended to replace certain aspects of the old legislation.

The Environmental Framework Act is crucial for pollution control of water sources. Legislation concerning surface water is also needed, although the process of drafting such laws has not yet commenced.

The following table provides an overview and brief descriptions of the current water-related laws in Suriname.

Act	Content
Protection of water resources in general	
The Drilling Act (Boorwet G.B. 1952 no. 93)	Contains provisions to protect the soil by regulating particularly the treatment of the drill holes. This Act does not aim to protect groundwater, but the main purpose is to prevent the mixing of the components of the soil.
The Nature Conservation Act (<i>Natuurbeschermingswet G.B. 1954 no. 26zlg.</i> S.B. 1992 no. 80)	Stipulates that the President may designate, having heard the State Counsel, land and waters belonging to domain land as a nature reserve. This in order to protect and preserve the natural resources in the country.
Water board Act of 2005 ("Waterschapswet 2005")	This law regulates the establishment and management of water boards, as well as the authorization of the board, the obligations of the stakeholders, the possibility of administrative coercion, the supervision of the water boards and the possibilities of appeal against decisions taken by the board.
The Forest Management Act (Wet Bosbeheer S.B. 1992 no. 80)	Contains provisions to regulate the forest management and forest exploitation, as well
,	as the primary wood processing sector.
Protoction of water recourses for drinking	
Article 224 of the Penal Code (Wethoek van	According to this Article: "He that deliberately puts a substance.
Strafrecht G B 1911 no 1 old hi S B 2004 no	in a well pump source creek that is used as common good
105)	or sharing with others as a drinking water device knowing
	that thereby the water will be polluted or can harm the health, will be punished by imprisonment not exceeding fifteen years ".
Police Criminal Code (<i>Politie Strafwet G.B. 1915</i> no.77 zlg. bij S.BS.B. 1990 no. 24.)	In this Code is stated that "The polluter of water in a well, water hole or a ditch or generally any water that will be used to drink or wash shall be punished with a fine or imprisonment not exceeding one month".
The Water Supply Act (<i>Waterleidingbesluit</i> G.B. 1938 no.33.)	Obliges owners of buildings and houses to make use of the public water supply system. It prohibits the possession of water tanks and wells in the areas where the law is applicable. It is prohibited to own or possess wells, pits or others that are used to extract water, bins, barrels or other similar objects which will be used for the collection and / or storage of water. Above-mentioned is not applicable for water companies that have a license from the Government.
The Concession Act (Concessiewet G.B. 1907 no.34 geldende tekst 1944 no.129) from 1907	Contains rules concerning the exploitation of the public utilities. The President can grant concession for the use of domain land for the construction and operation of works of public utility.

Table 2: Relevant Water related legislation in Suriname

Draft Act concerning the protection of groundwater extraction areas (Concept Wet Grondwaterbeschermingsgebieden)	The protection of the catchment is to ensure that no bacteriological contaminated water, hydrocarbons or other toxic substances reach the wells within a period of 60days.
Draft Act concerning the extraction of groundwater (Concept Grondwater wet)	According to this act it is prohibited to extract groundwater without a license from the Minister of Natural Resources.
Draft Act supervision on water quality of water companies (<i>Wet Toezicht</i> <i>Drinkwaterkwaliteit</i>) Waste water management	This draft act refers to standards that shall be set for drinking water quality and is applicable for all companies that supply potable water to the public.
The Building State Order (<i>Boumbesluit G.B 1956</i> no. 30 zlg. bij S.B.2002 no.93)	 Is a Government decision of November 26, 1956, pursuant to articles 1 and 3 of the Building Act 1956. Articles 1 and 3 of the Building Act sets the building through a compulsory licensing system. Some important provisions to be taken into account when building are: Each toilet must be connected to a septic tank or a designated sewage. Each building, in whole or in part, intended to house must have a well-established adequate drainage to drain rainwater and household water in a sewer to be designated by the Director of Public Works. The stool (range) of a private may only take place through air- and watertight stones, metal or cement pipes in the septic tank.
The Environmental Framework 2020	Provides rules for the conservation, management and protection of a healthy environment.

(Source: Del Prado, 2014)

3.1.3 Telecommunications

In Suriname, the telecommunications sector (phone and internet) is regulated through the Telecommunications Act, a law established on 11 November 2004, containing rules relating to provisions for telecommunications. Article 2 of the Telecommunications Act establishes the Telecommunications Authority of Suriname (TAS) and makes it responsible for implementing the Act. Within the Government of Suriname, TAS falls under the Ministry of Transport, Communication and Tourism. TAS is the official body that facilitates the rapid development of affordable, high-quality telecom services for the Surinamese public. They provide a framework that encourages innovative private sector participation and take-up of information services.

According to the Telecommunications Act, Article 3, the tasks of the TAS are:

- a. promoting the introduction of new technologies and services;
- b. advising the Minister, solicited or unsolicited, on matters concerning telecommunications;
- c. preparing the concessions to be granted and supervising compliance with the concession conditions by the concessionaires;
- d. supervising the tariffs for regulated or commissioned services;
- e. granting permits and supervising compliance with the license conditions by the licensees;
- f. representing the Republic of Suriname at international organizations;
- g. management of the frequency spectrum;
- h. management of the numbering plan;
- i. standardization and control of peripherals;
- j. settling disputes;
- k. management of the Universal Service Fund;
- 1. carrying out the activities assigned to the TAS by and pursuant to this Act;
- m. performing telecommunication activities insofar as not provided for in this Act expressly provided otherwise.

The Telecommunications Act proclaims it prohibited to construct, develop and operate telecommunications infrastructure without a concession to that effect. A concession may only be granted to a company established as a legal person under the Surinamese law. The TAS allocates the radio frequencies necessary for the performance of the concession. A concession may be granted for the construction, development, maintenance and operation of fixed or mobile infrastructure for the purpose of telecommunications in Suriname, where regulated and non-regulated services can be offered. This service must promote an efficient provision of telecommunications in the general social and economic interest. Each concessionaire must ensure that the capacity, quality and properties of the telecommunications infrastructure comply with an efficient provision of services. In the interest of efficient provision of telecommunications, they are obliged to provide non-discriminatory interconnection when requested by providers of telecommunications services. When providing interconnection, conditions must be transparent and fees must be cost-oriented.

Telecommunication projects needs approval by the TAS.

Established Telecommunication Authority, 2004, is responsible among other tasks for:

- a. promoting the introduction of new technologies and services;
- b. providing requested or unsolicited advice to the Minister regarding telecommunications matters;
- c. preparing concessions to be granted and overseeing compliance with concession conditions by concessionaires;
- d. monitoring rates for regulated or mandated services;
- e. granting licenses and overseeing compliance with license conditions by licensees;

Some supporting acts for the TAS to rely on, and this project to comply with are:

Act/Law/Regulation	Description
Act 26, on Regulating	This act aims to regulate the provision of telecommunication
service:	services in Suriname. It likely covers various aspects such as
	licensing requirements, service quality standards, consumer
	protection measures, and regulatory oversight mechanisms. The
	specifics of this act would provide guidelines and regulations for
	telecommunications companies operating within Suriname.
Act 27, Electromagnetic	Act 27 is likely focused on ensuring electromagnetic compatibility
compatibility	in the telecommunications sector. It may include regulations related
	to the design, installation, and operation of telecommunication
	equipment to prevent interference and ensure the efficient
	functioning of communication networks. Compliance with
	electromagnetic compatibility standards is essential for maintaining
	the reliability and integrity of telecommunication services.
Telecommunication	This law encompasses a broader range of provisions related to
provisions law	telecommunications in Suriname. It may cover various aspects such
	as licensing, spectrum management, technical standards,
	interconnection agreements, pricing regulations, and competition
	policies within the telecommunications industry. The
	Telecommunication Provisions Law likely serves as the primary
	legal framework governing the telecommunication sector in
	Suriname, providing comprehensive guidelines for both operators
	and regulators.

Table 3: Relevant Telecommunication related legislation in Suriname

3.1.4 Bio Economics

Typically, rural communities are driven to harness their forest and non-timber resources for both income generation and tourism development. The management of forest and non-timber forest products is predominantly overseen by SBB, with legislation primarily centered on timber resources. However, they have yet to be officially elevated to the necessary level of Forest Authority. Policies are limited to logs and timber, without clear vision of a road map how to utilize more from the NTFPs.

Conversely, the tourism sector has experienced encouraging growth with the establishment of the Suriname Tourism Board. Across Amazon countries, the advancement of these sectors underscores the importance of further examining and incorporating opportunities within the framework of this project.

3.2 Legal Framework

The Environmental Framework act and the project Classification guidelines form the basis for the required Environmental and Social Impact Assessment (ESIA). Where national legislation does not sufficiently address the potential damage, reference to

international conventions will be guiding.

As of the actual implementation phase, the labor act is guiding, and for ITPs zone, the absence of collective rights diverts the GO to deal with jurisprudent.

The Environmental Framework Act and the Project Classification Guidelines serve as the foundation for conducting the required Environmental and Social Impact Assessment (ESIA) for the project. In cases where national legislation does not adequately address potential environmental or social damage, reference to relevant international conventions will inform decision-making and mitigation measures.

During the actual implementation phase, adherence to labor laws governs the project's labor practices. Additionally, for Indigenous and Tribal Peoples (ITPs) zones, where collective rights may be absent, the government addresses any legal matters through jurisprudence and established legal precedents.

The Legislative Framework for the National Biodiversity Action Plan is built on the following acts:

i. The **Nature Conservation Legislation** (1954-Protected Areas designated and the management of those), predominantly keeping both levels' responsibility at the central Government. Although coordination between stakeholders is key in a MUMA (-IUCN category 6) the interpretation is not consistent and thus is the GoS once again in the lead. There is a draft act underway, which acknowledges the importance of inclusion of private lands and ICA (Indigenous designated and Managed lands).

The challenge is that ITPs have no collective rights nor inclusion in land tenure system. Because this process is ongoing for decades, ITPS have used and managed their ancestral lands by themselves. Organically mapping their territories and managing with community rangers to prevent intrusion of their livelihoods was the aim. Currently about 45 community rangers in central and south Suriname are trained and well equipped to monitor the immediate lands within 5-10 kilometers from their village.

- ii. The **Mining and Forest (Logging) act** allow the business to encroach on the ITP ancestral lands mainly because of the centralized licensing policies. These are threats to the biodiversity and human settlements. The forest depended community is suffering from the impact of deforestation, degradation and social eruptions due to the quick transformation of human and ecological habitat. Map depicts a larger area which represented the field situation early 2022. Both land use activities result in expansion of the road network, which allows for unregulated intrusion and poaching of the south. With a local corps of rangers alone, given the safety issues, patrolling is not sufficient for ecosystem and biodiversity loss.
- iii. The **Environmental Framework act** allows for preventive, mitigation and creative measures to enforce and to ensure that the quest from Suriname to gain economic prosperity for all remain a sustainable process. The authority to monitor and execute is in the making.
- Tourism act is recently approved in Parliament and provides opportunities for a more coordinated and environmental and social sound development of the industry. Given the opportunities CBT (Community based Tourism) conducting ESIAs remain important. Tourism Framework act and Board act (2023) set out a number of regulations and prepares the implementation of measures to promote sustainable development and regulation of the tourism industry in Suriname.
- v. **NTFP legislation.** By law the logging was regulated, however no comprehensive legislation exists on regulating the NTFPs in Suriname. Depending on the time of NTFPs, some guidance can be found in fragmented acts- dealing with protected species within the group of NTFPs. There is a call for regulation and databank to monitor the demand and potential risks.

Social Legislation

Below, an analysis of the general social legislative framework in relation to ITPs is provided. Suriname has no Collective Rights policy, but has subscribed to different universal and regional human rights treaties, including the following:

- ICCPR International Covenant on Cultural and Political Rights)
- ICESCR (International Covenant on Economic, Social and Cultural Rights)
- CRC (United Nations Committee on the Rights of the Child)
- CERD (UN Committee on the Elimination of Racial Discrimination)
- CEDAW (Convention on the Elimination of All Forms of Discrimination Against Women).

In addition, Suriname has voted for the adoption of the UN Declaration on the Rights of Indigenous Peoples in 2007 ("UNDRIP").

Suriname is one of the few countries in South America that has ratified ILO Convention 169.

The legislative system of Suriname, based on colonial legislation, does not recognize Indigenous or Tribal Peoples, and till today Suriname has no legislation governing Indigenous and Tribal peoples' land or other rights. This forms a major threat to the survival and well-being of Indigenous and Tribal Peoples, particularly given the strong focus that is being placed on Suriname's many natural resources (including oil, bauxite, gold, water, forests and biodiversity).

Draft Legislation Collective Rights ITP

In 2021, a draft act on Collective Rights ITPs was submitted to Parliament. This framework should provide the basis for existing acts to be revised and new acts to be developed. The act aims to comply with the international human rights, guaranteeing legal certainty for everyone and legal protection of the collective rights of Indigenous peoples.

The new draft act tries to strike a balance between traditions and the general public interest. Legal rules are largely based on the law and partly on customs. Rights are based on traditions; the traditions need to be understood to know exactly what those rights are. The traditions are known to the people themselves, and that makes it complex. The rights are not the same legal concepts as those known in western law; they have autonomous characteristics.

Currently the second round of debates should start in Parliament. Coalition parties are preparing amendments to the draft version. It is expected that the act is approved prior to May 2025. The prioritized acts to design and get approved after the framework act is endorsed, are:

- FPIC (Free Prior and Informed Consent)
- Integration of Traditional Governance in decentralized Governance
- Appealing institute (to settle conflicts)
- Demarcation of IPR lands.

In addition, a list of 10 acts should be developed and modified, in order to align the framework act with crosscutting topics (for example).

Cultural Heritage Legislation

Suriname, a country rich in cultural heritage, has various legislations in place to protect its archaeological and historical sites. Some of the key legislations related to cultural heritage, archaeological, and historical preservation in Suriname include:

- National Heritage Protection Act (Wet Nationaal Monumenten Beschermd Gebied): This legislation provides for the protection and preservation of national monuments and heritage sites in Suriname. It outlines the procedures for designating and managing protected areas and monuments of historical and cultural significance.
- Cultural Heritage Protection Act (Wet Bescherming Cultureel Erfgoed): This law aims to safeguard Suriname's cultural heritage, including its archaeological sites, artifacts, and cultural traditions. It regulates activities such as excavation, restoration, and exportation of cultural objects to prevent looting and illegal trade.
- Law on the Conservation of Nature (Natuurbeschermingswet): While primarily focused on environmental conservation, this law also includes provisions for the protection of natural and cultural heritage sites. It aims to preserve Suriname's biodiversity and ecosystems, which often intersect with areas of archaeological and historical importance.
- Law on Indigenous and Tribal Peoples (Wet op de Inheemse en Tribale Volken in Suriname): This legislation recognizes the rights of indigenous and tribal communities in Suriname, including their cultural heritage and traditional knowledge. It ensures their participation in decision-making processes related to land use, resource management, and heritage preservation.

- Suriname Archaeological Code: This code sets out guidelines and regulations for archaeological research, excavation, and conservation in Suriname. It outlines the responsibilities of archaeologists, researchers, and government authorities in preserving and documenting the country's archaeological heritage.
- International Conventions and Agreements: Suriname is a party to various international conventions and agreements related to cultural heritage preservation, including the UNESCO World Heritage Convention. These agreements provide frameworks for cooperation and exchange of expertise in safeguarding cultural and historical sites of universal value.

Overall, these legislations and regulations reflect Suriname's commitment to protecting its diverse cultural heritage and ensuring its preservation for future generations. They provide legal frameworks for managing archaeological sites, safeguarding cultural artifacts, and promoting awareness of Suriname's rich historical and cultural legacy.

4. Management Program

This section presents a summary of the Environmental and Social Performance Standards (ESPS) that are part of the IDB's Environmental and Social Policy Framework (ESPF). As this Program will be financed with an IDB Loan, these E&S Performance Standards must be considered during the preparation and implementation of all projects financed under the Program. T_{a}

T a a	Table 4. Amarysis of the subprojects against the Eories
E&S	Measures to take in order to prevent, minimize, mitigate impact
Performance	
Standards	
(IDB)	
ESPS 1:	This Standard is applicable to all investment finance projects and serves as the
Assessment and	foundation for other Standards by offering guidance on evaluating and
Management of	handling environmental and social risks and impacts. It emphasizes the
Environmental	importance of having an Environmental and Social Management System
and Social Risks	(ESMS).
and Impacts	
-	The objectives of this Standard include:
	- Identifying and assessing the environmental and social risks and impacts of the project.
	- Employing a mitigation hierarchy and precautionary approach to anticipate, avoid, or minimize risks and impacts to workers, project-affected individuals, and the environment, and compensating for residual impacts when necessary.
	- Enhancing the environmental and social performance of Borrowers through effective management systems.
	 Ensuring timely and appropriate responses to grievances from project- affected individuals and external communications from other stakeholders. Facilitating adequate engagement with project-affected individuals and other stakeholders throughout the project cycle on matters that may affect them, and ensuring disclosure and dissemination of relevant environmental and social information.
	The Borrower, in coordination with relevant government agencies and third parties, will conduct an environmental and social assessment process and establish and maintain an ESMS tailored to the project's nature, scale, and associated environmental and social risks and impacts.
	 Key features of an ESMS include: A dynamic and continuous process led by the executing agency. Collaboration among the borrower, project workers, affected individuals, and other relevant parties. Implementation of the "plan, do, check, and act" process to manage environmental and social risks and impacts.
	 The ESMS will include the following elements: i. Project-specific environmental and social framework; ii. Identification of risks and impacts; iii. Management programs;

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iv. Organizational capacity and competency;
v. Emergency preparedness and response;
vi. Stakeholder engagement;
vii. Monitoring and review.
In compliance with the provisions of the Standard, this Environmental and
Social Management Framework (ESMF) contains the guidelines for E&S
assessment and management of the projects outside (other coastal Indigenous
People and Tribal People) of the representative sample sites regarding
electrification with renewable energy, potable water and telecommunications
and bio-economic businesses in South Suriname project:
1. Forest and biodiversity protection: This will be important for the
forest/natural (savannah) areas, where towers will be constructed.
Ensuring that biodiversity and ecological impacts are as limited as possible,
an inventory in close collaboration with local rangers and the AdeKUS is
required. Protected, endangered or other types of species should be
identified in an early stage to either slightly move the construction site, or
have a strict monitoring of the impact.
2. Deforestation and biodiversity loss: Based on the ESPS1, a strict or
more flexible plan will be executed. This is preferably in close
collaboration with the formal agencies (Nature Conservation Division and
the research institutes of AdeKUS). On villages level more local
engagement of traditional leaders, villagers and rangers is required.
3. Clean water: There is an opportunity to engage with rangers or other
villagers to do water quality measurements during on site building work
for the water infrastructure project to raise environmental and sanitation
awareness. Sustainable compost nature toilet development in order to
protect groundwater and river water.
Promote alternative farming systems to have food production year-round
with efficient water use.
4. Cleaner energy: In the villages with generators- working on fossil fuels
with a grid to distribute the energy to households, a thorough analysis for
optimum energy flow, little energy loss should be identified and resolved.
In the solar systems recommended, these systems may be incorporated
even function as a backup (hybrid) model. As much as possible reduction
of the current carbon emission is strived for.
5. Waste management systems: This should be considered for different
waste types: Liquid Waste, Solid Waste, Hazardous Waste and
Construction Waste Sanitation improvements such as dry compost nature
toilet management.
6. Lack of waste management: It is recommended that investors retain the
'lack of waste management' risk. For the retention of this risk, mitigation
measures are needed to reduce the risk to ALARP. There are 2
recommended actions regarding this risk mitigation:
• Transfer the risk to local community monitors or rangers. The rural
landscape requires a different approach than the cities people are
acquainted with.
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 Absorb the risk from project workers: it would be recommended to employ a specific local group to help relieve waste generated based on the current waste management situation in the village. This can possibly be expanded with expansion of the amount of an-organic waste that may be generated during the course of the project. There may be need to transport parts of these types of waste back to Paramaribo, or have these re-utilized at site. The magnitude of waste (metal/packaging material/<u>batteries</u>) on construction site(towers) beyond the village boundaries, may need intervention of others then the rangers. Structures and systems to remove from the forest and or repurpose where possible should be reviewed. Special measures should be taken to have these forest areas left as much as possible in their natural state. Always avoid burning or burying batteries, as this can cause environmental harm.
Disposing of batteries in remote areas can be challenging due to the lack of proper facilities. Here are some steps to ensure safe disposal- The project is designed around lithium-ion batteries.
 Batteries should NOT go in household garbage or recycling bins. Lithium-ion batteries SHOULD be taken to separate recycling or bousehold hazardous waste collection points. To prevent fires, tape battery terminals and/or place lithium-ion batteries in separate plastic bags. Place non-conductive tape (e.g., electrical tape) over the battery's terminals. If the Li-ion battery becomes damaged, contact the battery or device manufacturer for specific handling information. Even used batteries can have enough energy to injure or start fires. Not all batteries are removable or serviceable by the user. Heed battery and product markings regarding safety and use. Because of the size and complexity of these battery systems, medium and large-scale Li-ion batteries won't be able to be removed by the consumer/villagers. The EBS, will have to calculate this in the maintenance/ replacement of batteries and have the manufacturer take these back. Due to the weight of batteries in the field, proper transportation schemes are required to fly them to the city for further handling. Either recycle or dispose (there is at least a few companies engaged in the recycling business).
 Use of natural resources: Have commitments for use of the Tribal and Indigenous People use of land. This is mainly to prevent social tensions, and eruptions during the project execution. Impact with zero waste goals if practically possible. Consult the rangers for the areas of best and safe location. Environmental awareness: Project workers can create environmental awareness by engaging with the local villagers and rangers. Lack of environmental awareness: Safeguards to follow are the same as the safeguards for 'lack of waste management'. Climate: heavy rainfall. *flood risk: Heavy rainfall due to climate change can be unpredictable and is a risk that is recommended to be retained and absorbed by investors. This is due to the high positive impact that solar panels would have on the environment and Indigenous and Tribal peoples' basic needs.

	 Absorbing the flood risk, would include reducing the risk to ALARP which could be achieved with the following mitigation measures and guidelines for all villages:
	• It is highly recommended to avoid construction work and building locations close to rivers or creeks. Locations at higher altitude would be preferable.
	 Instructing locals to shut down the solar system in case of heavy rainfall or lightning storms.
	• Investing in protective covering during lightning storms or heavy rainfall to ensure the long-term sustainability of the panels. Most villages are willing to use their natural resources in consultation with the traditional leaders. There could be an opportunity to use local natural resources to cover the solar system in cases of heavy rain or storms.
	- Droughts may increase risk from fires of uncontrolled burning are
	conducted in the villages and on farming plots.
	- Floods but also droughts can impact on the project execution (delay) the duration of the project.
	 Noise disturbance: There are no safeguards necessary for this KRI at this point in time, it could be something to consider when collaboratively choosing building locations with the local villagers and traditional leaders. Air pollution: dust production: There are no particular safeguards necessary for this KRI now, it could be something to consider when collaboratively choosing building locations with the local villagers and traditional leaders. Air pollution: Gold extraction: Absorbing the mercury contaminated water risk for Indigenous and Tribal villages, would include reducing the risk to ALARP which could be achieved with the following mitigation measures:
	 when driming a water wen, measuring whether the groundwater should be measured to see if it is affected by long- term mercury poisoning. When creating tap water infrastructure from river water, it is recommended to invest in a water filtration system for water infrastructure projects. Options for filtration systems include reverse osmosis systems, activated carbon filters, and water distillers.
ESPS 2: Labor	Environmental and Social Performance Standard (ESPS) 2 acknowledges that
and Working Conditions	the pursuit of economic growth through job creation and income generation should go hand in hand with safeguarding the fundamental rights of workers.
	 The objectives of this Standard are: Upholding and safeguarding the fundamental principles and rights of workers.
	- Promoting fair treatment, nondiscrimination, and equal opportunities for workers.

- Establishing, maintaining, and enhancing the relationship between workers
 Ensuring compliance with national employment and labor laws.
- Safeguarding the rights of workers, including those in vulnerable situations
such as women, individuals with diverse sexual orientations and gender
identities, persons with disabilities, children (subject to age-appropriate
work in accordance with this ESPS), migrant workers, workers engaged by
third parties, and workers in primary supply chains.
- Fostering safe and healthy working conditions and promoting worker health.
- Preventing the use of child labor and forced labor (as defined by the
International Labor Organization).
- Supporting the principles of freedom of association and collective bargaining for project workers.
- Ensuring that accessible and effective channels for raising and addressing
workplace concerns are available to workers.
The applicability of this Performance Standard depends on the type of employment relationship between the borrower and the project worker.
It applies to workers directly employed by the borrower (direct workers), those engaged through third parties for core project activities over a substantial period (contract workers), and those employed by the borrower's primary suppliers (workers in the primary supply chain).
The borrower must establish and implement labor management policies and procedures suitable for the project's nature, scale, and workforce. The project workforce is expected to include:
 (i) direct workers: government staff and a small number of professional consultants engaged directly by the Contractor (i.e. project management personnel); and
(ii) contracted workers engaged through the Contractor and eventually third-party Contractor
The project workforce will likely be comprised of mainly government civil servants who remain subject to the terms and conditions of their existing public sector employment agreement. In addition, private companies may be contracted to do partial work.
In all the work locally, it is recommended that locals are engaged in several project phases to assists, with an appropriated agreement, whether part-time or employment. Temporary workers should be differently agreed upon. The remaining project workers are professional consultants under the
Surinamese legislative framework governing labor and working conditions.

	In compliance with the provisions of the Standard, this Environmental and Social Management Framework (ESMF) contains the guidelines for E&S assessment and management of the projects outside (other coastal Indigenous People and Tribal People) of the representative sample sites regarding electrification with renewable energy, potable water and telecommunications and bio-economic businesses in South Suriname project:
	Risk that project workers are not paid at least minimum wage: Risk that workers will not be paid minimum wage is low, but should be monitored and addressed according to the agreement signed by the involved parties. The risk of discrimination and lack of equal opportunity: All contractors will require a policy or regulation that prohibits discrimination against women, youth's disability and ethnicity. While there is no Act of legislation that does not explicitly mention prohibition of discrimination on the grounds of political views, this must also be considered relevant for the project or at this time in Suriname.
	The risk of child labor, underage workers and forced labor: These issues are prohibited under the Surinamese labor law. The risk that project workers cannot access a redress mechanism to file grievance: The risk that grievances will not reach the GoS agencies involved in implementation of the program is low, because the contractor will have worker
	grievance mechanisms or complaints processes in place for their project workers as well. (mandatory) The risk that grievances of a sensitive nature (including sexual assault,
	harassment and abuse): These will be handled appropriately. Receiving and processing complaints must be within the human resources policy and guidelines. In both cases, all grievances are expected to be resolved on time, within an agreed time-frame.
	Vacancies for project implementation should be advertised locally, utilizing their own languages to ensure inclusivity (including indigenous languages, as well as Sranan Tongo). Basic compliance with labor laws is essential to meet various standards. All contractors and workers must adhere to appropriate etiquette when working in Tribal and Indigenous Peoples areas, which includes
	adopting a respectful approach, avoiding discrimination, and tollowing protocols to prevent sexual harassment. Furthermore, labor conditions should comply with national laws and regulations, ensuring that workers have adequate shelter, protection against noise and air pollution, reasonable working hours, adherence to safety and health procedures, and fair compensation.
ESPS 3: Resource Efficiency and Pollution Prevention	Environmental and Social Performance Standard (ESPS) 3 acknowledges that heightened economic activity and urbanization frequently lead to elevated levels of pollution in air, water, and land, and the depletion of finite resources. These practices may pose threats to both people and the environment at local, regional, and global scales. This ESPS delineates a project-oriented strategy for managing resources, preventing and controlling pollution, and minimizing greenhouse gas
	It leverages the mitigation hierarchy and the "polluter pays" principle, taking into account the disproportionate impact of pollution on women, children, the elderly, and the impoverished. Adopting suitable mitigation measures, technologies, and practices is essential for optimizing resource utilization, preventing and controlling pollution, and minimizing greenhouse gas emissions, aligning with globally disseminated technologies and practices.

The objectives of this Standard are:
 To prevent or minimize adverse impacts on human health and the environment by reducing pollution resulting from project activities. To encourage the sustainable use of resources including energy and water.
To encourage the sustainable use of resources, including energy and water.
- To infugate project-related greenhouse gas emissions.
- To reduce or prevent waste generation.
- To manage the risks and impacts associated with pesticide use effectively.
The borrower must implement technically and financially feasible and effective measures to enhance efficiency in energy, water, and resource consumption. Furthermore, throughout the project's design and operation, the borrower must explore alternatives to reduce or mitigate greenhouse gas emissions and prevent air, water, and soil contamination.
In compliance with this Standard, this ESA establishes the applicable national regulatory framework, considering the environmental, safety, hygiene, and occupational health requirements to be met during the execution of the projects outside the representative sample of the Program, and the Environmental and Social Policy Framework of the IDB. Likewise, it details the guidelines of the Environmental and Social Management Plans (ESMP) to address these aspects in the projects to be financed under the Program. In this regard, compliance with the Bank's ESPS and applicable national regulations will be required. In particular, the ESMP guidelines for projects outside the representative sample will include the following programs: - Program for Monitoring and Control of Compliance with Mitigation Measures; – Waste Management; Occupational and Community Health and Safety Program and - Disaster Management and Emergency Response Plan. A waste management plan ahead of time can address- potential overuse of water, generation of waste, and mindful use of material to minimize pollution at side. In order to minimize turbidity of the water systems (swamps, creeks), rivers, bare soil should be covered by creepers, for which mowing would be option
 Instead of using pesticides. Other important aspects which should necessarily be considered and complied to are: Incorporating measures to minimize pollution, including the implementation of clean technologies, waste management practices, and pollution control mechanisms to mitigate adverse environmental impacts. Implementing water conservation measures to optimize water usage efficiency, reduce water wastage, and protect water quality in the project area. Infrastructure design: Designing telecommunications infrastructure with a focus on energy efficiency, reduced electromagnetic radiation emissions, and sustainable materials to minimize environmental impact. Ensuring compliance with relevant environmental regulations, standards, and guidelines to uphold environmental protection and conservation principles.

ESPS 4:	Environmental and Social Performance Standard (ESPS) 4 acknowledges that
Community	project activities, equipment, and infrastructure can heighten community
Health, Safety,	exposure to risks and impacts, including those stemming from natural hazards
and	and climate change. Furthermore, communities already affected by such hazards
Security (CHSS)	and climate change may encounter an exacerbation or intensification of adverse
	effects due to project activities.
	The objectives of this Standard are:
	- To foresee and prevent adverse impacts on the health and safety of
	individuals affected by the project throughout its life cycle, encompassing
	both routine and unforeseen circumstances.
	- To ensure that the protection of personnel and property adheres to relevant
	human rights principles, while minimizing risks to those affected by the
	project.
	- To anticipate and avert adverse impacts on the project itself stemming from
	natural hazards and climate change over the project's life cycle.
	This ESPS addresses potential risks and impacts on individuals affected by
	project activities as well as potential risks and impacts on the project itself
	arising from natural hazards and climate change.
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	Occupational health and safety requirements for workers are covered in ESPS
	2; environmental standards to prevent or minimize impacts on human health
	and the environment due to pollution are addressed in ESPS 3; measures to
	address sexual and gender-based violence risks in situations of communal
	conflict and influxes of external workers are outlined in ESPS 9; and
	requirements for stakeholder consultation and information disclosure are
	detailed in ESPS 10.
	With the summer of secilities and with the insects and vide in terms of
	with the purpose of avoiding and mugating impacts and fisks in terms of health, safety and protection of the community, the following Management
	Programs will be included in the ESMP guidelines for all projects to be financed
	outside the representative sample.
	- Occupational and Community Health and Safety
	- Socio-environmental Training for Construction Personnel
	Disaster Management and Employeen Response, and
	- Disaster Management and Emergency Response, and
	- Community Information and Participation.
	It is crucial to raise awareness, extend caution, and provide clear signage to
	address CHSS. Preparing the Traditional leaders and present community
	monitors or rangers can help broad the awareness within the working area.
	Inconvenience to villagers can be significant during project execution. It is
	essential to promptly create and communicate alternative safe and efficient
	routes to mitigate these challenges.
	Adhering to the Precautionary Principle involves taking preventive action in the
	presence of uncertainty regarding potential risks. This may entail implementing
	heastice and residential neighborhoods
	nospitais, and residential neighborhoods.

	Health Impact Assessment: Conducting comprehensive health impact assessments to identify potential risks and vulnerabilities associated with electrification, water provision, and telecommunications projects. This involves assessing potential health hazards, such as air and water pollution, noise pollution, and exposure to electromagnetic fields.
	 This strategic approach prioritizes the well-being and protection of the local population while advancing development initiatives. That is why the following approach is very important: Implementing safety measures to prevent accidents and injuries during the construction, operation, and maintenance of infrastructure projects is mandatory. This includes training programs for workers, installation of safety equipment, and adherence to occupational health and safety standards. Developing security protocols to safeguard infrastructure installations and prevent unauthorized access, vandalism, and theft. This may involve community engagement initiatives, security patrols/rangers' patrols, and collaboration with local law enforcement agencies. Establishing emergency preparedness and response plans to effectively address natural disasters, emergencies, and other crises that may impact community health and safety. This includes establishing evacuation procedures, emergency communication systems, and access to ensure that local needs, concerns, and priorities are addressed. This involves consulting with indigenous communities, conducting public meetings (Krutus), and facilitating dialogue between stakeholders. Respecting Tribal and Indigenous cultural values, traditions, and practices throughout project implementation and operation. This includes incorporating traditional knowledge into planning processes, respecting sacred sites, and minimizing disruptions to cultural practices.
ESPS 5: Land Acquisition and Involuntary Resettlement	Environmental and Social Performance Standard (ESPS) 5 focuses on addressing the impacts of project-related land acquisition, which may involve restrictions on land use and access to assets and natural resources. These restrictions can lead to physical displacement (such as relocation or loss of land or shelter) and/or economic displacement (including loss of land, assets, or income sources). If not managed properly, involuntary resettlement can lead to long-term hardship and impoverishment for those affected by the project, as well as environmental damage and adverse socio-economic effects in the areas to which they are relocated. Therefore, efforts should be made to avoid involuntary resettlement. However, if resettlement cannot be avoided, it should be minimized, and measures to mitigate adverse impacts on displaced persons and host communities should be carefully planned and implemented.

The objectives of this Standard are:
- To prevent displacement whenever possible, and if not possible, to
minimize it by exploring alternative project designs.
- To prevent forced eviction.
- To anticipate, avoid, or minimize adverse social and economic impacts
resulting from land acquisition or restrictions on land use by:
- Providing compensation for loss of assets at replacement cost and addressing transitional hardships.
- Minimizing disruption to social networks and other intangible assets.
- Ensuring that resettlement activities involve appropriate disclosure of information, consultation, and the informed participation of those affected.
- To enhance or restore the livelihoods and standards of living of displaced
persons.
- To enhance living conditions for physically displaced persons by providing adequate housing with secure tenure and safety at resettlement sites.
Although the preliminary land allocation was verbally done and no objections given by the villagers, it is recommended that in the next stage Water installation, the Telecom and Energy designs are communicated with the village council and that a formal Land Allocation letter/agreement is signed.
Community consultations were held to communicate the Water installation, the Telecom and Energy designs with the village council and they have been documented and all recommendations from communities have been included in the project documents. In this way transparency and accountability throughout the land acquisition process is ensured. These transparent minutes and other documentation serve multiple purposes, including fostering trust between the project developer and the communities involved. Additionally, they can demonstrate community ownership and responsibility, enhancing the overall effectiveness of the project.
 Key aspects of documentation during the land acquisition process include: Minutes of meetings: Detailed records of discussions, decisions, and agreements made during meetings with community members, stakeholders, and relevant authorities.
- Correspondence: Copies of all communications, including emails, letters, and other written correspondence related to land acquisition activities.
- Surveys and assessments: Reports and findings from surveys, assessments, and studies conducted to evaluate land suitability, environmental impact, and community needs.
- Legal documents: Copies of legal agreements, contracts, and permits related to land acquisition, ensuring compliance with national laws and regulations.
- Reporting tools: Development and utilization of reporting tools to systematically capture and document land acquisition activities, progress, and outcomes.

	- Feedback and grievance mechanisms: Establishment of mechanisms for community feedback, complaints, and grievances, along with records of responses and resolutions.
	 Also, the documentation process should adhere to the principles of Free, Prior, and Informed Consent (FPIC), ensuring that communities are properly engaged and informed throughout the land acquisition process. This includes early engagement with communities, transparent communication of project objectives and impacts, and meaningful consultation to obtain consent.
	Overall, transparent documentation practices not only facilitate accountability but also contribute to building trust and fostering positive relationships between the project developer and the communities affected by the land acquisition activities.
ESPS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	Environmental and Social Performance Standard (ESPS) 6 acknowledges the critical importance of safeguarding and preserving biodiversity, conserving ecosystem services, and managing living natural resources sustainably to achieve sustainable development. The requirements outlined in this ESPS have been informed by the principles of the Convention on Biological Diversity, which defines biodiversity as "the variability among living organisms from all sources, including terrestrial, marine, and other aquatic ecosystems, and the ecological complexes of which they are a part. This encompasses diversity within species, between species, and of ecosystems."
	 Ecosystem services refer to the benefits that people, including businesses, derive from ecosystems. These services are categorized into four types: Provisioning services, which encompass the products obtained from ecosystems; Regulating services, which involve the benefits derived from the regulation of ecosystem processes; Cultural services, which include the non-material benefits obtained from ecosystems, such as recreational, spiritual, and aesthetic values; Environmental and Social Performance Standard (ESPS) 6 acknowledges the intangible benefits that people derive from ecosystems, such as recreational, spiritual, and aesthetic values; the natural processes that sustain the other services.
	 The objectives of this Standard are: To safeguard and preserve terrestrial, freshwater, coastal, and marine biodiversity. To uphold ecosystem functions to ensure the continuity of benefits derived from ecosystem services. To advocate for the sustainable management of living natural resources by adopting practices that integrate conservation requirements and development priorities.
	Following the risk and impact identification process, the requirements outlined in this ESPS are applicable to projects: i. situated in modified, natural, and critical habitats;

	 ii. that potentially affect or are reliant on ecosystem services under the direct management control or significant influence of the Borrower; or iii. involving the utilization of living natural resources (e.g., agriculture, animal husbandry, fisheries, and forestry).
	The objective is to minimize negative impacts on biodiversity while maximizing the benefits of development projects for local communities.
	 This Biodiversity Action Plan (BAP) should be reviewed alongside the assessment conducted for the Project, which collectively outline the Project's anticipated impacts and approach to biodiversity management, including: Environmental and Social Impact Assessment Critical Habitat Assessment Cumulative Effects Analysis
	Having a dedicated team for BAP implementation allows EBS with engaged contractors to learn and adapt the project, improve future project designs, and demonstrate its commitment and determination to prevent, reduce, and mitigate impacts. The En/CR species will have to be socialized with local rangers to ensure that awareness raising is correctly addressed and protocols are implemented accordingly.
	 The (BAP) outlines the following implementation actions: Implement the agreed-upon mitigation actions during both construction and operation phases, including the ability to shut down operations on demand if necessary. Evaluate the effectiveness of these actions during the operation phase. A detailed Fatality Monitoring Program document is necessary to demonstrate how this evaluation will be conducted. Assess the status of the Project for each identified species compared to the baseline. If the commitment to conservation actions for any species is not being met, additional support will be necessary. Once the Project is operational, the BAP must be updated annually.
ESPS 7: Indigenous and Tribal Peoples	Environmental and Social Performance Standard (ESPS) 7 acknowledges that Indigenous Peoples, as unique social and cultural groups, are frequently among the most marginalized and vulnerable members of society. In the case of Suriname, under this heading Tribal or Maroons are also considered. Often, their economic, social, and legal standing constrains their ability to protect their rights and interests in lands, natural resources, and cultural heritage, and may impede their participation in and benefits from development aligned with their cultural worldview.
	There exists no universally agreed-upon definition of "Indigenous Peoples." In various countries, Indigenous Peoples may be referred to by terms such as "original peoples," "autochthonous peoples," inhabitants of indigenous territories or reserves, or other formally recognized indigenous groups in Latin America and the Caribbean. Within the ESPF, the term "Indigenous Peoples" is employed in a broad sense to encompass social and cultural groups that possess some combination of the following characteristics to varying degrees:

i. Self-identification as members of a distinct indigenous cultural group,
acknowledged by others.
ii. Collective ties to geographically defined habitats or ancestral territories
within the project area, and to the natural resources therein.
iii. Customary cultural, economic, social, or political norms and
institutions distinct from those of mainstream society.
iv. A unique language or dialect, often distinct from the official language(s)
of the country or region where they reside.
The objectives of this Standard are:
- To ensure that development processes uphold full respect for the human
rights, collective rights, dignity, aspirations, culture, and natural resource-
based livelihoods of Indigenous Peoples.
- To anticipate and prevent adverse impacts of projects on Indigenous
Peoples' communities, or where avoidance is not feasible, to minimize
and/or compensate for such impacts. To advance sustainable development
benefits and opportunities for Indigenous Peoples in a culturally sensitive
manner.
- To cultivate and sustain an enduring relationship grounded in Informed
Consultation and Participation (ICP) that respects the cultural context of
the Indigenous Peoples affected by a project throughout its duration.
- To guarantee the Free, Prior, and Informed Consent (FPIC) of the Project-
Affected Communities of Indigenous Peoples under the conditions
outlined in this ESPS.
Because of the lack of collective rights recognition of Indigenous and Tribal
People in Suriname, the following process is key for the project (part of the
Engagement Plan):
- Free, Prior, and Informed Consent (FPIC): Respect the right of Indigenous
and Tribal Peoples communities to provide FPIC before proceeding with
the project. This involves consulting with the communities and obtaining
their consent before initiating any activities. Explain the project in detail
and get consent for the lots (m2) required for implementation- preferably
in writing from the village leadership, including a map.
- Cultural and Spiritual Significance: Recognize and respect the cultural and
spiritual significance of the land to Indigenous and Tribal communities.
Consult with community elders and leaders to identify sacred sites, cultural
heritage areas, and traditional land use practices.
- Traditional Ecological Knowledge (TEK): Incorporate Traditional
Ecological Knowledge (TEK) into the design process. Indigenous and
Tribal communities often possess valuable knowledge about local
ecosystems, biodiversity, and natural resources that can inform sustainable
design decisions.
- Conduct asap an ESIA and draft Mitigation Measures: Develop and
implement mitigation measures to minimize negative impacts on
Indigenous and Tribal lands.
- Compensation and Benefit-Sharing: Ensure fair and equitable
compensation for any land use rights or resources affected by the project.

	 Consider implementing benefit-sharing agreements that provide direct benefits to Indigenous and Tribal communities, such as job opportunities, training programs, or investments in community development projects. Capacity Building and Inclusion/Extension: Build the capacity/raise awareness of Indigenous and Tribal communities to participate meaningfully in the design process. Legal and Regulatory Compliance: Ensure compliance with relevant laws, regulations, and international standards pertaining to Indigenous and Tribal rights, environmental protection, and cultural heritage preservation. Grievance Mechanisms: Establishing effective mechanisms for resolving conflicts, addressing grievances, and providing recourse for Indigenous and Tribal communities affected by project activities. This includes establishing transparent and accessible grievance redress mechanisms, facilitating dialogue between stakeholders, and promoting peaceful resolution of disputes. By incorporating these considerations into the design process, the project (subprojects) can be developed in a manner that respects the rights, values, and interests of Indigenous and Tribal communities while promoting sustainable development and environmental stewardship. (Meulenhof, 2020)
ESPS 8: Cultural Heritage	 Environmental and Social Performance Standard (ESPS) 8 acknowledges the significance of cultural heritage for present and future generations. Aligned with the principles of the Convention Concerning the Protection of the World Cultural and Natural Heritage, this ESPS aims to ensure that Borrowers safeguard cultural heritage in the course of their project activities. Additionally, the requirements outlined in this ESPS regarding a project's utilization of cultural heritage draw upon standards established by the Convention on Biological Diversity. The objectives of this Standard are: To shield cultural heritage from the adverse impacts of project activities and contribute to its preservation. To foster fair distribution of benefits arising from the utilization of cultural heritage.
	 For the purposes of this ESPS, cultural heritage encompasses: Tangible manifestations of cultural heritage, including movable or immovable objects, properties, sites, structures, or clusters of structures possessing archaeological, paleontological, historical, cultural, artistic, and religious significance; Distinctive natural features or tangible objects embodying cultural values, such as sacred groves, rocks, lakes, and waterfalls; Certain instances of intangible cultural forms potentially utilized for commercial purposes, such as cultural knowledge, innovations, and practices of communities reflecting traditional ways of life.
	During the Engagement Phase (ESPS8), ensure that the heritage, sacred places are mapped and alternative lines and execution blueprint is made in accordance with the data gathered.

Protecting cultural heritage during the design and implementation phase of the project requires careful planning and collaboration with relevant stakeholders, including local communities, cultural heritage experts, and regulatory agencies. Here are some steps that can be taken to safeguard cultural heritage:

- Report to the *Monument care Commission* when a cultural (archeological) heritage site is encountered, the citizen is obliged to report this to the authorities to obtain guidelines to follow. Without a license, no further activities may be undertaken. Supervision will be coming from the *Monument care Commission*. There may be a need from the commission to conduct research by themselves, prior to guiding other how to handle the site.
- Cultural mapping and documentation: Conducting comprehensive cultural mapping and documentation exercises to identify and record the tangible and intangible cultural heritage of Indigenous and Tribal communities. This involves documenting traditional knowledge, cultural practices, rituals, ceremonies, oral histories, traditional arts and crafts, and other aspects of indigenous and Tribal culture.
- Cultural site management and conservation: Developing strategies for the management, conservation, and protection of cultural sites, sacred places, and cultural landscapes within indigenous and Tribal territories. This may include establishing conservation zones, implementing site management plans, and deploying measures to prevent damage, degradation, or destruction of cultural heritage sites.
- Community participation and ownership: Engaging Indigenous and Tribal communities as active participants and stakeholders in the preservation and management of their cultural heritage. This includes promoting community-based approaches to heritage conservation, fostering community pride and ownership, and empowering local communities to take responsibility for the safeguarding of their cultural assets.
- Capacity building: Building the capacity of Indigenous and Tribal communities, local authorities, and relevant stakeholders in cultural heritage management and conservation practices. This may involve providing training workshops, skill-building programs, and educational materials on topics such as heritage preservation techniques, documentation methods, and sustainable tourism development.
- Cultural revitalization and transmission: Supporting initiatives aimed at revitalizing and transmitting traditional knowledge, cultural practices, and linguistic heritage to future generations. This includes promoting intergenerational learning, cultural exchange programs, and language revitalization efforts within Indigenous and Tribal communities.
- Collaboration and partnerships: Fostering collaboration and partnerships between indigenous and Tribal communities, government agencies, nongovernmental organizations, academic institutions, and other relevant stakeholders in the field of cultural heritage conservation. This involves

	sharing expertise, resources, and best practices, as well as promoting cross- cultural dialogue and cooperation.
ESPS 9: Gender Equality	This ESPS acknowledges the universal right to gender equality, as outlined in relevant international agreements, irrespective of cultural or ethnic backgrounds. Achieving equality necessitates efforts toward equity, which involves the fair provision and distribution of benefits and resources to address existing disparities, recognizing that these disparities can adversely affect individuals of all genders.
	The primary objective of this ESPS is to identify potential gender-related risks and impacts, and implement effective measures to avoid, prevent, or mitigate such risks and impacts. This approach aims to eliminate the reinforcement of existing inequalities or the emergence of new ones. Affirmative actions targeted at closing gender gaps, addressing specific gender-related needs, or ensuring the inclusive participation of individuals of all genders in consultations will not be considered discriminatory or exclusionary under this ESPS.
	 The objectives of this Standard are: To foresee and forestall adverse risks and impacts based on gender, sexual orientation, and gender identity, and when avoidance is unattainable, to mitigate and redress such impacts. To establish measures to prevent or alleviate risks and impacts related to gender throughout the project lifecycle. To ensure the inclusion of individuals of all genders, sexual orientations, and gender identities in the benefits derived from the project. To prevent Sexual and Gender-Based Violence (SGBV), including instances of sexual harassment, exploitation, and abuse, and to promptly respond to such incidents when they occur. To foster safe and equitable involvement in consultation and stakeholder engagement processes, regardless of gender, sexual orientation, and/or gender identity. To adhere to the mandates of relevant national laws and international agreements concerning gender equality, including measures to mitigate and prevent gender-related impacts.
	 To ensure gender equity is integrated into project planning and execution, the following measures can be taken: Gender equality: The ranger department of ACT is actively working to create opportunities for women to contribute in the gender- environment nexus. Gender inequality: Gender inequality: Gender inequality is an ongoing process that can always be improved on. The recommendation for investors is to retain this risk and reduce to the risk to ALARP with the following mitigation measures and guidelines for all villages: Give women opportunities to join the waste management teams for project workers environmental waste collection and, if physically possible, for building work waste management. Practically this could

	include collecting, overseeing, separating and delivery of recyclable
	wastes to appointed persons back to the city Paramaribo.
	This risk could be transferred to ACT's or absorbed by investor's
	project workers themselves.
	 If the risk is absorbed by investors, it is recommended to compensate
	women for their waste management work during project building site
	visits.
	If women are willing to join the ranger team, include them in water
	quality measurements as an educational opportunity if reasonably
	household so including them in this significant life change can empower them
	nousenoid, so meruding them in this significant me change can empower them.
	By integrating gender equity considerations into project planning and
	execution, projects can contribute to more inclusive and sustainable
	development outcomes that benefit everyone in the community.
ESPS 10:	This ESPS acknowledges the critical role of transparent and inclusive
Stakeholder	engagement between the Borrower and stakeholders, particularly project-
Engagement and	affected individuals, as a fundamental element that can enhance the
Information	environmental and social sustainability of projects, bolster project acceptance,
Disclosure	and significantly contribute to successful project development and
	implementation.
	The ESPS aligns with the objective of upholding the rights of access to
	environmental information, public participation in environmental decision-
	making processes, and access to justice in environmental matters.
	For the purposes of this ESPS, a "stakeholder" refers to individuals or groups
	who:
	- Are directly affected or likely to be affected by the project ("project-affected
	individuals") and
	- Have an interest in the project ("other stakeholders").
	The objectives of this Standard are:
	To establish a structured approach to stakeholder engagement, enabling the
	Borrower to identify stakeholders, particularly project affected individuals
	and foster and sustain a constructive relationship with them
	The server the level of stable lider interest is and success the service t
	- To gauge the level of stakeholder interest in and support for the project,
	and facilitate the incorporation of stakeholders perspectives into project
	design and environmental and social performance.
	- To encourage and facilitate effective and inclusive engagement with
	project-affected individuals throughout the project's lifecycle on matters
	that may impact or benefit them from the project.
	- To ensure the provision of appropriate information regarding
	environmental and social risks.
	Stakeholder engagement and information disclosure are critical aspects of any
	project involving for electrification with Renewable Energy, Potable Water, and
	Telecommunications for Indigenous and Tribal Villages.

That is why the following should be considered:

MNH-DEV and EAS are the key decision makers on the definition of a regulatory and institutional framework for rural electrification projects, so the communication and their participation on meetings, discussions and deliverables reviews will be key for the project success.

The regulatory framework for rural electrification must focuses on technical standards about the different energy solutions, like hybrid systems, solar micro grids and/or individual solar systems, defining main characteristics of power lines, poles, meters, batteries, and others. These aspects are important to be standardized for assuring the quality and lifetime of the new projects and systems in operation what will impact positively on the sustainability of these energy solutions.

These kinds of solutions (hybrid systems, solar micro grids and individual solar systems) are more expensive in terms of investment (CAPEX) compared to conventional solutions but cheaper in terms of operation and maintenance (OPEX) so empowering by the beneficiaries will be key. For this it will be necessary to structure a suitable tariff scheme which includes payment of users and subsidies according to the local social and economic situation.

Quality standards must be studied in detail to avoid establishing high or restrictive standards like short time for fault repair, aspects that can affect and impact on high operational and maintenance costs. For this it should analyze the suitable quality standards with the EAS including the operational experience of EBS and DEV.

Different organizations and institutions in hinterland related to services like health, education, water supply, telecoms and others request and demand a constant and reliable electricity supply to develop their activities. A specific, detailed, and accurate rural electrification regulatory framework can promote energy access to support development and supply of different services that impact positively inhabitants of hinterland communities.

By prioritizing stakeholder engagement and information disclosure for this project can build trust, foster positive relationships with affected communities, and enhance project outcomes while minimizing potential conflicts and disruptions.
Summary of Compliance with IDB Environmental and Social Policy:

E&S	Performance Standards (IDB)	Project Compliance Yes/No
ESPS 1:	Assessment and Management of Environmental and Social Risks and Impacts	YES
ESPS 2:	Labor and Working Conditions	YES
ESPS 3:	<i>Resource Efficiency and Pollution</i> <i>Prevention</i>	YES
ESPS 4:	Community Health, Safety, and Security (CHSS)	YES
ESPS 5:	Land Acquisition and Involuntary Resettlement	Not Applicable
ESPS 6:	Biodiversity Conservation and Sustainable Management of Living Natural Resources	YES
ESPS 7:	Indigenous and Tribal Peoples	YES
ESPS 8:	Cultural Heritage	YES
ESPS 9:	Gender Equality	YES
ESPS 10:	Stakeholder Engagement and Information Disclosure	YES

Framework is presented in the table below:

5. Environmental and Social Management Framework

The correct design and environmental and social management of the project to be financed is directly related to the mitigation of impacts in the design, construction, operational and closure or

decommissioning phases. The incorporation of environmental, social, and occupational health and safety aspects throughout the project cycle is, therefore, fundamental to achieve an adequate management of these impacts.

5.1 Introduction

To comply with the applicable regulations presented in Chapter 3, it is necessary to establish a management system that defines the eligible projects, procedures, roles, and activities required according to the phase of the project cycle. This procedure covers all infrastructure works included in the Program.



5.2 Socio-Environmental Eligibility Criteria for Projects

Projects falling under Category A, as per the IDB's Environmental and Social Policy Framework, will not qualify for financing through Program resources. A project is categorized as Category A if it possesses "the potential to cause significant negative environmental impacts and associated social effects" or if it has "significant implications that affect natural resources."

Projects exhibiting any of the following characteristics will be ineligible for financing with Program funds:

- 1. Involuntary Resettlement: Projects resulting in the physical resettlement of individuals.
- 2. Indigenous Peoples or Ethnic Minorities: Projects leading to differentiated negative impacts (direct, indirect, or cumulative) on indigenous populations or their individual or collective rights or property.
- 3. Irreversible Adverse Impacts: Projects entailing negative effects that require a substantial amount of time to reverse. The degree of significance must be assessed and determined case by case.
- 4. Critical Natural Habitats: Projects involving the loss or significant degradation of critical or important natural habitats. Significant conversion refers to the removal or severe decline in the integrity of a critical or natural habitat caused by a long-term radical change in land or water use.
- 5. Critical Cultural Sites: Projects resulting in significant adverse impacts on critical cultural property or assets, such as religious, archaeological, paleontological sites, and other similar sites.
- 6. Economic Displacement: Projects leading to adverse impacts related to livelihoods or economic activities.

Furthermore, projects related to the production, trade, or utilization of the products, substances, or activities listed in the Exclusion List will also not be eligible for financing through Program funds.

Additionally, projects associated with the production, trade, or utilization of products, substances, or activities outlined in the following Exclusion List will not meet the eligibility criteria for financing through Program funds.

Exclusion List:

- a) Activities prohibited by national laws or regulations, ratified international conventions and agreements, or subject to phase-out or prohibitions at the global level, including:
 - Polychlorinated biphenyl compounds (PCBs).
 - Pharmaceuticals, pesticides/herbicides, and other hazardous substances subject to international phase-out or bans.
 - Persistent organic pollutants (POPs).
 - Substances detrimental to the ozone layer, governed by international phase-out measures.
 - Wild flora and fauna or related products regulated by the Convention on International Trade in Endangered Species of Wild Fauna and Flora.
 - Transboundary movement of wastes or waste products, except for safe waste destined for recycling.
 - Lead-based paints or coatings in the construction of structures and roads.

- b) Activities prohibited by the country laws or regulations or ratified international conventions and agreements relating to the protection of biodiversity resources or cultural heritage.
- c) Activities that, although they do not contravene the country's normative or regulatory framework, can generate adverse impacts of particular importance for people and the environment, such as:
 - Weapons, ammunition and other military goods or technologies.
 - Tobacco.
 - Betting, casinos and equivalent enterprises.
 - Radioactive materials.
 - Loose asbestos fibers or products containing asbestos.
 - Driftnet fishing in the marine environment with nets longer than 2.5 km.
- d) Production or activities involving harmful or exploitative forms of forced or compulsory labor, or harmful child labor.
- e) Production of pharmaceutical products that are being phased out of the market or have been banned internationally, according to the United Nations publication on banned products
- f) Production or activities affecting the ownership of territory or land belonging to, or claimed by, indigenous peoples for adjudication without the full documented consent of such peoples.

5.3 Socio-Environmental Management in the Project Cycle

E&S Management in the Design Phase

During the interventions design phase, the Program's Executing Agency (EA), with the support of external consultants, will develop the executive project for each work to be financed under the Program.

The assessments during the preparations stage of this project will be continuously monitored during the project cycles' and screened to determine the main impacts and mitigation measures to be applied, and determine any additional studies or plans that may be necessary to determine the socio-environmental eligibility of the project.

According to the project category and identified impacts, the socio-environmental assessment requirements are detailed in table below:

intougnout the project cycle.	
Category B:	Environmental and Social Analysis
	Environmental and Social Management Plan
	Thorough Public Consultation Plan
	Socio Cultural Analysis
	Environmental and Social Technical
	Specifications in tender documents
Category C:	Environmental and Social Management Plan
	Environmental and Social Technical
	Specifications in tender documents

Table 5: The project can either be category B or C with Socio Environmental Management Instruments throughout the project cycle.

The Executive Bidding Project must outline the minimum content of the Environmental and Social Management Program at the construction level, with the explicit incorporation (in the bidding offers) of socio-environmental management actions in the cost calculation. Projects categorized as B will require the preparation of the following documents to adhere to:

- Environmental and Social Analysis, aligned with national regulations and the IDB's Environmental and Social Policy Framework.
- Proposed interventions during the Implementation Phase will be monitored and adjusted by the implementation unit.
- Public consultation, as required under this category, will involve slight modifications considering the beneficiary groups and locations.
- Community consultation and Stakeholders Engagement plans will guide this process (ESPS10).

The Environmental and Social Analysis (ESA), Environmental and Social Management Plan (ESMP), and any relevant Public Consultation Reports should be made publicly available on the implementing agencies' website (EBS). These documents should be shared with the Bank at the earliest opportunity, prior to any bidding that may be necessary.

Bidding documents for works should include the necessary environmental, social, and occupational health and safety clauses and requirements, both general and specific to the project, arising from the socio-environmental evaluation and the delineation of the ESMP. This includes the need for periodic reports. These aspects will be detailed in the Environmental and Social Technical Specifications.

The Executive Bidding Project must outline the minimum content of the Environmental and Social Management Program at the construction level, explicitly incorporating socioenvironmental management actions in the cost calculation. The proposals received during the Bidding process must contain a budget that includes the cost of implementing and complying with the environmental, social, and occupational health and safety mitigation measures required by the project to ensure compliance with the IDB's ESMP and applicable national and local regulations.

Proposals received during the bidding process must contain a budget that covers the cost of implementing and complying with the environmental, social, and occupational health and safety mitigation measures required by the project to ensure compliance with the IDB's ESMP and applicable national and local regulations.

E&S Management in the Construction Phase

Before commencing construction, notification will be provided to the relevant authorities, including:

- o NAMA (Environmental Authority or NIMOS if NAMA is not operational)
- TAS (Telecommunications Authority)
- EAS (Energy Authority in Suriname)
- o SWM (since Water Authority is not yet established)
- SBB (responsible for Logging and informally supporting NTFP development)
- o Tourism Authority in Suriname

During the Construction Phase, the Contracting Company will undertake the following responsibilities:

- Preparation and implementation of the Environmental and Social Management Plan (ESMP).
- Obtaining necessary environmental and occupational health and safety clearances and insurance as per national and local regulatory requirements, and other applicable permits, which may include permits linked to the construction of infrastructure related to Energy, Water, Telecom, and Bio-economics.
- Submission of the Environmental and Social Management Program (ESMP) to the respective authorities through the EBS, prior to project commencement.
- Appointment of focus persons for the environmental and social components of the project, as well as hygiene and safety personnel responsible for ESMP implementation.
- Continuation of project execution contingent upon evidence of compliance with bank and national regulations and legislation, adhering to the Environmental and Social Policy Framework throughout all stages of work execution.
- Submission of regular reports to the implementing agency (quarterly?), detailing ESMP actions and results.
- Supervision, control, and monitoring of ESMP activities conducted by EBS, including inspection visits, preparation of internal reports for the Project, and imposition of corrective measures based on tender documentation terms.
- Potential audits by the environmental enforcement authority to oversee work in accordance with its competencies. The required public consultation, under this category will be a slightly modified one, when considering the beneficiary groups and locations.
- Community consultation and Stakeholders Engagement plans are guiding (ESPS10).
- The ESA, ESMP, and any relevant Public Consultation Reports should be published on the implementing agencies' website (EBS).
- These documents should be shared with the Bank at early as possible, prior to any bidding that may be necessary.
- Bidding documents for works should incorporate the necessary environmental, social, and occupational health and safety clauses and requirements, both general and specific to the project that arise from the socio-environmental evaluation and the delineation of the ESMP detailed therein, and including the needs for periodic reports. These aspects will be included in the Environmental and Social Technical Specifications.

Upon completion of the work, the Contractor must submit a Final Environmental and Social Report, encompassing information on ESMP implementation, records of plan and program implementation, and a report on compliance with environmental and social indicators throughout the project cycle.

E&S Management in the Operational Phase

During the operational phase, each contractor will assume responsibility for the operation and maintenance of the infrastructure implemented under the Program, adhering to their established operational protocols.

IDB Responsibilities

The IDB will undertake the review and oversight of all stages of the socio-environmental management system required for monitoring the socio-environmental program. This encompasses assessing and providing approval for the Environmental and Social Analyses (for category B projects) prior to the commencement of works bidding, as well as evaluating the ESMP guidelines and ensuring compliance with the Environmental and Social Plan.

Furthermore, the IDB will assess the implementation of the ESMP and the preparatory phase of construction, ensuring adherence to the environmental and social mitigation measures outlined therein to uphold compliance with the Environmental and Social Policy Framework throughout the Program. This includes reviewing and approving environmental and social compliance reports, as well as conducting environmental and social monitoring missions across all phases of the project cycle.

The following provides a summary of the environmental and social management responsibilities of the entities involved in the various phases of the Program.

During the Construction Phase, the Contracting Company will be responsible for preparing and implementing the Environmental and Social Management Plan (ESMP), as well as for having the Environmental and occupational health and safety clearances and insurance required by the national and local regulatory framework, and other applicable permits, which could include:

- Permits linked to the construction of infrastructure either linked to Energy, Water, Telecom and Bio economics.
- Prior to project start-up, the Contractor shall submit to the EBS for approval a construction-level Environmental and Social Management Program (ESMPc). This ESMPc shall contain, at a minimum, the programs and subprograms, together with the specific recommendations arising from the project analysis and as reflected in the Environmental and Social Technical Specifications of the Bidding documents. (see Annex ESA/ESMP)
- The ESMPc will also contain a Disaster Risk and Climate Change Analysis. Once the ESMPc has been approved, the Contractor will be responsible for its implementation, providing the necessary means to implement the Programs formulated within its framework.
- The Contractor must have an environmental and social representative and a person responsible for hygiene and safety, who will be responsible for implementing the ESMPc. Likewise, the contractor must comply and enforce compliance by operators and subcontractors with all the provisions contained in the Plan, national and local environmental legislation, and the IDB's Environmental and Social Policy Framework, during all stages of execution of the works.
- The Contractor will prepare monthly reports to EBS, detailing the actions and results of the ESMP implementation.
- ESMPc supervision, control and monitoring activities will be conducted by the EBS. The EBS may conduct inspection visits, prepare internal use reports for the Project, and determine and impose corrective measures based on the terms of the tender documentation.

- The environmental enforcement authority may also conduct audits to control the work, in accordance with its competencies.
- At the end of the work, the Contractor must submit a Final Environmental and Social Report, which incorporates the information corresponding to the implementation of the ESMP, including records of implementation of plans and programs, and a report on compliance with the environmental and social indicators considered in the different stages of the project cycle.

6. Measures

6.1 Contractors Environmental Management Plan

Introduction

The Contractors will be responsible for environmental management at the construction sites and will be required to prepare an Environmental Management Plan (EMP) to identify practical measures to ensure that construction activities do not negatively affect the environment and to ensure that health and safety is not compromised. The EMP will outlined measures to address noise, dust, hazardous materials management, etc. In addition, as part of the EMP, specific Plans will be included to address the following:

Health and Safety Plan

This Plan will outline measures to be adopted by the Contractors to adhere to the national laws and requirements regarding occupational health and safety and will include provisions for the use of PPE, orientation of construction workers, adequate signage within work zones, **and code of conduct for construction workers**.

Waste Management Plan

This Plan would identify category of waste and the handling, storage and disposal methods along with the disposal frequency for each waste type.

A battery disposal plan will be developed and detail the actions to be taken: Disposing of lithium-ion batteries requires careful handling due to their potential environmental and safety hazards. Below, are the steps to properly dispose of lithium-ion batteries:

- Identify and Isolate:
 - Identify the battery type to ensure it is a lithium-ion battery;
 - If the battery is damaged or swollen, place it in a non-flammable material like sand or kitty litter.
- Preparation:
 - Discharge the battery if possible. Run the device until the battery is fully discharged;
 - Cover the battery terminals with non-conductive tape to prevent short-circuiting.
- Local Regulations:
 - Check local regulations for battery disposal and/or guidance from the recycling companies;
 - Determine aerial carriers for batteries transportation and the guidelines for transportation.
- Recycling Centers:
 - Take the battery to a certified recycling center or a designated collection point;
- Avoid Regular Trash
 - Never dispose of lithium-ion batteries in regular household trash. They can pose a fire hazard and release harmful chemicals into the environment. Proper disposal of lithium-ion batteries helps prevent environmental contamination and reduces the risk of fire and other hazards.

Post Construction Restoration Plan

This Plan would identify the approach to restoration where construction or rehabilitation works at the health facilities has resulted in disturbances to natural sites and areas. In such instances these areas are to be restored and re-vegetated. This also includes materials stockpiles and excavation areas. The approach to restoration should be to allow natural re-vegetation with native species and without the application of pesticides or Agri-chemicals.

Emergency Response and Contingency Plan

The Emergency Response and Contingency Plan will include a description of possible emergency situations and the necessary response procedure and contingencies. Situations to be covered in this Plan include accidents and injuries; fuel spills, fires; flooding; disruption to utilities; and structural collapse. Such a Plan should include:

- Emergency Contact Details;
- Emergency Procedures;
- Authority of Control;
- Roles and Responsibilities;
- Emergency Response Equipment;
- Scenario Description and Response; and
- Incident Reporting.

Through this Plan it is expected that all contractors" personnel should be aware of potential risks and take steps to cope with hazards in their work area. In addition, all contractors" personnel are expected to alert the correct personnel if they discover an accident, fire or spill.

Environmental Responsibility

The Contractor will be required to assign the responsibility for environmental management to a senior staff member with the requisite experience and competence. This individual will also be responsible for conducting training and orientation of all construction workers on emergency response, spill response, waste management, health and safety and good housekeeping. **The Contractor's environmental personnel will liaise routinely with the project's Environmental Specialist.**

6.2 Monitoring and Review

This section provides a description of the methods that will be used to monitor performance against ESMP commitments.

Monitoring the performance of on-site personnel against the commitments of the ESMP is essential. Monitoring should be done on a daily, weekly and monthly basis.

Objectives:

The overall objective of monitoring is to make an evaluation of the process to:

- Ensure that adverse project impacts are effectively and efficiently mitigated, as set out in mitigation plans.
- Collect data for accountability to key stakeholders. These data will also serve as supporting material in case of grievances or concerns expressed by stakeholders. They will allow the Contractor to show Project stakeholders how and when mitigation measures have been implemented, and with what results.
- Enhance sustainability of the Project by early detection of conditions that necessitate additional mitigation measures, or unanticipated issues that jeopardize planned mitigation measures. Gather the views and feedback of beneficiaries and other stakeholders on Project impacts and mitigation measures at different times before, during and after the Project.
- Improve service delivery, planning and allocating resources.

Monitoring

The Contractor will ensure continuous documentation of the efficiency, effectiveness, impact and sustainability of mitigation measures. The data collected in the context of the ESIA study serves as the baseline against which change will be measured. Indicators for monitoring (as seen in the following tables) will cover process, outputs and impacts.

	Table 6 Overview of Monitoring scheme (sample sites)
Monitoring	Basis for Indicator and enhancement opportunities
Indicator	
Optimizing	The water needs could be significantly optimized by filtering the mercury from
their way of life.	the water in Apetina, Kawemhakan and Kumakapan (consult the environmental
	safeguards report for more information on this topic).
Engagement	The Krutu setting can be used to communicate with the villagers during project
method in place.	building grievances or guidelines for the villagers and their leaders.
Cultural	Being mindful of territories that are not allowed to be used or entered is an
heritage and -	important social safeguard to be monitored.
territories	
maintained.	
Feeling	False promises made is something to consider when constructing FPIC forms and
supported	during project information sessions with villagers.
Willing to be	Compensating the villagers for maintenance work can be discussed in the village
trained for	ownership model plan.
operation and	
maintenance.	
Willing to learn	In training models, Alalapadu, Sipaliwini and Kwamalasamutu modes of online
about new	training or communication could be possible if needed.
technologies.	
Willingness to	Operation and maintenance by local villagers increase community ownership.
work in	
operation and	
maintenance.	
Increased	Tourism and archaeological research can be included in socio-economic models to
business	sustain long term maintenance of the project building objectives.
opportunity.	
Improved health	Apetina has a freezer house. This is a great example of a community ownership
and nutrition	model.
status.	
Improved sense	ACT-S's initiative of Tareno Media, a radio station for peoples of South Suriname
of leisure.	can be broadcasted for the village locations for improved sense of leisure.
More business	Women empowerment can improve community ownership models.
opportunity for	
women.	

*possibly applicable to ITP Communities

Review

Contractor's feedback on performance will be communicated to the appropriate parties concerned. Any substandard performance will trigger a process that notifies the responsible party of the nature of the issue and indicates the actions that are required to rectify the situation. This will be followed up by further inspection and/or monitoring to ensure that the sub-standard performance has been corrected.

6.3 Summary of Public consultation process

The GoS, through the Ministry of NH and Ministry of ROM has the overall responsibility to effectively engage stakeholders so as to achieve the project's objectives. In order to secure the publics' support for the projects' interventions and to minimize disruptions during construction activities, public information, awareness and engagement will be critical. This will enhance public understanding and support for the project. Those consultations have already been conducted during project design and all those consultations with communities have been documented.²

During project implementation the Stakeholders Engagement Plan will be implemented as agreed. In this Stakeholders Engagement Plan the mechanism for receiving and addressing grievances, point of contact, contact information, etcetera is outlined. In the Stakeholders Engagement Plan is also outlined how the Ministry of NH or facilities management will communicate with stakeholders, for example, if there is going to be a disruption or an inconvenience, as well as to find out from stakeholders if there are any grievances or nuisance. This will be pursued considering the following interventions:

- Public Service Announcements (PSAs) on the project, its component and activities. The PSAs could be placed on print and electronic media.
- Provision of information on the Ministry of NH webpage.
- Notice Boards describing the projects' interventions in the villages.
- Information to the public in a timely manner on the disruption due to project activities.

6.4 Land Acquisition and Resettlement Framework

Although the Republic of Suriname has not recognized the Collective rights and more specifically the Land rights of ITPs, customary rights provide all guidance for negotiating with village authorities (council) for land allocation especially when it concerns the greater benefit of the community. The data collection phase was referred to – for gaining more insights and reflect with the community on that.

The following was discussed:

- i. In accordance with transparency guidance, the need for land acquisition was communicated during the village wide introductions;
- ii. During the data collection phase, it became apparent that land allocation was necessary for various purposes such as energy, water, and telecommunications. This information was communicated to the relevant resource persons. Additionally, potential areas were observed and scrutinized for flooding and the risk of fires during droughts, as well as for the preparation of farms. Although preliminary parcels have been identified, no formal commitments were signed;
- iii. Some sections of the study provided different scenarios, which after the final selection should be calculated to the actual lands required (area). Since the village council have been engaged in comparable initiatives, prior to this project, it is common to sign a commitment letter (executing agency with the village authorities). In this agreement the responsibilities of both parties should be clearly stated. The Village Leader signs on

² TTA, 2023 Stakeholders Engagement Plan

behalf of the village, whilst an appointment GO Ministry signs on behalf of the State (both NH, TCT engaged in ROS jurisdiction);

- The community is the owner of the land (customary right), and therefore the village leader signs on behalf of the community. An internal village meeting by leadership is recommended to discuss village wide consent. The consent will be documented by registering the outcomes of the meeting and agreements;
- v. It is recommended that the signed letter is shared with the district commissioner, and all relevant GO agencies as well as other strategic partners to the communities.

Follow-up of the Fact finding

The process is facilitated by a resource person who speaks the indigenous language, belongs to the tribe and is from the village, and an interpreter, to ensure that all parties involved are understood. After this phase, the written (and translated) version of the process discussed and all intermediate or final decisions made should be send back to the communities. Often this is a letter/poster in the local language.

Principles for Land Acquisition

Important guiding principles (criteria) for Land Acquisition complying with ESPF 5 and ESP7 following the Community Engagement Plan are:

- A piece of land that is elevated and does not get flooded;
- A piece of land that meets the required area for the project;
- A piece of land that, after the project is set up, remains under the management of the service provider and will only be accessible to designated trained local individuals;
- The service provider does not become the owner of that piece of land and will not incur any financial responsibilities for it hence the allocated land remains the property of the community;
- A piece of land for which the community has no significant purpose and no physical displacement from the community members is required;
- A piece of land that does not lead to economic displacement from the community;
- A piece of land that does not hamper exercising the advantages of the cultural and historic value of the community;
- Ensure that all interventions and constructions are planned and executed according to the community safety (flooding, strong winds, heavy eight, radiation, etc.)
- Minimize risks on electric hazards on household, local businesses and E, W, T generation and distribution plants;
- However, to prevent damage, theft, and/or accidents, the management will solely fall under the service provider and designated trained local individuals. An official document specifying further agreements regarding the piece of land will be drafted and must be signed by both the community and the service provider – in both their respective languages (Wayana or Trio) and in Dutch;
- Destruction and damage to the construction by villagers (for example fire) will be the responsibility of the village council;

- The community members can opt to have separate meetings prior to signing the formal commitment letter. When consensus is not met, the *grievance mechanism* will be addressed;
- Negative impact on the surrounding environment of the local interventions to build the required infrastructure should be prevented, minimized and or mitigated in close coordination with the local community.

Although the preliminary land allocation was verbally done and no objections given by the villagers, it is recommended that the final scenarios of Water installation, the Telecom and Energy designs as well as Bio economics enterprises are communicated with the village council and that a formal Land Allocation letter/agreement is signed. This act is recommended as soon as the project start is clear. Community have often given their consent, without any follow up observed.

Furthermore, it is imperative to maintain comprehensive documentation of all actions taken, to ensure transparency and accountability throughout the land acquisition process. These transparent minutes and other documentation serve multiple purposes, including fostering trust between the project developer and the communities involved. Additionally, they can demonstrate community ownership and responsibility, enhancing the overall effectiveness of the project.

Key aspects of documentation during the land acquisition process include:

- Minutes of meetings: Detailed records of discussions, decisions, and agreements made during meetings with community members, stakeholders, and relevant authorities.
- Correspondence: Copies of all communications, including emails, letters, and other written correspondence related to land acquisition activities.
- Surveys and assessments: Reports and findings from surveys, assessments, and studies conducted to evaluate land suitability, environmental impact, and community needs.
- Legal documents: Copies of legal agreements, contracts, and permits related to land acquisition, ensuring compliance with national laws and regulations.
- Reporting tools: Development and utilization of reporting tools to systematically capture and document land acquisition activities, progress, and outcomes.
- Feedback and grievance mechanisms: Establishment of mechanisms for community feedback, complaints, and grievances, along with records of responses and resolutions.
- Also, the documentation process should adhere to the principles of Free, Prior, and Informed Consent (FPIC), ensuring that communities are properly engaged and informed throughout the land acquisition process. This includes early engagement with communities, transparent communication of project objectives and impacts, and meaningful consultation to obtain consent.

Overall, transparent documentation practices not only facilitate accountability but also contribute to building trust and fostering positive relationships between the project developer and the communities affected by the land acquisition activities.

6.5 Critical Habitats Framework

The solar energy and water plans have a small-scale approach and are limited to the village or just outside, where inventories are required and can be monitored by the local Rangers.

When it comes to operation further away from the village (maps below), a more detailed biodiversity/habitat assessment may be required. Prior to transportation and execution of the construction of towers, the data should be at hand, in order to design a monitoring program.

Analysis of tributaries of the main river systems in Suriname, led to the watershed of the Tapanahony and the Sipaliwini river, determining the importance of Paru savannah and the Area south of Kabalebo are the critical habitats.

This project will have to provide evidence of monitoring and restoring the deforestation required to store and construct towers.

Indigenous and tribal peoples that have inhabited and protected the nearly 90% forested country since time and have not been offered the rights to manage their lands. Those groups located in the forestry belt and the extension of it, do have access to community forests to be utilized for sustainable development of those communities. Although this concept is embedded in the system for nearly 7 decades, first starting with simple logging regulated in HKV (Houtkap vergunning in the 1950s)- transforming to community forest in the 2000s to expand the logging options with other goods and services, the community forest governance has not significantly improved. In the south of Suriname, where Indigenous Peoples live, this is not applicable. No Community forest was issued, customary law allows Indigenous Peoples to use the non-timber forest products. Legislation to regulate NTFPs are not yet in place.

Strengthening of Governance

Indigenous groups are being equipped to advocate and negotiate for collective rights recognition and practice sustainable land management. Leadership is individually and collectively being strengthened, whilst internal governance is providing more transparency through improved participation. Communities, from which Kwamalasamutu set the example, by articulating their goals for the future in culture, education, traditional medicine, authority, territory, and sustainable land management in a detailed document known as a *Life Plan*, which will become the guiding force for their development. Leaders, including youth representatives, are learning to actively push for and participate in political conversations regarding land rights, conservation of headwaters, and *Life Plans*.

Communities are trained and equipped in mapping, zoning, and monitoring land use. Sustainable livelihood options are identified and fostered, providing an economic development path that has a low carbon profile and protects biodiversity. Traditional culture is currently promoted through story maps that record oral histories, ethno-education programs, and *Shamans and Apprentices* programs that train traditional healers Exchanges among the geographically separate communities within each indigenous/tribal group, as well as between the three Guianas is promoted.

No Ethno-bio economy without bio diversity

Supporting climate change adaptation and mitigation in the Amazon basin through innovative bio-businesses that seek to conserve the Amazon ecosystems and biodiversity, boost climate resilience, and improve local livelihoods in the Amazon countries is crucial. Starting to elevate this in Suriname, and especially in south Suriname is a great pilot for the country, and demonstrating carbon emission as well as reaching Sustainable Development Goals (SDG) goals.

These bio-businesses could be structured under different bio-economy value chains that prioritize natural capital and deliver climate benefits, including sustainable agroforestry, non-timber natural forest products, growing native species timber, and community-led nature tourism.

Conditions for Ethno-Bio-economy models:

When developing these models, the basic need for energy, and guaranteed 24x7 safe water, but moreover dedicated communication and safe and affordable transportation are felt to be challenging.

The chicken and egg situation are reckoned in sustaining initial investments. Financial contributions by household should not be left to the mercy of the GoS. That is a hard lesson learnt by NGOs in Suriname.

Bio-economy models can bring longevity to these in-depth investments.

Human resources to manage, expand and introduce technology, is another reality to address for a smooth development of small enterprises. Poor education, limited skills and trust are components to focus on, prior or simultaneously when developing these initiatives.

Indigenous communities in the next 4 years with local businesses.

Capacity building

In the process of developing Bio-Economics, the bottom up approach led to build upon knowledge and products known to the Indigenous Peoples. Technical and feasibility studies are as important as ESIAs. Sudden increase of income can lead to power struggles in the community, gender imbalance and disruption of relation between men and females.

With tailor made programs – capacity of locals is improved, e.g. quality and efficiency, organization and management. In the different phases of the product development, consistency, reliability and monitoring of the sustainability are key. In all value chains being developed, benefit sharing models and transmission of knowledge and marketing are important elements. Creating, promoting and supporting full ownership with a gradually face out of the NGOs role is the ultimate strategy.

Protecting the ecosystem means protecting the people

In fostering bio-economics by integrating conservation, sustainable resource management, traditional knowledge, and community empowerment to promote economic opportunities while preserving the rich biodiversity and cultural heritage of the Amazon rainforest, the following approach is reckoned:

Sustainable Resource Management:

This involves helping communities develop sustainable harvesting techniques for forest products, such as nuts, fruits, and medicinal plants. By supporting sustainable resource management, the economic viability of ITP communities will improve while preserving the biodiversity and ecosystem services of the Amazon.

Traditional Knowledge and Innovation:

Indigenous and Tribal communities possess valuable traditional knowledge about the Amazon rainforest's resources and their sustainable use. The documentation and preservation of this knowledge can foster innovation and the development of bio-based products and processes. This involves supporting community-led initiatives for sustainable agriculture, traditional medicine research and development (R&D), and the production of value-added products

derived from forest resources.

Market Access and Fair Trade:

This involves providing technical support, training, and assistance in establishing sustainable supply chains. By connecting ITP producers with fair trade and environmentally conscious buyers, as an NGO we help create economic opportunities that align with conservation goals. This step is a lengthy and tedious one.

Ecotourism and Community-Based Enterprises:

Development of community-based ecotourism initiatives that showcase the Amazon's natural and cultural heritage, is the next big step to undertake. By promoting responsible and sustainable tourism practices, private and public sector can help generate income for indigenous communities while raising awareness about the importance of conserving the rainforest.

Policy Advocacy and Collaboration:

Engaging in policy advocacy at local, national, and international levels to promote sustainable practices, indigenous peoples and tribal peoples rights, and conservation policies. Collaborating with governments, NGOs, and stakeholders, contributes to the development of policies and frameworks that recognize the economic value of the Amazon rainforest and support sustainable bioeconomic initiatives.

The Critical Habitat Assessment is part Biodiversity Action Plan (BAP). (see Annex for the BAP)

6.6 Indigenous Peoples Framework

ESPS 7:	General:	Governance
Indigenous	(i)Indigenous	ITP traditional leadership is not
and Tribal	Rights	fully integrated in the
Peoples	(ii)Avoidance of	administrative system, and thus
1	Adverse Impacts	not aligned with planning and
	(iii) Transborder	budget approval cycle for a
	Indigenous Peoples	decentralized execution of annual
	(iv) Indigenous	and multiple annual plans.
	Peoples in Isolation	1 1
	and Initial Contact	Due to this discrepancy in
	(v)Participation and	governance, often ITPs are not
	Consent	fully aware of the policy regarding
		issuing concessions to exploit
	<u>Circumstances</u>	resources.
	requiring Free,	
	Prior and Informed	Given the above described
	Consent:	situation ESPS 7 will be fully
	(i)Impacts on	applied.
	Lands and Natural	
	Resources	Cultural heritage
	(ii)Subject to	Without rights, ITP territories, the
	Traditional	culture is under threat. ITPs
	Ownership or	identity is inherent to their
	Under	environment they rely on. Its

Although having signed a number of international Conventions, and jurisprudence created by international ruling, the following reality exist on the ground:

Customary Use	physical and spiritual connectivity
(iii)Relocation of	that is at risk. Mapping the sacred
Indigenous Peoples	sites, the historic movement etc.
from Lands and	being recognized by central
Natural Resources	government is crucial. Resources
Subject to	map to use of building, food,
Traditional	medicine etc. is part of the ITP
(iv)Ownership or	identity. Conservation of the
Under Customary	language and traditional
Use	knowledge are also at risk apart
(v) Cultural	from the material heritage
Heritage	Suringme has no national ITP
Tientage	
Mitigation	museum.
Development and	Education in the mural ITD regions
Bonofito	is limited Drimory education is
Denems	is minicu. Finnary education is
	manny accessible, nowever with
Government	imited competence. Secondary
<u>Coordination of</u>	and vocational education is also
Indigenous Issues	limited.
	Access to Healthcare
	Although healthcare posts are well
	spread in the interior, no
	physicians have permanent
	presence in the villages. Only in
	the larger towns.
	Benefit sharing (from
	renewable/extractive industry and
	ecosystem services)
	There is a wide variety of models
	for benefit sharing, sometimes
	even on voluntary level. The
	models maybe present on paper.
	but not implemented on
	community level- serving a smaller
	group. Mining, logging and
	tourism are the known sector to
	use benefit models however
	leadership is often lured into
	composition
	contuption.
	Emimonymountal instact from twoists
	rollution and degradation due to
	economic activities impact on the
	11Ps without adequate payments,
	rehabilitation, restoration plans
	etc.

6.7 Cultural Heritage Plan

During the Engagement Phase (ESPS8), ensure that the heritage, sacred places are mapped and alternative lines and execution blueprint is made in accordance with the data gathered.

Protecting cultural heritage during the design and implementation phase of the project requires careful planning and collaboration with relevant stakeholders, including local communities, cultural heritage experts, and regulatory agencies. Here are some steps that can be taken to safeguard cultural heritage:

- **Cultural mapping and documentation:** Conducting comprehensive cultural mapping and documentation exercises to identify and record the tangible and intangible cultural heritage of Indigenous and Tribal communities. This involves documenting traditional knowledge, cultural practices, rituals, ceremonies, oral histories, traditional arts and crafts, and other aspects of indigenous and Tribal culture.
- **Cultural site management and conservation**: Developing strategies for the management, conservation, and protection of cultural sites, sacred places, and cultural landscapes within indigenous and Tribal territories. This may include establishing conservation zones, implementing site management plans, and deploying measures to prevent damage, degradation, or destruction of cultural heritage sites.
- **Community participation and ownership**: Engaging Indigenous and Tribal communities as active participants and stakeholders in the preservation and management of their cultural heritage. This includes promoting community-based approaches to heritage conservation, fostering community pride and ownership, and empowering local communities to take responsibility for the safeguarding of their cultural assets.
- **Capacity building:** Building the capacity of Indigenous and Tribal communities, local authorities, and relevant stakeholders in cultural heritage management and conservation practices. This may involve providing training workshops, skill-building programs, and educational materials on topics such as heritage preservation techniques, documentation methods, and sustainable tourism development.
- Cultural revitalization and transmission: Supporting initiatives aimed at revitalizing and transmitting traditional knowledge, cultural practices, and linguistic heritage to future generations. This includes promoting intergenerational learning, cultural exchange programs, and language revitalization efforts within Indigenous and Tribal communities.

Collaboration and partnerships: Fostering collaboration and partnerships between indigenous and Tribal communities, government agencies, non-governmental organizations, academic institutions, and other relevant stakeholders in the field of cultural heritage conservation. This involves sharing expertise, resources, and best practices, as well as promoting cross-cultural dialogue and cooperation.

6.8 Chance Find Plan and Procedures

Below, the Chance Find Plan and Procedures are presented.

This part of the ESMS describes a generic Chance Find Plan aligned with international best practice to protect cultural heritage that is inadvertently discovered during construction activities. The Chance Find Plan includes, as detailed below, a:

- I. Cultural Heritage Monitoring Program;
- II. Chance Find Procedure;
- III. Cultural Heritage Training Program and
- IV. Site Protection Program.

The Chance Find Procedure will be aligned with international standards, specifically the IDB ESPF 8 and its Guidelines (Cultural Heritage). Within EBS, the EHS EHSSpecialist is responsible for developing and implementing the Chance Find Procedure.

Baseline Conditions

<u>Cultural heritage sites</u>: Potential disturbance of cultural heritage sites could result in negative social impact. However, no known cultural heritage sites will be disturbed by the project. Nevertheless, given that only a small number of existing archaeological sites have been registered, chance finds may occur and therefore, it is not unlikely that items will be unearthed during earth moving works, e.g. to place the utility poles and water pipe infrastructure. It is unlikely –though not impossible- that pre-Columbian archaeological sites will be encountered in the target area. Therefore, care must be taken to not damage tangible cultural heritage.

Archaeological research in Suriname is predominantly focused on the pre-Columbian period. Archaeology of the colonial period is mainly practiced by amateur archaeologists. Archaeological resources at former plantation lands consist mostly of clay pipes, bottles, coins, brick foundations, and brick water cellars.

Regulatory Background

Suriname Laws and Regulations

The first law in Suriname protecting cultural heritage was the Historic Monuments Act of 1963 (*Wet Historische Monumenten* 1963, G.B. 1963 No. 23). The implementation of the Historic Monuments Act was assigned to the Department of Education (now the Ministry of Education, Science, and Culture, or MESC), which was also responsible for cultural policy. The Monuments Committee (*Commissie Monumentenzorg*) was formed to implement the act. The Historic Monuments Act was replaced by the Monuments Act of 2002 (Monumentenwet 2002, S.B. 2002 No. 72), the present legislation. The Monuments Act defines a monument to include all immovable objects or parts thereof exceeding fifty years of age that have common interest due to esthetic and artistic values or scientific, archeological, anthropological, historical, or architectural significance for Suriname. These monuments are inscribed in the public Monuments Register.

6.9 International Standards

The principal international standard for the protection of cultural heritage is Performance Standard (PS) of IDB ESPF 8 and its Guidelines. The **objective** of PS 8 is to "protect cultural heritage from the adverse impacts of project activities and support its preservation [and] promote the equitable sharing of benefits from the use of cultural heritage."

Definition

PS 8 defines cultural heritage as:

- i. **tangible forms of cultural heritage**, such as tangible moveable or immovable objects, property, sites, structures, or groups of structures, having archaeological (prehistoric), paleontological, historical, cultural, artistic, and religious values;
- ii. **unique natural features** or tangible objects that embody cultural values, such as sacred groves, rocks, lakes, and waterfalls; and
- iii. **certain instances of intangible forms of culture** that are proposed to be used for commercial purposes, such as cultural knowledge, innovations, and practices of communities embodying traditionallifestyles.

PS 8 differentiates between replicable, non-replicable, and critical cultural heritage, which are defined as follows:

- <u>Replicable Cultural Heritage</u>: Defined as "tangible forms of cultural heritage that can themselves be moved to another location or that can be replaced by a similar structure or natural features to which the cultural values can be transferred by appropriate measures. Archaeological or historical sites may be considered replicable where the particular eras and cultural values they represent are well represented by other sites and/or structures."
- <u>Non-replicable Cultural Heritage</u>: Includes "(i) cultural heritage [that] is unique or relatively unique for the period it represents; or (ii) cultural heritage [that] is unique or relatively unique in linking several periods in the same site."
- <u>Critical Cultural Heritage</u>: Includes "(i) the internationally recognized heritage of communities who use, or have used within living memory, the cultural heritage for long-standing cultural purposes; or (ii) legally protected cultural heritage areas, including those proposed by host governments for such designation."

Mitigation measures

The preferred mitigation measure for all cultural heritage impacts is **avoidance**. When this is not possible, PS 8 provides the following **mitigation hierarchy** (from preferred to least preferred) for replicable cultural heritage:

- Minimize adverse effects and implement *in situ* restoration measures;
- Restore the functionality of the cultural heritage in a different location;
- Permanent removal of historical and archaeological artifacts following national laws and internationally recognized practices by competent professionals; and
- Compensation for the loss of cultural heritage.

The removal of **non-replicable cultural heritage** should only take place if there is no technically or financially feasible alternative and the benefits of the project outweigh any heritage losses.

The removal of **critical cultural heritage** should only take place in "exceptional circumstances" and after extensive consultation with affected communities and other stakeholders.

PS 8 also requires the development and implementation of chance find procedures. Chance finds are defined as "tangible cultural heritage encountered unexpectedly during project construction or operation," and a Chance Find Procedure is defined as "a project-specific procedure that outlines the actions to be taken if previously unknown cultural heritage is encountered." This requirement is a recognition of the fact that no survey, regardless of methodology, is sufficient to ensure that all archaeological resources are identified in a project area, and that there is therefore always the potential for the inadvertent discovery of cultural heritage during ground-disturbing construction or operational activities.

According to the IDB ESPF 8 and its Guidelines, the Chance Find Procedure should "include record keeping and expert verification procedures, chain of custody instructions for movable finds, and clear criteria for potential temporary work stoppages that could be required for rapid disposition of issues related to the finds. It is important that this procedure outlines the roles and responsibilities and the response times required from both project staff, and any relevant heritage authority, as well as any agreed consultation procedures. The procedure should be incorporated into the Management Program and implemented through the client's Environmental and Social Management System."

6.10 Cultural Heritage Monitoring Program

The project will implement a Cultural Heritage Monitoring Program for all construction activities in consultation with the Ministry of Education Science and Culture (MESC) and other cultural heritage stakeholders, as appropriate. The purpose of the monitoring is to:

- Identify, record, and protect cultural heritage that has not been previously identified (i.e., chance finds); and
- Protect cultural heritage identified during previous cultural heritage investigations (i.e., known resources).

The project will utilize "passive" cultural heritage construction monitoring. This means that all project and contractor personnel will be responsible for cultural heritage monitoring during their daily activities, rather than having a Cultural Heritage Specialist (CHS) monitor all construction activities. Passive cultural heritage monitoring will be conducted by all project and contractor staff during their daily activities. Relevant project and contractor staff will receive training in the identification of potential chance finds and the Chance Find Procedure described below, and will be responsible for reporting any potential chance finds to the CHS to be retained by the project and who will be will be responsible for further follow-up in accordance with the chance find procedures.

6.10.1 Chance Find Procedure

The following types of cultural heritage are the most likely to be encountered during construction:

- Pre-Columbian archaeological features (e.g. habitations, hearths);
- Pre-Columbian artifacts (e.g. ceramic sherds);
- Historic archaeological features (e.g. petroglyphs);
- Historic artifacts (e.g. arrow and bow and axes, clay pipes, bottle fragments, coins).

The Chance Find Procedure includes a multi-tiered approach for identifying, assessing, and resolving potential chance finds. The purpose of this approach is to empower an on-call CHS to resolve minor chance finds without necessitating consultations with the MESC and minimize construction delays by allowing for the quick resolution of non-significant finds by a CHS in the field. The defining characteristics of each chance find tier and the processes for assessing them and determining if consultation is required will be developed in consultation with the MESC and other cultural heritage stakeholders, as appropriate. A preliminary three-tiered chance finds hierarchy is presented in the table below. All potential chance finds identified by project personnel will be reported to a CHS who will determine if the potential find is a chance find and assign it to a chance finds tier.

Chance Find Type	Characteristics	Evaluation Process
Minor Chance Finds	Modern features or objects. Isolated historic or prehistoric artifacts that are out of context or lack research potential or value.	Construction work will stop in the area of the find. The potential find will be reported to the EHS (Environmental Health and Safety) Specialist of the PIU (Project Implementation Unit) within 24 hours, who will then notify the on-call CHS (Cultural Heritage Specialist). The CHS will then examine the potential find via photographs or a site visit. If the find is determined to represent a minor chance find, the find will be documented and collected/resolved in the field by the CHS without MESC consultation. Construction activities will then resume in the area.
Significant Chance Finds	Significant historic or prehistoric features or artifacts.	Construction work will stop in the area of the find. The potential find will be reported to the EHS Specialist of the PIU within 24 hours, who will then notify the on-call CHS. The CHS will then conduct a site visit to examine the potential find. If the find is determined to represent a significant chance find, the CHS will develop a treatment plan in consultation with the MESC. Construction works will resume in the area upon completion of the treatment plan.
Human Remain s	Modern, historic, or prehistoric burials, isolated human remains, and/or associated features and/or artifacts (i.e., grave goods).	Construction work will stop in the area of the find. The potential find will be reported to the EHS Specialist of the PIU within 24 hours, who will then notify the on-call CHS. The CHS will then conduct a site visit to examine the potential find. If the find is determined to represent human remains and/or burial goods, the CHS will report the find to stakeholders, including local, regional, or national law enforcement agencies. The CHS will initiate consultation with the MESC and other stakeholders (e.g., potential descendent communities), as appropriate, to develop a treatment plan. Construction works will resume in the area upon completion of the treatment plan.

Table 7: Three-tiered Chance Find Hierarchy

Figure 1: The figure below provides a flowchart of the Chance Find Procedure.



Artifacts collected in connection with chance finds should be minimized. Photos of artifacts with a scale included in the frame should be taken as soon as possible. Artifacts and associated notes and photographs taken by any project personnel should be given to a CHS. Details of how artifacts should be collected and stored and what notes and photographs should be taken at the time of discovery will be provided in the Cultural Heritage Training. Artifacts found belong to the Suriname government, and a CHS will be responsible for giving them to the MESC.

The CHS and the EHS Specialist of the PIU will maintain records on chance finds and the implementation of treatment plans. These will include:

- Monthly reports summarizing reporting period activities, including chance finds identified, the results of any chance find assessments, internal and external communications and instructions, and supporting photographic documentation (or other reference materials as appropriate); and
- Any additional reports prepared to fulfil specific requirements of the MESC.

6.10.2 Cultural Heritage Training Program

Relevant Project personnel will receive training and demonstrate competency in the identification of chance finds and the Chance Find Procedure described above. This training will be incorporated into the overall induction process for the project and contractor personnel, and will include a quick reference handout. The EHS Specialist will maintain records of all Cultural Heritage Training provided to the project personnel. All employees must be aware that it is illegal and forbidden to disturb or remove cultural heritage objects offsite for personal gain. To support the training process, the project will develop training materials for use in the overall induction process.

6.10.3 Site Protection Program

Known cultural heritage sites will be protected from project-related damage. This includes sites identified in advance of construction activities and those found during construction (i.e., chance finds). Sites may be located in the project areas or adjacent to them. In some cases, it may be necessary to modify construction techniques to protect sites in work areas. Site information will be provided to project personnel in written and verbal form in official transmittals, meetings, and tool box talks as appropriate to ensure that known cultural heritage sites are protected. All communication materials will also be available in the local language of the villages.

6.10.4 Mitigation Measures/Plan

Below, a mitigation plan for potential moderate negative social impacts is presented.

Mitigation Measure/Plan to Protect Cultural Heritage Sites Version: 1				
Risk / Impact to be addressed:	Potential of	disturbance of arc	haeological sites and other sites of	
_	cultural r	elevance	č	
Summary of Current Situation:				
Given the history of Suriname,	Given the history of Suriname, it is considered possible that pre-Columbian or more recent			
archaeological artifacts are end	countered du	ring excavation a	ctivities.	
 Mitigation measures to minimiz In the case of encounter chance-find procedur Discuss planned location local area inhabitants procedure inhabitants pr	er and comp er of archaeo es as outlined on of utility p rior to placer	ensate impact: logical artifacts, s in the Chance Fin poles and water sup ment.	top work immediately and follow d Plan and Procedures. oply infrastructure to be constructed with	
Stage of Project to which measure applies	uction X tion X	Estimated cost(s):	In Preconstruction phase: Cost of Community Relations staff member of EBS, who is in charge of the project. <i>Construction phase:</i> In the case of chance-find, archaeological service of the Directorate of Culture of the Ministry of Education Science and Culture to perform necessary procedures.	

Applicable Requirements and Standards:

- IDB guidelines on chance finds, as indicated in IDB ESPF 8 and its Guidelines.
- Chance find procedure as described in the Chance Find Plan.
- Government of Suriname (GoS) Monuments Act (1963, revised 2002).
- (Draft) national guidelines of the Directorate of Culture of the Ministry of Education, Science and Culture (Ministerie van Onderwijs Wetenschap en Cultuur) for immoveable archaeological resources, found during the course of the project.

 Indicators to measure success: No complaints about disturbance of cultural heritage sites Procedures upon unanticipated discovery of material remains of archaeological or historical significance have been followed as agreed in consultation with MESC. 	 Performance goals for Indicators: Local communities do not experience damage to sites and artifacts in the places where they live and work. Preservation of cultural heritage in the interest of communities, Suriname and the world.
Responsibility for implementation of measure:	 <i>EBS</i>: Communicate with local authority in the village about exact location of known heritage sites. <i>EBS Project team</i>: Inform contractor about chance find procedures to be followed. <i>Contractor</i>: Initiate chance find procedures upon unanticipated discovery of material remains of archaeological or historical significance.
Frequency of inspection/ compliance verification:	Every field visit, in accordance with the specifications of the constructions.
Additional Information / Guidance:	No known material remains of archaeological or historical significance have been recorded in the locations where earth movement activities will take place, except for Kumakapan.

6.11 Gender Plan

Gender inequality is an ongoing issue that requires continuous improvement. Investors are advised to acknowledge and address this risk, aiming to reduce it to the "as low as reasonably practicable" (ALARP) level. Mitigation measures and guidelines for all villages include:

- **Providing women with opportunities to participate in waste management teams for** environmental waste collection and, if feasible, for managing building waste. This could involve tasks such as collecting, sorting, and delivering recyclable waste to designated individuals in Paramaribo. Investors may choose to handle this risk internally or transfer it to project workers or local organizations.
- If investors absorb the risk, they should consider compensating women for their waste management efforts during project site visits.
- Encouraging women to join ranger teams and involving them in water quality measurements as an educational opportunity, where practical. Given women's traditional roles in managing household water, inclusion in this aspect of the project can empower them.

- By incorporating gender equity considerations into project planning and implementation, projects can contribute to more inclusive and sustainable development outcomes, benefiting the entire community.

6.12 Stakeholder Engagement Plan

The Stakeholders Engagement Plan has a number of phases, which are as follows:

Phase I - Communication and project socialization

The initial phase involves disseminating information about the project and reaching a consensus on the way forward. This includes informing the communities about the current project status, introducing and shaping the community engagement plan, outlining the stakeholders and their relationships, specifying communication methods and guidelines, and detailing feedback and conflict resolution procedures.

Phase	Activity
I Communication	Project socialization
and Socialization	
	Facilitating in shaping a community engagement plan
	Identify stakeholders and define relationships, communication
	channels and protocols
	Facilitate feedback and conflict mechanisms

Table 8: Activities for communication and project socialization

Project Socialization is the communication of any information sharing activities between all stakeholders. This activity happens before, during, and after the community engagement plan – this is an ongoing activity. Although there is no communication channels, protocols and methods established yet, communication with and to the communities prior to initiating any project activities is eminently important – addressing the FPIC protocol.

Facilitate in shaping a community engagement plan. Within this activity, the object is to propose this document to the communities as a preliminary work done to shape the actual engagement plan. The first task is to inform all the communities about the engagement plan: inform what a community engagement plan is, and inform why it is important for all stakeholders and inform why it is important for the energy, water, and telecommunication project. The second task is for the community to assign community engagement plan. The third task is to organize a gathering with all the assigned community members to discuss and shape the community engagement plan and its timeline. The fourth task is to finalize, translate, and distribute this plan to all communities. The fifth, and the last task for this activity is that the community members is going to inform the community of the final community engagement plan.

Identify stakeholders and define relationships, communication channels, and protocols is the first activity after having a mutually agreed community engagement plan produced. The outcome of this activity is to come up with communication channels, protocols and a basis to improve the trust. In order to achieve this outcome, it is necessary to identify the stakeholders who are going to be engaging with the communities prior to, during, and post to the whole trajectory of this project. The second task is to define every stakeholder's responsibility and role within these projects. The third task is to establish communication channels and protocols. This is important to mitigate miscommunication, important for the sake of coordination flow, and important to keep everyone rightfully and truthfully informed. **Facilitate feedback and conflict mechanisms.** It is also important to actively support and enable processes for receiving input, comments, and addressing conflicts within this project. This involves creating structured channels for stakeholders to provide feedback, as well as establishing mechanisms for resolving disputes or disagreements that may arise during the course of the project or engagement. The aim is to ensure that communication is open, issues are addressed promptly, and conflicts are managed effectively to maintain a productive and harmonious working environment. Although this activity is described as a separate activity, due to its importance, this can be achieved altogether or within the communication channel and protocol activity.

Phase II - Local capacity building and awareness raising

The second phase focusses on local capacity building and awareness raising. Local capacity building refers to the process of enhancing skills, knowledge, and abilities of ITP communities. It aims to empower them to take on responsibilities, make informed decisions, and effectively manage and sustain the different project initiatives that benefit the ITP communities. On top of that, activities and efforts will be also involved to increase the understanding, knowledge, and consciousness among the community members about rational use of the energy, water, and telecommunication services, about the services' tariffs, rules and regulations, and also about the waste management plan.

Phase	Activity	
II Local Capacity	Technical training for energy, water, and telecommunication services	
Building and Raising		
Awareness		
	Administrative training for energy, water, and telecommunication	
	services	
	Training and awareness of rational use of energy, water, and	
	telecommunications services	
	Awareness on tariffs, rules, and regulations of energy and water	
	services	
	Internship energy, water and telecommunication for local employees	

Table 9: Activities for local capacity building and awareness raising

Technical trainings for energy, water and telecommunication. The local employees, that have been identified and selected, will receive technical trainings for the energy, water, and telecommunication services. The first task is to identify the necessary responsibilities and roles to maintain the services, followed by tailoring the training material to their context and capacity (yet, building towards the anticipated capacity). After having the training done in their community, an internship or fellowship program should be joined by the selected or identified community members fulfilling the important responsibilities and roles. Each of the services (energy, water, and telecommunication) have their own team of trainers and will be having their own curriculum considering the communities culture and personal workload. It is also recommended to have these trainings per services done within different timeframes.

Administrative trainings for energy water and telecommunication. Parallel to the technical trainings per service type, administrative trainings will also be provided. The identified and selected community members who shall fulfill these roles, will get the necessary training inventory, basic financials, and also basic ICT training to keep track of the aforementioned.

After the successful completion of the administrative training, the selected administrative employees will also follow through an internship or fellowship program.

Training and awareness of rational use of energy, water, and telecommunications services. Training and awareness of rational use of the services is necessary to provide the clients (read as communities benefiting from the services) instructions, guidelines, and practical knowledge on how to utilize energy, water, and telecommunications services in a way that minimizes waste, conserves resources, and promote sustainability. In this activity it is also considered to teach techniques to reduce energy consumption, emphasizing water conservation practices, and encouraging efficient use of telecommunication technologies. The period to organize these trainings and awareness of rational use of the services should go in parallel with the timeframe of the technical and administrative trainings.

Awareness on tariffs, rules, and regulations of energy and water services. Raising awareness on tariffs, rules, and regulation of energy and water services entails making the community aware and familiar with the established pricing structures, rules, guidelines, and legal requirements that govern the distribution, consumption, and conservation of energy and water resources. This awareness is crucial for the community members to make informed or better decisions about their energy and water usage, as well to ensure compliance with the relevant regulations.

Phase III - Crosscutting knowledge and experience exchange

The third phase is to facilitate or create a platform for the communities to exchange their knowledge, their experiences, and the impact these past activities has brought. But it will also be a time to exchange and discuss their concerns; issues, identified risks, et al. And more importantly, how will they mitigate, if not prevent, these potential risks.

Phase	Activity
III Crosscutting	Training and awareness on sustainable waste management practices
Community Project	
Knowledge and	
Experience Exchange	
	Organize exchanges with communities to share experiences, best
	practices, and positive impacts
	Facilitate discussion on identified and/or potential risk and a risk
	mitigation plan

 Table 10: Activities for the crosscutting community project knowledge and experience exchange

Training, awareness and sustainable implementation of a waste management plan.

Before starting any construction activities for the energy, water, and telecommunication projects, and technical or administrative trainings and awareness, it is important to compose a waste management plan that works for the communities. In this case, proven concepts are available in some ITPS villages and could provide support to other communities as well. On top of supporting the communities with trainings and awareness, this project will support the sustainable implementation of the waste management for 4 years. The waste management plan deserves to be recognized as a project on its own considering its intensity, long-term contribution to this project as well as other activities in the communities. See Annex Waste management program outline for the draft program outline of the Waste Management Plan.

Organize exchanges with communities to share experiences, best practices, and positive impacts. There will be 2 moments created where the communities would gather and where they can share their experiences, their best practices and their positive impacts. This frequency will be that after every 5 communities have their services established or finalized, the communities will gather together and share their experiences, best practices, and positive impacts.

Facilitate discussion on identified and/or potential risk and a risk mitigation plan. After every gathering where experiences, best practices, and positive impacts are presented by the communities, they will have the opportunity to also discuss their identified and/or potential risks, eventually come to an idea or conclusion on how to mitigate these risks.

Phase IV – Transition phase

The last phase is the transition phase. Each of these activities in this phase will be done separately – meaning that each community will have an appreciation of stakeholders' participation and efforts activity, and an official handover of the services to communities and partners.

Table 11 Activities for the transition phase		
Phase	Activity	
IV Transition Phase	Monitoring, evaluation, and improvement	

Monitoring, evaluation, and improvement. This is a responsibility for every stakeholder. It is important to keep track at all times on how well all stakeholders progress in growing and taking ownership and leadership of their responsibilities, thus the project and its outcomes. This activity goes in parallel with phase I where communication is discussed.

To support the monitoring, evaluation, and continuous improvement, it is recommended to install a group of community awareness officers (community watch group) that oversee the rational use of the services, the leadership, the clientele satisfaction or issues, and the equal use and advantage of services for every woman, child, and men of all ages. In short, oversee the social, economic, and environmental factors for sustainability.

6.13 Consultation Framework

Once stakeholders have been identified and characterized according to their power and influence the Team proceeded with developing a communication strategy to determine the information to be shared with the stakeholders and the communication tools to be used.

Manage Closely

IADB, MNH and EAS as policy maker and regulatory agency respectively are the main stakeholders and the decision makers for the definition of the regulatory and institutional framework for rural electrification projects. These institutions will be included and informed continuously and closely regarding the consultancy progress. Also, these institutions must participate in meetings and presentations to evaluate progress and present the main deliverables/products of this consultancy. For these stakeholders the following communication methods will be used: emails, meetings, presentations, WhatsApp, and reports.

The Academia, specifically the University Anton de Kom would participate as reviewer or adviser of the main deliverables/products, it could include their participation on meetings and presentations also.

Keep Satisfied

The Ministry of Finance and the Ministry of Foreign Affairs should be kept informed on the project, mainly results and reports. The regulatory and institutional framework will be an important tool for rural electrification developing in the country that will need financing support, so participation of these two ministries will be key for success of this initiative. EBS should also be kept satisfied, considering that they are a key player in the provision of the energy service and will need to be included in this process.

For these stakeholders' communication methods will be through high-level meetings, final presentations, and sharing reports.

Keep Informed

- The multilateral and bilateral organizations (CDB, EU-CIF, CARICOM), ministries of health, education and regional development, civil society organizations (VIDS, OIS), and give women opportunities to join the waste management teams for project workers environmental waste collection and, if physically possible, for building work waste management. Practically this could include collecting, overseeing, separating and delivery of recyclable wastes to appointed persons back to the city Paramaribo. This risk could be transferred to ACT's or absorbed by investor's project workers themselves.
- Private sector (energy services and solar mini grids installers) should be adequately informed. It is recommended to share with these institutions the results of the project and deliverables. For these stakeholders the following communication methods will be used: presentations and final reports.

Monitor

For the rest of the stakeholders who have low interest and low influence it recommends informing the results of the project. For this the communication methods to be used with will be just reports.

6.14 Grievance Redress

This component is involved with a description of the culturally appropriate procedures included in the project's grievance mechanism to address grievances/queries by Indigenous and Tribal Peoples arising from project implementation and operation.

The Grievance Mechanism should consider both the availability of judicial recourse and customary dispute settlement mechanisms applicable to Indigenous Peoples.

The grievance mechanism should provide for fair, transparent, and timely redress of grievances without costs, and if necessary, provide for special accommodations for women, youth and the elderly, and other vulnerable groups within the community, to make their complaints.

In all villages the traditional engagement method is the Krutu format. In the occasion of grievances during site visits, the inhabitants stated that they would notify project workers via their traditional leaders.

The Grievance Mechanism considers the usual dispute resolution mechanisms applicable within the indigenous and tribal communities involved. Government legal remedies also apply but are not part of the Grievance Mechanism.

The complaints mechanism provides for timely handling of complaints without costs. No statement can be made about fairness and transparency, but since this mechanism has been in use for centuries and meets the need, it can be assumed that the Grievance mechanism also provides for these aspects to a certain extent.

The Grievance Mechanism serves all villagers, including women, youth and elderly, as well as other vulnerable groups within the community, to register their complaints. In general grievances are communicated to the Paramount Chief or the (head) captain or basja.
7. Eligibility Criteria

Design Phase

During the interventions design phase, EBS, as the Program's Executing Agency (EA), with the possible support of external consultants, will develop the executive project for each work to be financed under the Program.

EBS will apply the "**Environmental and Social Data Sheet**" to perform a quick environmental and social categorization of the project (screening), detail the main impacts and mitigation measures to be applied, and determine any additional studies or plans that may be necessary to determine the socio-environmental eligibility of the project.

According to the project category and identified impacts, the socio-environmental assessment requirements are detailed in Table 2.

Project Category	Socio-Environmental Management Instruments
Category B	 Environmental and Social Analysis Environmental and Social Management Plan Meaningful Public Consultation Plan and Meaningful Public Consultation Socio-Cultural Analysis (if applicable) Environmental and Social Technical Specifications in tender
	documents
Category C	 Environmental and Social Management Plan Environmental and Social Technical Specifications in tender documents

 Table 12: Socio-Environmental Management Instruments by Project Category

Based on the categorization results, and for those projects that are classified as **category B**, the EBS, with the assistance of external consultants, will develop the Environmental and Social Analysis, in accordance with national regulations and the IDB's Environmental and Social Policy Framework. The minimum contents of the ESA are detailed (see Annex). EBS will also be responsible for verifying that the proposed interventions comply with the Project's Operating Regulations.

Projects classified as category B will require a public consultation. EBS will plan and conduct the corresponding public consultation instances, in accordance with the IDB ESPF Environmental and Social Performance Standard 10, and the guidelines of the Stakeholder Engagement Plan.

ESA, ESMP, and Meaningful Public Consultation Reports should be published on EBS's website. They shall also be submitted for the Bank's No Objection prior to the start of the bidding process. EBS will prepare the Bidding documents for works, incorporating the necessary environmental, social, and occupational health and safety clauses and requirements, both general and specific to the project that arise from the socio-environmental evaluation and the delineation of the ESMP detailed therein, and including the needs for periodic reports. These aspects will be included in the Environmental and Social Technical Specifications.

The Executive Bidding Project must outline the minimum content of the Environmental and Social Management Program at the construction level (ESMPc), with the explicit incorporation (in the bidding offers) of socio-environmental management actions in the cost calculation.

The proposals received during the Bidding process must contain a budget that includes the cost of implementing and complying with the environmental, social, and occupational health and safety mitigation measures required by the project to ensure compliance with the IDB's ESMP and applicable national and local regulations.

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