

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

REPUBLIC OF SURINAME

**CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS (CCLIP): JUST,
CLEAN AND SUSTAINABLE ENERGY TRANSITION FOR SURINAME**

(SU-O0012)

**FIRST INDIVIDUAL OPERATION: BIO-ECONOMY EMPOWERMENT IN
SURINAME'S INDIGENOUS COMMUNITIES THROUGH ACCESS TO WATER,
ENERGY, AND TELECOMMUNICATIONS
(Bio-SWEET)**

(SU-L1076 AND SU-G1010)

LOAN PROPOSAL

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ABBREVIATIONS

ACT	Amazon Conservation Team
CCLIP	Conditional Credit Line for Investment Programs
DEV	<i>Dienst Electrificatie Voorziening</i>
EA	Executing Agency
EAS	Energy Authority of Suriname
EBS	N.V. <i>Energie Bedrijven</i> Suriname
GDP	Gross Domestic Product
GEAPP	Global Energy Alliance for People and Planet
GHG	Green House Gases
GoS	Government of Suriname
ICA	Institutional Capacity Assessment
IDB	Inter-American Development Bank
LCE	Low Carbon Energy Fund for People and Planet
MDB	Multilateral Development Banks
MNH	Ministry of Natural Resources
NAP	National Adaptation Plan
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organizations
NH/DWV	<i>Dienst Watervoorziening</i>
NPV	Net Present Value
O&M	Operation and Maintenance
PEU	Program Execution Unit
SWM	N.V. <i>Surinaamsche Waterleiding Maatschappij</i>
TC	Technical Cooperation

PROJECT SUMMARY

REPUBLIC OF SURINAME

CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS (CCLIP): JUST, CLEAN AND SUSTAINABLE ENERGY TRANSITION FOR SURINAME (SU-O0012)

FIRST INDIVIDUAL OPERATION: BIO-ECONOMY EMPOWERMENT IN SURINAME'S INDIGENOUS COMMUNITIES THROUGH ACCESS TO WATER, ENERGY AND TELECOMMUNICATIONS (BIO-SWEET) (SU-L1076 & SU-G1010)

Financial Terms and Conditions							
Borrower: Republic of Suriname				Flexible Financing Facility ^(a) Ordinary Capital			
Executing Agency: N.V. Energie Bedrijven Suriname (EBS)				Amortization Period:	23.5 years		
Instrument and Modality: Global Multiple-Works operation under Conditional Credit Line for Investment Projects (CCLIP)				Disbursement Period:	6 years		
Financing		CCLIP		First Individual Operation		Grace Period:	7 Years ^(b)
Source	Amount (US\$)	%	Amount (US\$)	%	Interest rate:	SOFR Based	
IDB (Ordinary Capital):	135,000,000	100	45,000,000	96.8	Credit Fee:	(c)	
Low Carbon Energy Fund for People and Planet (Investment grant) SU-G1010 ^(d):	0,0	0	1,500,000	3.2	Inspection and supervision fee:	(c)	
					Weighted Average Life (WAL):	15.25 years	
Total:	135,000,000	100	46,500,000	100	Currency of Approval:	Dollars of the United States of America	
Project at a Glance							
<p>Objective of the Conditional Credit Line for Investment Programs (CCLIP). The general 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, and telecommunications services in rural areas and by promoting the decarbonization of the electricity sector.</p> <p>General objective of the First Individual Investment Operation. The general objective of the first operation of the CCLIP is to promote the socio-economic development of villages in the Amazon rural areas of Suriname. The specific objectives are: (i) to 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) to foster the development of a bio-economy in the Amazon rural areas of Suriname with a gender and diversity perspective.</p> <p>Special Contractual Clauses prior to the first disbursement. The borrower and/or executing agency will submit evidence of the following: (i) the approval and entered into force of the Program Operation Manual ("POM"), which includes as annexes the Environmental and Social Management Plan (ESMP); the Environmental and Social Management Framework (ESMF) and the ESAP, in the terms and conditions previously agreed upon with the Bank; (ii) appointed or hired the key personnel for the Program execution team, within the existing EBS operational structure, to include: (a) a Program manager; (b) a procurement specialist; (c) a financial specialist; (d) a specialist in renewable energy systems; (e) a water specialist; (f) an environmental specialist; and (g) a social specialist (¶3.7).</p> <p>Other conditions precedent may be consulted in the Environmental and Social Review Summary (ESRS).</p> <p>Special execution conditions for Subcomponent I.3. Prior to the start of this Subcomponent's first procurement process: (i) a memorandum of understanding between EBS and Telesur has been signed and has entered into force, specifying the conditions under which the equipment will be operated and maintained (¶3.8).</p> <p>Special execution conditions for Subcomponent I.4. Prior to the start of this Subcomponent's first procurement process: (i) the signature and entry into force of a Consultancy Service Contract between EBS and Amazon Conservation Team (ACT) (¶3.9).</p>							
Exceptions to Bank Policies. None.							

Strategic Alignment									
Objectives ^(e) :	O1 <input checked="" type="checkbox"/>			O2 <input checked="" type="checkbox"/>			O3 <input type="checkbox"/>		
Operational Focus Areas ^(f) :	OF1 <input checked="" type="checkbox"/>	OF2-G <input checked="" type="checkbox"/>	OF2-D <input checked="" type="checkbox"/>	OF3 <input checked="" type="checkbox"/>	OF4 <input checked="" type="checkbox"/>	OF5 <input checked="" type="checkbox"/>	OF6 <input checked="" type="checkbox"/>	OF7 <input type="checkbox"/>	

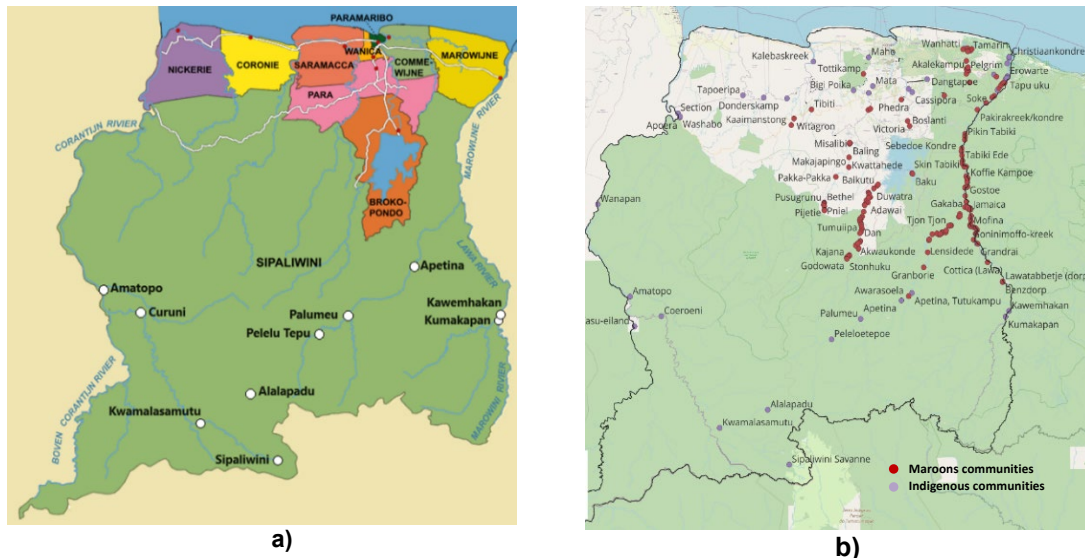
- a) Under the Flexible Financing Facility (document FN-655-1), the borrower has the option to request modifications to the amortization schedule, as well as currency, interest rate, commodity, and catastrophe protection conversions. In considering such requests, the Bank will take into account operational and risk management considerations.
- b) Under the flexible repayment options of the Flexible Financing Facility (FFF), changes in the grace period are possible as long the Original Weighted Average Life (WAL) and the last payment date, as documented in the loan agreement, are not exceeded.
- c) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors during its review of the Bank's lending charges, in accordance with the relevant policies.
- d) SU-G1010 co-financed under the LCE with resources from the Global Energy Alliance for People and Planet (GEAPP) and administered by the IDB pursuant to the provisions of the proposal to create the fund (document GN-3073-1).
- e) O1 (Reduce poverty and inequality); O2 (Address climate change); and O3 (Bolster sustainable regional growth).
- f) OF1 (Biodiversity, natural capital and climate action); OF2-G (Gender equality); OF2-D (Inclusion of diverse population groups); OF3 (Institutional capacity, rule of law, and citizen security); OF4 (Social protection and human capital development); OF5 (Productive development and innovation through the private sector); OF6 (Sustainable, resilient, and inclusive infrastructure); and OF7 (Regional integration).

I. PROJECT DESCRIPTION AND RESULTS MONITORING

A. Background, Problem Addressed, and Justification

- 1.1 **Socioeconomic context.** With an area of 163,820 km² and a population of 618,040 people¹ (of which 34% reside in rural areas), Suriname has a forest cover of around 93%² and is home to one of the most well-preserved areas of the Amazon biome. Approximately 14% of Suriname's population lives in the Amazon Rainforest (locally known as Hinterland), most in the Sipaliwini district (Figure 1). Indigenous and Maroon³ people are predominant in the Hinterland,⁴ where over 200 villages can only be reached by boat or plane. The southern part of Suriname is the most isolated area, practically only reachable by air. It can be geographically organized into two regions: south-east (Pelelu Tepu, Palumeu, Apetina, Kawemhakan, and Kumakapan) and south-west (Amatopo, Coeroeni, Alalapadoe, Sipaliwini, and Kwamalasamutu).

Figure 1. a) Suriname's districts and b) Maroons and Indigenous communities (in South Suriname). Source: Team compilation and [TTA,2023](#).



- 1.2 Suriname's economy is heavily dependent on the oil and mining sectors (mainly crude oil and gold), which account for 86% of its foreign exchange earnings and 25% of government revenues.⁵ Over the last decade, the country has experienced a relatively low average Gross Domestic Product (GDP) growth rate of about 0.4% annually up to 2022. This period includes a sharp economic contraction in

1 [OEL#10](#) [1].

2 [OEL#10](#) [2].

3 Maroon community refers to a group of formerly enslaved Africans and their descendants, who gained their freedom by fleeing chattel enslavement and settled in remote mountains or dense overgrown tropical terrains near the plantations. Many are found in the Caribbean, including Suriname. Source: Encyclopedia Britannica. [Maroon Community](#) (London, 2019).

4 Nearly 54,000 Maroons and 8,000 Indigenous distributed in about 300 isolated villages.

5 [OEL#10](#) [3].

- 2020 followed by a partial recovery⁶ and high inflation, which averaged 28.7% in the same period. The monetary policy has been adjusting to manage this inflation, with the policy interest rate reaching 8.2% in 2022, reflecting efforts to stabilize the economy. Nevertheless, fiscal issues persist, notably managing a high public debt and a fiscal deficit averaging about 4.6% of GDP.
- 1.3 Despite the country's high Human Development Index,⁷ nearly 26% of the population lives in poverty,⁸ and urban-rural disparities persist. While in urban areas, the non-extreme and extreme poverty rates are 26.5% and 1.8%, respectively; in rural areas, they are 32.2% and 15.7% (as of 2018).⁹ Other socioeconomic challenges in Suriname include: (i) education and skill development: low levels of educational attainment and disparities in access to quality education, especially in rural and interior regions, hinder economic opportunities and social mobility;^{10,11} and (ii) healthcare and social services: access to quality healthcare and social services is limited, particularly in rural and indigenous communities, affecting overall well-being and life expectancy.¹²
- 1.4 **Energy sector institutional framework.** The *Ministerie Van Natuurlijke Hulpbronnen* (MNH) or Ministry of Natural Resources, is responsible for energy policy and supervision of the energy sector. Energie Bedrijven Suriname (EBS - Electricity Company of Suriname) is a vertically integrated state-owned utility company supervised by the MNH that oversees the operation of the power system. EBS shares its responsibility for rural electrification with the *Dienst Electrificatie Voorziening* (DEV), the MNH's department of rural energy, which operates the small power systems located in isolated and remote communities where EBS networks do not reach. Finally, the newly established Energy Authority of Suriname (EAS) is responsible for setting regulations within the energy sector.
- 1.5 **Energy sector context.** As of 2022, Suriname's national electricity access rate was 98.2%¹³ and the installed capacity of power generation 586.3MW (66% from fossil fuels, 32% from hydroelectric power and about 2% from other renewable energy resources such as solar PV and biomass).¹⁴ The National Power System (NPS) consists of seven isolated power networks served by EBS,¹⁵ based on hydro and thermal generation. *Energievoorziening Paramaribo* (EPAR) is the largest network, with around 180,000 customers in the urban Paramaribo area, the semi-urban district of Wanica and the surroundings rural districts of Saramacca, Commewijne and Para, with peak demand of around 220MW. EPAR obtains

⁶ [OEL#10](#) [4].

⁷ According to [United Nations, 2022](#), Suriname's Human Development Index (HDI) is 0.730, which places it in the "high human development" category. This ranking is higher than the average HDI for Latin America and The Caribbean (LAC), which is approximately 0.763 (as of 2022).

⁸ [OEL#10](#) [5].

⁹ [OEL#10](#) [6].

¹⁰ In Suriname, the share of young people not in education, employment, or training (NEET) is among the highest in the Caribbean – accounting for a quarter of all young people at the national level and almost a third in rural areas ([ILO, 2023](#)).

¹¹ [OEL#10](#) [7].

¹² Life expectancy at birth in 2023 was 72.8 years, lower than the average for the Region of the Americas ([PAHO, 2023](#)).

¹³ [OEL#10](#) [8].

¹⁴ [OEL#10](#) [9].

¹⁵ The seven Systems covers the following locations: Paramaribo, Nickerie, Apoera, Wagenigen, Coronie, Moengo and Albina.

around 50% of its electricity from the 189MW Afobaka hydropower plant, 30% of the electricity is supplied through Staatsolie 96MW Heavy Fuel Oil (HFO) power plant¹⁶ located in Tuit Lui Faut refinery, and the difference is generated using HFO and diesel from two additional power plants that add up to 169.6MW of capacity, owned, and operated by EBS. In rural areas, EBS operates solar plants in Nickerie (2MWp), Coronie (300kWp), Brownsberg (500kWp), Alliance (250kWp), all of them integrated into the power system, which is expected to reduce the use of fossil fuels for power generation. EBS also runs the Pokigron/Atjoni 500kWp and the Godo Olo 250kWp solar hybrid mini-grids (equipped with batteries) to provide 24/7 electricity service to rural villages; and is currently working on 10 solar hybrid plants in the Upper Suriname river area (1.73MWp).¹⁷ Historically, Suriname has subsidized electricity consumption, but the country is now moving towards reducing these subsidies whereby low-income households will receive instead a stipend known as social subsidy. Even though EBS is a public company, and the sector lacks private investment, EBS is working on a renewable energy auction tender framework expected for 2025. Finally, tariffs are binomial with a fixed consumption rate.¹⁸

1.6 **Water sector context and institutional framework.** The MNH oversees water supply, as the Government of Suriname (GoS) recognizes water as an essential need and human right crucial for health, dignity, and prosperity. This responsibility is carried out by the N.V. *Surinaamsche Waterleiding Maatschappij* (SWM - Surinamese Water Company), a state-owned utility that supplies water to around 80% of the coastal plain population. The *Dienst Watervoorziening (NH/DWV - Water Supply Division)* is a department in the MNH that provides safe drinking water to 40% of the interior population, which translate to around 20,000 connections. The MNH oversees SWM's and NH/DWV's performance and guides water management. SWM and NH/DWV are public entities, the sector lacks private investment. Other agencies are involved in the water sector including the Ministry of Health, the Ministry of Agriculture, Animal Husbandry and Fisheries, the Ministry of Public Works, Transport and Communication, the Ministry of Regional Development, and EBS who has worked actively in Moengo (district of Marowijne). There is no independent regulator for the sector; in its absence, the Council of Ministers approves tariffs which are heavily subsidized and not cost reflective.¹⁹

1.7 **Telecommunications²⁰ sector context and institutional framework.** Telesur, a state-owned company, manages the public telecommunications network in urban, suburban and some rural areas, with Digicel (private company) being the other private licensed operator that only operates in the urban and suburban areas. Suriname has over 108,000 fixed telephony subscribers; about 125,000 fixed broadband subscribers²¹ and nearly 66% of the population has internet access.²² Mobile towers in Paramaribo use EBS energy, while the interior relies

¹⁶ *Staatsolie* recently increased its installed capacity to approximately 96MW of HFO power plants in *Tuit Lui Faut* refinery, to support crude oil processing operations and sell electricity through Power Purchase Agreements with the GoS.

¹⁷ All the remaining generation in rural areas are based on diesel.

¹⁸ [OEL#10](#) [10].

¹⁹ [OEL#10](#) [11].

²⁰ Internet, voice, and broadcasting.

²¹ [OEL#10](#) [12].

²² Idem.

on solar panels or diesel generators. The *Ministerie van Transport, Communicatie en Toerisme* (Ministry of Transport, Communications and Tourism) is responsible for formulating telecommunications public policies. The *Telecommunicatie Autoriteit Suriname* (Telecommunications Authority of Suriname) is responsible for regulating and supervising the telecommunications sector. Tariffs in the telecommunications sector are not subsidized.²³

1.8 Energy transition in Suriname. Suriname is progressing towards a more sustainable energy landscape by transitioning from fossil fuels to renewable energy (RE).²⁴ Despite the potential economic boost from oil and gas, which according to the latest IMF assessment is assumed to begin by the end of 2028,²⁵ Suriname remains committed to its climate commitments, which include maintaining the share of electricity from renewable sources above 35% by 2030; expanding the grid to the interior, connecting off-grid systems with the national grid, focusing on integrating solar power systems, mini-grids, and micro and small scale hydropower developments; and implementing fiscal sustainability measure to promote energy efficiency.²⁶ Being a carbon-negative country²⁷ due to its vast forest cover, it faces the challenge of balancing economic development with its role in global climate dynamics.²⁸ The country has a national policy to establish a sustainable energy sector, including: (i) the [Electricity Act of 2016](#), which provides a framework for increasing the deployment of renewable sources like solar and wind power, improving power market's regulations, and reducing subsidies; and (ii) as a member of the Caribbean Community (CARICOM). The GoS also aims to achieve universal energy access by 2030 in compliance with the United Nations Sustainable Development Goals (SDG). Furthermore, the interior regions targeted by the project are expected to experience significant climatic shifts. According to the latest climate projections, these areas are expected to experience a rise in average annual temperatures by approximately 2-3°C by 2050, leading to more frequent and intense heatwaves.²⁹ Given Suriname's high vulnerability to climate change, it is crucial to enhance resilience in both coastal and interior regions.

1.9 Problem to be addressed and rationale. The lack of socio-economic opportunities in the Amazon rural areas of Suriname constitutes the development problem that this program will contribute to solve. Although this problem is attributed to multiple determinants, this operation focuses on the following: (i) the lack of reliable and sustainable basic services³⁰ and infrastructure that hinders villages from achieving sustainable development goals; (ii) the inadequacy of action plans that promote income-generating activities in rural areas; and (iii) the

²³ [OEL#10](#) [13].

²⁴ In the last 5 years more than 6.5MWp of Solar power has been installed (more than 10% increase from total capacity). Source: EBS.

²⁵ [OEL#10](#) [14].

²⁶ State Decree No.41 dated April 4th, 2024, cuts the electricity subsidies for Suriname and promotes energy efficient measures.

²⁷ Suriname is a net-zero country-one of only three in the world (along with Panama and Bhutan)- classified as carbon-negative because it absorbs more carbon than it emits.

²⁸ [OEL#10](#) [15].

²⁹ [OEL#10](#) [16].

³⁰ In this program, "basic services" include potable water supply, sanitation, electricity, and telecommunication.

limited institutional capacity to plan and manage electrification and water projects, incorporating principles of sustainability and resilience.

- 1.10 **The lack of reliable and sustainable infrastructure in the electricity, water, and telecommunications sectors in rural areas is reflected in the coverage rates.** While the national electricity access rate is reported as 98.2%,³¹ it is less than 90% in rural areas, especially in the rural villages of the Hinterland. Nearly 20,000 households lack access to electricity³² or rely on small diesel generators. The service is limited to a few hours of operation due to the financial constraint posed by the lack of resources to purchase fuel. Moreover, electricity for these remote communities averages an estimated generation cost of US\$1.75/kWh, and can reach well beyond US\$4.00/kWh when diesel must be flown in by chartered aircraft.
- 1.11 Water supply is also limited, with less than 60% of the rural population having access to safe drinking water.³³ Some villages have piped water supply, many of them sponsored and installed by Non-Governmental Organizations (NGOs) or governmental funds. Management and maintenance are under MNH's responsibility, where collaboration and handover between sponsors and the ministry, among other factors, create challenges to the sustainability of these systems. Some villages with limited water infrastructure are located near a water source, mostly alongside the banks of a river, but some villages rely on creeks or the Brokopondo Lake. Raw water sources for water supply systems in the rural areas are limited. There is no known groundwater in aquifers and/or is difficult to search given the soil is rocky and generally consists of base rock formation.
- 1.12 Telecommunications infrastructure is poor or non-existent in the interior, but reliable along the coast. While 4G coverage reaches 87% of the population, remote areas remain disconnected, with rural internet access at only 27% and the fiber optic network restricted to the northern regions. Energy supply for mobile towers in Paramaribo depends on EBS, while the interior relies on solar panels or diesel generators, which often can't guarantee uninterrupted telecommunications services. Due to limited infrastructure, building and maintaining telecommunication towers in rural areas requires significant logistical operations and costs.
- 1.13 Other factors such as high transport costs,³⁴ high dispersity and distance to rural villages, and the lack of roads affect the provision of basic services in rural areas hindering the development of these villages. Limited technical capacity, a lack of inventory of existing systems, the number of villages without access to basic services, and multiplicity of stakeholders exacerbate the challenge. In this context, financial constraints in capital and operational costs, where the maintenance cost alone inevitably exceeds the collected fees, are an obstacle to private sector investment.

³¹ [OEL#10](#) [17].

³² This represents 13% of the population or over 40% of people in rural areas when considering users with limited access. [Formulation of the Rural Electrification Plan for Suriname \(Report\), 2023](#).

³³ [OEL#10](#) [18].

³⁴ Fuel transport to remote villages is mainly done by boat or airplane because only villages near Paramaribo can be reached by road. Air transport is vital for remote Suriname communities, being the main link to isolated areas. River transport is unreliable during the dry season, and roads are lacking, making air travel crucial.

- 1.14 **The limited institutional capacity to plan and manage electrification and water projects affects the sustainability of the services.** The limited technical capacity of MNH for planning and managing electrification and water projects affects the sustainability of the service. For such reason, EBS will take the lead to execute this program. While EBS has experience in rural electrification, they continue to engage and collaborate with NH/DWV by providing energy for water services in remote locations. In this regard, EBS needs to continue strengthening its operational capacity to implement rural electrification and collaborate with NH/DWV on water projects,³⁵ given the challenges of: (i) logistical complications in reaching the last mile that make operation and maintenance difficult; and (ii) insufficient technical capacities to develop and update electrification plans (¶3.1).
- 1.15 **The inadequacy of action plans that promote income-generating activities in rural areas is evidenced in the limited bio-economy³⁶ development.** The lack of investment in infrastructure (such as energy (¶1.4), water (¶1.6), telecommunications (¶1.7), transportation, processing facilities, access to markets, and storage capabilities) in the Amazon rural areas of Suriname, hampers the development of a sustainable bio-economy. This limitation affects various sectors such as traditional medicine (e.g. propolis, honey, cat's claw, etc.), artisanal harvested foods (e.g., *acai*, Brazil nut, etc.), and ecotourism in pristine forests.³⁷ Furthermore, the average monthly salary in the Amazon rural areas is approximately US\$40, significantly lower than the national minimum wage of US\$160, exacerbating the need for steady income-generating opportunities in the region. Specifically, in south-Suriname, dominated by the Wayana tribe in the south-east region and by the Trio tribe in the south-west region, communities generate incomes by selling and trading fish, wild meat, wildlife, arts, and crafts, by providing services to visitors (governmental institutions, NGOs, tourists, etc.), and in some cases by being employed by the government as traditional authorities, public workers, and teacher's assistants. However, most of these sources of income are seasonal; depending on the demand and availability of the sources, and there is still a pressing need for income-generating activities.
- 1.16 **Gender, Indigenous Peoples and Maroons.** In Suriname, Indigenous and Afro-descendant women face significant barriers to economic and social advancement. They experience lower levels of labor participation (45% compared to 68% for men)³⁸ and higher unemployment rates (11% for women compared to 6% for men).³⁹ Most employed women work in agricultural activities (62%) while men engage in technical and labor-intensive roles.⁴⁰ These challenges are compounded by limited access to electricity, water, and telecommunications in rural areas, which restrict their economic activities and increase time spent on

³⁵ A water specialist from NH/DWV will be assigned to be part of the EBS project execution unit to enhance the project management in the implementation of the water subcomponent of this program.

³⁶ Under the Green Climate Fund and compatible with the IDB Group's PAIA sector guidance, the standard Bio-economy definition refers to: "Any economic activity based on using natural renewable biological resources, from both land and water, to obtain food, materials, and energy sustainably without compromising their availability for future generations."

³⁷ [The NGO ACT](#) partners locally with indigenous and other local communities to protect Amazon rural areas and strengthen traditional culture and bioeconomy.

³⁸ [OEL#10](#) [20].

³⁹ [OEL#10](#) [21].

⁴⁰ [OEL#10](#) [22].

household chores.⁴¹ Additionally, lower levels of education in the interior contribute to higher poverty rates⁴² among these populations, as only 45% of the rural interior population has completed secondary education compared to 96% in urban areas.⁴³ Indigenous and Maroon women in rural communities face additional educational barriers, with difficulties in signing their names and limited knowledge of Dutch, the country's official language, further hindering their ability to access economic opportunities outside of subsistence farming.⁴⁴ Moreover, men dominate decision-making roles within households and communities, restricting women's involvement in planning and communal activities.⁴⁵ Productive uses of electricity greatly benefit women and can help reduce gender inequalities.⁴⁶ Improvements in energy, water, and telecommunication infrastructure could have important impacts on time allocation, increasing the opportunities for Maroon and Indigenous women to learn new skills and engage in paid work. Furthermore, targeted technical training on the installation and maintenance of the energy and water systems could significantly boost skills and labor opportunities for women in these communities. This approach not only empowers the women through new employment opportunities but also benefits the entire community by providing a locally sourced workforce that can sustain and repair the new infrastructure. In addition, by focusing on targeted bioeconomic activities and community awareness, the project aims to maximize benefits for Indigenous and Maroon women, fostering their economic empowerment and promoting sustainable development within their communities.

- 1.17 **The solution and the program's impact.** This program is designed to address the challenges described, thereby contributing to socio-economic development in the Amazon rural areas and furthering the GoS's efforts to achieve a just and clean energy transition. The program is designed to have a transformative impact by: (i) providing access to sustainable and reliable electricity, water, and telecommunication services in isolated rural villages where private investment is scarce due to high investment, operation, and maintenance costs; (ii) promoting local bioeconomy activities, with a particular focus on benefiting women; and (iii) strengthening the institutional capacity to implement and operate the financed infrastructure. Moreover, the program will target impact-driven interventions through an integral approach anchored in electricity provision as an enabler of water and telecommunications services and productive activities.⁴⁷ For this, the integral interventions will be of two types: i) energy, water, telecommunication, and bioeconomy activities; and ii) energy water and bioeconomy activities.⁴⁸

⁴¹ [OEL#10](#) [23].

⁴² In 2020, 26% of Suriname's population lived in poverty ([World Bank, 2023](#)), with poverty levels being greater amongst the Maroon and indigenous population living in the interior.

⁴³ [OEL#10](#) [24].

⁴⁴ Idem.

⁴⁵ Idem.

⁴⁶ [OEL#10](#) [25].

⁴⁷ Bioeconomic activities require the availability of all services to be productive. For instance, within the Curuni and Amotopo Ecological, electricity is vital to provide tourism services to visitors, water is essential, and it is crucial for operators/visitors to stay connected.

⁴⁸ This is because some of the villages already have internet/communications coverage. Each village is ensured that access to basic services is provided and due to their remote location, the integral intervention is justified. In all cases, the unit of analysis is the Village.

- 1.18 **Evidence.** The literature notes that access to basic services is a central pillar for a just and inclusive transition and is one of the basic conditions to be met for reducing poverty and improving social well-being.⁴⁹ The provision of these infrastructure services is key for a country's economic and social development. It also stresses the importance of investments to implement an inclusive and people-centric transition, recognizing the needs of the most vulnerable communities to ensure the universal provision of sustainable, reliable, affordable, and modern basic infrastructure services.
- 1.19 **Off-grid RE systems play a key role in closing the energy access gap.**⁵⁰ Off-grid solutions would be the best-fit solution to address at least 40% of the electricity access gap in Latin America and The Caribbean (LAC). Out of those, 30% would be mini-grids and the remaining 70% would consist of standalone systems.⁵¹ In particular, the transition to RE sources in remote areas represents considerable savings in current fuel expenditure, improves the quality of service, increases reliability and service hours, and reduces environmental risks pegged to fossil fuel transportation (by land, river, or air). For instance, running costs for solar mini-grids in Suriname can range from US\$0.15 - 0.25/kWh (excluding capital cost) depending on the remoteness of the location. When assessing the levelized cost of energy, which includes capital costs, communities in South Suriname experience a stark contrast: US\$4.00/kWh for diesel versus US\$1.00/kWh for solar PV mini-grids.⁵²
- 1.20 **Access to electricity fosters socioeconomic development.** Access to modern energy is a prerequisite and a catalyst for improving people's living conditions.⁵³ Energy consumption per capita is a key development indicator to avoid affecting GDP growth.⁵⁴ Access to electricity also improves health and education services,⁵⁵ by enhancing the quality and efficiency of health care in hospitals and the time devoted to educational development.⁵⁶
- 1.21 **Access to electricity enables the consumption of energy for productive uses.** Access to electricity: (i) enables the use of other technologies (such as technified irrigation) to increase agricultural productivity⁵⁷ and support crop diversification; (ii) promotes an increase in the share of services activities, such as commerce, carpentry, and mechanics shops, in comparison with agricultural activities;⁵⁸ and

49 Energy Sector Framework Document- GN-2830-8. BID (2018).

50 [OEL#10](#) [26].

51 [OEL#10](#) [27].

52 [OEL#2](#).

53 [United Nations, 2021](#); [Chaury et al., 2004](#) provide evidence that increased electricity access in rural communities improves the standard of living in terms of domestic comfort and security. [Acharya & Sadath, \(2019\)](#), report a negative relationship between economic development and energy poverty.

54 [Barreto, C. and Campo, J., 2012](#) find that a 1% increase in energy consumption generates a 0.40% increase in GDP.

55 [OEL#10](#) [28].

56 [OEL#10](#) [29].

57 In Brazil, an increase on the order of 10% in electricity coverage enabled a 9.8% increase in agricultural productivity. See [Szerman, D., Assunção, J., Lipscomb, M., and Mobarak, A., 2022](#).

58 In rural communities in Cochabamba, Bolivia, commerce accounts for 20% of the main activities, compared with 5% when there is no electricity.

(iii) contributes to time savings so that companies can diversify their productive activities and, in so doing, support increases in household income.⁵⁹

1.22 **Access to water is crucial for the development of a sustainable bioeconomy.**

Water is essential for various bioeconomic activities, including agriculture, forestry, and the production of bio-based products. Efficient water use can mitigate soil erosion, nutrient leaching, and other environmental impacts, ensuring the sustainability of bioeconomic activities.⁶⁰ Additionally, water's role extends beyond mere availability; it includes maintaining water quality and managing the risks associated with intensive land use. These considerations are vital for promoting a bioeconomy that balances economic development with environmental sustainability.⁶¹

1.23 **Improved access to electricity is linked to improved access to water⁶² and telecommunications services.**

Electricity is essential for operating pumps in water extraction, treatment, and distribution systems. This is crucial especially in rural or remote areas where water sources might not be readily accessible. Without reliable electricity and telecommunications, these systems can fail, leading to poor water supply. Beyond this, integrating solar power into water systems can capture additional green value by promoting the sustainable use of resources, enhancing pollution prevention and control, and safeguarding Suriname's natural capital. The telecommunication sector has a strong link with the energy and water sector, since remote monitoring and operation (reliability) of solar mini-grids connectivity services are needed, and telecommunications stations require electricity to operate 24/7. Therefore, by promoting the development of mini-grids in the Amazon rural areas of Suriname, telecommunications are promoted too. Finally, access to energy, water and telecommunications can catalyze the bioeconomy by providing product placement, increase productivity and quality, and a platform for communities to showcase non-timber forest products (e.g., honey, propolis, Brazil nut, etc.), offer ecotourism services, share and document their culture, knowledge and heritage.

1.24 **Synergies with IDB Invest.**

The remoteness and small population size of the targeted rural areas limit the opportunities for the scale needed to attract the private sector. The lack of basic infrastructure and low electricity demand further reduce the market's appeal, making it difficult for projects to be profitable. Therefore, the project will focus on facilitating the development of bio-business opportunities to drive sustainable economic activity in these regions. At the same time, the energy sector is collaborating with IDB-Invest on new initiatives, particularly in expanding renewable energy generation for the Paramaribo urban area.

1.25 **Resilience, Innovation and digitalization.**

Resilience is crucial in all networked infrastructure projects, especially those delivering critical services. The infrastructure systems under this program are designed to ensure continuous service delivery despite natural hazards such as floods, landslides, storms, and other stressors. The program emphasizes the integration of energy backup

⁵⁹ [OEL#10](#) [30].

⁶⁰ [OEL#10](#) [31].

⁶¹ [OEL#10](#) [32].

⁶² [OEL#10](#) [33].

systems, renewable energy sources, and advanced energy management techniques. Additionally, it focuses on building institutional capacity for preparedness and recovery, as a resilience preventative measure. By adopting state-of-the-art practices and exploring future directions, the program aims to enhance resilience in infrastructure systems, thereby enabling robust and uninterrupted services. The program will promote: (i) the use of state-of-the-art isolated renewable energy, water, and telecommunication systems; (ii) innovative remote monitoring, telemetry, and operation of those systems; (iii) targeted training on operation and maintenance of the energy, water, and telecommunication systems; and (iv) the application of Suriname's cybersecurity framework to all program stakeholders.^{63,64}

- 1.26 **Climate change is a priority in Suriname.** The [2022-2026 Multi-Annual Development Plan](#) emphasizes environmental sustainability as a long-term goal. It underscores the GoS's commitment to providing affordable, reliable, and sustainable energy, water, and telecommunication services. Similarly, Suriname's 2020 Nationally Determined Contribution (NDC) commits the country to reduce carbon emissions with renewable energies above 35% by 2030, furthering the expansion of grid-connected and off-grid capacity.⁶⁵ Suriname's NDC presents a package of policies and measures with sectoral sub-targets, including enhanced contributions from four out of the six emitting sectors of the country: forests, energy, agriculture, and transport, which together cover an estimated 70% of total emissions. This program will support Suriname in reducing its GHG emissions in the electricity sector, by reducing the use of diesel in the rural areas in support of national climate targets and decarbonization pathways. The operation aligns with the 2019-2029 National Adaptation Plan (NAP), which outlines strategies to manage and mitigate long-term climate risks. Key sectors prioritized in the NAP include water resources, sustainable forestry, energy, agriculture, livestock, and fisheries.
- 1.27 **Inter-American Development Bank (IDB) experience in Suriname's energy sector.** The Bank has actively supported the GoS efforts to transform the energy sector through operations in energy infrastructure, rural electrification, and institutional strengthening. Noteworthy are the following operations: (i) [3059/OCSU](#), executed by EBS, which financed a 500kW solar mini-grid for energy access purposes; (ii) [GRT/FM13774-SU](#), executed by the MNH with the technical support of EBS, which financed the installation of a 250kW off-grid solar mini-grid; and (iii) [4931/OC-SU](#), executed by EBS, which is financing ten solar mini-grids in the Upper Suriname region. The Bank also supported the GoS in: (i) the elaboration of a georeferenced least-cost Rural Electrification Plan (financed by [ATN/OC-19699-RG](#)), which determined the optimal solution and estimated the investments needed to achieve universal energy access in Suriname; and (ii) the establishment of a sustainable institutional and regulatory framework for the implementation and operation of solar mini-grids in the Hinterland of Suriname (financed by [ATN/OC-19678-SU](#)). Currently, the IDB is financing the MNH and EBS to install several mini-grids in other isolated villages in the rural areas, such

63 [OEL#10](#) [34].

64 [OEL#10](#) [35].

65 [OEL#10](#) [36].

as the Upper Suriname region⁶⁶ with 10 mini-grids (including batteries) that will provide up to 2MW of electricity for more than 2,000 families.

- 1.28 **IDB experience in Suriname’s water sector.** The Bank has also supported the water sector of Suriname. In 2008, the Bank supported the GoS with a Technical Cooperation (TC) operation ([ATN/SF-11374-SU](#)) “Suriname Water Supply Master Plan (SWSMP)”, which identified capital investment needs of US\$250,000,000 between 2009 and 2024 to improve water services. As a result of this operation, the “Water Supply Infrastructure Rehabilitation Program” ([2451/OCSU](#)) was formulated in 2010 to address the most pressing issues regarding water supply in priority districts of the coastal area and to strengthen the growing institutional and executing capacity of the SWM. This loan benefited over 16,600 households from connection to an upgraded water supply network. In 2014, the TC ([ATN/OC-14410-SU](#)) “Assessment of Aquifer Vulnerability and Yield Potential of Coastal Aquifers in Suriname” was approved and it showed that there is abundant fresh groundwater available in the coastal plain of Suriname to serve the drinking water supply needs through 2040 and beyond. In 2022, the “Water Supply Modernization Program” ([4986/OC-SU](#)) was approved and includes lessons learned from similar activities started under [2451/OC-SU](#) with a further reduction of Non-Revenue Water (NRW) levels, capacity building for improved operational and management efficiency, increased water production capacity, and a study for water supply services in the Interior Region considering climate change aspects. The proposed project builds on and incorporates lessons learned from the previous operations.
- 1.29 **IDB experience in Suriname’s telecommunications sector.** Along with the ongoing Bank support to Suriname’s energy and water sectors, the Bank has supported the telecommunication sector through the crosscutting TC “Support for rural electrification with RE, potable water and telecommunications in Suriname” ([ATN/LE19677-SU](#), [ATN/OC-19678-SU](#)) to promote the social and economic development of the rural villages in the Amazon Hinterland of Suriname by increasing access to affordable, reliable, clean and sustainable electricity, potable water, and communication services. Also, the Bank is supporting the GoS through the TC “Language Training and Connectivity” ([ATN/OC-20233-SU](#)) to explore connectivity options for schools and it is financing preparation studies to provide the GoS with the necessary resources to bring reliable internet services to unconnected and underserved schools.
- 1.30 **IDB experience in Suriname’s bio-economy projects.** The Bank has an active portfolio of projects to promote the deployment of bio-economy in rural areas: (i) [5860/OC-SU](#), [5861/GN-SU](#) contributes to the productivity increase of Surinamese Micro, Small & Medium Enterprises through access to finance for productive investments, with an emphasis on bio-businesses; (ii) [ATN/ME-19890-SU](#), an IDB Lab operation,⁶⁷ will pilot production of cassava through a local cooperative led by female farmers; and (iii) [ATN/GN-20053-SU](#) will promote formal employment opportunities in the Amazonian Region of Suriname

⁶⁶ Finance by [SU-L1055](#).

⁶⁷ IDB Lab is financing this project (US\$150,000) which aims at piloting a model to reset productive and resilient livelihoods for tribal women farmers who are engaged in the cassava value chain in Suriname.

through training to indigenous and tribal communities. This project will incorporate lessons learned and create synergies from these operations.

1.31 **Lessons learned.** The design of the program builds on and incorporates lessons learned from other Bank-financed operations related to increasing access to electricity including operations [3165/OC-PN](#) in Panama, [3725/BL-BO](#) in Bolivia, [3610/OC-CO](#) in Colombia, [GRT/SX-17123-HO](#) in Honduras, [2342/BL-NI](#) in Nicaragua, [3087/OC-EC](#) in Ecuador, [4900/GR-HA](#) and [GRT/CF-17708-HA](#) in Haiti. The lessons learned from these operations were considered in the design of this program, including the following: (i) Solar hybrid mini-grids are suitable technologies for delivering electricity service in the most vulnerable communities, thereby making it possible to lower the total cost of electricity supply (Subcomponent I.1); (ii) Communities need not only electricity, but all basic services, to drive and empower local bioeconomy activities (Subcomponent I.1, I.2, I.3 and I.4); (iii) community engagement during design and implementation phases to ensure the program sustainability through tariff payment and local participation in maintenance services (Subcomponent I.4); and (iv) promotion of productive uses with a gender perspective (Subcomponent I.4). In addition, thanks to lessons learned from operations [2460/BL-BO](#) and [3165/OC-PN](#), Component II includes activities to improve the institutional capacity of EBS for the design and monitoring of projects. Additionally, results from previous projects in Suriname such as [3059/OC-SU](#)⁶⁸ showed: (i) the program was successful in supporting the reinforcement of the management, operations, and administration systems and infrastructure of the EBS; (ii) all households in Powakka, the project's target area, are having 24/7 access to electricity from EBS; and (iii) customers are being billed, and are paying, for electricity, contributing to the financial sustainability of the rural electrification sector. Project [3403/OC-SU](#)⁶⁹ similarly showed: (i) the Program helped EBS advance towards becoming a more modern, efficient, and transparent utility with a renewed strategic focus on improving operational capacity and efficiency and its investment framework; (ii) upgrading critical infrastructure also contributed to an increase in the service area in the districts of Wanica and Para, increasing the number of customers and electricity supplied in these areas; and (iii) the importance of educational events to promote Energy Efficiency and Renewable Energies. Lessons from these interventions in Suriname were also integrated into Subcomponents I.1, I.2, I.3, I.4 (¶1.42) and Component II (¶1.47).

1.32 **Value added by the Bank: complementarity with technical assistance.** This operation is supported by TC [ATN/LE-19677-SU/ATN/OC-19678-SU](#), "Support for rural electrification with renewable energy, potable water and telecommunications in Suriname" (US\$500,000), which finances the technical, economic, and environmental studies associated with the loan operation, and support for EBS's technical and procurement team, among others.⁷⁰ In 2023, the Bank supported energy sector strengthening through technical cooperation operation [ATN/OC-19699-RG](#), which financed the definition of a regulatory and institutional framework for the implementation and operation of rural electrification projects in the Hinterland of Suriname, and the electrification plan for Suriname, which,

⁶⁸ [Project Completion Report \(3059/OC-SU\)](#).

⁶⁹ [Project Completion Report \(3403/OC-SU\)](#).

⁷⁰ This TC was approved in November 2022, and as of June 2024, it has a progress degree of 93.5% disbursed.

through a process of georeferencing estimated the volume of investment needed and the technologies to achieve universal electricity coverage by 2030.

- 1.33 **Strategic alignment.** The program is consistent with the IDB Group Institutional Strategy: Transforming for Scale and Impact (CA-631) and is aligned with the objectives of: (i) reducing poverty and inequality by supporting actions to bring electricity, water, and communication services to isolated communities in rural areas that currently lack these services; and (ii) address climate change by promoting the deployment of solar energy in Suriname, which will diversify and clean its energy matrix. The program is also aligned with the operational focus areas of: (i) biodiversity, natural capital, and climate action; (ii) gender equality and inclusion of diverse population groups; (iii) institutional capacity, rule of law, and citizen security; (iv) social protection and human capital development; (v) sustainable, resilient, and inclusive infrastructure; and (vi) productive development and innovation through the private sector. The operation is aligned with the IDB Group Country Strategy with Suriname 2021-2025 (GN-3065) by addressing inequality in basic services such as water and electricity. The operation is aligned with: (i) the IDBG Gender and Diversity Action Plan 2022-2025 (GN-3116-1) by training Marron and Indigenous women in energy and water systems operation and maintenance; (ii) the Employment Action Framework with a Gender Perspective (GN-3057), by fostering women’s labor participation in the energy sector; (iii) the thematic areas of the Energy Sector Framework Document (GN-2830-8); and (iv) the Climate Change Sector Framework Document (GN-2835-13).
- 1.34 The program is aligned with the general objective of the [ONE Caribbean Program](#) which refers to: “foster socio-environmentally sustainable development in the Caribbean region that benefits its citizens”. Also, it is aligned with the key priorities of: (i) “Climate adaptation, disaster risk management, and resilience”, by financing improved infrastructure that incorporates principles of sustainability and resilience (¶1.25) and (ii) Sustainable development through Private Sector Engagement, since the promotion of bioeconomy activities enables the emergence of small and medium enterprises that could capitalize on the opportunities provided by IDB Invest, and other private sector stakeholders seeking to support the sustainable development of the Amazon region (¶1.24).
- 1.35 The program is consistent with the IDB Group [Amazonia Forever Program](#) and is aligned with the pillars of: (i) bioeconomy and creative economy by promoting the development of bioeconomic activities in the communities (¶1.45); (iii) people by benefiting communities in the Amazon rural areas of Suriname with access to basic services (¶1.49); and (iv) sustainable infrastructure, cities and connectivity by promoting the implementation of sustainable and resilient solar mini-grids and increasing connectivity in rural areas (¶1.42; ¶1.44).
- 1.36 **Alignment with the objectives and targets of the Low Carbon Energy Fund for People and Planet (LCE).**⁷¹ This program is aligned with the objectives of the LEC, in particular, with the first specific objective to “increase access to affordable, reliable, and modern electricity services for unserved communities in Latin America

⁷¹ The LCE was established through an agreement between the Global Energy Alliance for People and Planet (GEAPP) and the IDB (GN-3073-1).

and the Caribbean, by expanding the use of distributed renewable energy.” The IDB has been working collaboratively with GEAPP on the ongoing LCE fund. Between 2022 and 2023, the LCE approved co-financing totaling USD 6.8 million to support technical cooperation and investment loans in Peru, Paraguay, Suriname, Panama, Bolivia, El Salvador, Jamaica, and Haiti. Notably, the LCE has already leveraged at least USD 250 million in financing to provide access to electricity for thousands of people in Bolivia ([5801/OC-BO](#)) and El Salvador ([5799/OC-ES](#)). This operation complements efforts being undertaken by GEAPP in closing the energy access gap in the region.

- 1.37 **Climate change financing.** In the context of climate financing, 65.57% of the resources provided by the IDB are invested in mitigation activities, according to the [Joint Methodology of the Multilateral Development Banks](#). These resources contribute to the IDB Group’s goal of allocating financing for climate-related projects of up to 30%. Furthermore, in accordance with the Green Finance Tracking Methodology of the IDB Group (GN-3101), the operation also contributes towards the environmental sustainability objective of "Sustainable use and protection of water and marine resources". Therefore, the total sum of climate and green finance is 65.60%.⁷²
- 1.38 **Paris Alignment.** This operation has been analyzed using the Joint MDB Assessment Framework for Paris Agreement Alignment and the IDB Group Paris Alignment Implementation Approach (GN-3142-1); it has been determined to be: (i) aligned to the adaptation goal of the Paris Agreement (PA); and (ii) universally aligned to the mitigation goal of the PA.
- 1.39 **Public Utilities Policy (OEL#6).** The program is consistent with the Public Utilities Policy (GN-2716-6) through: (i) social sustainability, by providing basic electricity services to customers in low-income rural communities that are currently underserved, and promoting gender equality and women’s empowerment; (ii) environmental sustainability, by helping to reduce greenhouse gas emissions through the use of renewable energy and lower consumption of fossil fuels; and (iii) financial sustainability, by avoiding expenditures on high-cost fossil fuels. The sample projects meet the conditions of: (i) financial sustainability, as regulations require compensation based on rates covering operation and maintenance costs; and (ii) economic evaluation, because every project will generate a positive return based on the cost-benefit evaluation. For works not included in the sample, only those that meet these conditions will be eligible, according to the program’s Operating Regulations ([OEL#5](#)).

B. Objective, components, and cost

- 1.40 **Objective of the Conditional Credit Line for Investment Programs (CCLIP).** The general objective of this CCLIP is to support the GoS in its efforts to foster socio-economic development by the promotion of clean and sustainable services under a just energy transition. It finances a program involving multiple sectors and

⁷² In order to avoid double counting of contributions, the total value of green and climate finance is calculated as follows: % of climate finance + % green finance - % intersection of green and climate finance.

its modality is “Multisector Modality I”, which entails one executing agency with the capacity to work in multiple sectors.

- 1.41 **General objective of the First Individual Investment Operation.** The general objective of the first operation of the CCLIP is to promote the socio-economic development of villages in the Amazon rural areas of Suriname. The specific objectives are: (i) to 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) to foster the development of a bio-economy in the Amazon rural areas of Suriname with a gender and diversity perspective.
- 1.42 **Component I. Infrastructure investments (US\$38,750,000: US\$37,250,000 - IDB OC and US\$1,500,000-LCE).**⁷³ This component will finance the provision of electricity, water and telecommunications services and their productive and sustainable use in the Amazon rural areas of Suriname with four subcomponents (¶3.5).
- 1.43 **Subcomponent I.1. Energy systems (US\$17,300,000).** Finances the supply, installation, and commissioning of solar mini-grids, resilient to natural disasters and including the upgrade of the existing distribution network to provide 24/7 electricity supply in the Amazon rural areas. The solar mini-grids will include systems for the remote operation and maintenance, and users will be charged using pre-paid meters. These digital technologies will consider cybersecurity aspects. This subcomponent will also promote and finance energy-efficient use of electricity in these villages.
- 1.44 **Subcomponent I.2. Water systems (US\$9,850,000).** Finances the installation of 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 and sustainable use of water resources in these villages, enhancing water quality for pollution prevention.
- 1.45 **Subcomponent I.3. Telecommunications systems (US\$1,000,000).** Finances the upgrade of existing and deployment of new distribution and access telecommunications infrastructure⁷⁴ to provide reliable telecommunications services (e.g., voice, internet, broadcasting) in the Amazon rural areas. The procurement of equipment will be carried out by EBS under the technical assistance of Telesur, which will oversee the operation, maintenance and sustainability of the telecommunications, for those villages prioritized by the program where telecommunications service is not yet provided.
- 1.46 **Subcomponent I.4. Bio-economy development and community awareness (US\$10,600,000).** Finances the development and implementation of productive and sustainable use projects (i.e., stingless bees propolis, bio-cosmetic oils, non-timber forest products), with electricity, water, and telecommunications, focused on bio-economy, within the Amazon rural areas, in collaboration with private initiatives and local NGOs. Also, it finances activities to strengthen the beneficiaries’ commitment and ownership of the projects and technical

⁷³ Including resources from GEAPP (for Sub-component I.1).

⁷⁴ E.g., antennas, towers, cables, routers.

training⁷⁵ for Maroon women and indigenous women, and support their participation in the operation and maintenance of the energy, water and telecom systems. The training and the bioeconomic activities will be designed to maximize the benefits to women, the indigenous population and Afro-descendants.

- 1.47 **Component II. Institutional capacity (US\$2,750,000).** 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) personnel training in project management, rural electrification, water systems, digital technologies, the application of the Suriname's cybersecurity framework, and resilience; and the implementation of EBS's gender and diversity action plan;⁷⁶ (ii) specialized technical support for the design, coordination, and supervision of the works; and (iii) management of environmental and social considerations of projects.⁷⁷
- 1.48 **Project management, evaluation, and auditing (US\$5,000,000).**⁷⁸ Finances the operation's administration cost, monitoring, verification, and evaluation of program outcomes, and the financial audit.

C. Key results indicators

- 1.49 **Expected results.** The first operation is expected to: (i) increase the number of households with sustainable access to basic services (electricity, water, and telecommunications) in the Amazon rural areas (in this regard, the same number of villages benefiting with reliable access to renewable energy-based electricity will also have access to potable water supply, and telecommunications systems); (ii) promote job creation through bio-economy activities focused on income-generating opportunities, gender, and diversity inclusion; and (iii) strengthening the technical capacities of MNH and EBS in implementing infrastructure projects in rural areas.
- 1.50 **Beneficiaries.** The project will directly benefit about 1,200 households, 25 health clinics, 30 schools, and 50 business activities in the Amazon region with a special focus on local farmers, small businesses owners, women, indigenous populations, and Afro-descendants. Also, 400 women (including Maroons and Indigenous women) will be employed in bioeconomy activities supported by the program (See Results Matrix). Additionally, MNH and EBS will also benefit from institutional strengthening.
- 1.51 **Economic analysis.** This section includes a cost-benefit analysis (CBA) for the provision of energy, water and telecommunication services, and the productive uses considered as an integral intervention, in each village and as a whole

⁷⁵ The contractor's technical team will include a social expert to shape the trainings to the needs of women. The social expert will follow up the trained women during one year after completion. The trained women will constitute a pool of technical specialists on the field that can eventually be hired afterwards.

⁷⁶ The project will support the implementation of activity 31 in the Gender and Diversity Action Plan 2024-2030 of EBS: "Developing gender-sensitive products and services". EBS will, will keep track of the indigenous and maroon women certified in the operation and maintenance of the energy and water systems.

⁷⁷ This includes the implementation of the Engagement Plan.

⁷⁸ Administration costs consider the need for a larger oversized budget given the dispersal of the works. A 10% was used as a reference from SU-L1055 execution.

(10 villages). The rationale for elaborating the CBA with an integral approach considering all the interventions done in each village (energy, water, telecommunication, and bioeconomic activities) lies in the interdependency between them. The total CAPEX of the sample is US\$21.18M from which US\$9.51M corresponds to energy systems, US\$5.81M to water systems, US\$0.62M to the telecommunication systems, \$3.69M to bioeconomy activities, and US\$1.54 to community engagement activities. The project presents a positive Net Present Value (NPV) of US\$16.3M, with an IRR of 19.3%. A sensitivity analysis was performed considering a 20% decrease and 20% increase in the CAPEX and the energy demand ([OEL#1](#)), resulting in positive NPV and Economic Rate of Return (ERR) larger than 12% in all the scenarios.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 **Instrument and modality.** The first individual operation is proposed as an Investment Loan under the Multiple-works modality. The projects will meet the eligibility criteria established by MNH and EBS, including transportation costs, fuel costs, distance, and diverse ethnicity, among others (¶2.5) with the following characteristics: (i) they are physically similar but independent of each other; (ii) their feasibility does not depend on the execution of any particular number of the works projects; and (iii) their individual size does not warrant direct Bank handling. Also, the independence of the works allows for the divisibility of a Multiple Works Program, in that some of the specific works could be eliminated or postponed indefinitely without affecting the other works or the program.
- 2.2 **Program Cost and Financing.** The CCLIP will have an estimated duration of ten years, for a total of US\$135,000,000. The first operation will be for an amount of US\$46,500,000, consisting of US\$45,000,000 financed by the IDB from Ordinary Capital and one investment grant for US\$1,500,000 financed with resources from the LCE,⁷⁹ administered by the Bank.

⁷⁹

SU-G1010 financed by the LCE with non-reimbursable resources from the GEAPP.

Table 1. Estimated program costs (in US\$ million)

Components	IDB	LCE investment grant	Total	
			Value	Percentage
Component I. Infrastructure to increase access to electricity, water, telecommunications services, and bio-economy development in rural areas	37.25	1.50	38.75	83%
1.1 Energy systems	15.95	1.35	17.30	
1.1.1 Maroon women certified	0.15	0.00	0.15	
1.1.2 Indigenous women certified	0.15	0.00	0.15	
1.2 Water systems	9.85	0.00	9.85	
1.2.1 Maroon women certified	0.15	0.00	0.15	
1.2.2 Indigenous women certified	0.15	0.00	0.15	
1.3 Telecommunications systems	1.00	0.00	1.00	
1.4 Bio-economy development and community awareness	9.85	0.15	10.00	
Component II. Institutional Capacity strengthening	2.75	0.00	2.75	6%
2.1 Training workshops conducted for MNH and EBS	0.75	0.00	0.75	
2.2 Technical supervision studies	2.00	0.00	2.00	
Project management, evaluation and auditing	5.00	0.00	5.00	11%
3.1 Administrative cost	3.89	0.00	3.89	
3.2 Program monitoring and reporting	0.11	0.00	0.11	
3.3 Contingency	1.00	0.00	1.00	
Total	45	1.5	46.5	100

2.3 **Disbursement schedule.** The disbursement period of the first operation will be six years, given that the activities will take place in remote rural areas of the Amazon that are inaccessible by road or river. The logistics for transporting goods and services are complex and require careful planning. Factors such as supplier timelines, transportation methods, and weather conditions must all be considered.⁸⁰ The following table shows the disbursement schedule:

Table 2. Projected disbursement schedule (US\$ million)

Source	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
IDB	7.0	16.4	8.7	12.8	0.1	0.0	45.0
	15.5%	36.3%	19.4%	28.5%	0.2%	0%	100%
LCE	0.4	0.5	0.3	0.3	0.0	0.0	1.5
	25%	30%	22.5%	22.5%	0%	0%	100%
Total	7.3	16.8	9.1	13.2	0.1	0.0	46.5
	15.8%	36.1%	19.5%	28.4%	0.2%	0%	100%

2.4 **Physical start of work.** Considering that the construction⁸¹ of energy, water and telecommunication infrastructure will take between 9 and 12 months, the deadline

⁸⁰ Similar interventions in rural electrification such as [5801/OC-BO](#) in Bolivia and [5799/OC-ES](#) in El Salvador, also have a six-year disbursement period.

⁸¹ Excluding the basic engineering design.

for the material start of works for the sample projects is two years from the effective date of the loan contract, and the deadline for the material start of works in the remaining non-sample projects is one year before the final program execution date.

- 2.5 **Representative sample of projects.** During the operation's preparation stage, a representative sample of US\$24,200,000 was considered, equivalent to more than 50% of the total cost. This includes more than 3,000 beneficiaries of ten villages: Pelelu Tepu, Palumeu, Apetina, Kawemhakan, Kumakapan, Amatopo, Coeroeni, Alalapadoe, Sipaliwini, and Kwamalasamutu. The projects comprise two different typologies: (i) energy, water, telecommunication, and bioeconomy activities; and (ii) energy, water, and bioeconomy activities for communities that already have telecommunication services. The projects are diverse and representative in terms of the level of difficulty, type of technology, diversity (including Indigenous and Afro-descendant communities), area of influence, and economic activity (in general, these communities generate income by selling and trading fish, arts and crafts, or by providing services to visitors). These projects meet all eligibility criteria and have enabled an assessment of the program's technical and economic viability.
- 2.6 **Projects outside the sample.** The works implemented outside the sample are expected to benefit ten additional villages, which represent about 600 households (in Maroon and Indigenous communities), located in the rural areas of Suriname. The design and execution arrangements will be the same as the sample projects.
- 2.7 **Eligibility criteria for the works.** The project works that are eligible to be financed under Component I are those that: (i) do not correspond to Category "A" works/interventions; (ii) will benefit Maroon and Indigenous people living in isolated rural villages of Suriname; (iii) will benefit villages currently lacking reliable electricity, water or telecommunication⁸² services, and there are no other ongoing or planned projects addressing these needs; (iv) will benefit villages with a potential to deploy bio-economic activities;⁸³ (v) the works must be part of an integral intervention that is economically feasible (minimum IRR of 12%) following the IDB's methodology; and (vi) will be aligned with the selection criteria for the Bank's green financing operations.⁸⁴ These conditions apply to both types of works/interventions (¶1.17).

⁸² Only energy, water, and bioeconomy activities/interventions will be implemented for those potential villages that already have a telecommunication system installed.

⁸³ At least, each village has a proven potential for bioeconomy activity based on local in-site surveys.

⁸⁴ In accordance with the IDB Group Methodology for Monitoring Green Financing guides (GN-3101), the operation meets the following screening criteria: 1. Tracking green finance in SG, and NSG lending operations, as well as IGR above US\$3 million, 2. Climate Change mitigation objectives, 3. Contributes entirely to one environmental objective being "Sustainable use and protection of water and marine resources", 4. Enables other activities to make substantial contribution to environmental objectives such as "Pollution prevention and control, and 5. Project includes in its design clear alignment with environmental objectives (including energy mitigation and sustainable use of water resources).

B. Environmental and social safeguard risks

- 2.8 The Environmental and Social (E&S) Impact Category is “B” in accordance with the E&S Framework Policy and has been validated by the due diligence. The direct negative E&S risks and impacts are low to moderate and related to the construction and operation of small-scale energy, water, and telecommunication works. These potential risks and impacts include workplace accidents, exposure to electrical systems and hazardous materials, improper management of wastes and hazardous materials, and negative interactions between workers and local communities. Land acquisition for the installation of photovoltaic panel arrays will be necessary and may result in localized economic displacement. The program will apply the IDB Group Measures to Address Risk of Forced Labor in the Supply Chain of Silicon-based Solar Modules, Revised Version (GN-3062-1).
- 2.9 While bioeconomy investments will not lead to expansion of the agricultural frontier or other negative impacts, a Biodiversity Action Plan will be implemented to achieve net gains for critical habitat values. Given that the project beneficiaries are indigenous communities, the Borrower will demonstrate Free, Prior, and Informed Consent of the participating communities and implement an Indigenous Peoples Plan.
- 2.10 The E&S Risk Rating is High due to the contextual risks of interventions in remote indigenous communities, and contribution risks relating to the cumulative impacts of ongoing mining and deforestation in the program area of influence. The Disaster and Climate Change Risk is Moderate due to riverine flood risk and the low levels of criticality of the small-scale infrastructure investments.
- 2.11 The Borrower has prepared an E&S Management System for the project, including an E&S Assessment (ESA) and Management Plan (ESMP) and Sociocultural Analysis for the subprojects of the representative sample, and an E&S Management Framework (ESMF) for future subprojects.
- 2.12 The general consultation process for the sample projects ended in July 2024. Attendees were briefed on the technical and socio-environmental aspects of the projects, particularly the ESA and ESMP. The process included numerous beneficiaries and stakeholders, promoting inclusion and providing multiple participation channels. The consultation underscored high expectations for the electrification projects, with many attendees looking forward to their first access to this basic service. In addition, the Borrower has been carrying out a culturally appropriate consultation process designed to achieve Free, Prior, and Informed Consent (FPIC) from the Indigenous and Maroon communities, which was achieved for the communities of the representative sample on August 15th, 2024. The planned requirements for achieving FPIC with communities not included in the sample will follow the guidance expressed in the ESMF that includes: (i) consultation with the participant families and communities; (ii) dissemination of information; and (iii) reaching and documenting consent in specific communities; all in a culturally appropriated manner.
- 2.13 Six environmental and social documents were publicly disclosed by the EA and the Bank prior to the analysis mission, including the ESA, ESMP, ESMF, and

Stakeholder Engagement Plan. Final versions of these documents including outcomes of the consultation process were published on August 15th, 2024.

C. Fiduciary risk

2.14 The IDB conducted an Institutional Capacity Assessment (ICA) of EBS using the ICA Platform, confirming that it has sufficient capacity to execute the program’s procurement, disbursements, reports, and monitoring and supervision. The opportunities for improvement and measures to address the gaps identified are to: (i) implement top-ups, salary rises, or other incentives for the project manager and other Program Execution Unit (PEU) members; (ii) the steering committee should be composed and engaged during early stages of project implementation; (iii) the Operation Manual should establish the composition, roles, responsibilities and guidelines for the steering committee; (iv) training to EBS (including local population) for the Operation and Maintenance (O&M) of water systems should be included as part of the operation; (v) The Ministry of Finances and Planning shall assign a person to expedite approval and processing of payments; (vi) hire a new social specialist to be assigned to the project as PEU member and to strengthen the HSEQ department; and (vii) a Memorandum of Understanding with Telesur should be signed to establish their roles and responsibilities during project implementation.

D. Other risks and key issues

2.15 A risk management analysis was conducted, and the following medium-high level risks were identified (Table 4).

Table 4. Other risks (Medium-high category)

Description	Taxonomy	Mitigation strategy
Logistical difficulties, such as increased transportation cost or adverse weather conditions. This could cause delays in the program and impact the budgeted costs.	Natural environment	The program and contracts will include a mitigation plan for natural and climatic events, approved by the project’s environmental and social engineer. EBS’s capacity will also be strengthened with a specialist funded by the operation.
Non-competitive salaries may result in losing skilled personnel, potentially compromising project execution and supervision, causing delays and cost overruns.	Human Resources	Discussion with GoS to have top-ups for the PEU.

2.16 **Sustainability of the investments.** To ensure the sustainability of the infrastructure built, EBS will be responsible for the O&M of the energy and water systems, and Telesur for the telecommunication infrastructure. Local villagers will support EBS on the O&M task and will be trained during the commissioning of each project. The capacity of EBS and Telesur for the O&M of this infrastructure will be also strengthened during project implementation with training (¶1.46). Additionally,

EBS is currently creating a rural electrification project office to oversee these and other projects. Finally, a state of the art monitoring platform will be implemented to monitor and facilitate O&M tasks, through telemetry, thus providing additional support to local operations. By ensuring access to telecommunications, the monitoring platform can be sustained, ensure communications, and minimize costly site visits. Regarding the tariff scheme, a tariff rate will be applied to cover O&M expenses, subject to the currently available subsidy, and using prepaid systems to reduce commercial losses. To ensure that beneficiaries can afford these services, the operation will promote productive bioeconomic activities, in collaboration with the Ministry of Regional Development. The program will also promote and finance energy and water efficiency measures.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 **Execution mechanism and implementation arrangements.** The Republic of Suriname will be the borrower, with EBS as Executing Agency (EA). The EA will establish a Project Executing Unit (PEU) responsible for the program's administrative and operational management, including: (i) planning, monitoring, evaluating, and supervising the operation; (ii) conducting procurement for works, goods, and consulting services; (iii) handling loan disbursement requests and maintaining financial records; (iv) managing work supervision and inspection; (v) overseeing environmental and social management; (vi) preparing documents such as the multiyear execution plan, annual work plan, procurement plan, semiannual progress reports, audited financial statements, midterm evaluation, and final evaluation; (vii) monitoring works and service contracts; (viii) supervising environmental and social aspects; and (ix) liaising with the IDB.
- 3.2 EBS will coordinate with all involved institutions, such as SWM for technical support on water provision, and Telesur for telecommunications infrastructure. ACT will support the bio-economy activities and will be hired by EBS through a Firm Consultancy Service (Annex III). A project steering committee including the Ministry of Finances and Planning, EBS, MNH, Ministry of Regional Development, water department, Telesur and ACT will offer regular input and advice on project implementation at the strategic level and facilitate dialogue with other stakeholders such as the EAS. The Project Manager of EBS' PEU will act as Secretary and a representative of MNH will be the chairperson.
- 3.3 **The role of ACT participation.** ACT under the supervision of EBS, will assist EBS with project selection and evaluation and will support the execution of Subcomponent 1.4, given its proven projects results in the Surinamese Amazon areas over the last 23 years for bioeconomy activities. This long-standing presence has allowed ACT to build trusted relationships, partner with local communities and gain knowledge of the local socio-cultural and environmental landscape. ACT will act as a facilitator, supporting local villagers in implementing bioeconomy activities. ACT will also provide technical assistance for project implementation and will follow/support the activities performed by the beneficiaries for 4 years, to ensure the sustainability and success of each of the bioeconomic activities.

- 3.4 **Experience of the executing agency.** EBS, a state-owned company in the electricity sector, distributes power across various districts. As an executing agency, it has the structure, personnel, and extensive experience needed, having successfully managed IDB-financed projects ([3059/OCSU](#), [3403/OCSU](#) and [4931/OC-SU](#)). An ICA was conducted to identify additional actions for ensuring proper execution.
- 3.5 **Organization of the executing agency.** To ensure the adequate performance of the loan contract, a PEU⁸⁵ consists of mandatory specialists as required by the Bank, including a: (i) Project Manager;⁸⁶ (ii) RE Specialist; (iii) Water Specialist; (iv) Financial Specialist; (v) Procurement Specialist; (vi) Environmental Specialist; and (vii) Social Specialist. The PEU will be supported by a Telesur coordinator and an ACT coordinator for Subcomponent I.3 and I.4 respectively ([OEL#5](#)). The hiring of any additional personnel and shared use of resources will be established in the program Operating Regulations and require the Bank's prior no objection.
- 3.6 **Program Operations Manual ([OEL#5](#)).** The execution of the first individual operation will be governed by the provisions contained in the loan contract and in the Program Operating Regulations. The latter will specify the following: (i) procedures for contracting the works, goods, and consulting services; (ii) guidelines for the use of resources and financial management of the program; (iii) disbursement procedures; (iv) a detailed description of activities; (v) follow-up and monitoring activities; (vi) the structure of the program execution team and identification of the functions of key personnel; (vii) the investment sustainability strategy and works operation and maintenance responsibilities; (viii) the ESMF with environmental and social requirements including ESMS and ESMP annexes; and (ix) operational aspects of the Bank financing, including the executing agency's role and responsibilities for coordination and dialogue with the Bank.
- 3.7 **Special contractual conditions precedent the first disbursement of the financing for the first individual operation. The borrower and/or executing agency will submit evidence of the following: (i) the approval and entered into force of the Program Operation Manual ("POM"), which includes as annexes the Environmental and Social Management Plan (ESMP); the Environmental and Social Management Framework (ESMF) and the ESAP, in the terms and conditions previously agreed upon with the Bank; (ii) appointed or hired the key personnel for the Program execution team, within the existing EBS operational structure, to include: (a) a Program manager; (b) a procurement specialist; (c) a financial specialist; (d) a specialist in renewable energy systems; (e) a water specialist; (f) an environmental specialist; and (g) a social specialist.** The first condition is necessary to guarantee proper execution of the program, considering that the Bank's experience in the region indicates that approval of the Program Operations Manual prior to the first disbursement contributes to the internal organization of the executing agency for implementation of the operation. The second condition is essential to assure the Bank that the executing agencies will have an effective team in place to launch the execution of the program.

⁸⁵ The program execution team's capacities will be strengthened at the start of the program and during implementation.

⁸⁶ The project manager will take the role of Component II manager.

- 3.8 **Special execution condition for Subcomponent I.3.** Prior to the start of this Subcomponent's first procurement process: (i) a memorandum of understanding between EBS and Telesur has been signed and has entered into force, specifying the conditions under which the equipment will be operated and maintained.
- 3.9 **Special execution condition for Subcomponent I.4.** Prior to the start of this Subcomponent's first procurement process: (i) the signature and entry into force of a Consultancy Service Contract between EBS and Amazon Conservation Team (ACT).
- 3.10 **Procurement policies.** Goods, works and services financed by the Bank will be procured in accordance with the Policies for the Procurement of Works and Goods Financed by the IDB (GN-2349-15), and consulting services will be selected according to the Policies for the Selection and Contracting of Consultants Financed by the IDB (GN-2350-15), in conjunction with the provisions of the procurement plan. Ex ante review will be used for all national, international and exceptional procedures, such as the direct contracting of Stichting Amazon Conservation Team Guianas (ACT - Guianas), as per Policies for the Selection and Contracting of Consultants GN-2350-15 clause 3.11 d) when only one firm is qualified or has experience of exceptional worth for the assignment. ACT has been actively working in the interior of Suriname for more than 20 years gaining incomparable experience in the Amazon tropical rainforest (Annex III). Financial management will adhere to the Financial Management Guidelines for IDB-financed Projects (OP-273-12, as amended).
- 3.11 **Audits.** During execution, EBS and the MNH will submit on an annual basis audited financial statements for the program, pursuant to the Bank's terms. Selection of independent audit firms acceptable to the Bank in Suriname will be required. These statements will be submitted within 120 days following the close of each fiscal year, and the final statement will be submitted within 120 days after the effective date of the last disbursement.

B. Summary of arrangements for monitoring results

- 3.12 **Monitoring.** The monitoring and evaluation plan includes supervision missions, semiannual reports and annual external audits, and program follow-up, based on the targets in the Results Matrix, annual work plans and the multiyear execution plan. EBS will submit semiannual reports within 60 days after the last working day of each six-month period; and it will hold meetings with the Bank to discuss program progress. The Energy Division will supervise implementation.
- 3.13 **Evaluation.** The monitoring and evaluation plan includes evaluation mechanisms to verify the achievement of the targets in the Results Matrix. The executing agency will hire consultants to conduct: (i) a mid-term evaluation with PCR format, once 50% of resources are disbursed, or after 36 months from the first disbursement, whichever occurs first. This evaluation will assess progress, fulfillment of obligations, and provide recommendations to meet targets; (ii) a final evaluation, within 90 days before the final disbursement. This evaluation using Project Completion Report (PCR) format, will determine the achievements of targets, performance of the executing agency, implementation factors, and future recommendations; and (iii) an ex-post cost-benefit analysis using the ex-ante

economic evaluation methodology. Moreover, a two-year extension for the PCR delivery is considered to allow time for users to stabilize their energy consumption.

IV. ELIGIBILITY CRITERIA

- 4.1 **Eligibility Criteria for the CCLIP.** The CCLIP complies with the provisions of ¶3.2 of Annex III of Document GN-2246-13 and ¶3.6 of the CCLIP Operational Guidelines (GN-2246-15) since the objectives of the CCLIP align with the priorities defined in the IDB Group's Strategy with Suriname 2021-2025 (GN-3065). Specifically, it falls within the prioritized area of economic reactivation and productive transformation, with a cross-cutting focus on climate change, environmental sustainability, and institutional capacity.
- 4.2 **Eligibility Criterion for the First Individual Operation.** The first individual operation under the CCLIP meets all the criteria established in Annex III of Document GN-2246-13 and the CCLIP Operational Guidelines (GN-2246-15). In this regard, an ICA of the EA was conducted using the simple evaluation mechanism, and specific actions to enhance the capabilities of the EA are included in line with ICA recommendations. Furthermore, this first operation, belonging to the same sector as the CCLIP, will contribute to the sectoral objective of the CCLIP (¶1.40) by supporting the efforts of the GoS to promote a Just Energy Transition in the country.

Development Effectiveness Matrix		
Summary		SU-L1076
I. Corporate and Country Priorities		
Section 1. IDB Group Institutional Strategy Alignment		
Operational Focus Areas	<ul style="list-style-type: none"> -Biodiversity, natural capital, and climate action -Gender equality and inclusion of diverse population groups -Institutional capacity, rule of law, citizen security -Social protection and human capital development -Sustainable, resilient, and inclusive infrastructure -Productive development and innovation through the private sector 	
[Space-Holder: Impact framework indicators]		
2. Country Development Objectives		
Country Strategy Results Matrix	GN-3065	Reduce inequalities in access to utilities
Country Program Results Matrix	GN-3207	The intervention is included in the 2024 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution		8.1
3.1 Program Diagnosis		2.5
3.2 Proposed Interventions or Solutions		1.6
3.3 Results Matrix Quality		4.0
4. Ex ante Economic Analysis		10.0
4.1 Program has an ERR/NPV, or key outcomes identified for CEA		1.5
4.2 Identified and Quantified Benefits and Costs		3.0
4.3 Reasonable Assumptions		2.5
4.4 Sensitivity Analysis		2.0
4.5 Consistency with results matrix		1.0
5. Monitoring and Evaluation		9.5
5.1 Monitoring Mechanisms		4.0
5.2 Evaluation Plan		5.5
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood		High
Environmental & social risk classification		B
IV. IDB's Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Budget, Treasury, Accounting and Reporting. Procurement: Information System.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project		

Evaluability Assessment Note: The proposal presents the first operation of the JUST, CLEAN, AND SUSTAINABLE ENERGY TRANSITION FOR SURINAME CCLIP. This first operation, Bio-SWEET, amounts a total of \$46,500,000 to be financed with a Global Multiple Works loan (45,000,000) and a Low Carbon Energy Fund for People and Planet Investment Grant (\$1,500,000). The objective of the 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, and telecommunications services in rural areas and by promoting the decarbonization of the electricity sector. The specific objectives of the first operation are: (i) to 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) to foster the development of a bio-economy in the Amazon rural areas of Suriname with a gender and diversity perspective.

The project presents a diagnosis of the problem; with a description of the current situation of the socio economic gaps in the Amazon Rural areas of Suriname. Both specific objectives are related to determinants of the problem and have outcome indicators. The outcome indicators included in the results matrix are SMART and have means of verification.

The economic analysis of the project was carried out through a cost-benefit analysis (CBA) combined with a cost-effectiveness analysis (CEA) and covers interventions that explain 83% of the total cost. The benefits are estimated based on the consumers surplus estimation for the integrated water, communications and electricity interventions and through the valuation of the productivity of labor in the case of the bioeconomy intervention. The CBA has reasonable assumptions, uses a rigorous methodology (consumers surplus) and has a sensitivity analysis. The analysis concludes that the project is economically viable, with an IRR of 19.3%, and an evaluation horizon of 20 years.

The project includes a monitoring and evaluation plan that is in line with Bank standards. The effectiveness of the proposed intervention will be measured following an ex-post cost benefit analysis approach and a before-after comparison.

Results Matrix

Project Objective	The general objective of the first operation 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.
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General Development Objective

Indicators	Unit of Measurement	Baseline Value	Baseline Year	Expected Year for Achievement	Target	Means of Verification	Comments
General development objective: To promote the socio-economic development of villages in the Amazon rural areas of Suriname.							
R1. Electricity coverage rate in rural areas	%	61.4%	2024	2030	64.5%	Rural Electrification Plan tracking tool from MNH	
R2. Drinking water access in rural areas	%	55.8%	2024	2030	59.6%	World Health Organization report	
R3. Internet access in rural areas	%	27.0%	2024	2030	28.0%	ITU, World Telecommunication / ICT Indicators Database	
R4. Energy supplied with Renewable Energy (RE) sources in the beneficiary communities	MWh/year	0	2024	2030	2,000	Data from the EBS monitoring platform	

Specific Development Objectives

Indicators	Unit of Measurement	Baseline Value	Baseline Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	End of Project	Means of Verification	Comments
Specific development objective 1: To provide villages in the Amazon rural areas of Suriname with reliable access to renewable energy-based electricity, potable water supply, and telecommunication systems.												
O1.1 Households supplied with reliable electricity service provided	Number	0	2024	0	0	100	100	200	800	1,200	EBS inspection visit report and registry	Rural areas refer to the areas under the

Indicators	Unit of Measurement	Baseline Value	Baseline Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	End of Project	Means of Verification	Comments
by off-grid systems in rural areas											of new customers served by EBS	intervention of the program
O1.2 Households with access to drinking water service in the beneficiary communities	Number	0	2024	0	0	100	100	200	800	1,200	EBS inspection visit report	Water services will be delivered through zero-emission water supply infrastructure including, where applicable, gravity-fed pumps.
O1.3 Households with uninterrupted broadband internet connectivity	Number	0	2024	0	0	100	100	200	800	1,200	Telesur inspection visit report	Comment: Broadband internet connectivity defined as speeds equivalent or higher to 3G.
Specific development objective 2: To foster the development of a bioeconomy in the Amazon rural areas of Suriname with a gender and diversity perspective.												
O2.1 Beneficiaries from diverse population groups employed in Bioeconomy activities supported by the program	Number of beneficiaries	0	2024	0	0	50	100	150	200	500	ACT inspection Report	The project is going to collect gender-disaggregated data
	Disaggregated											
	Number of Indigenous	0	2024	0	0	20	40	60	80	200	ACT inspection Report	

Indicators	Unit of Measurement	Baseline Value	Baseline Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	End of Project	Means of Verification	Comments
	Women employed											
	Number of Maroon Women employed	0	2024	0	0	0	40	70	90	200	ACT inspection Report	
	Number of Indigenous Men employed	0	2024	0	0	5	10	15	20	50	ACT inspection Report	
	Number of Maroon Men employed	0	2024	0	0	0	10	18	22	50	ACT inspection Report	

Outputs

Indicators	Unit of Measurement	Baseline Value	Baseline Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	End of Project	Means of Verification	Comments
Component 1: Infrastructure investments												
P1. Solar PV installed capacity	kW	0	2024	0	0	125	125	250	1,000	1,500	EBS inspection visit report	
P2. Water systems infrastructure installed	Systems	0	2024	0	0	2	2	4	12	20	EBS inspection visit report	
P3. Telecommunications infrastructure installed	Systems	0	2024	0	0	1	1	2	6	10	Telesur inspection visit report	Including antennas, towers, cables, routers Sample: 5 systems
P4. Business activities in rural areas supported by the program.	Number	0	2024	0	0	5	10	10	15	40	Inspection visit conducted by ACT	
P5. Maroon women certified in	Number	0	2024	0	0	0	10	10	10	30	List of participants	

Indicators	Unit of Measurement	Baseline Value	Baseline Year	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	End of Project	Means of Verification	Comments
operation and maintenance of energy and water systems											to the trainings	
P6. Indigenous women certified in operation and maintenance of energy and water systems	Number	0	2024	0	0	10	10	10	0	30	List of participants to the trainings	
Component 2: Institutional Capacity												
P7. Number of training workshops implemented for MNH and EBS	Workshops	0	2024	0	1	2	2	2	3	10	List of participants disaggregated by gender	Training workshops/seminars focused on project management, water systems, rural electrification and digital technologies
P8. Technical supervision studies completed	Studies	0	2024	0	1	2	2	2	3	10	Supervision Report	For the energy, water and telecommunications projects

Country: Suriname

Division: ENE

Operation No.: SU-L1076

Year: 2024

Fiduciary Agreements and Requirements

Executing Agency (EA): N.V. Energie Bedrijven Suriname (EBS)

Operation Name: Bio-economy Empowerment in Suriname Indigenous Communities through Access to Water, Energy and Telecommunications (Bio-SWEET)

I. Fiduciary Context of Executing Agency

1. Use of country system in the operation (Any system or subsystem that is subsequently approved may be applicable to the operation, in accordance with the terms of the Bank's validation).

<input type="checkbox"/> Budget	<input type="checkbox"/> Reports	<input type="checkbox"/> Information System	<input type="checkbox"/> National Competitive Bidding (NCB)
<input type="checkbox"/> Treasury	<input type="checkbox"/> Internal audit	<input type="checkbox"/> Shopping	<input type="checkbox"/> Others
<input type="checkbox"/> Accounting	<input type="checkbox"/> External Control	<input type="checkbox"/> Individual Consultants	<input type="checkbox"/> Others

2. Fiduciary execution mechanism

<input checked="" type="checkbox"/>	Co-Financing	The MNH and the MOFP were informed by the IDB team about one investment grant that will add US\$1.5 million to the loan operation. The investment grant (US\$1.5 million) will be with resources provided by the Global Energy Alliance for People and Planet (GEAPP) through the Low Carbon Energy Fund for People and Planet (LCE). This Grant will be executed by the Bank
<input checked="" type="checkbox"/>	Particularities of the fiduciary execution	This loan will be executed by N.V. Energie Bedrijven Suriname (EBS)

3. Fiduciary Capacity

Fiduciary Capacity of the EA	A PACI was conducted, and the result is that EBS has a strong financial department with the adequate leverage, capacity, experience, personnel, good and service to implement the project. The assigned financial specialist has more than 10 years experience implementing IDB financed projects with a similar scope of works than this operation, and will receive support of a financial assistant. The procurement specialist has deep knowledge of IDB procurement policies and PACI's conclusions do not raise any concerns regarding the fiduciary capacity of EBS.
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4. Fiduciary risks and risk response

Risk Taxonomy	Risk	Risk level	Risk response
Human Resources	If salaries are not competitive salaries, the skilled personnel may not be retained for the duration of the project and this could compromise both the execution and supervision of the works, causing delays in the project schedule and cost overruns.	Medium-High	Discussion with GOS to have top ups for the PEU.

5. Policies and Guides applicable to operation: Policies for the procurement of Goods and Works financed by the Inter-American Development Bank, GN-2349-15 and Policies for the selection and contracting of Consultants financed by the Inter-American Development Bank, GN-2350-15

6. Exceptions to Policies and Rules: not applicable

II. Aspects to be considered in the Special Conditions of the Loan Agreement

<p>Exchange Rate: For purposes of Article 4.10 of the General Conditions, the Parties agree that the applicable exchange rate shall be That indicated in paragraph (b)(ii) of said Article. Accordingly, the agreed exchange rate shall be the exchange rate on the effective date on/in which the Borrower, the Executing Agency, or any other person or legal entity in whom the power to incur expenditures has been vested makes the related payment to the contractor, the supplier, or beneficiary. That indicated in paragraph (b)(i) of said Article. For purposes of determining the equivalency of expenditures incurred in Local Currency chargeable to the Additional Resources or of the reimbursement of expenditures chargeable to the Loan, the agreed exchange rate shall be the exchange rate on the effective date on/in which the Borrower, the Executing Agency, or any other person or legal entity in whom the power to incur expenditures has been vested makes the related payments to the contractor, supplier, or beneficiary.</p>
<p>Type of Audit: Financial, Accounting and Institutional Inspection visits or meetings will be performed to: (i) Review of the Reconciliation and supporting documentation for disbursements; (ii) Compliance with financial and procurement procedures; (iii) Review of compliance with the lending criteria; and (iv) Follow up on audit findings and recommendations. The Review of Disbursements will be ex post.</p>

III. Agreements and Requirements for Procurement Execution

<input checked="" type="checkbox"/>	Bidding Documents	For procurement of Works, Goods and Services Different of Consulting executed in accordance with the Procurement Policies (document GN-2349-15), subject to ICB, the Bank's Standard Bidding Documents (SBDs) or those agreed between EA and the Bank will be used for the particular procurement. Likewise, the selection and contracting of Consulting Services will be carried out in accordance with the Policies for the Selection and Contracting of Consultants (document GN-2350-15) and the Standard Request for Proposals (SRP) issued by the Bank or agreed between the EA and the Bank will be used for the particular selection.
<input checked="" type="checkbox"/>	Direct Contracting and Single Source Selection	The following single source selection has been identified: Stichting Amazon Conservation Team Guianas (ACT - Guianas), contract amount of 10 million USD, as per Policies for the Selection and Contracting of Consultants GN-2350-15 clause 3.11 d) when only one firm is qualified or has experience of exceptional worth for the assignment. ACT has been

		actively working in the interior of Suriname for more than 20 years gaining uncomparable experience in the Amazon tropical rainforest (see Annex Single Source Justification).
<input checked="" type="checkbox"/>	Procurement supervision	The method of supervision shall be Ex Ante.
<input checked="" type="checkbox"/>	Records and Archives	The PIU will have the responsibility for maintaining the files and records of the project. All records and files will be maintained according to standards acceptable to the Bank (best practices) and kept for a minimum of seven (7) years after the end of the project's execution period.

Main Acquisitions

Description of the procurement	Selection Method	New Procedures/Tools	Estimated Date	Estimated Amount 000'US\$
Goods and Works				
Installation of 20 Telecom Systems	International Competitive Bidding (ICB)		01/04/2025	1,000
Installation of 20 Water Production Systems	International Competitive Bidding (ICB)		01/04/2025	11,300
Installation of Solar Photovoltaic Systems for 20 villages	International Competitive Bidding (ICB)		01/04/2025	17,300
Non-consulting services				
Training workshops for Ministry of Natural Ressources (MNH) and EBS	International Competitive Bidding (ICB)		01/05/2026	800
Consulting Firms				
Technical Supervision for infrastructure installation	Quality- and Cost-Based Selection (QCBS)		01/05/2025	2,000
Individuals				
Environmental and Social expert	Shopping/Request for Quotations by Open Invitation		01/02/2025	200

Water and Sanitation expert	Shopping/Request for Quotations by Open Invitation		01/02/2025	200
Telecommunication expert	Shopping/Request for Quotations by Open Invitation		01/02/2025	200
Financial Support technician	Shopping/Request for Quotations by Open Invitation		01/02/2025	100

Access to the [Procurement Plan](#).

IV. Agreements and Requirements for Financial Management

<input checked="" type="checkbox"/>	Programming and Budget	The executing agency will prepare and implement an operational plan, which will include the budget plan, procurement plan and financial plan, consistent with a 12 –month financial plan that will be required. The Borrower has committed to allocate, for each fiscal year of program execution, adequate fiscal space to guarantee the unrestricted execution of the program.
<input checked="" type="checkbox"/>	Treasury and Disbursement Management	<p>The disbursement mechanism shall be Manual and will follow the methods stated in the OP-273-12 and the Disbursement Handbook. The currency to manage the operation is the USD. The operation will generally work with a financial period of 6 months due to the planning cycle for the project. The Preferential Disbursement Method will be advance of funds, but other types of disbursements will be available.</p> <p>The operation is expected to justify 80% of accumulated balances pending of justification before requesting another advance of funds.</p>
<input checked="" type="checkbox"/>	Accounting, information systems and reporting	<p>Specific accounting norms: IFRS (International Financing Reporting Standards).</p> <p>Accounting reports: The Executing Agency will utilize the off the shelf accounting and financial management software QuickBooks currently used for the accounting and financial reporting of many programs in the country.</p>

		Financial Statements of the program will be prepared based on IDB rules given that the PFM reform is still in process. The financial specialist should maintain under his/her responsibility auxiliary records and systems (e.g. QuickBooks or similar).
<input checked="" type="checkbox"/>	External control: external financial audit and project reports	The Borrower and the Executing Agency, as agreed with the Bank, will hire the services of an audit firm through a bidding process. The audit's scope and related considerations will be governed by the Financial Management Guidelines (document OP273-12) and the Guide for Financial Reports and Management of External Audit. The annual financial audits/ assurance reports should be submitted within 120 days of the end of a fiscal year and within 120 days after the date of last disbursement.
<input checked="" type="checkbox"/>	Project Financial Supervision	Financial, Accounting and Institutional Inspection visits or meetings will be performed to: (i) Review of the Reconciliation and supporting documentation for disbursements; (ii) Compliance with financial and procurement procedures; (iii) Review of compliance with the lending criteria; and (iv) Follow up on audit findings and recommendations. The Review of Disbursements will be ex post.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/24

Suriname. Conditional Credit Line for Investment Projects (CCLIP): Just, Clean and Sustainable Energy Transition for Suriname (SU-O0012)

The Board of Executive Directors

RESOLVES:

1. To authorize the President of the Bank, or such representative as he shall designate, to enter into such agreement or agreements as may be necessary with the Republic of Suriname, to establish the Conditional Credit Line for Investment Projects (CCLIP): Just, Clean and Sustainable Energy Transition for Suriname (SU-O0012) (the "Line") for an amount of up to US\$135,000,000 chargeable to the resources of the Ordinary Capital of the Bank.

2. To establish that the resources allocated to the Line shall be used to finance individual operations under the Line, in accordance with: (a) the objectives and regulations of the Conditional Credit Line for Investment Projects approved by Resolution DE-58/03, as amended by Resolutions DE-10/07, DE-164/07, DE-86/16 and DE-98/19; (b) the provisions set forth in documents GN-2564-3 and GN-2246-13; and (c) the terms and conditions included in the proposal for the corresponding individual operation.

(Adopted on ____ 2024)

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/24

Suriname. Loan ___/OC-SU to the Republic of Suriname. Bio-Economy Empowerment in Suriname's Indigenous Communities through Access to Water, Energy and Telecommunications (Bio-SWEET). First Individual Operation under Conditional Credit Line for Investment Projects (CCLIP) SU-O0012

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Suriname, as borrower, for the purpose of granting it a financing aimed at cooperating in the execution of the project "Bio-Economy Empowerment in Suriname's Indigenous Communities through Access to Water, Energy and Telecommunications (Bio-SWEET)", which constitutes the first individual operation under the Conditional Credit Line for Investment Projects (CCLIP) SU-O0012, approved by Resolution DE-___/24 on ___ 2024. Such financing will be for the amount of up to US\$45,000,000, from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on ___ 2024)

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/24

Suriname. Nonreimbursable Investment Financing GRT/LE-____-SU. Bio-Economy Empowerment in Suriname's Indigenous Communities through Access to Water, Energy and Telecommunications (Bio-SWEET)

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, as Administrator of the Low Carbon Energy Fund for People and Planet (hereinafter, the "Fund"), to enter into such agreement or agreements as may be necessary with the Republic of Suriname, as beneficiary, for the purpose of granting it a nonreimbursable investment financing aimed at cooperating in the execution of the project "Bio-Economy Empowerment in Suriname's Indigenous Communities through Access to Water, Energy and Telecommunications (Bio-SWEET)". Such nonreimbursable investment financing will be for an amount of up to US\$1,500,000, from the resources of the Fund, and will be subject to the Terms and Financial Conditions and the Special Contractual Conditions in the Project Summary of the project proposal contained in document PR-_____.

(Adopted on ____ 2024)