

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

SURINAME

CONSOLIDATING A SUSTAINABLE ENERGY SECTOR

(SU-L1055)

PROJECT PROFILE

This document was prepared by the project team consisting of: Javier Cuervo, Team Leader, Alberto Levy, Alternate Team Leader, Natacha Marzolf, Virginia Snyder and Cecilia Seminario (INE/ENE); Steven Hofwijks (CCB/CSU); Jordi Abadal (ENE/CSU); Rinia Terborg and Mariska Tjon (FMP/CSU), Monica Centeno (LEG/SGO), Alberto Villalba (VPS/ESG).

Under the Access to Information Policy, this document is subject to Public Disclosure.

PROJECT PROFILE

SURINAME

I. BASIC DATA

Project Name:	Consolidating a Sustainable Energy Sector	
Project Number:	SU-L1055	
Project Team:	Javier Cuervo, Team Leader, Alberto Levy, Alternate Team Leader, Natacha Marzolf, Virginia Snyder and Cecilia Seminario (INE/ENE); Steven Hofwijks (CCB/CSU); Jordi Abadal (ENE/CSU); Rinia Terborg and Mariska Tjon (FMP/CSU), Monica Centeno (LEG/SGO), Alberto Villalba (VPS/ESG)	
Borrower:	Republic of Suriname	
Executing Agencies:	N.V. <i>Energie Bedrijven</i> Suriname (EBS) and Ministry of Natural Resources (MNH)	
Financial Plan:	IDB (Ordinary Capital, OC):	US\$35,000,000
	Total:	US\$35,000,000
Safeguards:	Policies triggered:	OP-102; OP-704; OP-761; OP-765; OP-703 (B.1, B.2, B.3, B.4, B.5, B.6, B.7, B.9, B. 10, B.11, B.17)
	Classification:	B

II. GENERAL JUSTIFICATION AND OBJECTIVES

- 2.1 **Background.** Suriname is a small middle-income country of 163,820 square kilometres, with an estimated population of 551,000 concentrated in the coastal areas, and a sparsely populated interior that extends to the Amazon Rainforest (locally known as Hinterland). Indigenous and Maroon¹ people are predominant in the Hinterland, where over 200 villages can only be reached by boat or plane.
- 2.2 Suriname's economy is heavily dependent on the oil and mining sectors (crude oil and gold), which accounted for approximately 7% of the Gross Domestic Product (GDP), 88% of merchandise exports and 24% of fiscal revenues in 2017.² The country posted one of the highest growth rates in the Caribbean during the period 2001-2014 when real GDP growth averaged 4.4%, due mainly to favorable commodity prices.³ However, a reversal of commodity fortunes in 2015 pushed the economy into a recession with real GDP contracting by an average of 3.9% annually for 2015-2016, accompanied by relatively large fiscal and external

¹ Maroon community refer a group of formerly enslaved Africans and their descendants who gained their freedom by fleeing chattel enslavement and running to the safety and cover of the remote mountains or the dense overgrown tropical terrains near the plantations. Many of the groups are found in the Caribbean, including Suriname (Article "Maroon Community" by Pamela Reed – *Encyclopedia Britannica*.)

² Central Bank of Suriname and the Ministry of Finance, Suriname.

³ Central Bank of Suriname.

imbalances and rising debt levels⁴. The authorities made some macroeconomic adjustments in late 2015 which produced some results: the fiscal and external imbalances have narrowed, economic growth is expected to return in 2018, and inflation decelerated in 2017.

- 2.3 **Sector overview.** The National Power System (NPS) consists of seven isolated power networks served by EBS based on hydro and thermal generation. *Energievoorziening Paramaribo* (EPAR) is the largest network which serves around 143,485 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 203 Megawatts (MW). EPAR has mainly depended on power supply from the 189 MW *Afobaka* hydropower plant⁵ but with increased electricity demand in recent decades,⁶ EBS entered into purchase agreements with *Staatsolie*, the state oil company,⁷ and has also needed to generate electricity from Heavy Fuel Oil (HFO) and diesel in two power plants totaling 169.6 MW of installed capacity.
- 2.4 Outside EPAR, EBS operates six additional power systems that use HFO and diesel. The largest is in Nickerie (also referred as ENIC), which serves around 10,489 customers with electricity supplied by a 20.6 MW thermal power plant at Clarapolder running on HFO and premium diesel. The remaining five rural power networks served by EBS are Albina, Apoera, Coronie, Moengo and Wagenigen, with an approximate installed capacity of 23 MW of diesel power plants, serving roughly 5,857 customers in the coastal zone.
- 2.5 The national electricity access rate is 90%⁸ with great disparities and significant differences in access for urban population (96.36%) and rural population (69.34%)⁹.
- 2.6 In isolated and remote communities in the Hinterland, where the NPS does not reach customers, about 130 villages are being intermittently served with small diesel generators by *Dienst Electrificatie Voorziening* (DEV, Department of Rural Energy of Ministry of Natural Resources, MNH) - the agency responsible for rural electrification in the sparsely inhabited interior. The electricity service provision is designed for an average time of six hours per day from 5:00 pm to 11:00 pm, but that is seldom the case due to irregular provision of diesel. In addition, electricity for these remote communities average an estimated generation cost of

⁴ Data from the Central Bank of Suriname.

⁵ Constructed in the 1960's by *Suralco* under the *Brokopondo Agreement* (1957) with the Government of Suriname (GoS), as a source of energy that made viable the development of a smelting facility and an alumina refinery near its bauxite sources. The agreement established that *Suralco* should supply 16 MW to GoS. When the smelter operation closed in 1999, a new agreement was signed to establish the conditions to increase supply up to 135 MW. In late 2015, *Suralco* also closed the alumina refinery and a new agreement is being negotiated with the GoS.

⁶ From 2012 to 2015 energy demand increased by 3.4% in line with economic growth but from 2015 to 2017 decreased by 5.6% when the country faced a recession. The demand is expected to grow again with the economic recovery of the country.

⁷ *Staatsolie* recently increased its installed capacity to approximately 96 MW of HFO power plants in *Tuit Lui Faut* refinery, to support its crude oil processing operations and to sell electricity through Power Purchase Agreements with the GoS.

⁸ OLADE (2016 Data) – Energy Statistics report.

⁹ World Development Indicators. World Bank data for 2015.

US\$0.63/kWh but can be as high as US\$1.00/kWh which are high compared to the main grid.¹⁰

- 2.7 Non-conventional renewable energy is being slowly introduced in the country. A 5 MW solar plant was commissioned in 2014 to supply power to the IAMGold Rosebel gold mine. Efforts to increase access in isolated areas include a 500 kW off-grid solar plant inaugurated by EBS in February 2018, with diesel backup, to provide 24 hours of electricity to the rural communities of Pokigron and Atjoni, project financed by operation 3059/OC-SU. EBS is also currently executing two additional solar projects, a 2 MW plant in ENIC and a 300 kW plant in Coronie. Also, MNH is working on a 150 kW off grid solar plant in a rural isolated community, project financed by operation GRT/FM-13774-SU. These projects are contributing to improve the know-how in Suriname to implement renewable energy in off-grid projects to improve the quality service of electricity in rural communities.
- 2.8 **Institutional framework.** MNH is the lead government agency responsible for energy policy and supervision of the sector. The sector is governed by the Electricity Act and the Energy Authority Act, enacted in 2016, to reform and improve the electricity sector with three objectives: (i) improve the availability of electricity; (ii) ensure the affordability of supply; and (iii) increase the environmental quality of electricity generation. The reform has four key elements: (i) implementation of the Energy Authority of Suriname (EAS) as an independent authority responsible for supervising the sector; (ii) development of the Electricity Sector Plan (ESP),¹¹ including a 20-year expansion plan and a regulatory plan; (iii) implementation of cost-reflective and affordable tariffs to reduce subsidies to the electricity sector; and (iv) unbundling of the electrical utility in separate business units for generation, transmission and distribution.
- 2.9 As head of the sector, MNH sets the policies and the EAS is the regulatory agency in charge of establishing the regulations needed to implement the policies. MNH provides policy guidance to N.V. EBS, the state-owned utility company. EBS operates under a 50-year countrywide concession since 1973, covering transmission, distribution and commercialization of electricity.
- 2.10 **Challenges:** Suriname's power infrastructure affects service reliability and hinders private sector development due to programmed interruptions of electricity service with the implementation of rolling blackouts or load-shedding programs to prevent system-wide failure. While power generation capacity has grown, because of public and private investments trying to address short-term supply shortages, the expansion and upgrade in transmission and distribution infrastructure has been limited affecting service quality and the overall competitiveness of the country. This is evidenced by the high rate of System Average Interruption Duration Index

¹⁰ Average cost of electricity in the National Power Systems (main grid) in 2017 was US\$0.11/kWh (Source: Electricity Sector Plan 2019-2023. Report by Castalia Consulting). It is also high compared to other regions in LAC, for example the average price in Central America is US\$0.18/kWh (Source: ECLAC statistics for the electric sector of countries of SICA-*Sistema de la Integración Centroamericana*).

¹¹ The elaboration of the ESP is being financed by the Bank (ATN/OC-14820-SU; ATN/OC-16663-SU) and planned to be completed in 2018.

(SAIDI) in the EPAR,¹² the nation's largest grid in terms of consumption and peak demand, a problem that affects more significantly the rural districts of Para, Commewijne and Saramacca supplied by older infrastructure that lacks redundancy to cover power failures. With the support of the IDB (see ¶3.2), EBS is addressing the shortcomings of infrastructure but there is a need for continued investment to improve the quality of the system while serving growing demand.

- 2.11 In rural areas and the interior of the country, significant geographic distances, remote locations, low population density and limited infrastructure constitute appreciable obstacles. Electricity is scarce and when available it is very expensive compared with the provision of electricity in the national grid as mention in ¶2.6. The lack of reliable provision of electricity hampers rural productivity as the efficient irrigation of crops, as well as post-harvest activities (processing and storing food) are highly dependent on electricity service. Limited community experience in the operation of diesel generators and especially in renewable energy technologies, represent a challenge for successful long-term deployment of electricity service in these areas.¹³
- 2.12 Regarding the institutional framework, the main challenge is the implementation of the electricity law, especially with regard to the EAS, which, although created by law, does not have the capabilities to fulfill established mandates, which include the formulation of the ESP as well as the development of secondary regulations to determine transparent dispatch rules, procedures to tender new generation plants, tariff and subsidy methodology-setting, and service quality requirements or sector planning.
- 2.13 **Objectives.** The GoS requested the IDB's support for a project aimed at the consolidation of a sustainable energy sector.¹⁴ The objective is to improve rural economic development, by ensuring adequate and modern access to sustainable electricity to improve the living conditions of the rural population while improving the rural business environment with better provision of electricity as a public service. The specific objectives are to: (i) advance the implementation of energy reform through support to the EAS and operational management of EBS; (ii) increase the reliability of the power system and promote the diversification of the energy matrix through financing pre-investment activities related to renewable energy and natural gas; and (iii) expand electricity coverage through a combination of grid extension and off-grid systems, increasing the provision of renewable energy systems. The project's estimated budget is US\$35 million (MM):
- 2.14 **Component I. Institutional framework (\$10 MM):** This component will support the implementation of energy reform with two subcomponents: (i) Institutional strengthening to the recently created EAS;¹⁵ and (ii) Modernization of EBS's

¹² SAIDI is the average outage duration for a customer and a measure of quality of service. A bigger SAIDI means worse service. As of 2013, SAIDI was 14.4 hours in comparison to a LAC average of less than 12 hours.

¹³ The lack of technical expertise impedes adequate maintenance of the electric installations leading to decay and non-functioning equipment.

¹⁴ The two loans in execution (SU-L1009 and SU-L1039) are aimed at improving the sustainability of the energy sector. The objective of this loan is to further develop the activities started with the previous loans.

¹⁵ Financing consultancy services to improve organizational management and technical goods or services (software, hardware, manuals on how to perform energy audits, etc.).

institutional and operational capabilities by: (a) supporting EBS's restructuring;¹⁶ (b) implementing a digitization strategy for EBS, including the installation of a Distribution Management System; and (c) promoting capacity building and training for EBS's employees.

- 2.15 **Component II. Improvement of critical infrastructure and energy diversification (\$19.5 MM).** This component will finance: (i) the upgrade and expansion of transmission and distribution infrastructure in the EBS network with emphasis on the needs of the networks that supply rural districts; (ii) pre-investment support for tender processes related to utility-scale renewable energy (solar, biomass, wind) in line with the electricity law; and (iii) the preparation of a feasibility study and a public-private partnership framework for the introduction of liquified natural gas.
- 2.16 **Component III. Electrification of rural areas (\$5 MM).** This component will implement rural electrification projects that include expanding distribution networks, upgrades or building of feeders and substations connected to the national grid, and off-grid renewable energy investments. A gender analysis will be conducted to propose specific activities that would contribute to reduce gender gaps in the areas of project intervention.
- 2.17 **Project management and other costs (\$0.5 MM).** this component will finance administration costs, audits and monitoring and evaluation activities.
- 2.18 **Expected results. The expected outcomes are:** (i) increased electrification access in rural areas while contributing to reduce gender gaps and (ii) increased reliability of the infrastructure for transmission. The expected outputs are: (i) EAS in operation fulfilling the duties mandated by law; (ii) EBS transformed into a digitized utility providing a more reliable service; (iii) critical transmission infrastructure upgraded or installed in rural districts; and (iv) households in rural areas receiving 24/7 electricity service.
- 2.19 The beneficiaries of this operation will be the population and businesses from rural areas served by EPAR that will receive better service from the NPS, as well as the rural population in the Hinterland that will receive 24 hours of electricity and that are currently underserved or have no access at all to electricity. Institutional beneficiaries will be the EAS and EBS.
- 2.20 **Strategic alignment.** The project will contribute to the overarching strategic objectives of the IDBG Country Strategy with the Republic of Suriname 2016-2020¹⁷ (CS - Document GN-2873) in the area of private sector development. The support to infrastructure that transports electricity is in line with the need to execute public investments that have growth-enhancing effects (¶3.23 and 3.24 of the CS). The institutional support for EBS is aligned with the need to improve the management of state-owned enterprises (¶3.14 of the CS). Finally, the provision of electricity to rural (remote) areas supports a more favorable business environment and the enhancement of the agricultural sector through 24/7 access

¹⁶ EBS has been separated into different business units to serve different segments of the provision of electricity and requires technical support (consultancies) to adapt to the new structure.

¹⁷ Approved on December 14th, 2016.

to electricity (¶3.22 and 3.33 of the CS) and by offering the opportunity to implement modern and efficient irrigation systems, as well as systems for processing and food storage that add value to crop yields. It is also worth pointing out the contribution of this operation to the cross-cutting themes of gender and cultural equity since the provision of electricity to indigenous and Maroon communities, that are beneficiaries of rural electrification, improves access to critical infrastructure services that improve the lives of these communities (¶3.45 of the CS).

- 2.21 The project is in alignment with the IDB's Update to the Institutional Strategy 2010-2020; partnering with Latin America and the Caribbean to Improve Lives (AB-3008) and the Corporate Results Framework (CRF) of the Update of the Institutional Strategy (GN-2727-6) and the as it contributes to the strategic policy objectives of social inclusion, equality, and productivity. The provision of electricity in rural areas helps reduce poverty by increasing productive activities and provides inclusive electricity infrastructure. The specific indicators of the CRF impacted by the project are "Households with new or improved access to electricity supply" and "Electricity transmission and distribution lines installed or upgraded." The project is in alignment with the four pillars of the Energy Sector Framework (GN-2830-5): (i) energy access, as it will increase the number of population receiving 24/7 electricity, (ii) energy sustainability, as it will promote the development of renewable energies, (iii) energy security, as it will upgrade critical infrastructure, and (iii) energy governance, as it will support the operational implementation of the energy regulator of Suriname.
- 2.22 **Donor coordination.** The GoS has informed the Bank of other projects related to transmission, distribution and rural electrification financed by other donors.¹⁸ EBS and the IDB Project Team agreed to maintain coordination to avoid duplication of activities and to look for synergies and explore options for parallel financing with the United Arab Emirates-Caribbean Renewable Energy Fund.¹⁹

III. TECHNICAL ISSUES AND SECTOR KNOWLEDGE

- 3.1 **Loan instrument and execution.** The proposed project is a specific investment loan of US\$35M financed by Ordinary Capital (OC). The Borrower is the Republic of Suriname represented by the Ministry of Finance. There will be two Executing Agencies (EA): EBS, a state-owned company, for subcomponent I-2, and components II and III; and MNH for subcomponent I-1. Each EA will have a dedicated Project Executing Unit. The expected execution period is five years.
- 3.2 **Sector knowledge. IDB experience in Suriname's energy sector.** The Bank has solid understanding of the energy issues as per the multiple operations and technical assistance projects. The Bank has actively supported the GoS efforts to transform the sector through operations in energy infrastructure, rural

¹⁸ The French Agency for Development is financing a project to connect the eastern part of the country to the EPAR grid. Exim Bank of India is considering a line of credit to bring electricity to a rural area near the airport. The Caribbean Development Bank is financing two projects. One is improvements to the power system in the Nickerie District and another finances energy efficiency investments.

¹⁹ EBS has submitted to the Ministry of Natural Resources and to the Ministry of Foreign Affairs a concept proposal to be presented to the UAE-CREF. A decision is expected by January 2019.

electrification and institutional strengthening. The proposed project builds on the institutional and policy reforms promoted by the three operations within the programmatic policy based loan “Support to the Institutional and Operational Strengthening of the Energy Sector (2848/OC-SU; 3062/OC-SU and 3691/OC-SU)” and it also incorporates lessons learned from operations 3059/OC-SU “Support to Improve Sustainability of the Electricity Service” and 3403/OC-SU “Support for the implementation of EBS Investment Plan”, projects currently being executed by EBS²⁰ with components related to information and communications technology improvements, the upgrade of critical transmission and distribution infrastructure and rural electrification; and the grant GRT/FM-13774-SU “Development of Renewable Energy, Energy Efficiency and Electrification”, executed by the MNH and oriented to the formulation of a wind map and the installation of a 150 kW off-grid solar photovoltaic plant.²¹

- 3.3 The Bank is also financing, with ATN/OC-14820-SU; ATN/OC-16663-SU, the formulation of the ESP. This plan will become the main policy tool for strategic planning and will guide generation expansion and tariff regulation. The formulation of the ESP includes various technical reports, including an energy sector review and outlook, performance monitoring and standards, tariff and subsidy analysis, expansion plans, and regulatory methodologies, findings from which are being used in the design of this operation.

IV. ENVIRONMENTAL SAFEGUARDS AND FIDUCIARY SCREENING

- 4.1 Based on initial information available and discussions on the proposed components of the loan, this operation is categorized as B in accordance with the IDB Environment and Safeguards Compliance Policy and will be further assessed and reevaluated during Environmental and Social Analysis due diligence (see Annex III). Typical environmental, social, health and safety impacts and risks are anticipated, for which mitigation and management measures are readily available. The main potential environmental and social negative impacts and risks to be further assessed during preparation include the following: (i) impacts related to the upgrade, expansion and operation of existing transmission lines and existing substations; (ii) impacts related to the installation and operation of one small photovoltaic plant in a location to be defined, preferably on property owned by EBS; (iii) impacts resulting from the construction and operation of new 33 kV transmission lines; and (iv) non-hazardous waste generation from the upgrade of cables and ceramic insulators. The project is not expected to affect families and livelihoods that would require an involuntary resettlement plan, it will not affect protected areas and critical natural habitats or cultural sites, and it will not require large construction activities and earth movement. These issues, however, will be studied in detail during preparation of the project.

²⁰ Both projects executed by EBS are satisfactory with EBS having acquired expertise related to project management.

²¹ Since the execution of the grant by MNH has been slower than expected, strong emphasis will be placed on the execution mechanism for Subcomponent I-2 working closely with the designated staff of the EAS.

- 4.2 To ensure compliance with IDB Policies, the EA will perform environmental and social assessments, public consultations, and will prepare Environmental and Social Management Plans for each proposed project included in the operation.
- 4.3 **Fiduciary aspects.** An institutional capacity analysis for the project²² will be carried out using the Bank's methodology. This analysis will consider the results of a similar analysis performed for EBS during the preparation of 3059/OC-SU and 3403/OC-SU and adapt them considering the characteristics of the present operation. During the design phase, possibilities for exploiting synergies with the executing unit established for those operations will be explored.

V. OTHER ISSUES

- 5.1 The following risks have been identified: (i) GoS priorities may change according to the results from the expansion plan of the power system that will be prepared within the ESP; (ii) implementation of the new EAS has been slow and there could be modifications to the scope of its activities; (iii) the GoS is currently defining roles and responsibilities for EBS and MNH regarding rural electrification; (iv) there are other projects planned or being executed by EBS to upgrade and expand the transmission and distribution infrastructure that could overload EBS execution capabilities; (v) the macroeconomic situation could worsen if there is another major commodity price shock, which could potentially affect the government's priorities, including investments in the energy sector. All risks have been identified as medium. Detailed classification of these risks will be included in the Risks Matrix at the Proposal for Operation Development (POD) stage.

VI. RESOURCES AND TIMETABLE

- 6.1 **Technical Cooperation (TC) request.** The GoS requested a TC to prepare key technical analysis for project design and to provide support for the early stages of implementation. TC SU-T1108 was considered eligible for financing on 7/11/2018 and Annex VI details the TC document. It was agreed that this TC will be executed by the Bank and it will cover consulting work, including technical analysis, operational and implementation issues and feasibility studies for the operation.
- 6.2 The project is expected to be considered for approval by the IDB Board of Executive Directors by April 24th, 2019, with POD distribution date to the Quality Risk Review (QRR) meeting on January 25th, 2019. Project preparation costs are estimated at US\$46,750 from administrative resources and US\$120,000 from TC. Staff time anticipated to prepare the operation is estimated at 1.220 FTEs.

²² Each EA will be assessed.

CONFIDENTIAL

¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.



Safeguard Policy Filter Report

Operation Information

Operation		
SU-L1055 Consolidating a sustainable energy sector		
Environmental and Social Impact Category	High Risk Rating	
B	High Risk	
Country	Executing Agency	
SURINAME		
Organizational Unit	IDB Sector/Subsector	
Energy	ENERGY	
Team Leader	ESG Primary Team Member	
JAVIER CUERVO	ALBERTO ESTEBAN VILLALBA	
Type of Operation	Original IDB Amount	% Disbursed
Loan Operation	\$35,000,000	0.000 %
Assessment Date	Author	
29 Apr 2018	avillalba ESG Primary Team Member	
Operation Cycle Stage	Completion Date	
ERM (Estimated)		
QRR (Estimated)		
Board Approval (Estimated)		
Safeguard Performance Rating		
Rationale		

Potential Safeguard Policy Items

[No potential issues identified]

Safeguard Policy Items Identified

[B.1 Bank Policies \(Access to Information Policy– OP-102\)](#)



Safeguard Policy Filter Report

The Bank will make the relevant project documents available to the public.

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The operation is in a geographical area exposed to [natural hazards \(Type 1 Disaster Risk Scenario\)](#). Climate change may increase the frequency and/or intensity of some hazards.

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The sector of the operation is vulnerable to natural hazards. Climate change may increase the frequency and/or intensity of some hazards.

B.1 Bank Policies (Disaster Risk Management Policy– OP-704)

The operation includes activities related to climate change adaptation, but these are not the primary objective of the operation.

B.1 Bank Policies (Gender Equality Policy– OP-761)

The operation will offer opportunities to promote [gender equality](#) or [women's empowerment](#).

B.2 Country Laws and Regulations

The operation is expected to be in compliance with laws and regulations of the country regarding specific women's rights, the environment, gender and indigenous peoples (including national obligations established under ratified multilateral environmental agreements).

B.3 Screening and Classification

The operation (including [associated facilities](#)) is screened and classified according to its potential environmental impacts.

B.4 Other Risk Factors

The operation may be of high risk due to controversial environmental and associated social issues or liabilities.

B.4 Other Risk Factors

There are other environmental and social sustainability issues that the project team considers to represent a risk for this operation. (e.g. wood sourced from Amazon rainforest).

B.5 Environmental Assessment Requirements

An environmental assessment is required.

B.6 Consultations

Consultations with affected parties will be performed equitably and inclusively with the views of all stakeholders taken into account, including in particular: (a) equal participation by women and men, (b) socio-culturally appropriate participation of indigenous peoples and (c) mechanisms for equitable participation by vulnerable groups.

B.7 Supervision and Compliance

The Bank is expected to monitor the executing agency/borrower's compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.



Safeguard Policy Filter Report

B.9 Natural Habitats and Cultural Sites

The operation will result in the degradation or conversion of Natural Habitat or Critical Natural Habitat in the project area of influence.

B.10. Hazardous Materials

The operation has the potential to impact the environment and occupational health and safety due to the production, procurement, use, and/or disposal of hazardous material, including organic and inorganic toxic substances, pesticides and persistent organic pollutants (POPs).

B.11. Pollution Prevention and Abatement

The operation has the potential to pollute the environment (e.g. air, soil, water, greenhouse gases).

B.17. Procurement

Suitable safeguard provisions for the procurement of goods and services in Bank financed operations may be incorporated into project-specific loan agreements, operating regulations and bidding documents, as appropriate, to ensure environmentally responsible procurement.

Recommended Actions

Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR.

Additional Comments

[No additional comments]



Safeguard Policy Filter Report



Safeguard Screening Form

Operation Information

Operation		
SU-L1055 Consolidating a sustainable energy sector		
Environmental and Social Impact Category	High Risk Rating	
B	High Risk	
Country	Executing Agency	
SURINAME		
Organizational Unit	IDB Sector/Subsector	
Energy	ENERGY	
Team Leader	ESG Primary Team Member	
JAVIER CUERVO	ALBERTO ESTEBAN VILLALBA	
Type of Operation	Original IDB Amount	% Disbursed
Loan Operation	\$35,000,000	0.000 %
Assessment Date	Author	
29 Apr 2018	avillalba ESG Primary Team Member	
Operation Cycle Stage	Completion Date	
ERM (Estimated)		
QRR (Estimated)		
Board Approval (Estimated)		
Safeguard Performance Rating		
Rationale		

Operation Classification Summary

Overriden Rating	Overriden Justification
Comments	



Safeguard Screening Form

Conditions / Recommendations

Category "B" operations require an environmental analysis (see Environment Policy Guideline: Directive B.5 for Environmental Analysis requirements)

The Project Team must send to ESR the PP (or equivalent) containing the Environmental and Social Strategy (the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3) as well as the Safeguard Policy Filter and Safeguard Screening Form Reports. These operations will normally require an environmental and/or social impact analysis, according to, and focusing on, the specific issues identified in the screening process, and an environmental and social management plan (ESMP). However, these operations should also establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.) where necessary.

Summary of Impacts / Risks and Potential Solutions

[Third party employment practices](#) are inadequate.

Achieve Consistency in Applying Labor Practices: The borrower should be required to improve employment and employment rights for non employees including: (a) clarification of employment practices and terms; (b) support of collective bargaining; (c) approaches to workers' organizations; (d) non-discrimination and equal opportunity; (e) development of appropriate grievance mechanisms (for contract workers only). Depending on the financial product, requirements should be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests etc.).

Borrower is committed to complying with applicable [ILO requirements](#) (including commitment to non-discrimination, equal opportunity, [collective bargaining](#) and rights of association) and national employment in relation to [working conditions](#) but does not fully address all employment requirements.

Confirm Labor Practices are Adequate: The borrower should be required to improve employment and employment rights including (as appropriate): (a) clarification of employment practices and terms; (b) support of collective bargaining; (c) approaches to workers' organizations; (d) non-discrimination and equal opportunity; (e) fair and transparent retrenchment/redundancy amongst workers; and (f) development of appropriate grievance mechanisms. These issues should be defined in a human resources policy. Depending on the financial product, requirements should be referenced in appropriate legal documentation (covenants, conditions of disbursement, etc).

Conversion or [degradation](#) of natural habitat causing [minor](#) to [moderate](#) impact on ecological function.

Mitigation measures presented in the Biodiversity Management Plan must be acceptable: The mitigation measures should be presented in the Biodiversity Management Plan (included in the ESMP) and should follow the mitigation hierarchy: impacts to biodiversity should be avoided in the first instance (i.e. proposed activities relocated or reconfigured); if avoidance of all impacts is not possible, those remaining should be minimized, mitigated by restoration, or compensated for. The BMP should also explain what consultation activities are planned. The BMP must define how these measures will be implemented (roles and responsibilities, monitoring, budget, etc.). Confirmation should be obtained from competent experts that they are confident that the BMP can mitigate impacts and that approval has been granted by relevant authorities. Regular (bi-annual or annual) reporting is required, in addition to independent audits of BMP. Depending on the financial product, the BMP should also be referenced in appropriate legal documentation (covenants, conditions of disbursement, project completion tests, etc.).

Generation of solid waste is [moderate](#) in volume, does not include [hazardous materials](#) and follows standards recognized by multilateral development banks.

Solid Waste Management: The borrower should monitor and report on waste reduction, management and disposal and may also need to develop a Waste Management Plan (which could be included in the ESMP). Effort should be placed on reducing and re-cycling solid wastes. Specifically (if applicable) in the case that national legislations have no provisions for the disposal and destruction of hazardous materials, the applicable procedures established within the Rotterdam Convention, the Stockholm Convention, the Basel Convention, the WHO List on Banned Pesticides, and the Pollution Prevention and Abatement Handbook (PPAH), should be taken into consideration.

Project construction activities are likely to lead to localized and temporary impacts (such as dust, noise, traffic etc) that will affect local communities and [workers](#) but these are [minor](#) to [moderate](#) in nature.

Construction: The borrower should demonstrate how the construction impacts will be mitigated. Appropriate management plans and procedures should be incorporated into the ESMP. Review of implementation as well as reporting on the plan should be part of the legal documentation (covenants, conditions of disbursement, etc).

The negative impacts from production, procurement and disposal of [hazardous materials](#) (excluding POPs unacceptable under the Stockholm Convention or toxic pesticides) are [minor](#) and will comply with relevant national legislation, [IDB requirements on hazardous material](#) and all applicable International Standards.

Monitor hazardous materials use: The borrower should document risks relating to use of hazardous materials and prepare a hazardous material management plan that indicates how hazardous materials will be managed (and community risks mitigated). This plan could be part of the ESMP.

The project is located in an area prone to [inland flooding](#) and the likely severity of the impacts to the project is [moderate](#).



Safeguard Screening Form

A Disaster Risk Assessment, that includes a Disaster Risk Management Plan (DRMP), may be necessary, depending on the complexity of the project and in cases where the vulnerability of a specific project component may compromise the whole operation. The DRMP should propose measures to manage or mitigate these risks to an acceptable level. This must take into consideration changes in the frequency and intensity of intensive rainfall and in the patterns of snowmelt that could occur with climate change. The DRMP includes risk reduction measures (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as the financial protection (risk transfer, retention) of the project. The DRM Plan takes into account existing vulnerability levels and coping capacities, the area's disaster alert and prevention system, general design standards, land use regulations and civil defense recommendations in flood prone areas. However, the options and solutions are sector- and even case-specific and are selected based on a cost analysis of equivalent alternatives.

Disaster Risk Summary

Disaster Risk Level

B

Disaster / Recommendations

Disaster Summary

Details

Actions

Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PP (or equivalent) and Safeguard Screening Form to ESR.

Environmental and Social Strategy (ESS)	
Operation Name	Consolidating a sustainable energy sector
Operation Number	SU-L1055
Prepared by	ALBERTO VILLALBA (VPS/ESG)
Operation Details	
IDB Sector	Energy (INE/ENE)
Type of Operation	Specific Investment Operation (ESP)
Environmental and Social Classification	Category B
Disaster Risk Rating	Moderate
Borrower	Government of Suriname (GoS)
Executing Agency	Energie Bedrijven Suriname (EBS) and Ministry of Natural Resources (MNH)
IDB Loan US\$ (and total project cost)	US\$35 million
Applicable Policies/Directives	Access to Information (OP-102), Disaster Risk Management (OP-704), Gender Equality (OP-761), Indigenous Peoples (OP-765), Environmental and Safeguard Compliance (OP-703) directives B.1, B.2, B.3, B.4, B.5, B.6, B.7, B.9, B.10, B.11, and B.17.
Operation Description	
<p>The objective of the operation is to facilitate private sector development by ensuring adequate and modern access to sustainable electricity, to improve the living conditions of urban and rural populations while improving business environment with a sustainable provision of electricity as a public service.</p> <p>This new operation will build upon the positive experiences from a similar operation currently under execution (SU-L1009)¹, in both cases their specific objectives are to support the implementation of information technologies and best management tools for Suriname Energy Company (EBS or <i>Energie Bedrijven Suriname</i>), to provide financial support for upgrading critical infrastructure, and to contribute to expand electricity coverage by grid extension and renewable energy systems in the interior of the country. EBS is a public company under the supervision of the Ministry of Natural Resources, which oversees energy policy and supervision of the sector. EBS operates the system under a 50-year countrywide concession covering transmission, distribution and commercialization of electricity for households as well as commercial and industrial users. EBS's major source of electricity comes from the Afobaka Hydropower Plant, owned by a private company (Suralco) that used to exploit bauxite for aluminum production, but is currently under a process of decommissioning. EBS owns several small and medium-sized diesel plants and generators and obtains electricity from the state oil company Staatsolie.</p> <p>This project is a Specific Investment Operation for a total amount of US\$35 million and the proposed components and approximate amounts for the new operations are the following:</p> <p>Component 1. Institutional framework (US\$ 10 million) This component will support the implementation of the energy reform with two subcomponents: 1. Institutional strengthening to the recently created EAS and 2. Modernization of EBS's institutional and operational capabilities by: (i) supporting EBS's restructuring;</p>	

¹ SU-L1009 Improving sustainability of the energy sector in Suriname is a Category C operation approved in November 2013 for a total amount of US\$30 million that was disbursed 85% to this date. The specific objectives of SU-L1009 are to support the implementation of information technologies for EBS, to provide financial support for upgrading critical infrastructure, and to contribute to expand electricity coverage by grid extension and renewable energy systems in the interior of the country. The main components of the Program are: (i) Improvement of EBS' Operations; (ii) Sustainable Rural Electrification; and (iii) critical infrastructure upgrading.

(ii) implementing a digitization strategy for EBS, including the installation of a Distribution Management System (DMS); and (iii) promoting capacity building and training for EBS's employees

Component 2. Improvement of critical infrastructure and energy diversification (\$19.5 MM): this component will finance: (i) the upgrade and expansion of transmission and distribution infrastructure in the EBS network with emphasis on the needs of the networks that supply the rural districts; (ii) pre-investment support of tender processes related to utility-scale renewable energy (solar, biomass, wind) in line with the electricity law; and (iii) the preparation of a feasibility study and a public-private partnership framework for the introduction of liquified natural gas. Considering that most funds will be allocated to this component, and that it will invest in small infrastructure construction and upgrade for transmission lines in two locations around Paramaribo and the International Airport, more information was provided in the next chapter regarding its potential impacts and risks, as well as technical and geographical details.

Component 3. Electrification of rural areas (US\$ 5 million) This component will implement rural electrification projects that include expanding distribution networks, upgrades or building of feeders and substations connected to the national grid, and off-grid renewable energy investments. Giving the small amount of funds, it is estimated that only one small PV plant of approximately one hectare of surface will be implemented in the Commewijne District close to Paramaribo or in another location to be determined. See next chapter for more information.

Project management and other costs (\$0.5 MM): this component will finance administration costs, audits and monitoring and evaluation activities

Key Potential ESHS Risks and Impacts

It is important to note that this new operation is relatively small, in terms of financing and the foot print of the operation, since it is not planned to support any large infrastructure, large earth movement or heavy traffic of machinery and vehicles. It is not expected to physically or economically displace families and businesses, it is not expected any negative affectations to indigenous groups, afro-descendants and other vulnerable groups, it is not expected significant conversion of natural and critical natural habitats and cultural sites. In a comparable way, the operation is not expected to generate substantial amounts of GHG, since it will improve the overall efficiency of the national system through replacement of diesel generators by PV plants and by connecting new users to the national grid that obtains its electricity mainly from hydroelectric power.

The main environmental and social impacts and risks are expected to occur during the construction phase and are related to typical construction and upgrading of existing transmission lines and the installation of at least one small PV plant. Most of the transmission lines will be constructed on existing right of ways or along roads on public domains, however, in some places it is possible to find private and communal lands that could pose a potential source of conflict and risks. No affectation to households, businesses or other structures are expected. It is expected minor generation of dust, noise, traffic disruptions and other nuisances to urban and rural dwellers, as well as minor amounts of solid non-hazardous waste since most metal and plastic materials will be recycled. During the operation phase, minor impacts and risks are expected, mainly related to potential accidents of workers during infrastructure maintenance and the procurement and management of minor amounts of hazardous substances, including lead panels and electrolytes for batteries, diesel and lubricants for generators and dielectric oil for transformers. It is important to note that EBS has a good image and overall institutional capacity to manage these mentioned risks and no liabilities, highly sensitive issues and reputational risks have been identified during this initial preparation phase.

Suriname has a moderate disaster risk rating, due to the risks posed by high winds, inland flooding and seasonal droughts, all of which are being exacerbated by climate change. The operation, however, is not expected to increase these risks, rather it seeks to promote adaptation measures for potential future impacts that may arise because of natural disasters. Considering this context, this new operation was categorized as B.

Specifically, most of the negative impacts and risks are expected under Component 2, during the construction phase of critical transmission infrastructure that includes upgrading existing transmission lines and the construction of approximately 23 km of new transmission lines on existing right of ways in public and private

lands that has been already cleared from natural vegetation for the installation of the transmission lines. In this way, it was already identified two sites for small investments under this component:

- 1) **Transmission Line from Powaka Village to the Zanderij International Airport:** it is a 33-kV line with a total extension of 19 Km, from which, 6 Km will use an existing transmission line and 13 Km will use a new right of way along a newly constructed road that links the two mentioned points. No land acquisition is expected since it will use the existing right of way of the road that was built on public lands with enough space for the TL. In order to install the TL along the road, it was cleared an estimated surface of around 50 hectares of secondary tropical forests and natural grasslands that are considered Natural Habitats (NH) according to IDB directive B.9, however, in both cases, these NH has been under human activities and degradation for several decades considering its proximity to urban, industrial, commercial, logging and plantations areas. According to a rapid assessment using satellite data and a meeting with the National Institute for Environment and Development in Suriname (*Nationaal Instituut voor Milieu en Ontwikkeling in Suriname* or NIMOS), it was preliminarily confirmed that no protected areas, cultural sites and highly valuable ecosystems are found in this specific area. In the same way, it was evident that no houses or structures are located along the new planned route for this transmission line. See map 2 in Annex 1.
- 2) **Improving transmission and generation services in the Commewijne District:** this district is in the east bank of the Paramaribo River, bordering the capital and the main urban center of Suriname. A 33-kV transmission line of approximately 18 Km long will be constructed and upgraded, from which, 8 Km will be using existing towers and only 10 Km will be a new transmission line to be constructed on suburban areas, on abandoned plantations, secondary forests and wetlands that are highly disturbed by decades of human activities. The new right of way is located along uninhabited areas, therefore, no affectations to households, businesses and other structures are expected, however, land acquisition and easements will be necessary. It is important to mention that EBS already has a good practice for Stakeholder Engagement and Consultation Plan that was successful in other cases in the past. This area used to be the main agricultural center for the capital since colonial times and is now a focus for urban expansion, recreational and service facilities, holiday homes and ecofriendly resorts and farms. For this same reason under Component 3, it is also planned to install a small PV plant in this district, in an existing 2-hectare-lot under the property of EBS where a diesel generator that served this area in the past is in the process of decommissioning. It is estimated that around 30 hectares of abandoned plantations and secondary forest will be cleared for the new transmission line along the mentioned new 10 Km right of way. According to a rapid assessment using satellite data and a meeting with NIMOS, it was confirmed that no protected areas, cultural sites and highly valuable ecosystems are found in this specific area. In the same way, it was evident that no houses or structures are located along the new planned route for this transmission line. See map 2 in Annex 1.

Information Gaps and Strategy for Analysis and Management

During the initial assessment for this operation by the Bank, key existing information and data were identified as potential sources for the preparation of project's documents, including the following items: ESIA's of nearby former development projects, demographic and socio-economic data at national and local levels, vegetation coverage, biodiversity and land-use data at national and local levels, general information on soil, mineral resources and land-use, general information on sociocultural data on afrodescendents and indigenous peoples).

However, it was also identified that key information is missing or unavailable and there are several compliance gaps, for instance, it is necessary an Environmental and Social Analysis and Environmental and Social Management Plan (ESMP) in order to comply with directives B.5 and B.6, that should include at minimum, a detailed evaluation of potential negative impacts and risks that could result as a direct or indirect effect of the Project, assessment of alternatives, scenario without project, cumulative impact assessment, evaluation of environmental and social liabilities and risks, assessment of institutional capacity and legal framework, detailed biological and socio-economic baseline, land tenure data, assessment of potential physical and economic displacement of people, potential affectation to afrodescendents, and Stakeholder Engagement and Consultation Plan.

The main elements of a strategy for this operation are the following:

- (i) Gathering of preliminary information, institutional capacity and arrangements for the assessment of ESHS impacts and risks for the entire operation and specifically for infrastructure construction and upgrade (including assessment of alternatives examined and determination that appropriate mitigation and management measures have been identified and are being or will be developed and implemented)
- (ii) Preparing and submitting an Environmental and Social Analysis and ESMP (ESA/ESMP) under the responsibility of EBS with the support of a consultant, under the Terms of References and timeframe agreed with the Bank. This goal was established during the identification mission and will take a period of at least three months to be completed after the consultant signs the contract.
- (iii) Publication of the first draft report of the ESA/ESMP on the IDB and EBS's websites at least two weeks before the Analysis Mission under the entire satisfaction of the Bank. See timeframe table below.
- (iv) Determination of any changes under this Operation; whether it will be necessary to change the environmental and social category or prepare specific studies in addition to the ESA/ESMP, for instance, a Sociocultural Assessment in case indigenous peoples are found to be affected by the Operation. Since physical and economic displacement are not expected under this operation, an Involuntary Resettlement Plan was not requested, however, if found otherwise in the future, this situation will be reevaluated accordingly by the Bank in a timeframe that is consistent with the project cycle and the IDB policies.
- (v) Ensuring that the Executing Agency has taken required steps for public meaningful consultation and disclosure of information. Initial assessment does not show any evidence of impacts to Indigenous Peoples since they are not located in the proximity of the areas where this operation will invest. However, if in the future it is demonstrated affectation to indigenous peoples, a socioculturally appropriate and duly documented consultation and good faith negotiation processes will be required.
- (vi) Evaluating and complementing requirements for adequate E&S management and continuous compliance, taking into account all applicable ESHS plans, including stakeholder engagement plans and grievance management mechanisms.
- (vii) Ensuring that the Executing Agency and its consultants have undertaken a detailed assessment of liabilities and reputational risks, especially in the land acquisition process for the road from Powaka to the International Airport, which was not financed by the IDB, but where a new transmission line will be built using the existing right of way of this road. EBS has assured that these lands are under public domains, however, if in the future it is found any liabilities and non-compliances on this matter, then EBS will compensate and correct any past non-compliances under these existing facilities and according to Banks policies and international best practices in the energy sector.

Table 1: ESHS Assessments – Tentative timeline and resources

ESHS Documents	Current stage of development - Gapfilling needed	Estimated resources needed to finalize	Estimated timeline to finalize and consult (as applicable)
Environmental and Social Analysis (ESA) and Environmental and Social Management Plan (ESMP)	Agreement with Team Leader and EBS to hire a consultant as soon as possible or by the end of May, 2018, for a period of three months	US\$ 60,000.00 for a consultant or firm to be covered by the Bank under a TC or resources from existing operations	Execution: 3 months Intended start: end of May, 2018 Consultation Process: July 15 th , 2018. Publication of first draft report: September 1 st , 2018 Analysis Mission: September 15 th , 2018

Opportunities for IDB Additionality on Environment and Social matters (if any)

During the Identification Mission it was found a high potential for adaptation to natural disasters and the promotion of renewable energy through solar plants in replacement of diesel generators.

Annex Table: Operation Compliance with IDB Safeguard Policies

Additional Appendices (if any)

Appendix 1: Maps

Annex Table: Operation compliance with IDB safeguard policies

Policies / Directives	Policy / Directive Applicable?	Rationale for applicability of Policy / Directive	Actions required during Preparation & Analysis
OP-703 Environment and Safeguards Compliance Policy			
B.2 Country Laws and Regulations	Yes	Required to comply with national regulations, especially for the procurement and management of hazardous and non-hazardous waste.	ESA will include detailed information of the applicable regulatory framework, potential impacts and risks and management measures for the construction and operation phases.
B.3 Screening and Classification	Yes	This operation was screened and pre-evaluated as indicated in Directive B.3. It was classified as Category B.	Not applicable (N/A)
B.4 Other Risk Factors	Yes	Although EBS has demonstrated improvement and an overall strong institutional capacity and good image, there are potential risks related to its capacity for the implementation of some management measures under a complex context.	The ESA will evaluate the institutional capacity of EBS, as well as other institutions and the regulatory framework. The ESMP will include appropriate measures to manage these risks and reinforce the institutional capacity as appropriate.
B.5 Environmental Assessment and Plans Requirements	Yes	The Bank requested EBS to prepare an ESA/ESMP as indicated by directive B.5. The regulatory framework does not require any instrument for Environmental or Social Assessment. In a similar way, environmental licenses for this type of operations are not required.	EBS will hire a consultant for the preparation of the ESA/ESMP in a period of at least three months.
B.5 Social Assessment and Plans Requirements (including Livelihood Restoration Plan)	No	N/A	N/A
B.6 Consultation	Yes	Requirement by the Bank of at least one consultation process for Category B projects during the preparation phase of the Operation	The ESA/ESMP will include a Stakeholder Engagement and Consultation Plan that will be undertaken by EBS with the support of the consultant

B.7 Supervision and Compliance	Yes	Requirement by the Bank for supervision and compliance for every operation financed with IDB resources	The ESA/ESMP will include the mechanisms for appropriate monitoring, supervision and reporting according to IDB policies.
B.8 Transboundary Impacts	No	N/A	N/A
B.9 Natural Habitats	Yes	It is expected moderate affectation and land-use change along existing and new transmission lines to be upgraded and improved by the project. It is estimated that around 70 hectares of diverse natural habitats will be partially or permanently affected, mainly secondary tropical forest and natural grasslands that are in urban and rural areas that has been significantly impacted by decades of human activities. None of them are comprised inside or nearby protected areas and none are considered of high valuable areas for conservation. No evidence was found of impacts and risks to other critical natural habitats or ecosystem services.	The ESA will include a detailed biodiversity baseline and will evaluate potential direct and indirect impacts and risks in relation to the activities and investments planned under this Project. The ESMP will include appropriate measures to avoid, mitigate and compensate these impacts and risks and reinforce the institutional capacity as appropriate for the implementation of the corresponding management measures.
B.9 Invasive Species	No	N/A	N/A
B.9 Cultural Sites	No	N/A	N/A
B.10 Hazardous Materials	Yes	Potential negative impacts for the procurement and usage of oil and lubricants in generators, dielectric oil in transformers, electrolytes and lead in batteries and other minor quantities of hazardous chemicals	The ESA/ESMP will include appropriate measures to avoid contamination, accidental spills and other risks related to the procurement and usage of hazardous materials and generation of waste during construction and operation.
B.11 Pollution Prevention and Abatement	Yes	Potential negative impacts for the generation of non-hazardous waste, especially ceramic, plastic and metal waste after replacing cables and isolators from obsolete transmission	The ESA/ESMP will include appropriate measures to minimize and manage the generation of non-hazardous waste during construction and operation.

		lines that will be changed as part of this initiative.	
B.12 Projects Under Construction	No	N/A	N/A
B.13 Noninvestment Lending and Flexible Lending Instruments	No	N/A	N/A
B.14 Multiple Phase and Repeat Loans	No	N/A	N/A
B.15 Co-financing Operations	No	N/A	N/A
B.16 In-Country Systems	No	N/A	N/A
B.17 Procurement	Yes	Requirement to comply with Bank's procurement procedures in all operations in terms of environmental and social better practices and sustainability.	Environmental and social standards will be included in the procurement process for consultancies and the acquisition of goods and services during preparation, construction, and implementation.
OP-704 Natural Disaster Risk Management Policy			
A.2 Analysis and management of Type 2 risk scenario	No	Type 2 risk scenario is not expected for this operation, that could exacerbate hazard risk to human life, property, the environment and the project itself.	The ESA/ESMP will include an assessment of potential impacts and risks due to natural disasters, especially high winds and inland flooding.
A.2 Contingency planning (Emergency response plan, Community health and safety plan, Occupational health and safety plan)	No	Suriname is considered a moderate disaster risk country, especially for high winds and inland flooding, however, considering the type of small infrastructure and to reinforce existing weaknesses, the operation is not expected to exacerbate this, but to alleviate the risks with new adaptation measures.	The ESA/ESMP will determine the necessary plans (emergency response, community and occupational health and safety) and appropriate measures for the project. The IDB will review these plans during the preparation of the operation and will make necessary updates accordingly.
OP-710 Operational Policy on Involuntary Resettlement			
Resettlement Minimization	N/A	N/A	N/A
Resettlement Plan Consultations	N/A	N/A	N/A
Impoverishment Risk Analysis	N/A	N/A	N/A

Resettlement Plan and/or Resettlement Framework Requirement	N/A	N/A	N/A
Livelihood Restoration Program Requirement ²	N/A	N/A	N/A
Consent (Indigenous Peoples and other Rural Ethnic Minorities)	N/A	N/A	N/A
OP-765 Operational Policy on Indigenous Peoples			
Sociocultural Evaluation Requirement	tbd		<p>The ESA will include a detailed socioeconomic baseline and will evaluate potential direct and indirect impacts and risks in relation to indigenous peoples that could be potentially affected by the activities and investments planned under this Project.</p> <p>The ESMP will include appropriate measures to avoid, mitigate and compensate these impacts and risks and reinforce the institutional capacity as appropriate for the implementation of the corresponding management measures.</p>
Good-faith Negotiations and proper documentation	N/A	N/A	N/A
Agreement with Affected Indigenous Peoples	N/A	N/A	N/A
Indigenous Peoples Compensation, and Development Plan and/or Framework Requirement	N/A	N/A	N/A
Discrimination Issues	N/A	N/A	N/A
Transborder Impacts	N/A	N/A	N/A

² OP-710 applies when livelihood impacts lead to physical displacement (see *Transitional Guidance in instruments for Physical Displacement, Economic Displacement and Economic Losses under OP-710 and OP-703 (TG-005)* for more information)

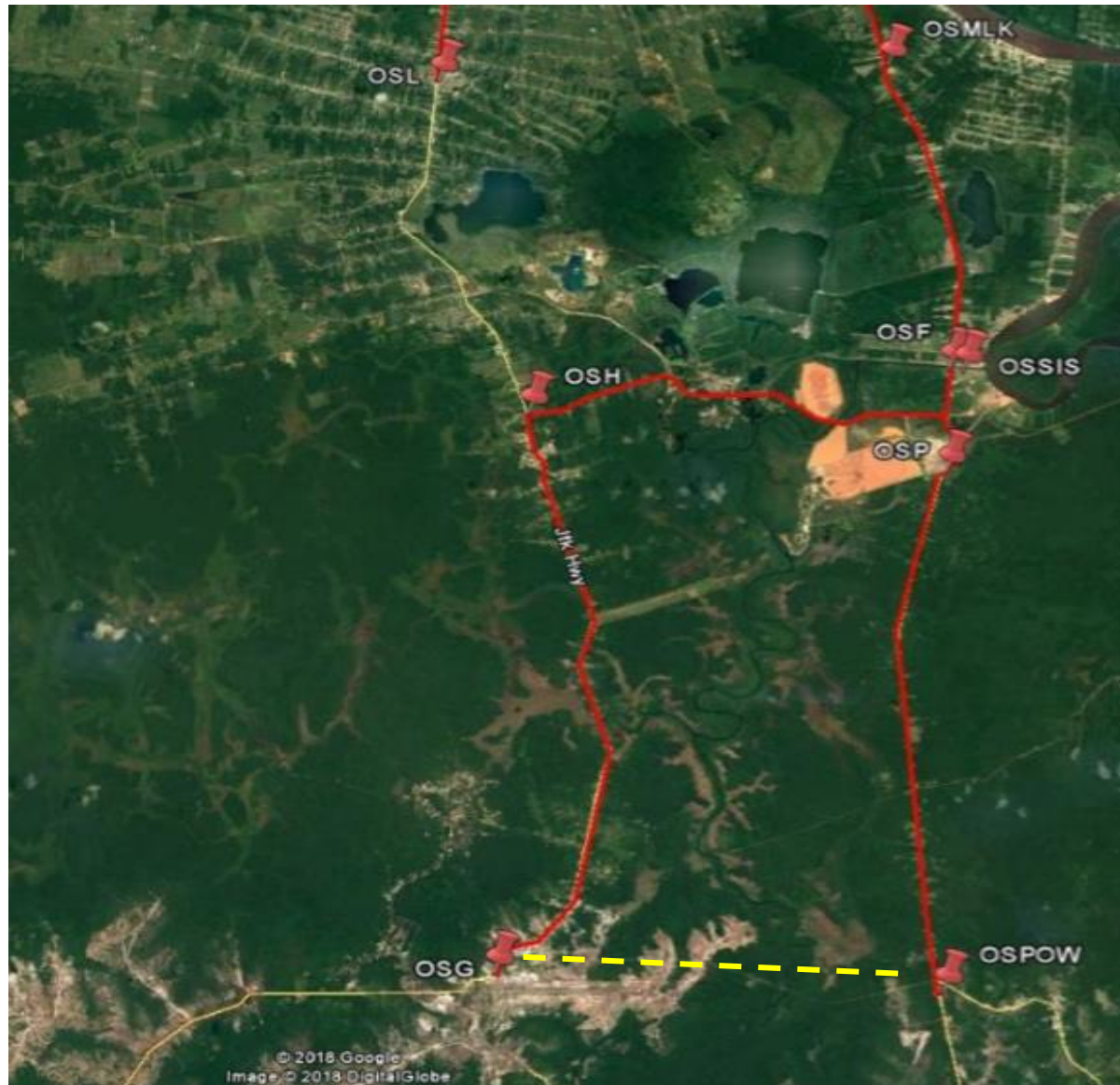
Impacts on Isolated Indigenous Peoples	N/A	N/A	N/A
OP-761 Operational Policy on Gender Equality in Development			
Consultation and effective participation of women and men	Yes	The project will seek the equitable participation of women and men in its consultation process.	The inclusion of women and men in all consultation activities will be reviewed in the ESA and by the IDB. Data will be gathered in consideration of gender and presented segregated accordingly to assess the level of participation of women versus men.
Application of safeguard and risk ³ analysis	No	No gender-based exclusion and risks are expected.	The risks of gender-based exclusion will be assessed in the ESA/ESMP and reviewed by the IDB.
OP-102 Access to Information Policy			
Disclosure of relevant Environmental and Social Assessments Prior to Analysis Mission, QRR, OPC and submission of the operation for Board consideration	Yes	A fit-for-disclosure ESA/ESMP must be ready for review and public disclosure at least two weeks prior to the analysis mission through the Borrower and IDB's webpage. IDB will disclose the final versions of the documents prior to OPC, at the latest.	Meaningful consultations with the affected parties will be done before the final version of the ESA/ESMP is published
Provisions for Disclosure of Environmental and Social Documents during Project Implementation	TBD	In the case that new relevant environmental and social documents are delivered during the Project construction or operation phases, they will also be made available to the public according to this IDB policy.	This requirement will be included as specific conditions of the Loan Agreement and ESMP, as appropriate.

³ Risks may include: (i) Unequal access to project benefits/ compensation measures, (ii) Men or women disproportionately affected due to gender factors, (iii) Non-compliance with applicable legislation related to equality between men and women, (iv) Increased risk of gender-based violence, including sexual exploitation, human trafficking and sexually transmitted diseases, and (v) Disregard of women's ownership rights.

Appendix 1: Map 1: Protected areas, natural resources and political division of Suriname



Map 2: TL from Powaka Village to the Zanderij International Airport (new TL in yellow, existing TL in red)



Map 3: Improving transmission and generation services in the Commewijne District east of Paramaribo



INDEX OF SECTOR OF PROPOSED SECTOR WORK

Area	Description	Estimated Dates	References and electronic links
Project planning	Result Matrix, detailed Budget, disbursement plan, Risk Management (GRP), Program Operations Manual (POM), Annual Operational Plan (AOP), Procurement Plan (PP), initial PMR.	January 2019	
Technical cooperation	Technical cooperation to support loan preparation and implementation	September 2018	
Technical and economic studies	Energy Sector Review and Outlook Report for Surinam	August 2018	Electronic Link
	Performance Monitoring and Standards Report for Suriname	August 2018	Electronic Link
	Tariff Methodology and Subsidy Plan Report	October 2018	Electronic Link Electronic Link
	Generation and Transmission Expansion Plan Report	November 2018	
	Regulatory Methodologies Report for Suriname	October 2018	
	Action Plan to Import Natural Gas to Suriname	April 2015	Electronic Link
	Technical feasibility and economic evaluation for critical infrastructure projects (transmission)	December 2018	
	Technical feasibility and economic evaluation for rural electrification projects (transmission)	December 2018	
Institutional Analysis	PACI report for executing agency ¹	December 2018	
Environmental and Social Safeguards	Environmental and Social Impact Analysis	Jan 2019	

¹ SECI analysis already done as executing agency is currently implementing 3059/OC-SU and 3403/OC-SU operations.

CONFIDENTIAL

¹ The information contained in this Annex is confidential and will not be disclosed. This is in accordance with the "Deliberative Information" exception referred to in paragraph 4.1 (g) of the Access to Information Policy (GN-1831-28) at the Inter-American Development Bank.

TC DOCUMENT

I. BASIC INFORMATION FOR TECHNICAL COOPERATION (TC)

▪ Country/Region:	Suriname/CCB - Caribbean Group
▪ TC Name:	Technical Support to the Preparation and Execution of SU-L1055
▪ TC Number:	SU-T1108
▪ Team Leader/Members:	Javier Cuervo, Team Leader, Alberto Levy, Alternate Team Leader, and Ana Cecilia Seminario (INE/ENE); Steven Hofwijks (CCB/CSU); Jordi Abadal (ENE/CSU); Monica Centeno (LEG/SGO); and Alberto Villalba (VPS/ESG)
▪ Taxonomy:	Operational Support
▪ Number and name of Operation Supported by the TC:	SU-L1055 - Consolidating a Sustainable Energy Sector
▪ Date of TC Abstract authorization:	July 11 th , 2018
▪ Beneficiary:	<i>EnergieBedrijven</i> Suriname (EBS)
▪ Executing Agency (EA):	Inter-American Development Bank (IDB)
▪ Donors providing funding:	US\$ 292,000.00
▪ IDB Funding Requested:	US\$ 292,000.00 - Ordinary Capital Strategic Development Program for Infrastructure (INF)
▪ Local counterpart funding, if any:	-
▪ Disbursement period:	18 months
▪ Required start date:	October 1 st , 2018
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	Energy Division (INE/ENE)
▪ Unit of Disbursement Responsibility:	Infrastructure & Energy Department (INE/INE)
▪ TC included in Country Strategy (y/n):	No
▪ TC included in CPD (y/n):	No
▪ Alignment to the Update to the Institutional Strategy 2010-2020:	Social inclusion and equality; productivity and innovation

II. DESCRIPTION OF THE ASSOCIATED LOAN

- 2.1 Operation SU-L1055 has the following three components:
- 2.2 **Component I. Institutional framework (\$10 MM):** This component will support the implementation of the energy reform with two subcomponents: 1. Budget support to the recently created Energy Authority of Suriname (EAS) to make it operational and 2. Modernization of EBS's institutional and operational capabilities by: (i) supporting EBS's restructuring; (ii) implementing a digitization strategy for EBS, including the installation of a Distribution Management System (DMS); and (iii) promoting capacity building and training for EBS's employees.

- 2.3 **Component II. Improvement of critical infrastructure and energy diversification (\$19.5 MM):** this component will finance: (i) the upgrade and expansion of transmission and distribution infrastructure in the EBS network; (ii) pre-investment support of tender processes related to utility-scale renewable energy (solar, biomass, wind) in line with the electricity law; and (iii) the preparation of a feasibility study and a public-private partnership framework for the introduction of liquified natural gas.
- 2.4 **Component III. Electrification of rural areas (\$5 MM):** This component will implement rural electrification projects that include expanding distribution networks, upgrades or building of feeders and substations connected to the national grid, and off-grid renewable energy investments.

III. OBJECTIVES AND JUSTIFICATION OF THE TC

- 3.1 The objective of the TC is to support the preparation and expedite execution of project SU-L1055 - "Consolidating of a Sustainable Energy Sector in Suriname" by financing the technical, environmental and social studies required for the design of the operation. There is also a need to support preparatory activities such as risk workshops and consultations with stakeholders.
- 3.2 The preparation and execution of the loan requires technical support which is the reason for the TC being requested. The Government of Suriname (GoS) has requested that the Bank administers the resources working in close collaboration with EBS and MNH.

IV. DESCRIPTION OF ACTIVITIES/COMPONENTS AND BUDGET

- 4.1 The TC will have the following components:
- 4.2 **Component I: Technical studies (US\$120,000).** This component will support the preparation of a new investment loan with the GoS (SU-L1055) by financing the technical studies of the transmission lines projects, the environmental and social impact assessment, consultation processes (if required), institutional analysis of the Executing Agency (EA) and the Cost Benefit Analysis (CBA) of the operation. The loan will be executed by EBS and will support the strengthening of EBS operations, the upgrade of critical infrastructure and the increase of energy access by grid extension or isolated mini grids based in renewable energies. The outputs will be the studies required for the preparation of the loan SU-L1055 and the main result will be the approval of the loan.
- 4.3 **Component II: Technical support to the preparation and execution (US\$172,000).** This component will support the preparation of the operation with a technical consultant to be based in Suriname in charge of the following activities: (i) running of the risk workshop; (ii) running of the start-up workshop; (iii) revision and coordination of feedback from EBS to the technical studies; (iv) fulfillment on eligibility clauses; (v) discussions with EBS and other government agencies about agenda, organization and content of the technical visits to be done by the international consultants and by IDB's project team; and (vi) drafting of project execution plan, procurement plan and financial management plan. The output will be to achieve the fulfillment of all conditions prior to the first disbursement of the loan SU-L1055 and the main result will be to obtain expedited loan eligibility.

- 4.4 This component will also support the execution, monitoring and evaluation of the loan SU-L1055 with a technical consultant to be based in Suriname in charge of the following activities: (i) contribute to the technical review of procurement activities; (ii) provide technical support to the Project Executing Units (PEUs); (iii) collaborate in planning activities; (iv) conduct field visits when required; (v) provide technical support to perform quality control reviews of planning documents such as annual operating plans, procurement plans, financial plans, disbursement requests; and (vi) supervise the monitoring tools such as the Semi-Annual Reports (SARs) or the Progress Monitoring Reports (PMRs). The output will be the identification of recommendations and monitoring measures for the consolidation and sustainability of the program's achievements. The result will be an updated PMR including the findings and recommendations. This component will also finance specialized expertise in procurement and environmental management to support the preparation of bidding documents for the main contracts of the loan related to works or goods.
- 4.5 The total cost of this TC will be US\$292,000, which will be financed by the Ordinary Capital Strategic Development Program for Infrastructure (INF).

Indicative Budget (in US\$)

Activities/Components	Description	IDB Funding	Total Funding
Technical studies	Technical analysis of transmission projects, environmental and social analysis, institutional analysis	120,000.00	120,000.00
Technical support to the preparation and execution	Consultancy to support the preparation, implementation and monitoring of the operation SU-L1055	172,000.00	172,000.00

V. EA AND EXECUTION STRUCTURE

- 5.1 The GoS has requested that the Bank administers the resources working in close collaboration with EBS to ensure optimal alignment with the timeline of the loan (see Annex I). The Bank through INE/ENE with the support of the Country Office in Suriname (CCB/CSU) will be the EA. The project team will work closely with the EBS, in particular with the Project Execution Team designated for SU-L1055, and with the focal point of Ministry of Natural Resources (MNH) designated to oversees the implementation of the electricity law and the EAS. The selection and contracting of consulting services will follow: (a) the Selection and Contracting of Consulting Firms for Bank Executed Operational Work (GN-2765-1) and related Operational Guidelines (OP-1155-4), and (b) the Bank's Administrative Regulation AM-650 for individual consultants (see also detailed procurement plan). In line with GN-2765-1, the team requests the approval to hire Castalia under the modality of "single source selection" to provide the deliverables contemplated under component 1 for up to an estimated amount of US\$120,000.00.
- 5.2 The justification for sole sourcing contracting is based on the rational of natural continuation of previous works and the clear, significant and unique experience of

Castalia. More specifically Castalia is conducting the formulation of the first Electricity Sector Plan including the expansion plan for generation and transmission which are the basis for the infrastructure projects that SU-L1055 finances. Castalia has the database for the electricity grid needed for the studies.

VI. MAJOR ISSUES

- 6.1 The main risk in the TC is the potential delay arising from the coordination with multiple stakeholders and the decision from high level representatives from the GoS related to the energy reforms and the preparation of the new operation. This risk will be mitigated by involving the counterpart from the beginning of the implementation of the TC, seeking feedback and regularly presenting and discussing progress report.

VII. EXCEPTIONS TO BANK POLICY

- 7.1 None.

VIII. ENVIRONMENTAL AND SOCIAL STRATEGY

- 8.1 The TC's main objective is to help prepare and execute project SU-L1055 whose Category, according to the Environment and Safeguards Compliance Policy (OP-703), is "B" ([SSF](#) and [SPF](#)), therefore this TC has been classified as a Category B.

Required annexes:

- Annex I. [Aide Memoire - Identification Mission \(SU-L1055\)](#).
- Annex II. [Results Matrix](#).
- Annex III. [Terms of Reference Component I](#) and [Terms of Reference Component II](#).
- Annex IV. [Procurement Plan](#).