

TC ABSTRACT

I. Basic Project Data

▪ Country/Region:	SURINAME/CCB - Caribbean Group
▪ TC Name:	Support for rural electrification with renewable energy, potable water and telecommunications in Suriname
▪ TC Number:	SU-T1165
▪ Team Leader/Members:	BALLON LOPEZ, SERGIO ENRIQUE (INE/ENE) Team Leader; CUERVO, JAVIER (INE/ENE) Alternate Team Leader; FRANCINE VAUROF (CSD/CCS); GANGADIN, RAIJANT AMARNATH (CCB/CSU); CARLOS RODRIGUES (INE/WSA); LOANA VEGA (INE/ENE)
▪ Taxonomy:	Client Support
▪ Number and name of operation supported by the TC:	N/A
▪ Date of TC Abstract:	26 Aug 2022
▪ Beneficiary:	Government of Suriname
▪ Executing Agency:	INTER-AMERICAN DEVELOPMENT BANK
▪ IDB funding requested:	US\$500,000.00
▪ Local counterpart funding:	US\$0.00
▪ Disbursement period:	36 months
▪ Types of consultants:	Individuals; Firms
▪ Prepared by Unit:	INE/ENE - Energy
▪ Unit of Disbursement Responsibility:	CCB/CSU - Country Office Suriname
▪ 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:	

II. Objective and Justification

- 2.1 The general objective of this Technical Cooperation (TC) is to promote the social and economic development of the rural villages in the Hinterland of Suriname by increasing access to affordable, reliable, clean and sustainable electricity, potable water, and communication services. The specific objectives of the TC are to: (i) support the implementation of solar mini-grids, water supply and telecommunication systems (the Systems); (ii) promote efficient use of energy and water; (iii) promote productive uses of electricity; and (iv) support establishing a sustainable regulatory and institutional framework for rural electrification projects.
- 2.2 With an area of 163,820 km² and a population of approximately 541,638, Suriname is the youngest sovereign country in South America. It is estimated that 10% of Suriname's population lives in the Hinterland (54,000 Maroons and 8,000 Amerindians), distributed in about 300 isolated villages, lacking access to affordable and reliable services, such as water and electricity. Most of these villages are being intermittently served with small diesel generators for an average time of six hours per day, but this is seldom the case due to irregular provision of diesel or, very often, because the units are out of service. Additionally, electricity for these remote communities, when available, averages an estimated generation cost of US\$0.63/Kilowatt hour (kWh) but can reach US\$1.00/kWh, which is high compared to the main grid. This hampers the social and economic development of the people in the Hinterland.

- 2.3 The Ministerie van Natuurlijke Hulpbronnen (Ministry of Natural Resources, MNH) has responsibility for energy policy and supervision of the energy sector. N.V. Energie Bedrijven Suriname (EBS) is the state-owned utility company supervised by the MNH and in charge of 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 customers.
- 2.4 The country is increasing energy access through grid extension projects (for example in the area of Powaka or Koina Kondre) or using isolated solar mini-grids. In 2018, the EBS completed the first solar mini-grid in the country, a 500 kW solar plant, including energy storage and a diesel generator as a backup, to provide 24/7 to the villages of Pokigron and Atjoni. The EBS and the MNH are executing several mini-grids in other isolated villages in the Hinterland (Godo Holo, Upper Suriname region). However, it is estimated that there is still an investment gap of approximately US\$ 93 million to reach universal energy access in Suriname by 2030.
- 2.5 The implementation and sustainability of energy access projects in Suriname face many barriers and challenges which will be addressed with the TC, including:
- 2.6
- Renewable energies and solar mini-grids are in an early stage of development in Suriname. There is a lack of proper local skills and knowledge for the design, implementation and operation of the solar mini-grids in the Hinterland.
 - Suriname does not have a regulatory framework in place for the rural electrification sector.
 - There are no financial incentives or mechanisms to promote private investment in rural areas.
 - To assure the financial sustainability of rural electrification projects customers must have the capacity to pay for the electricity consumed. The productive uses of electricity to generate new small businesses (farming, food processing, handcraft) is fundamental to ensure that beneficiaries have the necessary income to pay for the electricity.
 - The provision of water and telecommunication services is fundamental to ensure a proper operation and maintenance of the solar mini-grid and to the successful implementation of productive activities.
 - In Suriname there is not a system for disposal, recycling and/or reuse of solar panels, batteries and other components of the solar mini-grids.

III. Description of Activities and Outputs

- 3.1 **Component I: Design Energy-Water-Internet Systems** . (i) Design the solar-battery energy storage mini-grids, solar water supply systems and internet/telecommunications infrastructure; (ii) design strategies for productive uses with electricity-water-internet, while promoting gender equality; (iii) design a social, financial and technical assessment including barriers and propose mitigation measures for a proper O&M of the Systems; and (iv) support to define the business model for the installation, operation and maintenance of all the Systems.
- 3.2 **Component II: Regulatory and institutional framework** . (i) Support main stakeholders roles in the villages in rural electrification projects (planning, execution, operation and decommissioning); (ii) design a financial analysis for the execution of the Systems; (iii) design the regulatory framework and support the establishment of specific regulations for the rural/water/telecommunication sector in Suriname; and (v) strengthen the capacity of the main stakeholders involved in the energy/water sector.

IV. Budget

Indicative Budget

Activity/Component	IDB/Fund Funding	Counterpart Funding	Total Funding
Design Energy-Water-Internet Systems	US\$430,000.00	US\$0.00	US\$430,000.00
Regulatory and institutional framework	US\$70,000.00	US\$0.00	US\$70,000.00
Total	US\$500,000.00	US\$0.00	US\$500,000.00

V. Executing Agency and Execution Structure

- 5.1 At the request of the Government of Suriname (GoS), the Bank, through the Energy Division (INE/ENE) will be the Executing Agency (EA) of the project, due to its experience in the preparation and development of both technical and operational instruments proposed for this type of operations. The beneficiary of this TC will be the GoS, represented by the Ministry of Natural Resources, the Energy Authority of Suriname and the electric utility (EBS). The Bank will coordinate and engage with the main stakeholders from the beginning of the implementation of the TC, seeking feedback and regularly presenting and discussing progress reports.
- 5.2 In accordance with the Operational Guideline for Technical Cooperation Products (GN-2629-2), being the Bank the EA of this TC is justified under Annex 10 of the beforementioned guidelines as the TC responds to a request from the beneficiary and exceptionally – and at the request of the beneficiary – tasks the Bank with the responsibility for the contracting of consultancies. Furthermore, the Bank and the beneficiary agree that contracting by the Bank would enhance independence under the impartiality criteria, as several stakeholders might have different interests in the regulatory and institutional aspects, as well as the proposed financial structure for the implementation of this TC.
- 5.3 The IDB will be responsible for the selection and contracting of consulting firms and individual consultants. Activities to be executed are included in the Procurement Plan and will be contracted in accordance with Bank policies as follows: (i) Hiring of individual consultants, as established in the regulations AM-650; (ii) Policy for the Selection and Contracting of Consulting Firms for Bank-executed Operational Work according to GN-2765-4 and its associated operational guides (OP-1155-4); and (iii) contracting of logistics services and other services other than consulting, according to the policy GN-2303-28. The beneficiary may provide technical inputs to the terms of reference and reports of the consultants, such inputs should be provided directly to the Bank. The Bank will have the autonomy to approve such documents. This dynamic will facilitate proper articulation between the various actors within the framework of the technical dialogue of this TC. The TC does not present fiduciary management risks as it will be implemented by the Bank. Therefore, no financial audit is required.

VI. Project Risks and Issues

- 6.1 The main risk in the TC is the potential delay arising from the coordination with multiple stakeholders and potential misalignment of the outcomes with political decisions. 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 reports. The achievement of development objectives will rely on securing financing to implement the systems. Another risk is the possible limitations for the execution of the activities and visits to the Suriname Hinterland derived from COVID-19 restrictions. This risk will be mitigated by using digital tools to monitor and supervise the activities.

VII. Environmental and Social Classification

7.1 The ESG classification for this operation is "undefined".