

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

**HAITI**

**IMPROVING ELECTRICITY ACCESS IN HAITI**

**(HA-L1140)**

**PROJECT PROFILE**

This document was prepared by the project team consisting of: Jesús Tejeda, Team Leader; Natacha Marzolf, Alternate Team Leader (INE/ENE); Gerard Alleng, Alternate Team Leader (CSD/CCS); Audrey Crochemar, Stephanie Suber, María Julia Molina, Virginia Snyder, Javier Cuervo, Kenol Thys, Lorena Di Chiara (INE/ENE); Doris Barandiaran, Soraya Marie Claire Senosier (VPS/ESG); Said Suire (CID/CHA); Edwin Tachlian-Degras; Ana Gonzalez Vidales (VPC/FMP); Ophelie Chevalier (CSD/HUD); Louis-Francois Chretien (LEG/SGO)

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

## PROJECT PROFILE

### HAITI

#### I. BASIC DATA

<b>Project Name:</b>	Improving Electricity Access in Haiti	
<b>Project Number:</b>	HA-L1140	
<b>Project Team:</b>	Jesús Tejeda, Team Leader; Natacha Marzolf (INE/ENE), Alternate Team Leader; Gerard Alleng (CSD/CCS), Alternate Team Leader; Lorenzo Rovelli, (CSD/CCS); Audrey Crochemar; Stephanie Suber; Maria Julia Molina; Virginia Snyder; Javier Cuervo; Kenol Thys; Lorena Di Chiara (INE/ENE); Doris Barandiaran; Soraya Marie Claire Senosier (VPS/ESG); Said Suire, (CID/CHA); Edwin Tachlian-Degras; Ana Gonzalez Vidales (VPC/FMP); Ophelie Chevalier (CSD/HUD), Louis-Francois Chretien, (LEG/SGO)	
<b>Borrower:</b>	Republic of Haiti	
<b>Executing Agency:</b>	Ministry of Economy and Finance (MEF)	
<b>Financial Plan:</b>	IDB Grant Facility for Haiti:	US\$31,500,000
	U.S Agency for International Development (USAID)	US\$6,500,000
	EU Caribbean Investment Facility (CIF)	€10,000,000
	<b>Total:</b>	<b>49,300,000<sup>1</sup></b>
<b>Safeguards:</b>	Policies triggered:	OP 102, OP 704, OP-703 (B.1, B.2, B.3, B.4, B.5, B.6, B.7, B.9. B.10. B. 11, B.15, B.17)
	Classification:	B

#### II. GENERAL JUSTIFICATION AND OBJECTIVES

- 2.1 **Background.** Haiti's energy landscape is characterized by: (i) low level of electricity access and consumption; and (ii) heavy dependence on fossil fuel and biomass. The country has an estimated population of 10.5 million people of which, 50.5% live in rural areas located mostly far away from the national electricity grid. Electricity coverage in the country is around 38% (72% in urban areas and 15% y rural areas).<sup>2</sup> High capital costs and among the highest electricity costs in the Latin America and Caribbean region (US\$0.30/kWh for residential customers) partly explain the low electrification rate.<sup>3</sup>
- 2.2 About 85% of Haiti's electricity is produced by combustion of imported fossil fuels. Current installed capacity in the Port-au-Prince grid is 250 Mega-Watt (MW) where *Electricité d'Haiti* (EDH) owns the 54MW Peligre hydropower (recently refurbished

<sup>1</sup> Co-funding (Project Specific Grant - PSG) is expected from USAID for up to the amount of US\$6,500,000, subject to USAID's approval and, from the CIF up to the amount of €10,000,000 (equivalent to US\$11,300,000 as of July 7<sup>th</sup>, 2019 exchange rate) and subject to its approval by the EU.

<sup>2</sup> <https://www.export.gov/article?id=Haiti-Energy>.

<sup>3</sup> In comparison, Dominican Republic national electrification rate is 96%.

with IDB, OFID and KFW financing) and the diesel-fired plants Carrefour I, II and III (total 67.8 MW). EDH also owns 20 generators and transmission and distribution assets in regional grids (<20 MW) and supports municipalities to operate about 30 village-level grids (<500 kiloWatts (kW) serving 1,000-5,000 customers). The independent power producers Sogener (with BOT PPA) and E-Power (with BOO PPA) have installed 81.9 MW and 33.6 MW, respectively.<sup>4</sup> The aggregated generation capacity in the 12 regional grids is close to 75 MW of which 50 MW is operational, including Cap Haitien (11 MW), Gonaives (11 MW), Les Cayes (8 MW) and Jacmel (4 MW). EDH also owns approximately 1,700 km transmission and distribution lines across the country.<sup>5</sup>

- 2.3 In the north of the country, the Government of Haiti (GoH) has developed the Caracol Industrial Park (PIC, for its acronym in French) that provides employment to over 13,000 people (61% women) and concentrates most of the apparel industry in Haiti. Annual electricity demand is about 22 GigaWatt hours (GWh) supplied from a 10 MW Heavy Fuel Oil (HFO) Thermal Power Plant (TP) inside the PIC which was financed by USAID and operated by National Rural Electric Cooperative Association (NRECA) on their behalf. It offers utility-quality electricity to the PIC tenants, but tariffs are high, which threatens sustainability of the PIC *vis-a-vis* competing countries in the region.<sup>6</sup> The energy production costs depend on the price of imported fuel (plus an administrative fee). NRECA has progressively incorporated non-PIC customers (households and micro-businesses) to increase the load. As of 2019, 45% of the electricity is consumed by the PIC industrial tenants and 55% by over 14,000 customers in surrounding communities. The incorporation of cheaper Renewable Energy (RE) power into the system provides an opportunity to significantly reduce energy costs. Since NRECA's services is coming to an end in the area, GoH foresees bringing the thermal plant under concession for electricity distribution and expansion, based on a hybrid power system (PIC thermal plant, solar Photovoltaic- PV) under appropriate contract arrangements.
- 2.4 Haiti has abundant solar<sup>7</sup> and wind energy resources. Decentralized RE can play a key role to expand electricity coverage in unserved areas by producing electricity at a lower cost than fossil fuel-based generators.<sup>8,9</sup> Recognizing the opportunity offered by the drop in capital costs (CAPEX) of (PV) systems, several private companies have begun implementing innovative energy solutions using PV technology to bring electricity to unserved communities: Re-Volt (pioneering start up offering "off-grid" utility), Pay As You Go (PAYG) solar-powered energy services (with over 5,000 products sold); Earthpark (pre-paid hybrid generation micro-grid with small diesel backup generator), SIGORA (PAYG smart grid technology system with interconnected micro-grids designed to scale up quickly). Decentralized off-grid solutions for rural electrification are gaining ground in Haiti with RE and with liquid fuels (the latter for industrial uses). The success of NRECA

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<sup>4</sup> Fuel and power purchases are made in US\$ while revenues are collected in Gourdes which in turn translates into annual financial deficits of US\$200 million (equivalent to 4% of GDP).

<sup>5</sup> Source: Assessment of Haiti's Electricity Sector, Institute for Sustainable Energy, Boston University, March 2018.

<sup>6</sup> Medium-voltage (MV) tariffs are estimated about US\$ 0.30/kWh for industrial users at PIC, which is far above price levels of US\$0.18/kWh in Dominican Republic.

<sup>7</sup> Current installed solar capacity is estimated at 4MW.

<sup>8</sup> An average rural household spends about US\$10 per month on kerosene and candles for home lighting.

<sup>9</sup> Assessment of Haiti's Electricity Sector, Institute for Sustainable Energy, Boston University, March 2018.

to operate the TP at PIC, evidences the benefits and potential of minigrids for electrification at this stage in Haiti.

- 2.5 **Institutional framework.** A decree issued in February 2016 ended EDH's monopoly allowing private actors to produce, transport and distribute electricity. EDH reports to the Ministry of Public Works, Transport and Communication (MTPTC) which is the responsible for the planning and supervision of the energy sector. The *Autorité Nationale de Régulation du Secteur de l'Energie* (ANARSE) was created in 2016 and established in 2017 as Haiti's energy sector regulatory agency.
- 2.6 **IDB experience and knowledge of Haiti's energy sector.** The Bank has been a key partner for the GoH to finance repair of damaged infrastructure after the 2010 earthquake and hurricane Matthews. IDB has supported reform and transformation of the energy sector through investments in generation, distribution and transmission.<sup>10</sup> The proposed program is a continuation of this partnership and is closely coordinated with an ongoing World Bank (WB) financed project.<sup>11</sup>
- 2.7 **Challenges.** Extending electricity access to the unserved 70% of the population and fostering RE technologies proves challenging due to: delay in investment in electricity generation; historically low quality of service to customers connected to EDH's grid, and high connection costs due to remoteness of unserved communities from the grid. Sector governance is weak and institutional capacity of the newly created ANARSE needs reinforcement for properly performing supervisory and regulatory tasks. The GoH has requested the IDB support to close the electricity access gap, promote deployment of RE and strengthen ANARSE's regulatory function.
- 2.8 Decentralized off-grid RE solutions such as private minigrids are being proposed to close the access gap. The long-term sustainability of the PIC is challenged by its current reliance on costly TP. Given that the operation of the 10 W plant is being transferred to a private concessionaire, the proposal is to strengthen the PIC with an 8MW PV plant to achieve a tariff level sufficiently competitive to assure the long-term commitment of industrial enterprises with the PIC.
- 2.9 **Objective.** The general objective is to increase reliable electricity access in Haiti that promotes economic development and the strengthening of the sector's governance. The specific objectives are: (i) development of decentralized electrical minigrids with private sector participation; (ii) foster the supply of electricity with RE in the PIC; and (iii) strengthening of the sector governance.
- 2.10 **Component I. Development of decentralized electrical minigrids with private sector participation (US\$11.3 MM; €10MM).** This component will finance the construction of minigrids in delimited areas not covered by EDH. The grids will be built and operated by private companies under long-term concessions. 48 sites

<sup>10</sup> GRT/HR-14830-HA and 3413/GR-HA "Rehabilitation of the Peligre Transmission Line (US\$23.7 million), 1296/OP-HA, 1681/OP-HA, 2073/GR-HA and 2684/GR-HA (US\$32.5 million) "Rehabilitation of Peligre Power Plant", 1813/SF-HA, 2394/GR-HA and 2349/GR-HA "Rehabilitation of the Electricity Distribution System in Port-au-Prince" (US\$32.09 million), GEF-funded operation GRT/FM-12093-HA "Emergency Program for Solar Power Generation and Lighting" (US\$0.5million) and the GRT/MC-12067-HA Sustainable Energy and Climate Change Initiative (SECCI) project "Emergency Program for Solar Generation" (US\$1 million) and budgetary operations: GRT/HR-13877-HA and 2953/GR-HA (2013, US\$25 million), 2735/GR-HA (2010, US\$12 million), 2548/GR-HA (2011, US\$35 million and ATN/SF-12271-HA (2010, US\$100.000) "Towards a Sustainable Energy Sector Haiti – White Paper".

<sup>11</sup> WB project P154351 "Haiti Modern Energy Services for All".

have been prioritized by the GOH. The concessions will be granted by ANARSE to qualifying developers through a competitive bidding based on a requested subsidy per connection or by installed RE capacity, to achieve an affordable and competitive electricity tariff level. The requested subsidy will enable the concessionaire to obtain an acceptable financial return on investment and operations and helps reduce the end user tariff. The main risk assumed by the operator is hence the inability to reach the breakeven point by incorporating new customers and fostering demand. Since ownership of the infrastructure will be public, the authorities assume a long-term commitment to deliver the electricity service in the concession area. A first bidding round is currently being carried out for WB project P15435 under International Competitive Bidding (ICB), which is aligned with paragraph 3.13 (a) of the Bank's Procurement Policies (GN-2349-9). If the WB bidding proves successful, qualified bids not yet financed, may be considered by IDB for entering into contract and funding through the program. IDB will closely monitor the WB tender through dialogue with GoH counterparts and the WB team. The experience of this first tender will be used to identify opportunities for improving the bidding process under this component.

- 2.11 **Component II. Foster the supply of electricity with RE in the PIC (US\$23 MM).**<sup>12</sup> This component will finance the design, supply and installation of one 8 MW, and one 4 MW PV plant to be installed inside the PIC. The PV plants will partially substitute power from the TP, which will act as backup for the PIC industries and non-PIC customers respectively. The 8MW<sup>13</sup> PV plant will: (i) be connected to the PIC's internal grid; (ii) have a dedicated operator to manage the electricity infrastructure in the PIC; (iii) sell surplus solar energy to the TEP; (iv) reduce the cost of electricity for the PIC. The industrial tariff will have two components, one reflecting O&M costs of the PV plant; and one reflecting the cost of fuel (see [PIC-Proposal](#)). The 4MW PV plant will supply electricity to neighbouring communities through the private concessionaire of the TP.
- 2.12 **Component III. Strengthening the sector governance (US\$1.0 MM).** This component will support ANARSE to undertake its mandate, responsibilities and tasks including the design of new instruments to regulate the sector and the issuance of concessions.
- 2.13 **Project management and other costs (US\$2.7 MM).** This component will finance: (i) assistance to select the minigrid concessionaires in Component I, and the selection of a Solar Operator in Component II; and (ii) hiring of an international supervision firm. Resources will be allocated to finance the strengthening of the Project Executing Unit of the MEF.
- 2.14 **Financing instrument and execution.** Execution of program components requires close coordination between public entities and with international donors. Acknowledging MEF's extensive experience in developing the PIC, MEF will be the Executing Agency responsible for the fiduciary arrangement of the program and leading the execution of Component II.<sup>14</sup> MTPTC and ANARSE will provide technical support for Component I. The program is based on the modality of specific investments with resources from the IDB Haiti Grant Facility. Co-funding

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<sup>12</sup> US\$16.5 million from IDB Grant Facility and US\$6.5 million from USAID that will be administered by IDB.

<sup>13</sup> A set of batteries will be installed to prevent fluctuations.

<sup>14</sup> ANARSE will provide technical advice to the MEF during the execution of Component I.

is expected from the *Caribbean Investment Facility* (CIF) of the European Union up to the amount of 10 million Euros<sup>15</sup> for Component I, and US\$6.5 million from USAID, for funding of Component II (4 MW solar plant). The Beneficiary is the Republic of Haiti and the expected disbursement period is five years.

- 2.15 **Gender and diversity.** By improving access to electricity and fostering local economic development, the program offers women and men new opportunities to assume qualified, formal job positions. Quality electricity services further contribute to improved living conditions from electric lighting and refrigeration. Women will predominantly benefit from household electricity services by safer and time-saving technologies and improved nutrition and food safety levels.
- 2.16 Aspects of innovation and productive local development include: (i) use of RE for industrial power supply; (ii) incorporation of ICT technology to increase payment collection rate from electricity consumers; (iii) streamlining of ICB procedures under WB project (P15435) with pursuant paragraph 3.13(a) of IDB's Procurement Policies (GN-2349-9) to accelerate program execution; (iv) new job opportunities for women and men trained in installation of PV systems and O&M of minigrids; and (v) formal labour insertion offering paid jobs for local population.
- 2.17 **Expected results:** (i) Increase of households with access to quality electricity service<sup>16</sup>; (ii) affordable electricity tariff for residential customers outside EDH grid; (iii) lower and sustainable industrial tariff that encourages the expansion of industrial businesses in the PIC; (iv) sustained electricity production from solar plant consumed at PIC; (v) residential end-users served with dedicated RE installed inside PIC; and (vi) new concessions approved by ANARSE.
- 2.18 **Strategic alignment.** The program is aligned with the Bank's Updated Institutional Strategy 2010-2020 (UIS) (AB-3008) regarding: (i) productivity and innovation by promoting deployment of clean energy solutions at the PIC; and (ii) social inclusion and equality with the provision of a basic service (electricity) in unserved communities. It addresses the cross-cutting areas: (i) gender equality and diversity; and (ii) climate change and environmental sustainability. The program is further aligned with the Corporate Results Framework (CRF) 2016-2019 (GN 2727-6) by reducing greenhouse gas emissions and with the Strategy for Sustainable Infrastructure for Competitiveness and Inclusive Growth (GN-2710-5). It is responsive to IDB Integrated Strategy for Mitigation and Adaptation to Climate Change and Sustainable Energy by supporting sustainable and decentralized (off-grid) solutions. The program is aligned with the Energy Sector Framework (GN-2830-8) as it focuses on sustainable rural electrification and deployment of RE technologies. The program contributes to the objectives of the IDB Group Country Strategy (CS) with Haiti 2017-2021 (GN-2904). Concretely support the technical dialogue in the energy area by fostering the sustainability of the energy sector by diversifying the electricity matrix, reducing generation costs and

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<sup>15</sup> IDB is currently in discussion with the European Investment Bank (EIB) and the European Union (EU) regarding the possibility to secure the additional EU CIF resources. The GoH has not yet indicated whether it will request such CIF resources which will require a parallel loan from EIB, which in turn will be subject to the debt capacity of the GoH. The confirmation (or not) of both the EIB parallel loan and CIF resources will be during the third quarter of 2019.

<sup>16</sup> As an indicative goal, the operation aims to extend electricity coverage to at least 30,000 new households equally serving male and female end-users.

increasing access to electricity. The program will also promote the dialogue with the country on supporting the continuous development of the PIC”.

### **III. ENVIRONMENTAL SAFEGUARDS AND FIDUCIARY SCREENING**

- 3.1 This operation has been classified as Category “B” under the Environment and Safeguards Compliance Policy (OP-703) and Moderate, as per OP-704. The main potential environmental and social negative impacts and risks include: (i) impacts due to installation and expansion of minigrid transmission and distribution lines; (ii) impacts related to installation and operation of small PV plants and battery units associated to minigrids; and (iii) non-hazardous waste generated from the installation of power lines and auxiliary systems. The project is not likely to affect families and livelihoods. Activities in protected areas, vulnerable natural habitats and cultural sites will be avoided. Large construction activities are not foreseen. Issues will be assessed through a Strategic Environmental Assessment and a Strategic Action Plan that will stipulate the environmental and social measures to be implemented prior to starting activities at any project site. Potential negative social and environmental impacts of Component II will be minimal. The Solar Power plant will be built inside the PIC which is already for industrial purposes.
- 3.2 **Fiduciary aspects.** An institutional capacity analysis of the EA will be carried out using the Bank’s methodology.

### **IV. OTHER ISSUES**

- 4.1 The following risks have been identified: (i) changes in political conditions that might shadow the current push to develop decentralized minigrids by concessionaires; (ii) inadequate coordination between MTPTC-ANARSE and the municipalities slowing down program execution; (iii) low acceptance of proposed solutions by beneficiaries due to financial reasons, may delay the preparation of proposals by bidders and affect the sustainability of the operation and maintenance of the minigrids; (iv) low number of qualified local and international bidders due to lack of incentives (fiscal or others) and a strong regulatory framework; (v) adverse political or macro-economic events may limit successful awarding of new concessions; and (vi) slow growth of PIC industrial users. Under the program’s due diligence process, a thorough analysis of the WB’s first tender round will be conducted to enhance program implementation mechanisms. The Bank approved in July 2019, the Technical Cooperation ATN/OC-17428-HA to support the program to advance in the early preparation of procurement packages of projects, and to formulate and implement mitigation measures for program’s risks.

### **V. RESOURCES AND TIMETABLE**

- 5.1 Submission of the POD to the QRR is scheduled for July 2019; presentation to the Board of Executive Directors is scheduled for September 2019. Annex IV presents the studies for the preparation of the program, and Annex V the schedule and administrative costs.

CONFIDENTIAL

<sup>1</sup> 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		
HA-L1140 Improving Electricity Access in Haiti		
Environmental and Social Impact Category	High Risk Rating	
B		
Country	Executing Agency	
HAITI	HA-MEF - Ministère de l'Économie et des Finances	
Organizational Unit	IDB Sector/Subsector	
Energy	ENERGY SECTOR REHABILITATION AND EFFICIENCY	
Team Leader	ESG Primary Team Member	
JESUS ALBERTO TEJEDA RICARDEZ	SORAYA MARIE CLAIRE SENOSIER	
Type of Operation	Original IDB Amount	% Disbursed
Loan Operation	\$18,000,000	0.000 %
Assessment Date	Author	
10 Jul 2019	sorayas ESG Primary Team Member	
Operation Cycle Stage	Completion Date	
ERM (Estimated)	10 Jun 2019	
QRR (Estimated)	23 Jul 2019	
Board Approval (Estimated)		
Safeguard Performance Rating		
Rationale		

## Safeguard Policy Items Identified

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

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

### [B.1 Bank Policies \(Disaster Risk Management Policy– OP-704\)](#)



# Safeguard Policy Filter Report

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.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 borrower/executing agency exhibits weak institutional capacity for managing environmental and social issues.

## 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.

## 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.15. Co-financing Operations

The operation or any of its components is being co-financed.

## B.16. In-country Systems



## Safeguard Policy Filter Report

In-country systems will be used based on results from equivalency and acceptability analyses.

### [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.

## Potential Safeguard Policy Items

### [B.1 Bank Policies \(Resettlement Policy– OP-710\)](#)

The operation has the potential to cause physical displacement of people living in the project area of influence (see also Resettlement Policy)

### [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.

## 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		
<b>HA-L1140</b> Improving Electricity Access in Haiti		
Environmental and Social Impact Category	High Risk Rating	
B		
Country	Executing Agency	
HAITI	HA-MEF - Ministère de l'Économie et des Finances	
Organizational Unit	IDB Sector/Subsector	
Energy	ENERGY SECTOR REHABILITATION AND EFFICIENCY	
Team Leader	ESG Primary Team Member	
JESUS ALBERTO TEJEDA RICARDEZ	SORAYA MARIE CLAIRE SENOSIER	
Type of Operation	Original IDB Amount	% Disbursed
Loan Operation	\$18,000,000	0.000 %
Assessment Date	Author	
10 Jul 2019	sorayas ESG Primary Team Member	
Operation Cycle Stage	Completion Date	
ERM (Estimated)	10 Jun 2019	
QRR (Estimated)	23 Jul 2019	
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

[Moderate Greenhouse Gas Emissions](#) are predicted.

**Greenhouse Gas (GHG) Assessment:** The borrower should promote the reduction of project-related greenhouse gas emissions in a manner appropriate to the nature and scale of project operations and impacts. The borrower should quantify direct emissions from the facilities owned or controlled within the physical project boundary and indirect emissions associated with the off-site production of power used by the project. Quantification and monitoring of GHG emissions should be conducted annually in accordance with internationally recognized methodologies (i.e. IPCC - <http://www.ipcc.ch/>). In addition, the borrower should evaluate technically and financially feasible and cost-effective options for the reduction/offset of emissions that may be achieved during the design and operation of the project. The Sustainable Energy and Climate Change Initiative (SECCI) can help with this task (<http://www.iadb.org/secci/>).

A [natural hazard](#) is likely to occur or be exacerbated due to climate-related changes and the likely severity of the impacts to the project is [moderate](#).

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. The measures should consider both the risks to the project, and the potential for the project itself to exacerbate risks to people and the environment during construction and operation. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards and other related regulations. For details see the DRM policy guidelines.

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

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.).

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.

In an area of exposure to [natural hazards](#) with a [moderate](#) impact severity, project activities and structures increase vulnerability of area of influence to [natural hazards](#) and exacerbates risks to property and the environment, or to the project itself.

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 focus on the potential for the project to exacerbate risks to people and the environment during construction and operation, and propose measures to manage or mitigate these risks. Measures should include siting and engineering options, disaster risk preparedness and response, as well as financial protection for the project. They should also take into account the country's disaster alert and prevention system, general design standards and other related regulations. Focus should be given to replacing and enhancing resilience functions, with special attention given to reefs, dunes, mangroves, marshes, flood plains, drainage paths, slope vegetation, etc.

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).

Project will not use [resource use efficiency](#) measures and cannot comply with relevant national legislation or International Standards, in particular in relation to energy and water use efficiencies.

**Undertake Environmental and Resource Conservation Audit:** The borrower should be required to assess resource use and prepare an action plan that indicates how resource efficiency/cleaner production measures will be employed to achieve compliance with relevant national requirements and International Standards (as appropriate). Depending on the financial product, this information should be referenced in appropriate legal documentation (covenants, conditions of disbursement, etc.) and progress against achieving targets monitored.

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 [coastal flooding](#) from [storm surge](#), high wave activity, or erosion and the likely severity of the impacts to the project is [moderate](#).

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. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards, coastal retreat and other land use regulations and civil defense recommendations in coastal areas.



The project is located in an area prone to [hurricanes](#) or other [tropical storms](#) and the likely severity of the impacts to the project is [moderate](#).

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. The measures should consider both the risks to the project, and the potential for the project itself to exacerbate risks to people and the environment during construction and operation. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards and other related regulations.

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

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. The measures should consider both the risks to the project, and the potential for the project itself to exacerbate risks to people and the environment during construction and operation. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general design standards and other related regulations.

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

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. The measures should consider both the risks to the project, and the potential for the project itself to exacerbate risks to people and the environment during construction and operation. The measures should include risk reduction (siting and engineering options), disaster risk preparedness and response (contingency planning, etc.), as well as financial protection (risk transfer, retention) for the project. They should also take into account the country's disaster alert and prevention system, general seismic design standards and other related regulations.

The project will or may require [involuntary resettlement](#) and/or economic displacement of a [minor](#) to [moderate](#) nature (i.e. it is a [direct](#) impact of the project) and does not affect [indigenous peoples](#) or other vulnerable land based groups.

**Develop Resettlement Plan (RP):** The borrower should be required to develop a simple RP that could be part of the ESMP and demonstrates the following attributes: (a) successful engagement with affected parties via a process of Community Participation; (b) mechanisms for delivery of compensation in a timely and efficient fashion; (c) budgeting and internal capacity (within borrower's organization) to monitor and manage resettlement activities as necessary over the course of the project; and (d) if needed, a grievance mechanism for resettled people. Depending on the financial product, the RP should be referenced in legal documentation (covenants, conditions of disbursement, project completion tests etc.), require regular (bi-annual or annual) reporting and independent review of implementation.

## Disaster Risk Summary

Disaster Risk Level

### Moderate

Disaster / Recommendations

The reports of the Safeguard Screening Form (i.e., of the Safeguards Policy Filter and the Safeguard Classification) constitute the Disaster Risk Profile to be included in the Environmental and Social Strategy (ESS). The Project Team must send the PP (or equivalent) containing the ESS to the ESR.

The Borrower prepares a Disaster Risk Management Summary, based on pertinent information, focusing on the specific moderate disaster and climate risks associated with the project and the proposed risk management measures. Operations classified to involve moderate disaster risk do not require a full Disaster Risk Assessment (see Directive A-2 of the DRM Policy OP-704).

The Project Team examines and adopts the DRM summary. The team remits the project risk reduction proposals from the DRMP to the engineering review by the sector expert or the independent engineer during project analysis or due diligence, and the financial protection proposals to the insurance review (if this is performed). The potential exacerbation of risks for the environment and population and the proposed risk preparedness or mitigation measures are included in the Environmental and Social Management Report (ESMR), and are reviewed by the ESG expert or environmental consultant. The results of these analyses are reflected in the general risk analysis for the project. Regarding the project implementation, monitoring and evaluation phases, the project team identifies and supervises the DRM approaches being applied by the project executing agency.

Climate change adaptation specialists in INE/CCS may be consulted for information regarding the influence of climate change on existing and new natural hazard risks. If the project requires modification or adjustments to increase its resilience to climate change, consider (i) the possibility of classification as an adaptation project and (ii) additional financing options. Please consult the INE/CCS adaptation group for guidance.

## Disaster Summary

Details



## Safeguard Screening Form

The project is classified as moderate disaster risk because of the likely impact of at least one of the natural hazards is average.

### 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.

<b>Environmental and Social Strategy (ESS)</b>	
<b>Operation Name</b>	Improving Electricity Access in Haiti
<b>Operation Number</b>	HA-L1140
<b>Prepared by</b>	<i>Soraya Senosier and Melissa Barandiaran – VPS/ESG</i>
<b>Operation Details</b>	
<b>IDB Sector</b>	Energy
<b>Type of Operation</b>	Grant – Specific Investment Loan
<b>Environmental and Social Classification</b>	<i>Category B</i>
<b>Disaster Risk Rating</b>	<i>Moderate</i>
<b>Borrower</b>	Republic of Haiti
<b>Executing Agency</b>	Mintstry of Public Works, Transport and Communication (MTPTC) for Component 1, and Minsitry of Economy and Finance (MEF) for Component 2
<b>IDB Loan US\$ (and total project cost)</b>	\$31, 5000,000 – IDB (Grant) U.S. Agency for International Development (USAID - \$6,500,000 Caribbean Investment Facility (CIF) of the EU (€10,000,00)
<b>Applicable Policies/Directives</b>	<i>OP 102, OP 704, OP-703 (B.1, B.2, B.3, B.4, B.5, B.6, B.7, B.9. B.10. B. 11, B.15, B.17)</i>
<b>Operation Description</b>	
<p>The objective of the program is to provide reliable and quality electricity access to underserved and unconnected communities through the use of renewable energy and innovative solutions. There are 3 components to the program:</p> <ul style="list-style-type: none"> <li>- Component 1 (\$11.3 MM; €10MM) will consist of the development of electrical mini-grids by selected concessionaries and will provide access to electricity in 51 sites in Haiti selected by the Government of Haiti.</li> <li>- Component 2 (\$23 MM ) will support the sustainable operation of the Industrial Park in Caracol (PIC) through the installation of a 8MW Solar- Photovoltaic power plant that will act as a backup of the existing operating Power Plant. The solar plant will be installed in approximately 120,000 m<sup>2</sup> of land inside the area of the PIC.</li> <li>- Component 3 (\$1.0 MM ) will be used for institutional strengthening of the Autorite Nationale de Regulation du Secteur de l'Energie (ANARSE).</li> <li>- Assessment of physical and/or economic displacement. Compensation Plans, if needed.</li> <li>- Consultation Plan.</li> </ul> <p>This operation has been classified as Category “B” under the Environment and Safeguards Compliance Policy (OP-703) and Moderate for Disaster Rsk, as per OP-704. The main potential are related to Component 1 (financed by the IDB and the CIF) environmental and social negative impacts and risks include the following: (i) impacts related to the installation and expansion of minigridd transmission and distribution lines; (ii) impacts related to the installation and operation of small PV plants and battery storage units associated to the minigrids; (iii) non-hazardous waste generated from the installation of power lines and auxiliary systems. The project is not likely to affect families and livelihoods, will avoid activities in protected areas, critical natural habitats and cultural sites, and most likely, will not require large construction activities. These issues will be assessed through a Strategic</p>	

Environmental Assessment (SEA) and a Strategic Environmental and Social Action Plan which include a set of environmental and social requirements that will be implemented prior to start of each renewable energy activity.

The social and environmental impacts of Component 2 (IDB and USAID financing) will be minimal. The Solar Power plant will be built inside the PIC and as such no new land will be purchased.

### Key Potential ESHS<sup>1</sup> Risks and Impacts

The Project has been classified as a Category B projects in components 1 will be chosen through a bidding process it is therefore not known what type of renewable energy activities will be chosen and the type of environmental and social impacts that are expected.

In general these type of activities can generate, the following environmental impacts: i) waste from from batteries; ii) environmental, social, health and safety impacts and risks associated with retrofitting micro-grids; iii) impacts on soil, vegetation and biodiversity when installing infrastructure (solar panels, distribution lines, biomass, wind turbines, run-of-river micro-hydro plants, etc.). The main potential negative social impact could be the acquisition of land occupied by people, or and the potential displacement of populations and/or economic activities.

During construction works, potential social risks could be the following: i) temporary occupation of land for construction site installations, including potential generation of domestic waste; ii) risk to the health and safety of workers; iii) risks of confrontation if local labor is not prioritized; iv) risk of noise, dust, vehicle traffic and temporary disruption to business access due to construction works, in and near site areas, iv) impacts on water and soil, especially oil and hazardous material spills, and the potential for excavation activities to expose and mobilize previously contaminated soils; temporary noise impacts due to construction heavy equipment. In addition, some of the 51 sites (communes) pre-selected by the GoH might be located in protected areas or key biodiversity areas as shown in the Map (See Annex 2). For those projects, a description of potential impacts as well as specific management plans will be included as part of the the SEA and SAP depending on the renewable energy projects and minigrids.

During the operation phase, without proper mitigation, the potential risks could be risks of electrification for unformed populations, and maintenance personnel, risk of theft, vandalism, illegal connections on power lines, and frustration of populations living near renewable energy sites but not benefitting from their connections and the increase and/ or introduction of fees for energy that are not affordable. Some environmental impacts during implementation phase include waste generation from batteries of photovoltaics systems.

In addition, in case the solar panels are located in new areas it could affect negatively vegetation and farms, and therefore, ecologic or agricultural value. In addition, given the risk of hurricanes, earthquakes, landslides and other natural disasters such as floods, the project was assigned with Moderate disaster risk for Type 1. The project is not expected to exacerbate substantially disaster risk in the areas of intervention (Type 2), however for some energy typologies, such as the micro-hydro plants, if not well assessed and designed, the project might affect surrounding and downstream communities and environment as they could ended up more exposed to flooding risk. Design and non structural measures will be included and implemented to respond to these risks and will be defined during project preparation and analysis.

The executing agency for Component 1, the MTPTC, will be supported by the Bank and will require its non-objection for each renewable energy program for each site submitted by the concessionary.

<sup>1</sup> Environment, Social, Health and Safety.

An additional risk to this operation are related to the capacity of the MTPTC to implement and closely monitor and supervise environmental and social aspects according to the IDB policies to selected concessionaries for the projects.

The World Bank is currently implementing a similar program with the MTPTC, for which eligibility and selection criteria is already in place. This operation intends to homogenize the criteria in the bidding with those developed by the WB. One additional risk is that firms applying to the bidding process will prepare their proposals to comply only with the World Bank procedures and disregarding any additional IDB policy requirement.

## Information Gaps and Strategy for Analysis and Management

Given the type, scale and scope of infrastructure to be financed by the operation<sup>2</sup>, and in accordance with the Environment and Safeguards Compliance Policy (OP-703), the Program has been classified as Category "B" because is expected that the project environmental and social impacts and are localized and temporary, and for which effective mitigation measures will be design during the preparation of this operation.

The environmental and social classification of the operation is based on Component 1, as Component 2 is expected to have minor environmental and risks.

The typology of energy selected (or combination of them) for each commune, as well as the installation and construction of electrical mini-grids designs and location are not known and will be designed following a bidding process by the selected concessionaries. Therefore, following OP-703 directive B.5, the Borrower, must conduct a Strategic Environmental Assessment (SEA) and a Strategic Action Plan (SAP) to address key environmental and associated social impacts and risks.

Due to the nature of component 1, a competitive bidding process through which concessions will be granted, this part of the program does not have specific technical designs, as such, it will be assessed through an SEA that will describe:

- the likely social and environmental (positive and negative) effects from implementing component 1 of the program (**Development of electrical mini-grids by selected concessionaries**)
- the most important social and environmental constraints resulting from the implementation of the program
- an exclusion and eligibility environmental and social criteria for the projects to be financed, so that they will correspond to Category B classification.
- mitigation plans and measures of expected negative environmental and social impacts, through a Strategic Action Plan (SAP)

The SEA will provide a comprehensive and systematic assessment of the environmental and social impacts and other sustainability issues, to ensure they are captured and addressed in a SAP. The SEA will serve as a guide to the implementation of the various renewable energy projects of the program by assessing their potential effects (negative and positive) on the environment and the surrounding communities. It will address strategic issues and concerns that may relate to program justification; and streamlining the program due diligence and review process.

The SEA will ensure that the program takes into consideration potential impacts of natural disasters (including potential effects of climate change) and the vulnerability of project investments to those

<sup>2</sup> As stated above, the operation will potentially finance rural electricity in any of the 51 communes pre-selected by the GoH. The size of the population communes varies from more than 10,000 households in Anse à Galets in Ouest Department, to 280 households in Abricots in Grand Anse Department.

events, as well as vulnerabilities of surrounding communities and environment resulting from the project construction and operation.

The SAP will provide a framework for mitigation plans and programs for the foreseen environmental and social impacts and risks. The SAP will include actions to provide guidance for renewable energy developers and specific requirements by typology and area of the renewable energy activity.

Although the executing agency has experience in implementing IDB-financed projects, it has no experience with the implementation and management of a SEA and SAP. The executing agency will be supported by the Bank and will require its non-objection for each renewable energy project that is eligible for financing. Basic measures will be included in the SEA and implemented to address environmental and social risks as well as natural disaster risks that will be defined during project preparation and analysis.

The SEA/SAP will give an overview of all potential and direct, indirect, and cumulative ESHS impacts that can be generated by the Program during construction and operation, in order to ensure compliance with IDB safeguard policies and local regulations. It will include at a minimum:

- Assessment of potential environmental impacts, including impacts on soil, air, water and biodiversity resulting from construction or operation activities.
- Assessment of physical and/or economic displacement. Compensation Plans, if needed.
- Consultation Plan.
- Occupational and Community Health and Safety Risk Plan.
- Emergency Response Plan for construction and operation phases.
- A Consultation Plan and a grievance redress mechanism
- Stakeholder Engagement Plan to be applied during execution of the Program. It must include a grievance mechanism.
- Occupational and Community Health and Safety Risk Plan.
- Emergency Response Plan for construction and operation phases.
- Natural Disaster Risk Assessment, defining procedures and mitigation measures for relevant hazard events.
- Assessment of potential social and/or environmental liabilities. Corrective Action Plan, if needed.
- Assessment of Executing Agency capacity to properly assess and manage all ESHS aspects of the Program. Measures to strengthen ESHS institutional capacities, if needed.

The Executing Agency, with the support of the consulting firm responsible for preparing the SEA/SAP, will carry out a round of meaningful, gender sensitive and sociocultural appropriate consultations with community leaders on the program. In addition, the SEA/ SAP must include guidelines for consultations processes with all affected groups and relevant stakeholders prior to the beginning of construction of each project eligible for financing.

Following B.6 Directive, the main goal of the consultations will be to inform, gather comments, and adjust the SEA/SAP. Special measures might be necessary to reach out to and guarantee the participation of population with special needs, such as elderly people and persons with reduced mobility. The Executing Agency will document the consultations as per IDB requirements.

The consultation process will need to have taken place and the results included in the Environmental and Social Management Report prior to distribution of the Program to OPC.

<b>ESHS Documents</b>	<b>Current stage of development - Gapfilling needed</b>	<b>Estimated resources needed to finalize</b>	<b>Estimated timeline to finalize and consult (as applicable)</b>
<i>Strategic Environmental Assessment (SEA) and a Strategic Action Plan (SAP)</i>	<i>Terms of Reference for a SEA and SAP are currently being prepared.</i>	<i>To be determined (aprox. 70k)</i>	<i>Execution: 2 months Intended start: late May early June 2019 Consultation: End of July 2019.</i>
<i>Consultation Plan for SEA</i>	<i>Terms of Reference for a SEA and SAP are currently being prepared.</i>	<i>Entity in charge: MTPTC in coordination with consultants/ consulting firm (TBD) Source: TBD</i>	<i>Execution: 1 month Intended start: Early July 2019</i>

### **Opportunities for IDB Additionality on Environment and Social matters**

The SEA will provide the opportunity to the GOH to have a strategic tool designed to assess environmental and social impacts in the planning, decisionmaking and implementation processes of renewable energy programs and mini-grids in Haiti, by addressing systematically and strategically potential environmental and social issues and priority actions.

### **Annex Table: Operation Compliance with IDB Safeguard Policies**

#### **Additional Appendices**

*Appendix 1: Maps*



**Annex Table: Operation Compliance with IDB Safeguard Policies** OP 102, OP 704, OP-703 (B.1, B.2, B.3, B.4, B.5, B.6, B.7, B.9, B.10, B.11, B.15, B.17)

Policies / Directives	Policy / Directive Applicable?	Rationale for applicability of Policy / Directive	Actions required during Preparation & Analysis
<b>OP-703 Environment and Safeguards Compliance Policy</b>			
B.2 Country Laws and Regulations	Yes	<i>The Program must comply with Haiti's ESHS laws and regulations.</i>	<i>The SEA will assess the ESHS requirements of Haiti.</i>
B.3 Screening and Classification	Yes	<i>The Program is expected to cause mostly local and short-term negative environmental and social impacts for which effective mitigation measures are readily available, and as such a Category "B" classification has been assigned.</i>	<i>SEA will include requirements to ensure that all projects in the program will be Category B or Category C projects.</i>
B.4 Other Risk Factors	Yes	<i>The executing agency might not have the capacity to ensure the proper management of all ESHS aspects of the program.</i>	<i>The SEA will assess the institutional capacity of the MTPTC to manage the ESHS risks and impacts identified and will propose strengthening measures as needed.</i>
B.5 Environmental Assessment and Plans Requirements	Yes	<i>Due to the fact that the installation and construction of electrical mini-grids final designs and exact program areas are not known and will be designed and selected after a bidding process, following OP-703 directive B.5 in order to address key environmental and associated social impacts the Program must conduct a Strategic Environmental Assessment (SEA) and a Strategic Action Plan (SAP).</i>	<i>The SEA will describe the likely social and environmental (positive and negative) effects from implementing component 1 of the program (<b>Development of electrical mini-grids by selected concessionaries</b>), the most important social and environmental impacts on the implementation of the program and the mitigation of negative environmental and social impacts.</i>
B.5 Social		The SEA and SAP will include assessment of physical and/or economic displacement – both permanent and temporary, and include Compensation Plans, if	Please refer to the section on Information Gaps and Strategy for Analysis and

Assessment and Plans Requirements (including Livelihood Restoration Plan <sup>3</sup> )		needed; a Consultation Plan and a Stakeholder Engagement Plan (with a Grievance Mechanism), as well as an Occupational and Community Health and Safety Risk Plan.	
B.6 Consultation	Yes	<i>The SEA/SAP addressing ESHS potential impacts and risks of the various renewable energy projects will include a consultation plan that will address the consultation of the program and guidelines for the upcoming consultation processes of each eligible project.</i>	<i>The SEA/SAP will be consulted prior to OPC.</i>
B.7 Supervision and Compliance	Yes	<i>The Bank, will supervise compliance with the ESHS requirements established in the SEA/SAP. The MTPTC will closely supervise and monitor the ESHS requirements established in the bidding documents for the selected concessionaries.</i>	<i>The ESMR will establish ESHS requirements to be incorporated in the loan agreement, and the bidding documents.</i>
B.8 Transboundary Impacts	N/A	N/A	N/A
B.9 Natural Habitats	Yes	<i>Some of the communes pre-selected by the GoH might be located in protected areas or key biodiversity areas. For those projects, specific management plans will be included as part of the SAP.</i>	<i>The SEA and SAP will include potential impacts of renewable energy projects and minigrids, and its respective management plan for eligible projects located in PA or KBA.</i>
B.9 Invasive Species	<i>The operation is not to introduce invasive species.</i>	No	<i>No action is required.</i>

<sup>3</sup> OP-703 applies when livelihood impacts are not significant and don't 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)

B.9 Cultural Sites	N/A	N/A	N/A
B.10 Hazardous Materials	Yes.	<i>During construction works, hazardous materials will be generated and used in most eligible projects. During operations, generation of waste from batteries might occur. For both construction and operation, mitigation measures will be designed in the SEA and included in the bidding documents.</i>	<i>The borrower will include provisions for hazardous materials in the ESMP: handling of hazardous materials and hazardous waste.</i>
B.11 Pollution Prevention and Abatement	Yes.	<i>Depending on the selected projects eligible for financing, compliance with solid waste and effluents during construction, as well as with other standards during operations.</i>	<i>Specific conditions will be established in SEA and SAP for both construction and operation phases of eligible projects. It must contain procedures to ensure compliance with solid waste and effluents, as well as standards for Occupational, health and safety (such as distance of workers to the magnetic field), depending on the type of energy project to be financed.</i>
B.12 Projects Under Construction	N/A	N/A	N/A
B.13 Noninvestment Lending and Flexible Lending Instruments	N/A	N/A	N/A
B.14 Multiple Phase and Repeat Loans	N/A	N/A	N/A
B.15 Co-financing Operations	Yes	<i>The program will be Co-financed by European Union Caribbean Investment Facility.</i>	<i>During the due diligence process of the operation, the alignment of policies with the European Union Caribbean Investment Facility will be addressed.</i>
B.16 In-Country Systems	No	<i>Country Systems are not being used for this Program. Bank's policies will be applied.</i>	N/A

B.17 Procurement	Yes	<i>The request for proposals will include references to the IDB ESHS requirements.</i>	<i>The request for proposals will include references to the IDB ESHS requirements.</i>
<b>OP-704 Natural Disaster Risk Management Policy</b>			
A.2 Analysis and management of Type 2 risk scenario	Yes	<i>Some of the energy typologies for financing include micro-hydro, in which case it will be necessary to assess the potential for exacerbation of risk to communities and the environment.</i>	<i>The SEA/ SAP will include potential impacts for those typologies and its respective design and mitigation measures to be included in the bidding process.</i>
A.2 Contingency planning (Emergency response plan, Community health and safety plan, Occupational health and safety plan)	Yes	<i>Type 1 natural disasters risk has been assessed as Moderate, mainly due to hurricanes and tropical storms. There may be risks to the Program and to the workforce, during construction and surrounding population during operation.</i>	<i>The SEA/SAP will determine the necessary plans and measures (emergency response, community and occupational health and safety) for the Program.</i>
<b>OP-710 Operational Policy on Involuntary Resettlement</b>			
Resettlement Minimization	N/A	<i>No physical and economic displacement is anticipated as a result of the Program.</i>	<i>The SAP will include guidelines to exclude programs that could provoke physical and economic displacement.</i>
Resettlement Plan Consultations			
Impoverishment Risk Analysis			
Resettlement Plan and/or Resettlement Framework Requirement			
Livelihood Restoration Program Requirement <sup>4</sup>			
Consent (Indigenous Peoples and other Rural Ethnic Minorities)	N/A	N/A	N/A
<b>OP-765 Operational Policy on Indigenous Peoples</b>			
Sociocultural Evaluation Requirement	N/A	N/A	N/A

<sup>4</sup> 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)

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
Impacts on Isolated Indigenous Peoples	N/A	N/A	N/A
<b>OP-761 Operational Policy on Gender Equality in Development</b>			
Consultation and effective participation of women and men	Yes	<i>Women will likely be impacted from activities financed by the Program. To promote that their opinions are heard and taken into consideration, the Program will carry out gender-sensitive consultations.</i>	<i>The Consultation Plan and Stakeholders Engagement Plan included in the SEA/SAP will propose gender sensitive approaches and methodologies to promote equitable participation of women and men during preparation and operation of the Program</i>
Application of safeguard and risk <sup>5</sup> analysis	No	<i>No gender-based adverse impacts or risk of exclusion is anticipated.</i>	N/A
<b>OP-102 Access to Information Policy</b>			
Disclosure of relevant Environmental and Social Assessments Prior to Analysis Mission, QRR, OPC and submission of the operation for Board consideration	Yes	<i>A Fit-for-disclosure SEA/SAP must be disclosed prior to the analysis mission on IDB's web page Consultation Reports, prior to QRR and/or OPC.</i>	<i>A fit-for-disclosure SEA/SAP will be published on IDB's Web page prior to the analysis mission. IDB will disclose the final versions of the documents, including the Consultation Reports, prior to QRR and/or OPC.</i>
Provisions for Disclosure of Environmental and Social Documents during Project Implementation	Yes	<i>The Bank will publish all new relevant ESHS documents that will be developed during Program implementation.</i>	<i>The Bank will publish all new relevant ESHS documents that will be developed during Program implementation.</i>

<sup>5</sup> 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.

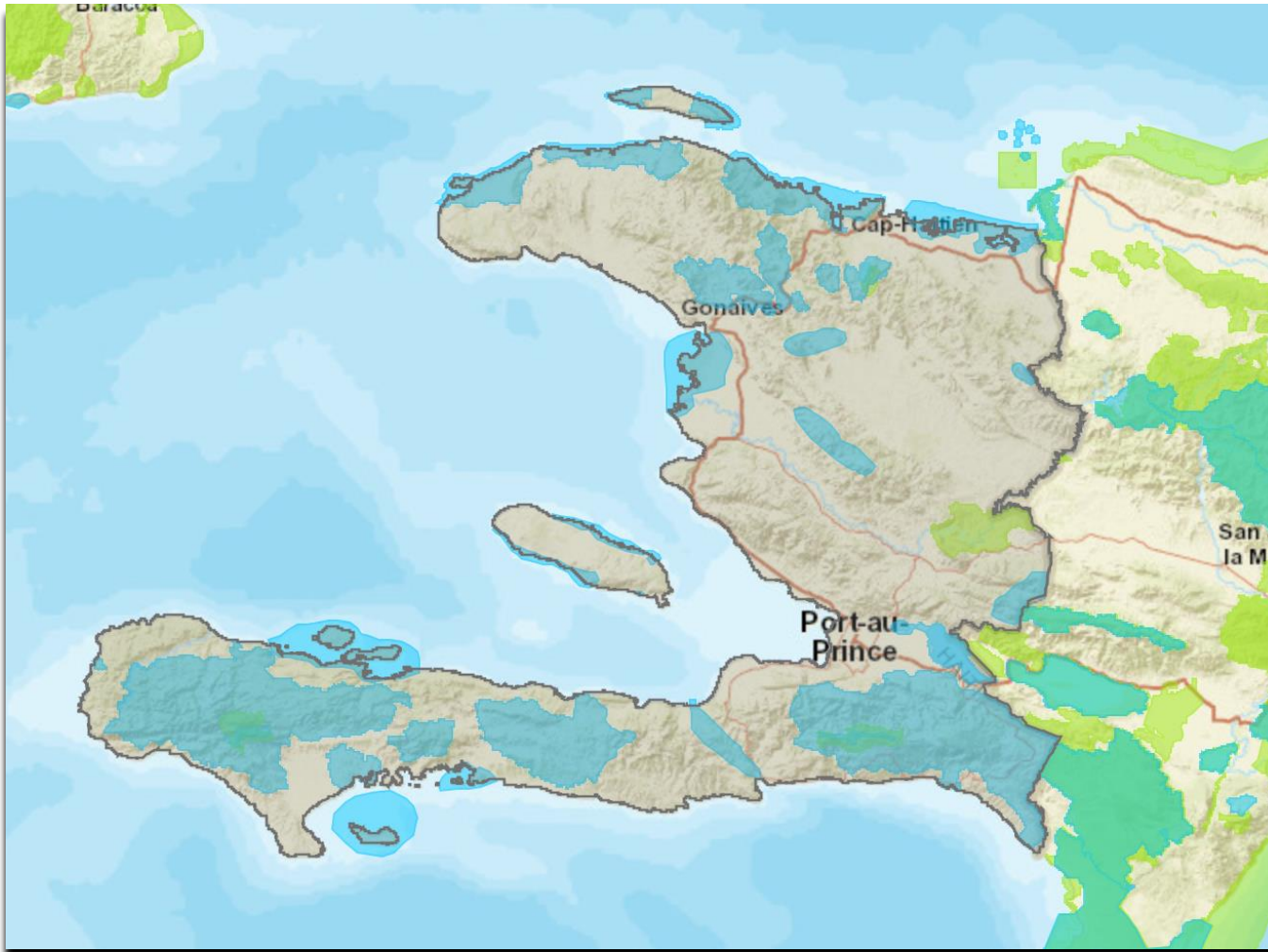
## Appendix 1:

**Map 1: 51 Communes prioritized by the GoH for Rural Electrification**





**Map 2: Protected Areas and Key Biodiversity Areas in Haiti<sup>6</sup>**



Green: Protected Areas – Blue: Key Biodiversity Areas

The most important hazards relevant to project area:

1. Drought Hazard

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<sup>6</sup> Please note that this is the last available information on IVAT, it does not include some recently declared protected areas such as the Marine Protected Area: 3Bay National Park.

#	Hazard Level	Area(km <sup>2</sup> )
1	Moderate	15,506.04
2	High	7,266.36

2. Heatwave Hazard (RCP 4.5)

#	Hazard Level	Area(km <sup>2</sup> )
1	HIGH	7,593.87
2	MODERATE	1,872.40

3. Heatwave Hazard (RCP 8.5)

#	Hazard Level	Area(km <sup>2</sup> )
1	HIGH	19,452.21
2	MODERATE	1,286.18

4. Landslide Hazard

#	Hazard Level	Area(km <sup>2</sup> )
1	Moderate	1.14

5. Precipitation Changes

#	Hazard Level	Area(km <sup>2</sup> )
1	Moderate	1,464.96



### Sectorial Work Index

Item	Study/Technical support	Description	Date	Electronic link
1	Caracol Industrial Par2017 Q4 Year End Report	Final Report 2017	December 2017	<a href="http://sonapi.org/">http://sonapi.org/</a>
	Consultation Publique Mini-reseaux	Public consultation for the development of mini-grid with private sector participation	2018	<a href="http://anarse.gouv.ht/">http://anarse.gouv.ht/</a>
2	CIP-Sustainable energy supply with RE	The document describes the proposal to reduce the dependence of the CIP on thermal power by installing a dedicated solar plant.	April 2019	<a href="#">EZSHARE-1640290310-6</a>
3	Annex II to the RFP	This document describes the recommendations to be included in the RFP for the hiring of a concessionaire for the power thermal plant of the CIP financed by USAID.	April 2019	<a href="#">EZSHARE-1640290310-3</a>
4	Annex VI- Coordination scheme for the supply of energy to the CIP	This document describes the main coordination mechanism for the supply of energy from the solar plant and the thermal plant to the CIP	April 2019	<a href="#">EZSHARE-1640290310-4</a>
5	Aide-Mémoire- Identification mission HA-L1140	This document includes main agreements with sector authorities for the preparation of the financing	April 2019	<a href="#">EZSHARE-1640290310-2</a>
6	Project Appraisal Document	International Bank for Reconstruction and Development Project Appraisal Document on a Proposed Grant from the Clean Technology Fund to the Republic of Haiti for a Haiti Modern Energy Services for all Project	October 3,2017	<a href="https://www.gtai.de">https://www.gtai.de</a>
7	Technical support	Economic and financial analysis of the project	Third semester 2019	In progress
8	Technical support	Environmental and social analysis	Third semester 2019	In progress

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<sup>1</sup> 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.