

Country Assessment Report

Country/Region Name:

Haiti

Generation and demand: (type, MW, TWh)

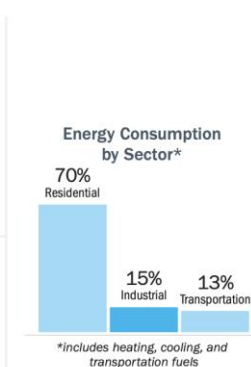
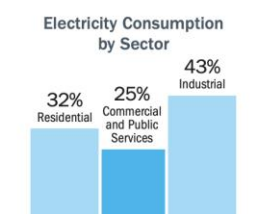
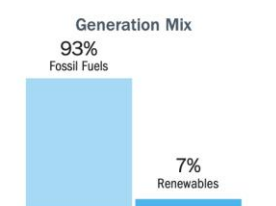
Haiti holds an annual energy generation of 1.092 TWh, with an installed capacity of 285 MW. It is estimated that peak demand in Haiti reaches up to 500MW. Within this installed capacity, 93% comes from imported fossil fuels and the remaining 7% from legacy hydroelectric dams in the country, which are identified as Renewable Energy sources. Haiti struggles with energy losses, with as much as 60% of the total generation lost through Transmission and Distribution. Energy poverty is a serious issue in the country considering that only 44% of the total Haitian population has access to electricity. Haiti faces significant challenges in generating and distributing energy reliably, and lack of access to affordable and reliable power affects the economic growth of the nation and hinders investments. According to a 2018 World Bank report, Haitian-government owned electricity utility Electricite d'Haiti (EDH) supplies nine hours or less of electricity per day on most circuits. Even for those with access to electricity, reliability is inconsistent, leading many businesses and larger households to install diesel generators.

Electricity access for rural areas is minimal (~3%), with many of these communities relying on biomass such as charcoal and wood as their main source of energy for light and cooking. The annual consumption of wood products was estimated at 4 million metric tons (MT), of which about one-third is transformed into charcoal to meet the cooking fuel needs of urban consumers. This dynamic contributes significantly to deforestation and pollution in Haiti.

The former presidential administration prioritized investment in the energy sector to increase the generation capacity of EDH and announced that they would replace post-paid meters with prepaid mode meters as part of the company's new commercial strategy, aiming to rectify their financial situation to better meet the demand of its customers. Renewable energy projects are underway, with the support and financing of external partners: for example, a 12 MW solar plant that has been funded by the Inter-American Development Bank (IDB) and USAID. Once completed in 2023, it will be the largest solar plant in the country.

Electricity Sector Overview

Installed Capacity 285 MW
RE Installed Capacity Share 28%
Peak Demand 500 MW (estimated)
Total Generation 1.092 TWh
Transmission and Distribution Losses 60%
Electricity Access
Total population 44%
Urban population 78%
Rural population 3%
Average Maximum Electricity Rates (USD/kWh) https://www.edh.ht/tarif.php
Residential \$0.13
Commercial \$0.14
Industrial \$0.14
Street Lighting \$0.14



SOURCE: [Energy Transitions Initiative](#)

SOURCE: [International Trade Administration, Haiti, 2021](#)

Electrical interconnection and import/export:

Electrical interconnection is very limited in rural Haiti and incredibly inconsistent in urban centers. With most of the population having limited or no access to energy supply from the grid, the majority of the Haitian population relies on decentralized supply for energy such as biomass from charcoal and wood as well as diesel generators. Additionally, of those with access to electricity, many illegally siphon from the grid and are therefore not billed and/or do not pay. In 2020 during the pandemic, grid instability and lack of continuously available electricity proved to be a major problem when EDH communicated that it would only be able to supply 6-10 hours of electricity per day to customers in the Port-au-Prince metropolitan area. It is estimated that the total unmet demand for residential and commercial electricity in Haiti is around 500 MW per day. Poor billing practices and unpaid invoices, including from government offices, also result in consistent shortfalls for the company, which operates at a loss. The estimated revenue losses in the electricity sector amounted to about 1.9 percent of GDP for FY2019, the latest date for which such figures were available.

According to information from the Commercial Directorate of EDH, the government subsidizes the utility with approximately \$250 million annually. In 2017, the Haitian government exempted solar modules and inverters from import duties, although some customs fees still remain.

According to Haitian dealers' records, 50 percent of power generators come from the United States. Other suppliers include Japan, France, China, and South Korea. Local demand for U.S. electrical machinery and equipment was valued at \$20.4 million in FY 2018, according to EDH.

Source: [International Trade Administration, 2021](#)

Market Structure:

The grid-connected electricity market is regulated, with autonomous state-owned EDH producing, transmitting, distributing, and marketing electricity in the country, though largely centered around Port-au-Prince and other population centers. EDH generates around 10% of the country's total energy, with the remaining majority coming from Independent Power Producers (IPPs). Most of the electricity is produced by IPPs that have signed power purchase agreements (PPAs) with EDH via bilateral negotiations rather than through competitive bidding procedures. Three IPPs (Sogener, E-Power, and Haytrac) and a tri-national enterprise (PBM, Petion-Marti-Bolivar) produce most of Haiti's IPP power. To attend to supply constraints and unreliable service, the private sector has resorted to self-generation. In the absence of reliable on-grid supply, more costly self-generation via small generators has expanded significantly and now collectively produces more electricity than the official grid, both at the household and commercial level.

Electricity prices in Haiti are some of the highest in the region. Multinational businesses have also expressed dissatisfaction at the expensive energy rates in the commercial and industrial sectors, compared to other countries in the Caribbean and Latin America. Average maximum electricity prices per sector are: Residential 0.13 \$/kWh, Commercial 0.14 \$/kWh, Industrial 0.14 \$/kWh and Street Lighting 0.14 \$/kWh. Limited availability and high prices of diesel have further contributed to increasing energy prices.

About 65 percent of the energy produced in Haiti is consumed by residences, 19 percent by industry, 12 percent by transportation, and 4 percent by services (International Monetary Fund, 2020). Less than 35 percent of households are connected to the national electricity grid, of which only 12.5 are connected legally.

Source: (**International Monetary Fund, 2020**)

Responsible Government Department: (include key contacts)

1) Electricity of Haiti (EDH)

Electricité d'Haiti (EDH) is an autonomous state-owned monopoly utility and responsible for producing, transmitting, distributing, and marketing electrical energy throughout the national territory.

2) Ministry of Public Works, Transport, and Communications (MTPTC)

The MTPTC is in charge of the Haitian energy sector. The minister also serves as the president of the executive board of EDH.

Key contact: [REDACTED], Head of Energy Unit - [REDACTED]

3) Regulatory Energy Commission (ANARSE)

Since 2017, the National Regulation Authority of the Energy Sector (ANARSE) has, of Moïse's administration, been developing regulation instruments, via concession contracts, and leading modernized, transparent bidding processes. These efforts aim at enabling private participation and foreign direct investment both in "large" regional grids currently operated by the public power utility and greenfield sites through the deployment of renewable energy mini-grids. ANARSE launched pre-qualification rounds to identify potential concessionaires for several regional electricity grids, including production, transmission, and distribution, in late 2020 and 2021.

4) Haitian Program for Access of Rural Communities to Solar Energy (PHARES)

This program is part of ANARSE and was launched in 2020 with the aim of modernizing the electricity sector in order to make it more efficient and to expand access to affordable, accessible and high-quality electricity service for the Haitian population living in rural and peri-urban areas. PHARES was initially launched with the financial support of the IDB through the project Improving Access to Electricity in Haiti (AMACEH – HA-L1140) and the World Bank through the Renewable Energies for All – SREP project (Gift TF0A5191).

5) Ministry of Environment

a) [REDACTED] - General Director - [REDACTED]

Existing/Planned Energy Legislation: (is there a CPO)

The last public communication regarding the reform of the energy sector was the Energy Policy for Republic of Haiti - 2012, and since then the government has not communicated any new changes.

In 2019, as part of the Energy Sector Master plan, Haiti proposed the development of regulations for its mini-grid sector. A full framework was developed in consultation with the Energy Cell within the MTPTC, ANARSE and the other PHARES donor partners, and work is now progressing on drafting and reviewing the individual sections of the regulations.

The Program for Access to Solar Energy for Rural Communities (PHARES) - 2020 (Program with IDB, IFC, World Bank) has been the most recent initiative from the Regulatory Energy Commission of Haiti, with plans to modernize the grid and to grant access to the majority of population living under energy poverty.

Environmental Legislation for Renewable Energy:

1) Ministry of Environment

a) The Ministry of Environment is responsible for formulating and implementing government policy on environmental management, ensuring sustainable use of the environment and

natural resources, and ensuring the sustainable management of biodiversity and protected areas. Renewable energy projects must ensure environmental conditions are conducive to a better quality of life and safety of the population.

2) Ministry of Public Works, Transport and Communication

- a) This ministry manages a set of services regarding development in Haiti. These include: the Energy Cell within the MTPTC, Distribution of Drinking Water (DINEPA), Regulation of Telecommunication Operators (CONATEL), Road Maintenance, Quality control of building infrastructure and application of standards for building

Considering that most Renewable Energy projects are financed by external partners, they must comply with international environmental standards such as the ISO-14000, IDB Environmental and Social Policy Framework -10 standards

3) Environmental and Social Policy Framework

- a) The International Bank for Reconstruction and Development (IBRD) outlined in 2017 the relevant requirements for Renewable Energy projects, with a section emphasizing sustainability and environment

Source: Environmental and Social Policy Framework, IDB 2020

Source: Development Aid

Source: World Bank, 2015

Existing/Planned Certificate Systems: (purpose, extent)

There is no existing certificate scheme in Haiti.

Extent of Engagement with Government: (brief summary of any contact already made with the national government regarding certification in general and I-REC)

EPP has had multiple conversations with the Head of Energy at the Ministry of Public Works Transportation and Communication, [REDACTED]. [REDACTED] has provided written confirmation of support for EPP's initiative to issue I-RECs and P-RECs from renewable energy projects in Haiti.

¹“Electricity Ministry Lacks Qualified Staff: Minister”, 29 July 2019. Radio Tamazuj. Available at: <https://radiotamazuj.org/en/news/article/electricity-ministry-lacks-qualified-staff-minister>

Expected response from Government:

Limited.

Current Environmental Reporting in Energy:

Not to our knowledge

Any other Relevant Information:

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