



CREEE
CARIBBEAN CENTRE FOR RENEWABLE
ENERGY & ENERGY EFFICIENCY



2018 ENERGY REPORT CARD HAITI

This document presents Haiti's Energy Report Card (ERC) for 2018. The ERC provides an overview of energy sector performance in Haiti. The ERC also includes energy efficiency, projects, technical assistance, workforce, training and capacity building information, subject to the availability of data.

This ERC includes data and information that was provided by government ministries, agencies or departments with responsibility for energy and was supplemented by internet research, author calculations and inferences.

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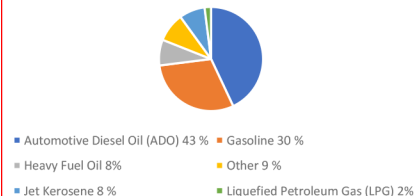
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"AT-A-GLANCE"

Summary of the Energy Sector

KEY DATA & INFORMATION – ENERGY SECTOR	
Population	10,646,714 (2017) ¹
GDP (USD) Per Capita	\$1,863 ²
Human Development Index	0.45 ³
National Energy Policy	Yes
Renewable Energy (RE) Policy	
RE Target	50% by 2020 ⁴
Energy Performance Standards/Appliance Labelling	No
Total Oil Imports (BOE) per day	29 565 ⁵
Total Oil Export (BOE) per day	N/A
Total Installed Capacity (MW)	314.6 ⁶
Total Installed RE (MW)	63.35 ⁶
Fuel & Oil Imports as % of GDP	
Electric vehicle stock	N/A
National Repository for Energy Data	No

FUEL: TOTAL ENERGY SUPPLY



Source: Ministry of the Economy and Finance (2018)

ENERGY SECTOR PERFORMANCE AGAINST TARGETS

<i>Indicator</i>	Base /Current Performance (Year)	National Target	National Target (Proposed by CARICOM – CSERMS Report) ⁷	<u>Indicative RE Oil Displacement^{8,9} Potential Annually**</u> <ul style="list-style-type: none"> • 1 MW wind displaces 1,760 barrels of oil equivalent (BOE) • 1 MW hydro displaces 3,300 BOE • 1 MW solar displaces 1,210 BOE <u>Energy Intensity (EI)¹⁰:</u> <ul style="list-style-type: none"> • EI measures how energy benefits the economy and is calculated by taking the ratio of total primary energy use (all of the fuels and flows that a country uses to get energy) to GDP (the total money made in a country). EI indicates how effectively an economy uses their fuels and flows.
RE as % of Installed Capacity	20 % ¹¹	50% RE by 2020 ⁴	46 % by 2027	
*Energy Intensity (BTU/US\$1 Unit of output)				

*The energy efficiency target for CARICOM is 33% reduction in energy intensity by 2027, compared to a reference of Average Annual Energy Intensity of ~13,000 BTU per USD of GDP in 2015.

**Based on capacity factors of 0.32 for wind. 0.6 for hydro and 0.22 for solar.¹⁶

KEY ENERGY SECTOR STAKEHOLDERS

GOVERNMENTS, MINISTRIES, DEPARTMENTS AND AGENCIES ¹²

Ministry of Public Works, Transportation and
Communication (Energy Cell)

Bureau des Mines et de l'Energie d'Haïti

ELECTRIC UTILITIES ¹²

Electricité d'Haiti (EDH)

Centrale tripartite PBM (Petion, Bolivar et Marti)

ELECTRICITY REGULATOR ¹²

National Regulation Authority for Energy
(Autorité Nationale de Régulation du Secteur de
l'Energie: ANARSE)

INDEPENDENT POWER SOURCES ¹²

SOGENER

E-POWER

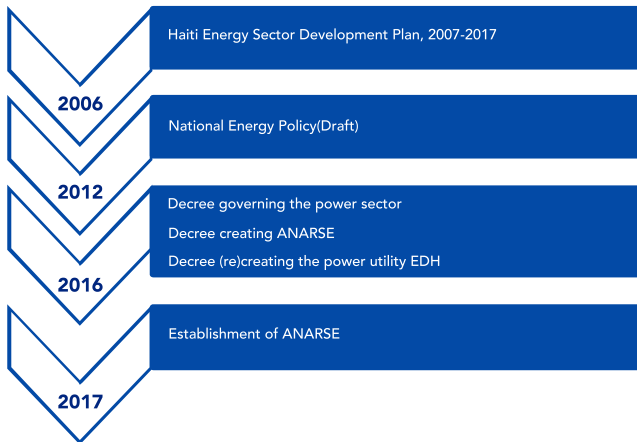
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POLICY, LEGAL AND REGULATORY FRAMEWORK

Electricity Sector : Policy, Legal and Regulatory (PLR) Framework

✓	Energy Policy and Energy Action Plan	●
✓	RE Target	●
✓	EE Target	
✓	Electricity Regulator	●
✓	Net billing/Net metering	
✗	Interconnection Policy/Standards	●
✗	Feed-in-tariff	●
✗	RE/EE Act	●
●	Completed/ In place	
●	In progress/ Draft	
●	Not yet started/ Not established	

Key Achievements: PLR Framework Timeline for the Electricity Sector ^{4, 12}



ELECTRICITY AND ENERGY EFFICIENCY

KEY DATA & INFORMATION	
1. Fuel Consumption – Electricity Subsector (BOE)	
2. Installed Conventional Capacity – Electric Utility (MW)	161.5 ⁶
3. Installed Conventional Capacity – IPPs (MW)	154.5 ⁶
4. Base Load (MW)	154 ⁶
5. System Peak Demand (MW)	239 ⁶
6. Total Generation (MWh)	1057110.54 ⁶
7. Total Sales (MWh)	473780.26 ⁶
8. Total Number of Customers	304,000 ⁶
TARIFFS	
9. Residential Tariff (US\$/kWh)	0.08 ¹³
10. Commercial (US\$/kWh)	0.14 ¹³
11. Industrial/Large Power (US\$/kWh)	0.14 ¹³
12. Street Lights (US\$/kWh)	0.15 ¹³

EFFICIENCY	
13. EE Target	
14. Electricity System Losses (%)	
15. Energy Use (kWh) Per Capita	
16. EE Initiative and Impact	

RE Resource	Installed Capacity (MW) ¹²
Wind	0.024
Solar	1.33
Hydro	62
Geothermal	
Biomass/ WTE	
Total	63.354

RE as % of installed Power Capacity = 20 %

PROJECTS IN THE PIPELINE ^{5,12}

Donor Organisation & Banks	Technical Assistance Providers	Funding Awards	Start Year
Banque Mondiale	Cellule Energie	23 Millions USD	2015
BID	Sigora	8 Millions USD	2019

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²Perspective Monde (2018). <http://perspective.usherbrooke.ca/bilan/servlet/BMTendanceStatPays?codeTheme>

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⁴National Renewable Energy Laboratory. (2015). Energy Transition Initiative: Islands Energy Snapshot – Haiti. Retrieved from <https://www.nrel.gov/docs/fy15osti/64121.pdf>

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⁶Haiti Electricity Company (2019)

⁷Worldwatch Institute. (2015). Caribbean Sustainable Energy Roadmap and Strategy (C-SERMS) Baseline Report and Assessment. Retrieved from http://www.worldwatch.org/system/files/C-SERMS_Full_PDF.pdf

⁸Ministry of Science, Energy, Technology and Mining. (2013). Grid Impact Analysis and Assessment for Increased Penetration of Renewable Energy into the Jamaican Electricity Grid. Retrieved from https://www.mset.gov.jm/sites/default/files/pdf/Grid%20Impact%20Analysis%20for%20Renewable%20Energy%20Penetration_2.pdf

⁹Sustainable Energy Ireland – Renewable Energy Information Office. (2011). Energy Unit Conversion Tool. Retrieved from https://ec.europa.eu/energy/intelligent/projects/sites/iee-projects/files/projects/documents/make-it-be_energy_unit_conversion_tool.xlsx

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¹⁰J.M.K.C. Donev et al. (2018). Energy Education - Energy intensity. Retrieved from https://energyeducation.ca/encyclopedia/Energy_intensity.

¹¹Calculated

¹²Ministry of Public Works, Transportation and Communications (Focal Point: Mr. Nicolas Allien). CARIFORUM Energy Report Card Input Data (Haiti).

¹³National Authority for the Regulation of the Energy Sector (2019)

¹⁴Rapid Scan Assessment of the Capacity Requirements for Sustainable Energy Development for CARICOM Countries (Professor Dr. Olav Hohmeyer, International Energy Consulting) (2019)