



2018 ENERGY REPORT CARD CARICOM

This document presents CARICOM's Energy Report Card (ERC) for 2018. The ERC provides data and information on CARICOM's energy sector by focusing on two priority sub-sectors: Electricity and Transportation. The ERC also presents energy efficiency, training and capacity building information for the energy sector. Further details can be found in the relevant ERCs for the individual CARICOM Member States.

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



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ENERGY SECTOR PERFORMANCE AGAINST TARGETS

Key Socio-economic and
Energy Data

Country	Population*	GDP per capita (USD)*	Human Development Index (HDI)*	Total installed capacity (MW)*	Fossil-fuel based capacity (MW)*	Renewable energy capacity (MW)*
Antigua & Barbuda (A & B)	96,286	26,739	0.78	81	72	9
Bahamas	399,285	33,494	0.807	536	534.7	1.3
Barbados	274,465	16,839	0.8	316.6	286.6	30
Belize	398,050	8,300	0.707	203.68	105.2	98.48
Dominica	73,897	11,000	0.715	32.98	26.34	6.64
Grenada	112,139	12,864	0.772	55.57	52.576	2.994
Guyana	746,955	8,100	0.654	183.42		56.64
Haiti	10,911,810	1,863	0.45	314.6		63.35
Jamaica	2726667	9,299	0.732	1283	1132	151
Montserrat	5,292	12,044		5.44	5.44	0
St. Kitts & Nevis	52,715	21,426	0.778	66	62.8	3.2
St. Lucia	178,695	14,400	0.747	92.1	88.4	3.7
St. Vincent & the Grenadines(SVG)	110,520	11,480	0.723	51.06	43.24	7.824
Suriname	583,400	13,776	0.72	483.8	287.3	196.5
Trinidad & Tobago (T & T)	1,359,193	28,647	0.784	2114	2113.9961	0.004
TOTAL	18,566,670			6526.2	5335.9421	760.681

*Various years over the period, 2011-2018; based on data availability

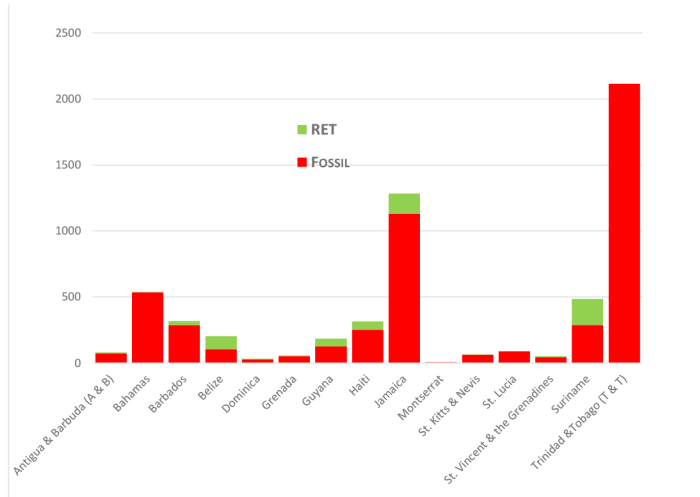
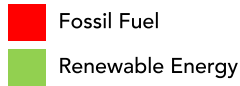
ENERGY SECTOR PERFORMANCE AGAINST TARGETS

Fuel Imports, Total Energy
Supply and Final
Consumption


Country	Total Fuel Imports (BOE)	Value of Fuel Imports as % of GDP	Total Energy Supply (BOE)	Total/Final Energy Consumption (BOE)
A & B	1560541	7.5%	1560541	N/A
Bahamas	390382657	11%		
Barbados	3,237,550	6.9%	3,467,500	2,110,065
Belize		7%	2,023,255	
Dominica	333,245	2%	296,709	237,360
Grenada	340,180	4%	1,016,525	734,015
Guyana	5,495,805	11%	6,598,265	
Haiti	10 791 225	4%	7,600,000	
Jamaica	22,190,905	11%	19,870,878	19,270,860
Montserrat		25%	60,292	
St. Kitts & Nevis	620,500	13.2%	711,568	440,008
St. Lucia	1,095,000	7.7%	1,117,265	581,080
SVG	636,294	6.2%	574,328	438,365
Suriname	300,030	10%	11,720,914	
T & T			183,230,000	98,185,000

Data availability relating to fuel imports, supply and consumption varies across the region; data years vary. Current data on fuel imports (commodity types, quantities and costs), total energy supply and final consumption (including sectoral breakdowns) are needed to accurately assess performance. Sector definitions/how data is disaggregated need to be consistently defined and tracked across the region.

FOSSIL FUEL-BASED AND RENEWABLE ENERGY CAPACITY



PERFORMANCE AGAINST TARGETS

Indicator	CARICOM Targets (C-SERMS) ¹	Indicative Progress
RE as % of installed Capacity	20% by 2017 28% by 2022 48% by 2027	 <p>A blue progress bar with a white label '11%' inside. The bar is filled with blue and has a 3D effect. The left end is labeled '0%' and the right end is labeled '48%'.</p>

Performance against energy intensity target (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) and Power Sector CO₂ Emissions Reductions targets (18 % by 2017; 32 % by 2022; 36 % by 2027) should also be tracked, however not enough data exists to determine progress.

KEY ENERGY SECTOR STAKEHOLDERS

COUNTRY	Government Ministry with Responsibility for Energy Portfolio	Electric Utility	Electricity Regulator
ANTIGUA AND BARBUDA	Ministry of Public Utilities, Civil Aviation, Transport and Energy	Antigua Public Utilities Authorities	
BAHAMAS	Ministry of the Environment and Housing	Bahamas Electricity Corporation (BEC); Grand Bahama Power Company (GBPC)	Utilities Regulation & Competition Authority
BARBADOS	Ministry of Energy and Water Resources	Barbados Light and Power Company Ltd. (BL&P Co.)	Fair Trading Commission
BELIZE	Ministry of Public Service, Energy and Public Utilities	Belize Electricity Ltd. (BEL)	Public Utilities Commission
DOMINICA	Ministry of Trade, Energy and Employment	Dominica Electricity Services Ltd. (DOMLEC)	Independent Regulatory Commission
GRENADA	Ministry of Finance, Planning, Economic Development and Physical Development	Grenada Electricity Services Ltd. (GRENLEC)	Public Utilities Regulatory Commission
GUYANA	Guyana Energy Agency	Guyana Power and Light, Lethem Power Company, Mabaruma Power Station, Linden Power Company, Mahdia Power Station	Public Utilities Commission
HAITI	Energy Division, Ministry of Public Works, Transportation and Communications	Electricité d'Haïti (EDH)	Autorité Nationale de Régulation de Secteur de L'Énergie
JAMAICA	Ministry of Science, Energy and Technology	Jamaica Public Service Company Ltd. (JPS)	Office of Utilities Regulation
MONTserrat	Ministry of Communications, Works and Labour	Montserrat Utilities Ltd. (MUL)	

ST. KITTS AND NEVIS	Ministry of Public Works, Housing, Energy and Utilities	St. Kitts Electricity Co. Ltd. (SKELEC); Nevis Electricity Company Ltd. (NEVLEC)	Public Utilities Commission
SAINT LUCIA	Ministry of Infrastructure, Ports, Energy and Labour	St. Lucia Electricity Services Limited (LUCELEC)	National Utilities Regulatory Commission
ST. VINCENT AND THE GRENADINES	Ministry of National Security, Air and Sea Port Development (Energy Unit)	St. Vincent Electricity Services Ltd. (VINLEC)	Utility provider VINLEC self-regulates
SURINAME	Ministry of Natural Resources	Energie Bedrijven Suriname (EBS)	Energy Authority of Suriname
TRINIDAD AND TOBAGO	Ministry of Energy and Energy Industries	Trinidad and Tobago Electricity Commission (T&TEC)	Regulated Industries Commission

POLICY, LEGAL AND REGULATORY FRAMEWORK

Countries	Finalized Energy Policy/ Action Plan?	Renewable Energy (RE) Targets?	RE Act?	Net Metering/ Billing?	Independent Power Producers?	Feed-in-Tariff (FIT)	Interconnection Policy/ Standards
Antigua and Barbados	●	●	●	●	●	●	●
Bahamas	●	●		●		●	
Barbados	●	●		●	●	●	●
Belize	●	●			●		
Dominica	●	●	●	●	●	●	●
Grenada	●	●	●	●			●
Guyana	●	●	●				
Haiti	●	●			●		
Jamaica	●	●		●	●		●
Montserrat	●	●		●			
St. Kitts and Nevis	●	●	●		●		

St. Lucia	●	●	●	●			
SVG	●	●	●	●	●	●	●
Suriname	●				●	●	●
Trinidad and Tobago	●	●		●	●		●











● In place /established

● draft/in development

ELECTRICITY AND ENERGY EFFICIENCY

Country	Total Generation (MWh)	Total Sales (MWh)	Total Number of Customers	System Losses (%)
A & B	361 985	287 344	35079	11%
Bahamas	1,930,000		119,500	13%
Barbados	996,154.6	42 562.92	129,985	5.2%
Belize	648,899.89	570,323.14	97,714	11.9%
Dominica	65,411	56,289	36,467	9.4%
Grenada	265,095.733	207,288.71	60717	7%
Guyana	831154	383572	188,664	29%
Haiti	1,057,110.54	473,780.26	304,000	60%
Jamaica	4,355,535	3,201,650	657,997	26.5%
Montserrat	12,282	11,557	3,590	8.7%
St. Kitts & Nevis	206,100		28167	20% (St. Kitts); 12% (Nevis)
St. Lucia	399228	361623	67301	6%
SVG	164,799.65	148,716.85	45,430	7.6%
Suriname	1,950,000	1,410,000	145,000	16%
T & T	9,324,416,000	8,463,084,132	487,877	11%

TRANSPORTATION

Countries	Fuel (BOE) Used in Transportation Sector	Sustainable Transportation Target?	Number of Conventional Vehicles Registered	Number of Hybrid & Electric Vehicles
Antigua and Barbuda	595,319		31,786	
Bahamas				
Barbados	1,065,800			400
Belize	837,339			
Dominica	123,370		27,223	1
Grenada	304,775		26,387	
Guyana	1,816,520.73		12,321	
Haiti				
Jamaica	6,605,400		3,304,559	
Montserrat			2,642	
St. Kitts and Nevis	173,740			
St Lucia	240,170			5
SVG	293,460		24,046	6
Suriname				
Trinidad and Tobago				

Data providing a breakdown on how fuel is used within the transportation subsector is not readily available and, in some instances, may not be tracked.

*Data years vary.

WORKFORCE

Number and Type of Tertiary Level Sustainable Energy Programmes Offered

Name of Education Programme Provider	Name of Programme	Type of Programme		
		B.Sc	M.Sc	Ph.D Level
The University of the West Indies, Cave Hill, Barbados	Renewable Energy Management		X	
The University of the West Indies, Mona, Jamaica	Alternative Energy	X		X
	Energy and Environmental Physics	X		
	Renewable Energy Management		X	
	Renewable Energy Technology		X	
	Renewable Energy Management (Post Graduate Diploma)			X
The University of the West Indies, St. Augustin, Trinidad	Renewable Energy Technology		X	
University of Technology, Jamaica	Renewable Energy Engineering		X	
	Sustainable Energy and Climate		X	
Caribbean Maritime University, Jamaica	Mechanical Engineering with Renewable Energy and Energy Efficiency	X		

NUMBER OF PERSONS EMPLOYED IN THE ENERGY SECTOR

COUNTRY	NAME OF ENTITY	NUMBER OF PERSONS IN THE ENERGY FIELD	BREAKDOWN BY GENDER	
Bahamas	Grand Bahama Power Company	200	Females: 70	Males: 130
Bahamas	Utilities Regulation & Competition Authority	3	Females: 0	Males: 3
Bahamas	Organization of Caribbean Utility Regulators	1	Females: 1	Males: 0
Barbados	Barbados Light and Power	365	Females: 99	Males: 266
Barbados	Ministry of Energy and Water Resources	30	Females :17	Males: 13

NUMBER OF PERSONS EMPLOYED IN THE ENERGY SECTOR

Barbados	Caribbean Centre for Renewable Energy and Energy Efficiency	7	Females: 4	Males: 3
Barbados	Fair Trading Commission	5	Females: 3	Males: 2
Barbados	Barbados Renewable Energy Association	1	Females: 1	Males: 0
Belize	Belize Electricity Limited	316 (2017)	Females:	Males:
Belize	Ministry of Finance	9	Females: 4	Males: 5
Dominica	Dominica Electricity Services Limited	150	Females: 5	Males: 145

NUMBER OF PERSONS EMPLOYED IN THE ENERGY SECTOR

Dominica	Independent Regulatory Commission	3	Females: 1	Males: 2
Dominica	Ministry of Trade, Energy and Employment	1	Females: 0	Males: 1
Grenada	Grenada Electricity Services Limited	244 (2017)		
Guyana	Guyana Energy Agency	21	Females: 8	Males: 13
Guyana	Energy Unit: CARICOM Secretariat	3	Females: 2	Males: 1
Haiti	Ministry of Public Works, Transportation and Communication	20	Females: 6	Males: 14
Jamaica	Office of Utilities Regulation	15		
Montserrat	Montserrat Utilities Ltd.	30		

NUMBER OF PERSONS EMPLOYED IN THE ENERGY SECTOR

St. Kitts	St. Kitts Electricity Co. Ltd.	120		
St. Kitts	Energy Ministry	2		
St. Lucia	Caribbean Electric Utility Services Corporation	10	Females: 8	Males: 2
St. Lucia	National Utility Regulatory Commission	7	Females: 7	Males: 0
St. Lucia	Ministry of Infrastructure, Ports, Energy and Labour	6	Females: 2	Males: 4
St. Vincent and the Grenadines	St Vincent Electricity Services Ltd.	250	Females: 8	Males: 242
St. Vincent and the Grenadines	Ministry of National Security, Air and Sea Port Development	4	Females: 2	Males: 2

NUMBER OF PERSONS EMPLOYED IN THE ENERGY SECTOR

Suriname	Ministry of Natural Resources	8	Females: 7	Males: 1
Trinidad and Tobago	Regulated Industries Commission	8	Females: 5	Males: 3
Trinidad and Tobago	Caribbean Solar Energy Society	5	Females: 3	Males:

***This may not be an exhaustive list**

REFERENCES

The data and information in this report was largely taken from the individual Energy Report Cards for the CARICOM Member States: Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, Cayman Islands, Dominica, Grenada, Guyana, Haiti, Jamaica, Martinique, Montserrat, St. Kitts and Nevis, St. Lucia, St. Maarten, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago ,Turks and Caicos.

¹Worldwatch 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

²Rapid Scan Assessment of the Capacity Requirements for Sustainable Energy Development for CARICOM Countries (Professor Dr. Olav Hohmeyer, International Energy Consulting) (2019)