

2019 ENERGY REPORT CARD

CARICON



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INTRODUCTION

This document presents CARICOM's Energy Report Card (ERC) for 2019.

The ERC provides an overview of the energy sector performance in CARICOM. The ERC also includes energy efficiency, 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, utilities, and statistical offices.

The data collected was supplemented by internet research, author calculations and inferences.

This data is a collection from a variety of public sources and, as such, is for general information only. It is not intended for decision-making purposes, and therefore reliance placed on the information herein is strictly at the user's risk.

There was no Energy Report Card generated for St. Kitts and Nevis for 2019. As a result, the CARICOM Energy Report Card excludes any information and data for St. Kitts and Nevis. There were also data gaps for a few other member states which is reflected in the report.





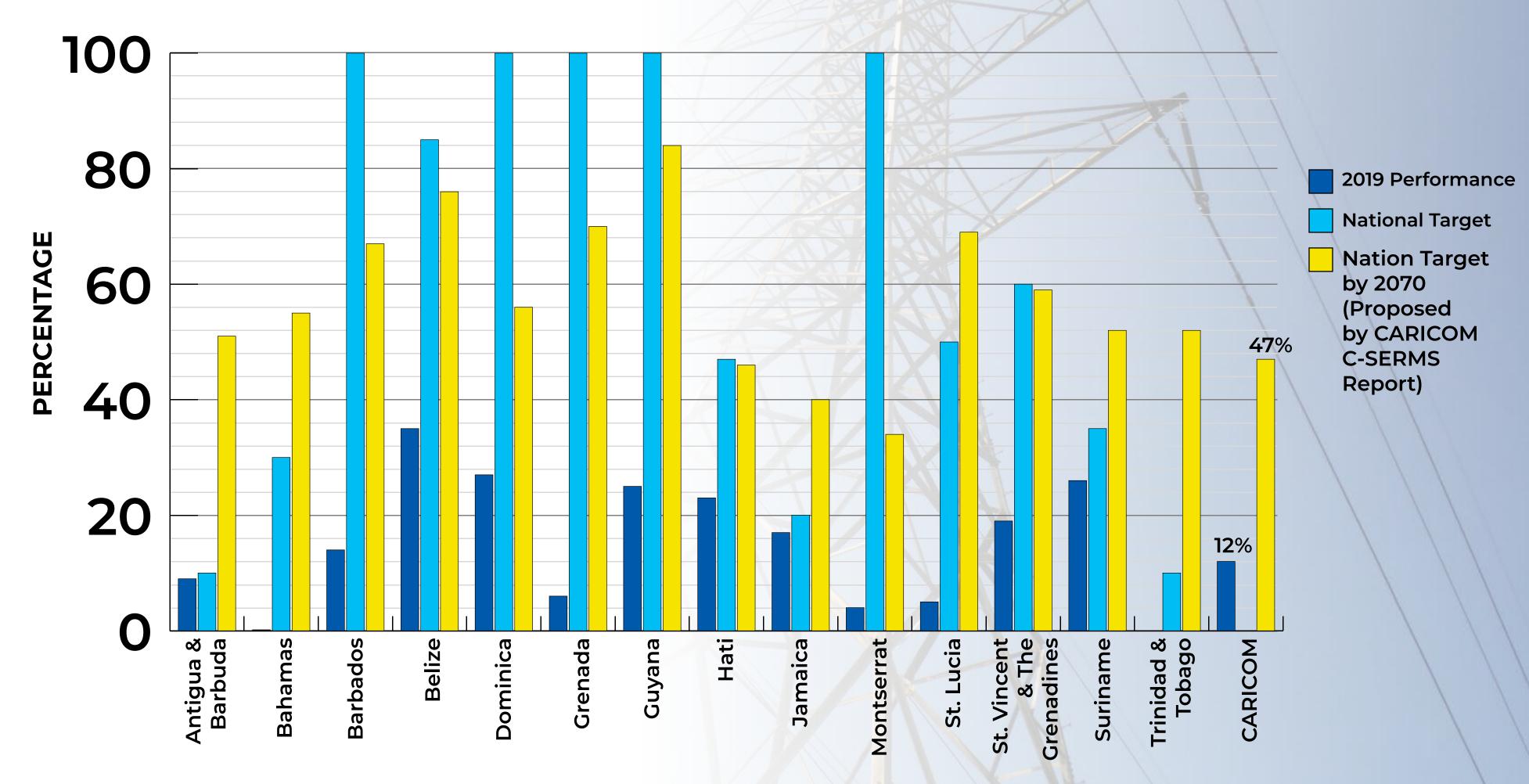
KEY SOCIOECONOMIC DATA

Country	Population	GDP per Capita (\$US)	Debt as % of GDP	Human Development Index
Antigua and Barbuda	96,453	\$17,790.30	76.3%	0.778
Bahamas	385,300	\$35,239.00	66.8%	0.805
Barbados	287,025	\$ 18,148.20	115.4%	0.814
Belize	408,487	\$3,507.16	94.2%	0.718
Dominica	72,231	\$8063.02	78.7%	0.756
Grenada	112,002	\$10,815.91	55.8%	0.779
Guyana	782,766	\$4,159.61	40.9%	0.682
Haiti	11,263,077	\$ 890.00	47 %	0.510
Jamaica	2,726,667	\$ 5,843	96.4%	0.743
Montserrat	4,519	\$ 13,487	6.7%	Not Available
St. Lucia	179,995	\$ 11,791.70	59.6%	0.759
St. Vincent and the Grenadines	110,049	\$6,077.41	75.2%	0.728
Suriname	590,100	\$6,359.80	86.6%	0.724
Trinidad and Tobago	1,363,985	\$16,688.02	62%	0.799



ENERGY SECTOR PERFORMANCE AGAINST TARGETS

RENEWABLE ENERGY PERFORMANCE AGAINST TARGETS





KEY ENERGY STAKEHOLDERS

Country	Energy Ministry	Electric Utility	Electricity Regulator
Antigua and Barbuda	Ministry of Tourism, Economic Development, Investment and Energy (MTEDIE) Ministry Public Utilities, Civil	Antigua Public Utilities Authority	Antigua Public Utilities Authority
	Aviation, Transport and Energy		
Bahamas	Ministry of Environment and Housing: Port Department	Bahamas Power and Light (BPL) Grand Bahama Power Company	Utility Regulation and Competition Authority (URCA) Bahamas
Barbados	Ministry of Energy, Small Business and Entrepreneurship (previously the Ministry of Energy and Water Resources)	Barbados Light and Power Company Limited	Fair Trading Commission
Belize	Ministry of Public Service, Energy and Public Utilities	Belize Electricity Limited	Public Utilities Commission
Dominica	Ministry of Blue and Green Economy, Agriculture and National Food Security- Energy Unit/ Renewable Energy Programme	Dominica Electricity Services Limited	Independent Regulatory Commission
	Ministry of Public Works and Digital Economy- Electrical Division		
Grenada	Ministry of Infrastructure Development, Public Utilities, Energy, Transport & Implementation	Grenada Electricity Services Limited	Public Utilities Regulatory Commission
Guyana	Guyana Guyana Energy Agency (GEA)		Public Utilities Commission (PUC)
Haiti	Haiti Ministry of Public Works, Transport and Communication (MTPTC) Office of Energy Security		National regulatory authority for the energy sector (ANARSE)



KEY ENERGY STAKEHOLDERS (CONT'D)

Country	Energy Ministry	Electric Utility	Electricity Regulator
Jamaica	Ministry of Science, Energy & Technology	Jamaica Public Service Company (JPSCo)	Office of Utilities Regulation
Montserrat	Ministry of Communications, Works, Energy and Labour (MCWEL)	Montserrat Utilities Limited, MUL	None
St. Lucia	Ministry of Infrastructure, Ports, Energy, and Labour	Saint Lucia Electricity Services Limited (LUCELEC)	National Utilities Regulatory Commission (NURC)
St. Vincent and the Grenadines	Ministry of National Security, Air and Sea Port Development Energy Unit	St. Vincent and the Grenadines Electricity Services Ltd. (VINLEC)	No independent Regulator; Cabinet of the Government of St. Vincent and the Grenadines self regulates
Suriname	Ministry of Natural Resources	N.V. Energiebedrijven Suriname	Suriname Energy Authority (Energie Autoriteit Suriname - EAS)
Trinidad and Tobago	Ministry of Energy and Energy Industries Ministry of Public Utilities	Trinidad and Tobago Electricity Commission (T&TEC)	Regulated Industries Commission



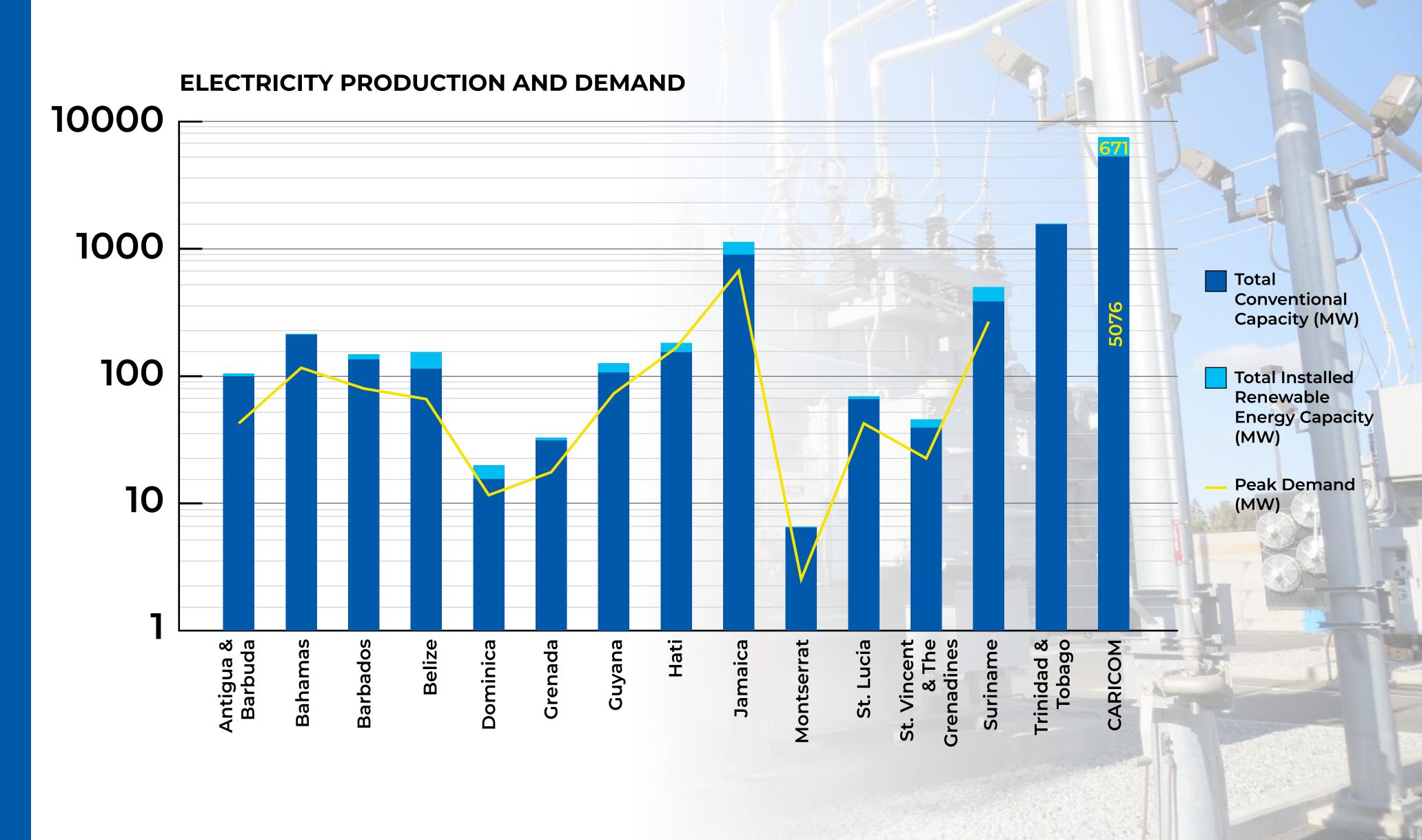
ELECTRICITY SECTOR: POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK

Country	Energy Policy and Energy Action Plan	RE Targets	EE Targets	Electricity Regulator	Net Billing/Net Metering	Interconnection Policy /Standards	Feed-in-tariff	RE/EE Act
Antigua and Barbuda								
Bahamas								
Barbados								
Belize								
Dominica								
Grenada								
Guyana								
Haiti								
Jamaica								
Montserrat								
St. Lucia								
St. Vincent and the Grenadines								
Suriname								
Trinidad and Tobago								

Completed
Draft
In-progress
Not Complete



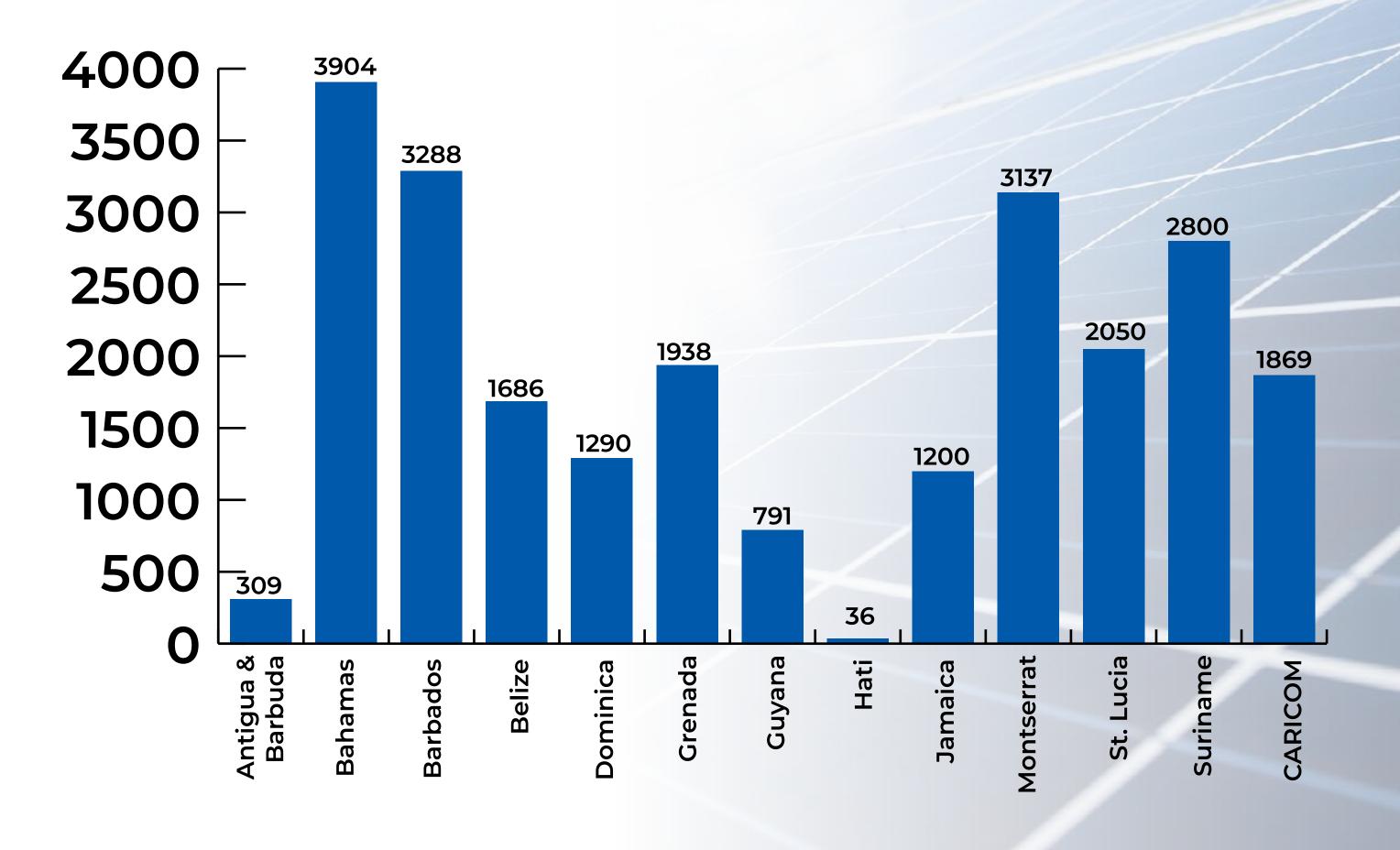
KEY ELECTRICITY DATA





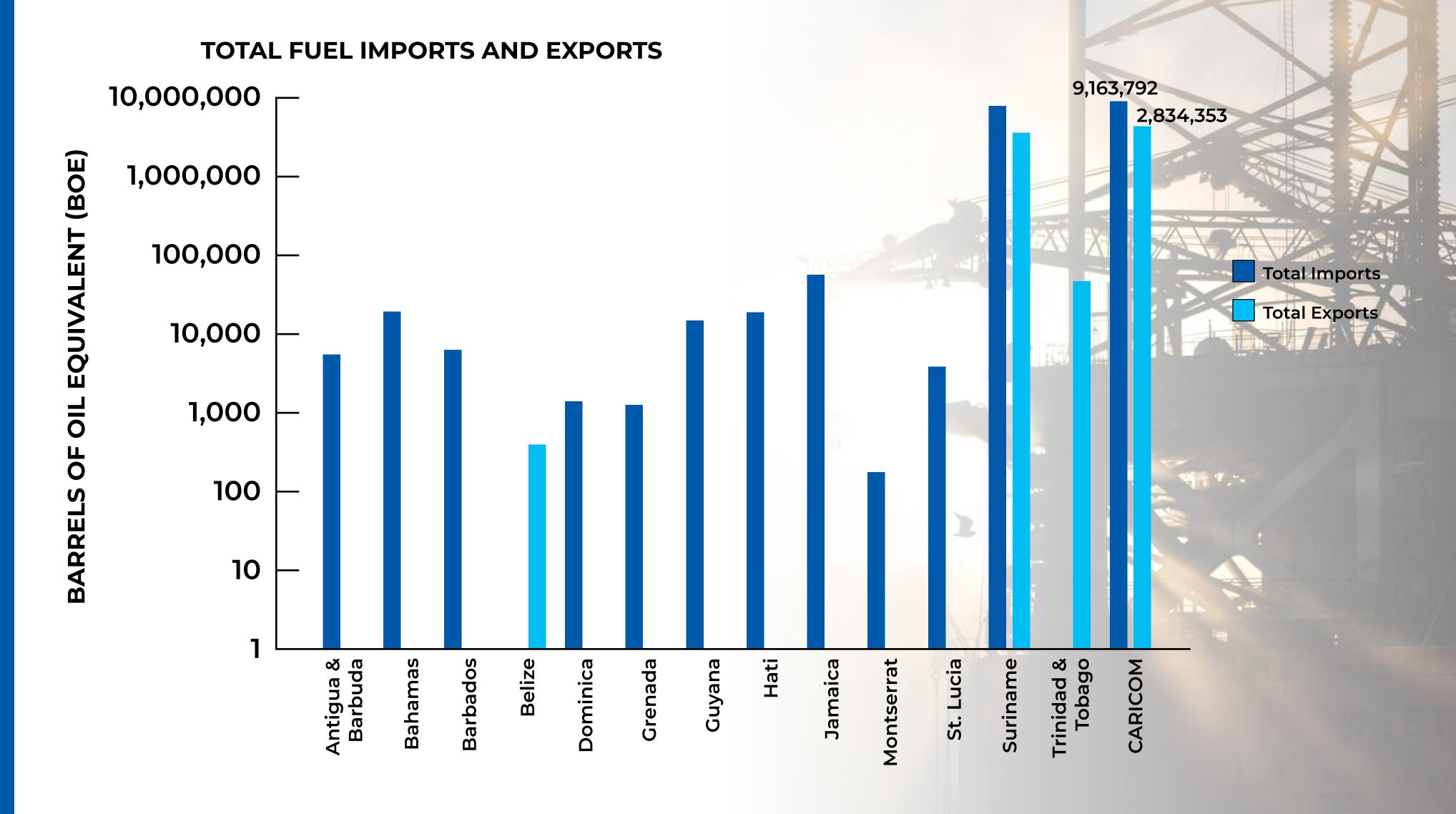
KEY ELECTRICITY DATA (CONT'D)

ENERGY USAGE PER CAPITA (KWH)



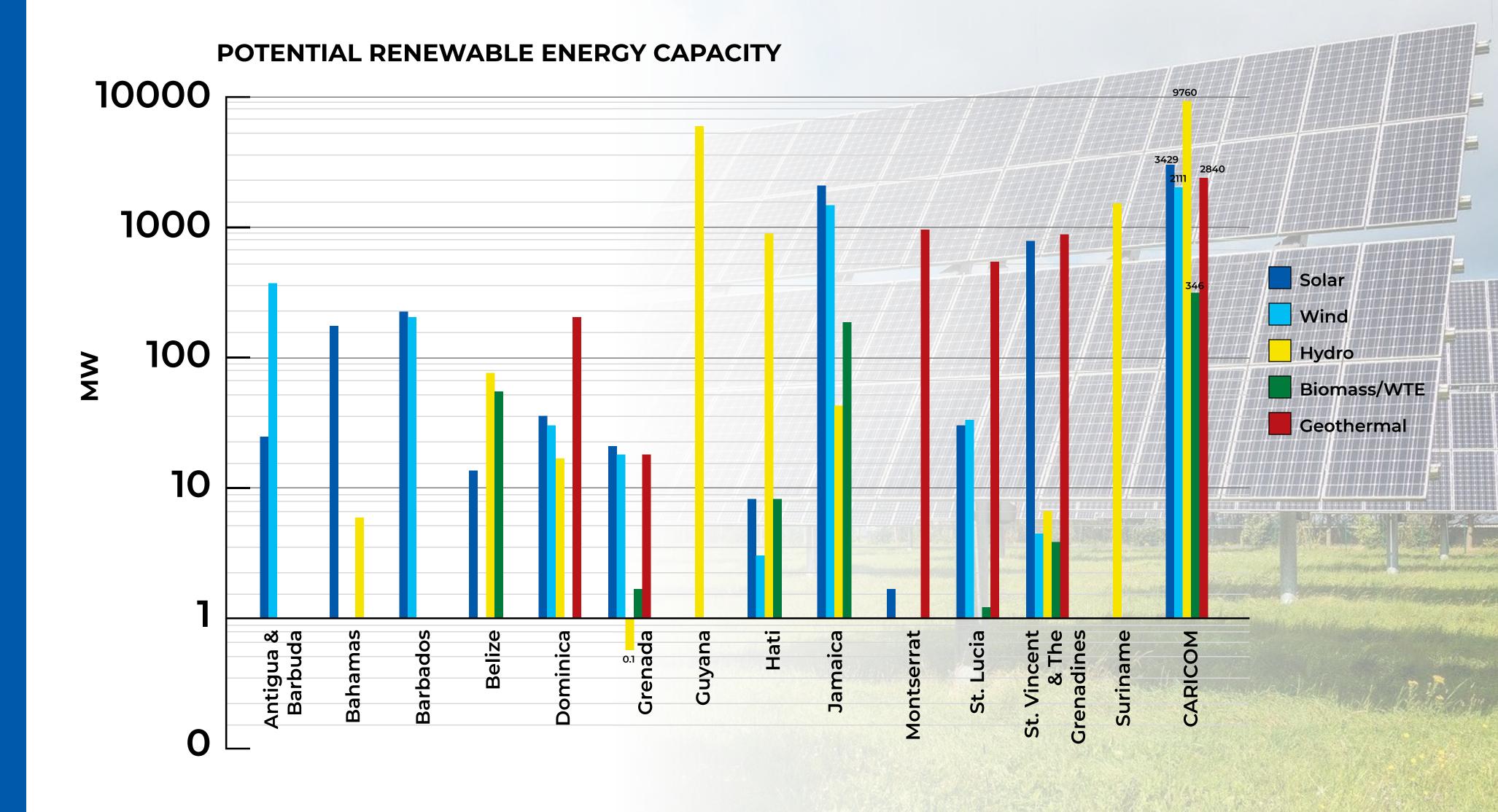


KEY ELECTRICITY DATA (CONT'D)





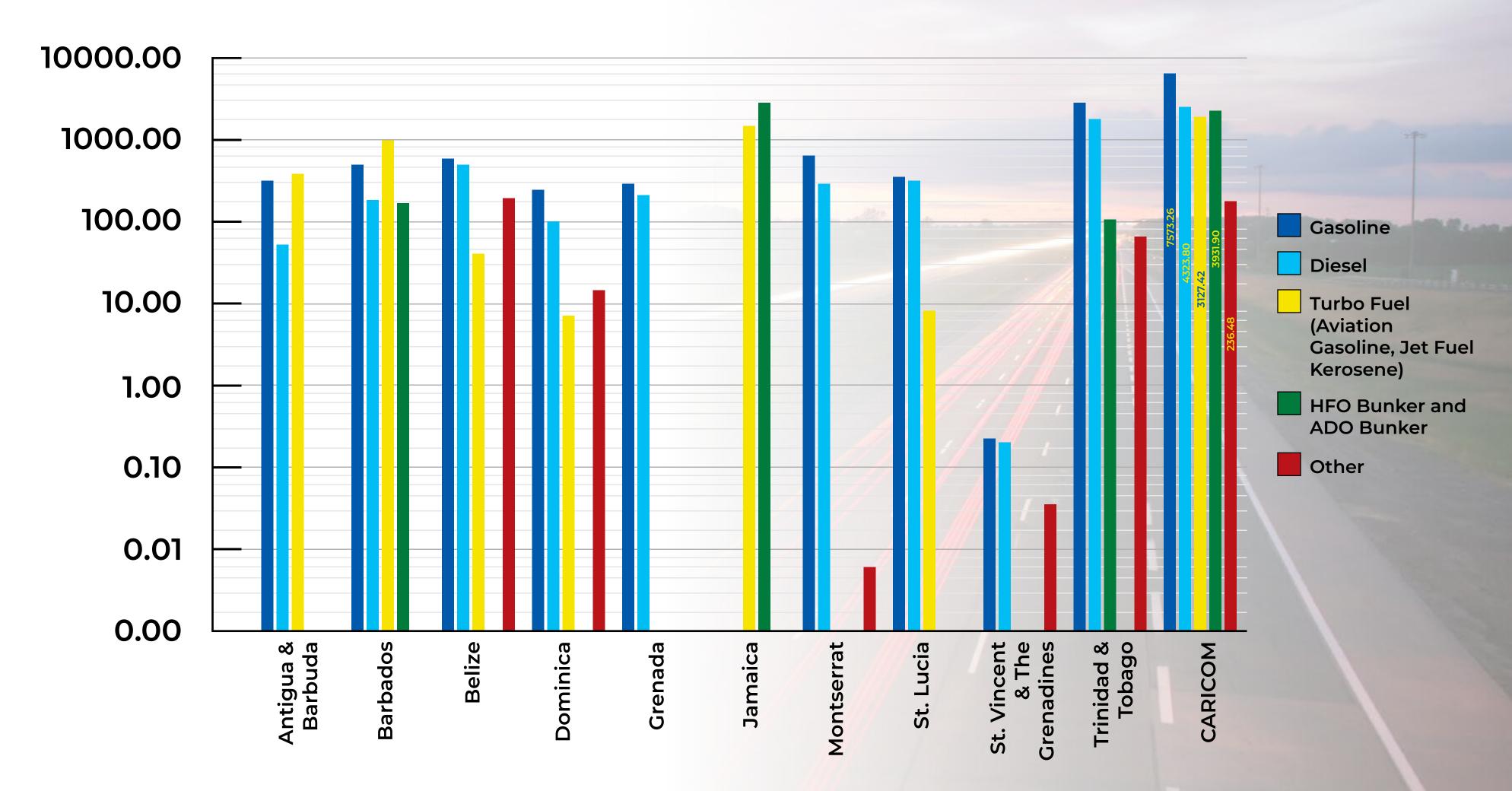
RENEWABLE ENERGY





TRANSPORTATION

FUEL CONSUMPTION

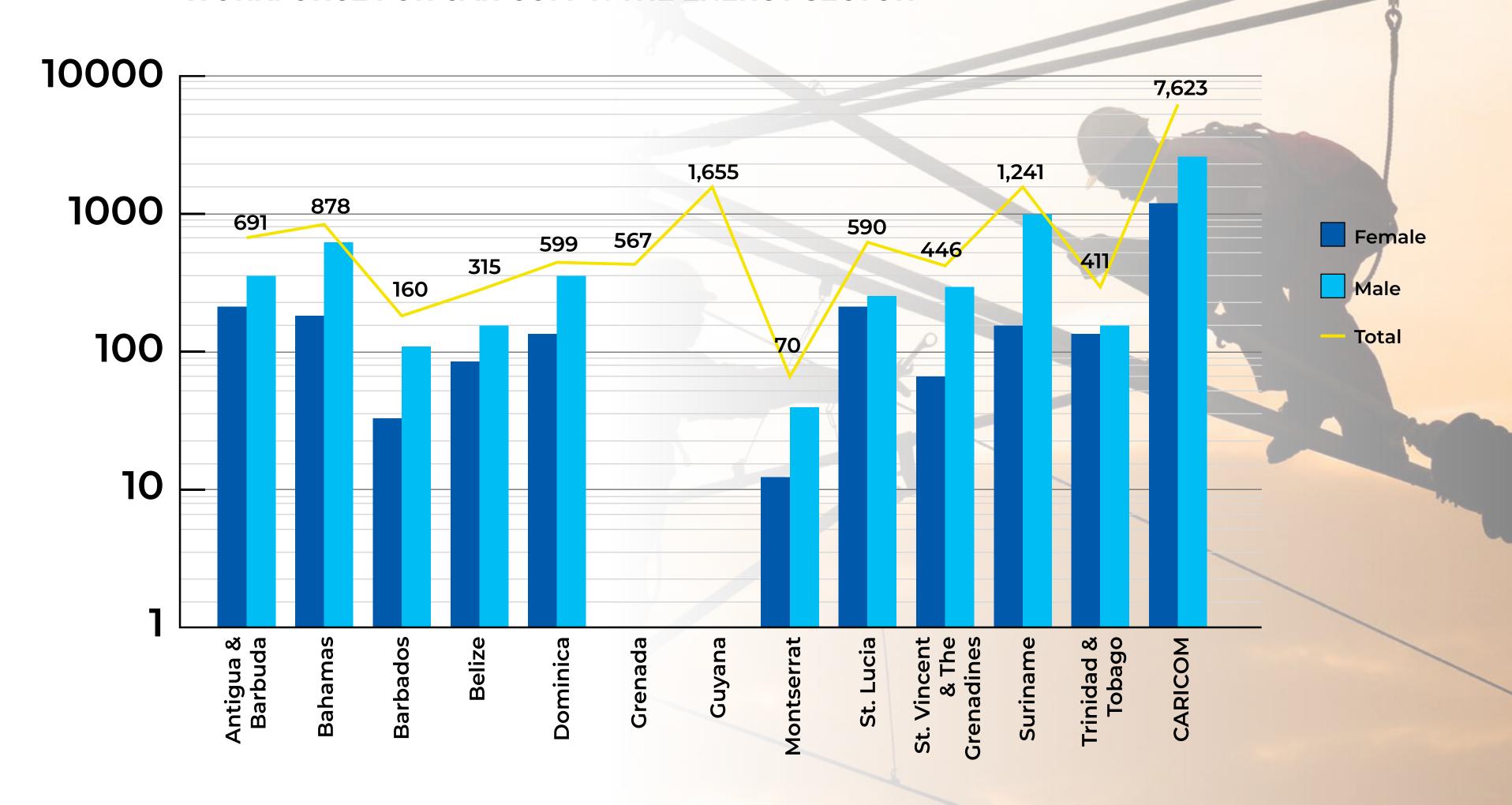


Jamaica reported an aggregate of 7,100,000 BOE for gasoline and diesel.



WORKFORCE

WORKFORCE FOR CARICOM IN THE ENERGY SECTOR





TYPES OF TERTIARY LEVEL & VOCATIONAL TRAINING SUSTAINABLE ENERGY PROGRAMMES OFFERED IN THE REGION

Country	Name of Education			Type of P	rogramme		
	Programme Provider	Vocational	Apprenticeship	Certificate	Associate Degree	Bachelor's Degree	Master's Degree
Antigua and Barbuda	Antigua State College						
Barbados	Barbados Community College	\checkmark					
	Samuel Jackman Prescod Institute of Technology						
	Barbados Vocational Training Board						
	The University of the West Indies - Cave Hill Campus						
Belize	ITVET Belize City						
	University of Belize				√		
Dominica	Green Solutions International SKN Incorporated						
	Dominica State College						
Grenada	Grenada Solar Energy Technical Institute						
Guyana	University of Guyana						
Haiti	Quisqueya University						



TYPES OF TERTIARY LEVEL & VOCATIONAL TRAINING SUSTAINABLE ENERGY PROGRAMMES OFFERED IN THE REGION (CONT'D)

Country	Name of Education	Type of Programme							
	Programme Provider	Vocational	Apprenticeship	Certificate	Associate Degree	Bachelor's Degree	Master's Degree		
Jamaica	University of Technology, Jamaica (Caribbean Sustainable Energy & Innovation Institute (CSEII))								
	HeartTrust/NTA's National Tool and Engineering Institute (NTEI)								
	The University of the West Indies, Mona Campus								

The Government of Montserrat sponsors external training based on a priority needs listing for that year.



TYPES OF TERTIARY LEVEL & VOCATIONAL TRAINING SUSTAINABLE ENERGY PROGRAMMES OFFERED IN THE REGION (CONT'D)

Country	Name of Education	Type of Programme							
	Programme Provider	Vocational	Apprenticeship	Certificate	Associate Degree	Bachelor's Degree	Master's Degree		
St. Lucia	National American Board of Certified Energy Practitioners (NABCEP)								
	Sir Arthur Lewis Community College								
	Leadership in Energy and Environment Design (LEED)								
St. Vincent and the Grenadines	St. Vincent and the Grenadines Community College: Division of Technical and Vocational Studies								
	Organisation of Eastern Caribbean States (OECS)								



TYPES OF TERTIARY LEVEL & VOCATIONAL TRAINING SUSTAINABLE ENERGY PROGRAMMES OFFERED IN THE REGION (CONT'D)

Country	Name of Education	Type of Programme							
	Programme Provider	Vocational	Apprenticeship	Certificate	Associate Degree	Bachelor's Degree	Master's Degree		
Suriname	Institude for Graduate Studies & Research (IGSR/ FTeW)								
	Anton de Kom University of Suriname - FTeW								
Trinidad and Tobago	The West Indies, St. Augustine Campus						√		
	Arthur Lok Jack School of Business								
	SBCS Global Learning Institute								
	CTS College of Business and Computer Science								



CLIMATE CHANGE

Country	Climate Change Policy	Nationally Determined Contributions	Emission Reduction Target	Priority Sectors for NDC	Number of National Communication to UNFCCC
Antigua and Barbuda	Sustainable Energy Action Plan	Implementing by 2030, a number of conditional and unconditional national policies, measures and actions using the 2006 and the GHG emissions and removals reference point.	25% Emissions by 2020	Energy, Health, Tourism, Agriculture, Waste, Water, transportation, Forestry and Land Use Change	3
Bahamas	Bahamas Climate Adaptation Policy	An economy-wide reduction of GHG emissions of 30% when compared to is BAU scenario by 2030	30% below 2010 levels by 2030	Energy and Forestry	2
Barbados	National Climate Change Policy Barbados	21 %, compared to 2008 by 2025 23%, compared to 2008 by 2030	20% below business as usual (BAU) by 2030	Agriculture, Water Resources, Fisheries, Tourism, Insurance, Human Health, Coastal Resources and Human Settlements	2
Belize	A National Climate Change Policy, Strategy and Action Plan to Address Climate Change in Belize	24 million metric tonnes of CO2e from 2014 to 2033	199.83 Gg CO2-eq from Renewable Energy Generation by 2033 123.86 Gg CO2-eq from Transport by 2033	Agriculture, Forestry, Fisheries and Aquaculture, Coastal and Marine Resources, Water Resources, Human Health, Tourism	3
Dominica	Dominica Climate Resilience Plan 2020-2030	44.7 % below 2014 levels by 2030		Energy industries Transport Solid waste	3
Grenada	National Climate Change Policy for Grenada, Carriacou and Petite Martinique 2017-2021 National climate change adaptation plan (NAP) for Grenada, Carriacou and Petite Martinique			Electricity, Transport, Waste, Forestry	2



Country	Climate Change Policy	Nationally Determined Contributions	Emission Reduction Target	Priority Sectors for NDC	Number of National Communication to UNFCCC
Guyana	Draft National Climate Change Policy and Action Plan 2020-2030	11% annually compared to historical levels from the timber industry Switch to 100% renewables by 2025 (Note that Guyana is a net carbon sink)		Forestry (including Avoided Deforestation), and Energy	2
Haiti	None	Unconditional: 5% compared to BAU by 2030 Conditional: 26 % compared to BAU by 2030		Energy, Agriculture, Forestry and Allocation of land (AFAT), Waste	2
Jamaica	Green Paper: Climate Change Policy Framework and Action Plan (2013)	25.4% by 2030 (unconditional)/ 28.5% by 2030 (unconditional)	7.8% below BAU by 2030 (unconditional) 10% below BAU by 2030 (conditional)	Forestry, Agriculture and Fisheries, and Energy sectors	3
Montserrat	National Climate Change Policy for Montserrat (2015 Draft)	Not Available		Not Available	None ²
St. Lucia	Climate Change Bill (Draft) The Saint Lucia Climate Change Adaptation Policy Environment Management Bill (Draft)	16% versus BAU by 2025 23% versus BAU by 2030	121 GgCO2-eq by 2023 188 GgCO2-eq by 2030	Energy, Waste, Industrial Processes, Agriculture	3

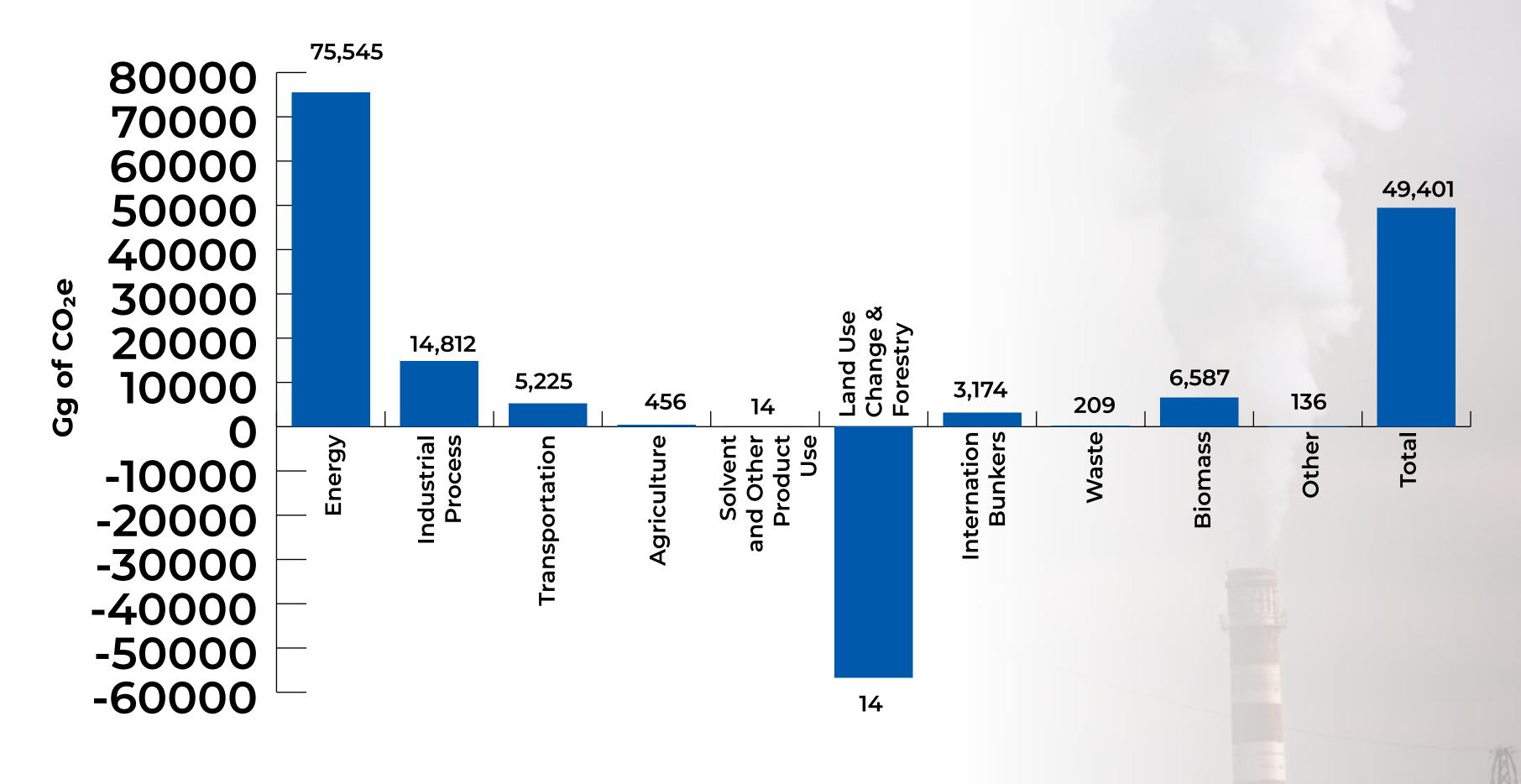
²Montserrat is a crown colony of the United Kingdom. The United Kingdom was involved in two INDCs. The UK Government will consult with UK Crown Dependencies and Overseas Territories on extending the Paris Agreement and the UK's NDC to cover their emissions at an appropriate point in the future.



Country	Climate Change Policy	Nationally Determined Contributions	Emission Reduction Target	Priority Sectors for NDC	Number of National Communication to UNFCCC
St. Vincent and the Grenadines	The National Climate Change Policy (2019) National Adaptation Plan	Economy-wide reduction in greenhouse gas (GHG) emissions of 22% compared to its business as usual (BAU) scenario by 2025	22% below business as usual growth (2010 baseline) by 2025	Energy, Transport and Agriculture	2
Suriname	National Climate Change Policy, Strategy and Action Plan (NCCPSAP) for Suriname 2014-2021	Implementing by 2025, a number of conditional and unconditional national policies, measures and actions.		Forestry, Electricity, Agriculture and Transport	2
Trinidad and Tobago	National Climate Change Policy	Overall emissions from the three sectors by 15% by 2030 from BAU, which in absolute terms is an equivalent of one hundred and three million tonnes (103,000,000) of CO2e	15%	Transportation, Power Generation, Industry	2

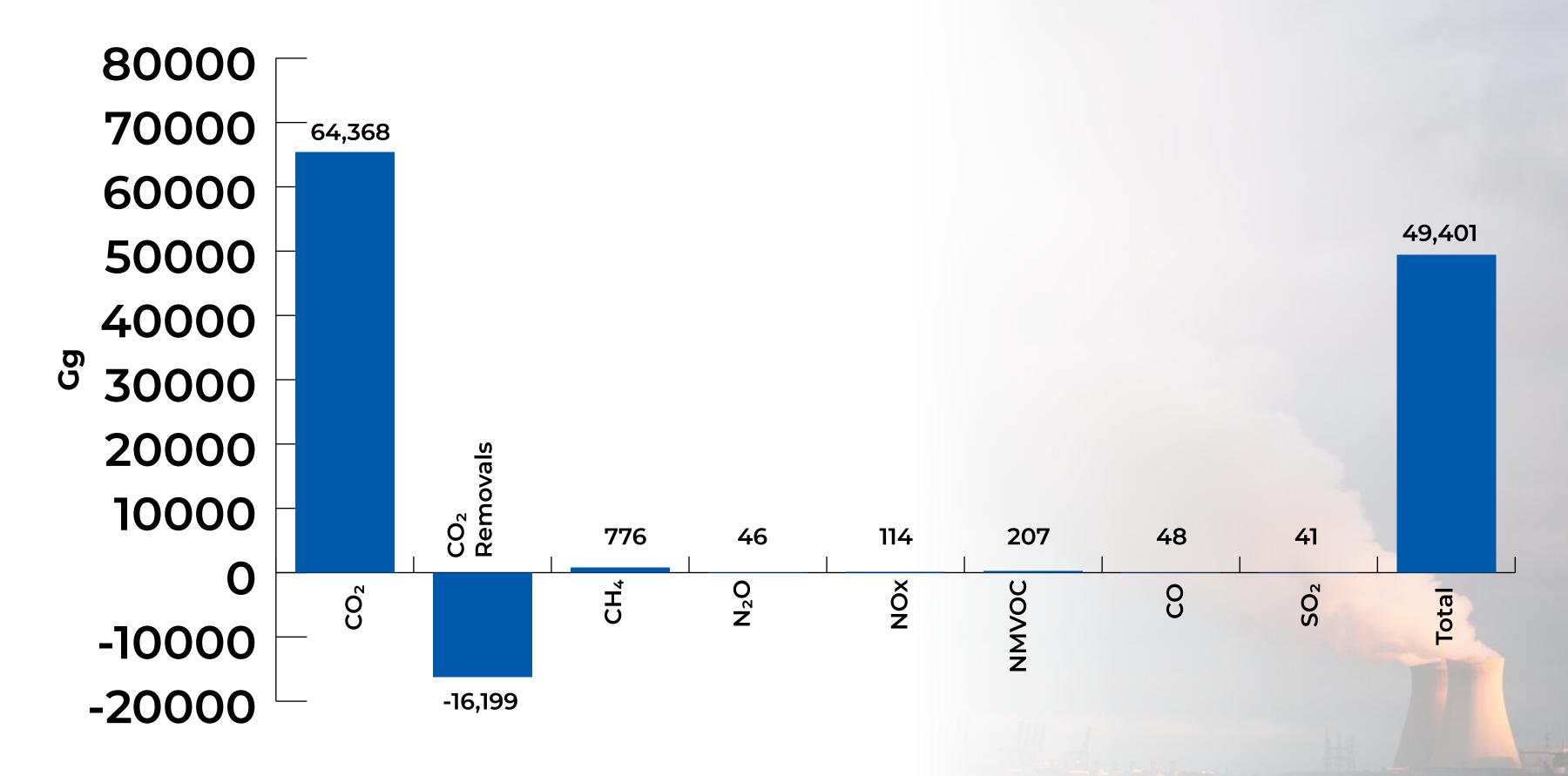


TOTAL GHG EMISSIONS FOR CARICOM BY SECTOR





TOTAL GHG EMISSIONS FOR CARICOM BY GAS





REFERENCES

The data and information in this report were from the individual Energy Report Cards for the CARICOM Member States: Antigua and Barbuda, Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Lucia, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago.

CARICOM Energy Knowledge Hub CCREEE "2019 Energy Report Cards" 2021. [Online]. Available: https://cekh.ccreee.org/?s=2019+energy+report+card