CCREEE
CARIBBEAN CENTRE FOR RENEWABLE ENERGY & ENERGY EFFICIENCY

2023 ENERGY REPORT CARD

JAMAICA

Introduction

This is the Energy Report Card (ERC) for 2023 for Jamaica.

The ERC provides an overview of the energy sector performance, highlighting the following areas:

- Installed Conventional and Renewable Power Generation Capacity
- Annual Electricity Generation, from Conventional and Renewable Plants
- Other Electricity Sector Metrics, such as Losses, Consumption, and Tariffs
- Renewable Energy Targets
- Renewable Energy Resource Potential

The ERC also includes sectoral data and information on policies and regulations; workforce; training and capacity building; and related areas.
The data and information that are available in the ERC were mostly provided by the government ministries, agencies, and departments, that have responsibility for statistics and planning, in general, and the energy sector and electricity subsector including the electric utilities, in particular. The data and information collected was supplemented by desk-based research and, in instances, information was generated from calculations and analyses that were performed by the CCREEE.

Quality Assurance

The collection and treatment of data and information that is produced for the ERC is consistent with the International Recommendations for Energy Statistics (IRES), which provides a comprehensive methodological framework for the collection, compilation, and dissemination of energy statistics in all countries irrespective of the level of development of their statistical system. The ERC is produced in accordance with these performance standards that seek, as far as is possible, to ensure the quality (i.e., objectivity, utility, and integrity) of data and information that it disseminates to the public.
The CCREEE strives for transparency on the information and methods that are used within the production of the ERC, with a view to improve understanding on how the information should be treated and to facilitate reproducibility of the information. Nevertheless, the Centre recognizes that quality may be limited by the nature and source of the data and information disseminated.

Disclaimer

The ERC includes data and information that is contained in a variety of public sources and, though every effort is made to validate the accuracy and validity of the contents, reliance on the information herein is strictly at the user's risk.

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If a substantive error is detected after the ERC is disseminated, the CCREEE will make correction and issue an errata notice, or other notification as appropriate. Also, the information contained within the ERC may be revised, after initial dissemination to reflect more complete information or other significant changes in the underlying data. The ERC may, from time to time, include information that is preliminary and is expected to be revised, or information that is revised from previously disseminated versions. In such instances, those cases are clearly noted.

Requests for Correction

The CCREEE has established administrative mechanisms to allow persons to seek and obtain, where appropriate, legitimate correction(s) to information maintained and disseminated through the ERC. Any request for corrections should be sent to: energyreportcard@ccreee.org, under the subject: REQUEST FOR CORRECTION TO ERC 2023 FOR JAMAICA.

Acknowledgements

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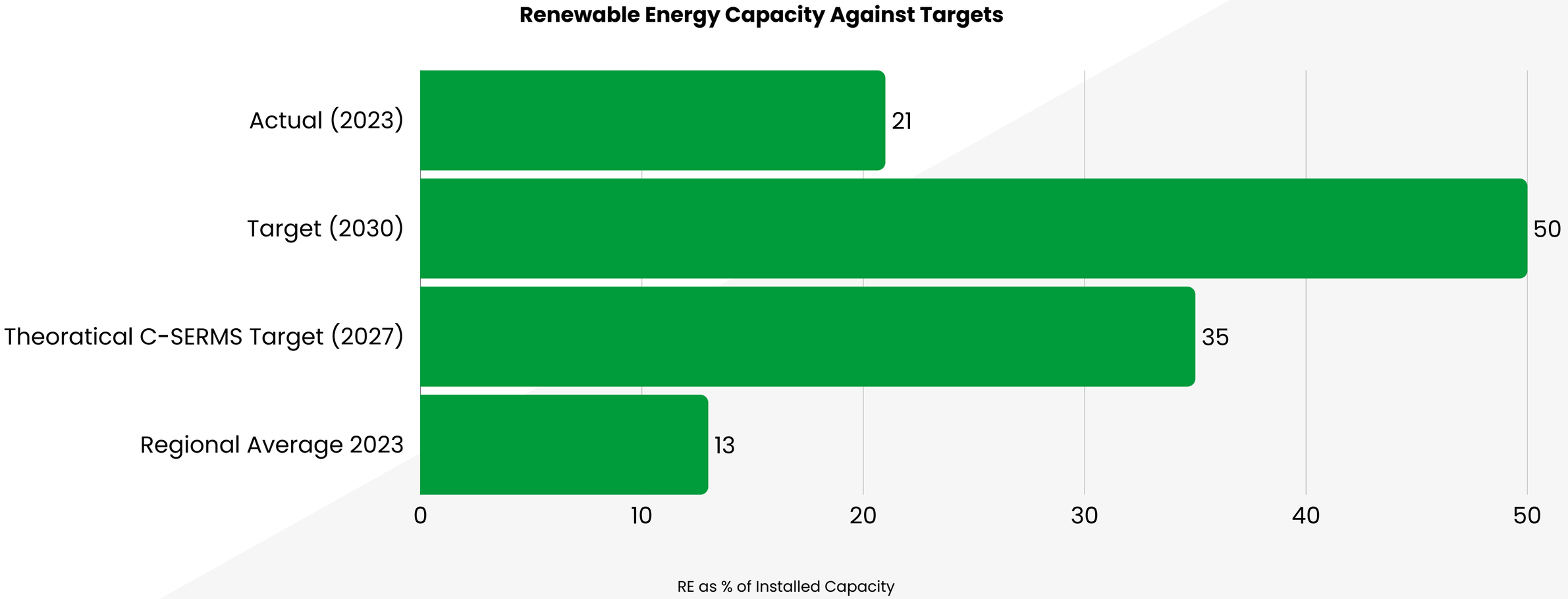
Energy Sector Summary

Population (Estimation)	2,704,300 [1]
GDP (USD)	$ 19,014,766,494.83 [2]
GDP (USD) Per Capita	$ 7,031.88 [2]
Gross National Income (GNI) Per Capita (USD)	$ 6,150 [3]
Debt as % of GDP	73.6% [4]
Human Development Index	0.706 [5]
National Development Plan/Overall Country Development Strategy	Vision 2030 Jamaica National Development Plan [6]
National Energy Policy	Jamaica's National Energy Policy (NEP) 2009-2030 [7]
Renewable Energy (RE) Policy	Draft National Renewable Energy Policy 2009-2030: Creating a Sustainable Future [8]
Renewable Energy Target	50% by 2030 (Electricity generation) [9] [10]
Energy Efficiency Target	None
Total Installed Conventional Capacity (MW)	859 MW [14] [15]
Total Installed RE (MW)	218.7 MW [14] [15]
Electricity System Losses (%)	27.86% [14] [15]
Energy Use (kWh) Per Capita	1,240 kWh

National Repository for Energy Data	Ministry of Science, Energy, Telecommunications and Transport Energy Division [16] [1]
Climate Change Policy	Climate Change Policy Framework for Jamaica [11]
National Determined Contributions (NDC)	• 25.4% reduction relative to business-as-usual emissions in 2030 without international support (unconditional) • 28.5% reduction relative to business-as-usual emissions in 2030 conditional upon international support (conditional) [12]
Energy Performance Standards/Appliance Labelling [13]	Energy Efficiency Labelling Program as part of the Energy Efficiency Programme • JS178 - Specification for Determination of Energy Consumption and Other Performance Characteristics of Household Refrigerator Freezers and Wine Chillers • JS179 - Specification for Room Air Conditioner, Energy and other Performance Testing • JS1 Part 21 - Specification for The Labelling of Commodities - Energy Labelling of Appliances and Products

1 - Energy Information System of Jamaica (sieJamaica) is not Active

Energy Sector Performance [9] [14] [15] [17]



Government Ministries, Departments and Agencies

Ministry of Science, Energy, Telecommunications and Transport[18]
- Energy Division [16]
- Government Electrical Regulator (GER) [19]

Ministry of Economic Growth and Job Creation [22]
- Portfolio Areas of Environment and Climate Change [23]

Transport Authority of Jamaica [21]

Fuel Importers & Suppliers

Corporate Petroleum Service Ltd. [24] New Fortress Energy [25]
Rubis Energy Jamaica [26]
IGL Blue Jamaica Limited [27]
Cool Oasis [29]
Future Energy Source Company Limited (FESCO) [30]
CWH Gas [31]
Massy Gas Products Limited
- GasPro [29]

Phoenix Fuels & Accessories Limited
Total Energies Jamaica [33]
West Indies Petroleum
SOL Jamaica SRL

3 - Affiliate company of Jamaica Energy Partners
4 - Managed by Jamaica Energy Partners
5 - A JPS affiliate company

Electric Utility

Jamaica Public Service (JPS) Company [34]

Electricity Regulator

Office of Utilities Regulation [39]

Independent Power Producer

Wigton Windfarm Limited (Wigton I, II, & III) [32]

Eight Rivers Energy Company Limited [34]

WRB Enterprises (WRB Solar) (Content Solar) [37]

InterEnergy [34]
Subsidiary companies:
- Jamaica Energy Partners [34] [35]
- West Kingston Power Partners (WKPP) [34] [35] [3]
- Jamaica Private Power Company [36] [4]

NFE South Power Holding (JAMALCO) [25]

BMR Jamaica Wind Limited Energy [34]

South Jamaica Power Company [34] [5]

Other

Jamaica Society for Energy Engineers (JSEE)

Jamaica Renewable Energy Association

Policy, Legal and Regulatory (PLR) Framework

	Year	Status
Energy Policy [7]	2009	In Force
Energy Action Plan		
RE Target [9] [10]	2022	In Force
EE Target [8]	2009	In Force
Electricity Regulator [40]	1995	In Force
Net Billing/Net Metering [41]	2016	In Force
Interconnection Policy/Standards [42]	2016	Draft in Progress
Feed-In-Tariff [6]		Not Established
Integrated Resource and Resilience Plan [7]		Not Established
RE/EE Act		Not Established

6 - The Office of Utilities Regulation (OUR), Regulatory Policy for the Addition of New Generating Capacity to the Public Electricity Supply System, published in June 2006, allows for, among other things, Power Purchase Agreement's for utility-scale capacity, and the procurement of small additions of renewable energy (i.e. 100kW or less) by way of a Standard Offer Contract. Within this framework, Distributed Generation Customers are compensated for the avoided cost of fuel

7 - Jamaica has not implemented a Integrated Resource and Resilience Plan, however they have implemented an Integrated Resource Plan [43]

Policy, Legal and Regulatory (PLR) Framework

Key Achievements: PLR Framework Timeline for Electricity Sub-Sector

1890
The Electric Lighting Act [44]

1977
The Electric Lighting Act Amended (First enacted 1890) [45]

2015
Office of Utilities Regulator Act Amended (First enacted 1995) [45]

2015
The Electricity Act [47]

2015
Establishment of Government Electrical Regulator [46]

2016
Net Billing and Electric Power Wheeling Programme [48]

2020
Jamaica Integrated Resource Plan [43]

2020
Full Operation of Government Electrical Regulator [50]

2022
Electricity (Net Billing) Regulations 2022

Policy, Legal and Regulatory (PLR) Framework

Policies Relevant to the Energy Sector

Year	Name	Status	Description
2004	National Road Safety Policy [52]	In Force	A policy aimed to prioritise the road safety of Jamaica in accordance with internationally accepted standards. The policy encourages the coordination and collaboration of different ministries and organisations to maximise resources and reduce duplicated efforts.
2007	National Transport Policy [53]	Repealed	The National Transport Policy prioritised private sector participation and inter-agency coordination, increasing transportation access, and supporting the reduction in fuel importation. A policy theme of energy efficiency was included to ensure that transportation was efficient and cost effective.
2009	Jamaica Vision 2030 [6]	In Force	A strategic long-term roadmap for the development of Jamaica to be the place of choice to live, work, raise families and do business.
2009	Jamaica's National Energy Policy 2009-2030 [7]	In Force	The policy supports the development plan outlined in Jamaica Vision 2030, particularly in relation to energy security and efficiency through modernisation, diversification, and environmental sustainability. The policy also aims to improve energy security through fuel diversification and the development of renewable energy.
2010	National Renewable Energy Policy 2009 – 2030 Creating a Sustainable Future [8]	Draft	This policy supports the National Energy Policy to provide affordable and accessible energy and focuses solely on the development of renewables in the energy sector.
2010	National Energy-From-Waste Policy 2010-2030 [56]	Draft	The National Energy Policy 2009 – 2030 provided the overarching framework for the development of the Energy-from-Waste policy. The policy is a sub-policy of the National Energy Policy and supports the other energy sub-polices, National Renewable Energy Policy 2010 – 2030 and the National Biofuel Policy 2010-2030 and aims to modernise the energy sector through efficient, diversified, sustainable energy supplies focusing on energy from waste.

Policy, Legal and Regulatory (PLR) Framework

Policies Relevant to the Energy Sector

Year	Name	Status	Description
2010	National Energy Conservation and Efficiency Policy [55]	In Force	Complementing the National Energy Policy, the National Energy Conservation and Efficiency Policy aims to develop and use conservation and efficiency all sectors of the economy thereby reducing energy consumption.
2010	National Biofuels Policy 2010-2030 [57]	Draft	A sub-policy of the National Energy Policy and linked to the National Energyfrom-Waste Policy and the National Policy for the Trading of Carbon Credits, the Biofuels policy aims for sustainable development, governance through legislation and incorporation into the local energy supply.
2010	National Policy for the Trading of Carbon Credits 2010-2030 [58]	Draft	A sub-policy of the National Energy Policy, the National Policy for the Trading of Carbon Credits relates to the climate change strategy that facilitates reduction in Jamaica's greenhouse gas emission and carbon footprint.
2017	National Policy on Environmental Management Systems (EMS) (Green Paper) [59]	In Force	Aims to reduce or mitigate environmental impacts in all sectors at a national and local level to facilitate the creation of a green economy
2020	Integrated Resource Plan (IRP): A 20 Year Roadmap to Sustain and Enable Jamaica's Electricity Future [49]	Repealed	The IRP outlines the preferred diversified energy mix for Jamaica based on the objectives outlined in the energy policy for the period 2018 to 2037. It also allows for the management of the influx of new technologies for the electricity grid and grid upgrades to transmit the projected additional energy without sacrificing quality standards, improved interconnection.
2020	The Strategic Framework for Electric Mobility in Jamaica [60]	In Force	The Strategy aims to reduce fossil fuel dependence in transportation and lower emissions and improve air quality. Electric mobility is encourages as an opportunity to increase renewable energy resources.
2021	Emissions Policy Framework [61]	In Force	Establishes the overarching direction for emission management while the country is engaging in a low carbon development pathway toward economic, social and environmental sustainability

Policy, Legal and Regulatory (PLR) Framework

Legislation Relevant to the Energy Sector

Year	Name	Status	Description
1938	The Road Traffic Act (Last Amended 2015)	In Force	Establish the Island Traffic Authority as the authority for the regulation and control of traffic on roads to improve road safety and transport efficiency and reduce the cost of administering road transport and other connected matters.
1970	Petroleum and Oil Fuel (Landing and Storage) Act [61]	In Force	Establishes the rules and regulations for storage, importation and handling of petroleum and oil.
1979	Public Passenger Transport (Rural Area) Act [62]	In Force	Establishes ownership of any petroleum found within Jamaica and its waters, the operations of the Petroleum Corporation of Jamaica and the Petrocaribe Development Fund for the management of petroleum.
1987	The Transport Authority Act [64]	In Force	Establishes the Transport Authority and provides for the functions of the authority and its operations.
1990	Petroleum (Quality Control) Act [65]	In Force	Establishes the framework for the provision of licenses, registration for retailers, haulage contractor and drivers, applications while outlining storage parameters for petroleum.
1995	Office of Utilities Regulation Act [40]	In Force	Establishes the framework for the provision of licenses, registration for retailers, haulage contractor and drivers, applications while outlining storage parameters for petroleum.
2002	Public Passenger Transport (Kingston Metropolitan Transport Region) Act [66]	In Force	Establishes the framework for the provision of licenses, registration for retailers, haulage contractor and drivers, applications while outlining storage parameters for petroleum.
2015	Electricity Act [47]	In Force	This Act repeals the Electric Lighting Act, and the Electricity (Frequency Conversion) Act. It consolidates and modernises the laws relating to the generation, transmission, distribution, supply, dispatch, and use of electricity, and connected matters. Part V relates to the duties of self-generators, independent power producers, procurement of new generating capacity, and renewable energy.

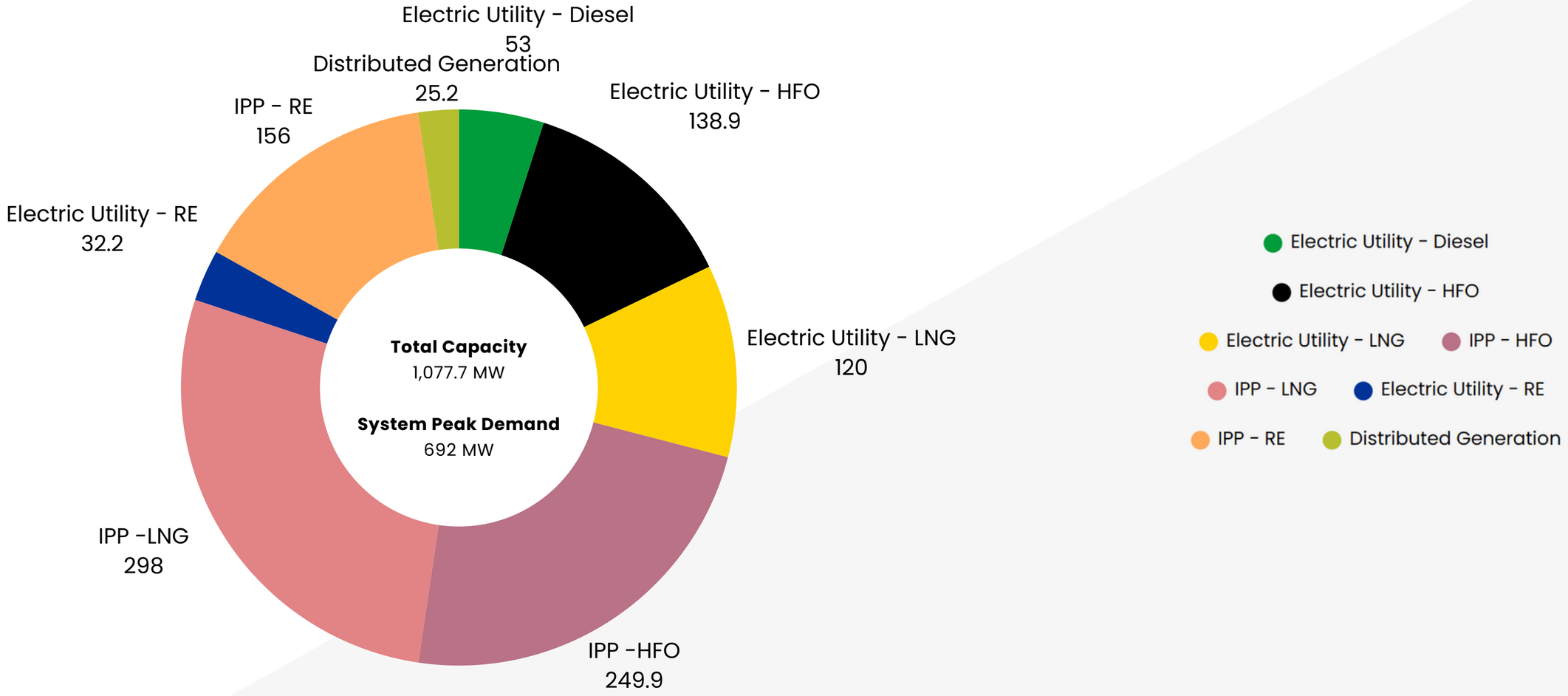
Policy, Legal and Regulatory (PLR) Framework

Legislation Relevant to the Energy Sector

Year	Name	Status	Description
2015	Motor Vehicle Emissions Standard [67]	Draft	Outlines the emission standards for the country for imported heavy duty vehicles and existing vehicles in the countries inclusive of older gasoline and diesel vehicles.

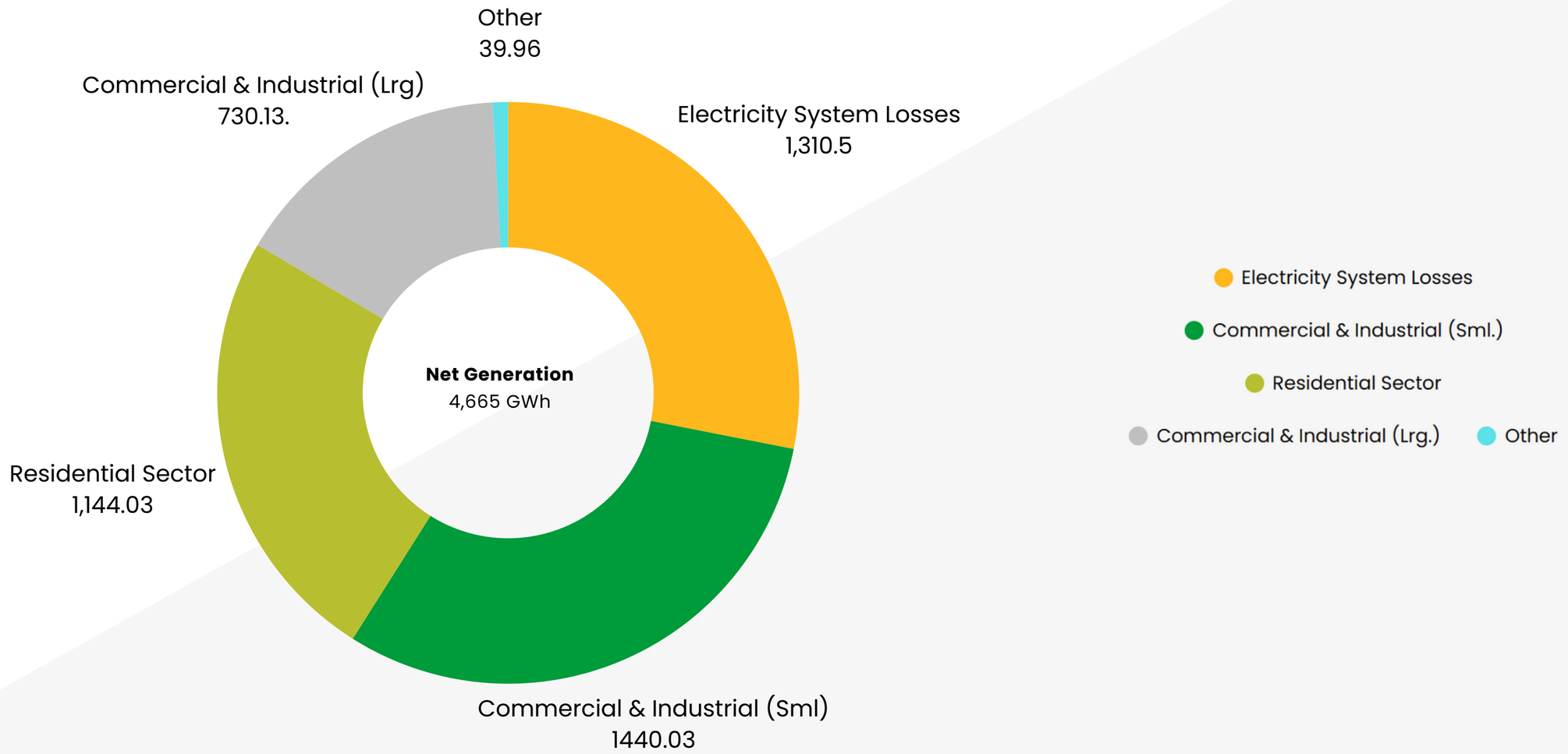
Electricity and Energy Efficiency [14] [15] [17]

Installed Capacity (MW)

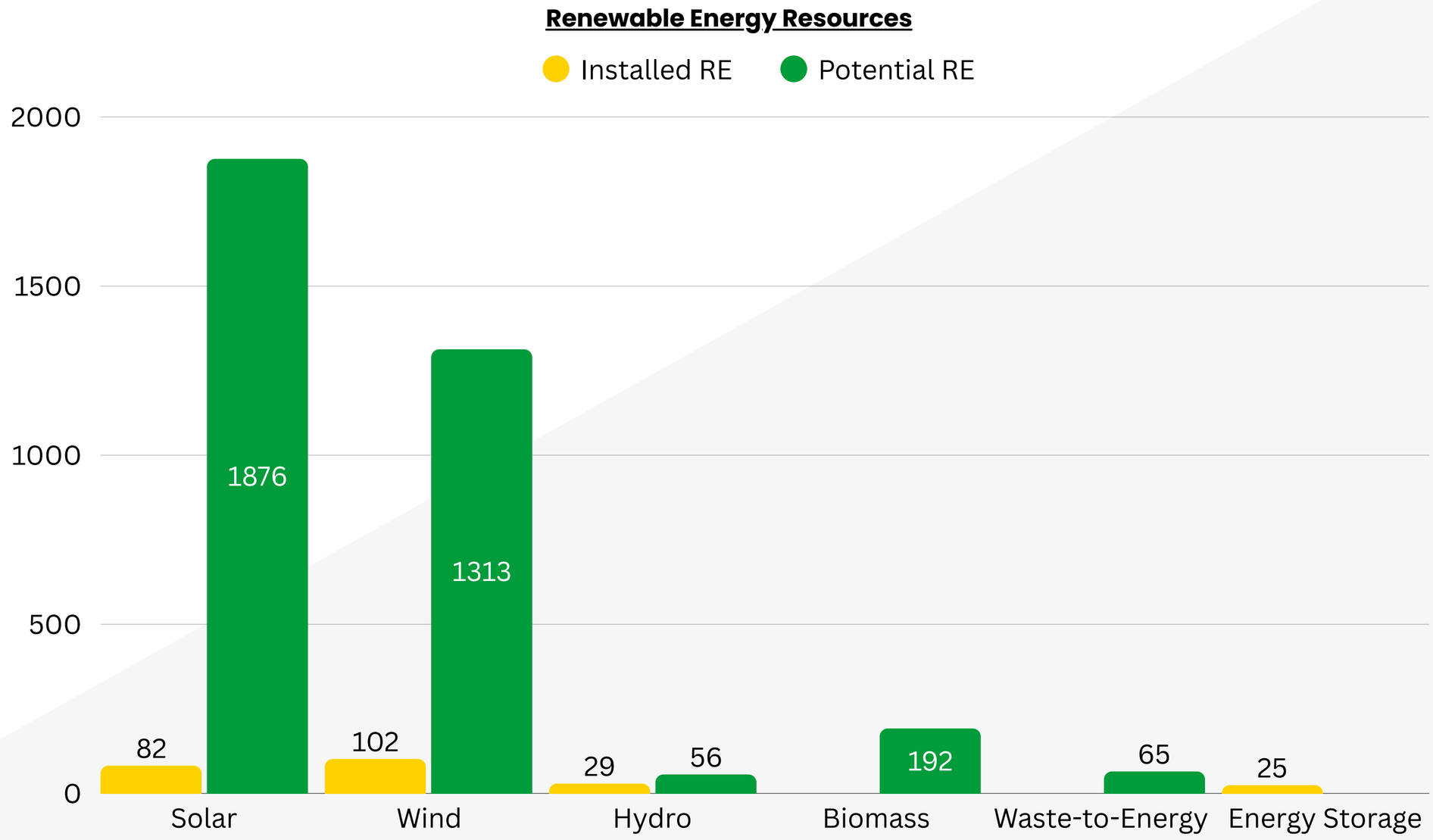


Electricity and Energy Efficiency [14] [15] [17]

Energy Generation (GWh)



Electricity and Energy Efficiency [14] [15] [17]



Electricity and Energy Efficiency

Electricity Tariffs [68]

Rate Class	Blocks	Customer Charge (US$/kWh)	Energy Charge (US$/kWh				Demand Charge (US$/kWh			
			STD	Peak	Partial Peak	Off Peak	STD	Peak	Partial Peak	Off Peak
Rate 10 STD	1-100	3.84	0.05							
	> 100		0.15							
Rate 10 Pre-Paid	1 - 117		0.10							
	> 117		0.15							
Rate 20 STD		8.18	0.06							
Rate 20 Pre-Paid	0 - 10		0.08							
	> 10		0.06							
Rate 40 STD		57.70	0.04				197.70			
Rate 40 TOU		57.70		0.04	0.03	0.03		11.02	8.13	2.36
Rate 50 STD		57.70	0.03							
Rate 50 TOU		57.70		0.03	0.03	0.03		8.50	6.28	2.24
Rate 60 Streetlights		23.26	0.08							
Rate 60 Traffic Signal		23.26	0.08							
Rate 70 STD		57.70	0.03				18.15			
Rate 70 TOU		57.70		0.03	0.03	0.03		9.63	6.28	2.25
Electric Vehicles				0.42	0.08	0.06				

Projects in the Pipeline

Programmes

Programme Name	Executing Agencies	Technical Assistance Providers	Implementing Partner	Funding Awards	Funding Source
Implementation and Technical Support for the Energy Sector in Jamaica [69]	Inter-American Development Bank Ministry of Science, Energy and Technology		Inter-American Development Bank	US$ 400,000	Inter-American Development Bank
Supporting the implementation of NDCs in the Caribbean – transforming the transport and energy sectors towards a low-carbon and climate-resilient future (NDC-TEC) [70] [8] [9]		Caribbean Centre for Renewable Energy and Energy Efficiency (CCREEE) Caribbean Development Bank (CDB) Climate Analytics SIDS DOCK The University of the West Indies, Mona Campus (UWI)	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	€ 19,999,489.00 [10]	Federal Ministry for Economic Affairs and Climate Action of Germany (BMWK)via the International Climate Initiative (IKI)
Building a Sustainable Electric Mobility Ecosystem for Inclusion and Access [71]	JPS Foundation [11]		JPS Foundation	Total - US$ 1,920,000.00 Country Counterpart Financing - US$ 925,000.00 IDB - US$ 995,000.00	Inter-American Development Bank
Energy Management and Efficiency Programme [72]	Petroleum Corporation of Jamaica Ministry of Science, Energy and Technology			Total - US$ 30,000,000.00	Inter-American Development Bank

8 - The programme Supporting the implementation of NDCs in the Caribbean – transforming the transport and energy sectors towards a low-carbon and climate-resilient future (NDC-TEC) is being undertaken in Antigua and Barbuda, Belize, Grenada, Jamaica, and Saint Lucia
9 - The Department of Sustainable Development, Ministry of Education, Innovation, Gender Relations and Sustainable Development is the local partner for the programme.
10 - This figure represents the entire project.
11 - JPS Foundation is the philanthropic arm of the Jamaica Public Service Company Limited.

Projects in the Pipeline

Energy Efficiency Projects

Energy Efficiency	Project Name	Old/Existing Infrastructure	Change in Old/Existing Infrastructure Expected in Upcoming Calendar Year	Expected Change in Technology	Relative Difference in Operating Consumption/Costs
Street Lighting [73]	Smart LED Streetlight Project	112,000 efficient lights with over 106,000 lights fitted with smart controllers	Additional 6,500+ streetlights converted to LEDs	Expected to complete all street lights by 2023	LED lights are more energy-efficient, have longer useful life, and upgraded technologies

Renewable Energy Projects

There were no Renewable Energy Projects reported for 2023. The Ministry awarded two (2) licences for utility scale renewable energy generation to Wigton Energy Limited for 49.83 MW and Sunterra Energy (Jamaica) Limited for 50 MW respectively in February 2025.

Tertiary Programmes Offered

University of the West Indies, Mona Campus [75]

Bachelor's Degree

- Energy & Environmental Physics [11]
- Electronics and Alternative Energy Systems [12]
- Essentials of Renewable Energy Technologies & Solutions [13]
- Electrical Power Engineering [14]
- Advanced Renewable Energy Technologies & Solutions [14]
- Fundamentals of Energy Statistics [14]
- Energy Information Management
- Energy Systems Laboratory

Master's Degree

- Renewable Energy Management
- Renewable Energy Technology
- Applied Physics

HEART/NSTA Trust [77]

Vocational Certificate

- Renewable Energy Level 2
- Renewable Energy Level 3

University of Technology [76]

Vocational Certificate

- Introduction to Energy Efficiency Audits

Bachelor's Degree

- Agricultural Engineering [15]

Master's Degree

- Sustainable Energy and Climate Change
- Engineering Management [16]

Mphil/PhD

- Built Environment [17]

Education Provider

Wigton Renewable Energy Training Lab [81]

Vocational Certificate

- Solar Thermal Energy
- Solar Photovoltaic
- Wind Energy
- Energy Consumption And Measurement
- Concentrated Solar Power
- Small Hydro
- Bio-Energy

Excelsior Community College [78]

Associate Degree

- Renewable Energy

University of the Commonwealth Caribbean [79]

Associate Degree

- Renewable Energy Technology

Vector Technology Institute [80]

Vocational Certificate

- Solar Photovoltaic Installer Level 1 [18]

11 - Includes the courses Solar Power and Wind and Hydro Power and Introducing Alternative Energy.
12 - Includes the courses Renewable Energy System Design and Modelling, Integrating Alternative Energy and Solar Power as core courses.
13 - Includes courses on Renewable Energy Systems and Integration of Renewable Energy Systems
14 - Offered as an elective course for those not completing a degree in Physics.
15 - Includes an option that focuses on Water, Waste, Energy and the Environment.
16 - Includes specialisation in Renewable Energy Engineering.
17 - Includes Environmental Sustainability and Climate Change as an area of specialisation.
18 - Students are automatically qualified to sit the external Electronics Technicians Association's international certification examination

Climate Change Framework

Climate Change Policy	Climate Change Policy Framework for Jamaica [11]
Nationally Determined Contributions Summary [12]	25.4% reduction relative to business-as-usual emissions in 2030 without international support (unconditional) 28.5% reduction relative to business-as-usual emissions in 2030 conditional upon international support
Emissions Reduction Target [12]	
Priority Sectors for NDC [12]	• Land-use and forestry • Agriculture • Waste to energy
National Communications (NC) to the UNFCCC	Jamaica National Communication to the United Nations Framework Convention on Climate Change (2000) [82]
	The Second National Communication of Jamaica to the United Nations Framework Convention on Climate Change (2011) [83]
	Third National Communication of Jamaica to the United Nations Framework Convention on Climate Change (2018) [84]

Climate Change Framework

Summary of Jamaica's GHG Emissions and Removals (Gg) for 2012

Sources	Emissions (Gg)						
	Carbon Dioxide (CO_2)	Methane (CH_4)	Nitrous Oxide (N_2O)	Nitrogen Oxide (NO)	Carbon Monoxide (CO)	NMVOCs	Sulphur Oxide (N O)
Energy	6909.33	1.41	0.24	33.58	69.06	9.88	15.99
Industrial Processes	436.56	0		0		3.08	
Solvent and Other Product Use	0	0	0	0		14.01	
Agriculture	0	12.87	20.88	10.09	8.07	1.67	
Land-Use Change and Forestry	-1625.88			0	0	0	0
Waste	38.62	26.3	0.15	0.31	5.33	1.01	0.01
Other	0	0		0	0	0	0
Total	3.6	Data not Available		43.98	82.46	29.65	16

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