





INTRODUCTION





This is the Energy Report Card (ERC) for 2022 for The Bahamas.

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
- Energy Efficiency Metrics, including Energy Intensity

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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ENERGY SECTOR SUMMARY







Vision 2040: National Development Plan of The Bahamas [6]

National Development Plan/ Overall Country Development Strategy

The Bahamas National Energy Policy 2013-2033 [7]

National Energy Policy

None

Renewable Energy (RE) Policy



SOCIOECONOMICS

Population Census/ Projection

GDP (USD)

GDP (USD) Per Capita

Gross National Income (GNI) Per Capita (USD)

Debt as % of GDP

Human Development Index

RE Target

399,3141[1]

\$ 12,897,420,000 [2]

\$32,299.00^{2[2]}

\$30,851.00 [3]

90.0% [4]

0.812 [5]

30% by 2030 [7]



Total Installed	Conventional
Capacity (MW)	

Total Installed RE (MW)

Electricity System Losses⁴ (%)

Energy Use (kWh) Per Capita

National Repository for Energy Data

450MW [37]	
37MW ^[37]	
12.3% ^[37]	
4,347 kWh	
None	



OTHER ENERGY SECTOR SUB-POLICIES

Climate Change Policy

Energy Performance Standards/Appliance Labelling

National Determined Contributions (NDC)

National Policy for the Adaption to Climate Change (2005) [8]

None

Reducing GHG emission by 30% compared to its BaU scenario. This covers gases and sectors included in The Bahamas National Inventory.

Having at least 30% of renewables in the country's energy mix.

Electric and hybrid vehicles represent 35% and 15% of total vehicle sales, respectively. [9]

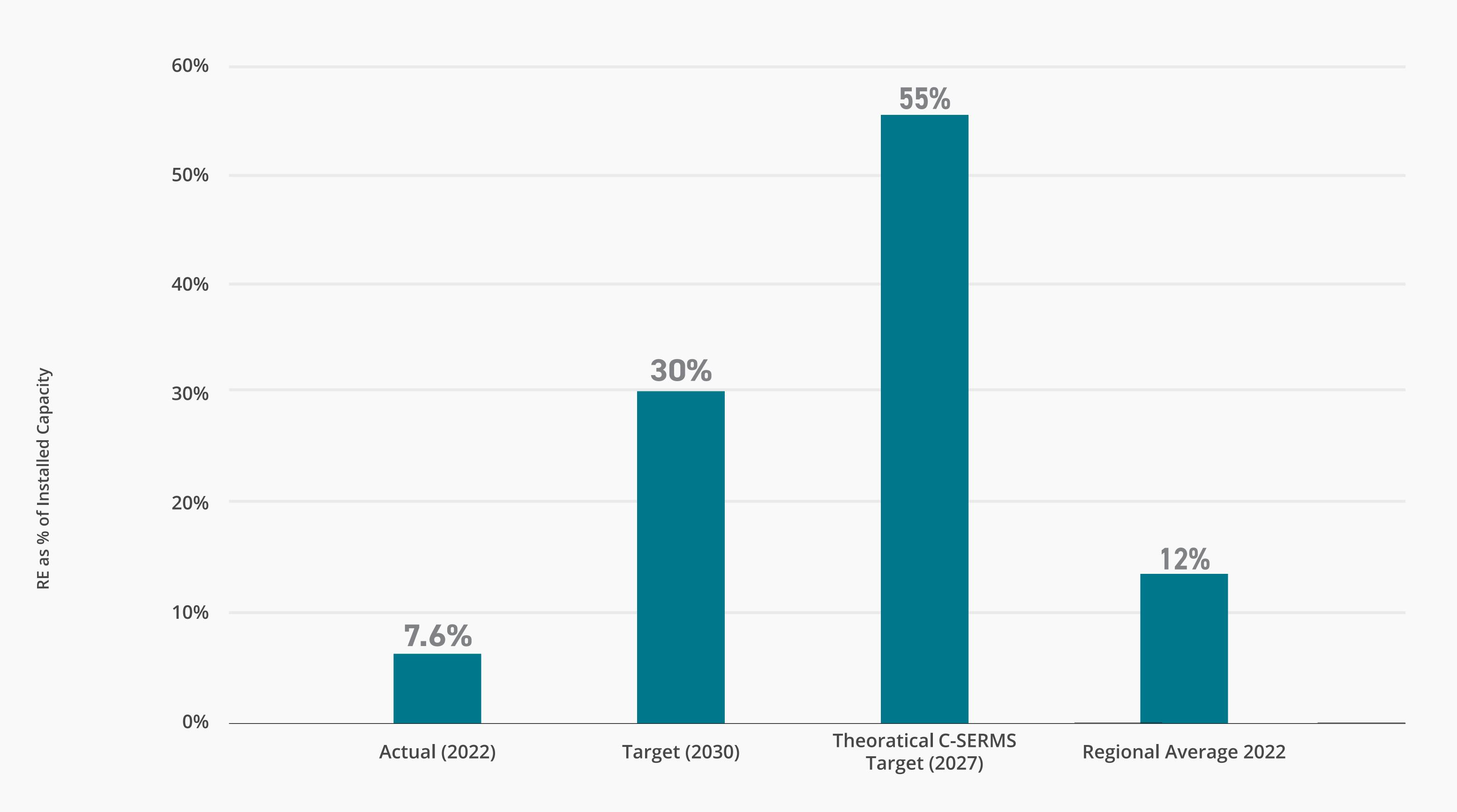
^{1.} Preliminary Results

^{2.} Projected





RENEWABLE ENERGY INSTALLED CAPACITY AGAINST TARGETS







Government Ministries, Departments and Agencies Ministry of Environment and Natural Resources [11] • Department of Environmental Planning and Protection (DEPP) [12] Ministry of Public Works [13] Ministry of Transportation and Housing³ **Electricity Regulator** Utility Regulation and Competition Authority (URCA) [21] Grand Bahama Port Authority Limited ⁶ [22] **Fuel Importers & Suppliers** Freeport Oil Company Limited (FOCOL) 4 [14] Rubis (Bahamas) Limited [15] Sol Petroleum Bahamas Limited [16] **KEY ENERGY** Buckeye Bahamas Hub ⁵ [17] STAKEHOLDERS 5 **Independent Power Producer** Shell Bahamas Power Company Inc. [20] **Electric Utility** Bahamas Power and Light (BPL) [18] **Grand Bahama Power Company [19]**

^{3.} In September 2023 the Prime Minister announced the creation of the Ministry Energy and Transport [45]

^{4.} Subsidiary of Sun Oil Limited

^{5.} Formerly Bahamas Oil Refining Company International (BORCO)

^{6.} The Grand Bahama Port Authority is a privately held corporation that has regulatory functions under the Hawksbill Creek Agreement 1955 for Freeport, Grand Bahama Island which include property development, municipal services, airport, harbour operation and shipyard concerns.

POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK







POLICIES RELEVANT TO THE ENERGY SECTOR

The Bahamas National Energy Policy 2013 - 2033 [7]

Designed to ensure that by 2033 Bahamas has a modern, diversified and efficient energy sector, providing Bahamians with affordable energy supplies and long-term energy security towards enhancing international competitiveness and sustainable prosperity.

Vision 2040 National Development Plan of the Bahamas [6]

The Plan includes a comprehensive policy framework that will guide Government decision-making and investment over the following 25 years which includes improving energy efficiency and increasing the renewable energy share in the total final energy consumption.



LEGISLATION RELEVANT TO THE ENERGY SECTOR

Hawksbill Creek, Grand Bahama (Deep Water Harbour and Industrial Area) Act Chapter 261 [24] (Amended 1960, 1965)

1955 The Act gives authority to The Grand Bahama Port Authority responsibility for the development, administration and management of Freeport, Grand Bahama including in matters related to electricity supply, transmission and distribution.

The Road Traffic Act Chapter 220 (Amended 2006) [34]

1958 The Act addresses motor vehicle use in The Bahamas as well as to provide for the regulation of traffic on roads and of motor vehicles, regulated the public transport services and oversee all matters related to motor vehicles.

Utility Regulation and Competition Authority (URCA) Act [23] (Amended 2015) [30] ●

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An Act to amend the Utility Regulation and Competition Authority Act to enable and facilitate URCA in fulfilling its function as an independent regulator of the electricity sector and related matters.

Electricity Act [31] •

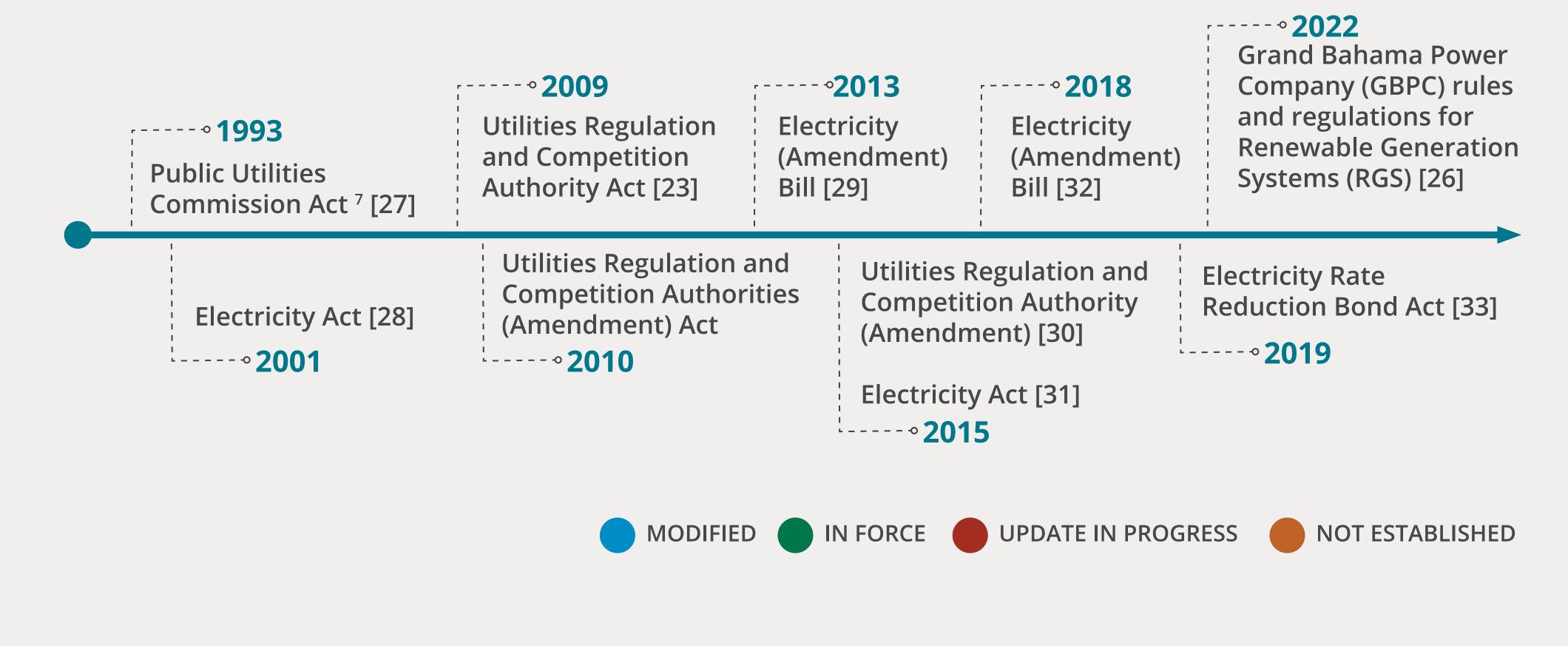
The Act made it unlawful for a person to engage in the generation, transmission, distribution, retail, import, export or wholesale trading of electricity in The Bahamas, without a licence granted by URCA. The Act includes considerations for renewable energy and liberalisation of the electricity sector.

Electricity Rate Reduction Bond Act [35] (Amended 2018) [36]

The purpose of the Actisto create an electricity supply regime which recognises safe, least cost, reliable, and environmentally sustainable electricity is vital to the economic and social welfare of The Bahamas and encourages and promotes energy efficiency and conservation, the development of the use of renewable energy technologies, and diversification in the generation, transmission, and distribution of electricity.

	YEAR
nergy Policy and Energy Action Plan [7]:	2013
RE Target [7]: •	2013
E Target:	
lectricity Regulator [23][24]:	2009
Net Billing/Net Metering [25][26]:	2017
nterconnection Policy/Standards [25][26]:	2017
eed-in-tariff [25]:	2017
RE/EE Act:	

KEY ACHIEVEMENTS: PLR FRAMEWORK TIMELINE FOR ELECTRICITY SUB-SECTOR

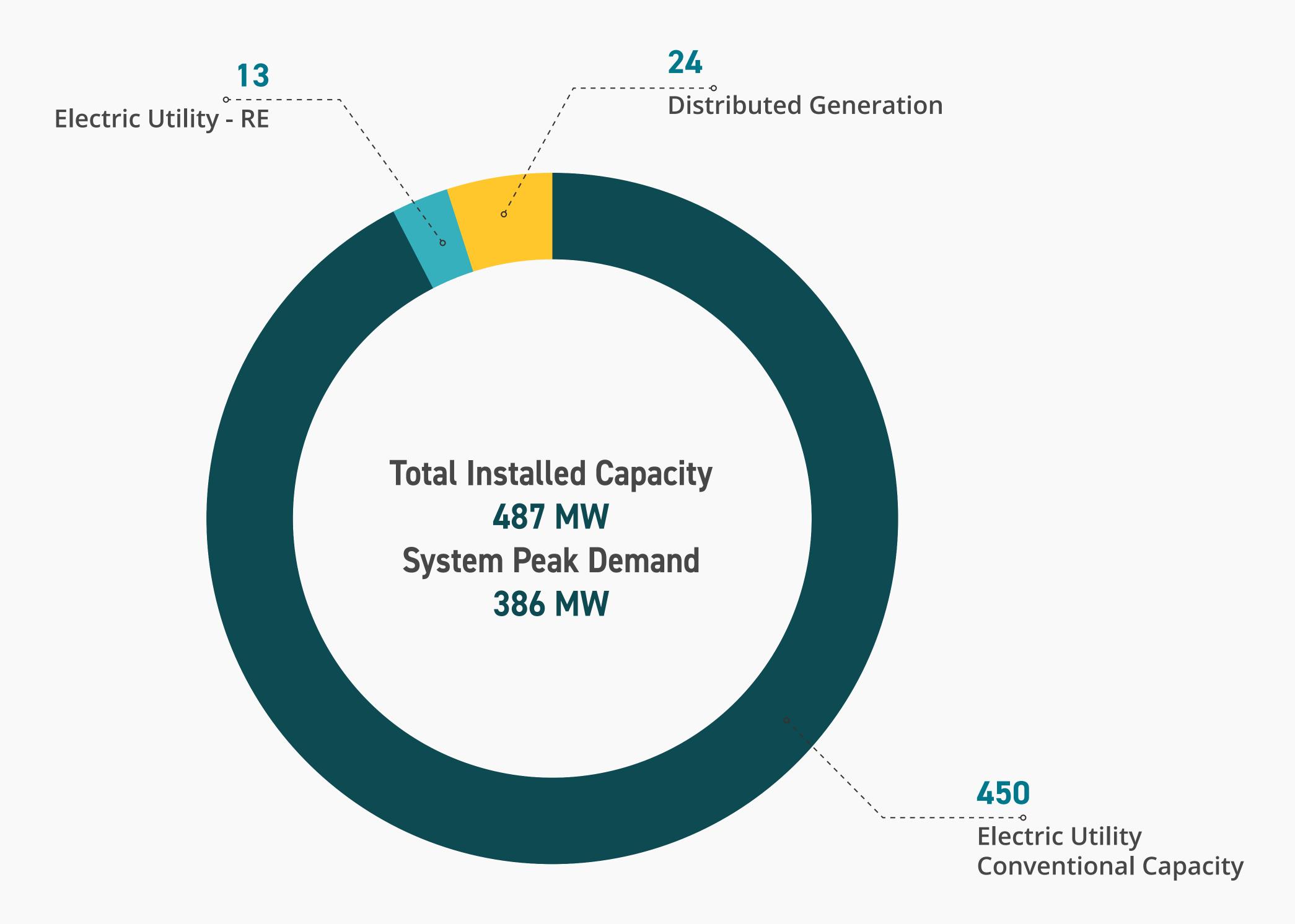


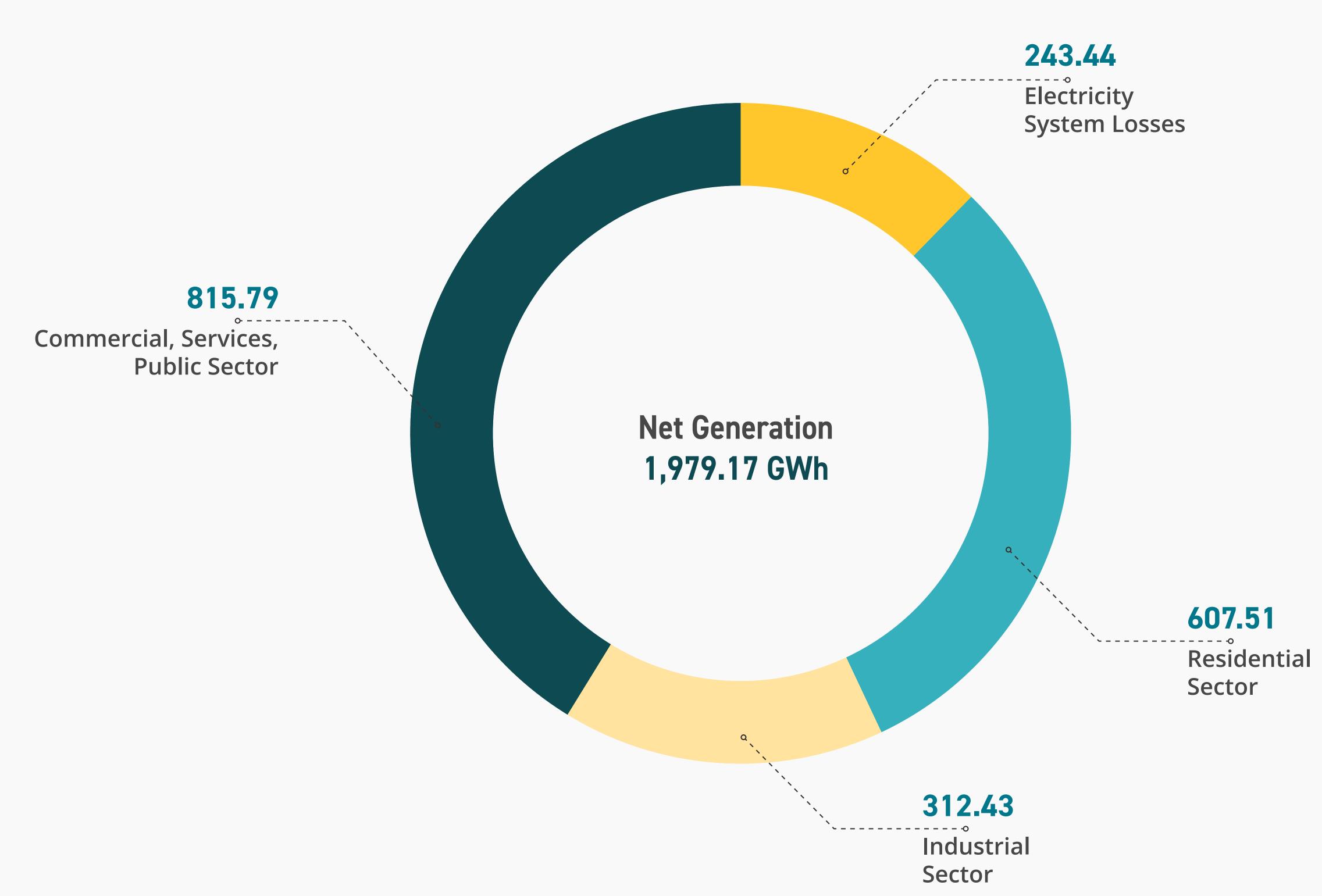








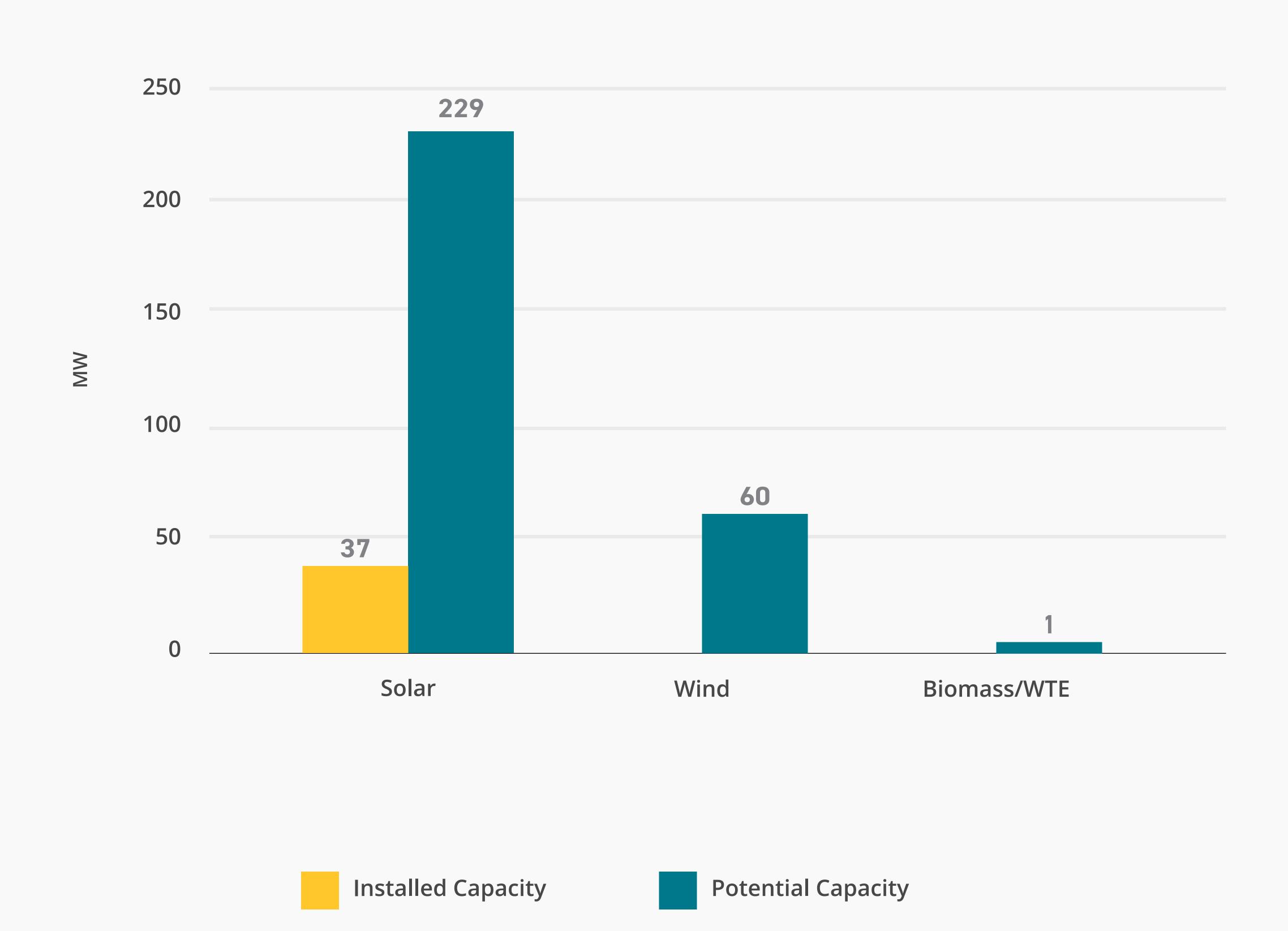








RENEWABLE ENERGY RESOURCES







GRAND BAHAMA POWER COMPANY ELECTRICITY TARIFFS⁸

Rate Class	Monthly Consumption/Demand	Rate (US\$)
	0-200	0.18
Decidential	201-350	0.18
Residential	351-800	0.23
	>800	0.27
	0-20,000	0.20
Canananaial	20,001-100,000	0.19
Commercial	>100,000	0.17
	Minimum monthly demand 5kVA (per kVA)	9.41
Industrial/Large	0-100,000	0.16
	100,001-500,000	0.15
	500,001-1,300,000	0.13
Power	1,300,001-1,700,000	0.11
	>1,700,000	0.08
	Minimum monthly demand 1,000kVA (per kVA)	9.41
	150 W	24.64
	250 W	37.00
Street Lights	400 W	49.34
	1,000 W	67.83

BAHAMAS POWER AND LIGHT ELECTRICITY TARIFFS9

Rate Class	Monthly Consumption/Demand	Rate (US\$)
Residential	0-200	0.11
	201-8000	0.12
	Remaining kWh	0.15
Commercial ¹⁰	All kWh	0.15
	Minimum Monthly Charge	10.00
Industrial/Large Power	0-900,000	0.09
	Remaining kWh per month	0.06
	Demand charge per kVA	11.36

^{8.} The tariffs present are representative of the 2023 electricity rate for Grand Bahama Power Company.

^{9.} In 2022the monthly fuel charge increased in five phases. For each phase there was an increase on \$0.02 per kWh up to 800 kWh and a \$0.04 increase per kWh for usage over 800kWh.

^{10.} Churches and Floodlit Sports Arenas

PROJECTS IN THE PIPELINE







Donor Funding and Technical Assistance Landscape	Donor Organization & Banks	Funding Awards (USD)	Year
Advancing Renewable Energy in The Bahamas [38]	Inter-America Development Bank	\$170,000,000.00	2020
Reconstruction with Resilience in the Energy Sector in The Bahamas [39]	Inter-America Development Bank	\$80,000,000.00	2020
Reconstruction with Resilience in the Energy Sector in The Bahamas [40]	Inter-America Development Bank	\$9,010,989.00	2021
Institutional and Regulatory Strengthening of The Energy Sector [41]	Inter-America Development Bank	\$150,000.00	2021



ENERGY EFFICIENCY PROJECTS

There were no Energy Efficiency projects reported for 2022.



There were no Renewable Energy Projects reported for 2022.

TERTIARY PROGRAMMES OFFERED

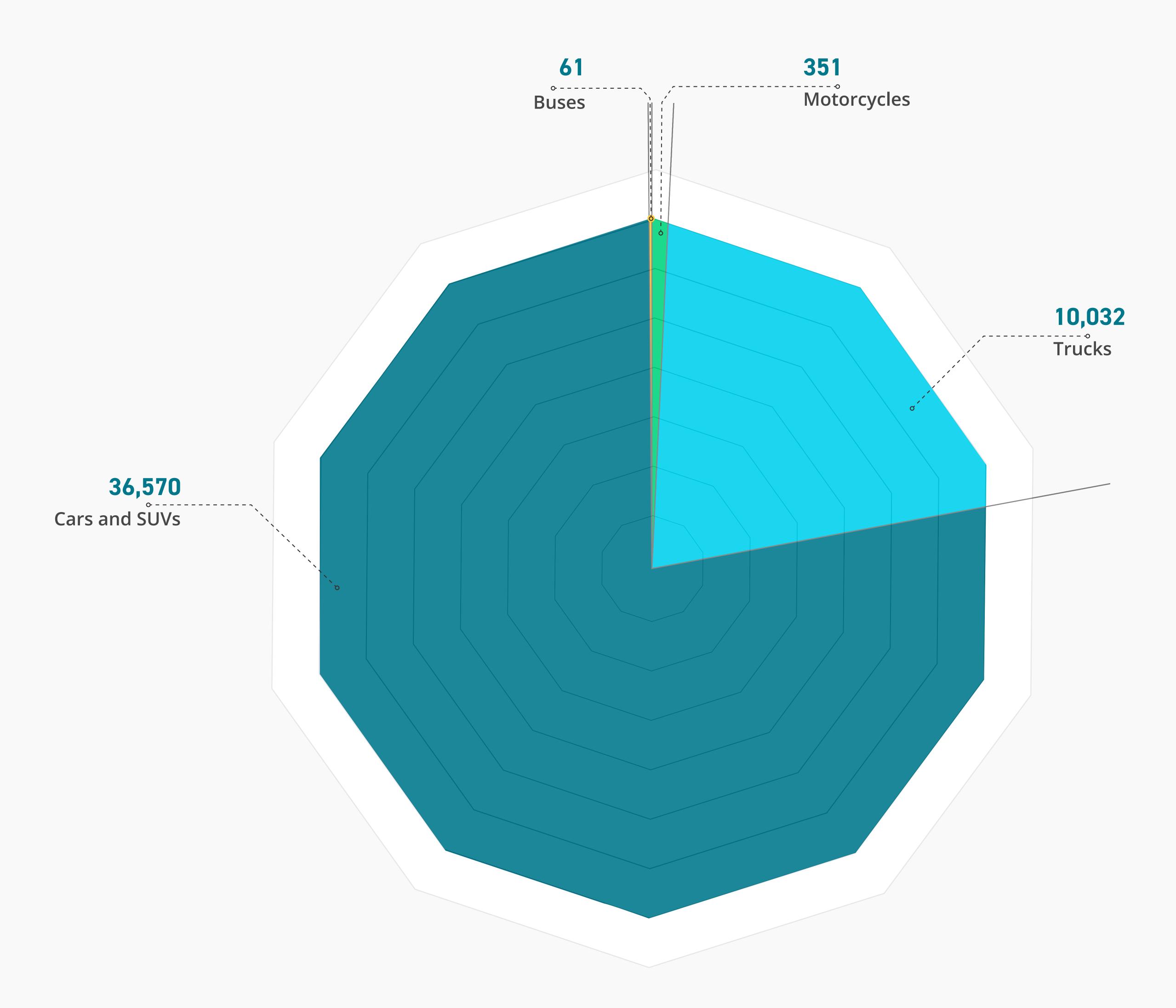




Name of Education Programme Provider	Associate Degree	Bachelors Degree	Programme Link
		Small Island Studies	
University of the Bahamas		Architecture ¹¹	https://www.ub.edu.bs/admissions/undergraduate-admission/programmes-2/
		Electrical Engineering Technology	
Bahamas Technical and Vocational Institute	Electronics Engineering Installers & Repairers		https://www.btvi.edu.bs/electronics-media-technology-trades-program/
The Bahamas Agriculture and Marine Science Institute	Environmental Science		https://bamsibahamas.edu.bs/academics/associate-of-science-degrees/environmental-science







This includes 294 electric vehicles and 545 hybrid vehicles reported.

CLIMATE CHANGE FRAMEWORK







SUMMARY OF THE BAHAMAS' GHG EMISSIONS AND REMOVALS (Gg) FOR 2000 [44]

Climate Change Policy	National Policy for the Adaptation to Climate Change (2005) [8]
National Determined Contributions [9]:	 Reducing GHG emission by 30% compared to its BaU scenario. This covers gases and sectors included in The Bahamas National Inventory. Having at least 30% of renewables in the country's energy mix. Electric and hybrid vehicles represent 35% and 15% of total vehicle sales, respectively
Emissions Reduction Target [9]:	Absolute economy-wide emissions target expressed as a single-year target (2030)
Priority Sectors for NDC [9]:	 Energy Transportation Industrial Processes and Produce Use (IPPU) Land-Use, Land-Use Change and Forestry (LULUCF) Waste
National Communications (NC) to the UNFCCC:	First National Communication on Climate Change Submitted to the Secretariat of the United Nations Framework Convention on Climate Change for Presentation to the Conference of Parties (2001) [43] The Second National Communication Report of The Commonwealth of The Bahamas under the United Nations Framework Convention on Climate Change

			Emissions		
Categories	Gg			g Gas	
	CO ₂	CH ₄	N ₂ O	NO	NMVOC
Energy	660.45				
LUCF onsite burning of forests	4.35	0.5	0.00013	0.12	
LUCF					
Livestock		0.23			
Solid Waste		0.07			
Comm/Industrial		0.003			
Wastewater and Sludge		0.05			
Animal Waste Management			0.001		
Grazing Animals			0.004		
Agricultural Soils			0.005		
Leaching			0.03		
Human Sewage			0.02		
Fugitive Emissions					2.31
Road Surfacing					0.17

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