



2019 ENERGY REPORT CARD

BAHAMAS



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UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

INTRODUCTION

This document presents the Bahamas' Energy Report Card (ERC) for 2019. The ERC provides an overview of the energy sector performance in the Bahamas. 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, 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.

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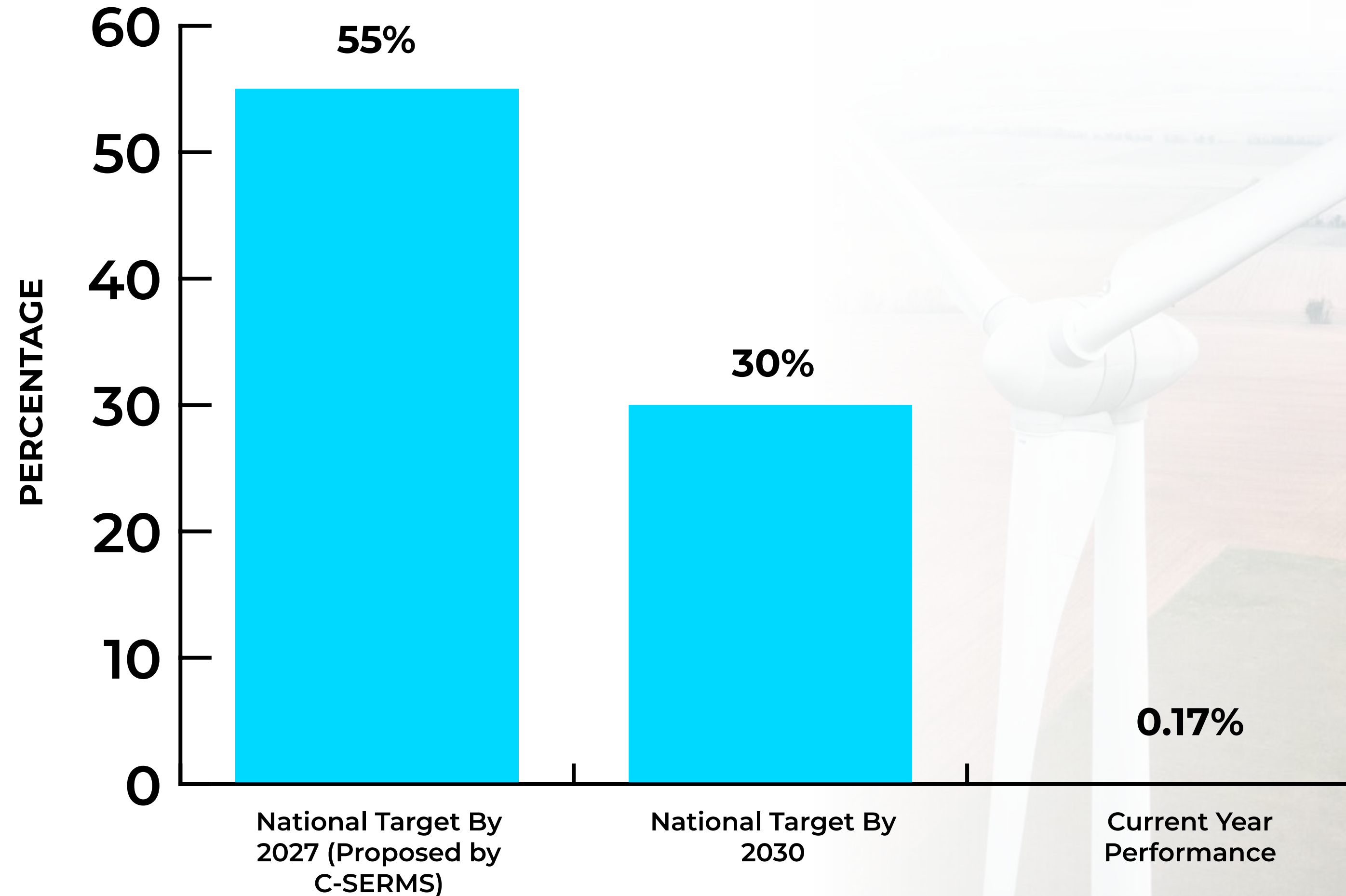
ENERGY SECTOR SUMMARY

Key Data and Information - Energy Sector	
Population	385,300 [1]
GDP (USD) Per Capita	\$35,239 [1]
Debt as % of GDP	66.80% [2]
Human Development Index (2018)	0.805 [3]
National Development Plan/Overall Country Development Strategy	Vision 2040: National Development Plan of The Bahamas [4]
National Energy Policy	The Bahamas National Energy Policy 2013 - 2033 [5]
Renewable Energy (RE) Policy	No
RE Target	30% by 2033 [5]
No. of Persons Employed in Energy Sector (Bahamas Power and Light)	878 [6]
Total Oil Import (BOE) per day	19,150 (2015 est.) [7]
Total Oil Export (BOE) per day	0
Total Installed Capacity (MW)	438 [6]
Total Installed RE (MW)	0.75 [6]
Electricity System Losses (%)	13% [6]
Energy Use (kWh) Per Capita	3,904
Fuel and Oil Imports as % of GDP	11.35% (2015) [8]
Climate Change Policy	Yes (2006) [9]
Electric Vehicle Stock	0
National Determined Contributions (NDC)	30% [9]
National Repository for Energy Data	No



ENERGY SECTOR PERFORMANCE AGAINST TARGETS

RENEWABLE ENERGY AS A PERCENTAGE OF INSTALLED CAPACITY





KEY ENERGY STAKEHOLDERS

Government Ministries, Departments and Agencies

- Ministry of Environment and Housing: Port Department
- Ministry of Transport and Local Government
- Bahamas Environment, Science and Technology (BEST) Commission

Fuel Importers & Suppliers

- Supplier- Shell Global
- Importer- Sun Oil Ltd.
- Distributor - Freeport Oil Company Ltd.

Electric Utilities

- Bahamas Power and Light (BPL)
- Grand Bahama Power Company

Independent Power Producer(s)

- Over Yonder Cay
- The Island School, Cape Eleuthera, Eleuthera, Bahamas

Regulator

- Utility Regulation and Competition Authority (URCA) Bahamas

Transportation

- Grand Bahama Port Authority





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

	Completed	Draft
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		✓

Policies and Legislation Relevant to the Energy Sector

Policies:

- National Energy Policy
- Electricity Sector Policy

Legislation:

- Electricity Act (2015) Amendment (2018)
- Utilities Regulation and Competition Authority (URCA) Act

Policies and Legislation Relevant to the Transportation Sector

Legislation & Regulation:

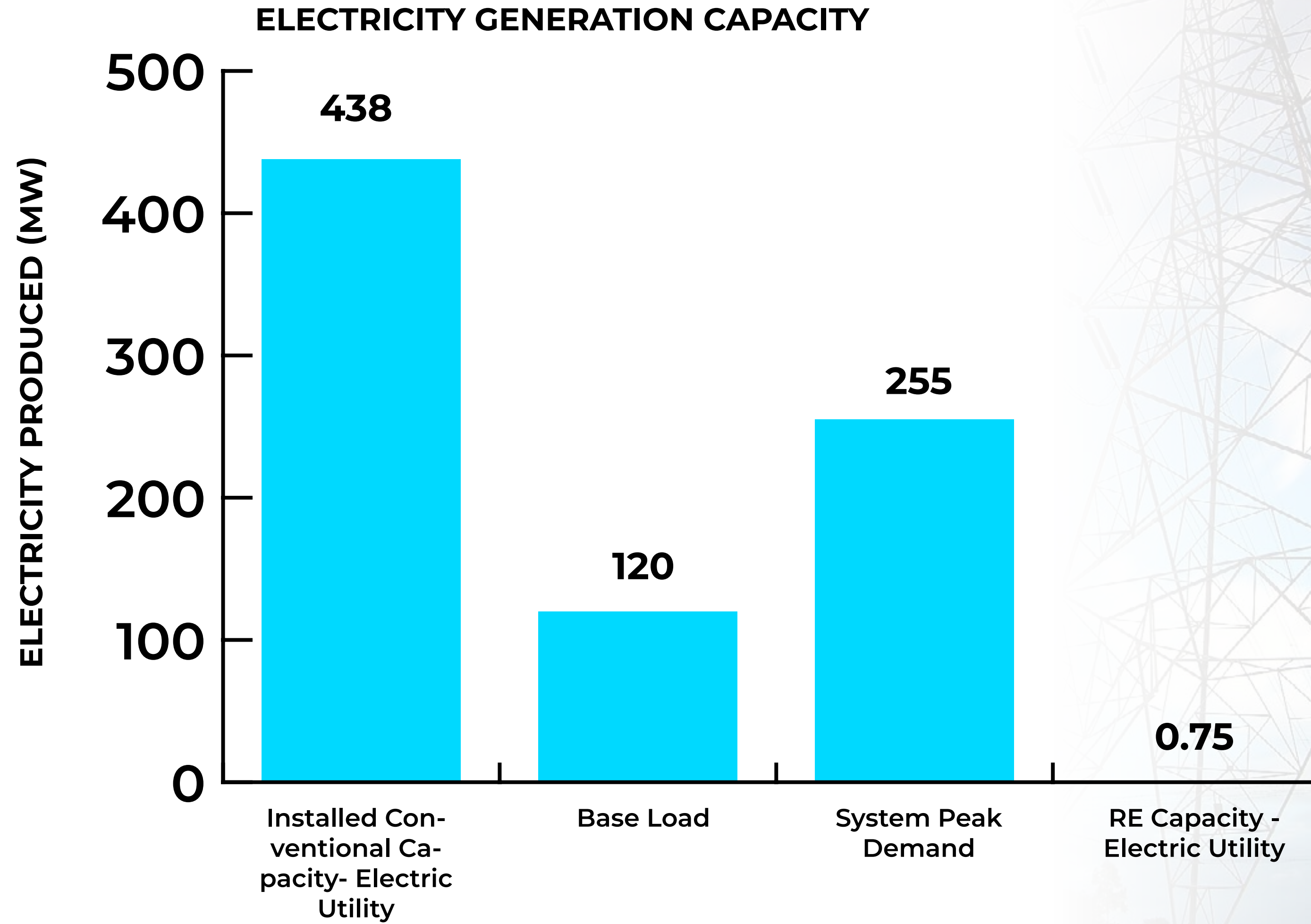
- The Road Traffic Act (1988) [13]

KEY ACHIEVEMENTS: PLR FRAMEWORK TIMELINE FOR ELECTRICITY SECTOR

Name	Year
National Energy Policy	2013
Electricity Act [10]	2015
Electricity Amendment Act (2) [11]	2018
Electricity Amendment Act (1) [11]	2018
Utilities Regulation and Competition Authority (Amendment) Act [12]	2015



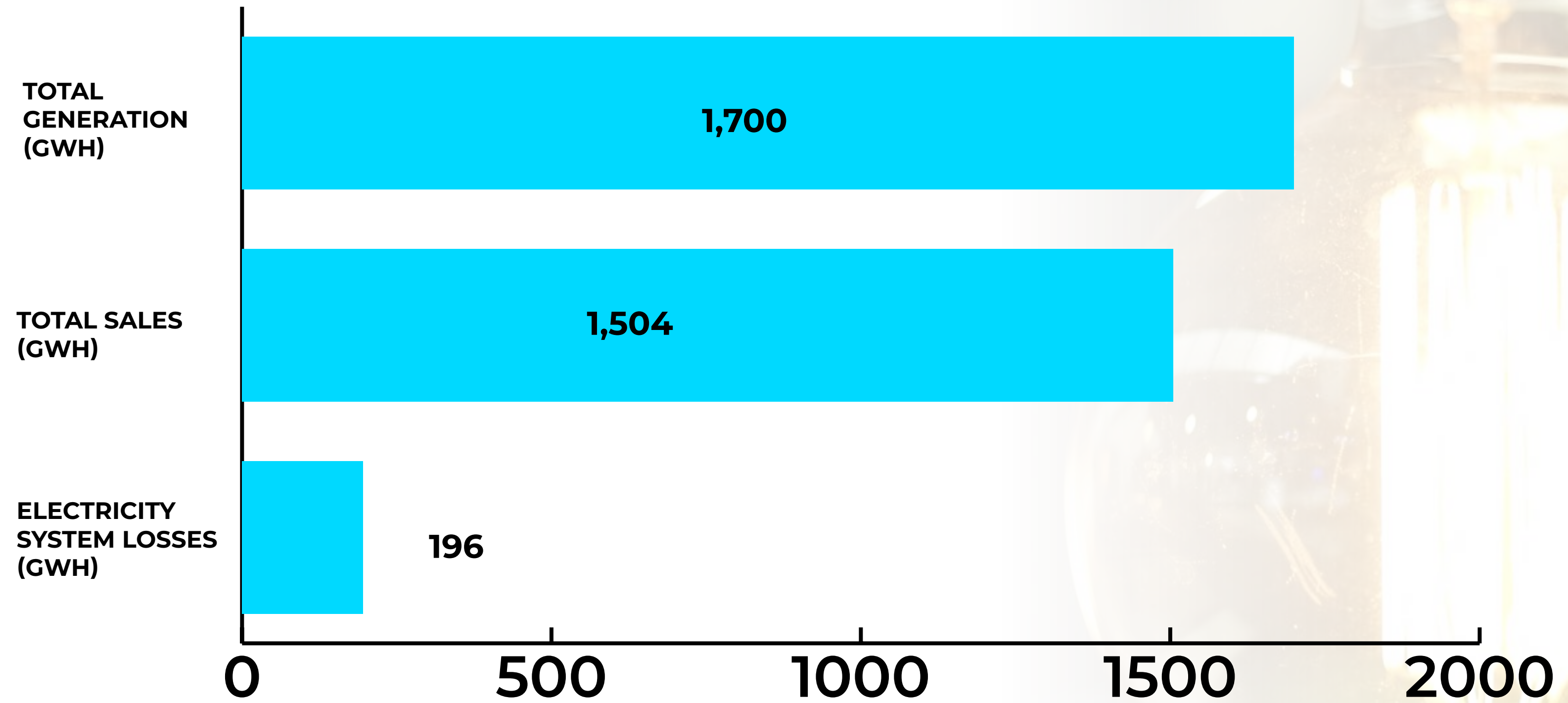
ELECTRICITY & ENERGY EFFICIENCY





ELECTRICITY & ENERGY EFFICIENCY (CONT'D)

ELECTRICITY CONSUMPTION





ELECTRICITY & ENERGY EFFICIENCY (CONT'D)

TARRIFS

Rate Class	Monthly Consumption / kWh	Tariff / (US\$/kWh)
Residential	0 - 200	0.1095
	201 - 800	0.1195
	> 800	0.1495
Commercial		0.1500
Industrial/Large Power	0 - 900,000	0.8700
	> 900,000	0.6200
Streetlights		0.1500

EFFICIENCY

Electricity System Heat Rate (kJ/kWh)	9,629
EE Target	No target set
Total Electricity System Losses (%)	~ 13%
Energy Use (kWh) Per Capita	~ 3904 Kwh/year



ELECTRICITY & ENERGY EFFICIENCY (CONT'D)

RE Resource	Installed Capacity (MW)	Potential Capacity (MW)	Assessment Conducted
Wind	Unknown	Unknown	
Solar PV	< 2	> 250	There is a lot of solar potential, however, there are practical limitations. For example, lots of potential exists on the Family Islands due to space availability, however the population and energy demand are too small to justify the installation.
Hydro	Unknown	Unknown	
Geothermal	Unknown	Unknown	
Biomass/WTE	Unknown	7	Based on numbers submitted in unsolicited proposals
Total	< 2	> 257	



PROJECTS IN THE PIPELINE

Donor Funding and Technical Assistance Landscape	Donor Organization & Banks	Technical Assistance Providers	Funding Awards	Year
Solar PV [14]	Italian Government Grant	Worlee Construction	\$1,000,000	2019
Solar PV Lighting	Rocky Mountain Institute	Not yet awarded	Not yet awarded	

Renewable Energy Source	Resource and Projects Capacity /kW	Development Partner	Total Estimated Cost	Funding Source
Solar PV Lighting House of Assembly Building	12.0	Rocky Mountain Institute	\$30,000	IDB Loan
Solar PV Lighting C. I. Gibson Senior High School	51.0	Rocky Mountain Institute	\$115,000	IDB Loan
Solar PV Lighting Uriah McPhee Primary School	56.1	Rocky Mountain Institute	\$126,225	IDB Loan
Solar PV Lighting Doris Johnson Senior High School	83.1	Rocky Mountain Institute	\$186,975	IDB Loan
Solar PV Lighting T. G. Glover Primary School	136.2	Rocky Mountain Institute	\$272,400	Italian Government Grant
Solar PV Lighting Customs Head Quarters	76.5	Rocky Mountain Institute	\$172,125	IDB Loan
Solar Photo-Voltaic Ministry of Education	73.2	Rocky Mountain Institute	\$164,700	IDB Loan
Solar PV Lighting Office of the Prime Minister	500.0	Rocky Mountain Institute	\$2,377,500	-
Solar PV Lighting C.V. Bethel Senior High	167.1	Rocky Mountain Institute	\$334,200	IDB Loan



NUMBER AND TYPE OF TERTIARY LEVEL & VOCATIONAL TRAINING SUSTAINABLE ENERGY PROGRAMMES OFFERED

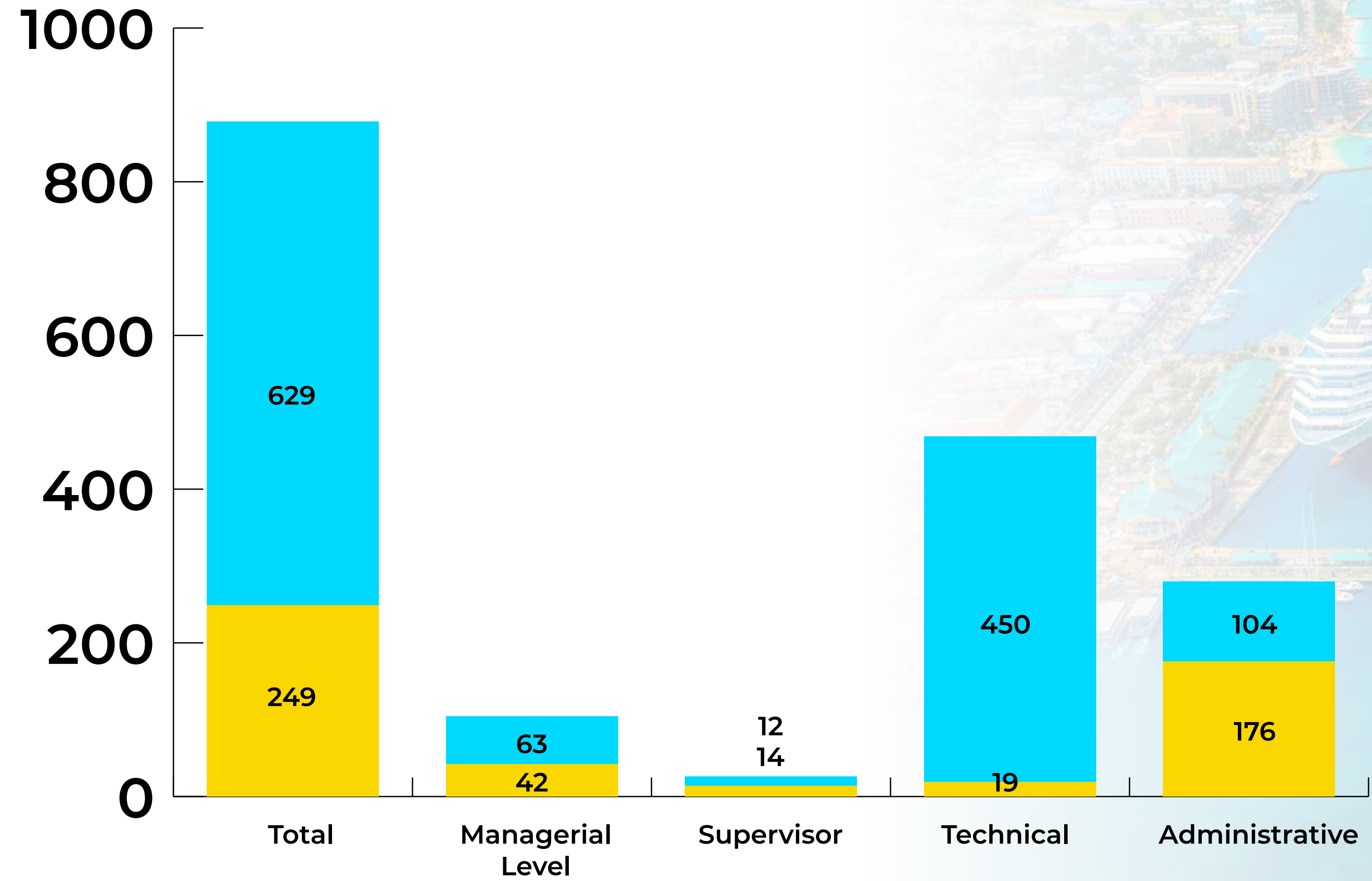


**THERE ARE NO TERTIARY OR VOCATIONAL TRAINING PROGRAMMES IN OR
RELATED TO SUSTAINABLE ENERGY**



WORKFORCE

**BREAKDOWN BY GENDER AND EMPLOYMENT LEVEL
BAHAMAS POWER AND LIGHT**





TRANSPORTATION SECTOR



NO INFORMATION WAS OBTAINED FOR THE TRANSPORTATION SECTOR



CLIMATE CHANGE FRAMEWORK

Climate Change Policy	Bahamas Climate Adaptation Policy [9]
National Determined Contributions	Yes [9]
Emissions Reduction Target	30% [9]
Priority Sectors for NDC	Energy and Forestry [9]
National Communications (NC) to the UNFCCC	Commonwealth of the Bahamas First National Communication on Climate Change (2001) [15]
	The Second National Communication Report of the Commonwealth of the Bahamas Under the United Nations Framework Convention on Climate Change (2014) [16]

GREENHOUSE GAS (GHG) INVENTORY

Gas	Sector	Volume / Tonnes CO2 Equivalent
Carbon Dioxide (CO ₂)	Energy	660,444.81
	Forestry (on site burning of forests)	4,350.00
Methane (CH ₄)	Agriculture	4,908.49
	Waste	2,655.29
	Forestry (on site burning of forests)	10,500.00
Nitrous Oxide (N ₂ O)	Agriculture	13,812.20
	Waste	6,105.39
	Forestry	41.54



CLIMATE CHANGE FRAMEWORK (CONT'D)

Gas	Sector	Volume / Gg
Nitrogen Oxides (NO)	Forestry (on site burning of forests)	0.12000
Non-Methane Volatile Organic Compounds (NMVOC)	Fugitive Emissions	2.31200
	Road Surfacing	0.17349



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