



2020 ENERGY REPORT CARD

THE BAHAMAS



CCREEE

CARIBBEAN CENTRE FOR RENEWABLE ENERGY & ENERGY EFFICIENCY

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2020 ENERGY REPORT CARD

INTRODUCTION

This document presents The Bahamas' Energy Report Card (ERC) for 2020.

The ERC provides an overview of the energy sector performance in The Bahamas. 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.

ENERGY SECTOR SUMMARY

ENERGY

POLICY

ELECTRICITY

STUDY
&
WORK
FORCE

TRANSPORT

CLIMATE
CHANGE

Population
(Estimation)
39,3244
[1]

National
Energy
Policy
**The Bahamas National
Energy Policy 2013-2033**
(2013)
[6]

National
Development
Plan
**Vision 2040:
National Development Plan
of the Bahamas**
(2017)
[5]

Energy
Intensity
(BTU/\$)
**Not
Available**

Energy
Use (kWh)
Per Capita
3,863.55
[9]

Energy
Performance
Standards/
Appliance
Labelling
None

Human
Development
Index
0.184
(2019)
[4]

Total Oil
Export (BOE)
per day
N/A

No. of Persons
Employed in
Energy Sector
**Not
Available**

RE Target
**30% by
2033**
[6]

Debt as
% of GDP
95.90%
[3]

Climate
Change Policy
**Bahamas Climate
Adaptation
Policy (2005)**
[9]

Fuel & Oil
Imports as %
of GDP
**Not
Available**

Total
Installed
Conventional
Capacity (MW)
554
[8]

Total Oil
Import (BOE)
per day
63,247
[7]

National
Determined
Contributions
(NDC)
**An economy wide reduction
of GHG emissions of 30%
when compared to
BAU scenario
by 2030**
[11]

Electricity
System
Losses (%)
11%
[8]

Total
Installed
RE (MW)
5.64
[8]

National
Repository
for Energy Data
None

Electric
Vehicle Stock
>200
[10]

Renewable
Energy (RE)
Policy
None

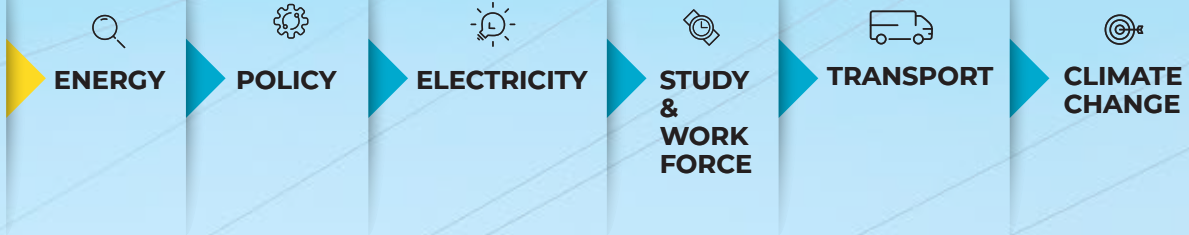
Oil Imports
as % of GDP
**Not
Available**

GDP (USD)
Per Capita
\$28,607.90
[2]



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ENERGY & ENERGY EFFICIENCY



ENERGY SECTOR PERFORMANCE AGAINST TARGETS

1.01%

2020 Performance

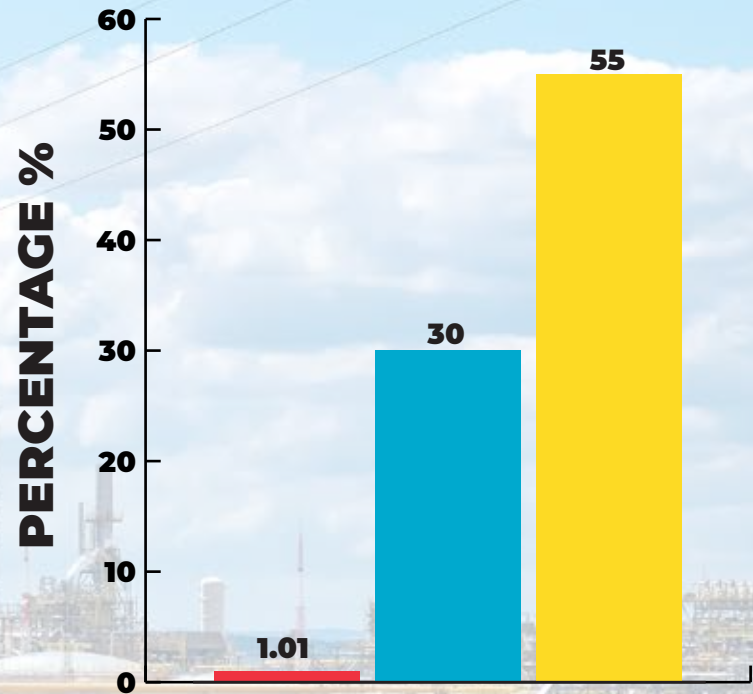
30%

National Target by 2030

55%

National Target by 2027
(Proposed by CARICOM
-CSERMS Report)

RENEWABLE ENERGY PERFORMANCE AGAINST TARGETS

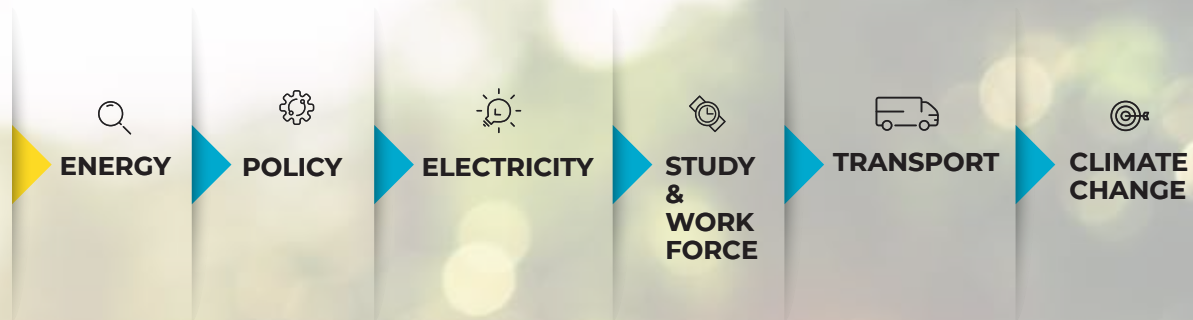


Installed Renewable Energy Capacity

■ 2020 Performance ■ National Target by 2030

■ National Target by 2027
(Proposed by CARICOM -CSERMS Report)

KEY ENERGY STAKEHOLDERS



Government Ministries, Departments and Agencies

Ministry of Environment and Housing

Independent Power Producer

Shell Bahamas Power/Sun Oil Over Yonder Cay
The Island School, Cape Eleuthera, Eleuthera, Bahamas

Fuel Suppliers

Sol Petroleum
Sun Oil Ltd
Freeport Oil Company Ltd.

Electricity Regulator

Utility Regulation and Competition Authority (URCA) Bahamas

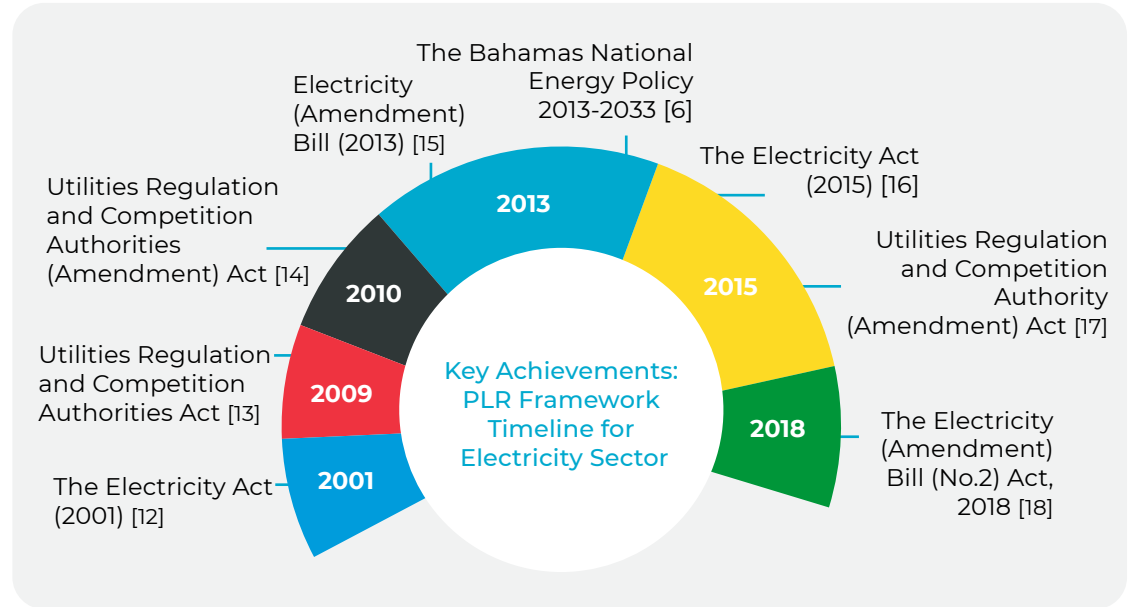
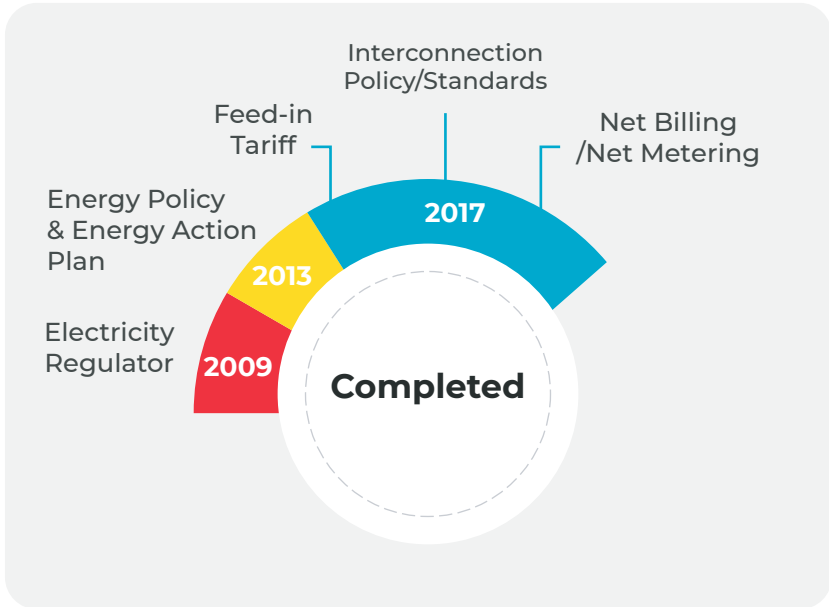
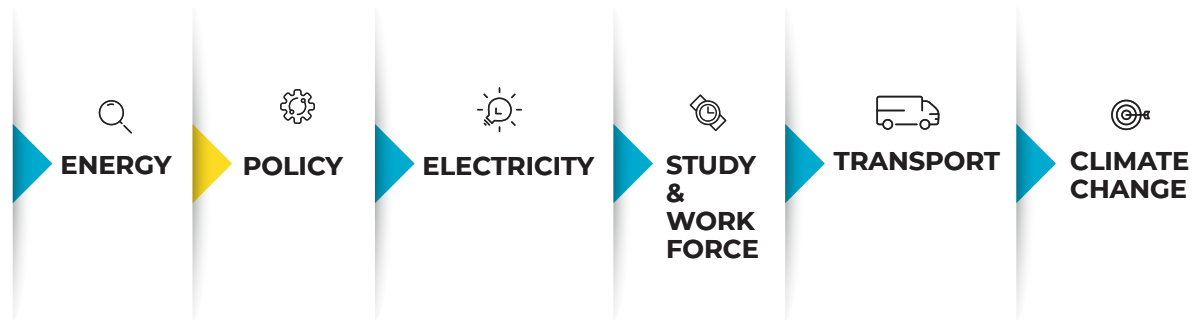
Electric Utility

Grand Bahama Power Company
Bahamas Power and Light

Transportation

Ministry of Transport and Local Government- Road Traffic/ Ports Department
Grand Bahama Port Authority

POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK



POLICIES AND LEGISLATION RELEVANT TO THE ENERGY SECTOR

The Bahamas National Energy Policy 2013-2033

[6]

POLICY

2013

POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK



POLICIES AND LEGISLATION RELEVANT TO THE TRANSPORTATION SECTOR

1988

Liquid Petroleum Gas Act [20]

2001

Road Traffic Regulations [19]

2001

Civil Aviation (Safety) Act [22]

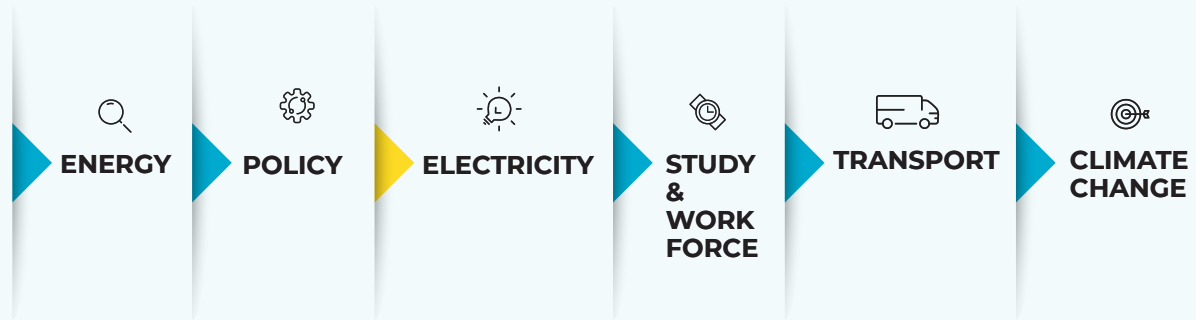
2006

The Road Traffic Act [23]

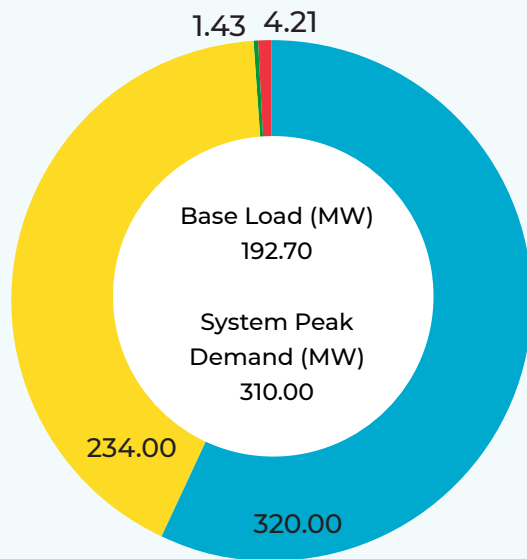
2016

Petroleum Regulations [21]

ELECTRICITY & ENERGY EFFICIENCY

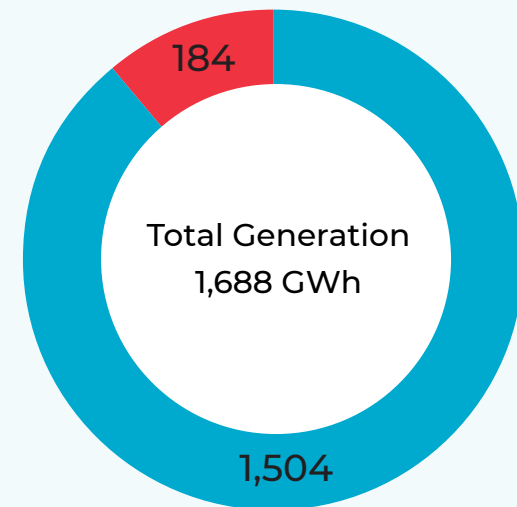


INSTALLED CAPACITY (MW)



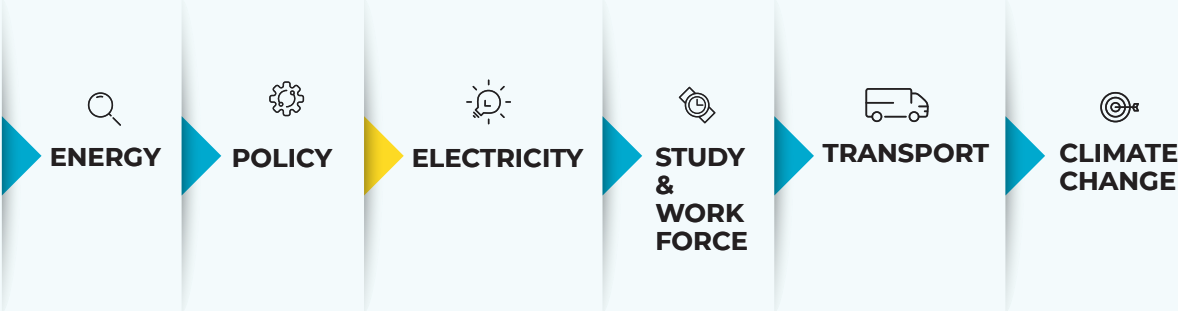
- Electric Utility - Diesel
- Electric Utility - RE
- Electric Utility - HFO
- Residential and Commercial/ Distributed Generation - RE

ENERGY CONSUMPTION (GWh)

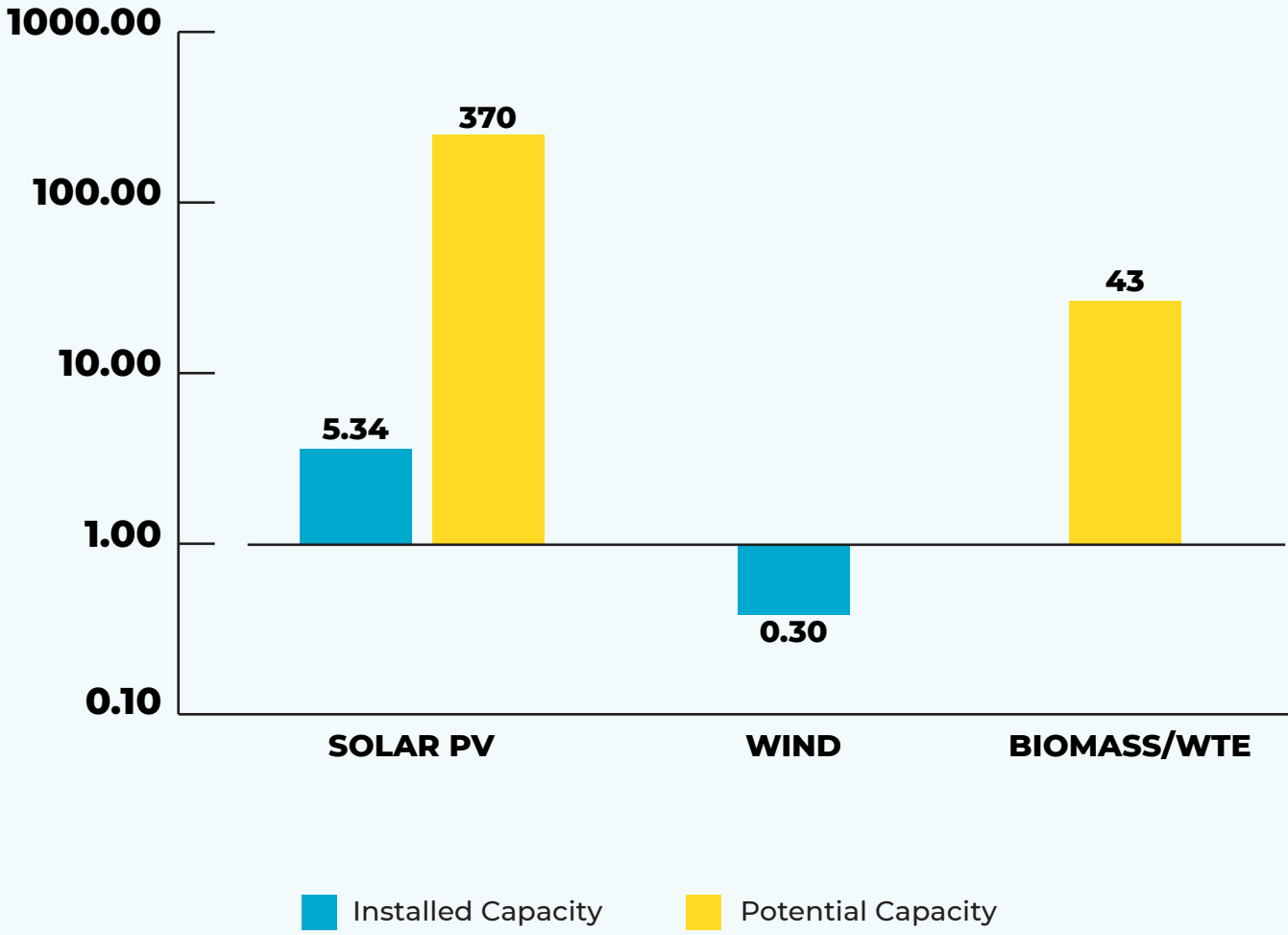


- Total Sales
- Losses

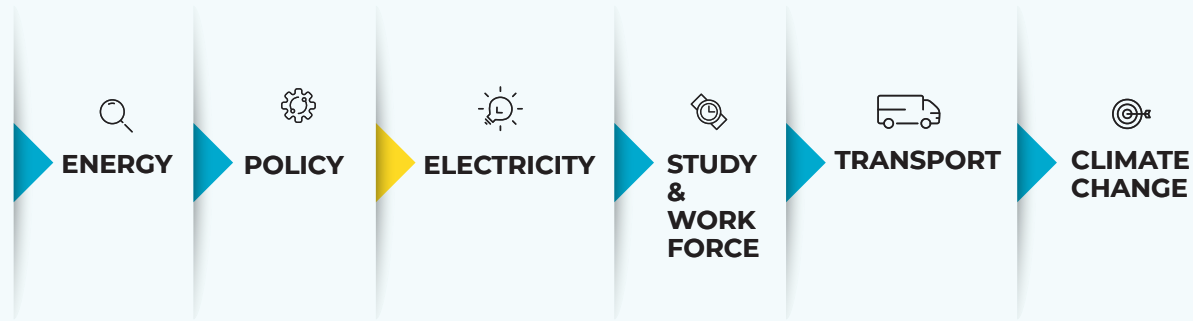
ELECTRICITY & ENERGY EFFICIENCY



RENEWABLE ENERGY RESOURCES (MW)



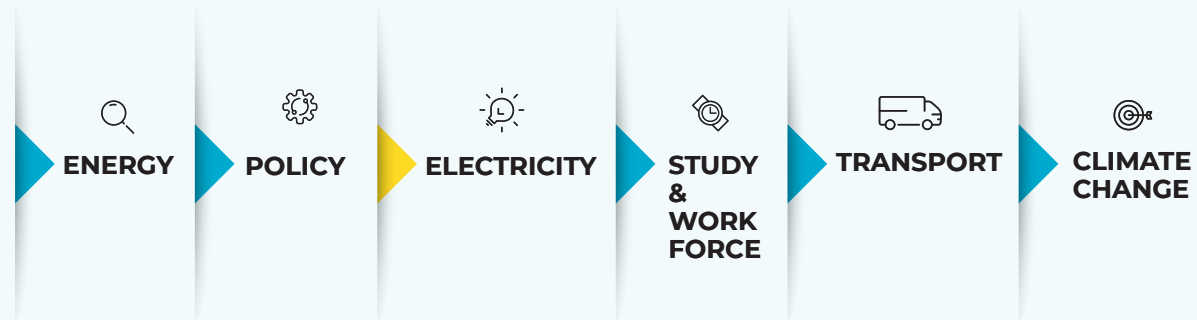
ELECTRICITY TARIFFS



GRAND BAHAMA POWER COMPANY

RATE CLASS	MONTHLY CONSUMPTION / DEMAND (kWh)	TARIFF INCLUDING SUBCHARGE / (US\$/kWh)
RESIDENTIAL	FIRST 350 NEXT 450 ADDITIONAL kWh	0.1756 0.2182 0.2606
COMMERCIAL	FIRST 20,000 NEXT 80,000 ADDITIONAL kWh	0.1955 0.1815 0.1675
STREET LIGHTS	150W 250W	23.88 35.82

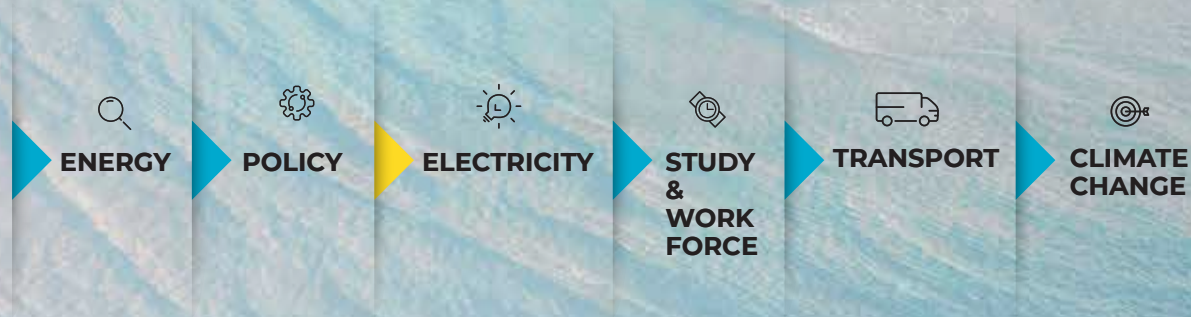
ELECTRICITY TARIFFS



BAHAMA POWER AND LIGHT

RATE CLASS	MONTHLY CONSUMPTION / DEMAND	TARIFF (US\$/kWh)
RESIDENTIAL	0-200	0.1095
	201-800	0.1195
	REMAINING UNITS	0.1495
COMMERCIAL	ALL UNITS PER MONTH	0.1495
GENERAL SERVICES	0-900,000 UNITS	0.8700
	REMAINING UNITS	0.6200

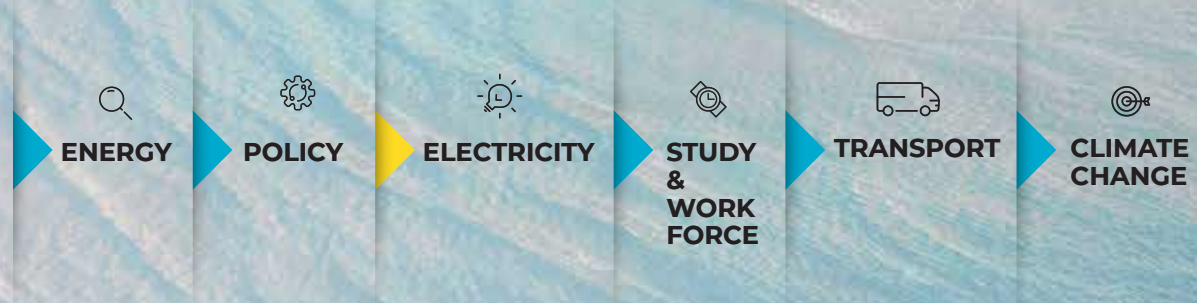
PROJECTS IN THE PIPELINE



TECHNICAL ASSISTANCE PROJECTS

DONOR FUNDING AND TECHNICAL ASSISTANCE LANDSCAPE	DONOR ORGANIZATIONS & BANKS	FUNDING AWARDS (US\$)	YEAR
Supporting Renewable Energy within the Implementation of the Electricity Act in the Bahamas	Inter-American Development Bank	450 THOUSAND	2018
Supporting a Comprehensive Renewable Energy Program and Institutional Reform in the Bahamas	Inter-America Development Bank	750 THOUSAND	2019
Advancing Renewable Energy in The Bahamas	Inter-America Development Bank	170 MILLION	2020
Reconstruction with Resilience in the Energy Sector in The Bahamas	Inter-America Development Bank	80 MILLION	2020

PROJECTS IN THE PIPELINE



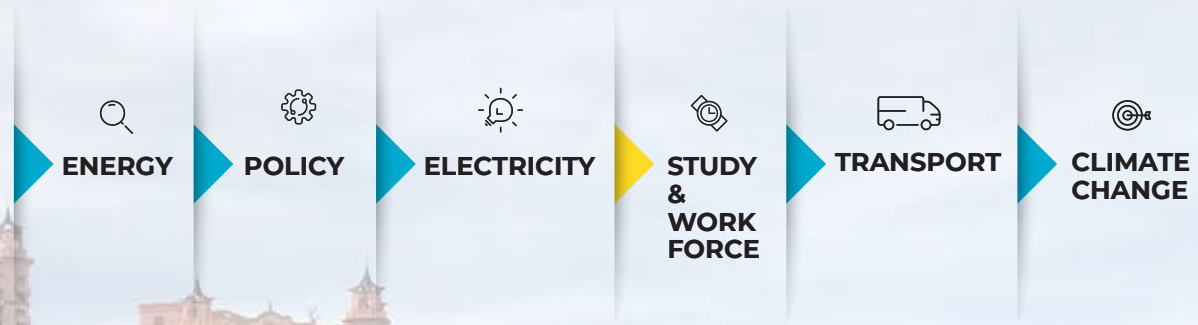
ENERGY EFFICIENCY PROJECTS

ENERGY EFFICIENCY INITIATIVE	CONSUMPTION (kW)	ENERGY EFFICIENCY LEGISLATION OR REGULATIONS	ENERGY SERVICE COMPANIES	CHANGE IN OLD / EXISTING INFRASTRUCTURE EXPECTED IN UPCOMING CALENDAR YEAR
Street Lighting	Not Available	None	Yes	39,500 by 2022
Public Buildings	Not Available	None	Yes	150 schools by 2033

RENEWABLE ENERGY PROJECTS

RENEWABLE ENERGY SOURCE	RESOURCE & PROJECTS CAPACITY (MW)	DEVELOPMENT PARTNER	TOTAL ESTIMATED COST (US\$)	FUNDING SOURCE	OWNERSHIP
Solar Photo-Voltaic	390 kW	Government of The Bahamas	170 MILLION	Loan	Public

TERTIARY PROGRAMMES OFFERED



UNIVERSITY OF THE BAHAMAS

B.Sc.

	PERSONS ENROLLED
SMALL ISLAND SUSTAINABILITY: ENVIRONMENTAL SCIENCE AND ECOSYSTEM MANAGEMENT	>25
PHYSICS	50+
ARCHITECTURE	74

US SOLAR INSTITUTE ¹

CERTIFICATE

	PERSONS ENROLLED
SOLAR INSTALLATION TRAINING	N/A

<https://ussolarinstitute.com/solar-energy-installation-training-in-bahamas/>

¹US Solar Institute is a US based institution that offers certification in Solar Energy Installation in the Bahamas.

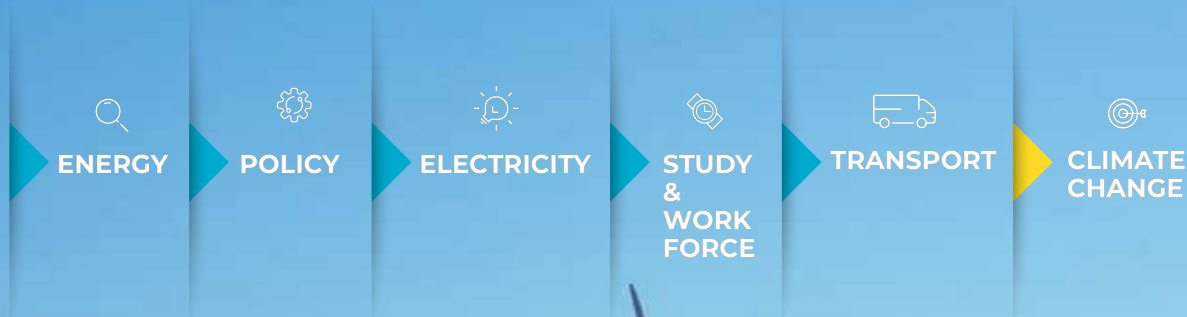
WORKFORCE

Detailed information on the workforce for The Bahamas was not available.

TRANSPORTATION SECTOR

The detailed breakdown of registered vehicles was not provided. There are, however more than 200 EV's.

CLIMATE CHANGE FRAMEWORK



THE BAHAMAS CLIMATE ADAPTATION POLICY (2005) [9]

NATIONAL DETERMINED CONTRIBUTIONS

**An economy wide
reduction of GHG
emissions of 30%
when compared to
is BAU scenario
by 2030 [11]**

EMISSIONS REDUCTION TARGET:

30% below 2010 levels
by 2030 [11]

PRIORITY SECTORS FOR NDCS

Energy and Forestry
[11]

NATIONAL COMMUNICATIONS (NC) TO THE UNFCCC:

Commonwealth of the Bahamas First National Communication
on Climate Change (2001) [24]

The Second National Communication Report of the
Commonwealth of the Bahamas Under the United Nations
Framework Convention on Climate Change (2015) [25]

CLIMATE CHANGE FRAMEWORK

ENERGY

POLICY

ELECTRICITY

STUDY
&
WORK
FORCE

TRANSPORT

CLIMATE
CHANGE

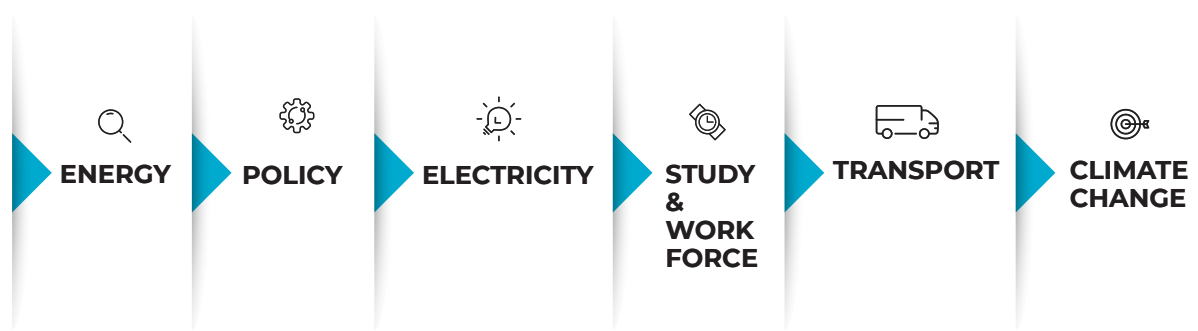
SUMMARY OF THE BAHAMAS' GHG EMISSIONS [25]

EMISSIONS (Gg CO₂ EQUIVALENT)*

CATEGORIES	CO ₂	CH ₄	N ₂ O
ENERGY	660.45		
MANUFACTURING INDUSTRIES & CONSTRUCTION	0.06		
AGRICULTURE / FORESTRY / FISHING		4.19	
WASTE		2.66	6.11
INTERNATIONAL BUNKERS	1673.00		

*Gg represents giga grams

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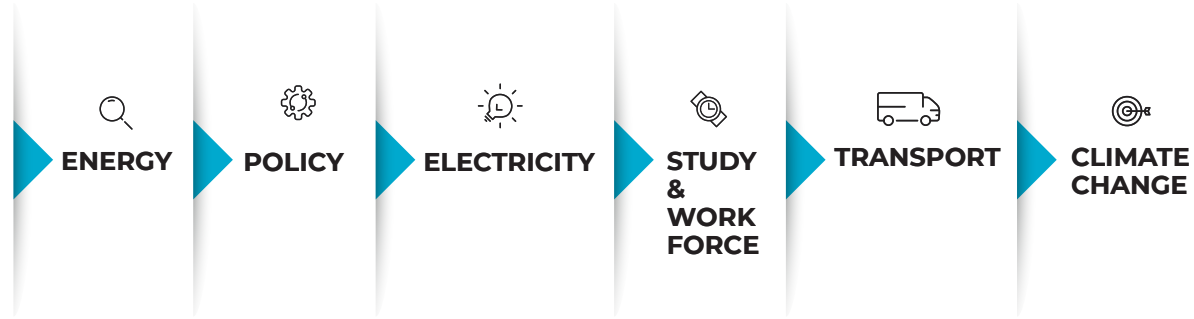
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