



2020 ENERGY REPORT CARD

BELIZE



CCREEE

CARIBBEAN CENTRE FOR RENEWABLE
ENERGY & ENERGY EFFICIENCY

AN INSTITUTION OF

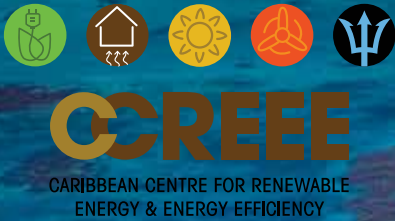


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ENERGY

POLICY

ELECTRICITY

STUDY
&
WORK
FORCE

TRANSPORT

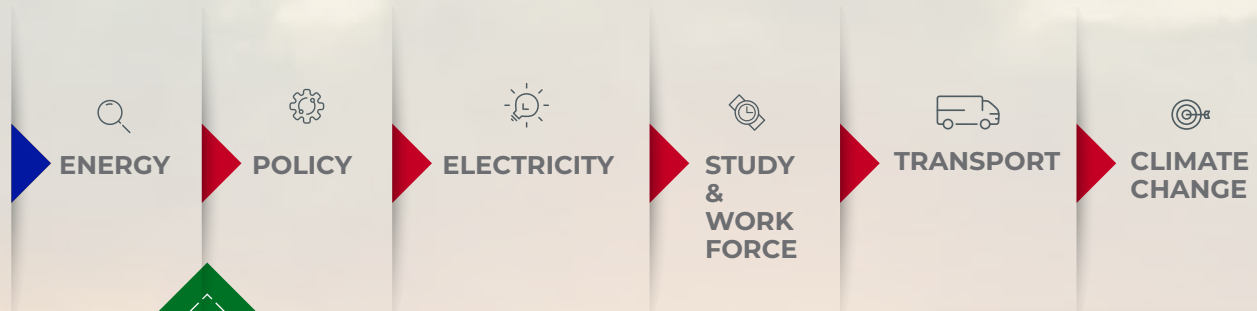
CLIMATE
CHANGE

2020 ENERGY REPORT CARD **INTRODUCTION**

This document presents Belize's Energy Report Card (ERC) for 2020. The ERC provides an overview of the energy sector performance in Belize. 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 Performance Standards/ Appliance Labelling

ASHRAE 62.1 for commercial buildings and 62.2 for residential buildings

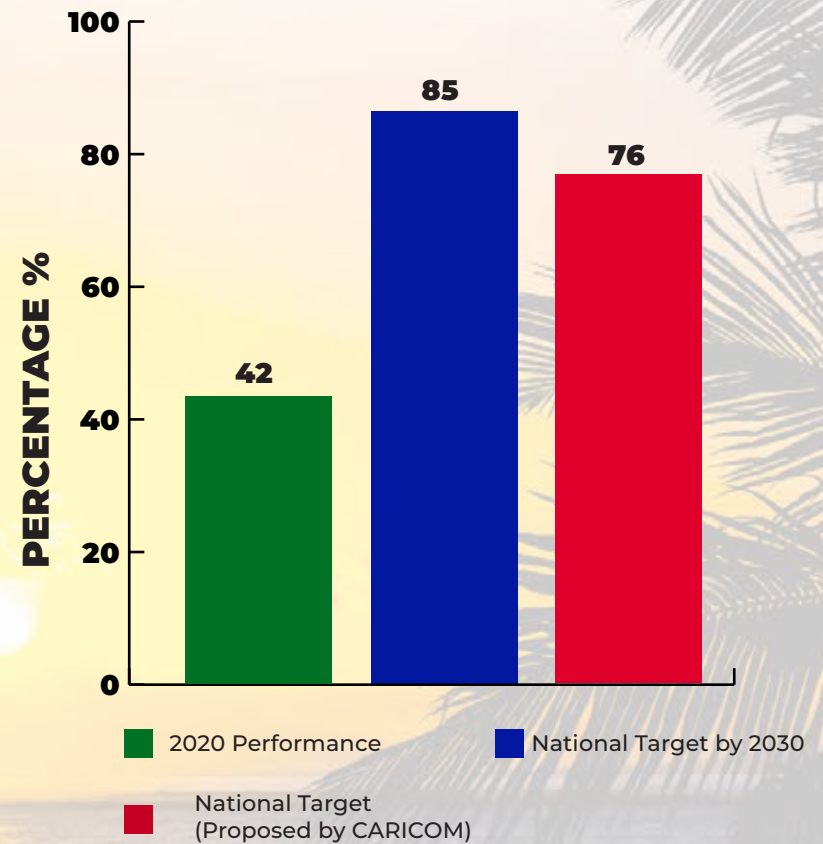
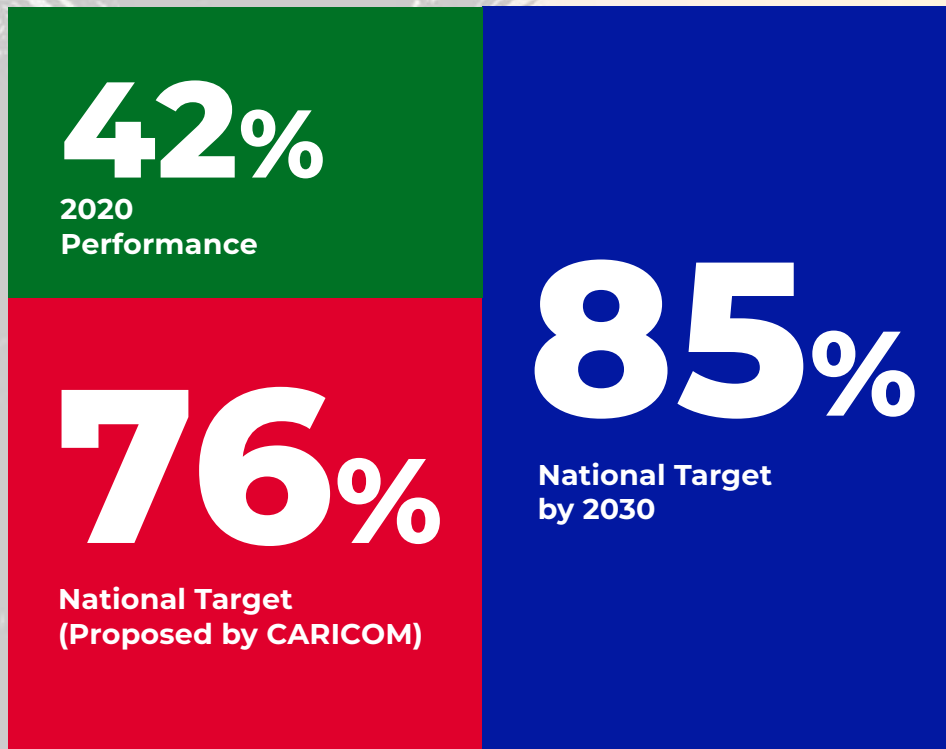
Belize Energy Efficiency Labelling Scheme (EELS)

[7]



RENEWABLE ENERGY PERFORMANCE AGAINST TARGETS

PERFORMANCE AGAINST TARGETS



KEY ENERGY STAKEHOLDERS

ENERGY

POLICY

ELECTRICITY

STUDY & WORK FORCE

TRANSPORT

CLIMATE CHANGE

Government Ministries, Departments and Agencies

Ministry of Public Utilities, Energy and Logistics [13]
Geology and Petroleum Department
Ministry of Rural Transformation, Community Development, Labour and Local Government [14]
Social Security Board (Shareholder in Utility company)

Electric Utility

Belize Electricity Limited (BEL) [13]

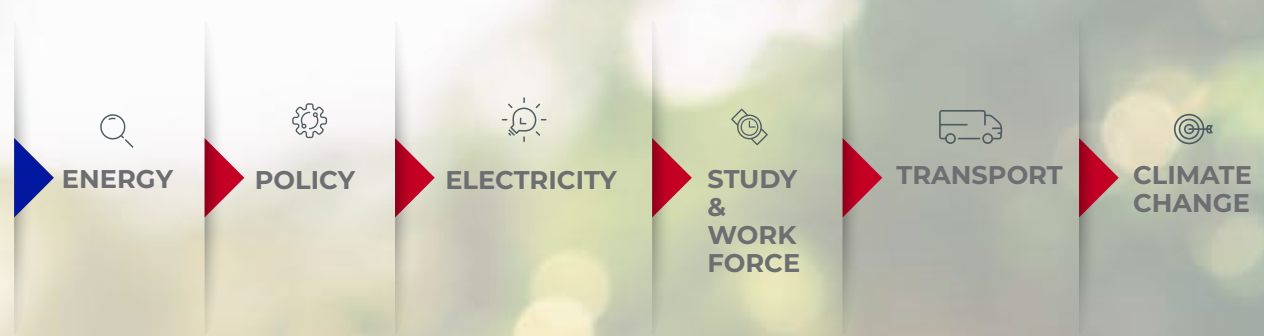
Fuel Importers & Suppliers

SOL Belize Limited
UNO Belize
PUMA Energy [15]
Belize Natural Energy [16]
LPG Gas Suppliers and Distributors
National Gas Company (Belize) Limited [17]
Zeta Gas
Gas Tomza Limited

Independent Power Producer

JICA Solar Farm [9]
Hydro Maya Limited [9]
Belize Cogeneration Energy Limited (BELCOGEN) [9]
Blair Athol Power Company (BAPCol) [9]
Farmers Light Plant Corporation Limited [9]
Santander Sugar Energy Limited (Biomass) [9]

KEY ENERGY STAKEHOLDERS



Electricity Regulator

Public Utilities
Commission (PUC)

Transportation

Ministry of Blue Economy
and Civil Aviation [18]

Department of Transport [13]

Belize Port Authority [13]

Others

Statistical Institute of Belize

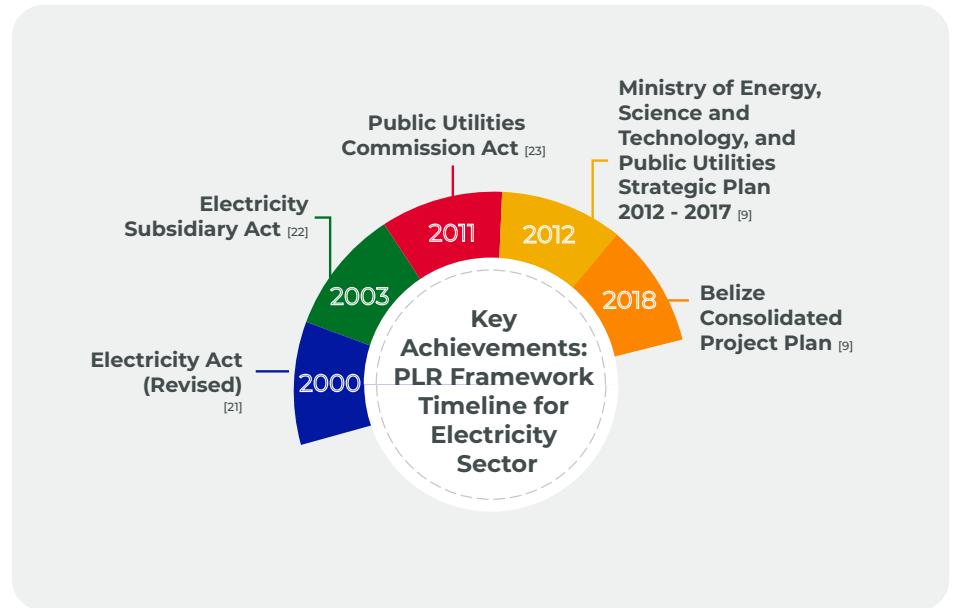
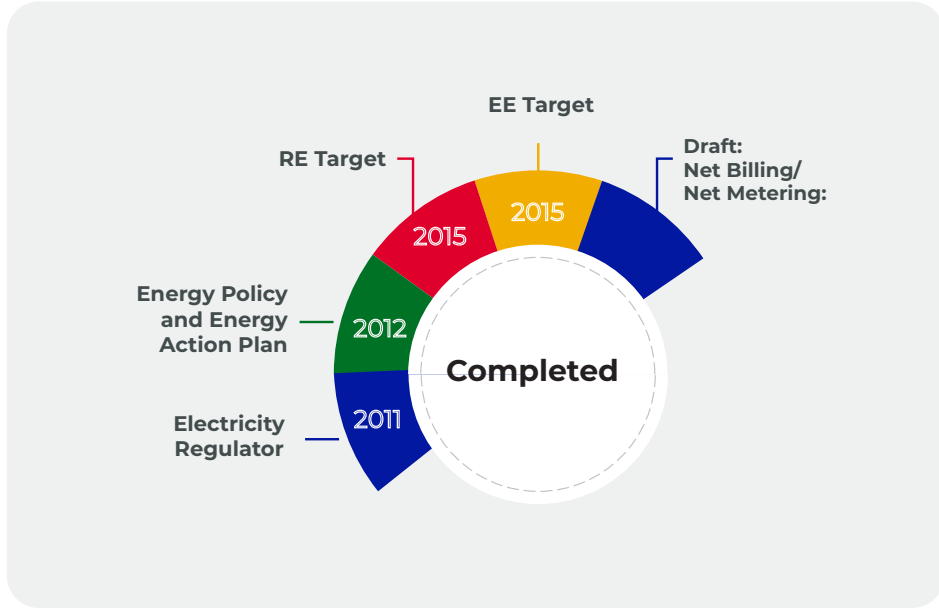
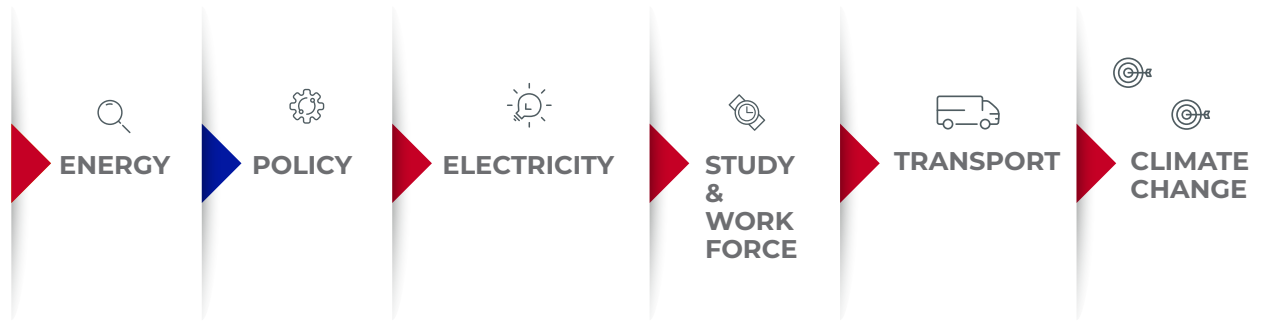
Department of Environment [19]

Ministry of Finance and Economic
Development

Ministry of Sustainable Development,
Climate Change and Disaster
TRisk Management [19]

The Belize Bureau of Standards [20]

POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK



POLICIES AND LEGISLATION RELEVANT TO THE ENERGY SECTOR



POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK



POLICIES AND LEGISLATION RELEVANT TO THE TRANSPORTATION SECTOR

POLICIES

Comprehensive National Transportation Master Plan for Belize [31]

LEGISLATION & REGULATION

2000
Revised
Edition

Motor Vehicles and Road Traffic Act [32]

2000
Revised
Edition

Civil Aviation Act (CAP 239) [35]

2000
Revised
Edition

Public Roads Act (CAP 232) [36]

2000
Revised
Edition

Harbours and Merchant Shipping Act [37]

2000
Revised
Edition

Public Roads Act (CAP 232) [38]

2000
Revised
Edition

Belize City By Laws (CAP 85) [39]

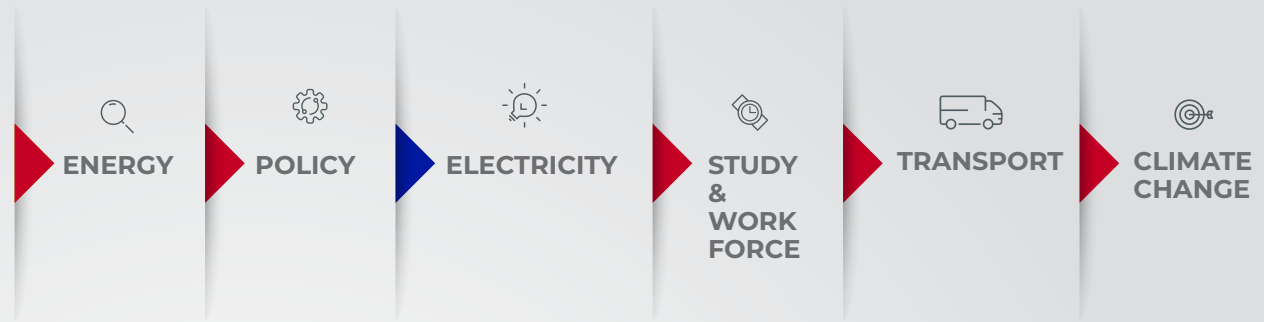
2003
Revised
Edition

Belize Port Authority Act (CAP 233) [33]

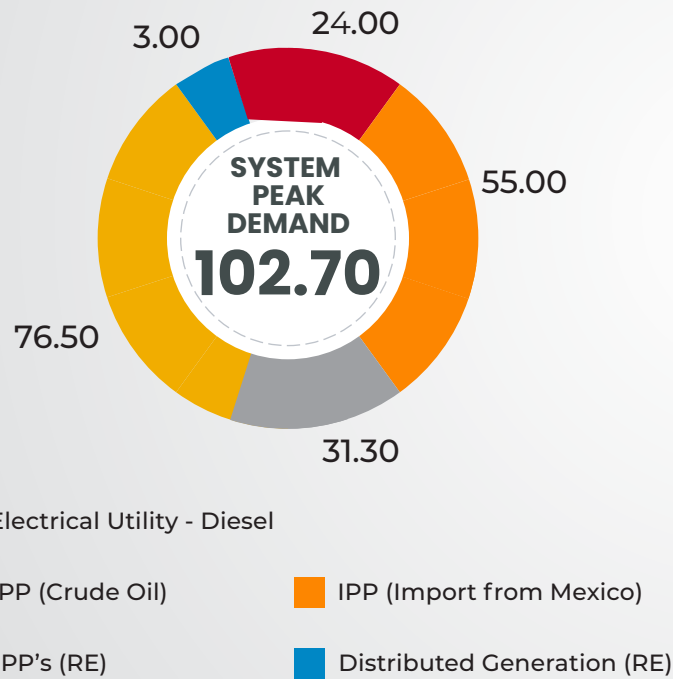
2011
Revised
Edition

Belize Airport Authority (BAA) Act (CAP 238) [34]

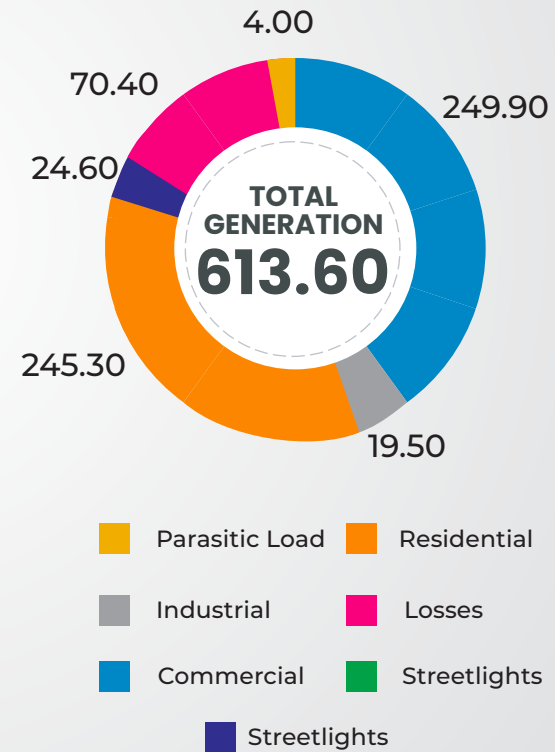
ELECTRICITY & ENERGY EFFICIENCY



INSTALLED CAPACITY (MW)



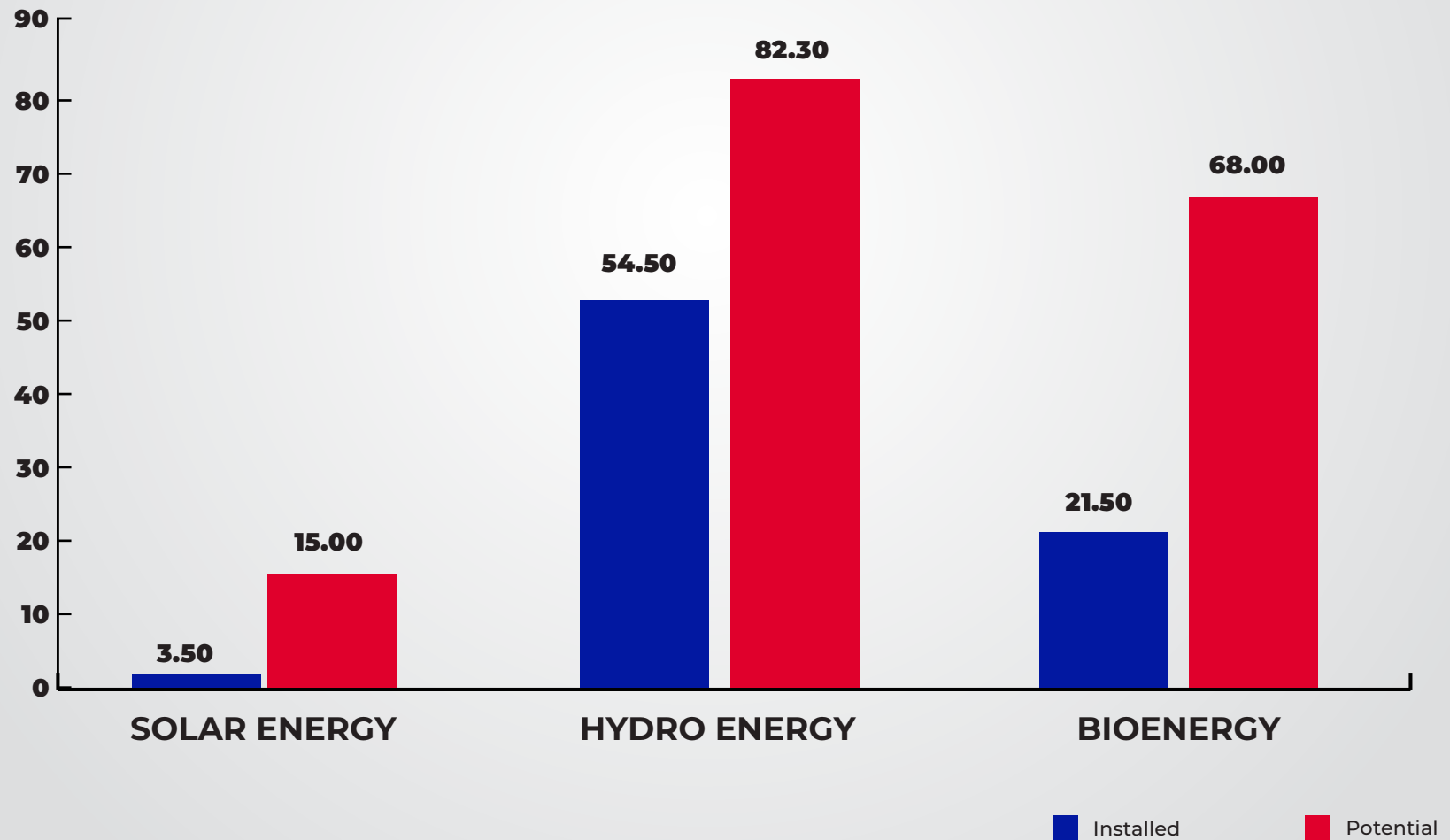
ENERGY CONSUMPTION (GWH)



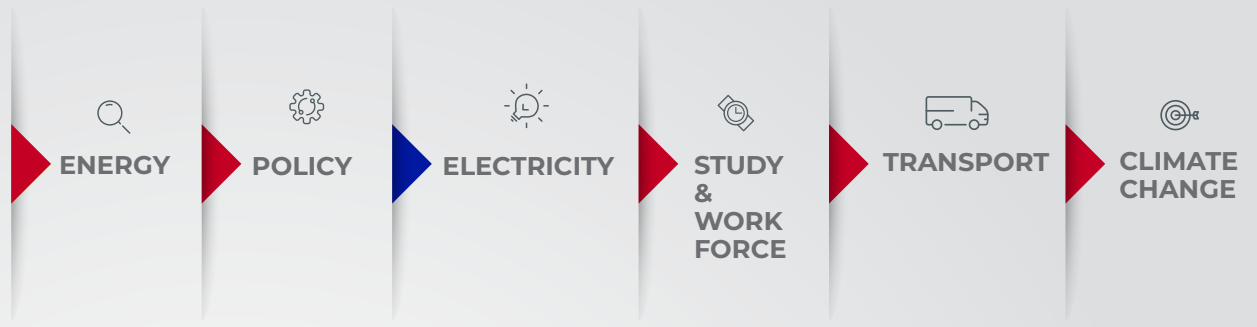
ELECTRICITY & ENERGY EFFICIENCY



RENEWABLE ENERGY CAPACITY (MW)



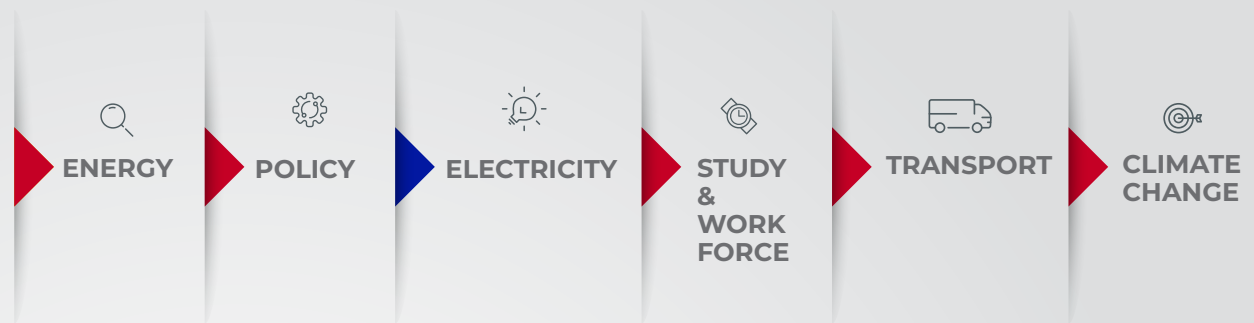
ELECTRICITY & ENERGY EFFICIENCY



ELECTRICITY TARIFFS

RATE CLASS	MONTHLY CONSUMPTION / DEMAND (kWh)	MINIMUM CHARGE (US\$)	TARIFF / (US\$/kWh)	DEMAND / (US\$/kVA)
SOCIAL RATES	0 TO 60		0.11	
RESIDENTIAL	BLOCK 1 - 1 TO 50 BLOCK 2 - 51 TO 200 BLOCK 3 - 201+	2.47	0.16 0.19 0.21	
COMMERCIAL 1	BLOCK 1 - 1 TO 50 BLOCK 2 - 51 TO 200 BLOCK 3 - 10,000	4.95	0.11 0.16 0.21	
COMMERCIAL 2	BLOCK 1 - 0 TO 10,000 BLOCK 2 - 10,001 TO 20,000 BLOCK 3 - 20,001+	74.21	0.20 0.19 0.19	
INDUSTRIAL 1		123.69	0.15	17.72
INDUSTRIAL 2		123.69	0.13	11.38
STREETLIGHTS	1 (KWH)		0.22	

PROJECTS IN THE PIPELINE



TECHNICAL ASSISTANCE PROJECTS

DONOR FUNDING AND TECHNICAL ASSISTANCE LANDSCAPE	DONOR ORGANIZATION & BANKS	IMPLEMENTING AGENCIES	YEAR
11TH EUROPEAN DEVELOPMENT FUND - supports to the implementation of the Belize Sustainable Energy Roadmap and consists of many projects	European Union Inter-American Development Bank	27 million EUR	
ENERGY CONSERVATION MEASURE (ECM) PROJECTS UNDER 11TH EDF			

ENERGY EFFICIENCY PROJECTS

No energy efficiency projects were provided

RENEWABLE ENERGY PROJECTS

No renewable energy projects were provided

TERTIARY PROGRAMMES OFFERED



GALEN UNIVERSITY

B.Sc.

	PERSONS ENROLLED	PERSONS GRADUATED
ENVIRONMENTAL SCIENCE	9	76

<https://galen.edu.bz/course/environmental-science/>

SAINT JOHN'S COLLEGE JUNIOR COLLEGE

ASSOCIATE DEGREE

	PERSONS ENROLLED	PERSONS GRADUATED
ENVIRONMENTAL SCIENCE	-	-

https://12c59f43-8389-f3cd-4d6a-92383e2134e8.files.usr.com/ugd/d25fb9_677cc23a837248d2ba4ba233b62e8ef7.pdf

UNIVERSITY OF BELIZE

ASSOCIATE DEGREE

	PERSONS ENROLLED	PERSONS GRADUATED
NATURAL RESOURCE MANAGEMENT	45	428

B.Sc.

	PERSONS ENROLLED	PERSONS GRADUATED
NATURAL RESOURCE MANAGEMENT	49	250

<https://www.ub.edu.bz/academics/academic-faculties/faculty-of-science-and-technology/>

GALEN UNIVERSITY

ASSOCIATE DEGREE

	PERSONS ENROLLED	PERSONS GRADUATED
NATURAL RESOURCE MANAGEMENT	52	275

<https://galen.edu.bz/course/environmental-science/>

SACRED HEART JUNIOR COLLEGE

ASSOCIATE DEGREE

	PERSONS ENROLLED	PERSONS GRADUATED
NATURAL RESOURCE MANAGEMENT	-	-

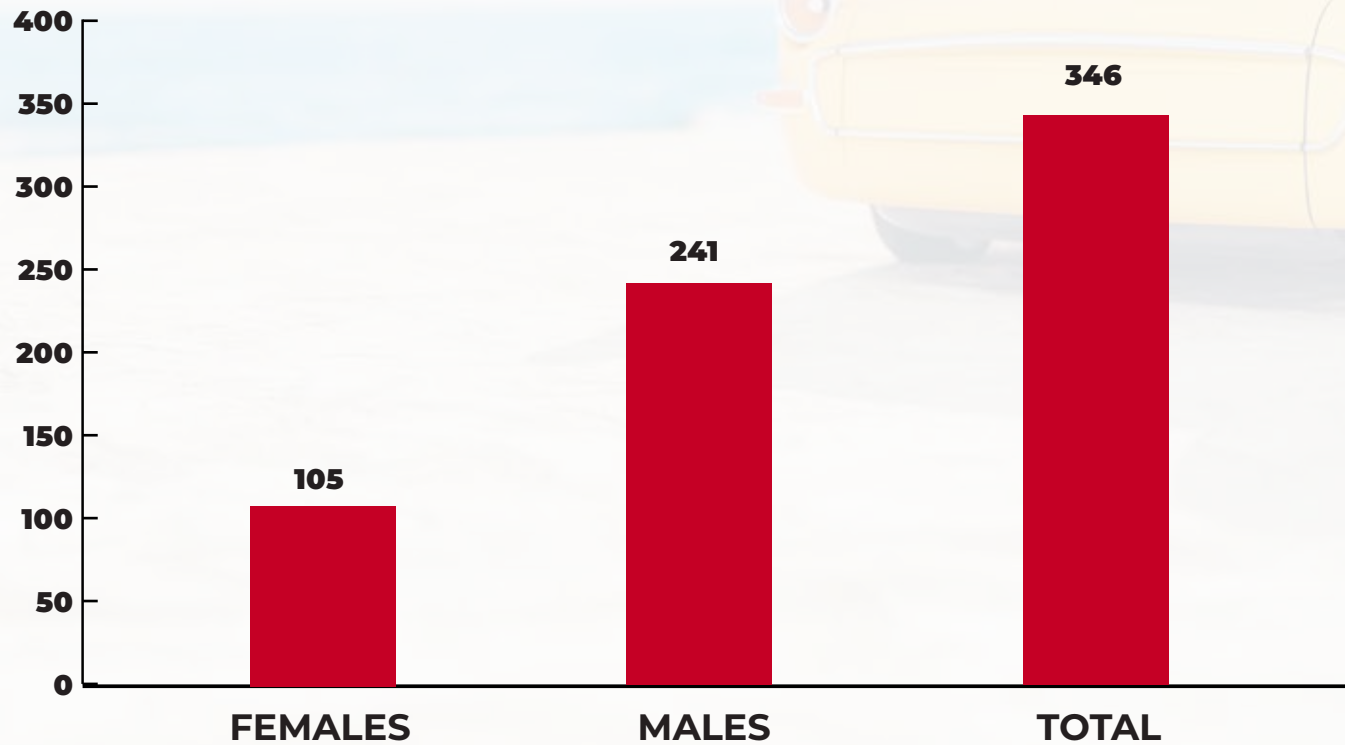
INSTITUTE FOR TECHNICAL VOCATIONAL EDUCATION AND TRAINING (ITVET) *

ASSOCIATE DEGREE

	PERSONS ENROLLED	PERSONS GRADUATED
AC AND REFRIGERATION ELECTRICAL TECHNICIAN	-	-



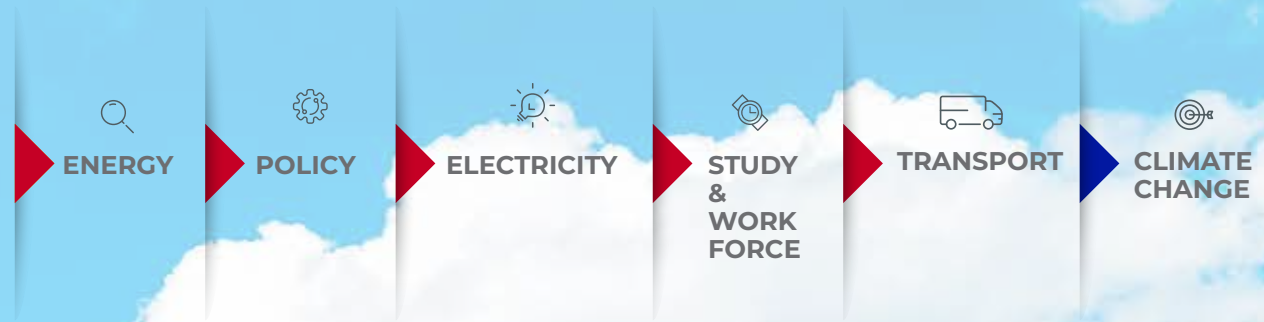
WORKFORCE



TRANSPORTATION SECTOR

No data was provided for transportation sector for 2020.

CLIMATE CHANGE FRAMEWORK



BELIZE NATIONAL CLIMATE CHANGE POLICY 2017 [12]

NATIONAL DETERMINED CONTRIBUTIONS [6]:

24 million metric tonnes of
CO₂e from 2014 to 2033

EMISSIONS REDUCTION TARGET [6]:

199.83 Gg CO₂-eq from
Renewable Energy
Generation by 2033 123.86
Gg CO₂-eq
from Transport by 2033

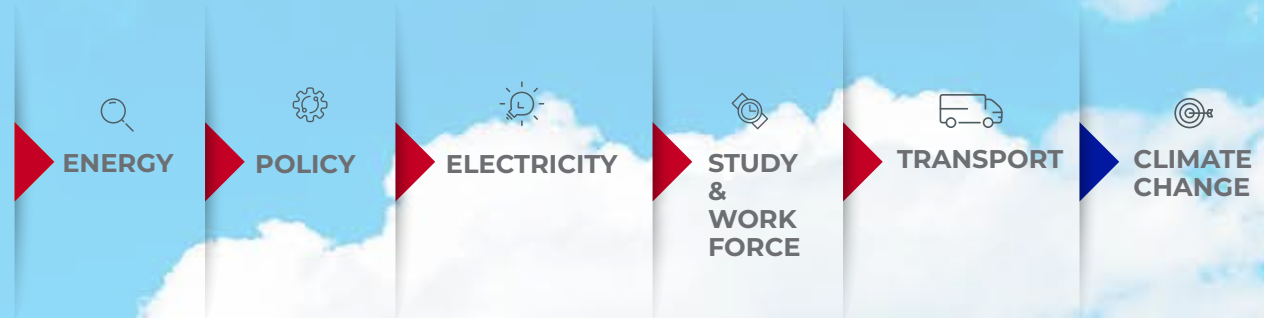
PRIORITY SECTORS FOR NDCs [6]

Forestry
Agriculture
Water Resources
Coastal and Marine Resources
Tourism
Fisheries and Aquaculture
Human Health

NATIONAL COMMUNICATIONS (NC) TO THE UNFCCC:

Belize's First National Communications [40]
Belize's Second National Communications [41]
Belize's Third National Communications [42]

CLIMATE CHANGE FRAMEWORK

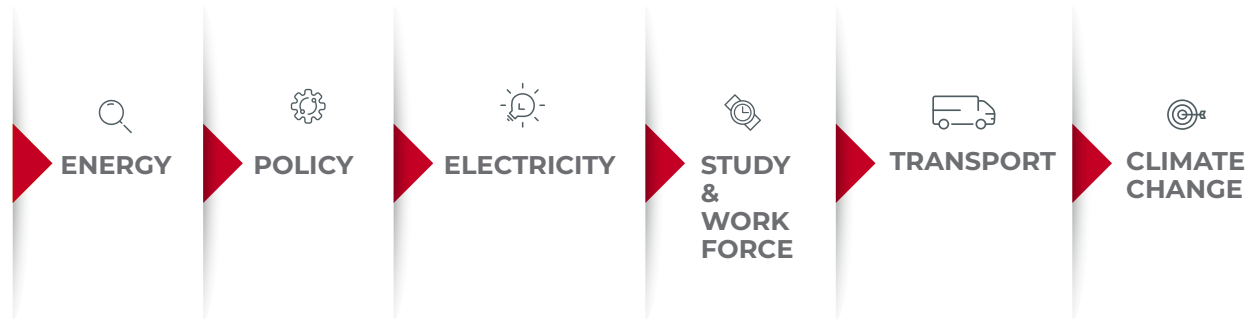


SUMMARY OF BELIZE GHG EMISSIONS BY POLLUTANT (Gg) [9]

EMISSIONS (Gg OF CO ₂ EQUIVALENT)			
CATEGORIES	CO ₂	CH ₄	N ₂ O
ENERGY	139.10	4.76	7.68
MANUFACTURING INDUSTRIES & CONSTRUCTION	NOT RECORDED	NOT RECORDED	NOT RECORDED
CIVIL AVIATION	12.80	0.002	0.11
ROAD TRANSPORTATION	519.60	3.26	7.68
RESIDENTIAL	144.80	4.69	0.88
NAVIGATION*	0.64	0.002	0.01
AGRICULTURE/ FORESTRY/ FISHING	NOT RECORDED	NOT RECORDED	NOT RECORDED
AVIATION INTERNATIONAL BUNKER	54.60	0.01	0.46
WASTE			NOT RECORDED

Gg represents giga grams*

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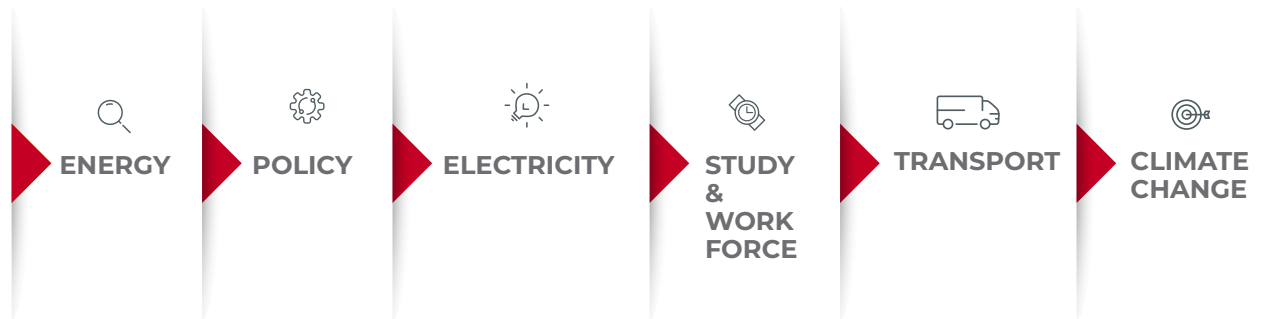
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