



2020 ENERGY REPORT CARD

GUYANA



CCREEE

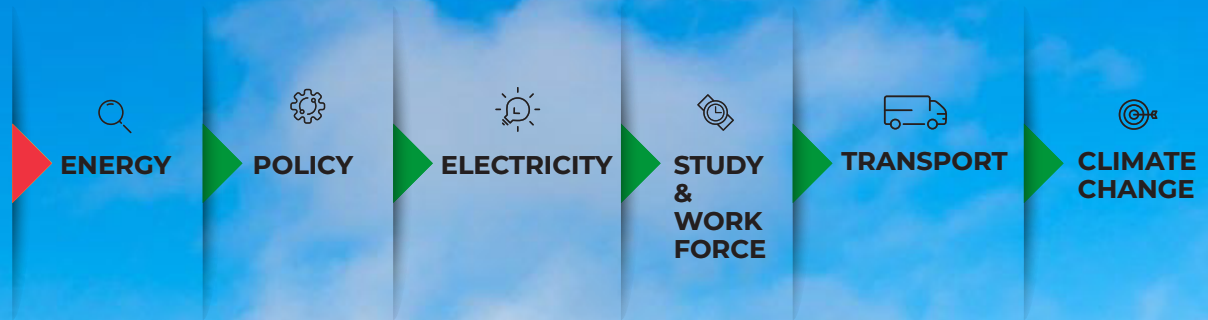
CARIBBEAN CENTRE FOR RENEWABLE ENERGY & ENERGY EFFICIENCY

AN INSTITUTION OF



www.ccreee.org





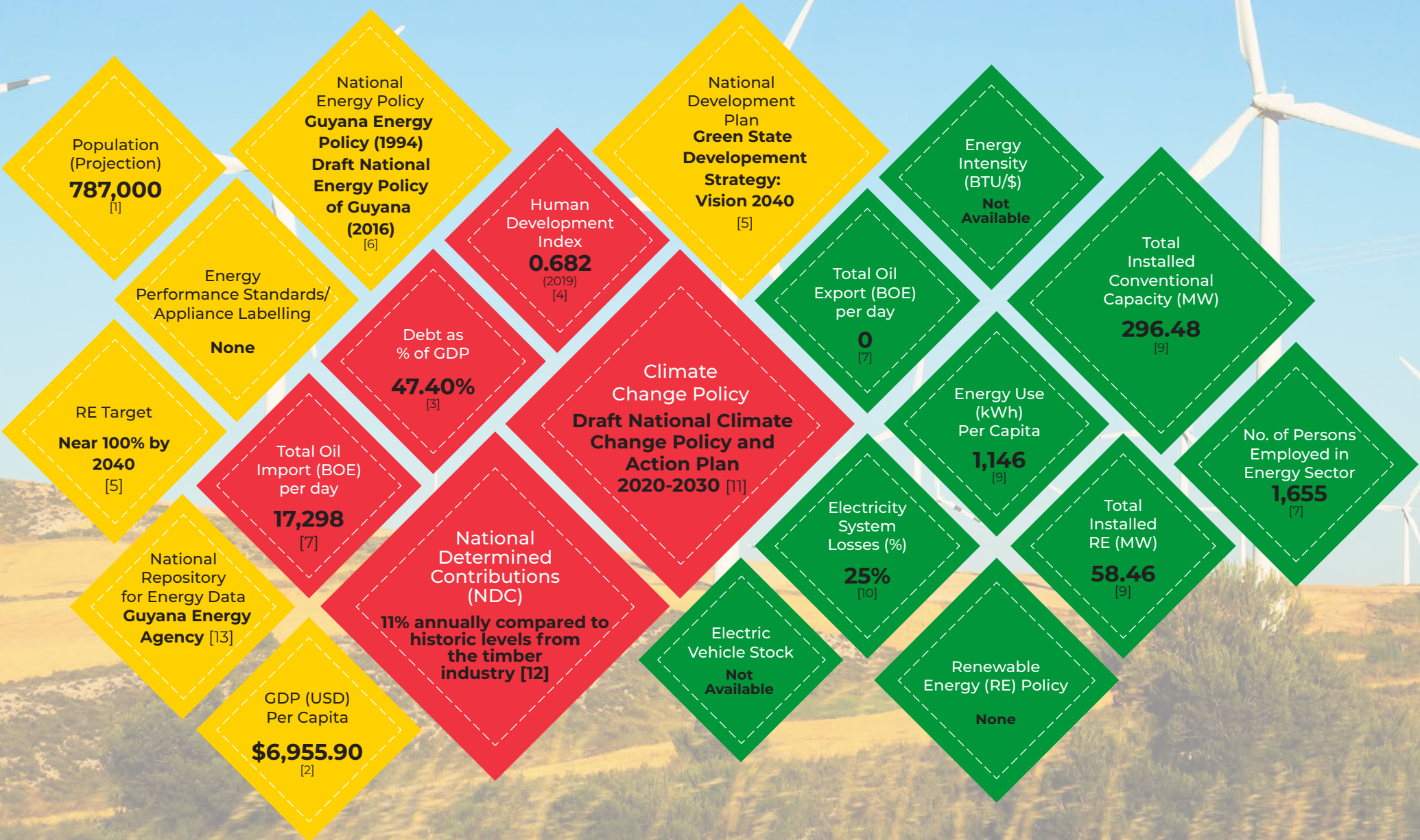
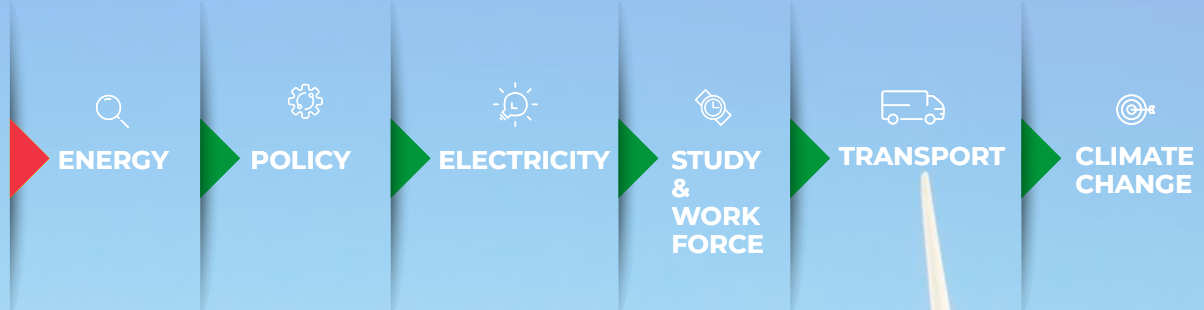
2020 ENERGY REPORT CARD

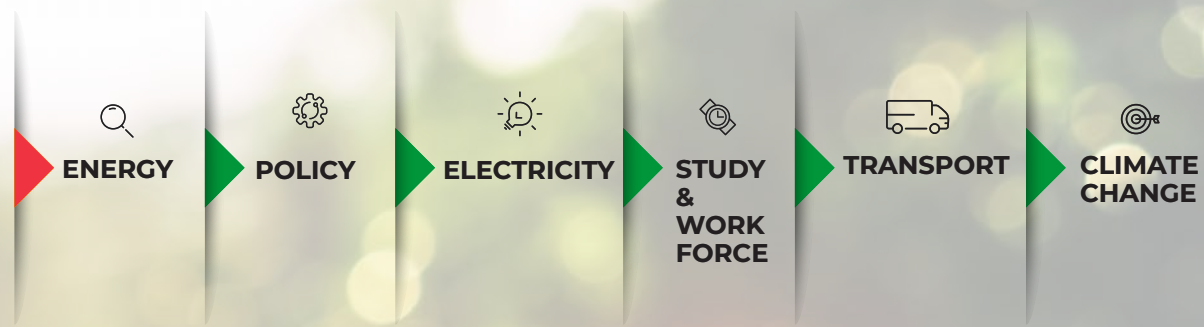
INTRODUCTION

This document presents Guyana's Energy Report Card (ERC) for 2020. The ERC provides an overview of the energy sector performance in Guyana. The ERC also includes energy efficiency, technical assistance, workforce, training, and capacity building information, subject to the availability of data.

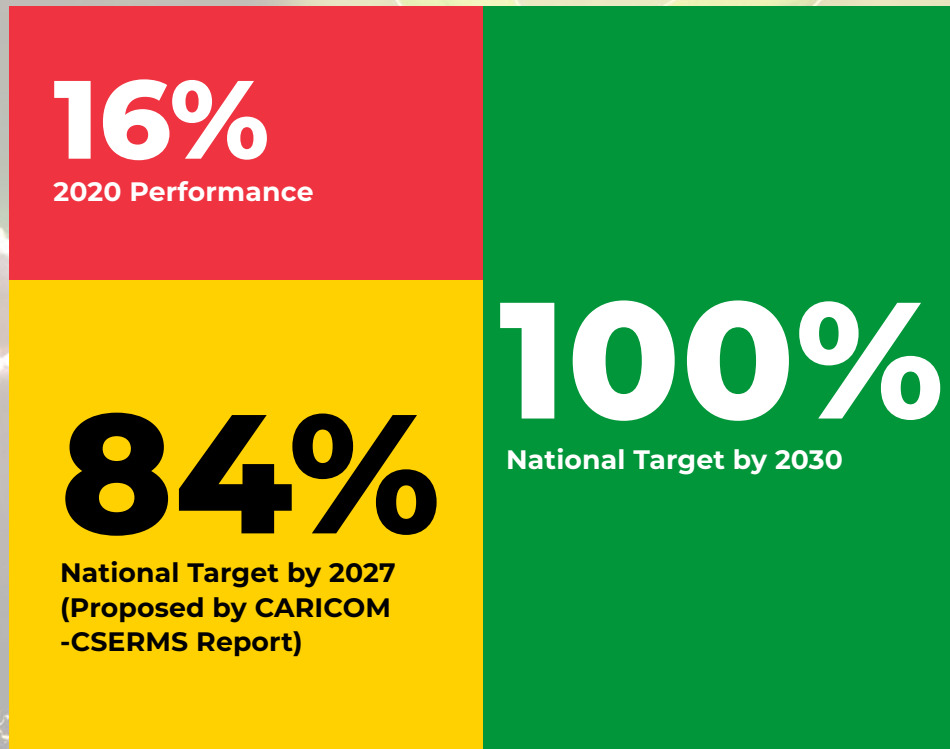
This ERC includes data and information that was provided by government ministries, agencies, or departments, with responsibility for energy, utilities, and statistical offices. The data collected was supplemented by internet research, author calculations and inferences. This data is a collection from 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

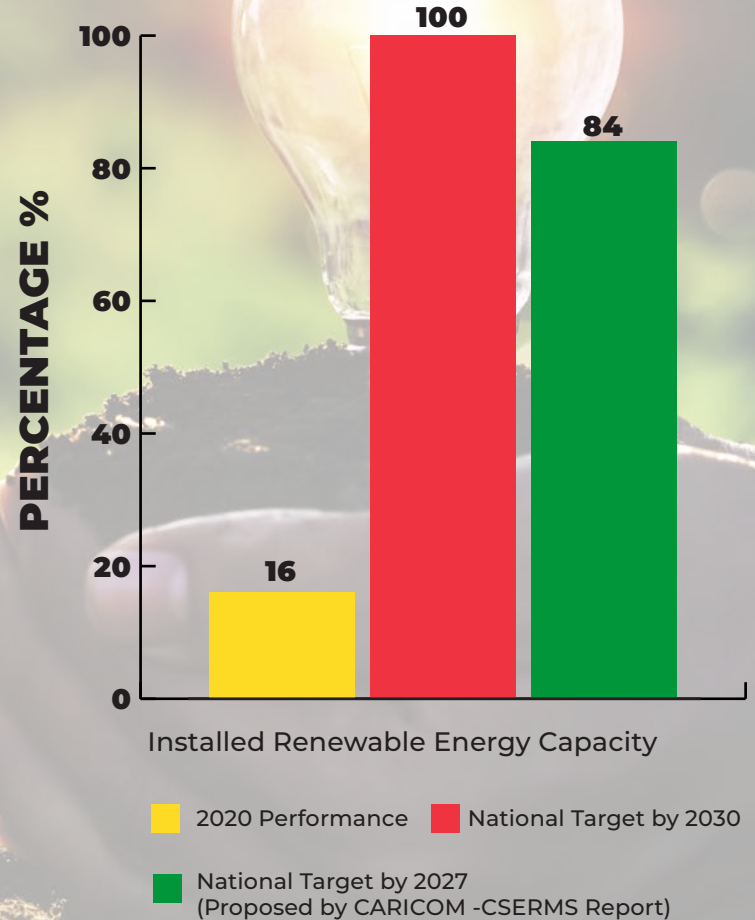




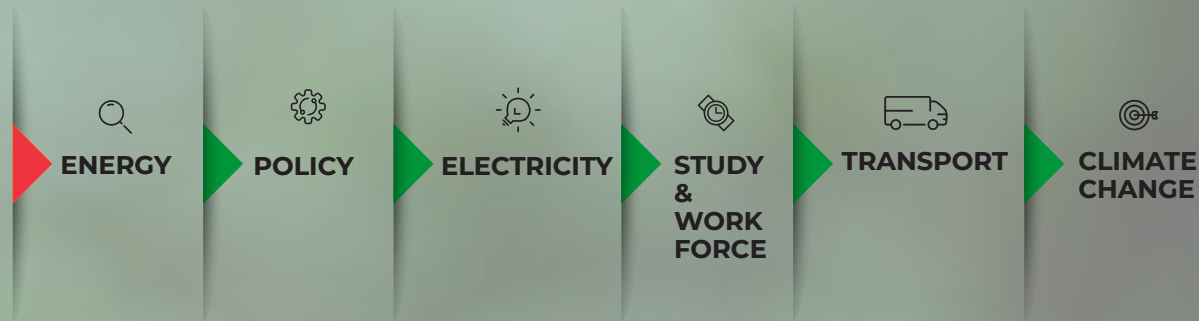
ENERGY SECTOR PERFORMANCE AGAINST TARGETS



RENEWABLE ENERGY PERFORMANCE AGAINST TARGETS



KEY ENERGY STAKEHOLDERS



Government Ministries, Departments and Agencies

The Guyana Energy Agency
The Ministry of Public Infrastructure [14]
The Ministry of Natural Resources, Department of Energy [15]
Office for Climate Change [15]

Fuel Suppliers

Guyana Oil Company [16]
SOL Petroleum Guyana [17]
RUBIS Guyana Inc. [18]

Electric Utility

Guyana Power and Light (GPL) [19]
Hinterland Electrification Inc. (HECI)
-Linden Electricity Company (LECI/LUSCSL)
-Kwakwani Utilities Inc (KUI)
-Lethem Power Company Inc. (LMPC)
-Mahdia Power and Light Inc. (MPL)
-Matthew's Ridge Power and Light Inc.
-Mabaruma Power and Light (MPL)
-Port Kaituma Power and Light Inc. (PKPL) [19,20]

Independent Power Producer

Linden Power Company (BOSAI) [15]

Electricity Regulator

Public Utilities Commission [19]

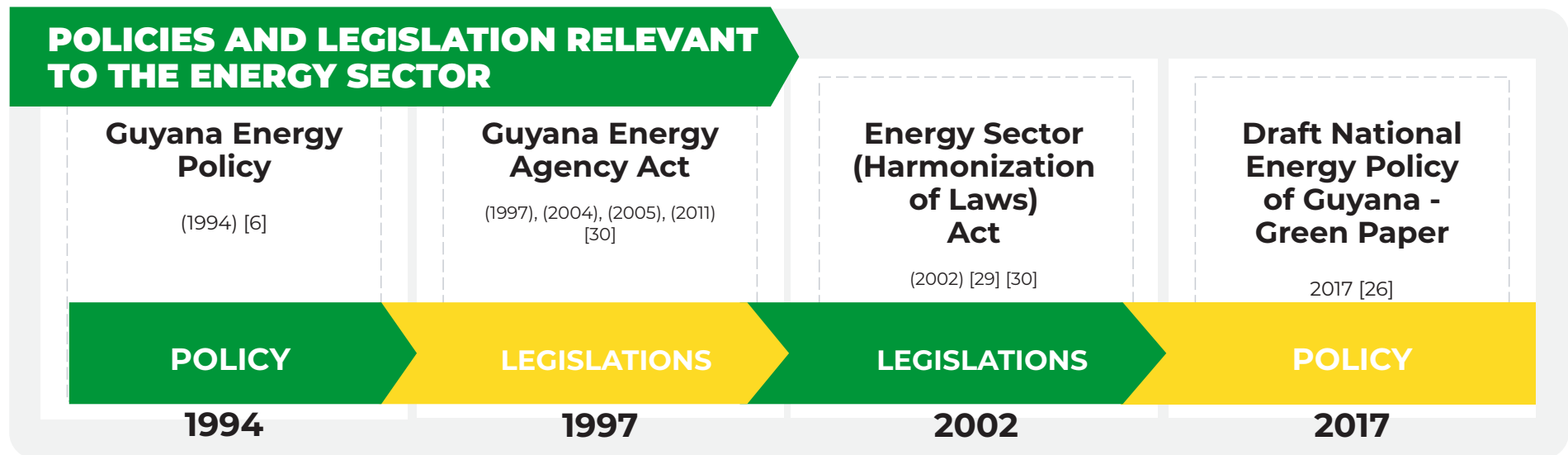
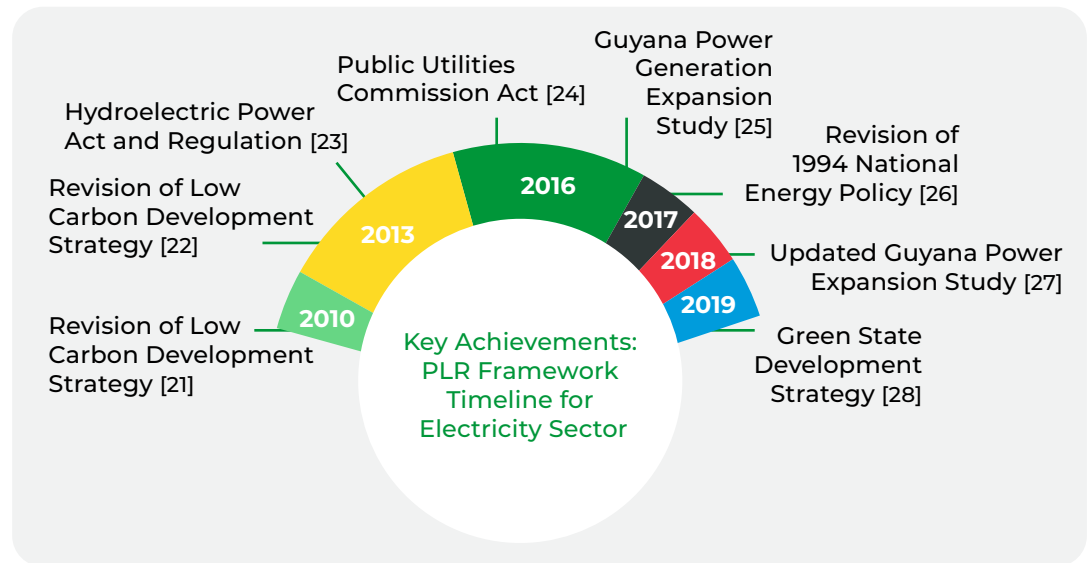
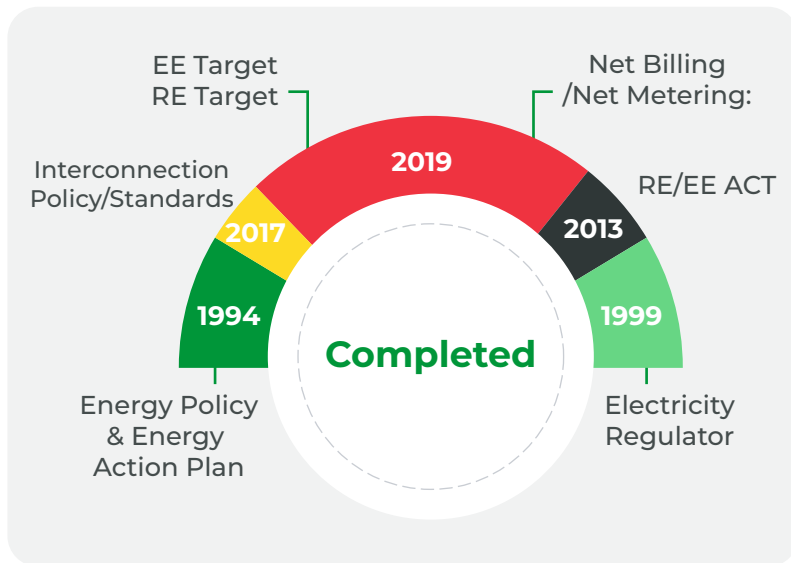
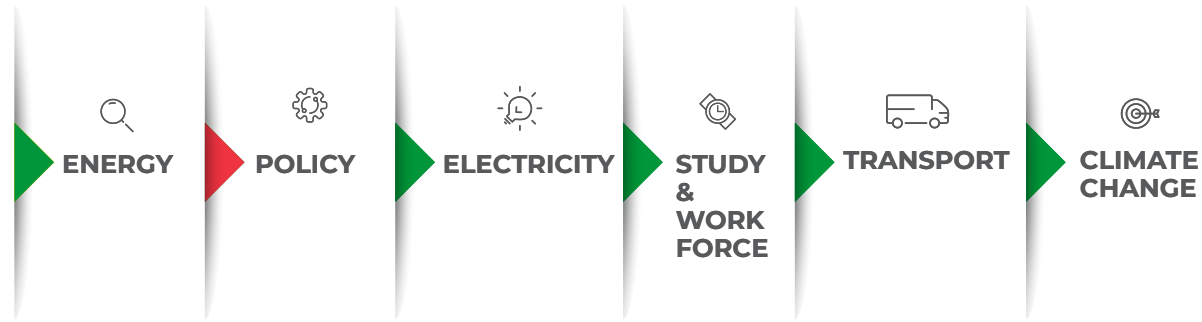
Transportation

Ministry of Public Infrastructure/Public Works
Guyana Civil Aviation Authority
Guyana National Road Safety Council [15]

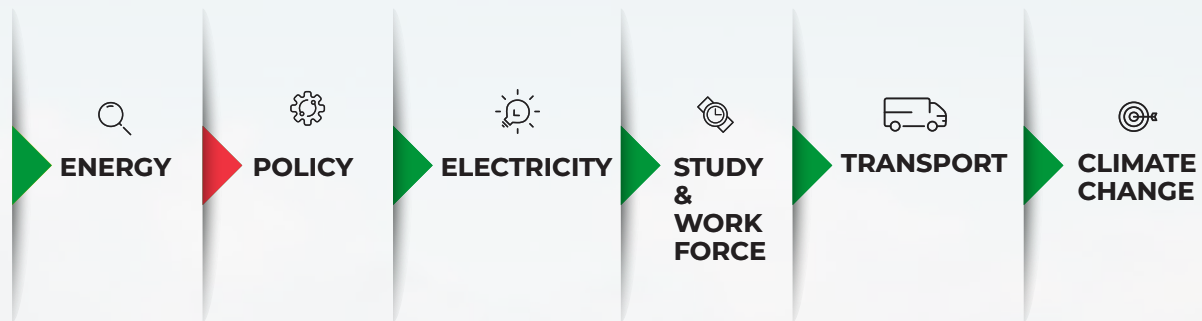
Other

Guyana Geology and Mines (GGMC) [15]
Environmental Protection Agency (EPA) [15]

POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK



POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK



POLICIES AND LEGISLATION RELEVANT TO THE TRANSPORTATION SECTOR

LEGISLATION & REGULATION

1998
Legislations
& Regulations

Guyana Shipping Act (1998) ^[31]

2002
Legislations
& Regulations

Energy Sector (Harmonization of Laws) Act (2002) ^[29]

Legislations
& Regulations

Value Added Tax Act ^[31]

2000
Legislations
& Regulations

Civil Aviation Act (2000) ^[31]

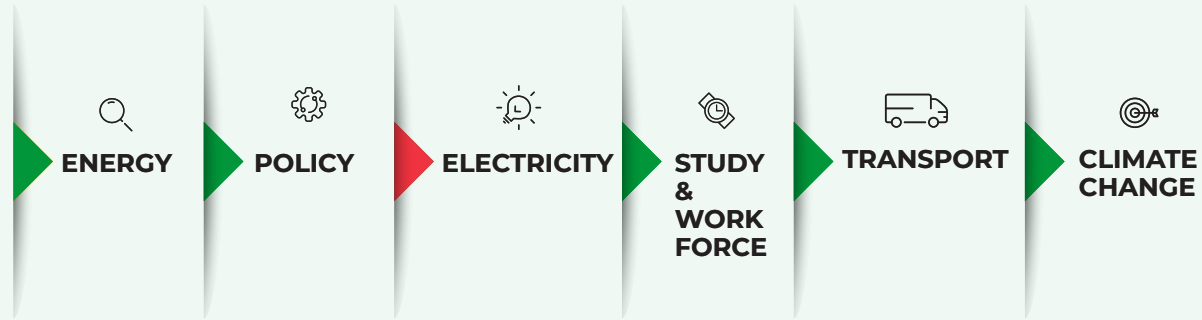
2000
Legislations
& Regulations

Customs Act ^[31]

2014
Legislations
& Regulations

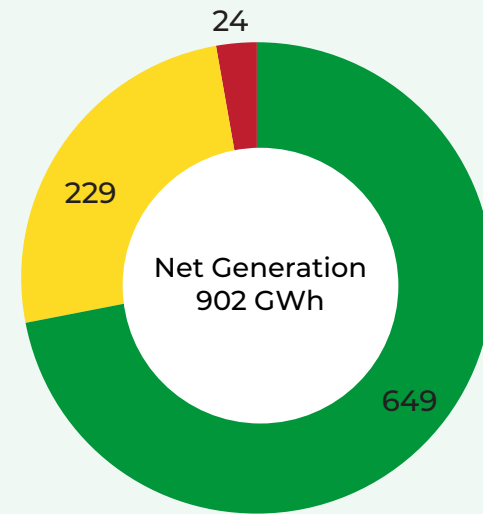
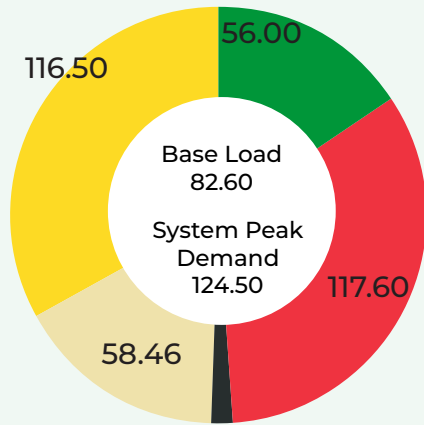
Petroleum and Petroleum Products Regulation (2014) ^[32]

ELECTRICITY & ENERGY EFFICIENCY



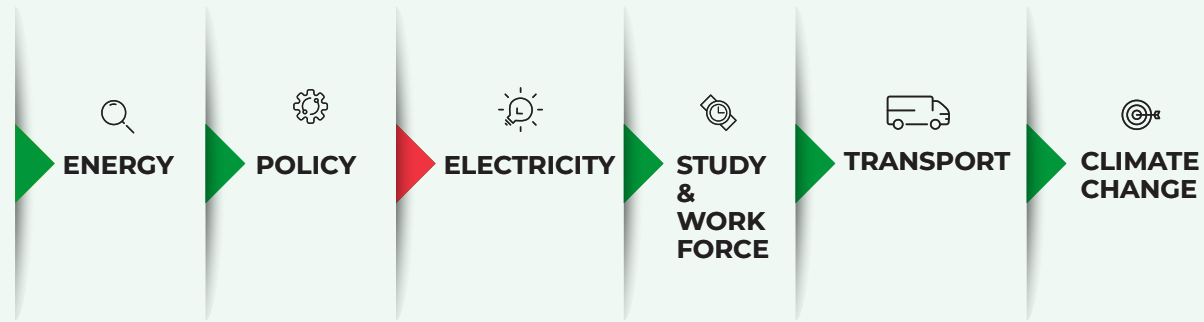
INSTALLED CAPACITY (MW)

ENERGY CONSUMPTION (GWh)

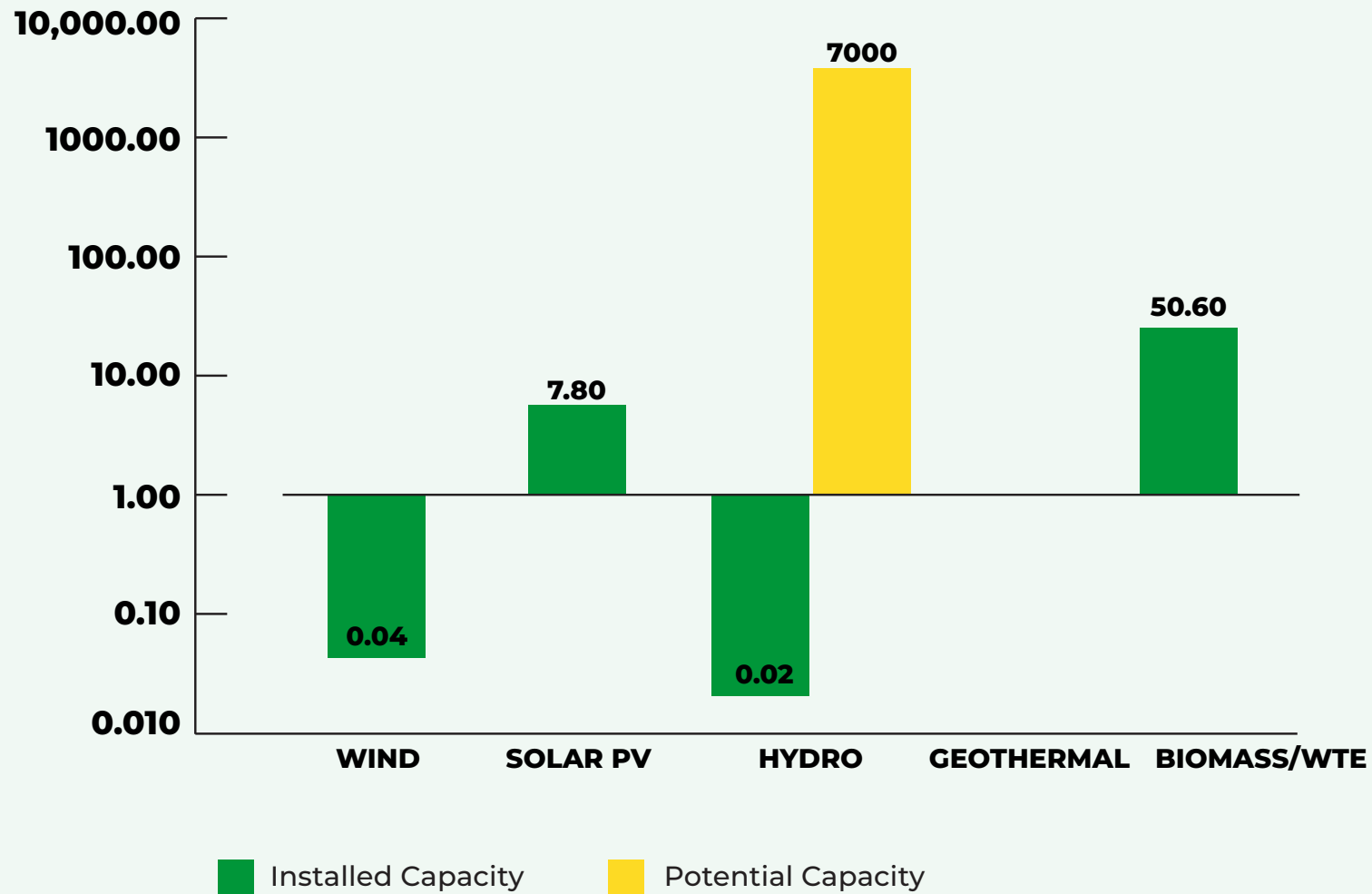


- Electric Utility Diesel
- Electric Utility Other
- RE
- Electric Utility HFO
- IPP's HFO/PP

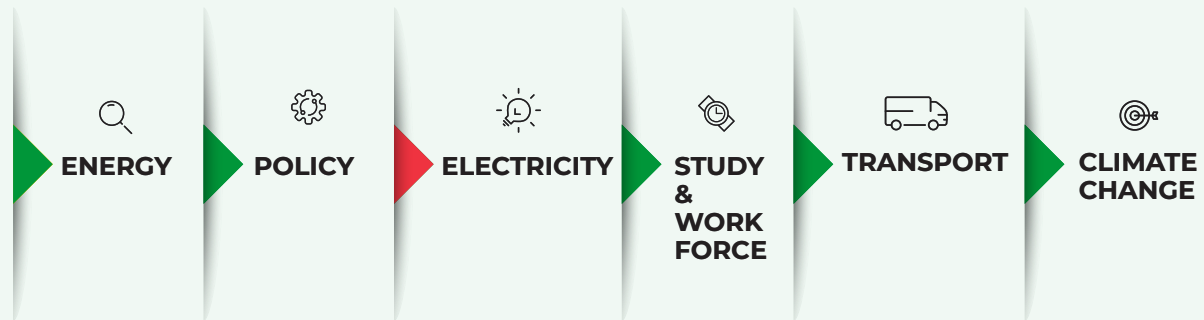
- Total Sales
- Losses
- Parasitic Load



RENEWABLE ENERGY CAPACITY (MW)



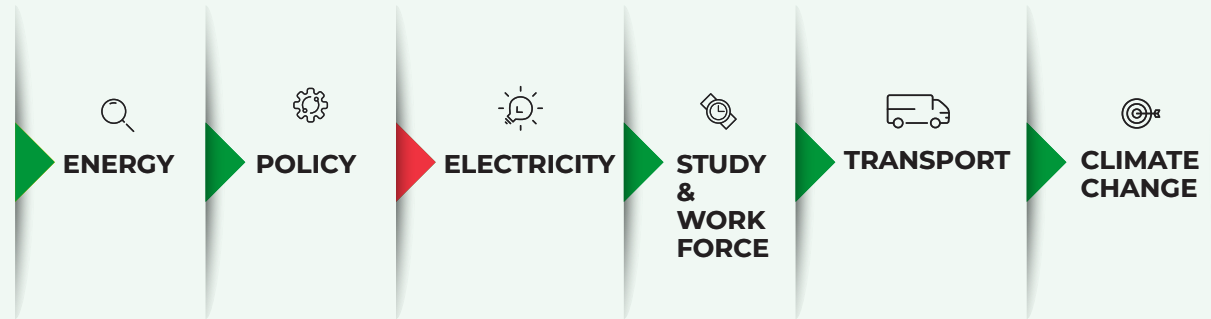
ELECTRICITY TARIFFS



ELECTRICITY TARIFFS: NON GOVERNMENT

RATE CLASS	MONTHLY CONSUMPTION / DEMAND (kWh)	TARIFF INCLUDING SUBCHARGE / (US\$/kWh)
RESIDENTIAL	A < 75	0.22
	A > 75	0.24
COMMERCIAL	B	0.32
INDUSTRIAL/HOTELS	C	0.29
	D	0.27
STREET LIGHTS	E	0.24

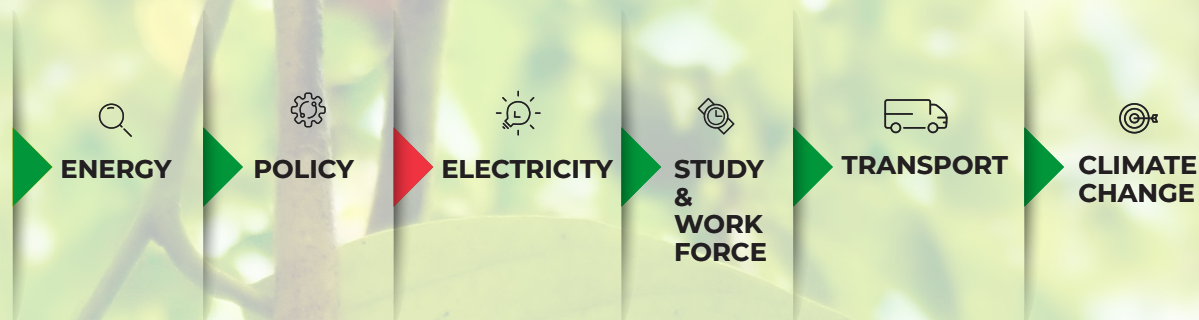
ELECTRICITY TARIFFS



ELECTRICITY TARIFFS: GOVERNMENT

RATE CLASS	MONTHLY CONSUMPTION / DEMAND (kWh)	TARIFF INCLUDING SUBCHARGE / (US\$/kWh)
RESIDENTIAL	GA < 75	0.27
	GA > 75	0.27
COMMERCIAL	GB	0.33
INDUSTRIAL	GC	0.30
	GD	0.29
STREET LIGHTS	GE	0.25

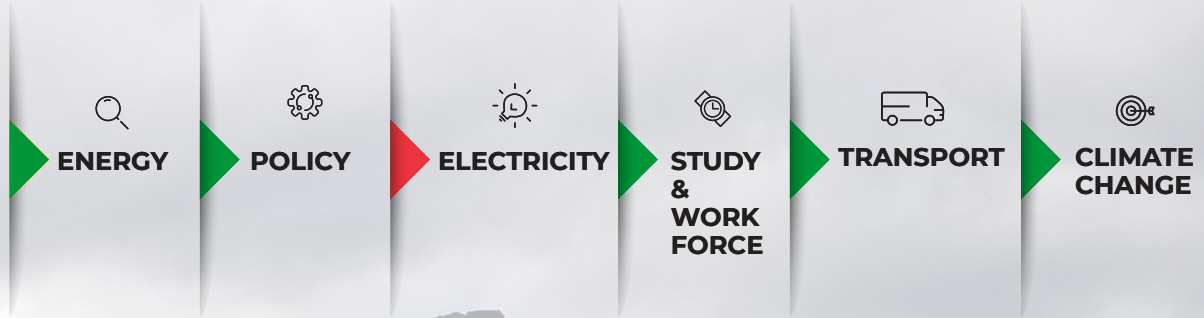
PROJECTS IN THE PIPELINE



TECHNICAL ASSISTANCE PROJECTS

DONOR FUNDING AND TECHNICAL ASSISTANCE LANDSCAPE	DONOR ORGANIZATION & BANKS	FUNDING AWARDS	YEAR
CANADA FUNDING FOR LOCAL INITIATIVES	CANADIAN HIGH COMMISSION	GYD \$2.4 MILLION	2019
BRITISH HIGH COMMISSION THROUGH THE UK PROSPERITY FUND	BRITISH HIGH COMMISSION	GYD \$8.1 MILLION	2018
ABU DHABI FUND FOR DEVELOPMENT (ADFD) AND INTERNATIONAL RENEWABLE ENERGY AGENCY	IRENA/AFD PROJECT FACILITY	\$8 MILLION USD	2019
GUYANA REDD+ INVESTMENT FUND (GRIF)	INTER-AMERICAN DEVELOPMENT BANK	\$150 MILLION USD	2014
REHABILITATION OF MOCO MOCO HYDRO-POWER STATION & CONSTRUCTION OF NEW HYDROPOWER	ISLAMIC DEVELOPMENT BANK	NOT AVAILABLE	2019
THE REHABILITATION OF THE HOSORORO HYDROPOWER FACILITY IN REGION 1	GIZ/REETA GOVERNMENT OF GUYANA	\$74 THOUSAND USD	2015

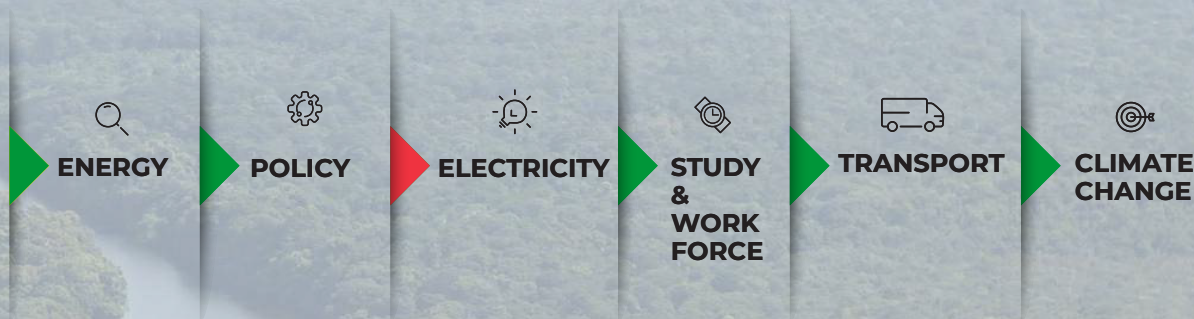
PROJECTS IN THE PIPELINE



ENERGY EFFICIENCY PROJECTS

ENERGY EFFICIENCY INITIATIVE	CONSUMPTION (KW) ASK IF ESTIMATED OR MEASURED	ENERGY EFFICIENCY LEGISLATION OR REGULATIONS	ENERGY SERVICE COMPANIES	CHANGE IN OLD/EXISTING INFRASTRUCTURE EXPECTED IN UPCOMING CALENDAR YEAR
STREET LIGHTNING		NONE	NO	NOT AVAILABLE
PUBLIC BUILDINGS	4.753 MWp	NONE	NO	NOT AVAILABLE

PROJECTS IN THE PIPELINE



RENEWABLE ENERGY PROJECTS

RENEWABLE ENERGY SOURCE	RESOURCE AND PROJECTS CAPACITY (MW)	DEVELOPMENT PARTNER	TOTAL ESTIMATED COST	FUNDING SOURCE
SOLAR PHOTO-VOLTAIC	72 kWp SOLAR MICRO GRID IN MORAİK OBAl	NOT AVAILABLE	NOT AVAILABLE	NOT AVAILABLE
WIND	500 W WIND TURBINE, 40 W LED LAMPS, 105 AH BATTERY	GUYANA ENERGY AGENCY W/ GUYANA TRAFFIC & HIGHWAY LIGHT UNIT	GYD \$247,553	NO SPECIFIC DETAILS GIVEN
HYDRO	20 KW HOSORORO HYDROPOWER PROJECT	GERMAN GOVERNMENT	USD \$165,175	GIZ/REETA AND GOVERNMENT OF GUYANA
WASTE TO ENERGY	NOT AVAILABLE	GOVERNMENT OF GUYANA AND OTHER PRIVATE SECTOR STAKEHOLDERS	NOT AVAILABLE	HOSKINSON GROUP
BIOFUELS	GUYSUCO BIOETHANOL PLANT	WHITEFOX TECH AND GREEN SOCIAL BENEFICIARIES	GYD \$85 MILLION	INTER-AMERICAN BANK AND GUYSUCO
BIOMASS	UNIVERSITY OF GUYANA GASIFIER PROJECT	EXXON MOBILE, PESCADO & GUYANA GEOLOGY&MINES	GYD \$12.4 MILLION	EXXONMOBIL GUYANA GEOLOGY AND MINES COMMISSION

TERTIARY PROGRAMMES OFFERED



UNIVERSITY OF GUYANA

B.Sc.

CHEMISTRY	PERSONS ENROLLED	PERSONS GRADUATED
	84	26

<https://fns.uog.edu.gy/srms/departments/5/programmes/813/details>

M.Sc.

RENEWABLE ENERGY	PERSONS ENROLLED	PERSONS GRADUATED
	-	-

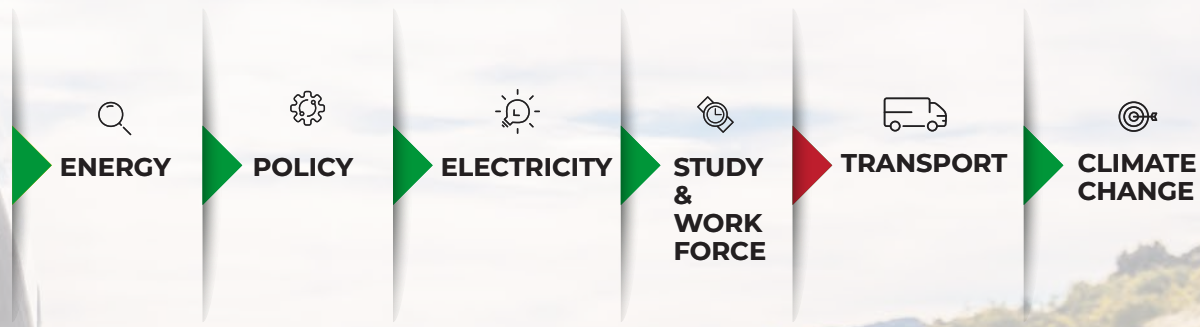
<https://fees.uog.edu.gy/srms/departments/8/programmes/>

WORKFORCE

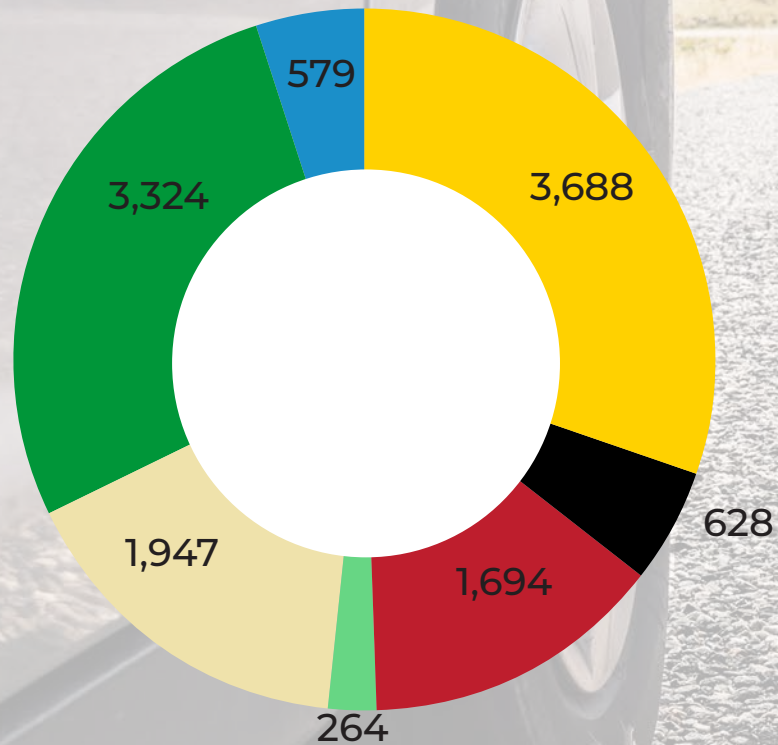
1,655 EMPLOYEES WERE REPORTED ACROSS THE GUYANA ENERGY AGENCY AND GUYANA POWER AND LIGHT.

THIS INFORMATION WAS NOT DISAGGREGATED BY GENDER.

TRANSPORTATION SECTOR

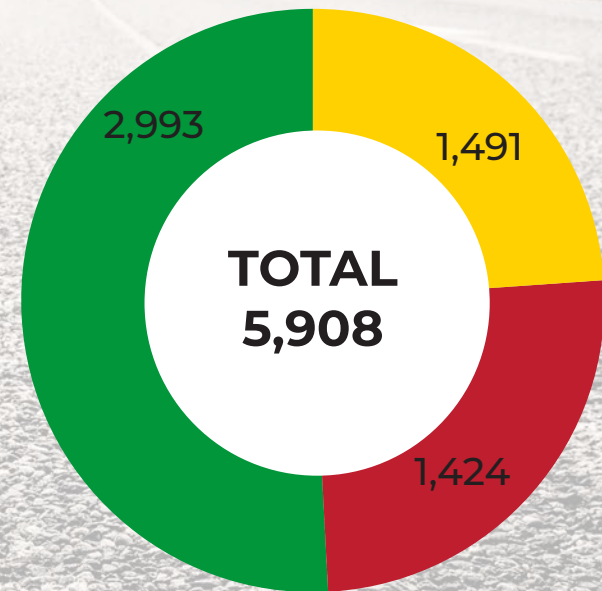


REGISTERED VEHICLES



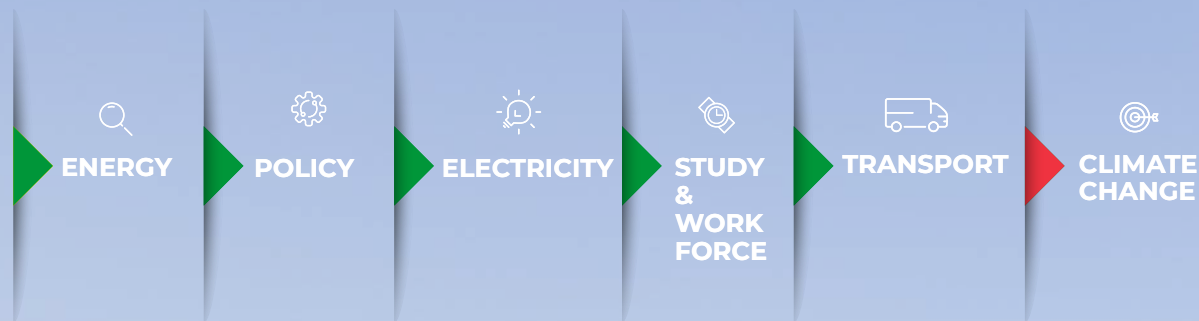
- Cars
- Motorcycles
- Lorries & Vans
- Tractors
- Trailers
- Buses
- Others

QUANTITY (BOE)



- Gasoline (Road)
- Diesel (Road)
- HFO Bunker and ADO

CLIMATE CHANGE FRAMEWORK



NATIONAL CLIMATE CHANGE POLICY AND ACTION PLAN 2020-2030 [11]

LOW CARBON DEVELOPMENT STRATEGY (2013) [22]

CLIMATE RESILIENT STRATEGY AND ACTION PLAN (2015) [33]

NATIONAL DETERMINED CONTRIBUTIONS

11% annually compared to historic levels from the timber industry.

*(Note that Guyana is a net carbon sink) [12]

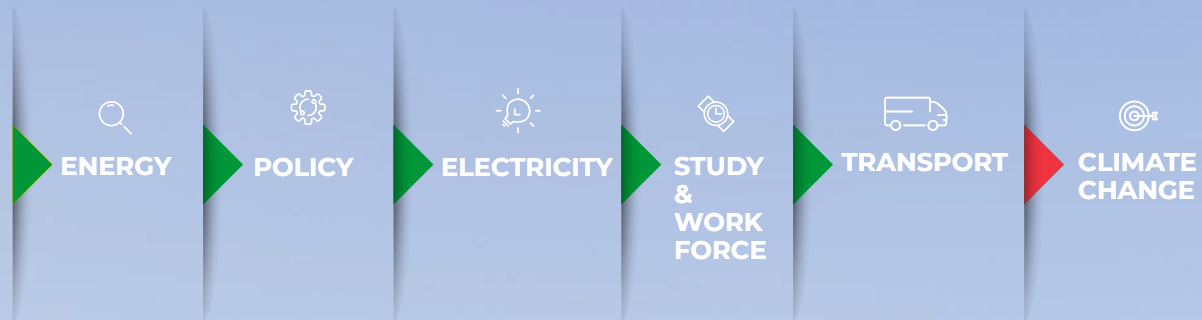
PRIORITY SECTORS FOR NDCs

Forestry (including Avoided Deforestation), and Energy [12]

NATIONAL COMMUNICATIONS (NC) TO THE UNFCCC:

Initial National Communication (2002) [34]
Second National Communication (2012) [35]

CLIMATE CHANGE FRAMEWORK



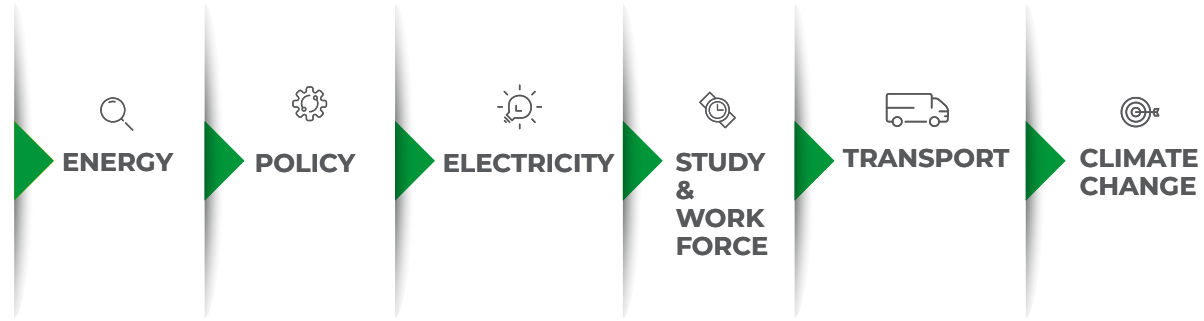
SUMMARY OF GUYANA'S GHG EMISSIONS [12]

EMISSIONS (Gg* CO₂ EQUIVALENT)

CATEGORIES	CO ₂	CH ₄	N ₂ O	NOx	CO	NMVOCS	SO ₂
ENERGY	792.70	0.22	0.03	2.69	6.34	0.36	8.46
MANUFACTURING INDUSTRIES & CONSTRUCTION	61.10			0.16	0.03	0.01	0.67
CIVIL AVIATION	52.90			7.33	58.48	11.04	0.47
ROAD TRANSPORTATION	752.30	0.24	0.04				
RESIDENTIAL	87.60	0.32		8.74	17.70	2.66	7.09
COMMERCIAL	11.50						0.19
NAVIGATION							
AGRICULTURE / FORESTRY / FISHING	517.10	0.07					

Gg represents giga grams*

REFERENCES

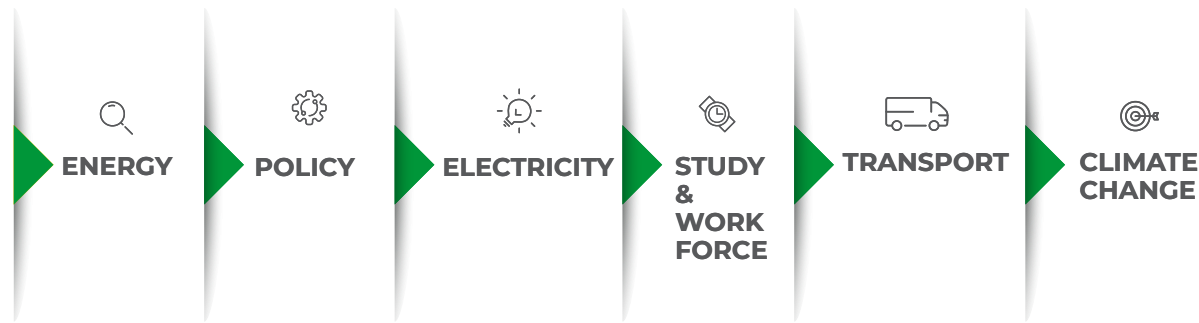


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