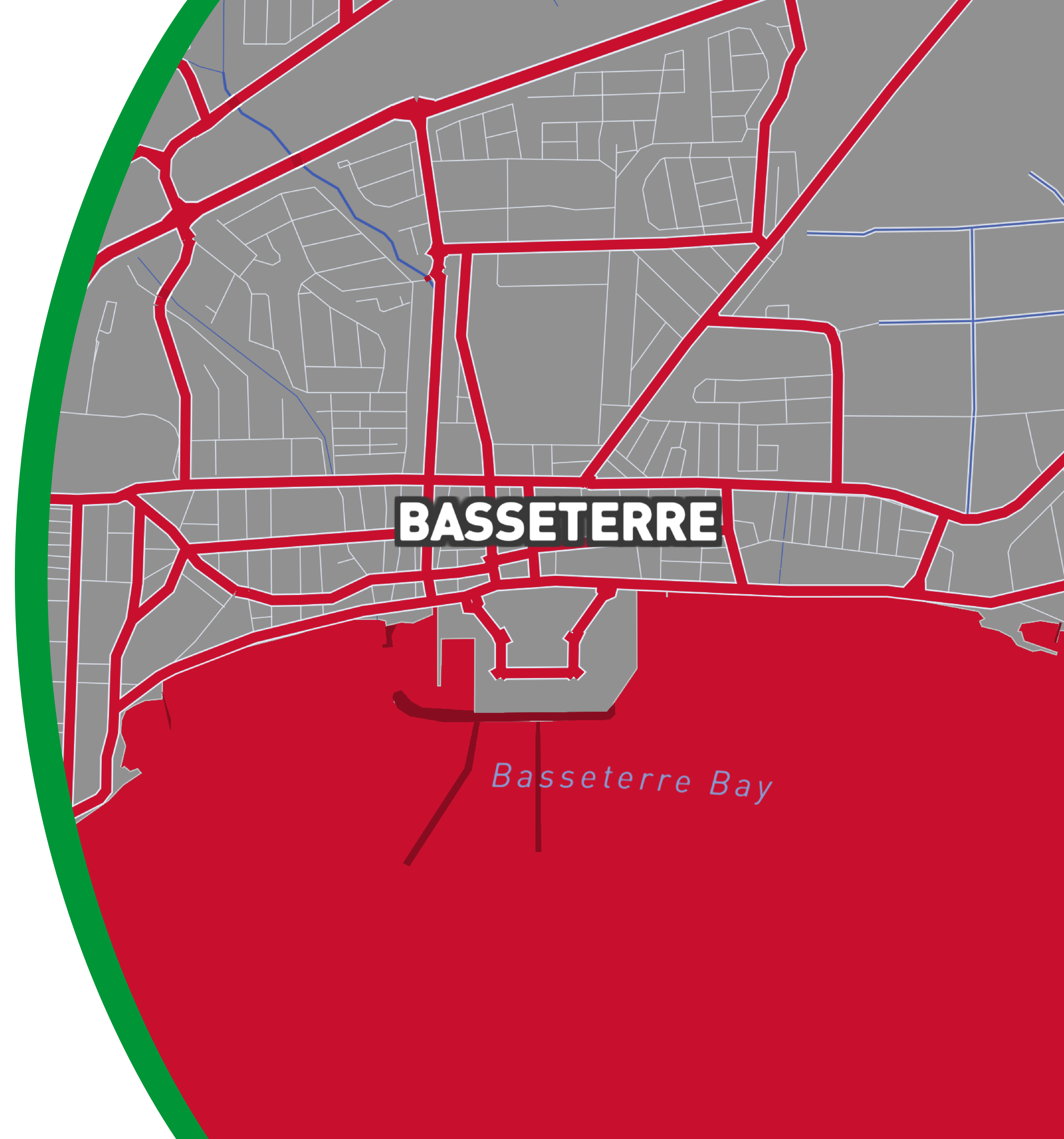


# ST. KITTS AND NEVIS

ENERGY REPORT CARD (ERC) FOR 2022



**BASSETERRE**

*Basseterre Bay*





# INTRODUCTION



## **This is the Energy Report Card (ERC) for 2022 for St. Kitts and Nevis.**

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.

### **Correction of Errors**

If a substantive error is detected after the ERC is disseminated, the CCREEE will make corrections and issue an errata notice, or other notification as appropriate. Also, the information contained within the ERC may be revised, after initial dissemination to reflect more complete information or other significant changes in the underlying data. The ERC may, from time to time, include information that is preliminary and is expected to be revised, or information that is revised from previously disseminated versions. In such instances, those cases are clearly noted.

### **Requests for Correction**

The CCREEE has established administrative mechanisms to allow persons to seek and obtain, where appropriate, legitimate correction(s) to information maintained and disseminated through the ERC. Any request for corrections should be sent to: [energyreportcard@ccreee.org](mailto:energyreportcard@ccreee.org), under the subject: REQUEST FOR CORRECTION TO ERC 2022 FOR ST. KITTS AND NEVIS.

### **Acknowledgements**

The CCREEE acknowledges the contributions of the Ministry of Public Infrastructure, Energy and Utilities; Domestic Transport, St. Kitts and Nevis, and thanks Denasio Frank, Energy Officer in the Energy Unit of the Ministry, for his supervision of the intern, Vlasean Smithen, who supported the preparation of the ERC.



# ENERGY SECTOR SUMMARY

## + SOCIOECONOMIC POLICIES

None<sup>3</sup>

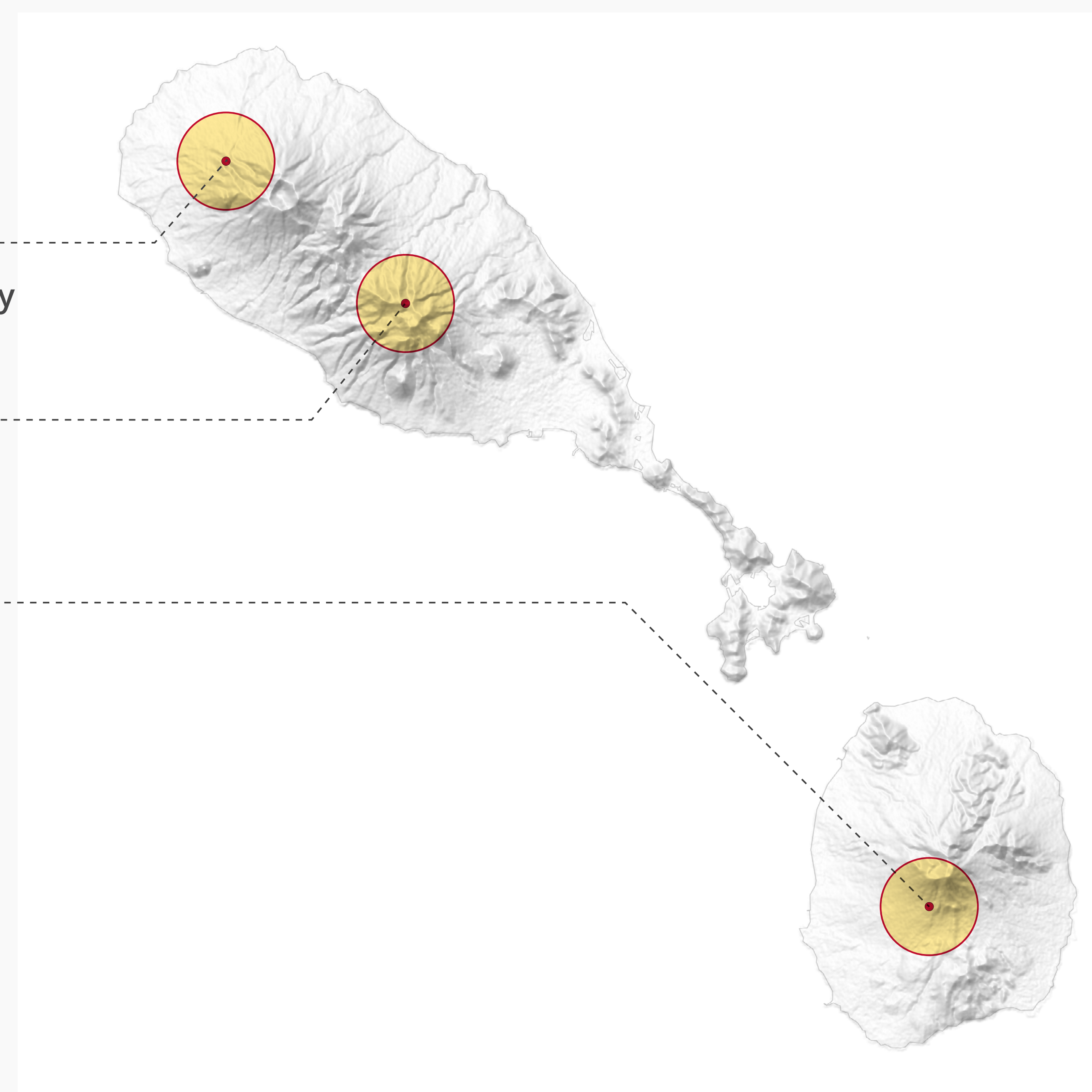
National Development Plan/ Overall Country Development Strategy

**St Kitts and Nevis Revised National Energy Policy (2014)** <sup>[6]</sup>

National Energy Policy

**Renewable Energy Policy** <sup>[7]</sup>

Renewable Energy (RE) Policy



## + SOCIOECONOMICS

Population (Estimation)	<b>49,841</b> <sup>[1]</sup>
GDP (USD)	<b>\$ 965,638,865</b> <sup>[2]</sup>
GDP (USD) Per Capita	<b>\$ 19,355.46</b> <sup>1 [3]</sup>
Gross National Income (GNI) Per Capita (USD)	<b>\$18,584.70</b> <sup>2 [3]</sup>
Debt as % of GDP	<b>78.06%</b> <sup>[4]</sup>
Human Development Index	<b>0.77</b> <sup>[5]</sup>
RE Target	<b>100% electricity generation by renewables by 2030</b> <sup>[8]</sup>

Total Installed Conventional Capacity (MW)	<b>76 MW</b> <sup>[11] [12]</sup>
Total Installed RE (MW)	<b>2.7 MW</b> <sup>[11] [12]</sup>
Electricity System Losses (%)	<b>4.10%</b> <sup>[11] [12]</sup>
Energy Use (kWh) Per Capita	<b>2,924 kWh</b>
Total Oil Import (BOE) per day	<b>23.3</b> <sup>[3]</sup>
National Repository for Energy Data	<b>None</b>

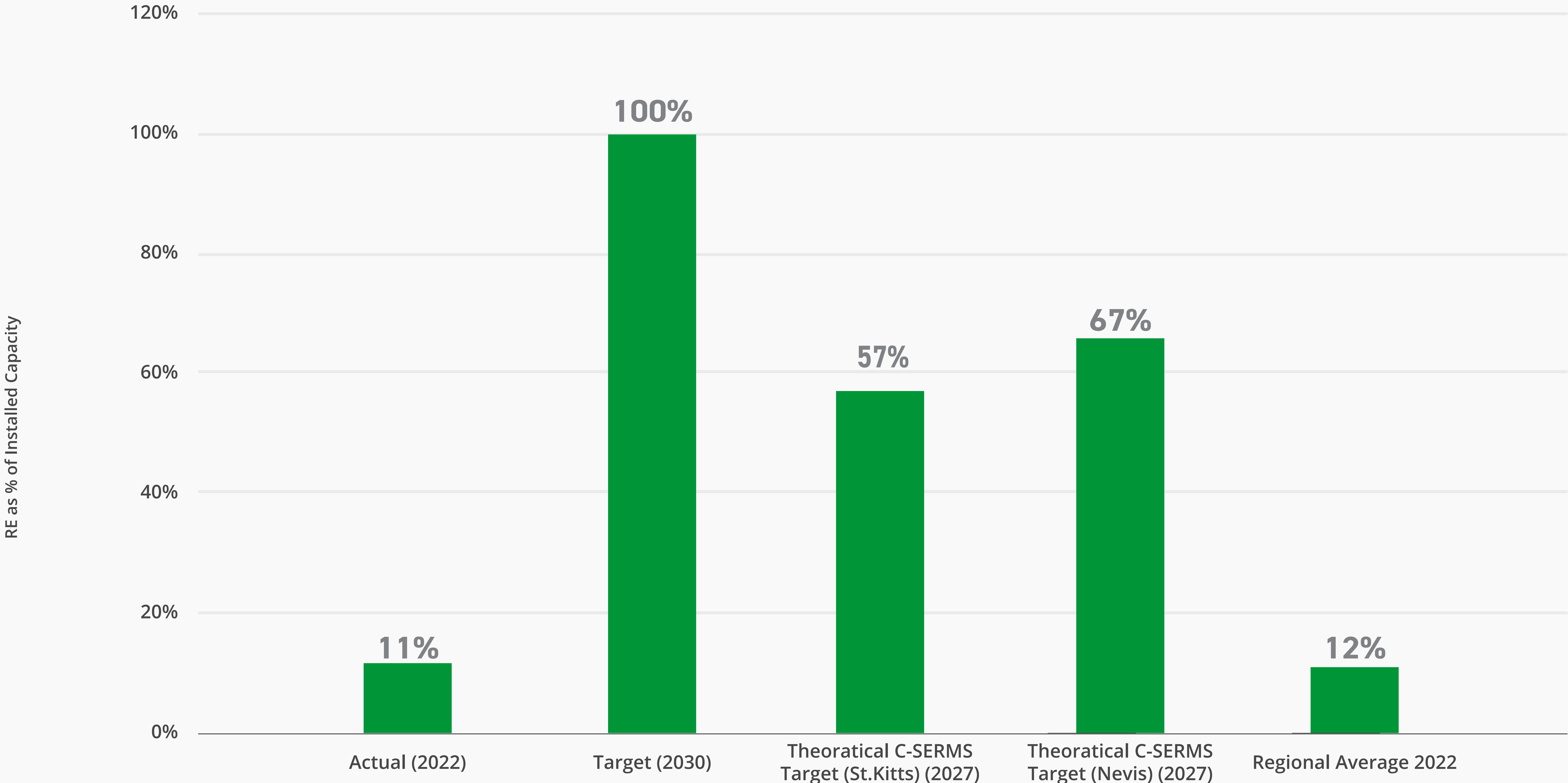
## + OTHER ENERGY SECTOR SUB-POLICIES

Climate Change Policy	<b>St. Kitts and Nevis National Climate Change Policy [9]</b> <b>The National Climate Change Adaptation Strategy for Saint Christopher and Nevis [10]</b>
National Determined Contributions (NDC) <sup>8</sup>	<ul style="list-style-type: none"> <li>• <b>Transition to 100% renewable energy in power generation*</b></li> <li>• <b>Improve efficiency in transmission and distribution of electricity</b></li> <li>• <b>Electrification of 2% of the total vehicle</b></li> <li>• <b>Development of EV infrastructure</b></li> </ul> <p><b>*35 MW of renewable energy will be sourced from a solar farm that will be constructed through private capital, beyond which, all other interventions are conditional.</b></p>
Energy Performance Standards/Appliance Labelling	<b>CREEBC</b> <sup>4</sup>

1. Preliminary Estimate  
 2. Preliminary Estimate  
 3. The National Development Plan was updated in 2023 to the National Development Planning Framework (2023-2033) (The National Development Planning Framework is not available for public viewing).  
 4. In 2021 St. Kitts and Nevis adopted the CREEBC.



### RENEWABLE ENERGY INSTALLED CAPACITY AGAINST TARGETS





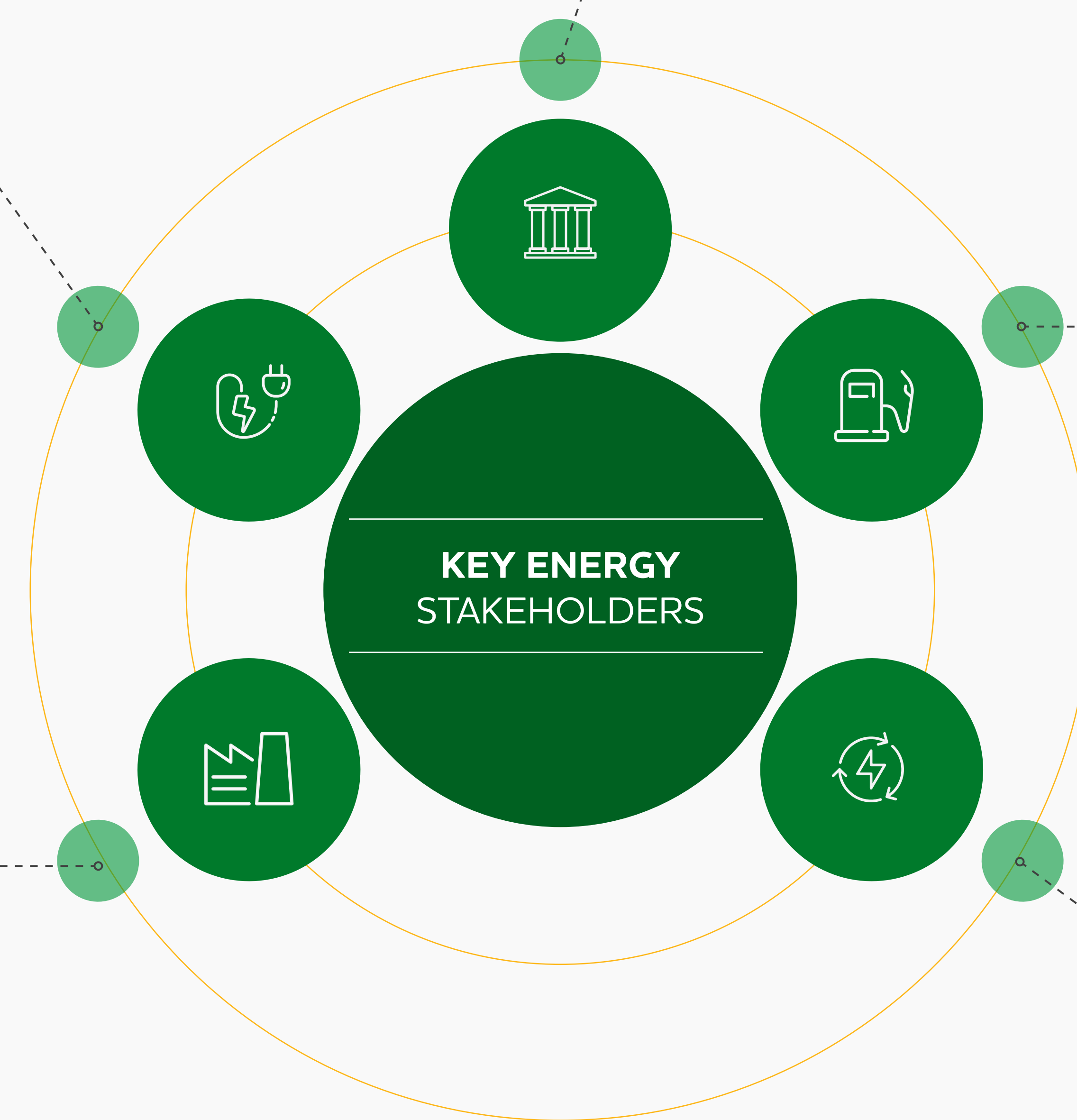
# KEY ENERGY STAKEHOLDERS

## Electricity Regulator

None

## Independent Power Producer

None



## Government Ministries, Departments and Agencies

Ministry of Public Infrastructure, Energy, Utilities, and Domestic Transport <sup>[14]</sup>

- Energy Unit <sup>[15]</sup>

Ministry of Sustainable Development, Environment, Climate Action and Constituency Empowerment <sup>[16]</sup>

- Department of Statistics
- Department of Climate Action
- Department of Environment

Ministry of Tourism, Civil Aviation, International Transport, Employment and Labour and Urban Development <sup>[17]</sup>

- Department of Maritime Affairs

## Fuel Importers & Suppliers

Delta Petroleum <sup>[18]</sup>

Sol EC Limited (St. Kitts and Nevis) <sup>[19]</sup>

## Electric Utility

St. Kitts Electricity Company Limited (SKELEC) <sup>[20]</sup>

Nevis Electricity Company Limited (NEVLEC) <sup>[21]</sup>



# POLICY, LEGAL AND REGULATORY (PLR) FRAMEWORK

## POICIES RELEVANT TO THE ENERGY SECTOR

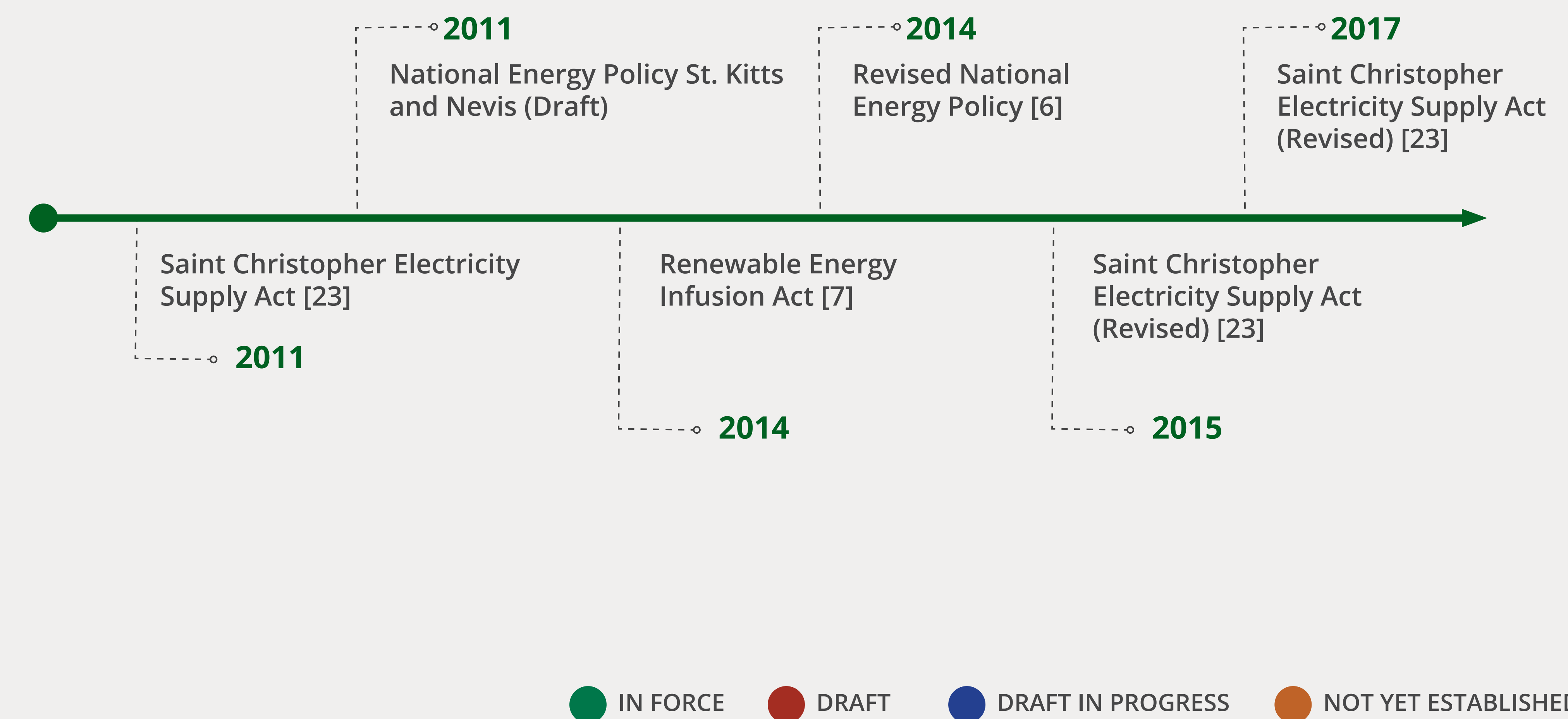
<b>2003</b>	<b>Medium Term Economic Strategy 2003 - 2005</b> <sup>5</sup>	
<b>2014</b>	<b>National Energy Policy [6]</b> ● The Policy outlines the framework for the country to become energy secured and urges the diversification of the energy mix. The use of renewable energy to including solar, geothermal and waste-to-energy is encouraged as the country makes a transition in the energy sector. The Policy addresses the electricity sector and the transportation sector in the transition.	
<b>2017</b>	<b>Integrated Resource Plan [24]</b> ● The Plan evaluates supply resource options in response to demand growth on a comprehensive basis and provides an analysis of the options.	
<b>2021</b>	<b>Renewable Energy Policy [7]</b> ● <b>IRRP</b> ● Supports the Energy Policy and provides a framework to promote the integration of renewable energy into the grid.	

## LEGISLATION RELEVANT TO THE ENERGY SECTOR

<b>2009</b>	<b>Public Utilities Commission Ordinance [25]</b> ● An Ordinance to make provision for the establishment, functions and procedures of a Public Utilities Commission for Nevis.
<b>2009</b>	<b>Nevis Electricity Ordinance [26]</b> ● This Act allows for the provision of the supply of electricity on the island of Nevis by a public supplier and details the regulations and process to obtain the supply of electricity.
<b>2008</b>	<b>Nevis Geothermal Resources Development Ordinance [27] (Revised 2009)</b> ● The Ordinance allows for the survey, exploration, drilling, productions and use of geothermal resources, in which entities may apply for a license. Any benefits gained from geothermal resources would be owned be the Government of St. Kitts and Nevis.
<b>2011</b>	<b>St Christopher Electricity Supply Act [28] (Amended 2015) [29]</b> ● Provides for the establishment of the legal framework ruling the electricity sector, to make provisions for the promotion of renewable energy sources and related matters.

	YEAR
Energy Policy and Energy Action Plan [6]: ●	<b>2011</b>
RE Target [8]: ●	<b>2021</b>
EE Target: ●	
Electricity Regulator : ●	
Net Billing/Net Metering: ●	
Interconnection Policy/Standards [22]: ●	<b>2018</b>
Feed-in-tariff: ●	
RE/EE Act: ●	

## KEY ACHIEVEMENTS: PLR FRAMEWORK TIMELINE FOR ELECTRICITY SUB-SECTOR

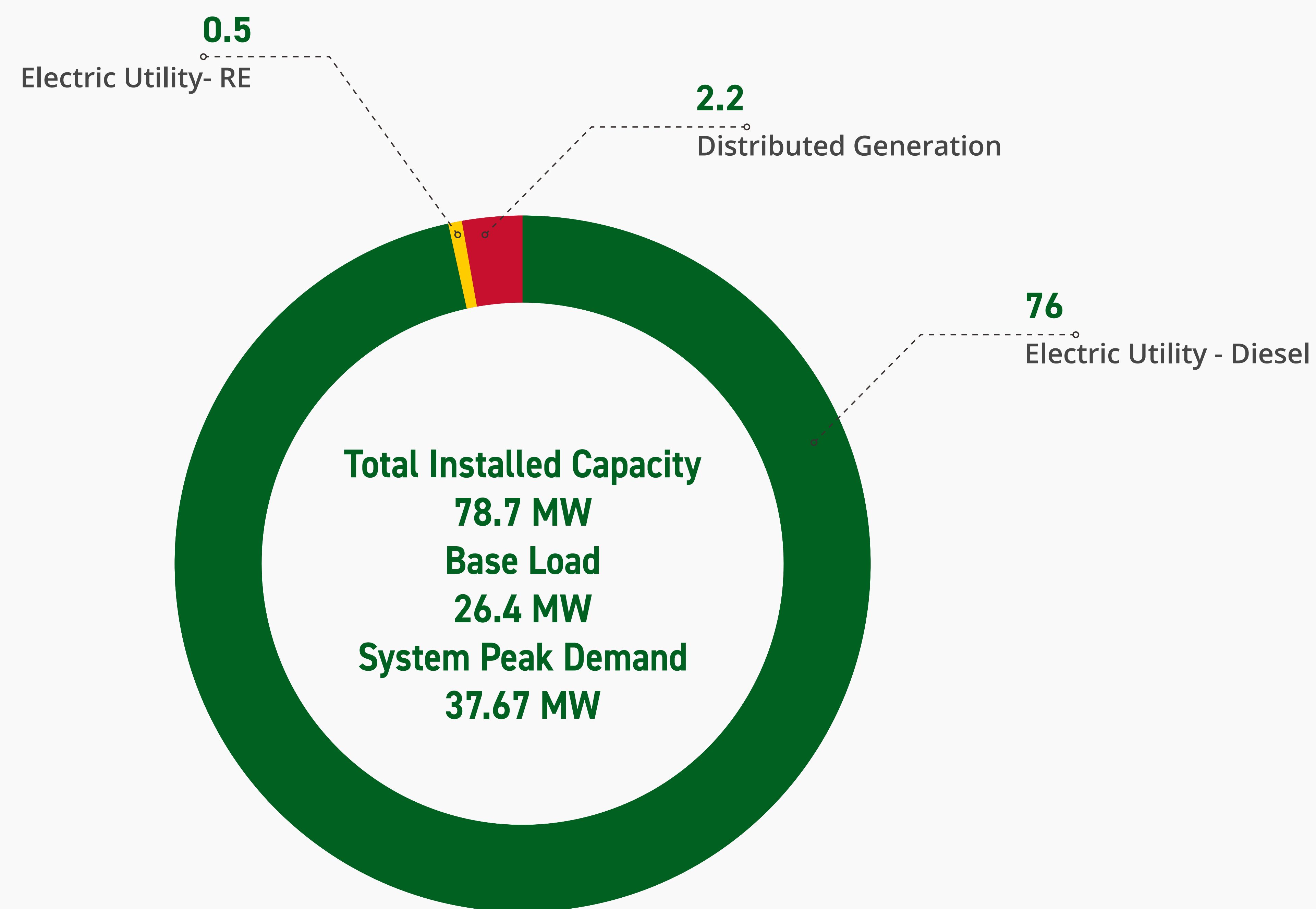


5. Public Reference no longer available

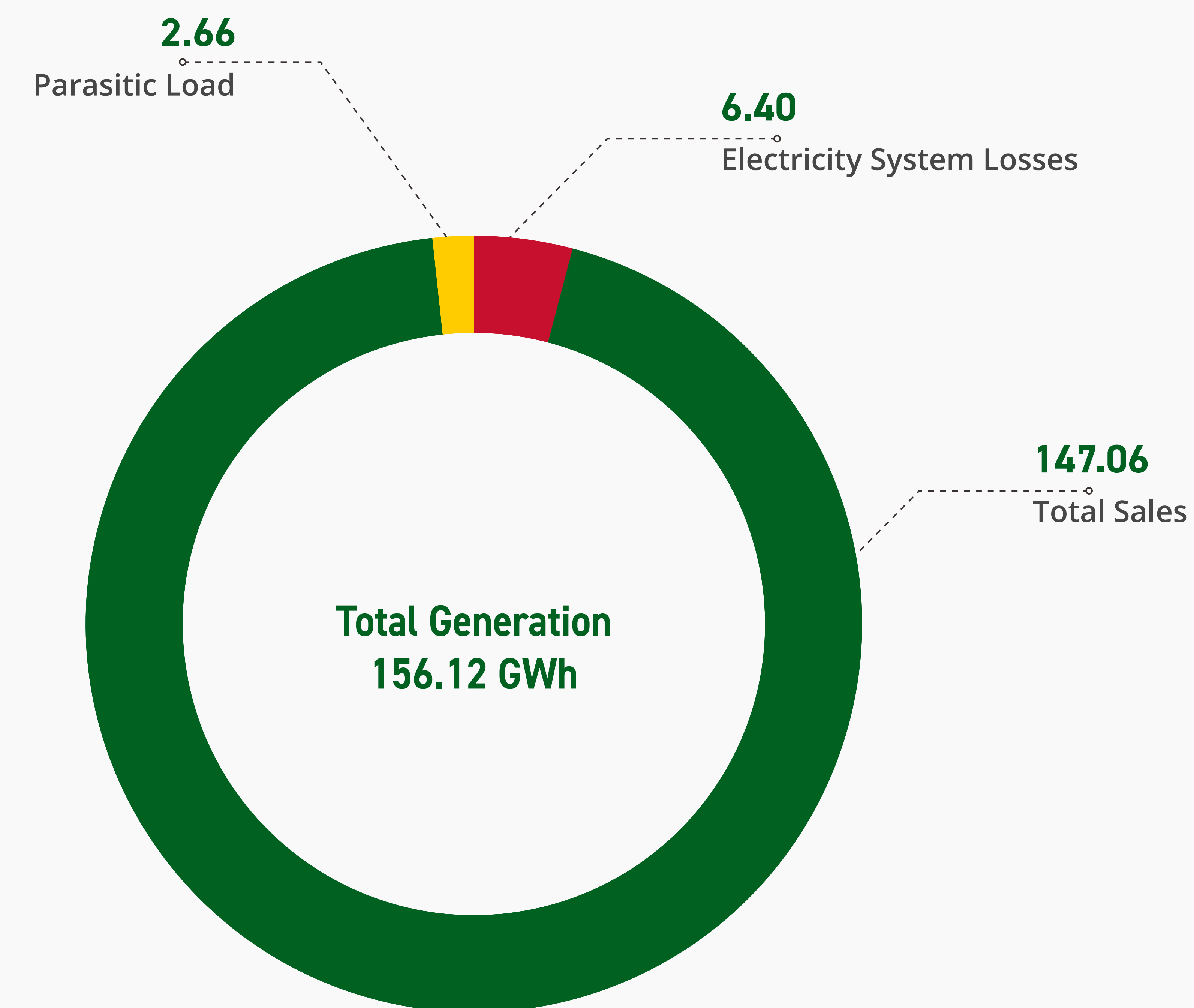


# ELECTRICITY & ENERGY EFFICIENCY <sup>6</sup> [13] [11][12]

## + INSTALLED CAPACITY (MW)



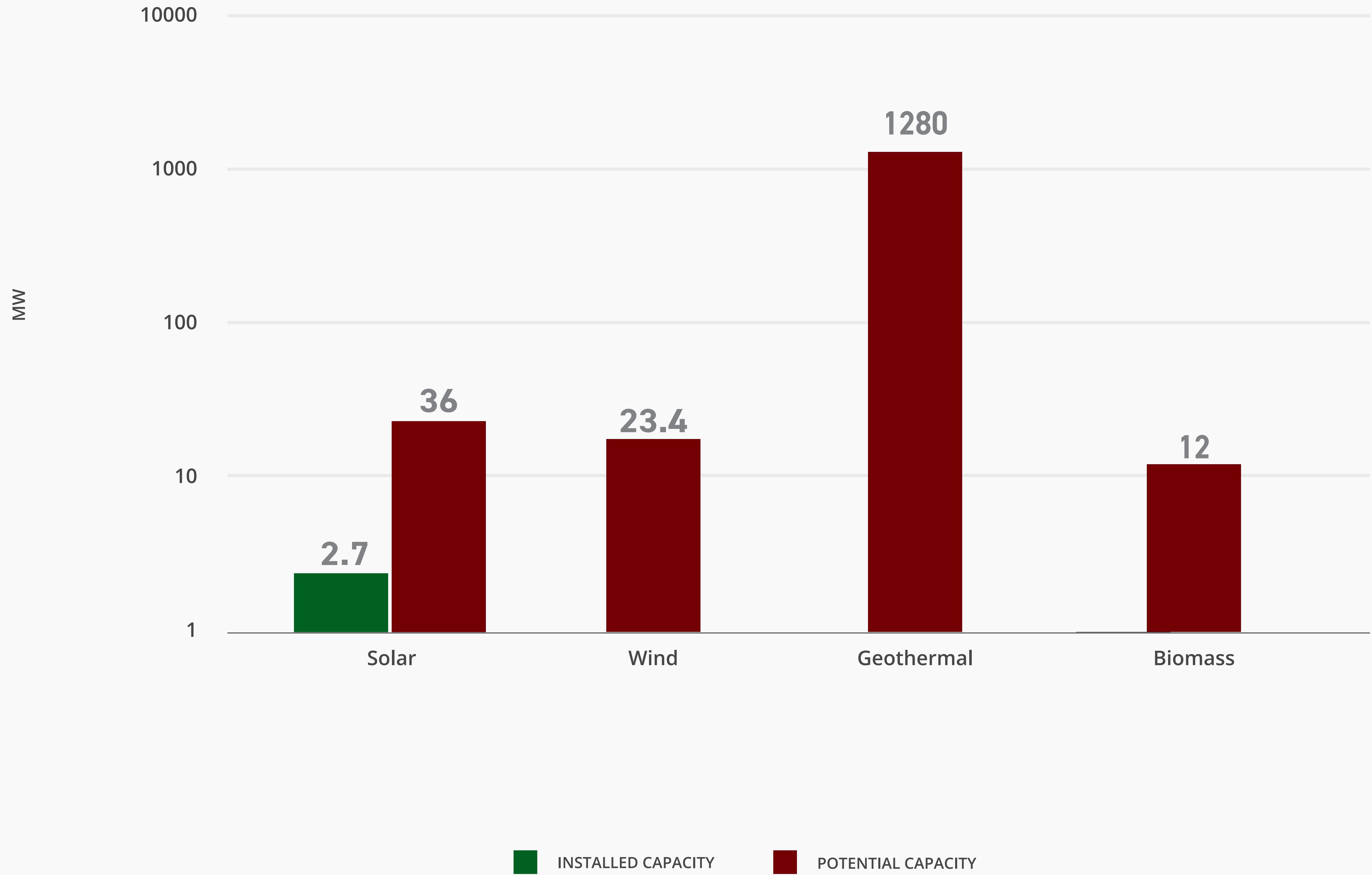
## + ENERGY CONSUMPTION (GWh)



6. The data presented represents a compilation of data from SKELEC and NEVLEC.



## RENEWABLE ENERGY RESOURCES







# ELECTRICITY TARIFFS



THE ST. KITTS ELECTRICITY COMPANY (SKELEC) <sup>[30]</sup>



THE ST. KITTS ELECTRICITY COMPANY (SKELEC) <sup>[31]</sup><sup>[32]</sup>

Rate Class	Monthly Consumption/Demand	Tariff (US\$/kWh)	Tariff (US\$/kVA)
General Services	Application for all services and temporary supplies	0.33 (per unit)	
		4.07 (Minimum total)	
Residential	First 50 units	0.21	
	Next 100 units	0.24	
	All units exceeding 150 units	0.25	
	Demand Charge - For 15 Amps of fuse rating or part thereof of fuse protecting service \$13.00.		4.81
Industrial and Commercial	First 50	0.29	
	Next 75	0.28	
	Next 125	0.26	
	All units exceeding 250	0.24	
	Demand Charge - Every kVA of demand or part thereof		5.55

NEVLEC Rates	Demand Charge (Energy Charge)	US\$/Unit	US\$/kVA
Residential	First 50 Units	0.19	
	Next 75 units	0.18	
	Above 125 units	0.17	
	<b>Standing Charge</b>		
	Consumption up to 120 units	2.66	
	Consumption above 120 units up to 250 units	4.44	
	Consumption above 250 units	6.66	
<b>Demand Rate = Energy Charge + Standing Charge</b>			
Commercial	Demand Charge (Energy Charge)		
	First 50		0.19
	Next 75		0.18
	Next 125 x kVA units		0.17
	For the remaining units		0.16
	<b>Standing Charge (based on cost per kVA = \$4.88) where 1 kVA = 250 units</b>		
<b>NOTE: Commercial rates include a fuel surcharge</b>			



# PROJECTS IN THE PIPELINE

## + PROGRAMMES

Donor Funding and Technical Assistance Landscape	Donor Organization & Banks	Technical Assistance Providers	Funding Awards	Year
Renewable Energy Dispatch Special Project	Taiwan ICDF	Taiwan ICDF	Not Available	2022

## + ENERGY EFFICIENCY PROJECTS

There were no reported Energy Efficiency Projects for 2022.

## + PROJECTS

Renewable Energy Source	Resource and Projects Capacity	Development Partner	Total Estimated Cost	Ownership
Solar Photo-Voltaic	35 MW	Leclanche	80,000,000 USD	PPA



## TERTIARY PROGRAMMES OFFERED



Name of Education Programme Provider	Associate Degree	Programme Link
Clarence Fitzroy Bryant College	Environmental Science <sup>7</sup>	<a href="https://cfbc.edu.kn/asgs-associate-degrees/">https://cfbc.edu.kn/asgs-associate-degrees/</a>

7. Environmental Science is a Caribbean Advanced Proficiency Examinations (CAPE) subject offered. The CAPE Associate Degree is awarded for the completion of ten (10) CAPE Units.



## TRANSPORTATION SECTOR

### TRANSPORTATION SECTOR

There was no transportation sector data available for 2022.



# CLIMATE CHANGE FRAMEWORK

<b>Climate Change Policy</b>	St. Kitts and Nevis National Climate Change Policy [9]
	The National Climate Change Adaptation Strategy for Saint Christopher and Nevis [10]
<b>National Determined Contributions [8]:</b>	Transition to 100% renewable energy in power generation* Improve efficiency in transmission and distribution of electricity. Electrification of 2% of the total vehicle Development of EV infrastructure *35 MW of renewable energy will be sourced from a solar farm that will be constructed through private capital, beyond which, all other interventions are conditional.
<b>Emissions Reduction Target:</b>	St. Kitts and Nevis pledges a 61% total CO2 emissions reduction against a 2010 base year. [8]
<b>Priority Sectors for NDC</b>	All sectors, with a focus on the energy sector (power generation and transportation) [8]
<b>National Communications (NC) to the UNFCCC:</b>	St. Kitts-Nevis Initial National Communication (2001) [33]
	The Second National Communications Report of St. Christopher and Nevis under the United Nations Framework Convention on Climate Change (2015) [34]



## SUMMARY OF ST. KITTS AND NEVIS' GHG EMISSIONS AND REMOVALS (GG) FOR 2018 [35]

Categories	Emissions (Gg)			
	Net CO2	CH4	N2O	NOX
Energy	292.29	2.3	0.02	0.01
Industrial Processes and Product Use				
Agriculture, Forestry, and Other Land Use	0.01	0.21	0.01	
Waste	0.03	2.08		



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