



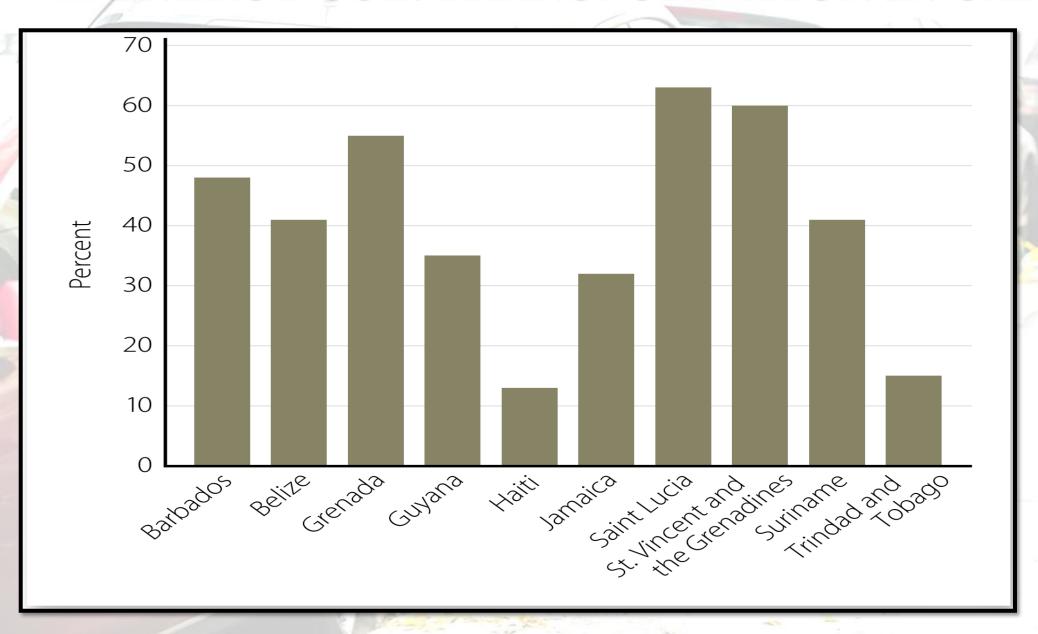
Innovation,
Opportunities and the
Caribbean Reality –
Considerations for a
Regional Vehicle Strategy

Devon O. Niel Gardner, Ph.D. CARICOM Secretariat

Tuesday, 16 June 2020



#### **ENERGY USE: TRANSPORTATION IN CARICOM**



Transportation's
Share of Total
End-Use Energy
Consumption in
Select CARICOM
Member States,
2017

## NDC COMMITMENTS [CURRENT STATE]

	CARICOM COUNTRY	NDC COMMITMENT RELATED TO TRANSPORTATION	NDC COMMITMENT RELATED TO ENERGY
	ANTIGUA AND BARBUDA	By 2020, establish efficiency standards for the importation of all vehicles.	By 2030, achieve an energy matrix with 50 MW of electricity from renewable sources both on and offgrid in the public and private sectors
A BY	BAHAMAS		30% RE in energy mix by 2030 allow 10% Residential Energy Self Generation within the year
	BARBADOS	A 29% reduction in non-electric energy consumption including transport, compared to a BAU scenario in 2029	Renewable energy: contributing 65% of total peak electrical demand by 2030. Electrical energy efficiency: a 22% reduction in electricity consumption compared to a BAU10 scenario in 2029
	BELIZE	A 20% reduction in conventional transportation fuel use by 2030	Reduction in energy intensity per capita at least by 30% by 2033; Reduce fuels imports dependency by 50% by 2020 using renewable energy; 85% renewable energy by 2030
	DOMINICA	By 2030, total emission reductions in Transport [16.9%]	By 2030, total emission reductions in Energy industries [98.6%]
	GRENADA	Reduce its emissions in the transport sector by 20% by 2025	A 30% reduction in emissions through electricity production by 2025 with 10% from renewables and 20% from energy efficiency measures

-	-4119	V F 1- 2-	
	GUYANA		100% renewable power supply by 2025.
	HAITI	Control, regulate the import of used vehicles	Increase to 47% the share of renewable energies in the system Haitian electricity by 2030 (hydro 24.5%, wind 9.4%, solar 7.5%, biomass 5.6%)
	11/4/11	control, regulate the import of used vehicles	biolitass 3.070)
15	JAMAICA		Renewable Energy increase to 20% by 2030. Prime Minister announced 50% by 2030.
ON A	SAINT LUCIA	Efficient Vehicles, Improved and Expanded Public Transit. Introduced a new levy to control importation of used vehicles Reduction of excise tax and duty for importers of fuel efficient vehicles and alternative energy vehicles	35% Renewable Energy Target by 2025 and 50% by 2030
		At Least reduce 5% of the national fuel consumption	Increase the use of renewable energy sources by 50%
	ST VINCENT AND THE GRENADINES	New policies to reduce the import duty paid on low emission vehicles	Generate approximately 50% of the national annual electricity consumption needs From Geothermal Energy. Energy Efficency:15% reduction in national electricity consumption compared to a BAU scenario by 2025
	SURINAME		31% emission reduction by 2025
	TRINIDAD AND TOBAGO	30% reduction in GHG emissions by 2030 in the public transportation sector	

## THE CARICOM ENERGY POLICY: GUIDING PRINCIPLES

1. Recognition that member states' energy resources and level of energy sector development varies

The CEP is crafted with the understanding that member states will only "commit" to take **INDIVIDUAL ACTIONS** that are both *relevant* and *feasible*.

2. Consistency, complementarity and collaboration

The CEP is based on a principle of **COLLECTIVE APPROACH AND COOPERATION** that takes cognizance of the national energy policies for the respective member states and seek to exploit synergies, where available.

#### 3. Subsidarity

The CEP seeks to emphasize **REGIONAL TREATMENT** of those actions that may gain comparative advantage vis-a-vis the "country alone" basis.

### CARICOM ENERGY: THE VISION AND GOALS

"Reliable, affordable, sustainable provision of energy services matched to the societal and development needs of the Caribbean Community over time, and based on robust, diverse energy sources and distribution systems that utilizes appropriate generation technologies, and equitably provided to all sectors of the society"

THE VISION OF CARICOM ENERGY

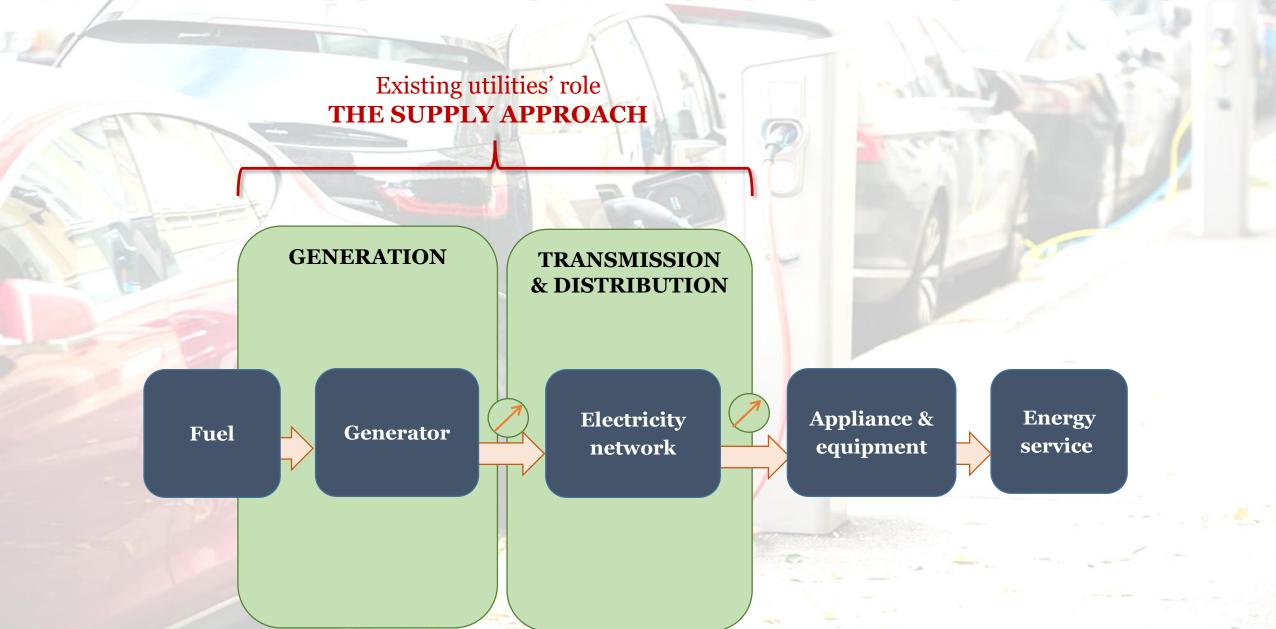
**Goal 1:** CARICOM citizens are well aware of the importance of energy conservation, use energy wisely and continuously pursue opportunities for improving their use of energy, with key economic sectors embracing eco-efficiency

**Goal 2:** Member States have modern energy infrastructure with clean and secure generation capacity, ensuring that energy supplies are reliably and affordably transported to homes, communities and the productive sectors on a sustainable basis

**Goal 3:** The Region is a global example for renewable energy use, providing secure intra-regional energy supplies at internationally competitive prices and a small carbon footprint, capable of supporting medium- and long- term economic growth, social development and environmental sustainability

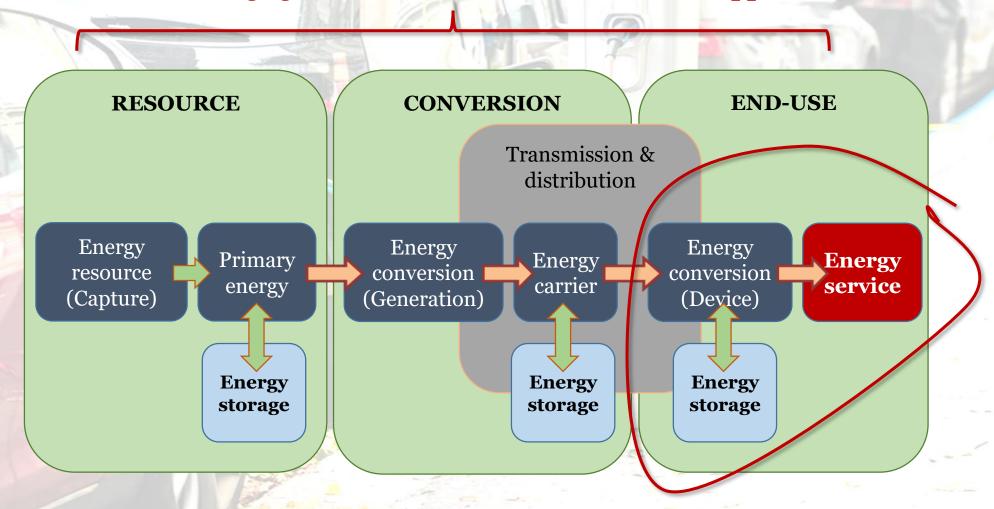
**Goal 4:** Countries have a well-defined and established governance, institutional, legal and regulatory framework to support the future developments in the energy sector, underpinned by high levels of consultation and citizen participation in this sector

## THE TRADITIONAL POWER SECTOR ARCHITECTURE

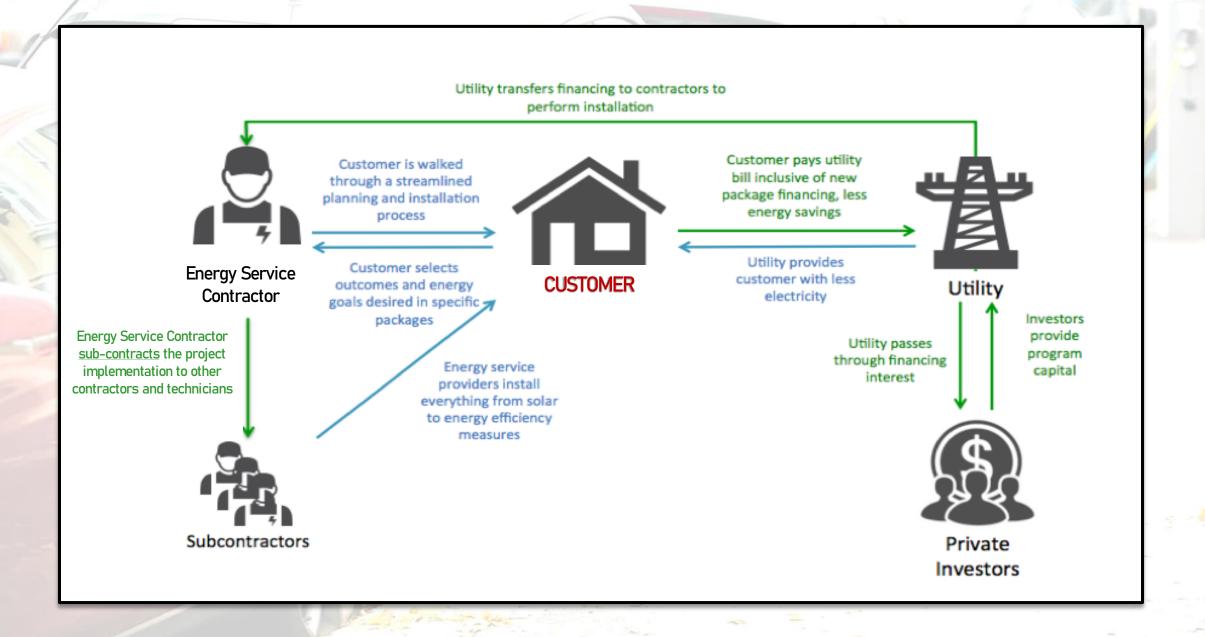


#### THE OPPORTUNITY

Emerging role for utilities; the demand-driven approach



## THE INTEGRATED UTILITY SERVICE (IUS)



## THE APPROACH TO THE C-SERMS

gives orientation

REGIONAL STRATEGY

updates

promotes

NATIONAL STRATEGIES & ACTIONS

generates information

VISIBLE & REPLICABLE REGIO-APPROPRIATE PROJECTS

## THE CONNECTION APPROACH

## High-Level

Caribbean Community Strategic Plan

Regional Climate Change Strategic Framework

Comprehensive Disaster Management Strategy

CARICOM Human Resource Development Strategy

# Meso-Level

Caribbean
Sustainable Energy
Roadmap &
Strategy

Climate-Resilient Sustainable Energy Supplies

Regional Energy Efficiency Strategy

Regional Quality Infrastructure for Energy

Regional Electric Vehicle Strategy

## itry-level

Integrated Resource & Resilience Planning

Belize

Guyana

Jamaica

Saint Lucia

Trinidad & Tobago

Integrated Utility Services (IUS)

**Barbados** 

Belize

Guyana

Jamaica

# Upscaling

Market Support & Performance Monitoring

Policy & regulatory support

Innovative financing models

**Capacity enhancement** 

Information & knowledge management

Project development assistance

## STRENGTHENING THE NEXUS: CLIMATE & ENERGY

## ANTHROPOGENIC CLIMATE CHANGE

- Temperature Rise
- Sea-level Rise
- Meteorological Shifts
- Precipitation Change

#### GLOBAL & LOCAL POLLUTION

- · Greenhouse Gas Emissions
- · Local Pollutants

Adaptation

Mitigation

### IMPACTS ON HUMAN & NATURAL SYSTEMS

- Food & Water Resources
- Energy Resources
- Ecosystems & Biodiversity
- Built Environment



### SOCIO-ECONOMIC DEVELOPMENT PATHWAYS

- Economic Growth
- Technology Deployment
- People
- Governance

"For the things we have to learn before we can do them, we learn by doing them" -Aristotle

## DR. DEVON GARDNER Head, CARICOM Energy Unit

Caribbean Community (CARICOM) Secretariat Turkeyen, Georgetown GUYANA

Phone: +592-222-0001 ext. 3521

Mobile: +592-673-2930

Email: devon.gardner@caricom.org

Skype: devon.gardner

