

Enhancing and embracing a sustainable lifestyle through responsible, affordable, and innovative energy supply and consumption"

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### **ACRONYMS AND DEFINITIONS**

ASHRAE American Society of Heating, Ventilation, Refrigeration, and Air Conditioning

Engineers

Agrivoltaics Solar photovoltaic energy systems designed to allow for the simultaneous use of

land for both agriculture and solar energy generation purposes

Avoided Cost The Transmission & Distribution (T&D) Licensee's most economic short-run

alternative cost which is passed onto consumers

B5 5% blend of biodiesel with diesel by volume

Battery An energy storage system

BESS Battery Energy Storage System

BAU Business As Usual

Benchmark Point of reference against which things may be compared or assessed

Biodiesel Lower carbon fuel made from animal and vegetable fats and oils

Carbon Footprint An estimate of the amount of carbon dioxide and other carbon compounds emitted

due to the consumption of fossil fuels at a location

Certified Qualifications meeting industry standards

Climate Change Change of climate attributed directly or indirectly to human activity that alters the

composition of the global atmosphere and which is in addition to natural climate

variability observed over comparable time periods

CNG Compressed natural gas

Carbon dioxide which is a colorless, odorless gas produced by combusting carbon

and organic compounds

Community Solar Solar facilities which are shared by multiple community subscribers who receive

credit on their electricity bills for their share of the power produced

Consumer Utiliser of a resource or product

Crude Oil Unrefined petroleum

CUC Caribbean Utilities Company, Ltd., the exclusive provider of electricity service for

Grand Cayman

Curriculum Or curricula (plural) meaning subjects comprising a course of study

CSC Customer Self-Consumption: The right for a customer to install and generate on-site

electricity

Demand Willingness of a consumer to pay a price for a product or service

DER (Distributed Energy Resource): Electricity generating system, typically smaller in size

and located close to electricity load. System may sell power to the electricity grid

under utility programmes approved by the Regulator.

Dispatch Supply from a generator at the request of the utility

Doppler Radar Station The weather station in East End on Grand Cayman providing real time weather

information and augmenting an early warning system for the Western Caribbean

DVES Department of Vehicles and Equipment Services

E10 10% blend of ethanol fuel with gasoline by volume

Economic Development From a policy perspective, means efforts to improve the economic wellbeing and

quality of life for a community by creating and/or retaining jobs and supporting or

growing incomes

Electricity Electrical energy

Electricity Supply System A network of equipment and controls that continuously supplies consumers with

electricity

Energy Policy Government guidance addressing energy development, including production,

distribution, and consumption

Energy Security Uninterrupted availability of energy sources at an affordable price

ENERGYSTAR EPA efficiency rating program for appliances and equipment

EPA United States of America Environmental Protection Agency

EPC Energy Policy Council

EPIC Energy Policy Implementation Committee

ESS Energy Storage System

EV Electric Vehicle

Firm Power Generated electricity that is meant to be available any any time of day

Fossil Fuel Hydrocarbon fuel derived from the accumulated remains of organic matter (e.g.,

petroleum, coal, and natural gas)

Gasoline A refined petroleum product fueling internal combustion engines

Generate Electricity production

Generation Thermal

Losses

Losses in the total energy content of a fuel upon converting the fuel into electricity

GHG Greenhouse Gases

Green References approaches that are more sustainable and/or have lower environmental

risks

HERS Home Energy Rating System which is an index for measuring a home's energy

performance

Hybrid Vehicle A vehicle powered by an internal combustion engine and electric motor

Hydrocarbon A compound containing hydrogen and carbon (i.e., a fossil fuel)

Innovation Translating an idea or invention in to a product or service that creates value

Interconnection The electrical connection of a generating station of a Generator, or of a generating

unit used for self supply to the T & D system of a T & D Licensee

Island Energy Island Energy (formerly Cayman Brac Power and Light Company Limited) is the

exclusive provider of electricity service for Cayman Brac and Little Cayman

Jet Kerosene Petroleum product for fueling aircraft

kWh Kilowatt hour

Kyoto Second The Kyoto Protocol legally binds developed countries to emission reduction targets.

Commitment Period The Protocol's first commitment period started in 2008 and ended in 2012. The

second commitment period began on 1 January 2013 and ended in 2020

Land Use Managing development of a natural environment

LEED Leadership in Energy and Environmental Design which is a global certification for the

planning, construction, maintenance and operation of buildings and communities

Legal Framework A set of rules and procedural steps, established by common law in the Cayman

Islands, through which judgements can be determined

Licensee The holder of a license awarded by Government, or a Regulator

LNG Liquefied Natural Gas

LPG Liquefied Petroleum Gas

Microgrid A self-sufficient distributed renewable energy and energy storage system able to

provide onsite grid-independent energy and resiliency for the consumer, that may

also able to serve and benefit the electric grid.

MMBtu Million British Thermal Units

MWh Megawatt hour

NEP National Energy Policy of the Cayman Islands

NEPC National Energy Policy Committee (2013)

NEPRC National Energy Policy Review Committee (2016)

New Vehicle Sales New vehicle sales refer to any vehicles (new or used) registered in Cayman Islands in a

given year.

Non-Firm Power Capacity not meeting the requirements of firm power

Non-Interconnected

System

An electric system which has a clear, physical break from being electrically

connected to the grid.

Paris Agreement The 2015 agreement within the United Nations Framework Convention on Climate

Change (UNFCCC) dealing with greenhouse gas emissions mitigation, adaptation

and finance starting in the year 2020

Petroleum Products Products derived from processed crude oil

Primary Energy Energy contained in a renewable or non-renewable resource in its natural state prior

to utilisation or conversion

Propane Byproduct from natural gas processing/refined petroleum commonly used for home

use

PV Solar photovoltaic generators which convert sunlight into renewable electricity

PV and Battery PV generator with battery storage

Regulator The Utility Regulation and Competition Office of the Cayman Islands (OfReg)

Regulatory Framework Applicable Cayman Islands Laws and any regulations, directions or rules issued

pursuant to those Laws

REM/Rate An online home energy rating and analysis tool

Renewable Natural resource or source of energy not depleted when used

Renewable Energy Electrical energy produced from natural resources which generate no carbon

emissions such as solar, wind, marine, geothermal as well as renewably sourced

clean fuels such as hydrogen.

Renewable Energy The percentage of electricity generated by a particular renewable resource, or

Penetration category of renewable resources, relative to the total amount of electricity

generated within a specified timeframe.

RET Renewable Energy Target

Social Policy Government guidance to improve the quality of life for citizens and correct societal

problems linked to poverty, healthcare, housing, education and unemployment

Socioeconomic The interaction of social and economic factors
Stakeholders Consumers, licensees, and the general public

Stationary Use Non-transport, non-electric uses of energy such as gasoline for machinery and

propane for cooking

Supply Total amount of a product or service available to consumers

Sustainable Development Development meeting the needs of the present without compromising the ability of

future generations to meet their own needs

Sustainable Energy The provision of energy meeting the needs of the present without compromising

the ability of future generations to meet their own needs through two key

components: renewable energy and energy efficiency

SWH Solar Water Heater

tCO₂e A tonne, or metric ton, of carbon dioxide equivalent which is a measure to compare

or benchmark the emissions from various greenhouse gases

T&D Transmission and Distribution

Technology Machines and equipment developed from scientific knowledge

ULSD Ultra-Low Sulfur Diesel, a petroleum product

Utility An entity licensed by the Regulator which owns or operates electrical infrastructure

that sells electricity to the public.

Utility Scale Electricity generating system, defined as systems 5 megawatts (MW) and greater

that sells power to the electricity grid and is approved by the regulator.

VORES (Value of Renewable Energy Study) a technical study carried out periodically which

analyzes the economic, social, and environmental costs and benefits of renewable energy generation. This data should be helpful to the Regulator in establishing cost

effective rates for renewable energy generated electricity on the grid.

VPP (Virtual Power Plant) an aggregated network of distributed energy resources ("DER")

and flexible services, such as controllable load/equipment, which may be contracted by the grid operator to provide energy, capacity, reserve and/or ancillary services in

similar manner to centralized power plants.

Waste-To-Energy Energy production from a solid waste stream

Wastewater Any water adversely affected in quality by human activity

Water Potable water, primarily derived from reverse-osmosis desalination

Wind Power Harnessing wind and converting it to renewable electricity

### **FOREWARD**



## Hon. Katherine Ebanks-Wilks | Minister for Sustainability & Climate Resiliency

I am proud to share an updated National Energy Policy, 2024-2045. This update is the result of a legally mandated five-year review and comes at a time when the cost of energy – on our wallets and our planet – is at the forefront of people's minds in a way it has not been for many years.

The updated policy takes into account developments in the international, regional and local energy sectors, as well as the renewed importance of prioritising our islands' shift to a sustainable energy future.

Renewable energy is the future of the Cayman Islands. If we want future generations to thrive in a peaceful, prosperous Cayman Islands distinguished by clear seas and verdant trees, we must shift away from our reliance on expensive, volatile and polluting fossil fuels to affordable, reliable and clean renewable energy.

The updated National Energy Policy focuses on renewable energy, energy conservation methods and the promotion of energy efficiency. In light of the recently released Climate Change Risk Assessment for the Cayman Islands, this policy update includes new policies for energy resiliency to protect against storms, electric vehicles and energy storage, all of which support greenhouse gas emission reductions.

In keeping with the Ministry of Sustainability & Climate Resiliency's mission to enhance sustainability across the environment, economy and society, the updated policy acknowledges that sustainable development requires a greater emphasis on social equity to promote energy access and professional opportunities for all Caymanians.

To update this policy, the Ministry, Energy Policy Council and its consultants drew on the expertise of a cross section of local and global stakeholders who offered technical guidance on a range of issues and opportunities from social policy considerations to the viability of emerging technologies. I would like to take this opportunity to thank all the individuals and organisations who contributed to this policy update.

While the Cayman Islands will not be able to turn the tide against global warming on our own, we have a responsibility to do our part to reduce greenhouse gas emissions through the use of environmentally friendlier sources of energy. Advancing our renewable energy goals will also help protect our islands from the volatility of traditional fuels and the external shocks of international markets.

The vision of the policy "Enhancing and embracing a sustainable lifestyle through responsible, affordable, and innovative energy supply and consumption" speaks to our collective aspiration for a Cayman Islands that is held up as one of the most sustainable countries in the world, a trio of islands where all its citizens can thrive; a peaceful and prosperous place known for its resourcefulness, its diligence, its excellence, and its innovativeness.

It is my hope that every individual and organisation in the Cayman Islands will embrace this updated policy and be part of the solution. Together, we can achieve an energy secure, climate resilient Cayman Islands that stands out as a destination of excellence while achieving a high quality of life for all its people and protecting our natural and cultural resources.

### **MESSAGE**

### Mrs. Neyka Webster

Acting Chief Officer | Ministry of Sustainability & Climate Resiliency

The Ministry of Sustainability & Climate Resiliency, alongside the Energy Policy Council, is pleased to present the updated National Energy Policy, 2024-2045.

The five-year review of the National Energy Policy has come at a time when people around the world



are struggling to meet the increased costs of food, fuel and goods. The impacts of climate change - rising seas, increased temperatures, changing weather patterns and stronger, more frequent storms - have gone from being distant predictions to ongoing realities that are upending lives and livelihoods across the globe. In the face of such complex challenges, the need for innovative, impactful programmes that support sustainable development is greater than ever.

Achieving a secure, sustainable energy future for the Cayman Islands is essential to ensuring we can meet the needs of current generations without compromising the ability of future generations to meet their own needs.

Our continued reliance on fossil fuels poses significant risks to our nation's energy security, cost of living, and environmental health.

Transforming our energy systems is about improving quality of life for everyone who calls the Cayman Islands home today, safeguarding the health of our natural environment, and cultivating a lasting legacy of sustainability that will allow future generations to thrive in their homeland.

I would like to extend my gratitude to the Ministry team, the members of the Energy Policy Council, our consulting agency, and all the people and organisations who have given their time and technical expertise to help ensure this policy update achieves environmental, social and economic benefits for everyone who calls the Cayman Islands home now and into the future.

I encourage all local residents and organisations to learn more about the updated National Energy Policy and stay tuned for updates on the policy implementation by visiting gov.ky/energy or following the National Energy Policy on social media.



### INTRODUCTION

The National Energy Policy (NEP or "the Policy") was first adopted by Cabinet in 2017 and covered the period 2017 – 2037. It required the Policy to be reviewed every five years, not only to monitor and report on progress, but also to review (and adjust if necessary) the targets and implementation plans in recognition of opportunities that will arise from the constantly changing technological environment. This document represents the first five-year NEP review. The dates have changed to 2024-2045 to align with the proposed targets.

Building upon the process developed to draft the 2017 NEP, this Policy draws upon inputs from Cayman Islands private and public sector stakeholders, and local and foreign experts advising on the current market context of energy sector reform topics, including energy efficiency, renewable energy, and electric vehicles.

The NEP seeks to establish a framework with which all stakeholders can identify, which sets the stage for the achievement of the territory's energy goals and takes into account the imperative need to reduce greenhouse gas emissions, thereby lowering the carbon footprint of the Cayman Islands.

The NEP focuses on exploiting renewable energy, promotes energy efficiency and conservation measures and supports energy security by reducing the reliance on imported fossil-based fuels. These in turn are catalysts to a sustainable environment where the people of the Cayman Islands can live, work, and do business.

### **TARGETS**

The 2017 NEP established the high-level targets of 70% of total electricity generation from renewable sources by 2037 and an aspirational goal of 4.8 tCO2e of GHG emissions per capita by 2030.

The Five-Year Review analyzed progress against these targets, which, taken with the below policy measures and Implementation Plan, identified opportunities for target revision and establishment of sub targets and a new target for electric vehicles.

### **UPDATED TARGETS**

100% Renewable energy by 2045

100% New vehicle sales from EVs by 2045

100% Emissions reductions from electricity supply by 2045

2

2



## RENEWABLE ENFRGY

30% Renewable energy penetration by 2030

70% Renewable energy penetration by 2037

100% Renewable energy penetration by 2045

This target is in line with targets of peer countries.
Global trends in cost declines of renewable energy technologies, including solar and storage, point to the viability of meeting these goals.



## **ELECTRIC** VEHICLES

Light-Duty
New Vehicle Sales & Imports
30% from EVs by 2030
100% by 2045

Heavy-Duty
New Vehicle Sales & Imports
30% from EVs by 2030
100% by 2045

Many US' states have made commitments to achieve a full transition to zero emissions vehicle sales in all categories by 2040. The NEP recommends a slightly longer timeframe to achieve 100% new EV sales to allow time to implementation policies to meet these targets. As such, all new vehicle sales will come from EVs by 2045.



### GREENHOUSE GAS EMISSIONS

Electricity Supply 30% emissions reduction over 2019 levels by 2030

100% emissions reduction by 2045

Ground Transportation 35% reduction by 2030 90% reduction by 2045

The Five-Year Review revised the emissions target to be an absolute instead of per capita reduction, with the goal to eliminate all emissions from electricity supply by 2045. Overall economy-wide emissions targets, including those of the transportation sector, are included in the forthcoming Climate Change Policy.

### **POLICY SECTIONS**

This policy document is organised under four sections:



### SECTION 1:

Provides a high-level overview of the energy sector of the Cayman Islands and the context in which the Policy has been framed.



#### SECTION 2

Provides the Policy framework, the vision, and goals.



#### SECTION 3

Provides the details of the goals, strategies, and strategic aims.



#### SECTION 4

Provides guidance on implementation, monitoring, evaluation, and change.



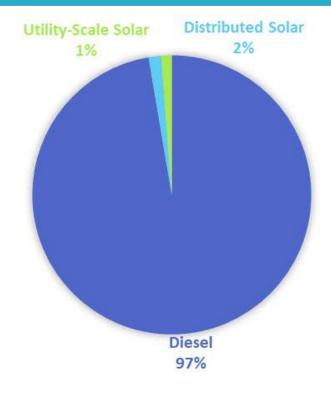
### **SECTION 1 | OVERVIEW AND CONTEXT**

The energy economy of the Cayman Islands is based almost entirely on imported petroleum products and like all economies of this type is subject to the variability of world market fuel prices. Electricity prices in the Cayman Islands are generally high because of high dependence on imported fuel for electricity generation. A similar challenge affects nearly all island jurisdictions in the Caribbean and elsewhere that rely on imported fossil fuels for electricity generation. While the economy is service based, the attractiveness of the Cayman Islands is influenced not only by its political stability, but also by the cost of basic infrastructure services such as electricity.

Figure 1 shows the 2021 electricity consumption profile in the Cayman Islands. More than 97% of electricity demand in the Cayman Islands is met by diesel generators and 3% from utility-scale and distributed solar.

The most recent Cayman Islands GHG Inventory (2019) estimates that road emissions in the Cayman Islands amounts to 1,115t,000 tCO2e, with 58% from electricity and transportation. Thus energy policy provisions that promote emissions-free distributed and utility scale renewable energy generation, energy storage and electric vehicles can make a significant impact on Cayman Islands' GHG reduction goals.

Figure 1. 2021 Cayman Islands electricity consumption profile (MWh).





### **SECTION 2 | ENERGY POLICY FRAMEWORK**

The Policy is structured to support a stakeholder Vision which articulates the Policy aims in the broadest terms.

Four (4) Goals were identified which, if successfully achieved over the life of the Policy, will assure the realisation of the vision, and meet the aspirations of the people of the Cayman Islands.

Each Goal is supported by a comprehensive set of Strategies and the Policy is organized such that specific Strategies are identified as mission critical in seven (7) sectors:

- Electricity
- Fuels
- Transportation
- Land Use and Buildings
- Water and Wastewater
- Public Education and Awareness
- · Climate change and the Environment

Strategic aims associated with each of the Strategies provide further detail regarding the initiatives to deliver on the established Goals.

#### 2.1 VISION

Enhancing and embracing a sustainable lifestyle through responsible, affordable and innovative energy supply and consumption.

### **2.2 GOALS**



#### Goal 1 Knowledge and Education

The people of the Cayman Islands will be well educated and knowledgeable on the impact of energy demand on the environment of the Islands and continuously embrace opportunities to increase the levels of sustainable energy solutions in the supply mix and improve efficiency in energy usage.

Goal 1 seeks to ensure an environment where the people of the Cayman Islands are knowledgeable about sustainable energy and sufficiently educated to make informed choices about energy options in their daily lives.

The Government is committed to take the lead by championing public awareness programmes designed to raise and keep awarenesshigh among the public on the statusof this Policy, the achievements under the Policy, as well as to keep all stakeholders apprised on the importance of the success of the Policy to the lives of the people of the Cayman Islands.

In doing so, public education programmes will be designed, using all available media resources, to sensitise the public to the short, medium, and long term aims of the NEP and to keep the public aware of the progress being made in the achievement of the targets and other expected results set out in the Policy.



#### Goal 2 | Innovation

The Cayman Islands will continually strive to demonstrate leadership and pursue strategic partnerships in the development and implementation of innovative, well researched, environmentally sensitive, and sustainable energy opportunities where appropriate to small-island states and archipelagos.

Goal 2 seeks to position the Cayman Islands as a leader in innovation and the standard for the development and application of sustainable energy solutions in small island developing states. The particular focus will be on archipelagos where opportunities to take advantage of economies of scale are rare and therefore innovative solutions are often needed to keep service affordable.

To ensure sustainability of opportunities under the NEP for the long term, it will be important that initiatives are pursued to introduce an awareness of and competencies in sustainable energy technologies at every level of the educational curricula. Also, professionals who work in the field must be appropriately trained and certified.



#### **Goal 3 | Energy Security**

The Cayman Islands will have a modern energy infrastructure ensuring that energy supplies are produced and distributed competitively, safely, reliably, efficiently and affordably supported by a governance framework of effective and responsive regulation, fuel security, environmental sensitivity and sustainable development.

This goal provides the underpinnings of the NEP's key targets towards environmental sustainability.

Given the overarching target of reducing GHG, it is critical to accelerate the usage of renewable energy from the current 3% to 100% of total electricity generation by 2045. The NEP anticipates utility scale, renewable energy, distributed Generation resources (DER), energy efficiency, and energy storage will be significant contributors to achieving these targets.

This goal recognizes and promotes the importance of a credible and balanced legal/regulatory framework seeking to ensure that all stakeholders' interests are considered. Accordingly, investors' interests should be balanced with the interests of consumers, who are entitled to receive reliable and efficient services at affordable costs. At the macroeconomic level, the framework shall also be sensitive to adverse consequences of the supply mix on the general price level, economic growth, and employment in the Cayman Islands.

The reliability of the national grid is of paramount importance to the integrity of the economy of the Cayman Islands and therefore, even as the target of 100% renewables is being realized, system reliability cannot be compromised.

Analyses suggest possible limitations in the availability of attainable acreage for renewable energy generation development. However, careful assessment of available lands (including landfills and mined-out quarries, as well as available roof tops and parking lots), has yielded a sufficiency of sites conducive to the development of utility-scale and DER opportunities.

In the medium to long term the development and application of viable alternatives and emerging technologies must be pursued, as these could in the long run become real options and substitutes for what may be a diminishing access to the development of renewable energy resources requiring significant attainable acreage.

Where emerging technologies are concerned, careful consideration should be given to the longer-term impact of adopting such technologies in addition to the short-term cost benefit analysis.



Goal 4 | Socioeconomic and Environmental Sustainability

The Cayman Islands will foster and promote the development and application of existing and new technologies, practices in sustainable energy solutions and the continual development and growth of the sustainable energy industry reflecting its commitment to the socioeconomic wellbeing of its people and to its international and local obligations relating to climate change and environmental sustainability.

The transition to renewable energy and a green economy affords opportunities for the growth and continual development of the sustainable energy industry and the Caymanian economy.

Goal 4 seeks to provide the framework wherein the opportunity to grow jobs and the sustainable energy industry are not only identified, but systematic, deliberate, and sustainable governmental and regulatory decisions and actions are taken to leverage them into the socioeconomic fabric of the islands, while respecting the constraints and carrying capacity of the natural environment.

Further developing and growing the sustainable energy industry will ensure this positive economic activity is the norm and the commitment to international and local obligations regarding climate change and environmental sustainability will become instilled as a way of life in the Cayman Islands.

### 2.3 RENEWABLE ENERGY GENERATION PLANNING

The NEP lays out a framework and assigns roles and responsibilities to meet targets. In 2021, OfReg approved a renewable energy auction scheme to promote competition and investment in renewable energy. The five-year integrated resource planning (IRP) process, subject to OfReg and Government approval, provides the techno-economic analysis to plan for penetration of renewables. The Energy Policy Council, discussed in Section 4 below, provides a discussion and planning forum for private sector, regulatory, and government stakeholders with responsibilities for implementing the NEP.

OfReg and CUC are currently planning renewable energy projects, in addition to the 16 MW of solar currently online. In 2022, OfReg issued two Request for Quotations (RFQs) for 1) up to 100 MW of solar PV (up to 60 MW of battery storage) by 2025; and 2) 23 MW of dispatchable solar PV with collocated storage by 2024.

OfReg approved a 20MW utility scale battery installation that will reduce CO2 emissions. The battery will enable CUC to store renewable energy for backup power and reduce the need to bring diesel generators online. The battery, due to be installed by 2024, will make available an additional 12 MW of capacity for distributed energy resource programmes. The Regulator will ensure a new hosting capacity and infusion study is carried out by an independent consultant to identify the maximum available grid capacity for distributed generation and other future opportunities after Battery Energy Storage System (BESS) installation.

The upcoming IRP process will be led by the Regulator in consultation with the utilities and designated consultants and guided by the updated NEP targets subsequent to the completion of this 5-year review. Nevertheless, the production of the IRP may be delegated to CUC and their consultant under the close supervision of the Regulator and their consultant. The IRP will take into account the results of the hosting capacity and infusion study carried out by the independent consultant working for the Regulator. The final IRP report will be confirmed by Government as to its adherence with the NEP.

OfReg is encouraged to review integrated resource planning needs for Cayman Brac and Little Cayman in coordination with Island Energy.



### SECTION 3 | STRATEGIES AND STRATEGIC AIMS

### 3.1 STRATEGIES AND STRATEGIC AIMS SUPPORTING GOAL 1

The following eight (8) strategies support Goal 1 - Knowledge and Education.

3.1.1 Electricity Sector Strategy: Establish public awareness programmes to influence public behavior and choices regarding sustainable energy, energy consumption, conservation, efficiency, and related new technologies.

Public awareness programmes to be developed that:

- 3.1.1.1 Inform individuals how to optimize their energy consumption.
  3.1.1.2 Inform the public on legislation, incentives, programs, and initiatives supporting sustainable energy, and how to participate in and benefit.
  3.1.1.3 Reinforce energy usage labeling which provides specific consumption data for appliances and equipment.
  3.1.1.4 Publicize economy-wide energy efficiency and conservation initiatives.
- 3.1.2 Fuel Products Sector Strategy: Support jurisdiction-wide and industry-developed public education programmes on fuel safety handling, storage, and disposal of waste fuel.
  - 3.1.2.1 Publish information on fuel safety and the environmental risk of improper handling, storage and disposal of waste fuel and related products.
- 3.1.3 Transportation Sector Strategy: Promote lifestyle changes through public education on options such as cycling, walking and the use of public transportation not only as reflective of the Policy, but also supportive of healthy lifestyles.

Develop public awareness programmes in coordination with transportation planning initiatives to ensure that the following energy messages are conveyed:

- 3.1.3.1 Information about energy efficient commuting options, including public transportation.3.1.3.2 Bicycle safety.
- 3.1.3.3 Driving efficiency techniques.
- 3.1.4 Transportation Sector Strategy: Promote lower vehicle emissions by supporting the shift to more fuel-efficient vehicle types, including hybrid and electric zero emission vehicle, and developing a regulatory framework for EV charging infrastructure.
  - 3.1.4.1 Develop public awareness programmes which:

- a) Provide public information on vehicle fuel efficiencies; Mandate a marketing strategy to be initiated by motor vehicle dealers and resellers to provide information on vehicle fuel efficiency to prospective purchasers.
- b) Publicise the government's initiatives to shift to more fuel-efficient, lower emission vehicles and electric vehicle charging infrastructure
- c) Lead a public awareness campaign outlining the benefits of electric vehicles, including potential cost savings and emissions reductions
- 3.1.5 Land Use & Buildings Sector Strategy: Promote land use and buildings policies that support energy efficiency and conservation through targeted public education programmes.

Develop public awareness programmes in coordination with development planning initiatives to ensure that specific energy messages are conveyed:

- 3.1.5.1 Benefits of mixed-use development and denser zoning in appropriate locations.
- 3.1.5.2 Efficient building design and landscaping, including passive design and green infrastructure (including stormwater management measures).
- 3.1.5.3 Promote development of live, work and play communities supporting non-motorized transportation and more sustainable land use.
- 3.1.6 Water & Wastewater Sector Strategy: Promote public awareness on the relationship between water consumption and energy demand.
  - 3.1.6.1 Reinforce water conservation information regarding efficiency and conservation devices and equipment available on the market.
- 3.1.7 Public Awareness and Education Sector Strategy: Develop and adopt a comprehensive multi-faceted public education plan that raises awareness of the NEP and its elements at strategic stages in the implementation. The latter includes the annual reporting and publication of GHG emissions and the progress of achieving the RET in terms of supply and usage by various sectors.
  - 3.1.7.1 Use web-based resources to familiarise people on the NEP.
  - 3.1.7.2 Lead public outreach events.
- 3.1.8 Climate Change & Environment Sector Strategy: Establish public education programmes that promote public understanding of the implications of climate change.
  - 3.1.8.1 Publicize the Cayman Islands' commitments to meet international obligations to combat climate change and promote the mitigation of domestic greenhouse gas emissions while fostering sustainable development.
  - 3.1.8.2 Support public education activities associated with the Climate Change Policy as they relate to the National Energy Policy and the Implementation Plan.

### 3.2 STRATEGIES AND STRATEGIC AIMS SUPPORTING GOAL 2

The following six (6) strategies support Goal 2 - Innovation

- 3.2.1 Electricity Sector Strategy: Promote innovation and research in renewable energy developments with a view to introducing appropriate new technologies in the energy mix of the Cayman Islands.
  - 3.2.1.1 The legal and regulatory framework will provide the regulator with the authority to approve sustainable energy technologies or projects which they determine to be innovative, to attract investors, developers, and investments and assure their confidence in the development of sustainable energy innovation in the Cayman Islands.
  - 3.2.1.2 The legal and regulatory framework will provide the regulator with the authority to ensure private parties are able to propose and implement innovative renewable energy projects and technologies in the Cayman Islands with clear criteria and pathways provided by the regulator in writing in order for projects to meet final regulatory approval recognizing the imperatives for safety and sustainability, and in compliance with appropriate safeguards and requirements and terms in compliance with the utility's license and Government policy
  - 3.2.1.3 Within the context of responsible fiscal management, Government can authorise any sustainable or renewable energy project to receive public funding support but will be mindful of the risks of any project and will normally prioritise projects such as technologies proven to be both technically and commercially feasible.
- 3.2.2 Electricity Sector Strategy: Promote public education on energy related issues and provide opportunities to acquire the professional qualifications required to offer services or work in the renewable energy industry, developing a cadre of well-trained and certified individuals at the professional and technician levels.
  - 3.2.2.1 The Government will encourage, develop and financially support the introduction of sustainable and renewable energy related disciplines into the curricula at tertiary, secondary and vocational education levels. The Government will also ensure that the sustainable energy sector is continually supported and promoted to spur the growth of green jobs and promote socio-economic well-being of the people of the Cayman Islands.
  - 3.2.2.2 The Government will ensure that Cayman Islands trained professionals are appropriately certified and recognized internationally, leveraging established institutions.
  - 3.2.2.3 The Government will encourage and support training, knowledge-sharing, and professional opportunities for all Caymanians, including women, youth, and members of low-income households and communities, such as workshops, public awareness campaigns and scholarships.
- 3.2.3 Electricity Sector Strategy: Develop and implement guidelines, standards, and codes for appropriate technologies, to ensure a safe operating environment.
  - 3.2.3.1 The Government will adopt internationally recognized guidelines, standards, and codes relevant to Cayman Islands context in a timely manner for energy efficiency and innovative and well researched sustainable and renewable energy technologies while ensuring a safe operating environment.

- 3.2.4 Electricity Sector Strategy: Develop and implement the regulatory frameworks to ensure the continuous review and implementation of viable and innovative renewable energy technologies facilitating continual policy alignment to enable the adoption of these technologies when feasible.
- 3.2.5 Electricity Sector Strategy: Promote and support regional and international exchanges of thought leadership to position the Cayman Islands as a leading resource centre for information on best practices in energy research and renewable energy adoption appropriate to small island states and archipelagos.
- 3.2.6 Land Use & Buildings Sector Strategy: Facilitate the development of renewable energy projects.
  - 3.2.6.1 The regulatory and planning authorities will facilitate the transition of innovative and renewable energy technologies such as energy storage, fuel cells, solar hybrid cooling systems, smart electrical load control panels and other innovative energy technologies by making timely and appropriate changes to planning rules and regulations.
  - 3.2.6.2 The Government shall develop a plan to secure land for utility-scale renewable energy generation.

### 3.3 STRATEGIES AND STRATEGIC AIMS SUPPORTING GOAL 3

The following thirteen (13) strategies support Goal 3 - Energy Security

- 3.3.1 Electricity Sector Strategy: Ensure that the legal and regulatory framework and key institutions such as the regulator promotes and facilitates renewable energy and energy storage development in pursuit of the NEP's renewable energy target and supports the goal to reach 100% renewable energy.
  - 3.3.1.1 Ensure that promotion of the social, environmental, and economic benefits of renewable energy takes into account the cost of energy to the jurisdiction, while achieving established standards in safety, reliability, power quality and a prudent diversification of the generation portfolio.
  - 3.3.1.2 Ensure that the Cayman Islands' natural environment is safeguarded while renewable energy resources are developed.
  - 3.3.1.3 Ensure fair and transparent competition for procuring utility-scale and distributed generation renewable energy utilizing a competitive market-based methodology or renewable energy programs and frameworks established by the regulator. Utilities may compete in utility scale renewable energy solicitation, defined as systems 5 megawatts (MW) and greater. Utilities cannot compete and leverage monopoly advantaged in distributed generation or consumer financing, thus ensuring fair competition in the market per ESR law.
  - 3.3.1.4 Permit licensees to participate in the solicitation of utility scale renewable energy projects run by the regulator for firm or non-firm power, subject to the terms of their license and in compliance with Government Policy.
  - 3.3.1.5 To ensure that consumers' interests are protected, the regulatory regime will determine all rates, tariffs, and commercial interests for utilities via their relevant licenses regardless of whether the energy source is firm or non-firm, renewable or otherwise.

- 3.3.1.6 Government will keep under review fee and tax structures encouraging the adoption of sustainable and renewable energy projects in furtherance of the Policy, having due regard to the requirement to create a net benefit to the islands and its inhabitants.
- 3.3.1.7 The regulatory framework will provide for a licensed utility to be required to purchase utility scale sustainable and renewable energy such as renewable or cogenerated power from a third party when the cost of the available sustainable and renewable energy is below the licensed utility's avoided cost. Similarly, the regulatory framework will allow for a utility to pay a margin, approved by the regulator, above the utility's avoided cost for renewable sustainable energy to meet targets established under or to generally further the goals of the Policy, provided that the margin will not have a significant impact on the overall consumer costs in the Cayman Islands.
- Increase the penetration of utility scale and distributed renewable energy generation on the grid utilizing existing developed spaces to the extent feasible. Such analysis shall assess the impact on cost of energy supplied to the grid and wider socioeconomic factors including equitable impacts of the location of distribut the impact on cost of energy supplied to the grid and wider socioeconomic factors including equitable impacts of the location of distributed generation.
- 3.3.1.9 The regulator shall ensure economically viable consumer programmes and options exist to facilitate sub-metering to promote renewable energy systems, including those located in multi-occupancy buildings consistent with electricity laws and/or utility license.
- 3.3.1.10 The regulatory framework will require utilities to plan their electric systems to optimally meet system requirements by considering demand projections, resource options, cost considerations, regulatory and policy compliance, and environmental impacts to ensure reliable, affordable, and sustainable energy.
- 3.3.1.11 The regulator, in consultation with the Government and utility, shall be responsible for ensuring that sufficient grid capacity exists for the continual adoption of renewable energy to meet National Energy Policy targets, through review, monitoring, timely implementation and approval of the utility's planning processes.
- 3.3.1.12 Promote grid-connected consumer-sited renewable energy programmes in Grand Cayman, Cayman Brac and Little Cayman in a framework which provides:
  - a) Rates reflective of the full costs and benefits of distributed renewable energy including economic, social, and environmental costs and benefits.
  - b) An appropriate billing mechanism.
  - c) Consumers shall have a simple to understand and safe interconnection arrangement and renewable energy programs, through standard agreements such as a Power Purchase Agreement (PPA), and for a reasonable term.
  - d) Reasonable limits to the individual system sizes having regard to economic and technical considerations, including suitable T&D upgrade cost recovery mechanisms that may evolve over time, while intending to ensure that consumers are able to maximize use of their available existing developed space for renewable energy adoption.
  - e) The regulator shall ensure a timely cadence for grid capacity analyses in order to review and reset renewable energy programmes appropriately, having regard to technology advances, system capacity considerations and other economic and technical factors.

- f) Affordability considerations for consumers of exported power from distributed generation.
- g) Customer self-consumption (CSC) shall be a right. It shall be defined as the right to produce and self-consume up to 20kW AC of solar PV plus battery energy storage. A CSC generation system that is interconnected to the T&D system shall be subject to the provisions of the Electricity Sector Regulation Act (2019 Revision). Such an interconnected system shall be required to meet the T&D Connection Code, Planning requirements and receive approval from the utility licensee for permission to operate. Where a CSC generation system is not interconnected to the T&D system (a "non-interconnected system"), utility approval to operate is not required; however, consumers must notify the utility of the details of the system to provide evidence it is not interconnected.
- 3.3.1.13 The Government shall develop and keep under review an appropriate import duty regime for all renewable energy systems and equipment, directly related to and designed for the operation of these systems, including energy storage and energy monitoring equipment every five years. The import duty rate on renewable energy technologies will be maintained at zero percent (0%) from 2024-2028.
- 3.3.1.14 The Government shall facilitate the development of financing products or mechanisms to establish "green" financial incentives for consumer-owned renewable energy systems and equipment directly related to and designed for the operation of these systems which could include dedicated consumer finance facilities, favorable loan terms, grants, and rebates.
- 3.3.1.15 The Regulator and the Government will explore the option to develop a consumer on-bill financing scheme where the utility will redirect agreed payments from solar production under the approved renewable energy programs to third party financiers, subject to approval of the customer. Any additional administrative cost of an on-bill financing scheme would be passed to the solar customer and not the utility or general consumer base.
- 3.3.1.16 The Government shall advance the planning and permitting processes on all islands to accelerate the deployment of renewable energy systems by increasing approvals efficiency, decreasing costs, providing more transparency, and accelerating the transformation of electricity generation to primarily renewable energy sources.
- 3.3.1.17 The Government shall review the airport exclusion zone requirements and restrictions, to assess whether and how to revise them to accommodate renewable energy, including wind energy facilities on Grand Cayman.

- 3.3.1.18 The Government shall review the exclusion zone requirements and restrictions for a doppler and airport radar stations, recognizing the benefits of such stations coexisting with renewable generation, to assess whether and how to revise exclusion zones to accommodate utility scale wind energy facilities on Grand Cayman.
- 3.3.1.19 The Regulator shall develop programs and incentives as well as initiate and approve studies to support the scale, pace and integration of distributed renewable energy and energy storage; such as non-grid export and time of use utility rates, VPP's, Microgrids, Agrivoltaics, demand-side management as well as electricity grid reliability and stability, in accordance with the IRP and ensure the roll out of these assets/options is part of the utility's planning processes.
- 3.3.2 Electricity Sector Strategy: Ensure that regulatory frameworks balance the interests of consumers in price, affordability and quality of service while facilitating investments, through competition, that optimize efficiency, reliability, safety, environmental performance, and the security of the public electricity supply.
  - 3.3.2.1 Ensure that investments in electricity infrastructure are supported by rigorous analysis on a basis of sound planning procedures such that electricity generation solutions are timely, economic, and reliable, and that transmission, distribution and supply infrastructure are maintained to reliably meet electricity demand. Require competition in the procurement of generating capacity.
  - 3.3.2.2 The regulator's policies will:
    - a) Establish and maintain cost reflective tariff structures that recover the utilities' efficient costs for transmission, distribution and supply. Rates will reflect the respective cost of providing service to customer classes.
    - b) The tariff setting process for sustainable and renewable energy programmes will be informed by a Value of Renewable Energy Study (VORES) and align with public policy. The process will be transparent and the process, its results, and the derivations will be publicly available.
    - c) Make cost recovery of energy efficiency investments transparent and effective.
    - d) Incentivize power production at times that economically reduce system peak demand.
    - e) Develop and implement economically viable energy efficiency programmes, such as utility demand response initiatives, and tariff structures encouraging energy efficiency by consumers by means of energy savings, energy load reductions and renewable energy usage.
    - f) Introduce "Time of Use" tariffs if cost-benefit justified to the consumer and the electric utility. The regulator will carry out a study to confirm that there are net benefits for implementing Time of Use tariffs to consumers, including applications for renewable energy, energy storage, and electric vehicle charging.
  - 3.3.2.3 Implement advanced metering and smart grid technologies to optimize sustainable and renewable electricity generation and consumption by customers (supply and demand) to the extent that these technologies will improve service delivery, reduce overall cost of service, and increase the security of energy supply.

- 3.3.3 Electricity Sector Strategy: Promote the utilization of brownfield sites such as marl-pits in the build-out of renewable energy facilities.
- 3.3.4 Fuel Sector Strategy: Assess and, where it is proven to be economically advantageous and prudent, promote the introduction of alternative fuels in the mix of fuels used for transportation.
  - 3.3.4.1 Explore with fuel suppliers the technical and commercial viability of introducing limited blends of ethanol in gasoline (up to E10) and biodiesel up (up to B5).
- 3.3.5 Fuel Sector Strategy: Where it is proven to be economically advantageous and prudent, consider and promote the introduction of alternative transitional fuels in the mix of fuels used for electricity generation.
- 3.3.5.1 To manage the cost of the transition to 100% renewable energy for generation the Government will evaluate the best economic options for achieving this objective over the Policy horizon and, where it is determined to be prudent and achieves the objective of balancing environmental and consumers' interests, consider the use of transitional fuels such as liquefied natural gas (LNG) or compressed natural gas (CNG) for power generation if doing so does not obligate consumers to pay for new fossil fuel infrastructure in the long term and at the expense of renewable energy adoption to achieve the Policy targets.
- 3.3.6 Fuel Sector Strategy: Ensure a secure, reliable, sustainable, competitive, and affordable supply of fuel products into the Cayman Islands.
  - 3.3.6.1 Develop policies and implement the legal and regulatory framework to secure:
    - a) A fair and competitive market for the importation of fuels into the Cayman Islands.
    - b) A fair and competitive market in the marketing and retailing of fuel products.
    - c) Adoption of equipment technology advances and support for fuel types and specifications appropriate for the Islands.
    - d) The ongoing review and implementation of policies which overall, foster affordable fuel prices.
    - e) Government will assess the impact that the existing fuel importing bulk storage facilities and distribution infrastructure and any future bulk fuel installations and facilities development opportunities would have on fuel related strategies.
    - f) Maintain industry test standards for all fuels used in the Cayman Islands.
    - g) Ensure that fuel suppliers comply with established international environmental, health, and safety regulatory standards for quality control.
- 3.3.7 Transportation Sector Strategy: Increase the share of lower emission, fuel efficient, electric and hybrid vehicles in the Cayman Islands.
  - 3.3.7.1 Create and/or maintain incentives to facilitate the usage of electric and hybrid vehicles and publicize information on vehicle maintenance, disposing of end-of-life batteries, and associated service providers. The Government shall set a target every five years for electric vehicle adoption in its fleet.

- 3.3.7.2 Support the progressive conversion of the public transportation fleet to more efficient alternatives such as EVs, hybrids and alternative fuel vehicles.
- 3.3.7.3 Complete a review of duties and incentives to promote electric vehicles every five years.
  - a) Extend 0% duty on electric vehicles for another five years (2024-2028).
  - b) Explore incentives (including incentives for exporting existing fossil fuel vehicles off island) to reduce the amount of vehicles on island.
- Assess policies to promote electric vehicle adoption in the Cayman Islands, including needs for EV charging infrastructure and additional electricity generation capacity required to meet increased demand from home and public EV. Such analysis shall consider the socioeconomic aspects of EVs including location of charging infrastructure and employment considerations and explore methods to promote EV uptake in disadvantaged communities. Policies shall also advance planning and permitting processes for EV charging infrastructure to increase efficiency, promote transparency, and decrease costs. Where possible charging EV's using renewable energy sources should be prioritized and promoted over charging primarily with fossil fuels.

## 3.3.8 Land Use & Buildings Sector Strategy: Provide a framework and incentives promoting the implementation of energy efficiency measures in new and renovated buildings and structures.

- 3.3.8.1 Amend the Building Code to provide for minimum standards in:
  - a) Lighting, by defining a minimum standard for lighting efficiency based on space type.
  - b) Insulation, by defining minimum standards for: insulation values of walls, doors, roof, and ceilings; window properties; and tightness of building envelope. These requirements will be mandatory for all habitable and occupied structures.
  - c) Equipment, by setting minimum standards for electrical, thermal, and mechanical devices in cooling and ventilation, relative to building size.
- 3.3.8.2 Review, and where appropriate, adopt international codes and standards, such as the CARICOM Regional Energy Efficiency Building Code (CREEBC), International Residential Code's Chapter 11 energy efficiency standards, International Energy Conservation Code or those of the American Society of Heating, Ventilation, Refrigeration and Air Conditioning Engineers (ASHRAE).
- 3.3.8.3 Establish local policies which will incorporate energy efficiency and renewable energy in building design. As appropriate, amend the Building Code.
- 3.3.8.4 Implement Government fee reductions and incentives for developers, homes and buildings which are LEED certified and which provide efficiency and sustainability levels that exceed minimum Cayman Islands building code standards every five years.
- 3.3.8.5 Review incentives and duty reductions for energy efficient appliances, devices, and sustainable building materials every five years.
- 3.3.8.6 Develop assistance programmes for the inclusion of energy production, efficiency, and storage systems within buildings.

## 3.3.9 Land Use & Buildings Sector Strategy: Support energy efficiency and conservation retrofits of existing facilities.

- 3.3.9.1 Develop and implement programmes to retrofit Government Buildings and facilities jurisdiction-wide with renewable energy, energy saving and conservation devices.
- 3.3.9.2 Develop projects to reduce the overall energy demand across all Government owned facilities.
- 3.3.9.3 Ensure that any new or rehabilitation of facilities undertaken by the Government will, unless clearly inappropriate, incorporate LEED certification, electric vehicle charging, and renewable energy systems to the greatest extent feasible and sustainable practices as standard procedure.
- 3.3.9.4 Develop or adopt a program to rate buildings utilizing established standards such as HERS by REM/Rate and mandate that this information be made available when space is listed for rent or sale.
- 3.3.9.5 Implement, with regulatory approval, the retrofitting of public street lighting fixtures to energy efficient alternatives and utilize renewable energy sources where cost effective.
- 3.3.10 Land Use & Buildings Sector Strategy: Rank resources to determine areas of land, sea, or air suitable for future electricity production and storage, giving preference to resources that provide net benefits to greenhouse gas emissions and minimize negative environmental impacts.
  - 3.3.10.1 Implement a legal and regulatory framework for timely reservation of land, sea or air resources identified as desirable for energy production and storage; identify and avoid areas deemed vulnerable to climate hazards.

# 3.3.11 Land Use & Buildings Sector Strategy: Promote the inclusion of renewable energy and energy storage solutions in new and existing structures, including those of critical facilities to promote energy resiliency.

- 3.3.11.1 The regulator shall promote economically viable off-grid and on-grid renewable energy solutions.
- 3.3.11.2 Provide incentives to encourage integration of renewable energy solutions in public spaces, including designated parking spaces for EVs.
- 3.3.11.3 Support national waste management policies by facilitating interconnection of waste to energy generation to the grid.
- 3.3.11.4 The Government shall develop and implement a plan for energy resiliency for critical infrastructure primarily using renewable energy and energy storage systems.

### 3.3.12 Land Use & Buildings Sector Strategy: Facilitate the enhanced security of the electrical distribution network.

- 3.3.12.1 Promote the inclusion of utility corridors in roadways for current and future use.
- 3.3.12.2 The Regulator shall review physical and cybersecurity standards and needs for electricity infrastructure and data management.

## 3.3.13 Water and Wastewater Sector Strategy: Develop and maintain programmes promoting water production/supply efficiency and conservation, and the reduction of wastewater creation.

- 3.3.13.1 Ensure that the regulatory framework:
  - a) Encourages efficient investment in water infrastructure.
  - b) Encourages continuous improvement in energy efficiencies of plant.
  - c) Encourages investments in renewable energy generation where feasible as an alternative or complementary to the public electricity supply system or onsite diesel generation.
  - d) Allows recovery of investments approved by a regulator in water efficiency interventions on customer premises.
  - e) Establishes targets for reductions in non-revenue water.
  - f) Supports a regime of cost reflective tariffs allowing the recovery of efficient investments in water infrastructure.
  - g) Allows for consumer/customer owned reverse osmosis(or similar technology) using renewable energy.
- 3.3.13.2 The Government will promote water conservation practices that reduce demand for potable water for non-potable use, by:
  - a) Providing incentives for rainwater harvesting.
  - b) Encouraging the use of fresh grey water.
- 3.3.13.3 Establish appropriate standards/guidelines that will encourage water conservation by consumers and incentivise adoption.
- 3.3.13.4 Carry out benchmarking on the central wastewater system serving the Seven Mile Beach area to identify and where feasible implement measures to achieve progressively higher efficiencies in wastewater collection and treatment.
- 3.3.13.5 Introduce an energy rating system administered by the regulator to assess the relative efficiency of onsite wastewater treatment systems.

### 3.4 STRATEGIES AND STRATEGIC AIMS SUPPORTING GOAL 4

The following ten (10) strategies support Goal 4 - Socioeconomic and Environmental Sustainability.

3.4.1 Electricity Sector Strategy: Maintain planning and permitting processes for renewable energy development which are equitable, resilient, transparent, objective and facilitate transforming electricity generation primarily to renewable energy sources.

- 3.4.1.1 The Government shall ensure a renewable energy transition plan focused on the protection of choice in energy for Cayman's consumers and that the regulator ensures there is always viable and fair competition in the energy sector.
- 3.4.1.2 Promote equitable access to distributed generation programs through:
  - a) Equitable access to distributed generation capacity allocations.
  - b) Enhance existing feed-in-tariff programs and develop new DER programs such as, community solar, VPP's, Microgrids, Agrivoltaics, non-grid exporting consumer self-consumption and time of use utility rates.
  - c) Facilitating distributed solar and storage financing options, including low-cost financing, for low-income households.
  - d) Programs designed for all consumers, including disadvantaged communities, to participate in distributed generation programs.
- 3.4.1.3 Facilitate the development of distributed solar and storage systems at critical public facilities such as hospitals, schools, and water infrastructure to enhance resiliency and reduce energy costs
- 3.4.1.4 Maintain and keep under review practices to safely dispose of end-of-life solar and energy storage systems.

## 3.4.2 Fuel Products Sector Strategy: Ensure sustainable handling, storage, and disposal of non-hazardous and hazardous waste fuel products.

- 3.4.2.1 Maintain and keep under review practices to collect and handle waste oil.
- 3.4.2.2 Require all private operators generating waste oil to follow best practices for handling and storage of waste oil.
- 3.4.2.3 Provide information on sustainable waste oil handling and storage through guidelines or regulations, including policies for offences/enforcement, as appropriate.
- 3.4.2.4 Define a risk management plan for waste oil environmental emergencies, to ensure reliable access to collection and disposal systems.
- 3.4.2.5 Encourage private operators to collect and export waste oil for off islands recycling and disposal.
- 3.4.2.6 Ensure compliance with international agreements on the export of hazardous waste, and environmental, health, and safety standards.

# 3.4.3 Transportation Sector Strategy: Encourage bicycles and e-bikes as an alternative mode of transportation and work with the Ministries responsible for transportation and land use planning to develop strategies to increase bicycle safety.

- 3.4.3.1 Assess the public's willingness to use cycling as an alternative mode of transportation and where determined to be practical, encouraging cycling as an alternative mode of transportation by:
  - a) Considering the introduction of fiscal incentives for the purchase of bicycles and e-bikes.
  - b) Promoting the inclusion of bike lanes on selected roads likely to be more heavily utilized.
  - c) Requiring the inclusion of bike lanes in the construction of new roads where appropriate.
  - d) Considering the development of bike paths in selected areas.
  - e) Considering incentives for developers who include and implement bike lanes or paths in new developments.
  - f) Provisioning facilities in selected areas with bike friendly amenities.
  - g) Explore partnerships with the private sector to promote bicycle usage.
- 3.4.3.2 Assess the public's willingness to use walking as an alternative mode of transportation and where determined to be practical encourage walking as an alternative mode of transportation by:
  - a) Identifying key areas for pedestrian development and plan in a manner which optimizes the cost/benefit relationship.
  - b) Designating pedestrian only areas where appropriate.
  - c) Improving and expanding the network of sidewalks and pedestrian crossings, increasing their quantity, quality, and safety.
  - d) Mandating developers to incorporate walkability in project design..

#### 3.4.4 Transportation Sector Strategy: Optimize traffic efficiency and address current bottlenecks.

- 3.4.4.1 Plan and deploy traffic planning and management technologies including the provision of real time traffic information, use of sensors to regulate traffic lights, and use of multi function message panels.
- 3.4.4.2 Adopt measures such as new roads, additional lanes and one -way traffic on selected routes at selected times to optimize road travel.
- 3.4.4.3 Adopt measures to decrease road demand including school bus programmes, restrictions to circulation, and staggering selected public services to off peak times.
- 3.4.4.4 Encourage flexible work practices, such as telecommuting or flexible work schedules. In this regard the Government will lead by instituting policies to reflect these strategies in the public sector.
- 3.4.4.5 Increase the efficiency of seaport and airport connections through a comprehensive plan including new infrastructure, green travel for workers and improved access to public transportation modes.

## 3.4.5 Transportation Sector Strategy: Promote measures designed to facilitate efficient utilization of and reduce demand for available parking space.

- 3.4.5.1 Increase the availability of parking facilities, particularly in the proximity of congested or pedestrian areas and in coordination with related transportation and land use policies.
- 3.4.5.2 Encourage the provisioning of parking garages in large developments.

## 3.4.6 Transportation Sector Strategy: Encourage the development of public transportation as a viable alternative to private transportation.

- 3.4.6.1 Government to ensure that any National Transportation Plan links to the Policy in the following ways:
  - a) Improve service coverage to meet demand extend routes, stops, express service.
  - b) Improve service quality, provision of bus shelters.
  - c) Allow public transportation on private roadways.
  - d) Improve payment modes e.g., electronic rechargeable tickets.
- 3.4.6.2 Provide incentives to older persons, students, and frequent users to encourage economies of scale.
- 3.4.6.3 Support new/alternative modes of public transportation such as shuttles between residential areas and employment centers, light rail, and/or developing transit corridors.

# 3.4.7 Land Use & Buildings Sector Strategy: Ensure that the Development Plan is kept updated to fully reflect commitment to sustainable energy practices supporting healthy lifestyles and to encourage zoning diversity and mixed-use development.

- 3.4.7.1 Encourage economy in energy consumption in commuting through the following:
  - a) Include commercial centres in each district with the necessary supporting zones for future growth.
  - b) Establish development/conservation goals for Little Cayman and Cayman Brac, so that development guidelines and control measures can be created to ensure those goals are met.

## 3.4.8 Water & Wastewater Sector Strategy: Promote initiatives designed to protect ground water resources and achieve environmentally friendly and efficient collection, treatment, and disposal of wastewater.

- 3.4.8.1 Repair, upgrade and improve the central wastewater collection and treatment system serving Seven Mile Beach and other areas as relevant to reduce saline ground water infiltration, so that effluents can be used for irrigation.
- 3.4.8.2 Establish a comprehensive regulatory framework for the beneficial reuse of wastewater treatment products (effluent and bio solids) as a source of irrigation water, soil amendment and biogas generation.

3.4.9 Climate Change & Environment Sector Strategy: Consider the United Nations Sustainable Development Goals No. 7 as guiding principles related to the development of sustainable energy solutions to 'ensure access to affordable, reliable and modern energy for all'.

3.4.9.1 Government, in conjunction with relevant authorities, shall track and monitor the rate of development and the loss of natural habitat to understand the rate at which resources impacting climate change are being lost.

3.4.10 Climate Change & Environment Sector Strategy: Embrace the aims enunciated in the Paris Agreement on climate change and develop supporting energy strategies.



# SECTION 4 | POLICY IMPLEMENTATION, MONITORING, EVALUATION AND CHANGE

### **4.1 POLICY IMPLEMENTATION**

Policy implementation is accomplished by actions supporting the Policy's strategic aims, strategies, goals and ultimately the Vision: 'Enhancing and embracing a sustainable lifestyle through responsible and innovative energy supply and consumption'. Such actions are detailed in this Policy's companion document in the form of Implementation Plans outlining responsible parties, resources, timelines and progress or success indicators.

This Policy is fundamental to the viability of the Cayman Islands as a sustainable and competitive economy where all persons are engaged in the opportunity to transform the energy landscape of the Cayman Islands. The Policy, therefore, proposes a structured framework for implementation, continuous monitoring, periodic review and evaluation of performance and mechanisms for change of strategic aims where necessary.

### PRIMARY FUNCTIONS OF THE EPIC



To lead the implementation of the strategies in the NEP.



To develop a monitoring plan and perform in accordance with that plan.



To recommend remedial action where performance not in line with the targets.



To recommend changes to targets or actions where there is over or under performance.

The Portfolio or Ministry with responsibility for energy will be required to establish and maintain a Secretariat (could be a permanent desk officer with administrative support as necessary) responsible for coordinating the implementation of facets of the Policy across ministries, portfolios, agencies, and other organisations with responsibility for actions in furtherance of the Policy aims. The Ministry with responsibility for energy will identify any additional positions or organizational structures that may support Policy implementation, as needed.

Cabinet will appoint and keep appointments current to an 'Energy Policy Implementation Committee (EPIC or the Committee)' responsible for advisory support and the implementation of the Policy. The Ministry with responsibility for energy will have the authority to establish and chair the committee comprised of core stakeholders to discuss technical matters, assign roles and responsibilities, and track progress against indicators and targets. These stakeholders will include but not be limited to representatives from core government ministries, utilities, the regulator(s) and civil society. Cabinet may include additional representatives from agencies at any time to support the implementation of the Policy.

The Ministry with responsibility for energy will chair the EPIC and assume responsibility for monitoring, review/evaluation of the implementation of the Policy, and to conduct 2-year reviews. Arising from those reviews the Ministry with responsibility for energy and EPIC may recommend Policy changes as appropriate.

The actions giving effect to this Policy are set out in a companion document 'Implementation Plan' detailing specific actions regarding strategic aims and indicating the timelines, responsible parties, resource needs, updates intervals and success indicators.

While the EPIC will regulate its own proceedings, it is anticipated that it would meet as necessary, but at a minimum of quarterly.

### 4.2 POLICY MONITORING

EPIC, will as soon as possible after it is appointed, develop a monitoring plan which will, among other things establish reporting periods, identify obstacles where the implementing party may need assistance having regard to possible future constraints.

### 4.3 POLICY REVIEW AND EVALUATION

A critical role of EPIC will be to conduct periodic reviews and evaluation of the Policy to ensure that, even as the Policy is being implemented, it is having the desired impacts and achieving the strategic aims. The factors that the EPIC will determine are any externalities that may affect the Cayman Islands achieving the strategic aims and to recommend appropriate mid-course changes; to assess local factors (for instance a once critical strategic aim may no longer be relevant or practical); or a key stakeholder view may influence the need for a review.

### **4.4 POLICY CHANGE**

EPIC may, informed by outcomes of the various stages of monitoring, review, and evaluation (including the 2-year review), recommend changes in the Policy to Cabinet. The companion document - Implementation Plan - may be amended at the discretion of the EPIC after due consultation.

This reflects the determination to ensure that mechanisms are in place to respond to changed circumstances, new technologies or the emergence of new organisations/stakeholders and therefore assure that the Policy and strategies remain relevant.



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A sustainable, climate-resilient future for the Cayman Islands starts with transforming our energy sector.



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