



# National Energy Policy 2017-2037 Cayman Islands

*“Enhancing and embracing a sustainable lifestyle through responsible and innovative energy supply and consumption”*

Approved by Cabinet 21<sup>st</sup> February 2017



CAYMAN ISLANDS  
GOVERNMENT

# Table of Contents

<b>ACRONYMS AND DEFINITIONS .....</b>	<b>II</b>
<b>FOREWORD .....</b>	<b>VI</b>
<b>MESSAGE .....</b>	<b>VII</b>
<b>INTRODUCTION .....</b>	<b>1</b>
<b>SECTION 1: OVERVIEW AND CONTEXT .....</b>	<b>3</b>
<b>SECTION 2: ENERGY POLICY FRAMEWORK OF THE CAYMAN ISLANDS .....</b>	<b>5</b>
2.1 VISION .....	5
2.2 GOALS .....	5
2.3 STRATEGIC FRAMEWORK .....	8
<b>SECTION 3: STRATEGIES AND STRATEGIC AIMS .....</b>	<b>13</b>
3.1 STRATEGIES AND STRATEGIC AIMS SUPPORTING GOAL 1 .....	13
3.2 STRATEGIES AND STRATEGIC AIMS SUPPORTING GOAL 2 .....	15
3.3 STRATEGIES AND STRATEGIC AIMS SUPPORTING GOAL 3 .....	17
3.4 STRATEGIES AND STRATEGIC AIMS SUPPORTING GOAL 4 .....	24
<b>SECTION 4: POLICY IMPLEMENTATION, MONITORING, EVALUATION AND CHANGE .....</b>	<b>28</b>
4.1 POLICY IMPLEMENTATION .....	28
4.2 POLICY MONITORING .....	29
4.3 POLICY REVIEW AND EVALUATION .....	29
4.4 POLICY CHANGE .....	29
<b>SECTION 5: ACKNOWLEDGMENTS .....</b>	<b>30</b>
<b>APPENDIX .....</b>	<b>I</b>

# Acronyms and Definitions

ASHRAE	American Society of Heating, Ventilation, Refrigeration, and Air Conditioning Engineers
avoided cost	The 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
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
CBP&L	Cayman Brac Power and Light Company Limited, the exclusive provider of electricity service for Cayman Brac and Little Cayman
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
CO <sub>2</sub>	Carbon dioxide which is a colorless, odorless gas produced by combusting carbon and organic compounds
consumer	Utilizer 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
demand	Willingness of a consumer to pay a price for a product or service
DG	Distributed generation and means generation facilities that are not provided through or by the central generation facilities of the electric utility
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
Energy Star	EPA efficiency rating program for appliances and equipment
EPC	Energy Policy Council
ESS	Energy storage system
EV	Electric vehicle
firm power	Power the availability of which is guaranteed
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	Lower environmental risks and higher sustainability
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 into a product or service that creates value
jet kerosene	Petroleum product for fueling aircraft
kWh	Kilowatt hour
Kyoto Second Commitment Period	The Kyoto Protocol legally binds developed countries to emission reduction targets. The Protocol's first commitment period started in 2008 and ended in 2012. The second commitment period began on 1 January 2013 and will end 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 licence awarded by Government or a regulator
LNG	Liquefied natural gas
LPG	Liquefied petroleum gas
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)
non-firm power	Capacity not meeting the requirements of firm power
OTEC	Ocean thermal energy conversion
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
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	Energy produced from natural resources – such as sunlight, wind, rain, tides and geothermal heat – which are not finite resources
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
stranded diesel generation assets	Useful generation assets no longer in use
supply	Total amount of a product or service available to consumers
sustainability	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
tCO <sub>2e</sub>	A tonne, or metric ton, of carbon dioxide equivalent which is a measure to compare or benchmark the emissions from various greenhouse gases
technology	Machines and equipment developed from scientific knowledge
utility	A regulated operator of public infrastructure
ULSD	Ultra-low sulfur diesel, a petroleum product
utility-scale	Larger-sized generation where 100% of the electricity produced is sold to the utility
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

# Foreword

## Hon. Alden McLaughlin, MBE, JP Premier of the Cayman Islands

I am proud to introduce the National Energy Policy. The vision of the policy “*Enhancing and embracing a sustainable lifestyle through responsible and innovative energy supply and consumption*” appropriately represents the aspirations of Caymanians and residents alike and provides a framework for sustainability of our energy sector.

The development of this policy, which covers the period 2017 to 2037, has been an ongoing effort of Government in partnership with key stakeholders.

We know that sustainable development is essential to provide opportunity for Caymanians and to help sustain and grow our economy. This policy acknowledges this reality and takes a thoughtful approach to providing appropriate protections and fundamental key goals.

The policy focusses on renewable energy, conservation methods and the promotion of efficient energy. In developing this policy we have drawn on the expertise of a cross section of stakeholders, both here and from the global community who advised us on a range of issues and opportunities from social policy considerations to the viability of emerging technologies.

Our ultimate goal is to contribute to the global reduction of greenhouse gas emissions through the use of environmentally friendlier sources of energy. We have to accept that, given our small size, our contribution will be minimal when compared to emissions of much larger countries. As a small Island nation that is extremely vulnerable to the impact of climate change it is important that we do our part, and in doing so we, as a country and individually, can also benefit economically from being less reliant on fossil fuels.

I am proud to be a part of a Government that cares about our people and our environment – not just for today but for the long term. The provision of this modern National Energy Policy is but one reflection of how much we care.

It is my hope that everyone will embrace this new policy and participate in the strategy to keep it alive so that we can all derive the benefits which the policy is intended to achieve in the medium to long term.

Alden McLaughlin, MBE, JP

# Message

**Hon. Kurt Tibbetts, OBE, JP, MLA**  
**Minister of Planning, Lands, Agriculture, Housing and Infrastructure**

It is my distinct pleasure to provide this message as an introduction to the National Energy Policy, 2017 - 2037. The development of this Policy benefited from a review in 2016 of an earlier draft prepared in 2013. The intervening period was significant for the energy sector, where the Paris Accord of 2015 and the United Nations Sustainable Development Goals have provided the global framework against which we have been able to position our policies. At the same time the costs of renewable energy technologies such as solar photovoltaics along with the associated storage options have fallen steadily while wind technology is now competitive with conventional generation.

As a community we must be sensitive to the consequences of unfettered increases in greenhouse gases on the planet and recognise that, as a responsible member of the global community, the Cayman Islands must do its part, however small, to mitigate impacts on climate change. The Policy therefore considers using local targets for Greenhouse Gas emissions as the driver for determining other targets. The opportunity to achieve lower electricity costs is increasingly realistic and I anticipate that, early in the life of this policy, consumers will, in fact, see these benefits.

Because of the nature of the energy environment, technological advances will quickly cause this Policy to become outdated and I have therefore been anxious that sustainable arrangements for its review and updating are enshrined in the Policy. To this end, important provisions are made for the establishment of an Energy Policy Council responsible for keeping the Policy under review and for updating and resetting the targets every 4 – 5 years in consultation with stakeholders.

I believe that the target of 70% renewable energy in our energy mix by 2037 is realistic and that it can, with careful and diligent implementation, be exceeded. Therefore our combined efforts must be to not only achieve the target but to surpass it! It will therefore be up to all stakeholders and the community at large to keep this Policy relevant.

I should like to thank all who participated in the preparation and development of this Policy, the 2013 Committee, the 2016 Review Committee and those who provided expert inputs. Together, both committees comprised a wide cross section of stakeholders and interest groups. It is therefore my hope that the Policy itself is reflective of the hopes and aspirations of all Caymanians and those who call the Cayman Islands home.

D. Kurt Tibbetts OBE, JP, MLA



# Introduction

The National Energy Policy (NEP or “the Policy”) was developed on a foundation laid by a Draft Policy which was tabled in the Legislative Assembly in March 2013. Since then, global events occurred prompting the Government of the Cayman Islands to initiate a review and to update the draft Policy to reflect the changed global conditions.

The noteworthy events were: the signing of the historic Paris Agreement on climate change in December 2015 which set global targets for the reduction of greenhouse gases and emissions; the decline in fuel prices from the low US\$100s per barrel for crude oil to the sustained mid to high US\$40s; the precipitous decline in the cost of alternative energy technologies such as solar PV and wind; and the decreasing trend in the cost of storage capacity (batteries) for electric energy.

The Policy covers the period 2017 – 2037 and will be reviewed every five years not only to monitor and report on progress but also to reset the targets and implementation plans in recognition of opportunities that will arise from the constantly changing technological environment.

The Draft NEP tabled in 2013 was the basis for the development of the Policy document produced after many consultation hours drawn from a cross-section of stakeholders from government, civil society and industry who were constituted as a National Energy Policy Review Committee in June 2016. The Committee drew on inputs from local and foreign experts advising on a whole spectrum of issues and opportunities, ranging from social policy considerations to the feasibility of emerging technologies applications, all of which must be considered in the development of any energy policy.

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

The Policy 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.

The Policy was considered and prepared against a background where the high cost (including environmental cost) of fossil fuel-based electricity is regarded as a risk to the competitiveness of the Caymanian economy and the standard of living of residents and therefore an inhibitor to socioeconomic development.

The NEP has established the following high level targets: 70% of total electricity generation to come from renewable sources by 2037; total peak GHG emissions for the Cayman Islands by 2020 while not exceeding 2014 per capita emissions levels (approx. 12.3 tCO<sub>2</sub>e). The Policy aim is to achieve the aspirational goal of the 2015 Paris Agreement of 4.8 tCO<sub>2</sub>e of GHG emissions per capita by 2030.

This policy document is organised under four sections:

- |                  |   |
|------------------|---|
| <b>Section 1</b> | <b>Provides a high-level overview of the energy sector of the Cayman Islands and the context in which the Policy has been framed.</b> |
| <b>Section 2</b> | <b>Provides the Policy framework, the vision, and goals.</b>  |
| <b>Section 3</b> | <b>Provides the details of the goals, strategies, and strategic aims.</b>   |
| <b>Section 4</b> | <b>Provides guidance on implementation, monitoring, evaluation, and change.</b>   |

# 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. 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.

More than 99 percent of energy demand in the Cayman Islands is met by oil products, largely diesel and gasoline, but also including jet kerosene and propane. Figure 1 which shows the economy-wide energy profile at the end of 2015 and demonstrates that most energy is used for electricity generation. Electricity consumption is then split between commercial and residential use. The transport sector is the second-largest energy consuming sector in the economy.

Regarding CO<sub>2</sub> levels, the most recent estimate in the Cayman Islands is 12.3 tCO<sub>2</sub>e per capita as of 2014. Whilst the Cayman Islands itself is not a party to the Paris Climate Change Agreement, as a British Overseas Territory of the United Kingdom which did sign the Paris accord, the Cayman Islands aspires to meet the agreed-upon reduction to 4.8 tCO<sub>2</sub>e per capita by 2030.

The only non-oil energy source in the Cayman Islands is a small amount of solar. Solar energy powers some solar water heaters (SWH) and distributed solar photovoltaic (PV) plants.

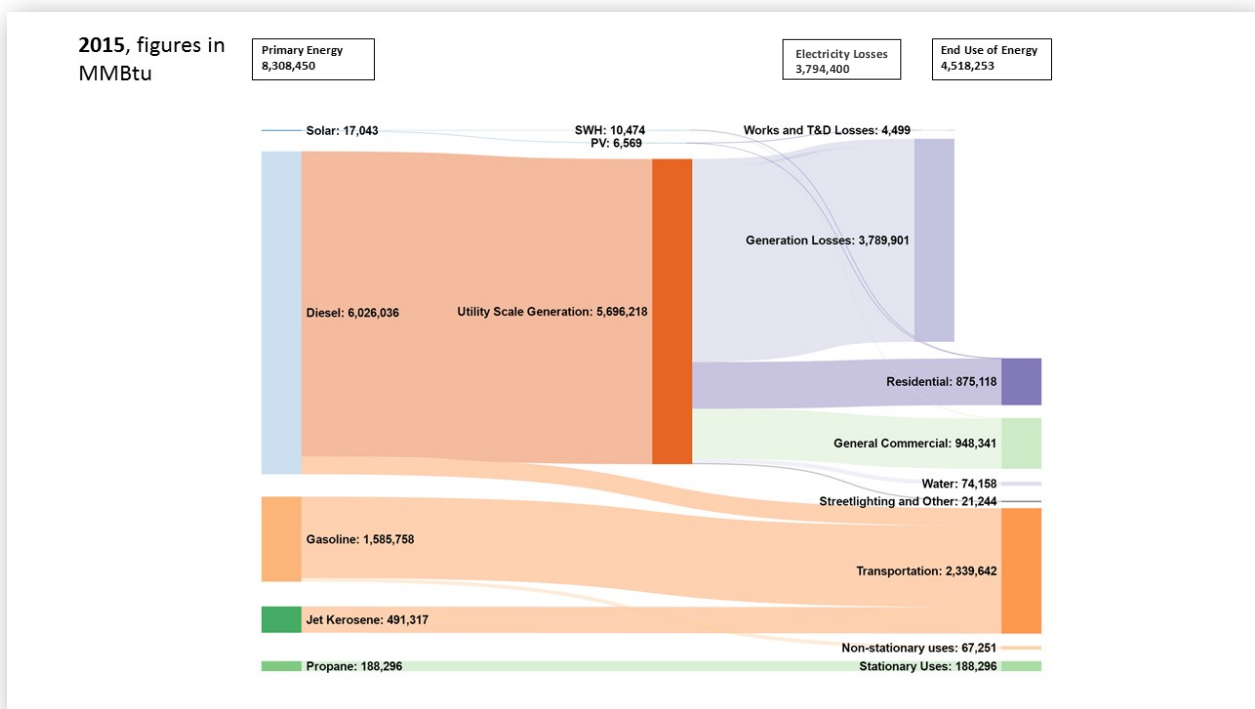


Figure 1: Energy Profile of the Cayman Islands (2015)

Of a total primary energy supply of 8,308,450 MMBtu in 2015, renewable energy accounts for only 17,043 MMBtu or 0.2%. Renewable energy also accounts for only 0.9% of electricity generation and 95% of diesel is used for utility-scale electricity generation.

On Grand Cayman in 2014, it is estimated that diesel-fired generation accounted for approximately 7.2 tCO<sub>2e</sub> per capita thus making it the clear imperative of any energy policy for the Cayman Islands to concentrate on the reduction of the contribution of diesel fuel to utility scale generation if the environmental targets and the reduction of GHG are to be met.

# Section 2: Energy Policy Framework of the Cayman Islands

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 realization 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 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.

Government is committed to take the lead by championing public awareness programmes designed to raise and keep awareness high among the general public on the status of 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**     **Destination of excellence - the Cayman Islands will continually strive to demonstrate leadership 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 destination of excellence 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 0.9% to 70% of total electricity generation by 2037.

Analyses suggests that achieving a minimum level of renewable energy delivered to the electricity supply system of at least 60% is entirely achievable, but in keeping with the aspirational nature of the vision of this Policy, and the expectation that technological developments will drive costs down and open up new technologies, the belief is that, with sustained commitment, 70% is not only a realistic target but the thrust should be towards attaining 100% in electricity generation beyond the life of the Policy. Furthermore, the NEP anticipates DG will be a significant contributor 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 70% renewables is being realized, system reliability cannot be compromised. As a consequence, the need to consider investments in options such as transitional fuels, as well as transmission and distribution systems enhancements are recognized in the Policy as important strategies.

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

In the medium to long term the development and application of viable alternatives and emerging technologies such as OTEC 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 acreage.

**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 development of a 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 development of a new industry and center of commerce in the Caymanian economy.

Goal 4 seeks to provide the framework where these opportunities are not only identified, but systematic, deliberate and sustainable actions are taken to leverage them into the socioeconomic fabric of the islands, while respecting the constraints and carrying capacity of the natural environment.

If these opportunities develop into sustainable industries and economic activity as the norm, the commitment to international and local obligations regarding climate change and environmental sustainability should become instilled as a way of life in the Cayman Islands.

## 2.3 Strategic Framework

The strategic framework underscores that the success or failure of this Policy will depend on the diligence with which particular attention is paid to implementing the aims relevant to the electricity sector. The modelling suggests that economically viable renewables are forecasted to make up 70% of electricity generation by 2037.

Table 1 shows that renewables account for 70% of electricity generation in the model forecast. Most of this comes from utility-scale solar PV, at 62% of generation. Diesel, or an alternative fossil fuel, still makes up 30% of generation.

**Table 1: Forecast Potential Sources of Electricity Generation in 2037  
(As forecasted in 2015)**

	Electricity Generation* (MWh)	Percentage of Total (%)
Diesel Generators	216,616	30
Wind Power	24,528	3
Solar PV - Utility Scale	450,292	62
Waste-to-Energy	21,900	3
Solar PV - Distributed	17,086	2
TOTAL	730,423	100

\*Note: Gross electricity generation (before generation and transmission and distribution losses).



In Figure 2, of a total primary energy demand forecast at 7,211,625 MMBtu in 2027, renewable energy will account for at least 833,184 MMBtu or 12%. However, of the 4,519,137 MMBtu of end use energy, renewable energy will account for at least 30% of the 2,219,036 MMBtu of electricity generation.

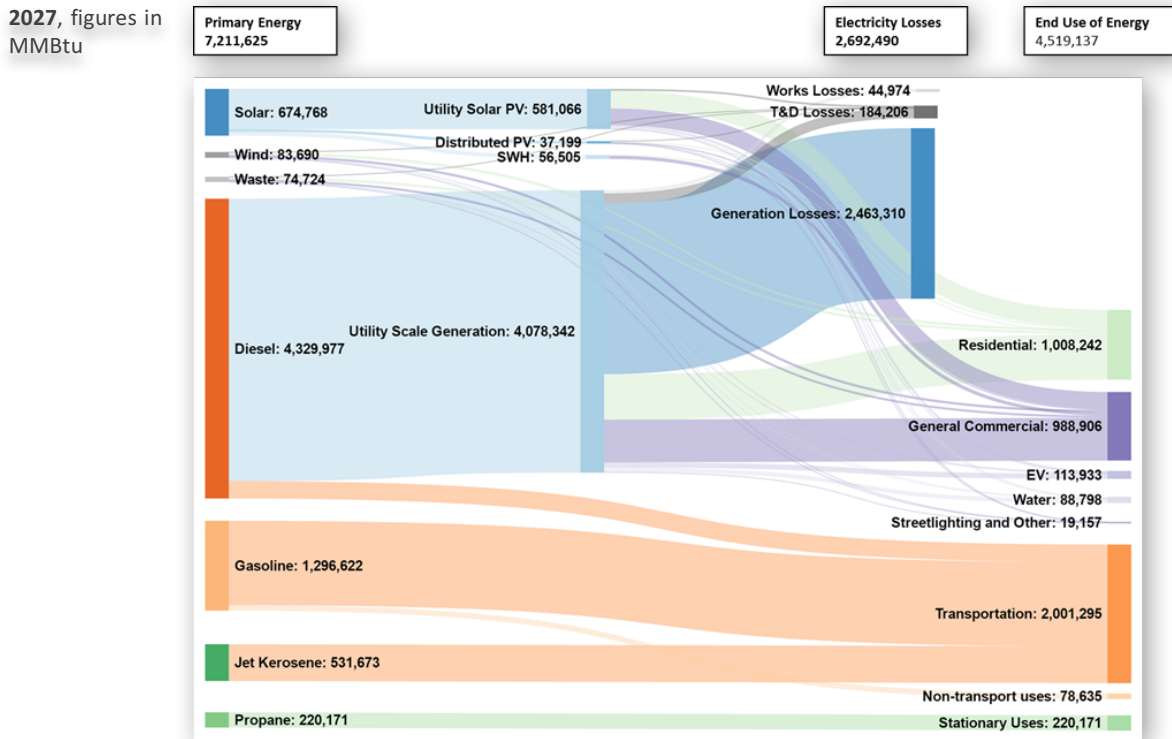
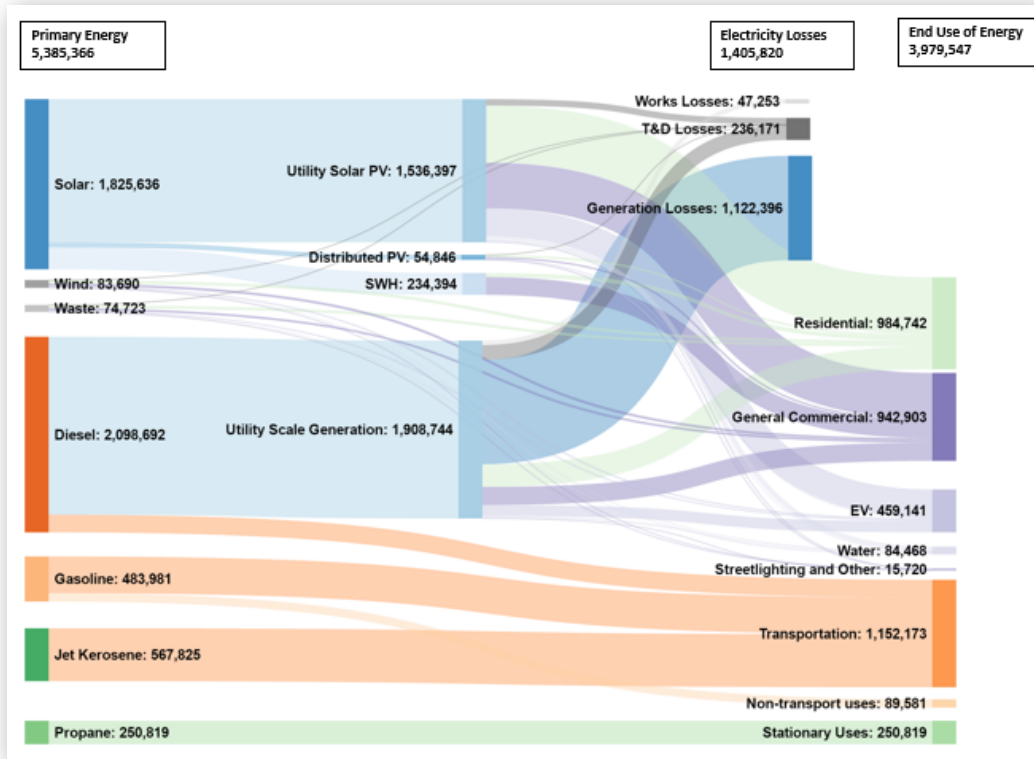


Figure 2: Energy Flow Diagram (2027)

2037, figures in MMBtu



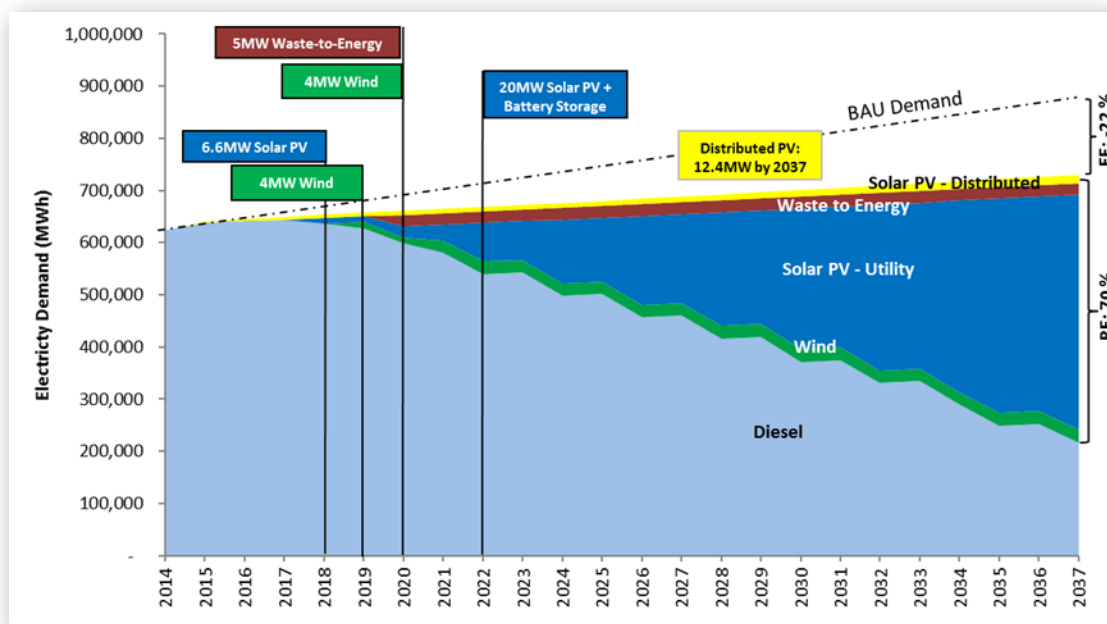
**Figure 3:** Energy Flow Diagram (2037)

In Figure 3, of a total primary energy demand forecast to be 5,385,366 MMBtu in 2037, renewable energy will account for at least 1,984,050 MMBtu or 37%. However, of the 3,979,547 MMBtu of end use energy, renewable energy will account for approximately 70% of the 2,770,398 MMBtu of electricity generation.

Gradually adding PV and battery systems would also allow CUC and CBP&L to make the operational adjustments and grid investments needed to maintain reliability. Between 2022 and 2037, 202MW of solar PV systems would be added in Grand Cayman.

Over the same period, it is forecast that about 11MW of internal combustion engine capacity would also be needed to maintain a reliable reserve margin.

The Policy anticipates that by 2037 the contribution of fossil fuel to primary energy demand will be 39% while the contribution from renewable resources to end use electricity generation will be 70%. Figure 4 indicates one possible scenario through which the Policy target could be achieved. In this scenario, the contribution from distributed PV is projected as less than 2% of end use electricity generation; however, the NEP anticipates DG will be a major contributor to achieving the 70% target and beyond.



**Figure 4:** Possible Scenario - Electricity Demand and Generation Sources (2014-2037)

Between 2017 and 2021, proven economically viable renewables will be added, in addition to the 5MW waste-to-energy facility planned to begin operating in 2020.

This would bring renewable generation to 11% of total electricity generation by 2021. Starting in 2022, retiring diesel generation assets would be replaced with PV and battery systems. This strategy minimises the exposure of the utilities to the possibility of having stranded diesel generation assets and therefore avoids rate shocks to customers.

Real opportunity for achieving the target of 70% renewable in the energy mix will result from over performance of distributed PV as prices continue the downward trend.

In this regard, it is expected that regulators will work with the utility companies to ensure that timely investment in the evolution of smart grid technologies are made to ensure that the grids are equipped to manage and dispatch increasing blocks of distributed PV.

It is also anticipated that, at the five-year Policy reviews, the strategy towards closing any gap to the targeted 70% renewable energy will be realised as the evolution of the technologies and the performance of the sub sectors against the implementation plan are assessed.

Because of their sizes, the Policy anticipates that Cayman Brac and Little Cayman will transition to majority renewables more quickly than Grand Cayman. This is because they are smaller systems that can exceed 50% renewables simply by replacing one thermal plant with a PV and battery system. The Policy anticipates that Little Cayman could add a 0.45 MW PV and battery system in 2020, and Cayman Brac could add a 4 MW PV and battery system in 2021.

In both cases the systems would replace retiring diesel generating assets. Each Island would achieve a minimum 60% of electricity generation from renewables by 2037. Figure 4 includes the expected gross electricity demand and generation sources for Cayman Brac and Little Cayman over the Policy period.

## Section 3: Strategies and Strategic Aims

**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 through conservation and use of new technologies.

### 3.1 Strategies and Strategic Aims Supporting Goal 1

The following eight (8) strategies support Goal 1.

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 handling, storage and disposal of waste.

3.1.2.1     *Publish information on 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.*

3.1.3.2 *Bicycle safety.*

3.1.3.3 *Driving efficiency techniques.*

3.1.4 **Transportation Sector Strategy:** Promote a shift to more fuel efficient vehicles.

Develop public awareness programmes which:

3.1.4.1 *Provide public information on vehicle fuel efficiencies.*

3.1.4.2 *Publicise the government's initiatives to shift to more fuel efficient vehicles.*

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.*

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.

3.1.8 **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' commitment to meet international and local obligations to combat climate change and promote environmental sustainability.*

**Goal 2**     **Destination of excellence** - the Cayman Islands will continually strive to demonstrate leadership in the development and implementation of innovative, well researched, environmentally sensitive and sustainable energy opportunities where appropriate to small-island states and archipelagos.

## 3.2 Strategies and Strategic Aims Supporting Goal 2

The following six (6) strategies support Goal 2.

**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 determine appropriate and prudent mechanisms to attract investors and assure their confidence in the development of innovative technologies in the Cayman Islands.*

*3.2.1.2     Encourage private parties to investigate the viability of and implement innovative renewable energy technologies in the Cayman Islands, recognizing the imperatives for safety and sustainability, and in compliance with appropriate safeguards and requirements.*

*3.2.1.3     Within the context of responsible fiscal management, Government may authorise any sustainable/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 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 and support the introduction of sustainable/renewable energy related disciplines into the curricula at tertiary, secondary and vocational education levels.*

*3.2.2.2     The Government will ensure that Cayman Islands trained professionals are appropriately certified and recognized internationally, leveraging established institutions.*

**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 in a timely manner for energy efficiency and innovative and well researched sustainable/renewable technologies while ensuring a safe operating environment.*

- 3.2.4 **Electricity Sector Strategy:** Develop and implement the institutional frameworks to ensure the continuous review of new and emerging technologies facilitating continual policy alignment to enable the adoption of these technologies when feasible.
- 3.2.5 **Electricity Sector Strategy:** Promote and support regional/international exchanges of thought leadership to position the Cayman Islands as a leading resource centre for information on best/next practices in energy research 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 *Facilitate the transition of a technology (for example residential fuel cells) from experimental status to production and application by making appropriate changes to planning rules and regulations.*



**Goal 3** Energy security - the Cayman Islands will have a modern energy infrastructure that ensures that energy supplies are produced and distributed competitively, safely, reliably, efficiently and affordably in the context of a governance framework that supports effective and responsive regulation, fuel security, environmental sensitivity and sustainable development.

### 3.3 Strategies and Strategic Aims Supporting Goal 3

The following thirteen (13) strategies support Goal 3.

**3.3.1 Electricity Sector Strategy:** Ensure that the legal and regulatory framework promotes renewable energy development in pursuit of the NEP's renewable energy target and supports the longer term 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 competition for procuring utility-scale sustainable generation utilizing a competitive or market based methodology established by the regulatory framework.*

*3.3.1.4 Permit any licensed utility to participate in the solicitation of utility scale sustainable/renewable energy projects run by the regulator for firm or non-firm power, subject to the terms of the utility's license.*

*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/tax structures encouraging the adoption of sustainable 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/renewable energy such as renewable or cogenerated power from a third party when the cost of the available sustainable/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 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 prices in the Cayman Islands*

*3.3.1.8 Increase the penetration of distributed renewable energy generation on the grid utilizing*

*existing developed spaces to the extent feasible.*

- 3.3.1.9 *Facilitate sub-metering in multi-occupancy buildings consistent with electricity laws and/or utility licenses.*
- 3.3.1.10 *The regulatory framework will require utilities to plan their electric systems using a holistic approach including both traditional resources and the deployment of utility and distributed scale sustainable/renewable generation to optimally meet system requirements.*
- 3.3.1.11 *Promote grid-connected consumer owned 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) *A simple and safe interconnection arrangement through a standard agreement and for a reasonable term.*
  - d) *Reasonable limits to the individual and overall eligible systems having regard to economic and technical considerations that may evolve over time.*
  - e) *The ability to review and reset programmes appropriately, having regard to technology advances, system capacity considerations and other economic and technical factors.*
- 3.3.1.12 *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. The differentiation between commercial and residential systems/importers will be eliminated and maintained at zero percent (0%) for the first five years (2017 – 2021) of the Policy.*
- 3.3.1.13 *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, favourable loan terms, grants and rebates.*
- 3.3.1.14 *The Government commits to continually improving the planning and permitting processes on all islands for renewable energy development to decrease costs, provide transparency, and transform electricity generation to primarily renewable energy sources.*
- 3.3.1.15 *Review the airport exclusion zone requirements and restrictions, to consider whether and how to revise them to accommodate renewable energy, including wind energy facilities on Grand Cayman.*
- 3.3.1.16 *Review the exclusion zone requirements and restrictions for a doppler radar station, recognizing the benefits of such station coexisting with renewable generation, to consider whether and how to revise exclusion zones to accommodate utility scale wind energy facilities on Grand Cayman.*

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 tariff 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 will be transparent. 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) Provide a tariff structure encouraging energy efficiency by consumers.
- f) Introduce "Time of Use" tariffs if cost-benefit justified to the consumer and the electric utility.

3.3.2.3 *Implement advanced metering and smart grid technologies to optimize sustainable/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:** Consider 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).*

3.3.4.2 *Keep under review the development of containerized compressed natural gas (CNG) technology.*

3.3.4.3 *Consider the viability of liquefied petroleum gas (LPG) for transportation.*

3.3.5 **Fuel Sector Strategy:** Consider and, where it is proven to be economically advantageous and prudent, 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 70% 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 consumers' interests, consider the use of transitional fuels such as liquefied natural gas (LNG) or compressed natural gas (CNG) for power generation.*

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 consider 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 regulatory standards for quality control.

3.3.7 **Transportation Sector Strategy:** Increase the share of fuel efficient, electric and hybrid vehicles in the fleet of the Cayman Islands.

3.3.7.1 *Create and/or maintain incentives to facilitate the usage of electric and hybrid vehicles. The Government will lead with a policy to convert 7 - 10% of its fleet to electric vehicles and hybrids, where appropriate in the first 5 years of the Policy.*

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 *Mandate a marketing strategy to be initiated by motor vehicle dealers and resellers to provide information on vehicle fuel efficiency to prospective purchasers.*

3.3.7.4 *Reduce the duty on EV's and hybrids to 0% and 10% respectively for 5 years.*

**3.3.8 Land Use & Buildings Sector Strategy:** Provide a framework and incentives promoting the implementation of energy efficiency measures in new facilities and major renovations.

*3.3.8.1 Amend the Building Code to mandate energy efficiency 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 “Main Building” structures except residential structures under a particular square footage or cases where it is clearly inappropriate.
- c) Equipment, by setting minimum standards for electrical, thermal and mechanical devices in cooling and ventilation.

*3.3.8.2 Review and where appropriate adopt International codes, such as the International Energy Conservation Code or those of the American Society of Heating, Ventilation, Refrigeration and Air Conditioning Engineers (ASHRAE).*

*3.3.8.3 Amend the Building Code to allow safe and easy incorporation of renewable energy systems into building design.*

*3.3.8.4 Encourage, through incentives the application of international building efficiency standards in building design such as LEED and Energy Star where these exceed the minimum Building Code requirements of the Cayman Islands.*

*3.3.8.5 Provide incentives for energy efficient appliances, devices, and sustainable building materials*

*3.3.8.6 Develop assistance programs for the inclusion of energy production, efficiency and storage systems within buildings in conjunction with the utility commission, lending institutions, power utilities and the Government.*

**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 with a view to achieving at least a 10% reduction in energy consumption by the five year review of the Policy.*

*3.3.9.2 Embark, as a priority, on a programme to reduce energy demand in Government owned facilities.*

*3.3.9.3 Ensure that any new or rehabilitation of facilities undertaken by the Government will, unless clearly inappropriate, incorporate international standards such as LEED and Energy Star and utilize sustainable/renewable energy practices to the greatest extent feasible.*

- 3.3.9.4 *Develop 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.
- 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.*
- 3.3.11 **Land Use & Buildings Sector Strategy:** Promote the inclusion of renewable energy solutions in new and existing structures.
- 3.3.11.1 *Promote the application of 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 EV's.*
- 3.3.11.3 *Support national waste management policies by facilitating interconnection of waste to energy generation to the grid.*
- 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.*
- 3.3.13 **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 rain water 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.*

**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 development of a sustainable energy industry reflecting its commitment to the socio economic wellbeing of its people and to its international and national obligations relating to climate change and environmental sustainability.

### 3.4 Strategies and Strategic Aims Supporting Goal 4

The following eleven (11) strategies support Goal 4.

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

3.4.1.1     *Develop a renewable energy transition focused on the protection and choice of Cayman's consumers.*

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 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.*

3.4.3     **Transportation Sector Strategy:** Encourage non fossil fuel burning vehicles as an alternative mode of transportation.

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.
- 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.

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.

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 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.*

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.
- c) Review the threshold area of 40 acres for the creation of a Planned Area Development for possible reduction to encourage densification of specific areas and the reduction of commutes.

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 the Seven Mile Beach area to reduce saline ground water infiltration, so that effluents may 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:** Embrace the relevant commitments of the United Nations Sustainable Development Goals No. 7 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 the rate of development and the loss of natural habitat to understand the rate at which resources impacting climate change are being lost.*

3.4.9.2 *Government shall also continue working with the public and private sectors to collect relevant data to be used in the calculation of sectoral and per capita GHG emissions.*

**It is expected that the successful implementation of the proposed Strategies 3.4.10 and 3.4.11 will enable the Cayman Islands to achieve the aspirational goal of the 2015 Paris Agreement of 4.8 tCO<sub>2</sub>e per capita by 2030**

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

3.4.11 **Climate Change & Environment Sector Strategy:** Embrace the goals of the Kyoto Second Commitment Period as and when adopted by Government.

# 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 considered to be 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.

The portfolio or ministry 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 Cabinet will appoint and keep appointments current to an ‘Energy Policy Council (EPC or the Council)’ responsible for monitoring, review/evaluation of the implementation of the Policy, and to conduct 5-year reviews. Arising from those reviews the Council may recommend Policy changes as appropriate.

The Council will comprise a minimum of nine (9) persons and a maximum of twelve (12) taken from the critical stakeholder groups – Government, the energy regulator, private sector, renewable energy advocacy groups, the utilities, environmental interests and the Sister Islands. The Chair should be an independent person with knowledge of the sector. The ministry with responsibility for the sector will provide secretarial support.

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.

EPC will be required to commence the quinquennial review during the fourth year of each cycle such that updates, policy and implementation plan revisions are brought into effect as close to each successive fifth anniversary of the Policy as practicable. Information for a future review can be gathered at any time during the 5 year cycle.

In summary, EPC’s primary functions will be:

- To conduct the 5-year reviews

- 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 changed targets or actions where there is over or under performance

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

## **4.2 Policy monitoring**

EPC, 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 EPC 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 EPC should also consider are: any externalities that may affect the Cayman Islands achieving the strategic aims and to recommend appropriate mid-course changes; to consider 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**

EPC may, informed by outcomes of the various stages of monitoring, review and evaluation (including the 5-year review), recommend changes in the Policy to Cabinet. The companion document - Implementation Plan - may be amended at the discretion of the EPC 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.

## Section 5: Acknowledgments

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Philip Thomas (Secretary)	Bentley Vaughn	David Fawcitt
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# Appendix

- NEP Implementation Plan