

CONCEPT PAPER – DRAFT 30th JANUARY, 2015

FRAMEWORK FOR PROPOSALS TO NATIONAL ENERGY COORDINATION COMMITTEE

The Government of Samoa has strategic priorities for energy supply and use which contribute to the Strategic Development of Samoa. These are summarised in Attachment 1 and reflect the Samoa Energy Sector Plan.

Energy related initiatives arise in all sectors of the economy and have the potential to contribute to or be detrimental to these strategic priorities. The National Energy Sector Coordination Committee (NECC) provides total sector oversight and ensures coordinated effort.

ENERGY RELATED INITIATIVES

The NECC needs to be aware of all energy related initiatives in Samoa and has a review and endorsement function for initiatives above certain thresholds. All energy related initiatives therefore need to be submitted to the Energy Division of the Ministry of Finance (Energy Division) to undertake its function as the Secretariat of the NECC as well as its sector coordination responsibilities.

It is important to consider energy from a total system perspective. For transport fuels, it is the total system from supply of liquid fuels through to the driving of vehicles. For electricity, it is the total system from supply of fuels through generation of electricity to use of appliances in business and at home.

Actions taken in any part of the system have the potential to significantly influence the whole sector and the whole economy of Samoa. Actions in other sectors such as the water sector or the agriculture sector could also significantly influence the energy sector.

Initiatives therefore have a broad definition and **include policy, activities and projects across the private sector and government**. Although the focus is on energy sector initiatives the NECC may need to take an interest in other sectors on a discrete and specific basis as any concerns arise.

The following are examples of initiatives of interest to NECC:

- Introduction of appliance labeling to encourage more efficient appliances
- Development of electricity Interconnection Agreements
- Delivered quality of liquid fuels
- Ability of the electricity network to handle distributed generation
- Availability of agricultural land for bioenergy opportunities
- Energy options with economic development benefits

The Energy Division is responsible for sector coordination on a day to day basis and must be aware of all initiatives. Significant initiatives will be submitted to a sub-committee of the NECC and where full endorsement is required further submitted to the full NECC and in some cases Cabinet.

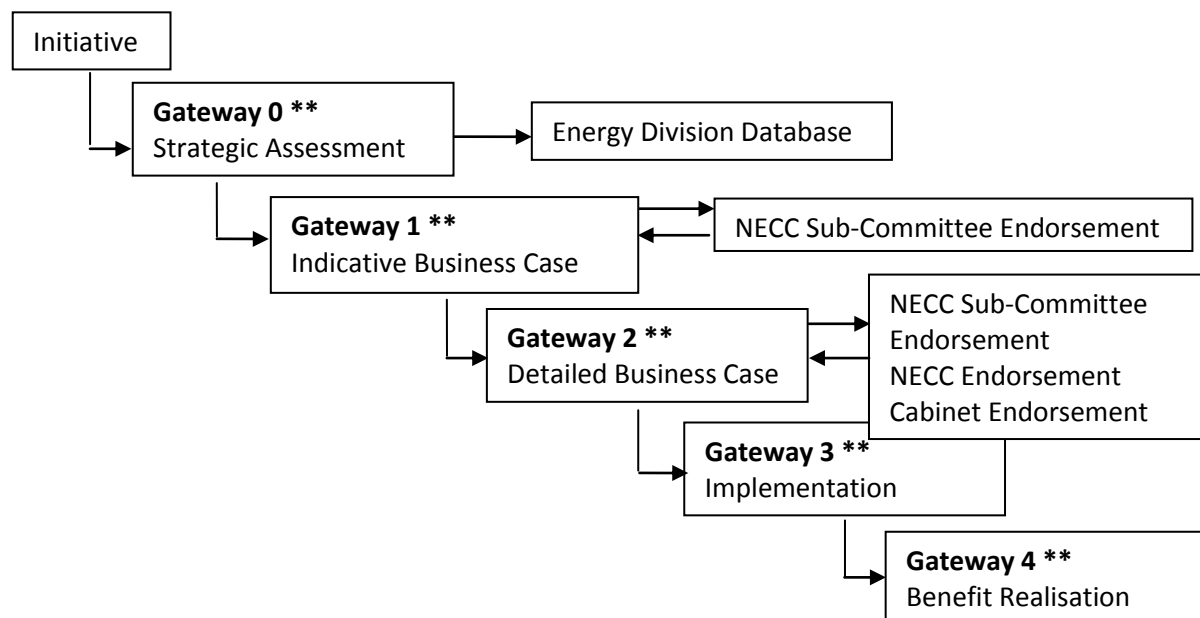
Endorsement by NECC, or the Energy Division on its behalf, does not reduce the necessity to gain all other consents as required.

GATEWAY PROCESS

The Energy Division will apply a Gateway process to ensure awareness of all energy related initiatives, and discipline to ensure effort is applied appropriate to the scale of the initiative. This Gateway process must be clearly understood by Proposers of Initiatives.

Generally only initiatives above an individual consumers energy use are of material interest and over time it is expected that certain initiatives will be of such a nature that they gain endorsement at the first step. For example an increasing number of residential scale wind turbines may be installed and be immediately endorsed as experience is gained with their application.

Proposers of energy related initiatives may **include individuals, companies, government agencies, international players and aid countries**. Essentially each initiative should have a business case supporting it, which can be further developed depending on requirements.



** At all stages the Energy Division can seek expert external advice to assist in evaluation.

Gateway 0 – Strategic Assessment

Proposer approaches the Energy Division with details of the initiative and a strategic assessment is made including; the problem, the benefits and the strategic response.

If the initiative is low risk and low cost (refer Scale Matrix in next section), the Energy Division may be able to provide immediate endorsement on behalf of the NECC.

Gateway 1 – Indicative Business Case

An indicative business case is presented including; the case for change, long list of options, and short list of options. This should include the economic, commercial, financial and management considerations of the Initiative.

Depending on the fit within the Scale Matrix (refer next section), the Energy Division may submit the initiative for NECC Sub-committee endorsement or advice to proceed to the next Gateway.

Gateway 2 – Detailed Business Case

Revisit case for change, detailed cost benefit analysis, preferred option.

The Business Case will be submitted to the NECC Sub-Committee, to the full NECC, and possibly Cabinet for endorsement.

Gateway 3 - Implementation

Proposer decides to proceed to implementation in accordance with endorsement

Gateway 4 – Benefit Realisation

NECC considers whether the benefits were achieved

To facilitate this process the Energy Division and Proposer need to engage in the early stages of each deliverable to agree on the:

- timing and nature of decision required
- scale and risk of the proposal
- scope and depth of analysis and assurance required-using the Scale Matrix
- level of effort required

The Energy Division plays a facilitation and support role. The Energy Division can make specific requests for new Initiatives to be subjected to the Gateway process.

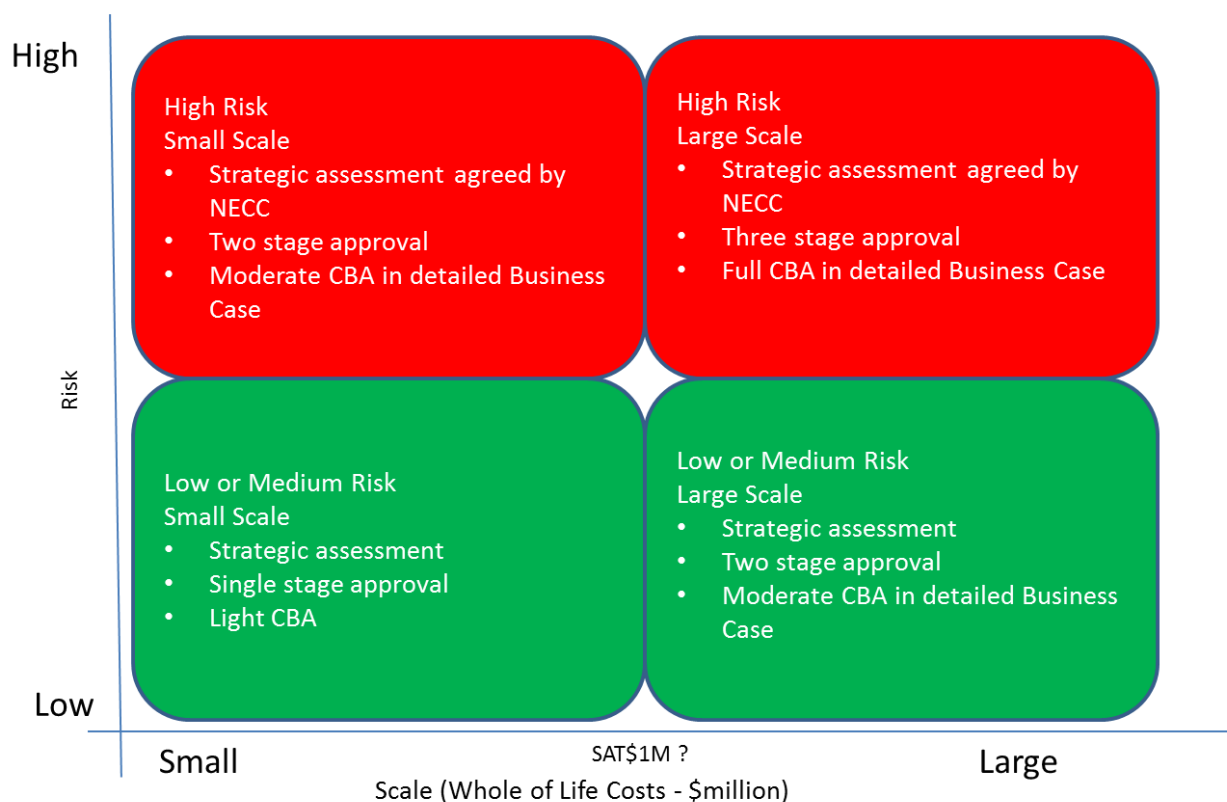
SCALE MATRIX

To ensure a consistent approach for consideration of Initiatives a Scale Matrix has been developed.

Following the Strategic Priorities (Attachment 1) few initiatives should fall into the High risk category.

Scale Matrix

A systematic approach to agreeing business case quality and effort



** CBA = Cost Benefit Analysis

INITIATIVE APPRAISAL

To assist with its appraisal responsibilities the Energy Division may from time to time engage with members of the NECC, the respective agencies represented by NECC members and external advisers in order to improve on the quality of advice.

The first appraisal of all Initiatives will be the responsibility of the Energy Division. The appraisal will focus mainly on establishing the practicalities and feasibility of the assumptions and the accuracy of the information presented within the proposal. In line with this, the appraisal will ensure that both economic and social aspects of the initiative are considered and aligned to environmental sustainability and energy efficiency objectives of the Energy Sector Plan and the SDS.

The appraisal of the initiatives will be based on the following key fundamental aspects:

- *Alignment* – do the objectives of the initiative contribute to the overall achievement of the Energy Sector Plan and the SDS?
- *Feasibility* – can the initiative successfully and sustainably address energy efficiency within the country?
- *Sustainability* – are there supply side constraints that may hinder the process and in effect interrupt the achievement of the objectives stated?
- *Cost Effectiveness* – Is the project financially viable? Can the project ensure cost savings for consumers?
- *Technology* – can the technology being proposed by the initiative be easily adapted to the Samoan context and is there potential for the maintenance and replacement of parts to be locally available?
- *Economy Effects* – the opportunity presented to enhance economic activity and assist efforts to reduce import reliance, increase foreign reserves, improve Balance of Payments and meet obligations under the WTO;

Proposers need to bear in mind at all times that endorsement from the NECC does not in any way remove responsibilities to gain all other approvals necessary such as through the PUMA process.

Where concessions or other incentives are sought then separate submissions will be required to the Investment Committee.

TECHNICAL ADVICE

Project proposals will be forwarded to the following NECC members, by the Energy Division, for the stated reasons, to gauge technical expertise and advice when the need arises:

1. Electric Power Corporation
Where there is a need to confirm the technical aspects of an initiative with inter-connection to the electricity network;
2. Scientific Research Organisation of Samoa
Where the initiative proposes to provide an alternative fuel for vehicles, for generators or for heat;
3. Ministry of Natural Resource and Environment
Where the initiative may have long term implications on the natural environment or proposes to introduce flora or fauna;
4. Ministry of Agriculture and Fisheries
Where supply side constraints of an initiative proposing to use local crops for energy purposes needs to be addressed/confirmed;
5. Ministry for Revenue/Ministry of Commerce, Industry & Labour
Where the investor requests incentives under existing schemes of the Government of Samoa;
6. Attorney General's Office
Where the initiative has extensive legal components

ELECTRICITY GENERATION

Proposers seeking to generate electricity for sale to the grid must comply with the Electricity Act 2010 in all regards including gaining a license from the Electricity Regulator.

The endorsement of all electricity generation projects will be subject to the ability of the investor to comply with all conditions as set out in the Electricity Act 2010, specifically those relating to Part VI Consumer Protection.

The Proposer must include in its proposal to the NECC any plans for further expansion and its Asset Management Plan (AMP) for the next 5 years. This is to ensure an informed decision by the NECC on the cost effectiveness of the project in order that efficiency within the electricity system is improved and that losses to the grid and/or waste is minimised.

Proposers must gain all other necessary consents in addition to endorsement by NECC.

FUEL ALTERNATIVES

Proposers seeking to provide alternatives to fossil fuels will adhere to standards that will be developed as part of the Energy Sector Plan and overseen by the NECC. Subsequently, all proposals regarding initiatives for fuel alternatives will be subject to the ability of the Proposer to comply with all engine fuel specifications to be developed as part of the Energy Sector Plan.

The Proposer must include in its proposal the identification of key risk areas especially with regards to supply side constraints and the ability to address these. This contributes to assurity that the Government of Samoa priorities towards Food Security and Environmental Sustainability are met.

SAMOA ENERGY SECTOR STRATEGIC PRIORITIES

July 2012 (Refer Samoa Energy Sector Plan)

Sector	Options	Limitations	Price
Transport			
Petrol	Blending of ethanol into petrol deliveries	Up to 10% of total petrol requirements or approximately 2.9 million litres per year.	Less than current cost of petrol plus 15%
Diesel	Bio oil blending	Up to 3% of total diesel requirements or 0.4 million litres per year.	Less than current cost of diesel plus 15%
	Biodiesel.	Up to 100% of diesel requirements or 22 million litres per year	Less than current cost of diesel plus 15%
Fleet & network	Hybrid vehicles Electric vehicles Smaller or more efficient vehicles Improved maintenance Improved traffic management		
Electricity			
Generation	Renewable generation options including biofuelled, hydro, wind, geothermal, solar and marine.	Upolu up to approximately 70% of demand or 70GWh pa. Savaii up to 100% of demand or Y GWh pa	Grid connected: Less than current marginal cost of generation plus 15%, or approximately 85/kWh.
Use	Improved transmission/distribution network Distributed generation Energy efficient appliances Energy efficient lighting		
Heating Fuels	Biogas from organic waste Bioethanol as fuel source Energy Efficient wood stoves		

SUBMITTING A PROPOSED INITIATIVE

All energy related initiatives shall be submitted to the Energy Division of the Ministry of Finance as the Secretariat for the NECC in the approved format (*As below*) and addressed to:

Secretary
National Energy Coordinating Committee
Energy Policy and Coordination Division
Ministry of Finance

All proposals must contain the information requested as per the approved format and failure to provide the information in this form may result in the decline or delay in the approval of proposals.

The required format follows:

ENERGY INITIATIVE
ON
(TITLE)
SUBMITTED BY
(PROPOSER)
TO
NATIONAL ENERGY COORDINATING COMMITTEE

1. **Project Title**
2. **Proposer**
3. **Project Objectives**
4. **Background**

Must include:

- *Background on the proposer;*
- *An outline of ownership and investment arrangements;*
- *Brief history on similar initiatives by the proposer in Samoa and other countries whose economic and geographical aspects are similar to Samoa;*

5. Outputs and Benefits

Outputs and benefits to be quantified so that performance indicators can be identified and elaborated on using, inter alia, the following check list as appropriate;

- *Physical production and output targets;*
- *Contribution to the economy of Samoa;*
- *Employment creation;*
- *Contribution to environmental sustainability;*

6. Inputs

The stipulated inputs to be elaborated on using, inter alia, the following check list as appropriate:

- *Production resources (raw materials)*
- *Land*
- *Infrastructure (including water, transport, telecommunications)*
- *Equipment and materials*
- *Construction and buildings*
- *Human resources and training*

7. Revenues and Costs

Where appropriate, proposed revenues or cost implications to the Government of Samoa and Samoan citizens must be elaborated and detailed;

8. Cost - Benefit Analysis

The cost-benefit analysis to be expressed in terms of

- *Financial IRR*
- *Economic IRR*

(if costs and benefits cannot be described in financial and/or economic terms, benefits and costs to be elaborated on within the concept of project cost-effectiveness)

9. Implementation

Implementation arrangements with consideration to the following:

- *Compliance with the necessary regulatory and legislative framework (eg. MCIL Foreign Investment Certificate, MfR Business License, MWTI Building License and PUMA Development Consent Requirements);*
- *Identification and costing (eg. financial, environmental, economic and social) of potential risks and mitigation measures;*

10. Feasibility

Feasibility to be elaborated on within the following framework:

- *Technical feasibility*
- *Market feasibility*
- *Management and operating organisation*
- *Environmental impact*

11. Sustainability

Sustainability to be discussed within the following framework:

- *Addressing supply side constraints (raw materials);*
- *Initiative viability*