

2002

# Guide for Renewable Energy Projects in Belize

BUN-CA

Luis Aké

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**Guide for  
Renewable Energy Projects  
in **Belize****

Prepared by:

**BUN-CA**  
**Biomass Users Network**  
Regional Office for Central America



**BUN-CA**

## Guide for Renewable Energy Projects in Belize

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Author: BUN-CA  
Data compile: Ing. Luis Aké

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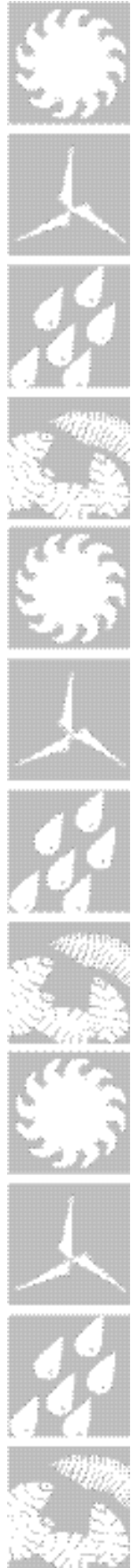
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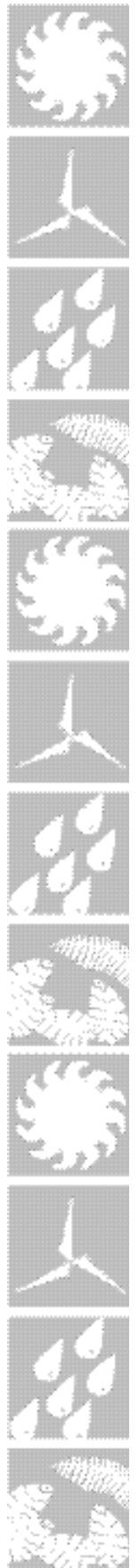
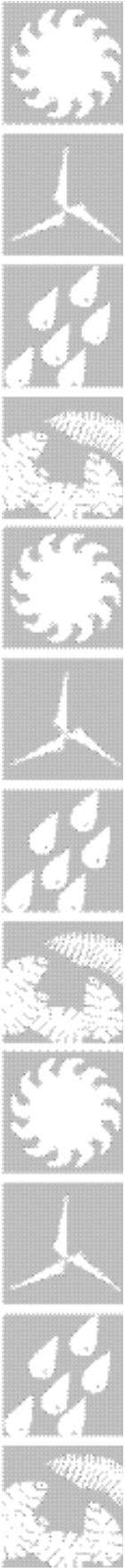
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# Introduction

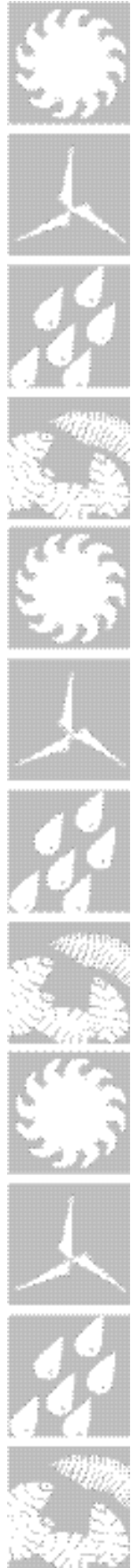
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This Guide is directed at Belizean entrepreneurs considering renewable energy projects, locally. In essence this guide is intended for an entrepreneur considering creating a business that supplies energy products/equipment or services in Belize.

One of the barriers that is confronted by the renewable energy project developer of the Central American region is the lack of information regarding institutional and legislation aspects of the technology that they hope to apply. For example permits required to do studies, construction, concessions and possibilities for energy sales.

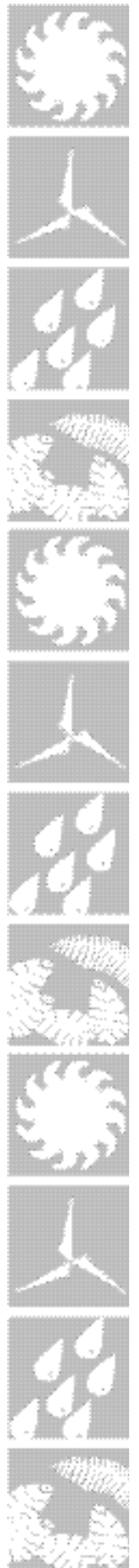
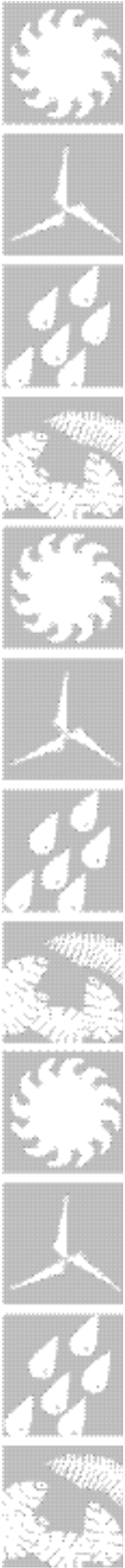
The objective of this Guide is to offer this type of information to renewable energy project developers in Belize, with the aim to stimulate the development of more projects. It is understood that project developers can be a public, private or community entity that is in the process of developing a renewable energy project, which can be a project connected to the grid or an isolated system.. This document includes basic information regarding institution, laws and policies of the electric sector. It also offers information regarding paper works for obtaining permits required by the project developer.

This Guide is produced through the efforts of the office for Central America of the Biomass Users Network (BUN –CA). This guide is subject to changes since it is in its formation stage therefore we would appreciate your comments and amendments to this first version, to the follow e-mail: [bun-ca@bun-ca.org](mailto:bun-ca@bun-ca.org).





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# 1. Institutions related to the Energy Sector

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The small electricity market of Belize is under the control of the Belize Electricity Limited company, they have a license (1993 to 2008) to sell electricity to customers in all the populated area known in Belize. The government of Belize gave this license and it will be revised at the end of the fifteen year period.

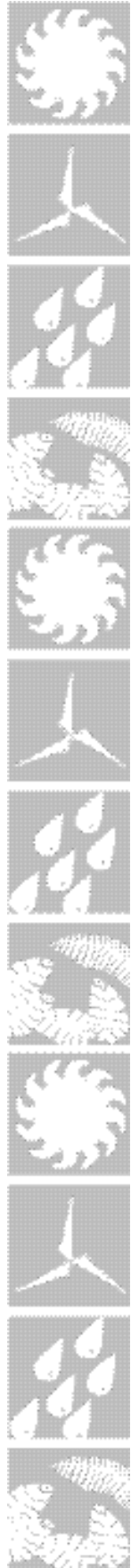
## a. Ministry of Budget Management, Investment and Public Utilities

In October 2001 the government of Belize announced a re organization of its government ministries. Public Utilities and energy falls under this ministry. The government has the right to change and modify its ministries, the term of office runs from 1998 to 2003. The person responsible is the Minister, Honorable Ralf Fonseca . The Chief Executive Officer in this ministry is Dr. Cresencio Sosa who is the person second in command. They are responsible for the drafting of policy and presenting it to cabinet.

The headquarters offices are located in Belmopan City at the government buildings near the national assemble building. There are offices located at each of the six districts, with an additional office in Belize City which is the commercial capital of Belize.

## b. Public Utilities Commission

The Public Utilities Commission is an autonomous body, created in 1999, and is the government department charged with the responsibility to regulate all public utilities in Belize. They issue licenses and set the retail price for the sale of electricity to the general public. Dr. Gilbert Canton was appointed by the Governor General to serve for a period of time not to exceed 6 years.





**c. Office of Electricity Supply**

This Office of Electricity Supply had been responsible for all matters related to electricity in Belize, prior to the creation of the Public Utilities Commission in 1999. Presently it is in charge of rural electrification and wireman licensing and is in the process of reorganizing in an effort to become the Energy Department whose mandate will be the preparation and recommendation of energy policy in Belize. Mr. Herman Charlesworth is in charge of the office of electricity supply. The office is located at the government building on mahogany street, Belize City.

**d. Belize Electricity Limited**

The Belize Electricity Limited (BEL) is the sole commercial generator, transmitter, seller and distributor of electricity current in Belize. BEL is a public limited liability company, incorporated in 1992, as the successor of the Government owned Belize Electricity Board (BEB).

It is majority owned by Fortis Inc. of Canada since 1999 and hold a license issued by the Public Utilities Commission to operate in Belize. It has offices in all the districts of Belize along with a 115kv national grid that is connected to a 24MW hydro plant and to the Mexican national grid. Presently they hold a 25MW power purchase agreement with Mexico.



## 2. Legislation

### a. Belize Electricity Board, Act. 1950

In 1950 the law of the electricity act was revised to provide for the establishing of the Belize Electricity Board. This government institution was charged with the responsibility to generate electric energy transmit and distribute to the general public.

### b. Belize Electricity Limited, Act. 1992

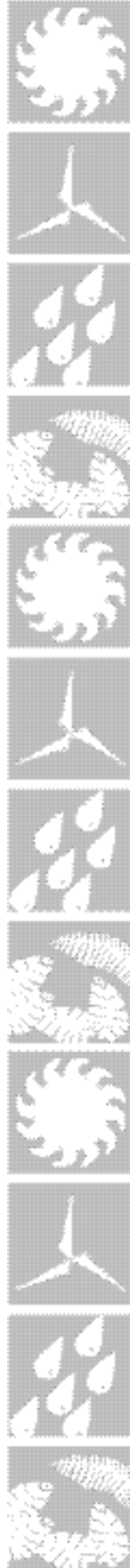
In 1992 the electricity act was amended to provide for the privatization of the electricity sector and BEB became Belize Electricity Limited (BEL) a private company owned by its shareholders with the government retaining 51% of the voting stock. In 1999 the government of Belize further divested itself of its holding in BEL and so Fortis Inc. became BEL's majority shareholder.

### c. Public Utilities, Act. 1999

The Public Utilities Act was created in August of 1999 to provide for the establishment of a Public Utilities Commission whose main functions would be to regulate the public utilities and protect the interests of the customers at large.

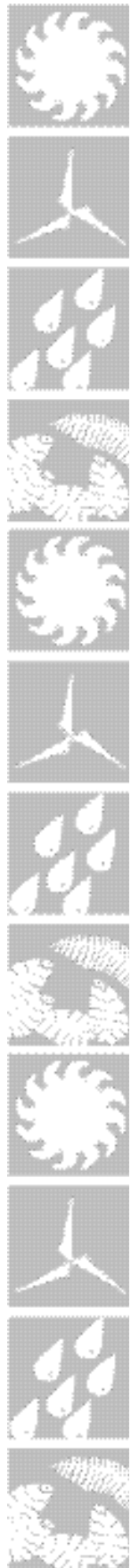
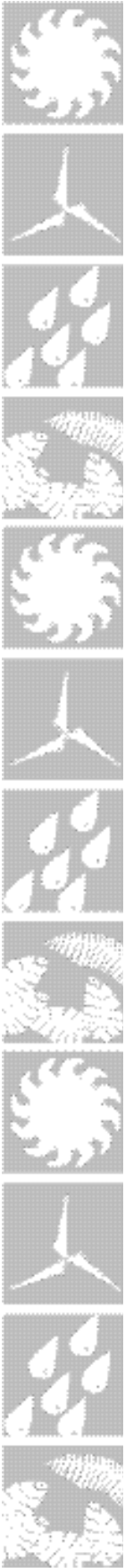
### d. Legislation related to Renewable Energy

In terms of renewable energy the government of Belize has not yet included it in its policies, nevertheless it is committed to assist any genuine renewable energy venture that proves to be viable and sustainable.





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### 3. General Market Conditions

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It is important that general market conditions – economic, commercial, political, social, – instill confidence in the people needed to implement a project (for example, lenders, investors, suppliers, contractors, insurers). The most important of the general market conditions that need to be favorable are the following:

#### a. Macro-economic

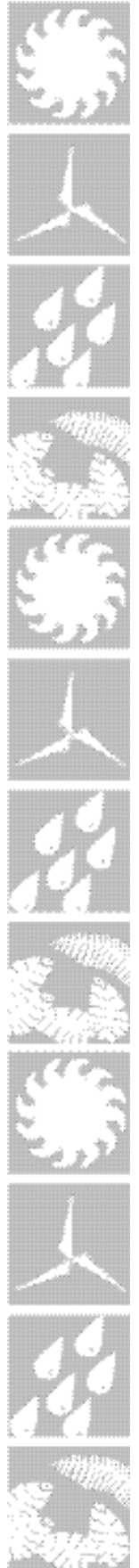
Belize's inflation rate is 0.6 for the year 2000 and the general economy is and has been stable for the past 25 years and growth rate for last year is 10.5%, currency is Belize dollar and is pegged to the us dollar, the rate of exchange is 1USD to 2BZD.

#### b. Commercial

There are 5 commercial banks in Belize two are local banks and the other 3 are international banks. There are no special rules for doing business in Belize and all genuine investors are welcomed. All agreements are done directly with the bank of your choice. In the case of renewable energy projects, since there is no government legislation on this matter, the banks will consider them as a regular industrial project investment. The only company that commercializes electricity in Belize is the Belize Electricity Limited.

#### c. Politics

Belize enjoys the stability of a parliamentary democracy based on the British system of government. There are two major political parties and since independence (1981) each party gets a chance to govern for a period of five years and at the end of each period power is transferred in an orderly and predictable



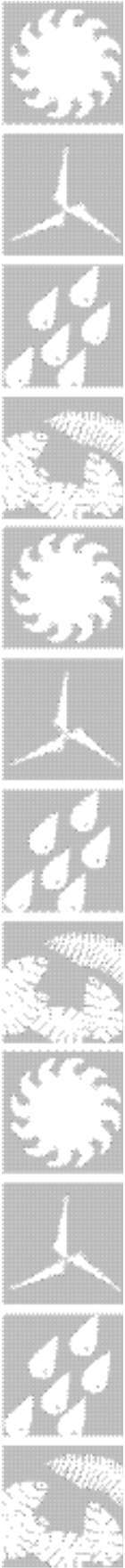


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manner through elections. The level of corruption is very low and sometimes inexistent.

### d. Social

Public support for any project is important especially when it will impact communities and areas. Sometimes it is necessary to do public information and awareness campaigns.





## 4. Requirements for Project Development

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### a. Land

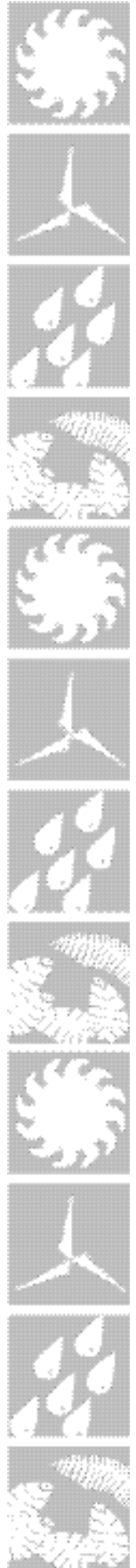
Land is needed for the construction and operation of the project. Land can be secured by ownership, by lease (rental) arrangements or by royalty arrangements. Land is needed not only for the project's physical features themselves but to secure fuel supply (a watershed, for example) and to permit site access.

- If you need to obtain land from government you need to go to the land department in Belmopan and apply for the parcel of land you need and after approval you are required to pay a lease payable per annum.
- After the land has been developed you can apply for ownership.
- You need to secure land access if needed.
- Private land is always available and in that case you need to do all the arrangements directly.

### b. Permits

Every project setting has its own characteristics. It is important to determine, at the earliest possible point, the complete list of permits required and conditions to be met in obtaining approvals.

- The company should be a registered company and this registration can be obtained at the Government Registry Office in Belize City for a small fee.
- An Environmental Impact Assessment (EIA) is required for obtaining an environmental permit for all projects. This permit is obtained from the





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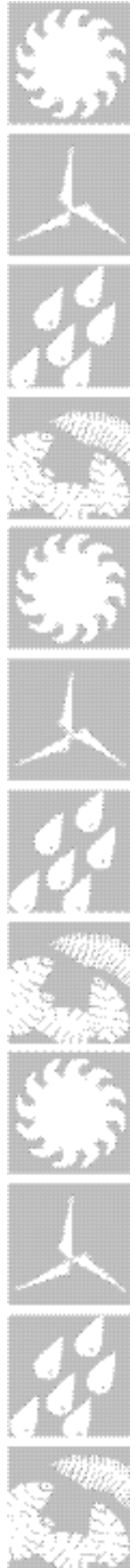
Department of the Environment at Belmopan City If the neighboring communities believe that the project will affect them then public hearings will be needed.

- It is required to obtain a written approval from the Ministry of Natural in order for you to make use of natural resources. Resources such as water, wind and minerals
- It is required to obtain a license to generate and sell electrical energy to the national grid. This license is obtained from The Public Utilities Commission whose office is in Belize City.
- Belize Electricity Limited is the only electric utility presently generating and selling electricity in Belize. BEL is the owner of the national grid therefore it is necessary to establish a Power Purchase Agreement with BEL if you intend to sell power to the national grid.
- The Government of Belize has given its assurance that any genuine developer will be able to obtain import duty exemption on all items imported for the purpose of the project.
- Duty exemption permits can be obtained by applying at the offices of Beltrade.

## 5. Additional Information

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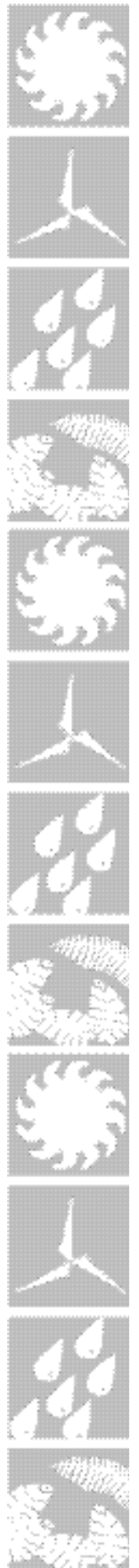
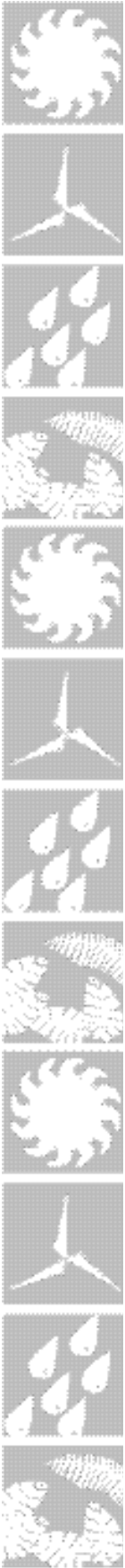
- a. The Government of Belize does not have defined guide line for performing project feasibility studies for energy generation or for any project for that matter. The responsibility lies with the project developer.
- b. With regards to assistance from the Government for a specific project, there are no specific types of projects that may qualify. The Government of Belize has committed itself to assist any genuine project with tax incentives and duty free concessions on imported goods to be used for the project.





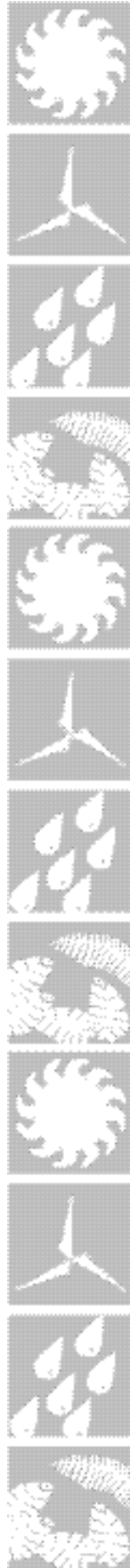


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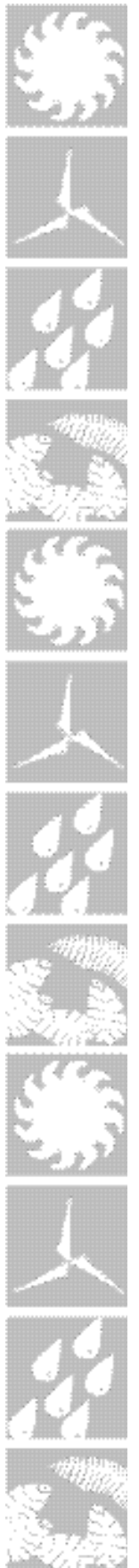
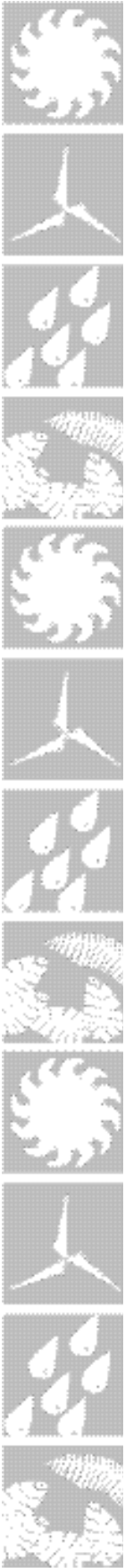
## 6. List of Consultants and Suppliers

- a. Ambrose Tillett**  
Renewable Energy Consultant  
28 Reagent Street, Belize City  
Phone: 501 2 74555  
Email: bsnmail@btl.net
- .....
- b. Kevin Denny**  
Supplier  
Solar Photovoltaic Panels and Wind  
Turbines  
Kelosha Corporation Belize Ltd  
Po Box: 165  
Phone: 501 05 12050  
Email: mamananoots@btl.net
- .....
- c. Ademek Claus**  
Supplier  
Photo Voltaic Solar Panels  
Tropicales Limited  
Po Box: 226  
Phone: 501 08 20079  
Email: tropicales@btl.net
- .....
- d. Robert Nicolait & Assocs.**  
Solar Photovoltaic Panels  
49-A Ave. Street  
P.O. Box 785  
Belize City  
Tel.: (501) 6-23149  
Fax: (501) 6-23290





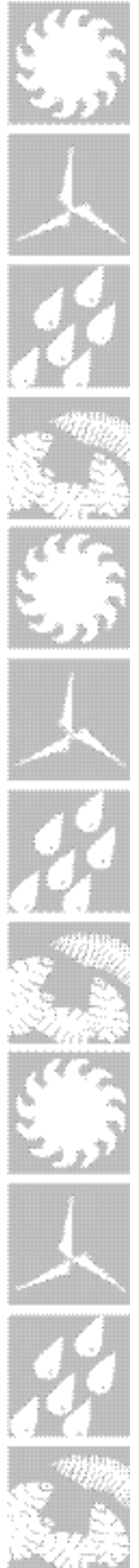
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## 7. Annex

### ANNEX 1

NAME	ADDRESS	PHONE	FAX	E MAIL
Min. of Budget Planning, Investment and Public Utilities	Administration Building, Belmopan City	08 22345 08 22526	08 23673	
Public Utilities Commission	63 Reagent St. Belize City	02 71185	02 71149	puc@btl.net
Office of Electricity Supply	Administration Building Mahogany avenue	02 24995	02 24994	oes@btl.net
Belize Electricity Limited	2.5mls Northern Highway	02 770954	02 30891	mpolonio@bel.com.bz
Belize Trade and Investment Development	No 14 Orchid Garden	08 23737	08 23032	beltraide@belize.gov.bz
Department of the Environment	10/12Amebergis Avenue Belmopan City	08 22816	08 22862	
Land and Survey Department	Belmopan City	08 22331	08 22333	
Ministry of Natural Resources	Administration Building Belmopan City	08 22249 08 22711	08 22333	
General Registry	Regent Street Belize City			



## ANNEX 2

BUN-CA es una organización no gubernamental y regional, que busca contribuir al desarrollo y fortalecimiento de la capacidad de Centro América para aumentar su producción por medio del uso sostenible de los recursos naturales, como medio para mejorar la calidad de vida de sus habitantes, especialmente en las áreas rurales.

El accionar de BUN-CA se enfoca en sus tres áreas temáticas: Energía Renovable, Eficiencia Energética y Agricultura Sostenible.

A continuación se presenta un listado de las publicaciones que usted puede encontrar disponibles en BUN-CA. Para mayor información sobre consultas de estas publicaciones o el trabajo de BUN-CA, favor comunicarse al e-mail: [bun-ca@bun-ca.org](mailto:bun-ca@bun-ca.org).

### Otras publicaciones

#### Publicaciones Técnicas:

Energía Renovable Tecnologías: Solar Térmico

Energía Renovable Tecnologías: Solar Fotovoltáico

Energía Renovable Tecnologías: Energía Eólica

Energía Renovable Tecnologías: Biomasa

Energía Renovable Tecnologías: Hidráulica

Manual para Empresarios: Sistemas Aislados de Energía Renovable

Reducción de Emisiones de Carbono: Una Guía para Empresarios de Energía Renovable

Promoción de Energía Renovable en Centroamérica: Oportunidades para el Planteamiento de Políticas

Manual Práctico para la Fabricación de Abono Orgánico utilizando Lombrices

Retos y Dilemas del Sector Cafetalero Centroamericano ante la Reconversión Industrial

**Publicaciones Técnicas editadas y distribuidas en coordinación con Swiss Contact:**

Manual I: Energía y Energía Renovable

Manual II: Sistemas Hidráulicos Domésticos - Técnicas para instalaciones de agua fría, agua caliente y sistemas solares térmicos domésticos

Manual III: Construcción de un Colector Solar

Manual IV: Ingeniería Solar

**Publicaciones de Apoyo al Desarrollo de Proyectos:**

Guía para Desarrolladores de Proyectos de Generación de Energía Eléctrica utilizando Recursos Renovables en Nicaragua

Guía para Desarrolladores de Proyectos de Generación de Energía Eléctrica utilizando Recursos Renovables en Panamá

Guía para Desarrolladores de Proyectos de Generación de Energía Eléctrica utilizando Recursos Renovables en Belice

Guía para Desarrolladores de Proyectos de Generación de Energía Eléctrica utilizando Recursos Renovables en Guatemala

Guía para Desarrolladores de Proyectos de Generación de Energía Eléctrica utilizando Recursos Renovables en El Salvador

Guía para Desarrolladores de Proyectos de Generación de Energía Eléctrica utilizando Recursos Renovables en Honduras

**Publicaciones de Diseminación de Experiencias:**

Estudios de casos de 8 proyectos demostrativos de Energía Renovable en América Central

Boletín Bi-mensual “*Enfoque Renovable*”

Micro-Hydro and Organic Farming for Sustainable Rural Development in Costa Rica: Compilación de tres Estudios de Caso de Proyectos Rurales en Costa Rica

**Memorias de Seminarios:**

Seminario Nacional de Energía Renovable en Costa Rica, octubre 20, 2000

Seminario Nacional de Energía Renovable en Panamá, noviembre 8, 2000

Seminario Nacional de Energía Renovable en Honduras, julio 5, 2001

Seminario Nacional de Energía Renovable en Belice, julio 6, 2001

Seminario Nacional de Energía Renovable en Nicaragua, agosto 8, 2001

Seminario Nacional de Energía Renovable en El Salvador, septiembre 5, 2001