Electrification Status Report

For

Implementation of Corporate Social Responsibility in Rural Energy Systems in Isolated Areas in Guyana

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Abbreviations & Acronyms

GL&P	Guyana Light and Power
OLADE	Organization for Energy Development in Latin America and the Caribbean
GEA	Guyana Energy Agency
NGO	NON-Governmental Organization
kVA	Kilovolt amperes
kWh	Kilowatt hour
OPM	Office of the Prime Minister
PV	Photovoltaic
RE	Renewable energy
GT&T	Guyana Telephone & Telegraph
GPL	Guyana Power & Light Inc.
IAST	Institute of Applied Science and Technology
UAEP	Unserved Areas Electrification Programme
IDB	Inter-American Development Bank
SHS	Solar Home Systems
CIDA	Canadian International Development Agency
IPED	Institute of Private Enterprise Development
GoG	Government of Guyana
LCDS	Low Carbon Development Strategy
MoAA	Ministry of Amerindian Affairs
MoLG	Ministry of Local Government
GGMC	Guyana Geology and Mining Corporation
UNDP	United Nations Development Programme
GCC	Georgetown Chamber of Commerce

Executive Summary

The availability of energy, particularly in remote and scattered rural and even urban marginal areas, is an essential factor in the search for socio-economic equity. Renewable Energy technologies have proven to be one of the most attractive options for increasing the rates of electrification in rural areas which remain unserved due to their remoteness, low population levels and their proximity to the conventional power grid.

Several stakeholders have contributed to this electrification effort in Guyana. This responsibility has been shared by Governments, Non-Governmental Organizations (NGO's) and private sector entities. It is clear that the electrification effort requires strong partnership between stakeholders. To this end, Guyana, as part of its socio-economic development and poverty alleviation objective, embarked on the 2007 Unserved Areas Electrification Programme to extend electricity to unserved areas. The implementation of electrification and energy related services is therefore a major government responsibility given the links to improved standards of living of the populations and the industrial and economic development of any society.

Many studies have been conducted on the use of renewable energy sources in the past years with support from the Guyana Government, IDB, UNDP, OLADE, CARICOM and others. Several demonstration pilots have also been set up to provide energy at the household and community levels, for both lighting and productive use, as well as fuel efficiency, pumping and cooking. A number of on-going projects are being executed by different organizations throughout the hinterlands.

In this consultancy, Corporate Social Responsibility will be incorporated into the electrification effort to increase the rate of implementation and create a more sustainable model for future implementation.

Background

Electricity is of significance to all developed and developing economies. They all need to ensure a sustainable supply of electricity due to their growing dependence over time. While electricity has become one the most common forms for energy delivery, other indirect energy sources are still relevant. Meanwhile, many developing countries face the struggle of providing electricity to all communities to aid socio-economic development and catch up with the rest of the world in many respects. Electricity is therefore fundamental to the industrial and economic development of any society. It is used in virtually all types of places, from homes to industry and public spaces. As a result, economic growth of a country is always reflected in a rise in energy consumption.

The availability of energy is an essential factor in the search for socio- economic equity. Renewable technologies allow the supply of off-grid electricity in isolated systems. They are presented as one of the most attractive options for increasing the rates of electrification in rural areas where, due to its remoteness and low population levels, the laying of the conventional power grid is not feasible from an economic standpoint.

The total electricity generation in Guyana in 2012 was estimated to be 944.325 GWh: 96.28% from fossil fuels, 3.52% from bagasse-based cogeneration and the remaining 0.2% from solar PVs and wind powered sources (GEA 2012). In some of the many remote communities the power service is provided by small electric generators using fossil fuels, wind and solar energy. The largest consumers in the rural industries are timber, mining, agriculture and fishing.

Guyana has a population of 785,000 persons with 85% living in and around Georgetown. The rest of the country is sparsely inhabited by small and scattered communities with little or no access to electricity. Each hinterland community has from 200 persons in the small villages to about 2000 persons in the larger villages (OPM 2012).

1.0 Introduction

1.1 Purpose

The purpose of this report is to present an assessment of the state of electrification in the rural areas of Guyana. It seeks to document the groundwork for developing a framework which incorporates Corporate Social Responsibility (CSR) into ongoing efforts to electrify those areas and implement energy services into those communities.

The consultancy will identify conditions, businesses and communities that are appropriate to implement the schemes of sustainable rural electrification projects, seeking to improve the standard of living of the populations of these remote areas in Guyana. It also plans to begin the implementation of rural electrification projects in isolated areas with the implementation of CSR in a sustainability scheme.

Specifically, the consultancy will:-

1) Identify private sector companies that have a scope in remote areas of Guyana, ready to support communities in their area of influence in the implementation of pilot projects for rural electrification. Identifying appropriate communities for rural electrification projects with the implementation of CSR to meet their needs
2) Incorporate into the development of rural electrification projects in remote areas of Guyana, the concepts of CSR and involve the public and private companies within the plan of project sustainability
3) Create a rural enterprise in charge of the technical and financial development of energy projects in each isolated area
4) Make agreements between public and private enterprises and rural enterprises for the contribution to the development and sustainability of energy projects

5) Start the implementation of energy projects in communities in remote areas of Guyana with the support of sponsors and companies under the concepts of CSR

1.2 Audience

The primary audience for this document will be:

- OLADE
- The Office of the Prime Minister (OPM)
- Guyana Energy Agency (GEA)
- Ministry of Amerindian Affairs

1.3 Methodology

1.3.1 Approach

The scope of this consultancy is divided into parts to assist in the monitoring of project progress and the establishment of key milestones. These are:-

1) To document the current status of electrification and identify the key stakeholders in the overall process

2) To identify the potential suitable participants for rural electrification projects: public or private companies that finance them, and communities to benefit from its implementation

3) To adequately understand the implementation of rural electrification projects in Guyana and propose three (3) pilot projects, identifying the respective sponsoring companies, partners and its beneficiary communities

1.3.2 Meetings

The project was commenced with face to face meeting with an initial list of stakeholders in Georgetown. The list included the Guyana Energy Agency (GEA) which reports into the office of the Prime Minister (OPM), The Ministries of Amerindian Affairs (MoAA) and Local Government (MoLG), Guyana Geology and Mining Corporation (GGMC), United Nations Development Programme (UNDP) and the Georgetown Chamber of Commerce (GCC).

Subsequent to these arranged meetings, further stakeholders were identified and additional meetings conducted on and off site using various communications technologies.

Meetings will continuously be used to gather the necessary information to ascertain the level of work completed so far and to discover and develop strategies to implement CSR in the implementation of electrification and energy related projects in the rural remote areas of Guyana.

1.3.3 Research

In order to cover as many bases as possible the electronic media is utilised to survey as many sources as possible to gather information on the completed, on-going and planned work in the rural areas of Guyana.

Online sources also provided useful information on implementation in different cultures and effective CSR incorporation.

2.0 Contributors to Rural Electrification

Several stakeholders contribute to the electrification of rural communities in Guyana. This responsibility is shared primarily by Governments but also includes other Non-Governmental Organizations (NGO's) and private sector entities. It is however clear that the electrification effort requires strong partnership between stakeholders. It is also possible that an additional stakeholder, namely corporate Guyana, may potentially speed up the process in the future.

2.1 Public Sector

The public sector has shown tremendous leadership in the electrification of rural areas in Guyana. This is demonstrated at different levels of government particularly because of the designated responsibilities within the political directorate.

2.1.1 General Government

Guyana, as part of its socio-economic development and poverty alleviation objective, embarked on the **2007 Unserved Areas Electrification Programme** (UAEP). This is being achieved through its Hinterland Electrification Strategy to extend electricity to unserved areas where extension of existing distribution networks was deemed economically unfeasible. The implementation of electrification and energy related services is therefore a major government responsibility given the links to improved standards of living of the populations and the industrial and economic development of any society.

The existing unequal opportunity situation which currently exists partially because of limited access to energy in general and electricity specifically, has made this concern very acute for rural areas. Addressing these issues is inextricably linked to the delivery of many other critical services which are also important to national development. Consequently, the approach often requires a cross cutting methodology which includes multiple ministries which are guided by some national policy driven by government. This central policy is manifested in most ministries as they seek to work together to achieve a common good to the benefit of the remote rural communities in Guyana. In addition to the critical inter-ministry cooperation, some ministries play a more focused and dedicated role in the process.

The Office of the President (OP) holds the responsibility for the Guyana REDD+ Investment Fund (GRIF) which is a multi-contributor trust fund for the financing of activities identified under the Government of Guyana.

2.1.2 Key Ministries

Office of the Prime Minister

The Prime Minister is the Minister responsible for energy and electricity and gives directions to the policy to be followed by the GEA and others in the performance of its functions. The Office of the Prime Minister (OPM) has principal policy-making and regulatory responsibility in the energy sector, including the granting of licences to the public utilities and independent power producers. This also includes the approval of development and expansion plans and of operating standards and performance targets for Guyana Power & Light Inc. (GPL), the principal supplier of electricity in Guyana.

Ministry of Amerindian Affairs

The Ministry of Amerindian Affairs play a key role in the implementation of all projects in the hinterland regions of Guyana. As it relates to energy associated projects they interface with the OPM which has primary responsibility for this area and the implementing resources on the ground. They are a major partner in any implementation and must be fully engaged in any future proposed projects based on CSR.

Ministry of Local Government

The Ministry of Local Government is involved in the existing projects in the rural areas but only in an administrative capacity. It provides no technical or financial support. Their coordination between project directors and local officers do however keep projects in line procedurally.

Ministry of Natural Resources and Environment:

The Ministry of Natural Resources and the Environment has responsibility for forestry, mining, environmental management, wildlife, protected areas, land use planning and coordination and climate change. They relate to GEA on matters related to the performance *of the energy* sector in Guyana.

Ministry of Agriculture

The Ministry of Agriculture and IAST share responsibility for the development of this Agro-Energy and Biofuels industry in Guyana. Both sectors are of particular relevance to the rural remote areas of Guyana. This ministry therefore has ministerial responsibility for the industry.

2.1.3 Government Agencies

Guyana Energy Agency

The GEA was established in 1997 by the Guyana Energy Agency Act 1997 (Act No. 31 of 1997). The Act has been amended over the years to foster harmonization, increased monitoring, better regulation and greater enforcement in the energy sector. This Agency falls under the responsibility of the OPM as the Ministry responsible for energy and electricity.

The GEA interacts with other ministries in order to manage the production, importation, distribution and utilization of petroleum and petroleum products. It has lead several electrification efforts with other agencies and the OPM and continues to plan the delivery of sustainable energy services delivery for Guyana including the remote hinterlands.

Institute of Applied Science and Technology (IAST)

The IAST is an industrial research organisation, which has as its mandate the development and/or adaptation of appropriate technology for the utilisation of Guyana's natural resources, so that these resources can be gainfully developed and exploited for the benefit of the people of Guyana. The development of Agro-Energy and Biofuels is an important growth sector for the Government of Guyana, and the Ministry of Agriculture. IAST plays a lead role in the development of this sector with support from the GEA in an effort to expand bio-energy opportunities.

2.2 Non-Governmental Agencies (NGOs)

Many NGOs are actively involved in the development of Energy in the hinterland areas, some of which are listed below:

Acronym	Full Name	Description	Location
IDB	Inter-American Development Bank	Financing	Georgetown
UNDP	United Nations Development Programme	Development	Georgetown
Caricom	Caribbean Community	Caribbean Community	Georgetown
CREDP	Caribbean Renewable Energy Dev.Prog.	CARICOM Renewable Energy	St. Lucia
OLADE	Latin American Energy Organization	Latin American Energy Organisation	Ecuador
CIDA	Canadian International Development Agency	Canadian International Development Agency	Canada
JICA	Japan International Cooperation Agency	Japanese development Agency	Georgetown
Eerepami	Eerepami Regenwald Stiftung	NGO Foundation Germany-Guyana	Germany
SIDS DOCK	Small Islands Developing States Cooperation	Platform to assist SIDS to develop sustainable energy	New York
Peace Corps	Peace Corps Guyana	Community Development through Capacity Building	Georgetown

Table 1 – NGO Agencies

2.3 Private Sector

2.3.1 Electricity Utility

Guyana Power and Light Inc. (GPL) is the principal public supplier of electricity in Guyana. Its customer base in 2012 was 166,878 and it has an estimated generation capacity of 690 GWh of electricity from fuel oil (83%) and diesel (17%) which together accounted for about 1 million barrels of fuel in 2012. They supply Georgetown and the greater Georgetown area along with several other key towns. There are still however several un-serviced areas among rural Guyana. Economics has been the primary inhibitor.

2.3.2 General Corporate

Companies in Guyana have been exposed to a concept of CSR but not as it related to electrification. Some companies have over the years assisted clubs and other charitable organizations financially and otherwise. It is often done without specific reference to CSR but functions in a similar manner to that practiced in other more developed countries.

The Travel and Telecommunication industries have shown keen interest in working toward improving energy access for the rural communities. Some interest has also been shown by others but a more structured approach is needed. Based on this history, it is hoped that a more structured approach to assisting the less developed rural areas of Guyana will receive a favourable reception and sustainable support.

3.0 Implementation

Over the years, the Government, supported by other organizations, has been implementing projects to provide energy access to several hinterland communities. A Guyana "Hinterland Electrification" Strategy has been implemented since 2007 through the OPM, based on the "Hinterland Study", which was outlined in the framework of the Unserved Areas Electrification Programme (UAEP) of the Government of Guyana in 2005. This programme, along with others, aims to electrify the unserved areas and also deliver other energy related services in the most cost effective manner.

Implementation progress has been made as well as the completion of relevant studies aimed at directing future work. Based on one recent UNDP study (UNDP 2012), the existing energy supply facilities in a typical hinterland community in regions 1 and 7 (including public, private households, and businesses) are as shown in table 2 below. This supply comprises of stand-alone energy generation systems.

Area of study	Installed capacity (kW)	Average capacity per community (kW)	Annual demand (MWh)
Region 1	1,530	69.7	2,200
Region 7	700	87.1	1,017

Table 2 – Region Energy Consumption Statistics

More information like this would be useful in directing similar efforts in the other remote regions.

3.1 Achievements

Many studies have been conducted on the use of renewable energy sources in the past years with support from the Guyana Government, IDB, UNDP, OLADE, CARICOM and others. Several demonstration pilots have also been set up to provide energy at the household and community levels, for both lighting and productive use, as well as fuel efficiency, pumping and cooking.

Over the years the Government has also provided several villages with electricity for social services. PV systems were installed to:-

- Provide lighting and to refrigerate vaccines, etc. in several health clinics
- Power well pumps to provide drinking water in some communities
- Power 2-way radios for long distance communications in many villages

3.1.1 Unserved Areas Electrification Programme (UAEP)

The Government of Guyana started the implementation of UAEP with loan support from the Inter-American Development Bank (IDB) in 2004. The project had several components including a hinterland energy component, using Solar Home Systems (SHS) and community-based systems for schools to provide community and household access to electricity.

- Under the UAEP, four (4) solar energy demonstration projects were originally planned and be implemented in Kurukubaru, Yarakita, Capoey, and Muritaro. Because of the positive results in these communities, the project was extended to additional communities. The systems comprised a 125W mono-crystalline panel and

a flooded lead acid battery. The schools in these villages received 250W systems with an inverter, 8 25W bulbs and 120V outlets.

- A total of 1,750 solar systems were installed in homes, schools and other community buildings across 21 hinterland villages.

- Another 12 villages received 65 W-sized solar home systems to about 1,200 hinterland households. Government has therefore taken first steps towards basic electricity access to all. The Hinterland Electrification Programme is assuring the installation of solar home systems in every Amerindian household that has not received one through a previous initiative.

- Production related installations for income generation at the community level were implemented in the villages of Paruima (Region 7), Wauna (Region 1), Wowetta (Region 9) and Kato (Region 8).

3.1.2 Rural Electrification Project (REP)

Another Rural Electrification Project was implemented jointly by CIDA, OLADE and the University of Calgary-Haskayne School of Business with the GEA as the national supporting agency. The project focused on the village of Wowetta in Region 9 and it included:-

- 49 Solar 40W Home Systems
- A freezer for the village shop
- A submersible water pump for irrigation
- An electric 110V cassava mill

Each household is expected to pay $1,000 per week to ensure the financial sustainability of the project. A portion of that payment went towards for the maintenance and a portion towards the recovery of the capital investment. The cost recovery period for these systems was 4 years.

2.1.3 Hinterland Electrification by Renewable Energy Pilot Project (HRbRE)

The purpose of this project was to build capacity and demonstrate RE use. It was funded by UNDP and implemented by OPM.

- RE systems were installed for income generation purposes and included:-

  -One PV system in Wauna to support a peanut processing business
  -One PV System in Kato for a vaccine freezer and battery charging service
  -One PV system in Orealla to support Fruit Cheese production

- Efficient woodstoves were also introduced in Orealla and Kato to reduce firewood consumption and respiratory illnesses from smoke inhalation

- Wind measurement was carried out in Paramakatoi, but proved insufficient for wind power generation

- In Kato an opportunity was identified to use small hydro-power at the Chiung River to operate a water pump for irrigation purposes, and a prefeasibility study was carried out

- In 2011 the hydro-power option was pursued by OPM with EU support to provide the school in Kato with electricity and irrigation for the nearby fields

2.1.4 Energy Services at Community Level for MDG achievement in Hinterland

In 2010 the Government of Guyana and the UNDP began a partnership with OPM to jointly implement the **"Energy Access at Community Level for MDG Achievement in Hinterland Areas**" project. The project seeks to provide energy access at the community level to all Hinterland communities by 2015, as part of the efforts to meet the Millennium Development Goals (MDG). Another component of that project is improved cooking and involved the promotion of efficient wood stoves and solar cookers.

- Phase one (2011-2012) was a needs assessment survey carried out in Regions 1 and 7 to identify specific energy needs and potential energy sources

- Phase two (2013-2015) will build on Phase 1

- GEA assisted OPM in the promotion of the energy efficient wood stoves in the following communities: Shulinab (Region 9), Rupertee (Region 9), Powaikoru (Region 1), Kangaruma (Region 7) and Tuseneng (Region 8).
  -Distributed/Implemented 293 solar cooking stoves in 2012

3.1.5 Solar Home Light kits (SHLK)

In 2009 the GEA and OPM collaborated with the Ministry of Amerindian Affairs to assist rural communities by meeting key energy needs.

- Provided 1000 portable solar light kits to19 Villages in Regions 1,2,7,8 and 9. The kit consists of:

  -One 15W panel

-One charge control cabinet containing a 20Ah battery
-Three 11W CFL light bulbs

- In 2011 another 100 solar light kits were procured with:

-A new design
-LED light bulbs

3.1.6 Hinterland Electrification Programme (HEP)

In 2011 GoG invested in more PV technology with the distribution of 11,000 Solar Home Systems.

- 65W systems were deployed to mostly Amerindian Hinterland and riverine communities as part of the Low Carbon Development Strategy (LCDS). The systems were equipped with maintenance-free AGM batteries

- The project also includes training the communities to install and maintain their systems

3.1.7 Eerepami Foundation Projects (EFP)

This German foundation has carried out several renewable energy initiatives in Guyana. It:

- Installed a 1 kW PV system at Bina Hill
  -later extended to 20 kW.
- Installed a 1 kW wind turbine
- Installed a 1 kW PV system at Shell Beach
- Distributed 100 solar lights in Annai and Agatash

3.1.8 Mobile Phone Base Stations in Off-grid Areas

Mobile operators are seeking to expand their coverage to off-grid areas and thus require electricity for the base stations. Digicel has led the way with some installations.

- In 2010 PV power systems were installed in the villages of Wakapau, Kwebana, Red Hill
- In 2011 PV systems were planned at 58 miles and Mahdia Trail
- In 2012 PV systems were planned for Port Kaituma and Mabaruma
- A phone charging service was also provided to the communities free of charge

3.1.9 Integrated Farming Model (IFM)

The Institute of Private Enterprise Development (IPED), with funding from the Inter-American Development Bank (IDB), started an Integrated Farming Model to reduce poverty among small rural farmers in Guyana. The project incorporated the use of bio-digesters fed with manure from pigs or cattle to produce biogas. The effluent from the digester is used as liquid manure for vegetables on some farms and the gas is used for cooking.

- Twenty-six (26) bio-digesters have been installed across Guyana.
- GEA installed an additional 2 bio-digesters in an effort to promote the use of bio-digesters in farming communities
- GEA has prepared a “Guide for the Design and Construction of Low-cost Bio-digesters” which can be used by small scale farmers to convert animal waste to energy in the form of biogas which can be used for cooking, lighting and electricity generation

3.1.10 Micro Generation

Micro-generation has been pursued with the implementation of grid-tied and net-metering systems.

- 3 systems were installed in 2011 and 1 in 2012
- YTD wind capacity of 31.4 kW was installed in 2011 and 40 kW in 2012

3.1.11 Projects Summary

Project	Description	Partners	Period
UAEP	Unserved Areas Electrification Programme for the hinterlands	GoG OPM IDB	2004-2010
REP	Rural Electrification Project	GEA OLADE CIDA	2009
HEbRE	Hinterland Electrification by Renewable Energy Pilot Project	UNDP OPM	2006-2008
ESCL	Energy Services at Community Level for MDG achievement in Hinterland area	UNDP OPM GEA	2010-2015
SHLK	Solar Home Light kits	GEA MoFA	2009-2011
HEP	Hinterland Electrification Programme,	OP OPM GRIF	2011
EFP	Eerepami Foundation Project	Germans	2011
MPBSOA	Mobile Phone Base Stations in Off-grid Areas	Digicel GT&T	2010-2012
IFM	Integrated Farming Model	IPED IDB OPM UNDP	2011-2012

Table 3 – Project Summary

3.3 Plans

3.3.1 Strategic plans

The Government of Guyana has adopted certain strategic positions in order to promote a multi-pronged approach to achieving its electrification objectives. These include plans to:-

- Review and update Guyana's remaining hydropower potential to meet future demand for energy and explore options for the export of energy. A Memorandum of Understanding (MOU) has been signed with the Government of Brazil

- Explore the restoration of defunct Hydro powered installations

- Continue to pursue options for bagasse-based cogeneration to complement existing cogeneration and increase power cogeneration capacity where feasible to meet incremental growth in demand. Power generation options from rice husk and wood waste will also be reviewed

- Install over 1 MW of solar PV power over the next five (5) years

- Support the use of solar water heaters. Importation and installation of solar water heaters will be encouraged for both residential and commercial use. The tourism and hospitality sector will be engaged with the objective of promoting the installation of solar water heaters

- Support the implementation of wind farms to supply energy to the national grid, provided that pricing mechanisms are competitive and sustainable. Wind energy at the residential and commercial levels for off-grid applications will also be encouraged in appropriate rural communities

3.3.2 Specific Plans

The more specific plans proposed by the Government and stakeholders include the following:

- One hydropower station utilising water from the Tumatumari Falls on the Potaro River, Region 8 and has and will have installed capacity of 1,500 kW. It is not currently functional and is being considered for rehabilitation by a private company

- The Moco-Moco 2 x 0.25 MW hydropower project in Region 9 was commissioned on November 22, 1999. This station is a run-of-the-river diversion-type with a high water head. This plant supplied power to the community of Lethem and its environs and is being considered for rehabilitation

- GEA will continue to monitor the integration of energy efficient cooking stoves in the various pilot communities with the objective of ensuring sustained successes and replicating the experiences in other communities.

- Identify areas to store/dump wood waste from wood-based industries with the primary objective of sustainable waste- management practices. This will create centralized areas from which biomass-based electricity generation can be realized. The first plant is proposed for 2016.

- Utilize rice husk for energy generation. The first rice husk-to-energy plant is proposed for 2017.

- Installation of ICT hubs with 1000 computer terminals

4.0 Way Forward

4.1 Objectives

The next stage of the consultancy will focus on achieving three (3) main objectives. They are:-

- Identify potential private companies
- Assess companies' overall capacity to participate in CSR
- Define CSR model and marketing approach
- Meet with potential partners

4.2 Plans

4.2.1 Potential Private Companies

There are several companies in Guyana which may have varying strength ties to rural Guyana and/or electrification. Those with relevant interest will be identifies. This process will be executed in collaboration with the strategic partners identified in section 2.

4.2.2 Private Company Capacity Assessment

Each company will have common and differing characteristics. Basic selection criteria will take into consideration proximity to and existing ties to rural communities. Ties may be commercial or otherwise. A specific list of criteria will be developed and applied to the initial selection list of companies in order to rate their capability.

4.2.3 CSR Model

Corporate Social Responsibility is a new concept and is in full-swing in many countries. While CSR practices are no substitute for public policy, they contribute to achieving several of its objectives, such as capacity building, a more rational use of natural resources, more innovation performance, poverty reduction and greater respect for human rights. How this concept is applied in Guyana as it relates to delivering energy services to its rural communities, must be clearly defined with specific roles and responsibilities. After the initial development of a Guyana CSR model, some discussion and consensus must be achieved.

A marketing approach will be developed to package the agreed CSR model for company presentation during partner engagement.

4.2.4 Partner Engagement

Atom will develop a forum to present the CRS model for Guyana to a short list of companies. The detailed format of the forum and the presentations to be made will be finalized with the stakeholders prior to execution. It will also include a clear call to action and a brief discussion of the basic elements of a CSR enterprise and agreement.

It is anticipated that a follow up will be required to work out the content of the agreement and confirm the composition of the Enterprise.

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Interviews

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