

ACKNOWLEDGMENTS

This case study has been prepared as part of the Frankfurt School - UNEP Collaborative Centre for Climate & Sustainable Energy Finance project entitled the National Climate Finance Institutions Support Programme (NCFISP). This project is funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety in the framework of the International Climate Initiative (ICI).

The programme helps national climate finance institutions become "Fit for the Funds" through the exchange of knowledge, experience, and good practice. National climate finance institutions in an early stage of development, especially those in Least Developed Countries, receive a range of practical services to develop technical know-how, innovative financing approaches and joint pilot projects. The present case study is part of a series intended to provide examples of the set up and management of national climate finance institutions.

The information presented was compiled through desk research and interviews with Steven Grin, Director of the Project Management Office (PMO) under the Office of the President of the Government of Guyana as well as a review of the literature. A review of the Case Study was also provided by Shyam Nokta, Adviser to the President and Head in the Office of Climate Change of the Government of Guyana. It should be noted that some information is not yet available, as the Guyana REDD-plus Investment Fund is not yet in its full implementation stage, as at the time of writing the case study the GRIF had not received all committed funding from its contributors as the its a result-based mechanism.

Furthermore, we would like to thank Sabrina Heckler, Joyce Lee, Carmen Maria López, Carola Menzel, Alicia Rondón-Krummheuer, Louise Brown and Virginia Sonntag-O'Brien for their valuable comments on the case study.

AUTHORS

Christine Grüning and Laura Susanne Shuford

Copyright © Frankfurt School of Finance & Management gGmbH 2012.

CITATION

Frankfurt School - UNEP Collaborating Centre for Climate & Sustainable Energy Finance (2012), Case Study: The Guyana REDD-plus Investment Fund (GRIF), http://www.fs-unep-centre.org/.

This publication may not be reproduced in whole or in part and in any form for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgement of the source is made. The Frankfurt School - UNEP Collaborating Centre for Climate & Sustainable Energy Finance would appreciate receiving a copy of any publication that uses this publication as a source.

No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from Frankfurt School of Finance & Management gGmbH.

TABLE OF CONTENTS

••	INTRODUCTION	د
2.	GUYANA: MACROECONOMIC AND POLICY CONTEXT	5
2.1.	MACROECONOMIC SITUATION	5
2.2.	EXISTING INSTITUTIONAL AND POLICY FRAMEWORKS	7
2.2.1.	INTERNATIONAL POLICY COMMITMENTS	7
2.2.2.	NATIONAL POLICY FRAMEWORKS RELATED TO REDD+	9
3.	OVERVIEW OF THE GUYANA REDD-PLUS INVESTMENT FUND	13
3.1.	FUND ADMINISTRATION AND GOVERNANCE	15
3.2.	GRIF FUNDING: SOURCES AND STATUS	18
3.2.1.	FUNDING SOURCES	18
3.2.2.	GRIF STATUS OF FUNDING	19
3.3.	REDD+ INCENTIVE STRUCTURE UNDER THE GRIF	20
3.3.1.	MEASURING GUYANA'S INTERIM PERFORMANCE: ENABLING AND PERFORMANCE INDICATORS	21
3.3.2.	MEASURING LONG-TERM PERFORMANCE: SYSTEM OF MONITORING REPORTING AND VERIFICATION	21
4.	OVERVIEW OF THE GUYANA REDD-PLUS INVESTMENT FUND	22
4.1.	GRIF PROJECT PORTFOLIO AND PIPELINE	24
5.	OVERVIEW OF THE GUYANA REDD-PLUS INVESTMENT FUND	32
6.	BIBLIOGRAPHY (TO BE COMPLETED FOLLOWING EDITS)	34

ABBREVIATIONS

	<u></u>
ADF	Amerindian Development Fund
AFH	Amaila Falls Hydro Inc.
AFHEP	Amaila Falls Hydropower Project
BOOT	Build Own Operate Transfer
CAP	Conservancy Adaptation Project
CDB	China Development Bank
CIFOR	Center for International Forestry Research
СОР	Conference of the Parties
DNV	Det Norsk Veritas
EDWC	East Demerara Water Conservancy
EPA	Environmental Project Agency
EPC	Engineering Procurement and Construction
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
EVN	Economic Value to the Nation
EVW	Economic Value to the World
FAO	Food and Agriculture Organisation of the United Nations
FCPF	Forest Carbon Partnership Fund
FIF	Forest Investment Programme
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEA	Guyana Energy Agency
GFC	Guyana Forestry Commission
GGMC	Guyana Geology and Mines Commission
GHGs	Greenhouse Gases
GNRA	Guyana Natural Resources Agency
GoG	Government of Guyana
GoN	Government of Norway
GPL	Guyana Power and Light
GRIF	Guyana REDD-Plus Investment Fund
Harza	Company name: MW Harza Global
HDI	Human Development Index
HFLD	High Forest Low Deforestation
IDA	World Bank's Association
IDB	Inter-American Development Bank
JCN	Joint Concept Note
LCDS	Low Carbon Development Strategy
MDP	Multiple Delivery Partner
MINTIC	Ministry of Tourism, Industry and Commerce
MoAA	Ministry of Amerindian Affairs
MoA	Ministry of Agriculture
	I

MoU	Memorandum of Understanding
MRVS	Monitoring, Reporting and Verification System
MSE	Micro and Small Enterprise
MSSC	Multi Stakeholder Steering Committee
MW	MegaWatt
NRWG	National REDD Working Group
NOK	Norwegian Krone
NTC	National Toshaos' Council
ОСС	Office of Climate Change
ODA	Official Development Aid
ОР	Office of the President
PAC	Protected Areas Commission
PFI	Public Finance Instrument
PFM	Public Financing Mechanism
PMO	Project Management Office
PPA	Power Purchase Agreement
REDD	Reducing Emissions from Deforestation and Forest Degradation
RGDP	REDD+ Governance Development Plan
RPP	Readiness Preparation Proposal
RS	REDD+ Secretariat
Synergy	Synergy Holdings Inc.
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank

1. INTRODUCTION

The Governments of Guyana (GoG) and Norway (GoN) signed a Memorandum of Understanding¹ (MoU) and a Joint Concept Note (JCN) on November 9th, 2009 pledging that the countries will "work together to provide the world with a relevant, replicable model for how REDD+ can align the development objectives of forest countries with the world's need to combat climate change." The result of this cooperation is the **Guyana REDD-Plus Investment Fund (GRIF)**. The GRIF aims to align national economic development with climate resilience and low-deforestation, low carbon growth by investing in low-carbon strategies identified in Guyana's Low Carbon Development Strategy (LCDS). The GRIF channels funding and offers economic incentives to a wide range of actors to enhance national government policy frameworks and economic incentives for combating climate change. Due to its characteristics, purpose and use the GRIF can be viewed as a **public finance mechanism** (PFM).

Public Finance Mechanisms (PFMs) or public finance instruments (PFIs)² are financial support mechanisms that help governments align market actors, correct market failures and in the case of climate finance activities, help to reduce the perceived and actual risk of low-carbon and climate-friendly investments.³ In both general terms and when used for climate finance PFMs cover a broad range of mechanisms such as grants, loans and credit lines, guarantees and technical assistance. In the case of the GRIF the PFM takes the more unique form of a "financial intermediary mechanism for the performance-based payments from contributors to Guyana" for REDD+ activities.⁴ For the purpose of climate finance many PFMs are employed by national governments, development finance institutions and commercial banks to mobilise, in addition to public funding, private financing to accelerate the development, commercialisation, and deployment of climate-oriented projects, programmes and institutions and build commercially sustainable markets.

The following section provides an overview of Guyana's macro-economy and evolution of Guyana's climate change policy with a special focus on REDD+. Section three gives an overview of the GRIF, including its funding sources, design and governance, fund administration and current operations. The GRIF's key points and features are presented in section four. The conclusion in section four aims to present the lessons learned from the GRIF.

GUYANA: MACROECONOMIC AND POLICY CONTEXT

To better understand the conditions under which the GRIF developed, this section first gives an overview of the macroeconomic situation of Guyana. The second part of the chapter presents the evolution of its climate change policy framework with a special focus on REDD+.

2.1. MACROECONOMIC SITUATION

Guyana is a tropical country situated on the north eastern coast of South America and bounded by the Atlantic Ocean on its northern coast, Suriname to the east, Venezuela to the west and Brazil to the south and southwest. Guyana occupies a total landmass of approximately 216,000 km with a 434 km long coastline. About 35 percent of the country lies within the Amazon Basin.⁵ Guyana has a total population of 754,493 (2010), which considering its total land mass translates to a very low population density of less than four persons per square km⁶ of which approximately 90 percent resides along the coast where its urban and commercial activities are located.

Guyana has nine indigenous Amerindian tribes spread over all ten administrative districts of Guyana, many in the rainforest.⁷ According to the 2011 UN Human Development Report Guyana's HDI value is

5

¹ Government of the Cooperative Republic of Guyana and the Government of the Kingdom of Norway (2009).

² UNEP/SEFI (2008).

³ Neuhoff et al (2009).

⁴ Government of the Cooperative Republic of Guyana and the Government of the Kingdom of Norway (2009).

⁵ World Bank Data Portal (2012). Web, Guyana country page, accessed May 2012.

⁶ Republic of Guyana (2002).

⁷ Ibid.

0.633 — in the medium human development category — positioning the country at rank 117 out of 187.8

According to the World Bank, Guyana's 2010 Gross Domestic Product (GDP) totaled USD 2.2 billion, classifying it as a lower middle income country. For the past six consecutive years the domestic economy showed real positive growth, with GDP increases of 5.4 percent in 2011, and its expected to continue its positive growth trend into 2012.⁹ Nevertheless, persistent problems still exist, such as a shortage of skilled labour, a high crime rate, deficient infrastructure, and a lack of political consensus on development issues.¹⁰

Due to their common history as a former British colony Guyana has very close ties with most of the other English-speaking island states and countries of the Caribbean. As in colonial times, agriculture and resource extraction are still the primary economic activities, and the export of six commodities (sugar, gold, bauxite, shrimp, timber and rice) represent nearly 60 percent of the country's GDP. Since these commodities are highly sensitive to commodity market fluctuations and extreme weather events, Guyana's economy is susceptible to slowed growth.¹¹

Guyana is highly dependent on the import of fossil fuels to meet its energy requirements. The installed capacity of the country's only electricity producer, the Guyana Power and Light (GPL) Company, depends primarily on inefficient diesel-engine generators, rendering Guyana's electricity prices third highest in the Caribbean. These factors combined make the country especially susceptible to external price shocks and reduce its competitiveness.¹²

Guyana is very rich in renewable energy resources, in particular hydroelectric power due to its abundance of waterfalls. Based on analysis by the Guyana Natural Resources Agency (GNRA) in 1995, the economic potential of hydropower was estimated to be around 7000MW. Six sites for medium and large-scale hydroelectric facilities were identified by the GNRA and one was selected for development that boasts very high generation potential located at Amaila Falls.¹³

Guyana is one of the few countries characterized as High Forest Cover Low Deforestation (HFLD), meaning historically it has retained a high percentage of its original forest cover due to low levels of deforestation. About 87% of its territory is covered with rainforest¹⁴ (18.39 million hectares and 5GtCO2 above ground biomass) of which 75% is relatively untouched.¹⁵ According to some estimates, Guyana has one of the lowest historical deforestation rates in the world with 0.1 to 0.3%, even though the forest is very suitable for timber and resource extraction and post-timber harvest agriculture.¹⁶ In fact, the deforestation rate in Guyana exhibits no significant forest change for the period 1990-2005.¹⁷ These low deforestation rates have been linked to strong sustainable forest management practices and national policy and legal frameworks.¹⁸

An independent assessment by McKinsey & Company (2007) estimates the Economic Value to the World (EVW) of Guyana's rainforest¹⁹ (if it were to be harvested one time and the land used at its highest value) to be USD 5.8 billion. Conservative valuations of EVW provided by Guyana's forests suggest that, left standing, they contribute USD 40 billion per year to the global economy each year.²⁰ The Economic Value to the Nation (EVN) of the resources of its forests was estimated by the GoG in its LCDS to be the

⁸ UN (2011). The 2011 UN Human Development Report presents the 2011 Human Development Index (HDI) values and ranks for 187 countries and UN-recognized territories.

⁹ Government Information Agency, the Republic of Guyana (2012a).

¹⁰ USAID (2012) Guyana country webpage, accessed May 2012.

¹¹ CIA Fact Book Guyana country webpage, accessed May 2012.

¹² World Bank (2007).

¹³ Republic of Guyana (2000).

¹⁴ Guyana is a part of the larger Guyana Shield Rainforest that also covers four other countries in South America. This rainforest is one of the largest expanses of untouched tropical rainforest in the world.

¹⁵ FAO (2005).

¹⁶ Conservation International (2009).

¹⁷ FAO (2005).

¹⁸ Office of the President, Republic of Guyana. (2008).

¹⁹ Includes State Forest Estates. Excludes lands under the jurisdiction of indigenous people and 10% of forested land which will be allocated as protected areas.

²⁰ Based on 2030 marginal abatement cost from McKinsey & Company (2007).

equivalent of an annual payment of USD 580 million.²¹ The purpose of efforts such as REDD+ is to offer alternative payment schemes to HFLD countries such as Guyana, so they do not engage in a development pathway that would exploit the EVN of their forests.

2.2. EXISTING INSTITUTIONAL AND POLICY FRAMEWORKS

Guyana's existing national climate change policies and international commitments guide the GoG, the **Office of the President** (OP) and the **Office of Climate Change** (OCC) and government **agencies and ministries** (e.g. the Guyana Forestry Commission (GFC), the Ministry of Agriculture (MoA) and the Project Management Office (PMO)) in multi-sectoral coordination for all climate change-related policies, plans and programmes.

The overall management and implementation of national and regional climate change initiatives are jointly overseen by the OCC and the OP. They are also the key parties supporting international negotiations on REDD+. The OCC, which operates within the OP, was founded in 2009 and has the overall responsibility for coordinating the GoG's over-arching climate change policy, Guyana's LCDS.²² The Project Management Office (PMO), which also operates within the OP and was founded in 2009, is responsible for the coordination and implementation of projects identified in the LCDS and to attract and drive key low carbon investments. A Guyana **REDD+ Secretariat** (RS) was also established in 2009 as a part of the GFC to coordinate all national REDD+ activities, under the direction of the GFC, OP, and OCC and to oversee the implementation of REDD+ activities under the LCDS framework.²³

To keep these activities streamlined with funding activities, emerging national and international climate change policies will be integrated into the LCDS, which serves as the primary vehicle for identifying strategic-low carbon sectors for investment under the GRIF. The development of Guyana's climate change policies at the national and international level that laid the foundation for the GRIF are discussed below.

2.2.1. INTERNATIONAL POLICY COMMITMENTS

One of the first major steps in Guyana's Climate Change Policy at the international level was taken in June of 1992, when the GoG signed the **UN Framework Convention on Climate Change (UNFCCC)** at the United Nations Conference on Environment and Development (UNCED). It was ratified in August of 2004. As member of the UNFCCC, Guyana submitted its initial **National Communication** on the implementation of the Convention to the Conference of the Parties (COP) in 2002.²⁴ In September 2012 Guyana submitted its **Second National Communication** to the UNFCCC. The core elements of the national communications are information on emissions and removals of greenhouse gases (GHGs) and details of the activities undertaken to implement the Convention. Guyana made further commitments to combating climate change through its ratification of the **Kyoto Protocol** in 2003, the **United Nations Convention on Biological Diversity** in 1994, and the **United Nations Convention to Combat Desertification** in 1997.²⁵

Since 2009 Guyana has played a pivotal role internationally in widening the vision of the financing mechanism "Reducing Emissions from Deforestation and Forest Degradation" (REDD), renamed as "REDD+" (see Figure 1). Guyana's efforts, which are embodied in its LCDS, are based on the REDD+ approaches.

Showing its commitment to the development of a REDD+ financing mechanism, Guyana's then President Dr. Bharrat Jagdeo and the Prime Minister of Norway Mr. Jens Stoltenberg issued a **Joint Statement** on their cooperation for climate and forest issues on February 3, 2009. To formalise their cooperation, the

7

²¹ Office of the President, The Government of Guyana (2010 b).

²² Office of Climate Change, Republic of Guyana. (2012).

²³ Forest Carbon Partnership Fund, World Bank (2010). The RS also works closely with the Multi Stakeholder Steering Committee (MSSC) of the LCDS and later the National REDD Working Group (NRWG) which the Government intends to establish.

²⁴ Guyana's National Communication to the UNFCC is available online: http://unfccc.int.

²⁵ http://unfccc.int.

Figure 1: What is REDD and REDD+?

What prompted the creation of REDD and REDD+? Deforestation and forest degradation brought on by agricultural expansion, a conversion of land to pastureland, the development of infrastructure, destructive logging practices and 'slash and burn' techniques for land clearing account for nearly 20% of global greenhouse gas emissions, an amount that is greater than the entire global transportation sector and second only to the energy sector.²⁶

REDD is "an effort to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested land and invest in low-carbon paths to sustainable development."²⁷

REDD+ goes beyond deforestation and forest degradation, and includes "the role of conservation, sustainable management of forests and enhancement of forest carbon stocks." It is, therefore, more inclusive than REDD. REDD+ improves climate resilience through the protection of ecosystems and the offer of viable and sustainable livelihoods through agroforestry and other sustainable forestry techniques. Respecting the rights of indigenous people who typically reside in forests is one of the key points of REDD and REDD+. ²⁸

Historical development - negotiation under the UNFCCC: An established incentive structure for REDD or REDD+ (as it has been referred to since the 15- Conference of the Parties (COP15) of the UNFCCC in 2009) was first put on the agenda at the COP11 in 2005, re-affirmed at the COP13 in 2007 and COP15 in 2009, but has not yet been established under the UNFCCC. Strides were further taken at COP16 in 2010 with the acknowledgment of positive incentives for those countries with high forest cover and low deforestation rates (HFLD countries) and at COP17 in 2011 with the recognition that REDD+ will include funding from multiple sources (private and public). The Parties to the UN Climate Convention agreed in Durban at COP 17 that financing for REDD+ actions will come from both public and private sources, opening the door for continued negotiations in 2012 on the role of the carbon market in climate financing. The Green Climate Fund (GCF) also notes explicit eligibility given to REDD+ activities.²⁹

Technical and financial support: A number of NGOs, development agencies, research institutes and international organizations offer technical and financial support to developing countries that wish to engage in REDD and REDD+ activities. Primary donors include the World Bank's Forest Carbon Partnership Facility (FCPF), the UN-REDD Programme, the Forest Investment Programme (FIF) and Norway's International Climate and Forest Initiative, Australia's International Forest Carbon Initiative and the Collaborative Partnership on Forests.³⁰

Current Status: Currently the Programme supports 44 partner countries in Africa, Asia-Pacific and Latin America. Sixteen of those forty-four countries are receiving support for "National Programme" activities that assist with the development and implementation of National REDD+ Strategies. To date US\$67.3 million has been distributed for National Programme Activities. Donor contributions from Denmark, Japan, Norway and Spain now total US\$118.3 million, with Norway as the largest donor.³¹

Challenges of REDD and REDD+: The legality and accountability of REDD and REDD+ depends on if a country has strong systems of governance, accountability, transparency and participatory decision-making processes. Without these systems the potential for corruption, illegal and unplanned forest conversion, and conflicts over land and forest ownership from indigenous groups is high. Another issue is how to calculate payments for REDD+ activities. This issue will be further discussed in the subsequent section on systems of monitoring, reporting and verification (MRVS).

²⁶ The UN-REDD Programme & the REDD+ website accessed July 2012.

²⁷ FAO, UNEP, and UNDP (2010).

²⁸ Ibid.

²⁹ UN REDD Programme (2011).

³⁰ FAO, UNEP, and UNDP (2010).

³¹ The UN-REDD Programme "National Programmes" website assessed: July 2012.

³² UN REDD Programme (2011).

GoG and GoN signed an **MoU** and simultaneously published a **JCN**³³ on November 9-, 2009 which states how they will "work together to provide the world with a relevant, replicable model for how REDD+ can align the development objectives of forest countries with the world's need to combat climate change." In attempts to pilot a REDD+ incentive structure, the alliance between Norway and Guyana establishes a **framework for performance-based financial support of up to USD 250 million over five years** to 2015 to implement REDD+ activities put forth in Guyana's June 2009 **Low Carbon Development Strategy (LCDS)**³⁴ and formalised in its **REDD+ Governance Development Plan (RGDP)**. The stated hope is that the alliance between Norway and Guyana will facilitate an international political discourse on REDD+ and the creation of a "robust mechanism for the inclusion of REDD+ in a global climate regime."

Guyana has worked to build its capacities for developing its REDD+ strategy for the GRIF through its creation of government agencies such as its REDD+ Secretariat for oversight and implementation, submitting its **Readiness Plan to the World Bank's Forest Carbon Partnership Fund (FCPF)** and aligning international commitments with national policies.

2.2.2. NATIONAL POLICY FRAMEWORKS RELATED TO REDD+

The following schematic attempts to show the hierarchy of Guyana's key climate change and REDD+ frameworks and programmes. At the top are the MoU and JCN which initiated funding for implementing REDD+ projects via the GRIF and identified by its LCDS.³⁷ The programmes on the bottom are those which support the LCDS in building capacities and strengthening Government institutions. The hierarchy of Guyana's key policies and programmes related to REDD+ are illustrated in Figure 2 and subsequently presented in more detail.

Norway-Guyana **MoU & Joint** Performance-related **Concept Note** payments Low Carbon Guyana REDD+ Development Investment Fund Strategy REDD+ Readiness Governance **MRV Roadmap** Preparation Development Proposal Plan

Figure 2: Hierarchy of Guyana's key REDD+ enabling policies and programmes

Source: Adapted from the Joint Concept (2009).

As detailed in the MoU and JCN signed between Norway and Guyana, the LCDS is the over-arching and guiding policy for the GoG in implementing its REDD+ enabling activities for the GRIF. The three pillars of the LCDS are intended to align Guyana's long-term economic growth with low-carbon, low-deforestation development:

³³ The JCN, which serves as a transparent and inclusive living document, was updated in March 2011 to reflect new international policy agreements on REDD+ and progress made by the two countries.

³⁴ Office of the President, The Government of Guyana (2010 b).

³⁵ Office of the President, Republic of Guyana (2011).

³⁶ Government of the Cooperative Republic of Guyana and the Government of the Kingdom of Norway (2009).

³⁷ Office of the President, the Government of Guyana (2010 b).

- Avoiding Deforestation: By capitalizing on the REDD+ mechanism, Guyana can avoid cumulative forest-based emissions of over 1.5 GTs of CO2 by 2020 that would have otherwise been produced through economic use of the forest.
- Low Carbon Development: REDD+ payments gained through avoided deforestation can be used by Guyana for sustainable economic growth and additional climate change initiatives.
- Adapting to Climate Change: REDD+ payments can be used to assist in promoting climate resilience by investing in priority climate adaptation infrastructure and measures e.g. flood control or early warning systems for extreme weather events.

The broader objectives of the LCDS include poverty reduction, inclusive national multi-stakeholder participation, applying social and environmental safeguards in accordance with international standards, and protecting the rights of indigenous Amerindians in accordance with the principles of free, prior and informed consent.

The LCDS identifies seven priority areas that were the initial focus of implementation for the period 2010 and 2011, and details priorities for the period 2012-2015. There are additional activities listed divided into four phases (see Figure 3) pertaining to specific projects to be implemented, capacity building for a system of monitoring, reporting and verification (MRVS), GRIF fund management and other skills for forestry management, and legal considerations for accelerating land titling for the Amerindian groups.

Figure 3: Low Carbon Development Strategy

Guyana's Four-Phase Approach to its LCDS ³⁸			
Phase 1	2009	Launching the Low Carbon Development Strategy	
Phase 2	2010-2015	Participating in development of REDD+ and Laying Foundation for the New Economy	
Phase 3	2013-2020	Integrating the New Economy with a Global Climate Deal	
Phase 4	2020 onwards	Operating "at-scale" under a functioning international REDD+ regime	

Seven priority areas of the LCDS

- (i) Government equity in the Amaila Falls Hydro Electricity Company
- (ii) Accelerating Amerindian land titling, demarcation and extension processes
- (iii) Amerindian Development Fund
- (iv) Expansion of fiber optic digital infrastructure
- (v) Micro-finance for Small and Medium Enterprises (SMEs) and Vulnerable Groups' Low Carbon Development
- (vi) Initial work to establish an International Centre for Bio-Diversity Research and Low Carbon Development, coupled with enhancement of the national school curriculum
- (vii) Work on MRVS and other support for the LCDS

Policy updates to the LCDS

There are a number of subsequent policy updates to the LCDS, the first in December 2009, which integrates lessons learned and feedback from Guyanese stakeholder consultations to augment and support its activities, and the second in May 2010 to input decisions made at the international level.

The first draft of the LCDS³⁹ put forth the initial views on how the country could stimulate the creation of a low-deforestation, low-carbon, climate-resilient economy through a forestry incentive mechanism such as REDD+. The draft LCDS was submitted to a four-month national multi-stakeholder consultation

³⁸ Office of the President, The Government of Guyana (2010 a).

³⁹ Office of the President, The Government of Guyana (2010 b).

from June to August 2009 through public outreach, national and local media, and was overseen by a nationally representative steering committee.⁴⁰ Inputs gained through these consultations were inputted into the LCDS draft in December 2009 to make it an inclusive strategy.

The second update to the LCDS in May 2010, which added the title "Transforming Guyana's Economy While Combating Climate Change", ⁴¹ serves to incorporate the results of year 2010's further consultations with stakeholders. It also inputted agreements made in climate change negotiations at the United Nations, such as the decisions made at COP 15 in Copenhagen 2009 and puts forth an adjusted strategy for the interim period 2010 – 2015 of project investments, which accounts for the continued lack of a UNFCCC-REDD+ financing mechanism. It also identifies priority areas for the initial implementation period of the LCDS in 2010 and 2011, presents its 10-year strategy to 2020, and sets out the framework for further consultation and strategy development on Guyana's long-term low carbon development.

Guyana's REDD+ Governance Development Plan (RGDP).

As part of its agreement with Norway, financial support is, among other objectives, intended to support Guyana in building capacity for its REDD+ and LCDS efforts.⁴² The subsequent paragraphs explain framework policies established by Guyana to help achieve this objective.

Realizing the objectives laid out in its LCDS, Guyana adopted and implemented an RGDP.⁴³ In keeping with the goals set forth in the JCN for a transparent, inclusive, and accountable REDD+ approach the outline of the plan was prepared in December of 2009 by a Technical Team coordinated by the OCC, the GFC, Guyana Geology and Mines Commission (GGMC) the EPA and Ministry of Amerindian Affairs according to the guidelines set forth in the JCN. Multi-stakeholder consultations were held with Amerindians, loggers, miners and residents.

The purpose of the RGDP is the development of a transparent, rules-based, inclusive forest governance, accountability and enforcement system. The RGDP outlines key activities to be carried out to assess and improve the capacity of relevant agencies for the governance of forests and Amerindian lands, and indicated the implementation time-frame and responsible agencies.⁴⁴

Framework support programmes: Readiness Preparation Proposal (R-PP)

Guyana has engaged itself as a pilot country under the **World Bank's Forest Carbon Partnership Fund (FCPF)**, which builds the capacities for implementing a REDD+ strategy. Guyana submitted its **R-PP**⁴⁵ in June of 2009, with revisions following throughout 2009 and an update in 2010 to reflect feedback received by Guyana from the FCPF. In November 2010, an invitation was sent by the FCPF to the GoG for it to participate as one of five pilot countries to explore the option of using a Multiple Delivery Partner (MDP) under the Readiness Fund of the FCPF. The Participants Committee (PC) of the FCPF proposed various development agencies to serve Guyana as its MDP alongside the World Bank, of which Guyana selected the IDB. Guyana's revised R-PP version from 2010 is currently under review by the IDB.

The purpose of the R-PP is to "identify and conduct analytical and diagnostic studies relevant for designing Guyana's REDD+ strategy..." which includes the design of an MRVS and work on forest cover reference levels, conducting consultations with relevant stakeholders, and lastly the establishment of an implementation framework for REDD+ activities such as those listed under its LCDS, which includes a

⁴⁰ It should be recognized that these consultations are in accordance with and upholds the Guyana Constitution (amended 2003) which recognizes the right of Guyanese to participation, engagement and decision-making in all matters affecting their well being and the articles contained therein to account for the rights of citizens (Article 13) and Indigenous Peoples (Article 149 G). IIED. (2009). Independent Report on Stakeholder Participation in the Review Process of Guyana's Low Carbon Development Strategy draft (LCDS), Report from the Independent Monitoring Team.

⁴¹ Office of the President, The Government of Guyana (2010 a).

⁴² The Government of Guyana and the Government of Norway (2009). Joint Concept Note. Updated 2011.

⁴³ Office of the President, Republic of Guyana (2011).

⁴⁴ Ibid

⁴⁵ Forest Carbon Partnership Fund, World Bank (2010)

REDD+ Management and Inclusive Governance System. ⁴⁶ The R-PP can thus be seen as the enabling plan to build the necessary capacities for implementing Guyana's REDD+ strategy under the LCDS.

At the decision of Guyana, the implementing agencies for the R-PP include Guyana Forestry Commission (GCF) and the National Toshaos' Council (NTC) which represents the native Amerindians in each administrative district of Guyana.⁴⁷ Though Guyana has yet to receive the initial FCPF grant, work is already underway for developing its MRVS, as it will be used to calculate the amount of performance-based payments under the MoU with Norway.⁴⁸

Guyana's MRV Roadmap⁴⁹

The roadmap timeframe consists of three phases over a three year period and includes both near-term and long-term targets. To ensure accountability and transparency, Guyana created an MRVS Steering Committee to oversee the implementation of Guyana's MRVS; comprised of representatives from the government, private sector, academia and indigenous groups.⁵⁰ The Roadmap's execution is centralised at the GFC.

The three phases of the roadmap comprise a national strategy (2010), country readiness (2011/2012) and implementation (post 2012).

- The focus of the national strategy phase for 2010 was on gathering information regarding forestry data and filling data gaps. Independent studies such as the assessment of forest governance and logging practices in Guyana carried out by the Center for International Forestry Research (CIFOR) and the Food and Agriculture Organisation of the United Nations (FAO) assisted with this process.
- In the country readiness stage for 2011/2012 Guyana will develop its capacities, conduct historical monitoring of forest cover and forest area changes, implement the IPCC tier two national forest carbon monitoring, and establish a reference level or "baseline" data. It will also report on interim performance.⁵¹

In the final phase Guyana will establish a consistent and continuous MRVS supporting national REDD+ actions and international IPCC GPG-based reporting and verification data.⁵²

Furthermore, Guyana's legal framework for forest protection and to uphold the rights of Amerindians who reside in and rely upon the forests for their livelihoods forged the path to implement the LCDS and subsequent REDD+ activities under the GRIF. Some important laws which have been created or updated in recent years are presented in Figure 4.⁵³

Figure 4: Guyana's REDD+ Enabling Framework

- The Environmental Protection Act of 1996 (updated 2011) "provides for the management, conservation, protection and improvement of the environment, the prevention, control of pollution, the assessment of the impact of economic development on the environment and the sustainable use of natural resources..." It also established the Environmental Protection Agency (EPA) and outlines the steps for conducting Environmental Impact Assessments.
- The Forest Act of 2009 promotes the use of sustainable forestry, through participation with local communities. It also provides for the declaration of protected areas within the framework of the Environmental Protection Act and requires prior consultation before any mining or petroleum prospecting can be undertaken. This act strengthens forestry management by replacing prior

⁴⁷ Ibid.

⁴⁶ Ibid.

⁴⁸ Ihid

⁴⁹ Guyana Forestry Commission, Republic of Guyana (2009).

⁵⁰ Guyana Forestry Commission and Wageningen University (2009).

⁵¹ Republic of Guyana, Guyana Forestry Commission and Durham University (2011).

⁵² Guyana Forestry Commission and Pöyry Forest Industry (2011).

⁵³ The REDD Library "Legal framework summary" webpage for Guyana. Assessed June 2012.

forest acts containing timber extraction permits and forest-harvesting concessions.

- The Protected Areas Act 2011 expanded protected areas in Guyana through the establishment of a National Protected Areas System and the Protected Areas Commission (PAC) which is tasked with the management, maintenance and expansion of the national protected areas system. The PAC will include the Kanuku Mountains Management Plan, the Kaieteur National Park Management Plan and later a Shell Beach Protected Areas Management Plan and includes fines for those invading protected lands.
- The Iwokrama International Centre for Rain Forest Conservation and Development Act of 1996 established the Iwokrama reserve of 360,000 hectares of tropical forest and requires that 50 percent of the reserve is for "sustainable utilisation" and the other 50 percent is designated as a wilderness reserve.
- The **Amerindian Act of 2006** provides for "the recognition and protection of the collective rights of Amerindian Villages and Communities, the granting of land to Amerindian Villages and Communities and the promotion of good governance within Amerindian Villages and Communities". Of the total 18.38 million hectares of rainforest, Amerindian titled lands accounted for 3.087m in 2010, alluding to a traditional use of the land which is sustainable.

Since the areas named in Figure 4 are already legally protected, the additional rule of avoided deforestation under REDD+ should preclude either National Parks or the Iwokrama reserve from being eligible under a REDD+ framework. It is still, however, important to note that the government and citizens of Guyana have long been aware of the importance of forests as exhibited through the enactment of these laws.⁵⁴

3. OVERVIEW OF THE GUYANA REDD-PLUS INVESTMENT FUND

The Guyana REDD-Plus Investment Fund (GRIF) is a fund for the financing of activities identified under the Government of Guyana's Low Carbon Development Strategy (LCDS). The fund will receive up to US\$250 million from Norway in performance-based payments for the period up until 2015, based on an independent verification of Guyana's deforestation and forest degradation rates and progress on REDD+ enabling activities.

The GRIF is the world's first fund to be implemented in a National REDD+ strategy.⁵⁵ The GRIF was established in October 2010 through the **Administrative Agreement** (AA)⁵⁶ between Norway and the IDA; having being proposed and contemplated in the MoU and JCN signed by the GoG and GoN in November 2009. As part of the cooperation between the two countries the GRIF would serve as the primary "financial intermediary mechanism for the performance-based payments from contributors to Guyana."⁵⁷ As outlined in the 2011 JCN, financial support is intended to finance the following two activities:

- The implementation of Guyana's LCDS.
- Guyana's efforts in building capacity to improve overall REDD+ and LCDS efforts.

To summarise its operation, Norway (and possibly other donors) will transfer payments to the GRIF for Guyana's independently verified performance on limiting GHG emissions through REDD+ enabling activities. Upon approval of projects by the GRIF Steering Committee, Guyana will then invest the payments it receives including any income earned in the strategies identified in its LCDS. The GRIF is designed to meet international financial, environmental and social safeguards. Some key features of the

⁵⁵ Government of the Cooperative Republic of Guyana and the Government of the Kingdom of Norway (2009).

⁵⁴ Conservation International (2009).

⁵⁶ "Administration Agreement" is the agreement entered into between the Trustee and a Contributor in respect of the Contributor's Contribution.

⁵⁷ Royal Norwegian Ministry of Foreign Affairs and International Development Association (2010), Appendix A, Governance Framework Document.

GRIF are summarised in Table 1, including the funding sources, the administration and governance of the fund at the international and national level, and funded projects and programmes.

Table 1: GRIF Key Parameters

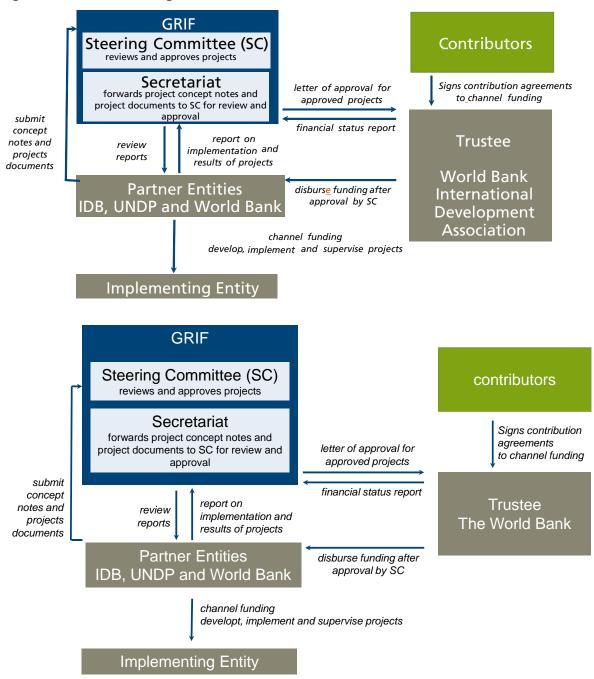
KEY PARAMETERS OF	F THE GRIF
Date operational	October 2010
Benificiary	Government of Guyana (GoG)
GRIF Strategic Management	Government of Guyana (GoG)
Financial Management	The World Bank's International Development Association (WB IDA)
National Trustee	The Office of the President (OP) The Office of Climate Change (OCC)
Partner Entities	The Inter-American Development Bank (IDB); the United Nations Development Programme (UNDP); the World Bank (WB)
Objectives	To invest in priority low-carbon development investments outlined in the LCDS
Primary Functions	Manage and Monitor Payments for Forest Climate Services Support REDD+ policies Attract and fund Low-Carbon Investments in Guyana Distribute REDD+ funding Establish Benefit-Sharing Arrangements for Indigenous Lands and Impacted Workers
Financing mechanism/sources	REDD+ Payments from Norway Other donors (anticipated)
Eligible projects	Projects in the seven priority areas outlined in Guyana's current LCDS and any other projects compliant with the approved LCDS results-framework Projects that meet the requirements and standards of Partner Entities

The GRIF's governing bodies detailed in the following section play an important role in channeling funds and ensuring eligibility for financial support for its REDD+ activities under the LCDS. As such, the GRIF's administration and governance structure will first be introduced, following a discussion of the GRIF's funding sources, status of funding and requirements for support.

3.1. FUND ADMINISTRATION AND GOVERNANCE

The Governance Framework Document⁵⁸ contained in the 2010 AA⁵⁹ established the governance structure for the GRIF. The institutional design of the GRIF is illustrated in Figure 5 and subsequently described.

Figure 5: Institutional design of the GRIF



Source: prepared by Frankfurt School based on Administrative Agreement between Norway and Guyana, Governance Framework Document (2010)

⁵⁸ Ibid.

⁵⁹ Ibid.

Contributors

As noted, the GRIF is designed to be a **multi-contributor trust fund**. According to the Administrative Agreeement GRIF's future contributors payments must be performance-based and calculated using the GRIF Verification Framework methodology.⁶⁰

Steering Committee

The Steering Committee is the oversight and decision-making body that reviews and approves projects and carries out independent reviews of the GRIF and the Trustee. The Steering Committee is comprised of representatives of the GoN and GoG. If there are any further contributors to the GRIF then representatives from those contributors shall also become members of the Steering Committee. The Trustee, Partner Entities, civil society organisations and private sector entities are invited to participate as observers to the Steering Committee. The responsibilities of the Steering Committee include approving a GRIF Operational Manual, establishing fiduciary, safeguard and operational standards and a process for accreditation for the Partner Entities which are outside of the United Nations (UN) specialized agencies or the IDB. The Steering Committee also reviews and approves project proposals prepared by the GoG and Partner Entities and approves administrative fees for the Secretariat, Trustee and Partner Entities. Lastly, the Steering Committee is the recieiving entity for the Trustee and Partner Entities progress and financial reports.⁶¹

Secretariat

The Secretariat was made up of the GoG and GoN as interim members and provides necessary administrative support to the Steering Committee for the operation of the GRIF. Effective March 2012, the Meridian Institute, ⁶² a US-based not-for-profit, serves as the Interim Secretariat until the GoN and GoG select a permanent entity. The role of the Secretariat includes preparing operation manuals and procedures, facilitating Steering Committee meetings, handling project proposals and overseeing public communication. It also coordinates with the Trustee to share information to the Partner Entities regarding GRIF requirements, and is the receiving party for the Trustee and Partner Entity of progress and financial reports for distribution to the Steering Committee. ⁶³

Trustee

The World Bank's International Development Association (WB IDA) was asked by Guyana and Norway to serve as Trustee of the GRIF.⁶⁴ In this role it will provide financial intermediary services to the GRIF, meaning that it will **receive payments from donors, manage them** in a trust fund on Guyana's behalf, and then **transfer the amounts approved by the Steering Committee to the Partner Entities** responsible for the implementation of projects under the LCDS. In its role as Trustee, the World Bank's International Development Association does not make decisions regarding the funding of projects. The Trustee is responsible for submitting regular financial status reports to the Steering Committee according to the Administrative Agreement between the Trustee and the Contributors.⁶⁵

Partner Entities

In the continued absence of a global REDD+ regime that includes a set of safeguards and standards, the GoG and GoN have invited the IDB, United Nations Development Program (UNDP), and the World Bank to serve as Partner Entities to assist with the overall **development and implementation of LCDS activities approved by the Steering Committee**. The Partner Entity must use any funds transferred to it for project implementation according to its own policies and procedures, including procurement of goods and services, financial management, environmental and social safeguards, reporting

⁶⁰ Royal Norwegian Ministry of Foreign Affairs and International Development Association (2010).

⁶¹ Ibid

⁶² Meridian Institute, Guyana REDD+ Investment Fund Assessment webpage. Assessed June 2012.

⁶³ Royal Norwegian Ministry of Foreign Affairs and International Development Association (2010), Appendix A, Governance Framework Document.

⁶⁴ This arrangement is referred to as a "Financial Intermediary Funds (FIFs)." For more information see: World Bank (2011a).

⁶⁵ Royal Norwegian Ministry of Foreign Affairs and International Development Association (2010).

arrangements and its framework to combat fraud and corruption, while still cognizant of the laws of Guyana. If at a later date the GRIF Steering Committee feels it is necessary, additional Partner Entities could be included as long as they meet the safeguards set by the Steering Committee. This option to use the Partner Entity's safeguards will remain operational until the UNFCCC establishes a safeguard system for internationally accepted REDD+ activities.

The other role of the Partner Entity includes **ensuring that any project proposal it prepares and submits is in accordance with the activities set forth by the LCDS and includes a "robust results framework"** that is decided on by the Partner Entity and the GoG. Finally, Partner Entities must provide to the Steering Committee an annual progress report on project implementation status, results achieved and also a financial report on each project implemented. ⁶⁶

Implementing Entities

Implementing Entities can include the GoG or an entity eligible to receive funding according to the guidelines and procedures of the Partner Entity. The Partner Entity and Implementing Entity will enter into grant agreements for the provision of GRIF resources according to proposals for projects and activities approved by the Steering Committee. Implementing Entities are held accountable to the Partner Entities according to the grant agreement terms.⁶⁷

The Role and members/partners of the different institutions of the GRIF are summarized in Table 2.

Table 2: Governance & Management Structure

INSTITUTION	ROLE	MEMBERS AND PARTNERS
Contributors	Provide performance-based payments to the GRIF for Guyana's forest climate services	The Government of Norway; others anticipated
Secretariat	Provides necessary administrative support to the Steering Committee for the operation of the GRIF	The Governments of Norway and Guyana (interim members); Meridian Institute (March 2012)
Signs contribution agreements with donors, receives and holds GRIF funds, transfers funds to Partner Entities upon project approval by the Steering Committee and requests from the Partner Entities, and provides financial reporting		The World Bank's Association (IDA)
Steering Committee	Oversight and decision-making body; reviews and approves projects	The GoG and GoN as co-chair. Members are any Government and the financial contributors to the GRIF. The Trustee, each of the GRIF partner entities, civil society organizations and private sector entities can serve as observers.
Partner Entities	Receive funds and supervise projects according to their fiduciary, social and environmental safeguards and operational policies and procedures and report on implementation and results	IDB, UNDP and the World Bank
Implementing	Receives funding from Partner Entities	Guyana Ministries or other eligible entities according to Partner Entity

⁶⁶ Administrative Agreement (2010).

⁶⁷ Royal Norwegian Ministry of Foreign Affairs and International Development Association(2010).

Entities	to implement projects May include the GoG or any other entity that is eligible for funding under the policies, guidelines and procedures of the Partner Entity and approved by the Steering Committee	policies and procedures). Receive funds from Trustee.
----------	--	---

Source: Administrative Agreement between Norway and Guyana, Governance Framework Document (2010)

3.2. GRIF FUNDING: SOURCES AND STATUS

Through its MoU, Norway committed to providing "results-based REDD+ funds" of up to USD 250 million over a five-year period (to 2015) for independently verified results achieved by Guyana in limiting emissions from deforestation and forest degradation and REDD+ enabling activities.⁶⁸ The LCDS⁶⁹ refers to this support as "payments for forest climate services" and can be viewed as payments for ecosystem services. As it is a multi-donor trust fund, the GRIF's contributors can be any donors which meet the standards set forth by the GoN in the Annex of the Administration Agreement.

3.2.1. FUNDING SOURCES

As part of its global effort to establish a REDD+ regime and to commence its partnership with Norway, the GoG established a four-phase structure in its LCDS which accounts for the "interim reference level" that reflects Norway's support for the Economic Value to the Nation of Guyana's forests (see Table 4). It also set forth how **payment methodologies** for possible REDD+ payments under future international agreements could be integrated into the economy, the funding of which would be channelled through the GRIF. These methodologies will be described in the following section "Requirements for Support". Table 3 below details the GRIF's four-phased structure in implementation and the possible sources of funding.

Table 3: Guyana's Phased Approach for REDD+ under the GRIF

PHASE	REDD+ PAYMENTS AVAILABLE TO GUYANA	DESCRIPTION
Phase 1 (2009)		Interim payments to launch the LCDS incl. funding for an MRV system in Guyana
Phase 2	Starts at: ~ USD 60 million	Transitional funding that will be used for:
(2010 –	Ramps up to USD 230- USD 350	– Capacity building
2015)	million (40%-60% of EVN)	 Investment required to build a low-carbon economy
		– Human capital
Phase 3 (2013 –	Starts at: ~ USD 230- USD 350 million (40%-60% of EVN)	Continued payments to avoid deforestation Payments will be used for further:
2020)	Ramps up to USD 580 million (EVN)	- Investments in low-carbon economy
		– Capacity building
		– Climate change adaptation
Phase 4	At or above EVN	"At-scale" REDD mechanism should:
(2020		

⁶⁸ The Government of Guyana and the Government of Norway (2009). Joint Concept Note. Updated 2011.

⁶⁸ Government of the Cooperative Republic of Guyana and the Government of the Kingdom of Norway (2009).

⁶⁹ Office of the President, The Government of Guyana (2010 a).

onwards)	(> USD 580 million)	Provide incentives at or above EVN*
		 Account for increasing value of the forests (e.g., reset EVN periodically)

Source: The Government of Guyana's LCDS (update, 2010)

Guyana, in its phased approach recognises that long-term funding beyond Norway's initial payment structure for its LCDS and subsequent REDD+ activities could possibly be sourced from four main categories: Carbon markets (pending the inclusion of REDD+ in carbon markets), market-linked, voluntary funding mechanisms, and the pending UNFCCC-mandated global model for REDD+. The GoG has recognised that the estimated costs for REDD+ global efforts is such that the additional private capital must also be leveraged.

To accommodate the sources of funding the GoG anticipates from additional donors and under a future REDD+ global regime, it has set forth a "phased approach" to REDD+:

- Establishment of the GRIF fund-based mechanism for REDD+ in 2010 with financial payments from Norway for avoided deforestation and low-carbon development;
- Gradually merging REDD+ into carbon markets for supplementary funding. This assumes that forestry emissions quotas or carbon credits (REDD+ Credits) will be assigned to countries with HFLD as offsets to trade within the carbon markets. This depends upon further international negotiations regarding the role of REDD+ in carbon markets, the outcome of which is uncertain at this point.

3.2.2. GRIF STATUS OF FUNDING

The 2010 AA⁷⁰ between Norway and Guyana states that the contribution from Norway in the amount of NOK 1.5 billion (equivalent USD 250 million in 2010) will be made available as performance-based payments for five years (through 2015) according to the following schedule: The first payment in 2010 totaling between USD 30 million and USD 42 million, the second in 2011 between USD 30 million and USD 64 million, and further work will be done to identify individual investments for the period 2012 -2015. 71 As set forth in the AA, these payments will be calculated in accordance with the methodology set out in the AA's GRIF Verification Framework.⁷²

Table 4: GRIF funding allocations to date by Norway (as of June 30, 2012)⁷³

DONOR FUNDING CONTRIBUTIONS	AMOUNT (USD)
Amount pledged by Norway*	USD 255.5 million (Norwegian eq. NOK 1.5 billion)
Scheduled Payments	The first payment in 2010 totaling between USD\$30 million and USD 42 million
	The second in 2011 between USD 30 million and USD 64 million
	Further work will be done to identify individual investments for the period 2012 – 2015
Actual payment dates	October 2010 approximately USD 30 million
	July 2011 approximately USD 40 million

⁷⁰ Royal Norwegian Ministry of Foreign Affairs and International Development Association (2010).

^{*} EVN: "Economic Value to the Nation" of Guyana's forests if they were to be harvested and the land used at its highest value

⁷² Ibid. Appendix B Grif Verification Framework.

⁷³ Due to currency rate fluctuations the figures above represent the equivalent for NOK to USD as contained in the World Bank Trustee Report recorded on June 30 2012.

Amount deposited by Norway	USD 69.8 million
Amount outstanding	USD 185.7 million
Amount held in trust by the WB IDA and available for funding decisions by GRIF Steering Committee	USD 61.1 million

Funds allocated to GRIF Projects/Programs** USD 9.2 million

Source: World Bank (2012). Trustee Report on the Financial Status of the Guyana REDD-Plus Investment Fund (GRIF)

The above table 4 summarises the amounts pledged to the GRIF by Norway, the amounts deposited to date and the amount available for projects and programmes. Note that due to fluctuating currency exchange rates the original 2010 contribution amount of USD 250 million was estimated as USD 263 million when the fund update was released by the GRIF Trustee in March 2012.

As noted in the table above, the amount transferred to the GRIF is held in trust by the WB IDA for funding decisions by the GRIF Steering Committee. This amount includes any investment income, minus any administrative costs due to the Trustee and the Secretariat and any administrative and fees⁷⁴ due to the Partner Entities for the preparation and implementation of projects and activities that support Guyana's LCDS.⁷⁵

As can also be seen in the table, there were slight delays by Norway in transferring the funding pledged to the GRIF Trustee, with the first payment made towards the end of October. The Norwegian Agency for Development Cooperation informed that Norwegian support for 2010 and 2011 would only be given when Guyana's "results of efforts against deforestation are documented and confirmed by Norwegian Veritas." Det Norsk Veritas (DNV) is a Norwegian company that serves to fulfill the requirement that Guyana's achievements made through its REDD+ activities are independently verified. Along these lines, the following section serves to describe the requirements for support to the GRIF as set forth in the Agreement between Norway and Guyana.

3.3. REDD+ INCENTIVE STRUCTURE UNDER THE GRIF

The methodology set forth by the two countries in the 2010 AA's "Verification Framework" states that for Guyana to be eligible for performance-based payments from Norway and other contributors, its gains made through REDD+ activities must be measured and independently verified through an MRVS of forest carbon stocks and forest areas changes.⁷⁷ To address the issue that establishing such a system takes time and funding to build Guyana's capacities, the Joint Concept Note (JCN) states that that until its national MRVS⁷⁸ is operational, seven interim indicators, referred to as "Enabling Indicators," will be used to determine Guyana's performance and eligibility for interim funding.

^{*}Subject to currency fluctuations for Norwegian NOK ~ USD

^{**}Includes Partner Entity's project preparation and admin fees

⁷⁴ "Administrative Fee means the amount agreed by the Steering Committee with the Partner Entity for administrative and other costs, including but not limited to costs for Project preparation, Project supervision and preparation of reports and unaudited or audited financial reports and evaluations, incurred by the Partner Entity in connection with services performed by the Partner Entity in connection with a Project, excluding any Administrative Fee for Project Proposal Preparation for such Project.

⁷⁵ Royal Norwegian Ministry of Foreign Affairs and International Development Association (2010).

⁷⁶ NORAD, Guyana country webpage. Assessed July 2012.

⁷⁷ The Government of Guyana and the Government of Norway (2009). Joint Concept Note. Updated 2011.

⁷⁷ Government of the Cooperative Republic of Guyana and the Government of the Kingdom of Norway (2009).

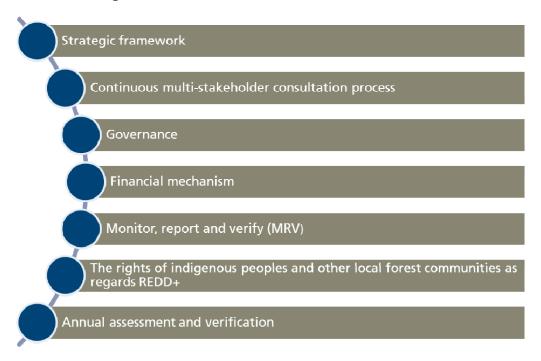
⁷⁸ The JCN and MoU state that the MRVS must follow the Intergovernmental Panel on Climate Change (IPCC) Good Practice Guidelines to anticipate an international system of MRVS.

⁷⁹ It in envisioned that these indicators will be eventually replaced when an international MRV system is established through the UNFCCC.

3.3.1. MEASURING GUYANA'S INTERIM PERFORMANCE: ENABLING AND PERFORMANCE INDICATORS

As part of its global effort to establish a REDD+ regime and to commence its partnership with Norway, the GoG established a four-phase structure in its LCDS which accounts for the "interim reference level" that reflects Norway's support for the EVN of Guyana's forests (see Table 4). It also set forth how "payment methodologies" for possible REDD+ payments under future international agreements could be integrated into the economy, the funding of which would be channeled through the GRIF. Table 3 below details the Enabling Indicators used for calculating Guyana's REDD+ performance-based payments.

Figure 6: Seven "Enabling indicators"



Source: Joint Concept Note between Norway and Guyana (2009).

3.3.2. MEASURING LONG-TERM PERFORMANCE: SYSTEM OF MONITORING REPORTING AND VERIFICATION

Responding to its need to measure the impact of its REDD+ activities to ensure its performance-based payments from Norway and other contributors over the long-term, Guyana began the process of developing a national framework for an MRVS in 2009 following a workshop with stakeholders to identify the availability of current data and capacities.

Guyana and Norway agreed that **independent overall assessments** of progress against the seven Enabling Indicators and Interim Measures Reports for its MRVS would be conducted annually "by one or more neutral expert organisations, to be appointed jointly by the Participants." These assessments, which have all shown positive progress, are meant to build confidence in Guyana's increasing capacity for forest governance and conservation. For assessing progress on the Enabling Indicators, the Rainforest Alliance carried out an audit and published its findings in March of 2010. With regard to progress on the MRV system, for year one (the period to September 30, 2010) the initial Guyana "MRVS Interim Measures Report" published in 2011 was prepared by the GFC in partnership with the New Zealand

⁸⁰ Royal Norwegian Ministry of Foreign Affairs and International Development Association (2010).

⁸¹ Rainforest Alliance (2010).

consulting firm Pöyry Forest Industries and published in 2011.⁸² Det Norsk Veritas (DNV) was selected on the basis of an international tender process in accordance with Norwegian procurement regulations and independently verified the report's findings.⁸³ The GFC released its report for Year Two in 2012.⁸⁴ Guyana has completed reporting activities for year Three and the third tranche of funding will be released subsequent to independent verification.⁸⁵

By striving to meet its performance goals measured against the enabling indicators and establishing its system of MRV, Guyana aims to achieve its goals for low-carbon, low-deforestation growth and sustainable resource management while ensuring results-based compensation for avoided deforestation.

4. OVERVIEW OF THE GUYANA REDD-PLUS INVESTMENT FUND

As outlined by the LCDS, ⁸⁶ performance-based payments received from Norway or other contributors will invest in the seven priority areas presented in Figure 3. The revised JCN of March 2011 states that "Transfer of funds [to the GRIF] takes place on approval of projects with acceptable quality that are inline with the LCDS by the GRIF Steering Committee, which consists of Guyana and Norway, with observers from Partner Entities [UNDP, IDB and WB], and Guyanese and Norwegian civil society". ⁸⁷ The other requirement is that the projects comply with the Partner Entity's "own globally accepted operational procedures and [environmental, social and financial] safeguards". ⁸⁸ Therefore, for the GRIF to receive funds from Norway to support any project outlined in the LCDS's seven priority areas, the projects must first be approved. The following diagram (Figure 7) details the process by which projects are reviewed, approved and funded by the GRIF's governing bodies.

Note: not all GRIF projects will go through a PCN process. The PCN is utilized specifically for Projects that require significant up-front due diligence, a go/no go analysis and/or significant retroative financing. Therefore, the operations cycle above can start at either the PCN development stage at #1 or the PD development stage at #7.

⁸² Guyana Forestry Commission (2011)

⁸³ Det Norske Veritas (2011).

⁸⁴ Guyana Forestry Commission (2011).

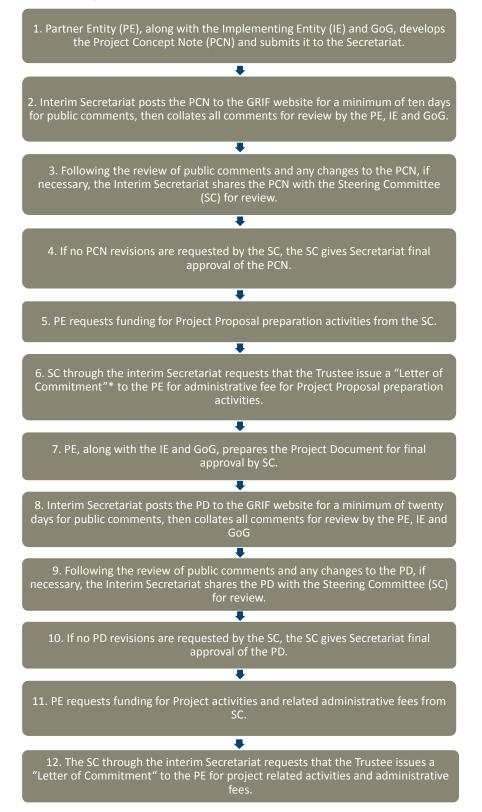
⁸⁵ The Government of Guyana (2012) LCDS "Supporting Initiatives" webpage. Assessed July 2012.

⁸⁶ Office of the President, The Government of Guyana (2010 b).

⁸⁷ The Government of Guyana and the Government of Norway (2009). Joint Concept Note. Updated 2011.

⁸⁸ Ibid.





Source: adopted from GRIF Interim Secretariat (2012)

^{*} Note: not all GRIF projects will go through a PCN process. The PCN is utilized specifically for Projects that require significant up-front due diligence, a go/no go analysis and/or significant retroative financing.

4.1. GRIF PROJECT PORTFOLIO AND PIPELINE

Through its LCDS and GRIF Guyana can avoid cumulative forest-based emissions of 1.5 gigatons of CO2e (carbon dioxide equivalent which includes other GHGs) by 2020 that would have been produced by an otherwise economically rational development path. Guyana can generate economic growth at or in excess of projected Latin American growth rates over the coming decade, while simultaneously eliminating approximately 20 percent of non-forestry emissions through the use of clean energy.⁸⁹

As of June 2012, four projects, the LCDS Institutional Strengthening project, the Micro and Small Enterprise Development and Building Alternative Livelihoods for Vulnerable Groupsproject, the Cunha Canal Rehabilitation Project, and the Amerindian Development Fund project have successfully gone through the GRIF Steering Committee approval process. The Amaila Falls Hydro Project is already planned since the signing of the MoU in 09' and is the cornerstone of the LCDS.

Table 5: GRIF project funding decisions as June 30, 2012 (in USD millions)

ACTIVITY	TITLE	PARTNER ENTITY	AMOUNT
Projects	Institutional Strengthening	IDB	5.94
	Amerindian Development Fund project admin	UNDP	1.76
	Subtotal projects		7.7
Fees	Institutional Strengthening project preparation fee	IDB	0.31
	Institutional Strengthening project admin fee	IDB	0.14
	Micro and Small Enterprise development project preparation fee	IDB	0.13
	Cunha Canal Rehabilitation project admin fees	WB	0.07
	Amerindian Development Fund project admin fees		0.12
	Subtotal fees		0.77
Administrative Budgets	FY11 – FY12 Trustee	World Bank	0.70
		Total	9.17

Source: GRIF Interim Secretariat (2012)

Four further projects are in the project pipeline. The process of final approval for the MSE Development Fund Amerindian Land Titling, Cunha Canal Rehabilitation project, and the Amerindian Development Fund is pending. The following table shows fees and disbursals made to date for the two approved projects.

⁸⁹ Government of Guyana (2010).

⁹⁰ World Bank and the Government of Gyana (2012).

Figure 8 details the approval timeframe for all of the projects, which have had concept notes approved, but are pending final project document approval by the Steering Committee (Figure 8). All of the projects either currently under consideration or implementation by the GRIF are subsequently described briefly and the Amaila Falls Hydropower Project in detail in chapter 4.2.

Figure 8: GRIF Project Portfolio and pipeline as of June 2012

Amaila Falls Hydropower Project

- Project Document being drafted in parallel with on-going Project due diligence by IDB.
- •ESIA received IDB Senior Management sign-off.
- •11th September 2012: Engineering, Procurement and Construction Agreement signed.
- Mandate letter executed between AFH and IDB.

Institutional Strengthening of agencies implementing LCDS

- •16th June 2011: PCN approved by SC.
- •7th November 2011: Full Project Document approved by SC.
- •30th June 2012: Agreement signed by GoG and IDB.
- Project being implemented.

Amerindian Development Project

- •5th June 2012: PCN/Initiation Plan approved by SC.
- •9th August 2012: PCN/Initiation Plan signed by GoG and UNDP.
- Project being implemented

Amerindian Land Titling Project

•SC approval expected in October 2012.

Micro and Small Enterprise and Building Alternative Livelihoods for Vulnerable Groups Project

- •13th October 2011: PCN approved by GRIF Steering Committee.
- Full Project Document practically completed.
- •SC approval expected in November 2012

Cunha Canal Rehabilitation Project

- •5th June 2012: PCN approved by GRIF Steering Committee.
- Full Project Proposal being completed.
- •SC approval expected in December 2012.

Institutional Strengthening in Support of Guyana's LCDS

Following adjustments made to the Project Concept Note at the request of the Steering Committee in May 2011, the Institutional Strengthening in Support of Guyana's LCDS project document gained final approval by the GRIF Steering Committee on November 7, 2011. The project is currently being implemented following the signing of the agreement between the GoG and IDB in June 2012. It is the first project approved for funding under the GRIF. The funding amount to be channeled from Norway via the Trustee to the GRIF for project implementation totals USD 5.94 million. There is also a counterpart contribution for this project of USD 1.06 million provided by the Government of Norway and channelled through Conservation International that has already funded initial work on the MRVS being implemented by the GFC. The aim of the project is to strengthen the capacities of the primary institutions involved with the implementation of Guyana's LCDS, namely: The Office of Climate Change (OCC); the Project Management Office (PMO); and the Guyana Forestry Commission (GFC). The project will also seek to identify capacity gaps in other relevant agencies such as the Environmental Protection Agency (EPA) and Guyana Geology and Mines Commission (GGMC). The project aims at overcoming a

⁹¹ GRIF Interim Secretariat (2011) Record of Decision, Project Concept Note: Institutional Strengthening of agencies implementing LCDS.

low capacity among government institutions to monitor deforestation and biomass for the system of MRV. It is hoped that the project will foster improved cross-sectoral coordination so that relevant institutions can successfully implement the LCDS.⁹²

Amerindian Development Fund Project

The GRIF Steering Committee gave final approval for the Amerindian Development Fund (ADF) project Concept Note in June 2012. 93 On the 9- August 2012 the GoG and UNDP signed the PCN/Initiation Plan and the project is now in its implementation phase. The UNDP as Partner Entity has requested USD 1,883,628 for Project Proposal preparation activities. The Concept Note put forth in March 2012 states that the Project Proposal preparation activities will be "Phase 1" of the project during which the Ministry of Amerindian Affairs (MoAA) together with UNDP and relevant national stakeholders will jointly design the PD. The aim of the fund is to "support sustainable livelihoods for the economic empowerment of indigenous communities, to arrest challenges to poverty reduction in its widest definition, via community development plans." It is envisioned that the fund will provide funding in the form of grants to Amerindian communities so that they may implement Community Development Plans (CDPs) they identify as priorities for their social and economic development. 94

Amerindian Land Titling and Demarcation Project

The Project amount totals USD 7.5 million. The objective of this project is to facilitate and fast track the Amerindian Land Titling process. It seeks to a) Have land titles issued and demarcation process completed for all Amerindian villages that submit requests, including those that request extensions, b) Strengthen existing mechanisms to deal with unresolved land issues, c) improve the communication and outreach efforts of the Ministry of Amerindian Affairs. The project improves land tenure security and consequently offers the Amerindians the option to "opt-in" the portion of their forests to the REDD+ payment scheme if they so wish. Stakeholder consultations with groups such as the National Toshaos Council (NTC) have been held as part of the project's development.⁹⁵

Micro and Small Enterprise Development and Building Alterative Livelihoods for Vulnerable Groups

The GRIF Steering Committee approved the project Concept Note for the Micro and Small Enterprise (MSE) Development and Building Alterative Livelihoods for Vulnerable Groups project in October 2011. The Project Document (PD) has been practically completed and Steering Committee approval is expected in November 2012.. The project will be implemented in two phases, totaling USD 5 million each. Guyana's institutions will benefit from capacity building through the project. The IE will be the Ministry of Tourism, Industry and Commerce (MINTIC) through the Small Business Bureau (SBB) which falls under the auspices of MINTIC.

The project aims to address two of the major barriers to the development of MSEs in Guyana; limited access to finance and a lack of technical and business skills. The project's target groups are Guyana's micro and small enterprises that meet the criteria established for small businesses in the Guyana Small Business Act of 2004, as well as vulnerable groups, who operate in the low carbon sectors identified in the LCDS. To help improve the access to finance by MSEs, the GoG plans to use numerous financial mechanisms as part of the project:⁹⁷

Credit Guarantee Fund: This fund can be thought of as a pool of money meant to absorb part of the collateral requirements posed by a lending institution, thereby improving the loan terms and the likelihood of approval of business loan proposals put forth by an MSE or vulnerable group.

⁹² Inter-American Development Bank (2011). Grant Proposal (GY-G1002), Institutional Strengthening in Support of Guyana's Low Carbon Development Strateg (LCDS).

⁹³ GRIF Interim Secretariat (2012b).

⁹⁴ United Nations Development Programme (2012).

⁹⁵ GRIF, Amerindian Land Titling webpage. Assessed August 2012.

⁹⁶ GRIF Interim Secretariat (2011). Record of Decision, Project Concept Note: Micro and Small Enterprise Development and Building Alterative Livlihoods for Vulnerable Groups
⁹⁷ Ibid.

- Interest Payment Support Facility: This sub-component will provide resources to eligible lending institutions which will then transfer these onto the beneficiaries in the form of a reduction on the interest cost of their loans. The project stipulates that both facilities will only support low-carbon ventures.
- A Low-Carbon Grant Scheme: This scheme seeks to facilitate MSE access to financing through grants to be used in low carbon sectors. Access can be facilitated in a number of ways, such as to assist a low carbon business owner to expand his/her business with a partial grant towards a loan request, thereby reducing the amountneeded for the loan, or to encourage persons to set up a business in a LCS with an initial grant which may make them eligible for a loan in the future.

To address the lack of local technical and business skills in Guyana, a multi-faceted intervention will be utilised: (i) a skills voucher scheme, developed with approved training institutions of the program for delivery of training to the target group; and (ii) technical/hands on' training at the community and sector levels, delivered to beneficiaries by specialists of the training institutions. Training will be in both technical and business support areas.. Project management support will also be offered to cover MSE administration costs such as those incurred for hardware, software, salaries for additional staff, training, knowledge exchange trips and consultancy services.⁹⁸

Cunha Canal Rehabilitation Project

In June 2012, the GRIF Steering Committee gave its final approval for the World Bank's Concept Note for the Cunha Canal Rehabilitation Project. Therefore, the World Bank as Partner Entity can request up to USD 73,000 for Project Proposal preparation activities. ⁹⁹ The proposed project amount totals USD 2.00 million. The project provides co-financing for an earlier intervention funded by the Global Environment Facility (GEF), the Conservancy Adaptation Project (CAP) during which the project design and environmental assessment were carried out by the World Bank for the larger Cunha Canal Rehabilitation Project.

The project aims to improve the adaptive capacity of the densely populated coastal zone, which includes the East Demerara Water Conservancy (EDWC) and the capital of Georgetown. This zone is transected by a dense network of drainage and irrigation canals that connects with a water storage system (the EDWC) which provides irrigation water for agricultural lands and drinking water for the country's urban areas, and drainage and flood control during heavy rainfall periods. The objectives of the project are to improve the EDWC's drainage capacity by rehabilitating and widening the current drainage channel of the Cunha Canal to allow for increased flow into the Demerara River, the construction of a new sluice to prevent inflow of river water during high tides, and constructing a bridge over the canal to connect to a nearby public road. 100 Rehabilitation of the Canal will increase its discharge capacity and contribute to reducing the risks of the embankment overtopping and flooding of areas along the East Bank of the Demerara.

Falls Hydropower Project (AFHEP)

The Amaila Hydropower Project reached a major development milestone on September 11th, 2012 in Xian China with the signing of: the Engineering, Procurement and Construction Agreement between Sithe Global and China Railway First Group CRFG); the signing of investment agreements between the GoG and China Railway; and the execution of the Mandate Letter between IDB and Sithe Global (Amaila Falls Hydro Inc.).

The Amaila Falls Hydropower Project (AFHEP) Project is the flagship initiative of Guyana's LCDS for moving the country onto a low-carbon, high economic growth path. The LCDS states that Amaila Falls installed capacity of 165 MW is enough to meet approximately 90% of the country's domestic power needs and will relieve Guyana's high balance of payments for fuel imports, which accounted for approx. 35 percent of GDP in 2008. The project will also reduce end-user electricity tariffs, which are some of the

⁹⁸ Ibid.

⁹⁹ GRIF Interim Secretariat (2012a).

¹⁰⁰ World Bank (2011b).

highest in the region.¹⁰¹ By providing reliable generation of clean energy the AFHEP is expeted to encourage economic growth & development by improving regional competitiveness, private sector investment and foreign direct investment. It is envisioned that the project will initially provide electricity to Guyana's capital, Georgetown, and its second largest town, Linden, via a 270km electric transmission line, with the possibility of exporting energy to neighboring countries. It will take approximately four years to complete.¹⁰²

With total costs over USD 700 million, the AFHEP is the single largest investment in Guyana to date. ¹⁰³ The AFHEP is structured so that the project sponsor bears the development and construction risk of the project. Because of its high cost, developing the project requires debt¹⁰⁴ and equity financing ¹⁰⁵ from external sources. The debt financing is expected to be provided by multilateral and development financial institutions such as the Inter-American Development Bank (IDB) and China Development Bank (CDB), and the private sector equity portion provided from US-based Sithe Global Power Group. The GoG is financing the road construction necessary for the AFHEP construction and has the option to invest equity in the project. The development of the AFHEP site has a long history going back to the mid-1970s that is marked with delays and challenges. ¹⁰⁶

Historical development of the AFHEP

With an abundance of giant waterfalls, the hydropower potential of the entire country, which is estimated to be around 7,000MW, has been recognised for the past several decades. ¹⁰⁷

However most of the larger waterfalls are located at a distance from the country's economic center, of which 95% is located along the country's coastline. During an UNfunded study carried out between 1974–1976 to determine Guyana's hydroelectric potential. The study identified numerous sites with high hydroelectric power potential. Further studies carried out in 1997–2001 determined that out of all sites identified through the earlier study, Amaila Falls, which is located where the Amaila and Kuribrong rivers meet, is the most desirable hydroelectric project site due to favourable factors such as its power generation capacity, and limited environmental and ecological impacts. 109

In subsequent years following the initial studies, the Guyana Energy Agency (GEA) also identified six possible sites, with the AFHEP appearing the most favourable by the GEA based on its overall risk/benefit evaluation, the site's low unit costs per kw of capacity, its small reservoir, and a high reliability of supply. 110

Figure 9: Amaila Hydropower Site Map



Source: Amalia Falls Hydro 2012

¹⁰¹ Klass, Verlyn (2010).

¹⁰² Office of the President, The Government of Guyana (2010 b).

¹⁰³ Inter-parliamentary party dialogue forum for Amaila Falls project; Minister of Finance Dr. Ashni Singh; Georgetown GINA, March 14, 2012

¹⁰⁴ Debt financing refers to when money is borrowered to cover investment costs with a promise to return the principle. Unpaid debt is referred to as liabilities.

¹⁰⁵ Equity refers to the ownership claim or interest held by investors in assets (such as infrastructure) after all liabilities have been paid.

¹⁰⁶ Amailia Hydro Power Project, Project page. Assessed July 2012.

¹⁰⁷ Republic of Guyana (2000). National Development Strategy.

¹⁰⁸ Government of Guyana (2002).

¹⁰⁹ Synergy Holdings INC: The Amaila Falls Hydroelectric Project (AFHEP), assessed June 2012.

¹¹⁰ The Government of Guyana (2002).

In 1998, Synergy Holdings Inc. (Synergy) joint-ventured with MW Harza Global (Harza) to invest in the AFHEP and were subsequently given the right to develop the project through an interim license. The initial results of Synergy and Harza's investigation of the site included a Feasibility Report and a Final Environmental Impact Assessment in 2002, later updated in 2008.¹¹¹

Thereafter, the project attracted global equity investors and multilateral banks that were necessary to finance the complete construction of the AFHEP, however, the proposed Power Purchase Agreement (PPA) could not be agreed upon with GPL (which was at that time a private utility). To allow for work to continue on the project until an agreement was reached with GPL, the GoG extended the hydro-power license to allow for work to be done on the transmission line, studies and structuring the financing for the project.¹¹²

The situation improved in 2005 with discussions started between Synergy and GPL (which by then had reverted back to a public utility), however no decision could be reached. Harza subsequently pulled out of the project. In 2008, Synergy identified US-based Sithe Global Power Group, a US-based international energy company and a division of Blackstone Private Equity, to develop the project, and transferred its license to them in 2009. Sithe Global formed a special purpose company incorporated in Guyana, Amaila Falls Hydro Inc (AFH) to carry out the project. In 2005 in 20

Project Sponsors and Developers

AFH will bear all development risks for the project, as they are responsible for coordinating the financing, management and construction of the hydropower plant and transmission lines and for contracting with the GoG and GPL.¹¹⁵ AFH's equity partner Enventure Partners currently maintains the right to develop the 165 MW of AFHP's total hydro capacity potential. The civil works projects necessary to develop Amaila Falls (construction of the hydro facility and the electrical interconnection) was granted to China Railway Engineering Corporation through an international open tender.¹¹⁶ The GoG is responsible for the financing, construction, and operation of the access roads necessary to access the site (summarized in table 6).¹¹⁷

Table 6: Project Sponsors and Developers

PROJECT IMPEMENTATION AND FINANCING	DESCRIPTION
Capacity	165 MW Capacity Hydroelectric Power Plan
Developer	Sithe Global Group (Amaila Falls Hydro Inc - AFH), Synergy Holdings & Enventure Partners
Lender/Lead Arranger	China Development Bank; Inter-American Development Bank (IDB)
Other Capital Contributions	Government of Guyana (GoG)
Project Equity Provider	Sithe Global Group, a division of Blackstone Private Equity with partner Enventure Partners
Power Purchaser	100% by Guyana Power & Light (GPL) with a "take or pay" Power Purchase Agreement (PPA)
Civil Works Contractor	China Railway Engineering Corporation

Source: Eventure Power Generation 2012

112 Synergy Holdings INC: The Amaila Falls Hydroelectric Project (AFHEP), assessed June 2012.

¹¹¹ Ibid.

¹¹³ Ibid.

¹¹⁴ Ibid.

¹¹⁵ Government of Guyana (2009).

¹¹⁶ Inter-parliamentary party dialogue forum for Amaila Falls project; Minister of Finance Dr. Ashni Singh; Georgetown GINA,

¹¹⁷ Amailia Hydro Power Project, Project page. Assessed July 2012.

As shown in the table 7 below, the total project cost as of early 2012 is estimated at USD 840.3million. 70% of the project funding is sourced from debt financing provided by the China Development Bank (CDB) and the IDB (pending approval from the IDB's financing board), with the former providing USD 413.2 million, and the latter expected to provide USD 175M. Guyana's equity is expected to be USD 100 million, while Sithe Global will be providing USD 152.1 million.

Table 7: Total project costs

PROJECT FINANCING	PROVIDER	AMOUNT
Debt Financing	China Development Bank (CDB); Inter- American Development Bank (IDB)	USD 413.2 million & USD 175.1 million respectively
Equity Financing	The Government of Guyana (GoG)	USD 100.0 million
	Sithe Global Group	USD 152.1
Total Project Cost	-	USD 840.3 million.
Debt/Equity Ratio		70 : 30

Source: Sithe Global Group (2012)

With regard to the IDB's contribution to the debt financing, the project sponsors approached the bank early on in 2010, however the IDB's decision hinges on the favourable completion of financial due diligences and social and environmental assessments¹¹⁸, which take time to complete.¹¹⁹ As a result, the date of the project's financial closure has been delayed.¹²⁰ In March of 2012, Guyana's President Donald Ramotar expressed optimism that the IDB's Board will approve the USD 175million loan.¹²¹

Table 8: Project implementation and Financing

PROJECT IMPLEMENTATION AND FINANCING	DESCRIPTION
Engineering Procurement and Construction	USD 519.6million
Financing Costs	USD 187.8million
- Interest during construction	(USD 97.1million
- Debt Political Risk Insurance	(USD 55.7million)
Total Capital Expenditures	USD 652.5million

Source: Sithe Global Group (2012)

In terms of how the money will be used, Sithe Global's officials explained that the Engineering Procurement and Construction (EPC) cost of the actual project will amount to USD 519.6million (Table 8). The total capital costs for the project, according to the Sithe Global officials, will be USD 652.5million, taking into consideration additional construction, development, start-up, as well as a contingency. The remaining USD 187.8million will go towards financing costs which include Interest during Construction (USD 97.1million), Lenders Fee and Advisory Cost (USD 34.9million), and Debt Political Risk Insurance (USD 55.7million).¹²²

Structured Financial Arrangement

GPL will operate the project for 20 years, after which the facilities will revert to the GoG, at no cost, through a Build Own Operate Transfer (BOOT) arrangement. The Guyanese electricity utility, GPL, is the

¹¹⁸ Inter-American Development Bank (2010).

¹¹⁹ IDB (2010).

¹²⁰ Stabroek News (2012).

¹²¹ Guyana Times, March 26 2012.

¹²² Ibid.

main off-taker for the output from the project. During the 20-year period on the BOOT, the AFEHEP is expected to yield USD 2billion in profits.¹²³

Through financing from the GRIF the GoG proposes to provide USD 80 million of equity to the AFHP to take-out Sithe's equity, thereby reducing the annual "take or pay" payment to AFH. 124 Under the terms of the project, the Government has the "right but not the obligation to substitute Sithe's high-cost equity with LCDS funds." The PMO will handle the access of funding from the GRIF. Once the plant is operational, future GoG "may exercise the option to sell the Government's equity stake to private investors". 125

Delays in project development

Delays have affected the project's development since 2010. Construction of the hydro facility and electrical transmission lines was originally expected to begin in late 2011.

Since Guyana wants to use GRIF funds, a Partner Entity must be appointed to oversee the project's implementation, which means that the project must meet the Partner Entity's fiduciary requirements and social and environmental guidelines. The required financial due diligence and environmental impact assessment takes time.¹²⁶ In January 2012, Sithe Global Representatives informed that IDB's main concerns lie with the environmental studies conducted and the impact of the project coupled with the GPL's ability to manage the project and to make the requisite repayments, taking into consideration technical and commercial losses already incurred by the power company.¹²⁷ PPA Energy, a UK-based energy and management consultants firm was contracted in 2011 to carry out due diligences for the IDB and Amaila Falls Inc which include a market due diligence, an operational assessment of GPL, and a financial due diligence of GPL.¹²⁸ These due diligences commenced in July of 2012. Considering this delay, the company stated that it is likely that financial closure may now be around March 2013. ¹²⁹ Construction will take about four years to complete.¹³⁰

In 2010, the price of developing the AFHP was estimated at USD 650 million. In June 2012 it had grown to USD 840 million. ¹³¹ Sithe Global Representatives explain that this sharp increase in development costs is primarily due to the increased price of commodities as well as the appreciation of the Chinese currency against the US dollar. The United States and other major development finance players are asking the Chinese to appreciate its currency by some 20 percent. ¹³² The debt political risk insurance required by the Chinese also added additional fees of some USD 55.7 million. ¹³³

Emissions Savings

Once the AFHP is fully operational, Guyana's present installed energy generation capacity mix of 85percent fuel oil, and 15percent biomass (bagasse) would shift to a mix of hydro (32percent), biomass (bagasse) (11percent), thermal (diesel) (57percent) by 2015. 134

Environmental and Social Impacts of AFHP

AFH informs that the project is being developed to meet international labor, health, environmental and social standards and policies of possible global investors and multilateral banks who might invest in the project, detailed in the 2,500 page Environmental and Social Impact Assessment (ESIA) released in 2011 for public review as an update to earlier Assessments made by prior companies.¹³⁵ They have already put

¹²³ Kaieteur News (2012).

¹²⁴ Government Information Agency, Government of Guyana (2012b).

¹²⁵ Office of the President, The Government of Guyana (2010 b).

¹²⁶ Development Today (2010).

¹²⁷ Guyana Times, March 26 2012.

¹²⁸ PPA Energy (2011).

¹²⁹ Kaieteur News (2011)

¹³⁰ Stabroek News (2012).

¹³¹ Kaieteur News (2011).

¹³² Stabroek News (2012).

¹³³ Guyana Times, March 26 2012

¹³⁴ Klass, Verlyn (2010).

¹³⁵ Amaila Falls Hydro Inc (2011).

in place an Environmental and Social Management Plan (ESMP) to reflect the final Project design, as well as current environmental and social conditions in the Project area.

5. OVERVIEW OF THE GUYANA REDD-PLUS INVESTMENT FUND

The GRIF can provide valuable lessons learned and good practices for other forested countries, as well as donors who wish to engage in REDD+ activities and programmes. Since it is the world's first fund to be implemented in a national REDD+ strategy, Guyana's model also serves to inform international negotiations on how to design and implement a credible global REDD+ model. The following are key lessons learned from the GRIF:

- Government policies must be in place to lay the groundwork for the establishment of national climate finance funds and financing mechanisms such as the GRIF: The GoG has long-established enabling policy frameworks that integrate REDD+ activities for forest protection and conservation into its overarching national climate strategy (the LCDS). These policies help to streamline Guyana's REDD+ activities across government agencies and departments. They are also aligned with international policies and seek to validate the GoG's REDD+ activities.
- Implementing a public finance mechanism for climate finance takes time: Since its inception in 2009, significant progress has been made by Guyana and Norway to test how such mechanisms as the GRIF can effectively channel performance-based finance for REDD+, however, the process took longer than expected and was marked by delays. This is mostly due to the time it took for a Project Concept Note and Project Document to move through the approval stages of the Partner Entity's internal processes. For the GRIF to receive funds from Norway to support any project outlined in the LCDS, the project must first be approved by the GRIF Steering Committee. To gain approval the project Concept Note must be of acceptable quality and ensure that the project will meet the environmental, social and fiduciary standards of the Partner Entities. Building the capacities needed to meet these standards and getting the right actors in place to draft well-designed project Concept Notes and Project Proposals is a slow process that requires coordination and planning.
- Formal Cooperation Agreements between countries can enable the use of innovative and forward-thinking models such as performance-based financing for REDD+ activities: The JCN, MoU, and AA between Norway and Guyana established a framework for their cooperation in implementing the projects and programmes outlined in the LCDS. It also detailed the requirements for performance-based payments and how the payments would be calculated. These well-defined framework agreements serve as a guide for the two country's overall cooperation between the two countries and specifcy expectations and requirements for support. The GoG has sought to create an effective administrative and governance framework for the GRIF with the aim of streamlining the actions outlined in these agreements.
- A mechanism for channeling performance-based payments must be transparent, rules-based and must include a strong system of forest governance, accountability and enforcement: These features were outlined in the JCN and are included in Guyana's RGDP enabling activities for 2011. These oversight and governing systems are especially important considering that under the JCN, strategic use of some forest areas for high-value economic activity is allowable, but Guyana would be penalised if there were a rise in deforestation above an agreed-upon level.
- Until an internationally agreed-upon model is established, traditional ODA models must evolve to accommodate REDD+ payments: The issue of delayed payments from Norway to the GRIF for independently verified REDD+ activities reveals that alternatives to traditional official development aid (ODA) models need to evolve to allow for payments for ecosystem services. Guyana understands that REDD+ payments must be in-line with

international fiduciary and environmental standards, however, it is crucial that the financing can be accessed in a timely manner so as to avoid bottlenecks and ensure that REDD+ becomes a viable option for development finance.

- Climate mechanisms and funds should be designed to adhere to internationally recognized financial, environmental and social safeguards: The GRIF is designed to meet the standards held by the Partner Entities and other relevant international development banks and agencies. This design adds credibility to projects and programmes and also paves the way for the GRIF to receive additional funding streams from other contributors.
- Engaging civil society and the people residing in and depending on the forests for their livelihood is key to the long-term success of any REDD+ programme. In their 2009 Joint Statement Guyana and Norway acknowledged this and have worked to involve the Amerindian people, civil society and special interest groups throughout the development of the LCDS and GRIF through multi-stakeholder consultations and the inclusion of Amerindian and civil society groups as observers to the GRIF Steering Committee.
- REDD+ programmes must legally recognise the ownership of land and natural resources and the rights of indigenous people residing in or near the forests: This legal recognition should be accompanied by land demarcation and titling activities and protection against encroachment by miners, loggers and settlers. Through the LCDS's Amerindian Land Titling and Demarcation project Guyana is working to secure the land rights of those people who reside in the forest and are traditionally responsible for its conservation.
- An internationally recognised system of measuring, reporting and verification (MRVS) that contains plausible reference scenarios is crucial to performance-based financing schemes such as REDD+: Guyana has worked with international agencies and reputable consulting firms to create a credible MRV system. This serves to inform the international discourse on establishing a global standard for MRVS that other highly-forested countries can use until the UNFCCC establishes an international standard for MRV. The case of Guyana also shows that countries can steadily build their capacities for MRV while receiving performance-based payments for enabling activities.
- Transparency around funding amounts and the use of funding is important for REDD+ to gain credibility among the public and civil society: There has been of lot of controversy in the national and international press since the inception of the LCDS and GRIF. Some of these controversies can be quelled by offering access to transparent information on contributors to the GRIF and Guyana's LCDS. To facilitate such transparency, the GoG has established a dedicated website which shows international funding committed for activities related to its REDD+ activities, amounts disbursed and details about the supported LCDS projects and programmes. Such actions in the long-run can help to build credibility and support for REDD+ programmes among critics and proponents alike.
- A challenge of any REDD+ programme is providing incentives for alternative economic activities to timber and mineral extraction: Through the establishment of its MSE Development and Building Alterative Livelihoods for Vulnerable Groups and Amerindian Development Fund Project Guyana is working to create alternative livelihood opportunities to forest-dependent communities and for those previously engaged in timber harvesting and mineral extraction in the Guyana's forests. Guyana's LCDS also serves to connect the country's economic activities with LCDS to ensure sustainable and economically viable forest and landuse practices.
- Lastly, the case of the GRIF shows that mechanisms and funds can be designed to possibly receive different sources of funding from multiple sources: Guyana and Norway have stated that the GRIF could evolve to cover all types of climate change mitigation and adaptation funding including possibly REDD+ payments governed by the UNFCCC. This design lends to the GRIF's long-term sustainability.

6. **BIBLIOGRAPHY**

Administrative Agreement (2010), Guyana REDD-Plus Investment Fund, between Royal Norwegian Ministry of Foreign Affairs and International Development Association.

Amaila Falls Hydro Inc (2011), Environmental Social Impact Assessment Update Report (ESIA).

Amailia Hydro Power Project, Project page. Web: http://amailahydropower.com/Project.cfm. Assessed: July 2012.

CIA Fact Book Guyana country webpage: https://www.cia.gov/library/publications/the-world-factbook/geos/gy.html, Accessed: May 2012.

Conservation International (2009), Biodiversity Mainstreaming Through Avoided Deforestation Guyana Case Study (Bmad-Gcs) (Gy-T1058) Technical Document.

Det Norske Veritas (2011), Verification of the Interim Performance Indicators under the Guyana-Norway REDD+ Partnership, Monitoring Period 1 October 2009 – 30 September 2010 – Year 1. Report No. 2011-9107.

Development Today (2010), Norway-Guyana forest aid slated for investment in hydro dam. Nr. 16/2010, 14 November 2010.

FAO (2005), Global Forest Resources Assessment 2005: Progress towards Sustainable Forest Management, Forestry.

FAO, UNEP, and UNDP (2010), Frequently asked questions and answers - The UN-REDD Programme and REDD+.

Forest Carbon Partnership Fund, World Bank (2010), Readiness Preparation Proposal (R-PP).

Guyana Forestry Commission, Republic of Guyana (2009), Terms of Reference for Developing Capacities for a national Monitoring, Reporting and Verification System to support REDD+ participation of Guyana, Background, Capacity Assessment and Roadmap.

Guyana Forestry Commission (2011), Guyana REDD+ Monitoring Reporting & Verification System (MRVS) Interim Measures Report 01 October 2010 – 31 December 2011 Version 1.

Guyana Forestry Commission and Pöyry Forest Industry (2011), Guyana REDD-Plus Monitoring Reporting and Verification System (MRVS) Interim Measures Report.

Guyana Forestry Commission and Wageningen University (2009), Preparing Guyana's REDD+ participation: Developing capacities for monitoring, reporting & verification Report and summary of a workshop and consultation held.

Government Information Agency, the Republic of Guyana (2012a), Finance Minister presents whopping \$ 192.8B national budget. Georgetown, GINA, March 30, 2012.

Government Information Agency, Government of Guyana (2012b), 2012 Budget at a Glance: "Remaining on Course, United in Purpose, Prosperity for All."

Guyana Times, March 26 2012, Ramotar hopeful IDB will approve \$\$\$ for hydro project.

Government of Guyana (2002), Review of Amaila Falls Hydroelectric Project Feasibility Study Report, Prepared by Kaehne Consulting Ltd.

Government of Guyana (2012), LCDS "Supporting Initiatives" webpage: http://www.lcds.gov.gy/index.php/support-initiatives. Assessed July 2012.

Government of the Cooperative Republic of Guyana and the Government of the Kingdom of Norway (2009), Memorandum of Understanding between the Government of the Cooperative Republic of Guyana and the Government of the Kingdom of Norway regarding Cooperation on Issues related to the Fight against Climate Change, the Protection of Biodiversity and the Enhancement of Sustainable Development.

Government of Guyana (2009), Transfer of Interim Licence from Synergy Holdings Inc to Amaila Falls Hydro INC.

Government of Guyana (2010), Forest Carbon Partnership Facility (FCPF) Readiness Preparation Proposal (R-PP).

Government of Guyana and the Government of Norway (2009), Joint Concept Note. Updated 2011.

GRIF, Amerindian Land Titling webpage:

http://www.guyanareddfund.org/index.php?option=com_content&view=article&id=92&Itemid=120. Assessed: August 2012.

GRIF Interim Secretariat (2012 a), Record of Decision, Project Concept Note: Cunha Canal Rehabilitation Project.

GRIF Interim Secretariat (2012 b), Record of Decision, Project Concept Note: Amerindian Development Fund.

IDB (2010), Amaila Falls Hydroelectric Project Fact Sheet October 28, 2010.

Inter-American Development Bank (2010), Technical Cooperation Abstract: Amaila Falls Hydroelectric Project Preparation Studies (GY-TC1075). Approved July 7, 2010.

Inter-American Development Bank (2011), Project Profile, Micro and small enterprise (MSE) development and building alternative livelihoods for vulnerable groups.

Inter-parliamentary party dialogue forum for Amaila Falls project; Minister of Finance Dr. Ashni Singh; Georgetown GINA, March 14, 2012.

Isles, Kwesi (2012), Norway funds eminent, two projects approved.

Kaieteur News (2011), Controversial Amaila Falls hydro project, June 16 2011.

Kaieteur News (2012), Jan 25 2012. Amaila Falls hydro project, Loans of \$588M will cost Guyana US\$187M in fees during construction alone.

Klass, Verlyn (2010), GUYANA POWER SECTOR POLICY AND IMPLEMENTATION STRATEGY, comissioned by the Republic of Guyana.

McKinsey & Company (2007), "A Cost Curve for Greenhouse Gas Reduction", McKinsey Quarterly, 2007 Number 1.

Meridian Institute, Guyana REDD+ Investment Fund Assessment webpage:

http://www.merid.org/en/Content/Projects/Guyana_REDD_Investment_Fund_Assessment.aspx. Assessed June 2012.

Neuhoff, Karsten, Sam Fankhauser, Emmanuel Guerin, Jean Charles Hourcade, Helen Jackson, Ranjita Rajan and John Ward (2009). Structuring International Financial Support to Support Domestic Climate Change Mitigation in Developing Countries, Climate Strategies. University of Cambridge, Cambridge, UK.

NORAD, Guyana country webpage: http://www.norad.no/en/countries/latin-america/guyana. Assessed July 2012.

Office of Climate Change, Republic of Guyana (2012), Focus on the LCDS. Volume 1, April 2012.

Office of the President, Republic of Guyana (2008), "Creating incentives to avoid deforestation". In Guyana, the rate of deforestation is put at 0.1–0.3 percent per year.

Office of the President, The Government of Guyana (2010 a) Transforming Guyana's Economy While Combating Climate Change, a Low-Carbon Development Strategy.

Office of the President, The Government of Guyana (2010 b), Low-Carbon Development Strategy.

Office of the President, Republic of Guyana (2008), "Creating incentives to avoid deforestation". In Guyana, the rate of deforestation is put at 0.1–0.3 percent per year

Office of the President, Republic of Guyana (2011), Guyana's REDD+ Governance Development Plan.

PPA Energy (2011), Guyana: Amaila Falls Hydro-Market, Financial, Technical and Hydrology Assessments.

Rainforest Alliance (2010), Verification of Progress Related to Enabling Activities for the Guyana-Norway REDD+ Agreement.

REDD Library "Legal framework summary" webpage for Guyana: http://www.theredddesk.org/countries/guyana. Assessed: June 2012.

Republic of Guyana (2000), National Development Strategy.

Republic of Guyana (2002), Initial Communication to the UNFCCC. Available online: http://unfccc.int.

Republic of Guyana, Guyana Forestry Commission and Durham University (2011), Guyana REDD-Plus Monitoring Reporting and Verification System (MRVS), Accuracy Assessment Final Report.

Royal Norwegian Ministry of Foreign Affairs and International Development Association (2010), Administrative Agreement: Guyana REDD-Plus Investment Fund.

Santiago, Chris (2011), Writing the Rules for a New REDD Paradigm: Norway and Guyana, Forest Carbon Portal webpage: http://www.forestcarbonportal.com Assessed: July 2012.

Stabroek News (2012). Letter from Brian Kubeck & Bruce Wrobel: Hopeful that Amaila Falls Hydro project will start final due diligence, documentation in July. June 17 2012.

Synergy Holdings INC: The Amaila Falls Hydroelectric Project (AFHEP), online at: http://synergyholdings.net/energy/hydro/amailafalls/amailafalls.htm. Assessed: June 2012.

UN (2011), 2011 Human Development Report.

United Nations Development Programme (2012), Initiation Plan: Concept Note for Project Preparation, Low Carbon Development Strategy (LCDS) Amerindian Development Fund: Village Economy Development under GRIF (Phase 1).

UNEP/SEFI (2008), Public Finance Mechanisms to Mobilise Investment in Climate Change Mitigation - An Overview of Mechanisms being used today to help scale up the climate mitigation markets, with a particular focus on the clean energy sector.

United Nations, UN-REDD Programme Website: http://www.un-redd.org/ assessed: July 2012.

UN REDD Programme (2011), Support to National REDD+ Action Global Programme Framework 2011-2015.

USAID (2012) Guyana country webpage:

http://www.usaid.gov/locations/latin_america_caribbean/country/guyana/. Assessed May 2012.

World Bank (2007), Guyana Investment Climate Assessment, Vol. II.

World Bank (2011a), Financial Intermediary Funds 2011 Trust Fund Annual Report.

World Bank (2011b), Guyana REDD+ Investment Fund Project Concept Note, Cunha Canal Rehabilitation Project.

World Bank Data Portal (2012), Web, Guyana country page: http://data.worldbank.org/country/guyana adressed: May 2012.

World Bank and the Government of Gyana (2012), Interim Secretariat Report.



UNEP Collaborating Centre
For Climate & Sustainable Energy Finance
Frankfurt School of Finance & Management
Sonnemannstrasse 9-11
60314 Frankfurt am Main

http://fs-unep-centre.org www.frankfurt-school.de

E-Mail: unep@fs.de

Phone: +49 (0)69 154008-627 Fax: +49 (0)69 154008-670

Supported by:



Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

based on a decision of the Parliament of the Federal Republic of Germany

