



2016
AfDB CIF
ANNUAL
REPORT

FINANCING CHANGE

THE AfDB AND CIF FOR A CLIMATE-SMART AFRICA



AFRICAN DEVELOPMENT BANK GROUP



CLIMATE
INVESTMENT
FUNDS



CONTENTS

ACRONYMS & ABBREVIATIONS	2
FOREWORD	3
AfDB CIF AT A GLANCE 2016 (Infographic)	4-5
.....	
Feature Section	
CHANGE FROM THE GROUND UP	6-7
The Evolving World of Climate Finance: CIF AS KEYSTONE AND CATALYST	8-11
The Operational Platform: AFRICAN CHANGE THROUGH AFDB CIF PROJECTS	12-21
.....	
WHAT LIES AHEAD: CHALLENGES AND OPPORTUNITIES	22-23
KNOWLEDGE AND LEARNING IN 2016	24-25
AFRICA'S CREATIVE USE OF PREPARATION GRANTS UNDER CIF	26-27
2016 AfDB CIF PORTFOLIO	28-Inside back cover



Asian Development Bank



European Bank
for Reconstruction and Development



Inter-American
Development Bank



WORLD BANK GROUP

ABOUT THE CIF

Premier \$8.3 billion global public climate finance instrument with Multilateral Development Banks to support developing countries in renewables, sustainable transport, climate resilience, forests, and agriculture. Uniquely broad-based and inclusive governance structure. Programmatically linked to government development policy. Uniquely designed to simultaneously deliver strong development and climate outcomes.



CTF



FIP



PPCR



SREP

AfDB serves as a key CIF partner and implementing agency, along with its fellow Multilateral Development Banks (MDBs). The AfDB's Power, Energy, Climate and Green Growth Vice Presidency produces this report every year as part of its contributions at AfDB to support Africa's move toward climate-resilient and low-carbon development.

The report highlights AfDB's work to expand Africa's access to climate financing through the CIF, and support for Africa's transformations in clean technology, sustainable management of forests, increased energy access through renewable energy, and climate-resilient development.

ACRONYMS & ABBREVIATIONS

ABM	Adaptation Benefit Mechanism	MENA	Middle East and North Africa
AEEP	Africa-EU Energy Partnership	MT	Megaton
AfDB	African Development Bank	MW	Megawatt
ARC	African Risk Capacity	NAMA	Nationally Appropriate Mitigation Action
AREI	Africa Renewable Energy Initiative	NDC	Nationally Determined Contribution
CCAP	Climate Change Action Plan	ONEC	Energy, Environment and Climate Change Department, AfDB
CIF	Climate Investment Funds	PDIPC	Project for the Improvement of Climate Forecasting Systems and Operationalization of Early Warning Systems
CO₂	Carbon Dioxide	PPA	Power Purchase Agreement
COP	Conference of the Parties, UNFCCC	PPCR	Pilot Program for Climate Resilience
CSP	Concentrated Solar Power	PPG	Project Preparation Grant
CTF	Clean Technology Fund	PV	Photovoltaic
DRC	Democratic Republic of Congo	RE	Renewable energy
EBRD	European Bank for Reconstruction and Development	REDD+	Reducing emissions from deforestation and forest degradation combined with sustainable forest management and protection of carbon stocks
FIP	Forest Investment Program	SCF	Strategic Climate Fund
GCF	Green Climate Fund	SDG	Sustainable Development Goal
GDP	Gross Domestic Product	SEforALL	Sustainable Energy for All
GEF	Global Environment Facility	SEFA	Sustainable Energy Fund for Africa
GDC	Geothermal Development Company, Kenya	SME	Small and Medium-Scale Enterprise
GGGI	Global Green Growth Institute	SPCR	Strategic Program for Climate Resilience
GHG	Greenhouse gas	SREP	Program for Scaling Up Renewable Energy in Low Income Countries
GTP	Growth and Transformation Plan, Ethiopia	UNDP	United Nations Development Programme
Ha	Hectare	UNFCCC	United Nations Framework Convention on Climate Change
IDB	Inter-American Development Bank	WB	World Bank
INDC	Intended Nationally Determined Contribution	WBG	World Bank Group including International Finance Corporation (IFC)
IP	Investment Plan	ZAR	South African Rand
IPP	Independent Power Producer		
IPPG	Investment Plan Preparation Grant		
km	kilometer		
kWh	Kilowatt hour		
LOC	Line of Credit		
MASEN	Moroccan Solar Energy Agency		
MDB	Multilateral Development Bank		

FOREWORD

“”

The Bank has been on the forefront of Africa's efforts on climate finance.

—Akinwumi Adesina
AfDB President

2016 saw a major shift in direction for both the African Development Bank (AfDB) and the Climate Investment Funds (CIF) in their climate support to Africa. Both refined their focus to more effectively leverage the world's scarce climate funds, and to ramp up and speed up innovation and change.

The Bank committed to a set of new priorities to accelerate Africa's economic transformation – the “High 5s”. During 2016, the Bank underwent a transformation to meet these new commitments: restructuring in order to move closer to its clients and streamlining business processes. One important goal of this effort is to ensure a rapid and effective support for countries' climate-friendly development and the implementation of their Paris Agreement's Nationally Determined Contributions for an access to modern energy for all African citizens through development of sustainable energy resources.

The Bank is leading in Africa on renewable energy and financed several key renewable energy projects with the support of the CIF.

The CIF governing bodies focused in 2016 on considering the best ways to maintain the four CIF programs building on the success of its first eight years of operation, measuring the outcomes of the operations underway, sharing the compelling innovations and learnings of the unique CIF structure, and evolving the CIF mechanism as the global climate finance architecture evolves.

In the evolving world of climate finance, the CIF is a key partner, particularly for AfDB as the Bank commits to significantly increase its climate finance operations. At the Bank, the Climate Change and Green Growth Department is driving the AfDB/CIF partnership, helping to ensure that Africa takes advantage of the opportunities that CIF-financed programs provide.

For both AfDB and the CIF, the most essential measure of success is **change from the ground up**: how all the investment, policy, planning, and partnership translates into action for the people and environment of Africa. This annual report reflects on the state of play in 2016 of the AfDB/CIF portfolio.

We hope this report offers you new insights and helps raise hope for a sustainable Africa on the near horizon.

AMADOU HOTT

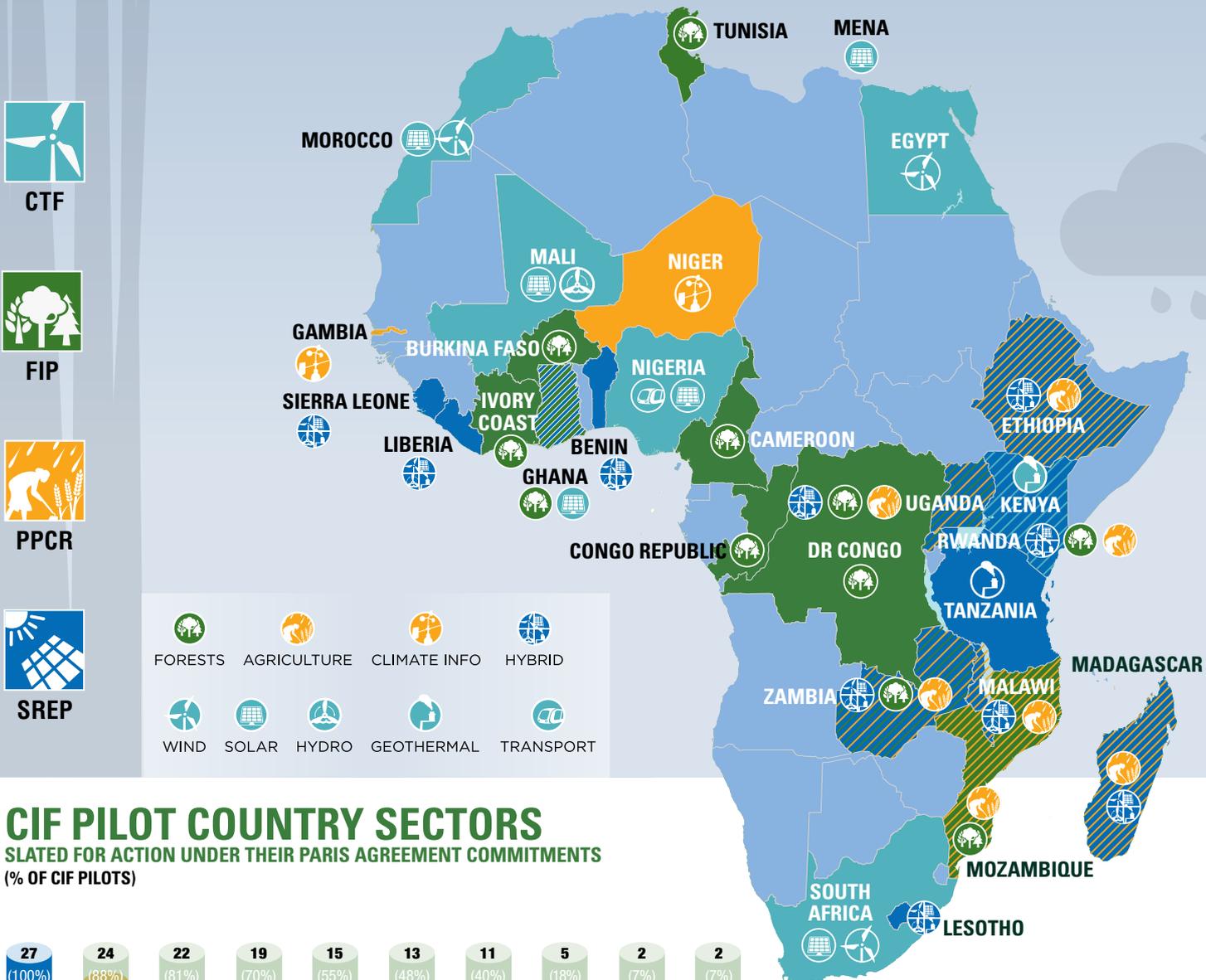
AfDB Vice-President, Power, Energy, Climate and Green Growth



AfDB CIF AT

AfDB CIF PILOTS

With AfDB and CIF support, these pilot countries carry out programs and projects which contribute to their climate-smart development and can significantly advance their commitments under the Paris Agreement, known as Nationally Determined Contributions (NDCs).



A GLANCE 2016

AfDB CIF PORTFOLIO SNAPSHOT

 **39 INVESTMENT PLANS**

21 + 1 + 17

ENDORSED
COUNTRY
INVESTMENT
PLANS

ENDORSED
REGIONAL
INVESTMENT
PLAN

COUNTRY
INVESTMENT
PLANS TO BE
DEVELOPED

 **18 APPROVED PROJECTS**
+ 24 PROJECTS TO BE APPROVED



29

RENEWABLES



6

FORESTS



6

RESILIENCE
SOLUTIONS



1

TRANSPORT

APPROVED PROJECTS

AfDB APPROVED PROJECTS BY PROGRAM

PROJECTS

6 CTF \$1.774B
CIF \$511M, AfDB \$1,263M



4 FIP \$48M
CIF \$53M, AfDB \$19M



5 PPCR \$133M
CIF \$105M, AfDB \$29M



3 SREP \$147M
CIF \$52M, AfDB \$130M



AfDB CIF
APPROVED PROJECTS

\$2.1 billion

AfDB: **\$1.4 billion**
CIF: **\$0.7 billion**

2016 NEWS AT A GLANCE

JAN
UGANDA RESILIENCE
Uganda awarded grant to prepare transformational strategic program for climate resilience

MAR
HALF OF AFRICA GREENING
Advancing climate solutions to front burner in national development plans: report

AUG
CLIMATE FUNDS GROW
US \$81 billion mobilized in 2015 to tackle climate change: Joint MDB report

OCT
AFRICAN ACTION PARIS
African nations join front-runners in ratifying Paris Agreement on climate change

FEB
MOROCCO SHOWCASES NEW DEAL
World's largest concentrated solar power plant in Morocco showcases AfDB's New Deal on Energy for Africa

MAY
RWANDA FORESTS
Rwanda gets green light to prepare plan to sustainably enhance its forest resources
AFRICAN JOURNALISTS WITH AfDB
To explore the path to a green and powered Africa

SEPT
GHANA FORESTS
Ghana wins US \$24 million to restore and expand sustainable forests through innovative public-private partnership

DEC
NDC SUPPORT GROWS
Climate finance mobilization required to strengthen NDC ambition, says new report

CHANGE FROM

The Evolving World of Climate Finance:

**CIF AS KEYSTONE
AND CATALYST**

The Operational Platform:

**AFRICAN CHANGE
THROUGH AfDB CIF
PROJECTS**

THE GROUND UP



The CIF has been a front-runner in contributing to the Bank's institutional transformation to effectively meet Africa's needs. This section sets out the CIF's keystone role in AfDB's evolving climate-friendly operational support.

CHANGE FROM THE GROUND UP

The Evolving World of Climate Finance:

CIF AS A KEYSTONE AND CATALYST

In 2016, as countries prepared to undertake their Paris Agreement promises, the landscape of climate finance evolved in response. Public sector support institutions, including the UN and AfDB and other MDBs, began to ramp up their programs. Beyond the public sector, the massive funding needed to meet countries' goals made it abundantly clear that the private sector must be a central part of the equation.

Concurrently in 2016, as Africa's premier development partner, the AfDB dramatically realigned its priorities in line with the African people's increasingly urgent economic, social and environmental realities.

With an underpinning of *inclusive growth and transition to green growth* outlined in the Bank's **Ten Year Strategy** for 2013-2022, the Bank's structural transformation is built on five operational priorities: infrastructure development,

regional economic integration, private sector development, governance and accountability, and skills and technology. This transformation is the foundation of the Bank's new Development and Business Delivery Model, which aims to improve the Bank's efficiency, financial performance, and development impact, and the priorities are embodied in the Bank's "High 5s". Commitment to climate action is embedded in all High 5s.

THE BANK'S NEW OPERATIONAL PRIORITIES ARE EMBODIED IN THE "HIGH 5s"



Light up & power Africa



Feed Africa



Industrialize Africa



Integrate Africa



Improve the quality of life for the people of Africa

The cost of climate inaction is increasingly untenable, particularly for large numbers of vulnerable Africans. African nations, along with the world's other developing countries, committed to fulfilling their own promises made at Paris in the form of Nationally Determined Contributions (NDCs) to manage their greenhouse gas emissions.

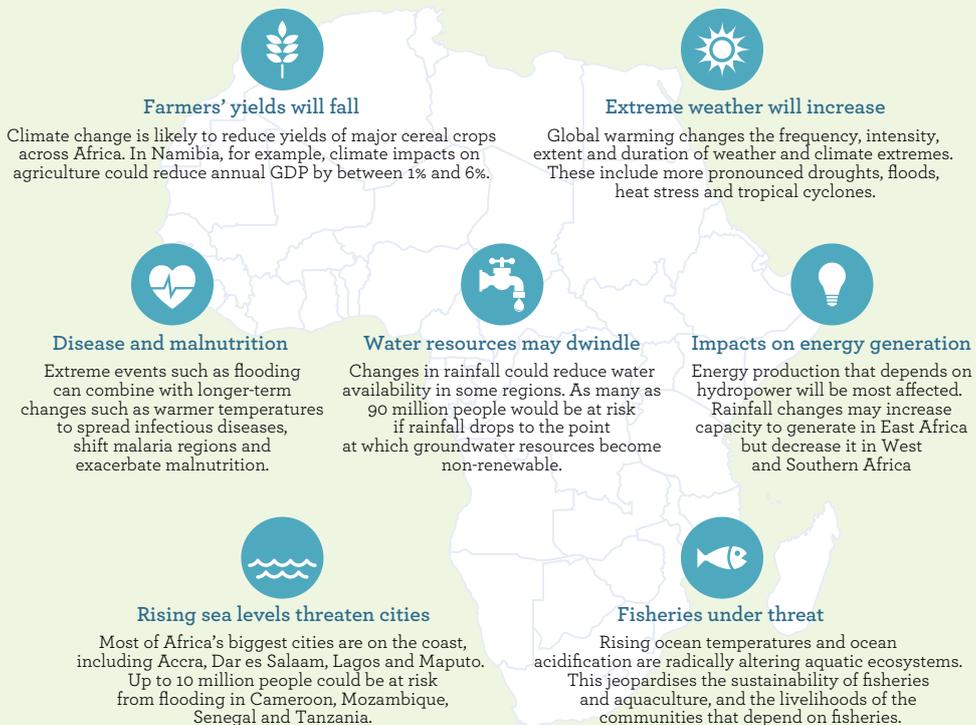
However, the continent's total emissions account for only 2% of global emissions. Africa's main challenge is to urgently address the growing negative impacts Africans are experiencing from climate change (see Box 1.). To achieve that, massive amounts of funding must flow to support their efforts. With the UN's Green Climate Fund (GCF) offering

only half of its support for adaptation and half for mitigation, it is incumbent on the Bank with the CIF and other support systems to find ways to help African countries find viable solutions to their real problems.

Given this increasingly urgent situation with its critical timelines, the sources and types of climate finance remain ever more crucial. In 2016, AfDB worked to increasingly integrate the use of climate finance through its core structure, so that its partnership with the global climate funds can make good on the promise of leveraging, scaling-up, and demonstrating successful climate-smart transformation.

AFRICA FACES ACUTE CLIMATE RISKS

Africa is particularly vulnerable to climate change and is already suffering from its worst effects



In 2016, AfDB worked to transform the way it carries out its business to help Africa's countries get on the fast track to achieve green, inclusive and sustainable development and deliver on their goals for climate action by:

- Working through ten climate funds, mechanisms and policy advocacy initiatives—six internal funds and four external funds—to ensure well-targeted delivery of climate finance;
- Mobilizing wide-ranging public and private climate resources for projects in forests, climate resilience, renewables, and energy efficiency;
- Taking the lead in developing innovative financial instruments and climate finance tracking systems;
- Designing and implementing low-carbon and climate-resilient projects to benefit from the \$500 million green bond issued by AfDB in its inaugural 3-year Green Bond Program that focuses on creating flagship green projects in Africa;
- Transforming its institutional infrastructure to channel climate finance quickly and efficiently to the communities that need it most;
- Instituting ways to help countries meet their NDCs under the Paris Agreement and UN Sustainable Development Goals (SDG) commitments.



Pioneer of Climate Adaptation Financing



Fund for African readiness for climate-resilient, low-carbon development



Fund for innovative water projects in Africa



Multi-donor fund to support agriculture infrastructure projects



Premier global instrument for low-carbon, climate-resilient development



Multi-donor fund for information for climate-resilient development



Champion of the global commons, global UN treaty instrument



UN fund to help developing countries achieve adaptation and mitigation



Multi-donor Trust Fund to support rural water supply and sanitation programs



Unique mechanism for private investment in small/medium scale renewables, energy efficiency





Flickr/AfDB Projects
Menengai Geothermal Project.

Climate Finance is about blending financial instruments at terms *below market rates* with the objective of addressing barriers and mitigating risks which prevent investment in mitigation and adaptation projects and/or programs. The principle of *minimum concessionality* should be applied at all times to avoid market distortions and crowding out of investments.

THE CIF'S PIVOTAL ROLE

In climate finance, the \$8.3 billion CIF stands as a keystone, embodying the foundations of successful support for climate action. Since 2008, the CIF's unique architecture, built on the MDB partnership, interlinked development and climate policy, engagement of stakeholders, private sector and other partners, and innovation, has helped create best practice to achieve change.

In addition, the CIF's eight years of operations have resulted in showcase examples of climate action success, as well as identifying areas of concern and need for adjustment, and can serve as a learning platform for other funds, including the GCF.

For AfDB, the CIF has been a front-runner in contributing to the Bank's transformation, helping initiate its increased lending towards mitigation and adaptation finance. The Bank's commitment to reach a lending target of \$5 billion per year by 2020 for climate change related projects would not have been possible without the CIF. The fruits of this transformation will allow the Bank to continue mobilizing resources at scale from the GCF and elsewhere.

In Africa, AfDB is serving as lead CIF MDB on 42 projects in 17 countries and 2 African regions. These CIF-supported projects have helped shape the Bank's approach to embedding climate response in development projects.

The CIF's unique and proactive approach to engaging the private sector, including through its Private Sector Set-Aside Program and the Dedicated Private Sector Programs, has set the stage for critical momentum toward breaking down barriers, de-risking investment, and inviting early investors in greenfield technologies.

The CIF's unique structure also allows countries to receive preparatory support in the form of Investment Plan Preparation Grants (IPPGs) to help countries advance development of their Investment Plans and Project-level Preparation Grants (PPGs) to prepare projects for approval and implementation (See pages 26-27).

Form Ghana: helping change AfDB's development operations

In Ghana the Bank approved a \$10 million FIP concessional loan agreement with a local forestry private company, opening the door to implementation of an innovative Public-Private Partnership (PPP) project to restore highly degraded forest reserves. This is Ghana's first PPP in the forest sector and will add 12,000 hectares (ha) of sustainable commercial plantations that meet both Forest Stewardship Council and Verified Carbon Standard certification standards.

The CIF has been a front-runner in contributing to the Bank's institutional transformation to effectively meet Africa's needs. This section sets out the CIF's keystone role in AfDB's evolving climate-friendly operational support.

CHANGE FROM THE GROUND UP

The Operational Platform:

AFRICAN CHANGE THROUGH AfDB CIF PROJECTS



CLEAN TECHNOLOGY FUND (CTF)

Ensuring Sustainable Energy



FOREST INVESTMENT PROGRAM (FIP)

Reduced Emissions Through Reforestation and REDD+



Shutterstock/Anna Om
Africa, Kenya, Lake Nakuru



PPCR

PILOT PROGRAM FOR CLIMATE RESILIENCE (PPCR)

Embedding Resilience In
National Planning



SREP

SCALING UP RENEWABLE ENERGY PROGRAM IN LOW INCOME COUNTRIES (SREP)

Economic Growth Through
Renewables



CLEAN TECHNOLOGY FUND (CTF)

Ensuring Sustainable Energy

The AfDB CTF

portfolio

includes

7 public and

7 private

sector projects

in the pipeline.

Of these, six

projects were

under

implementation

in 2016. This

section

explores their

2016 status of

implementation.

APPROVED PROJECTS UNDER IMPLEMENTATION

MOROCCO OUARZAZATE CONCENTRATED SOLAR POWER

CTF \$100M, AfDB \$240M

Purpose: To generate 120-160 MW in its first phase by 2014 and 500 MW in total.

Key expected results: 0.24 million tons of CO₂ emissions avoided per year; shifted energy mix.

MOROCCO NOOR II AND III CONCENTRATED SOLAR POWER PROJECT (MENA REGION IP)

CTF \$119M, AfDB \$140M

Purpose: To develop 2,000 MW of concentrated solar power.

Key expected results: Annual CO₂ savings of 521,670, potential creation of 11,000 jobs, reduce global CSP cost curve by 3%.

MOROCCO ONE WIND ENERGY

CTF \$125M, AfDB \$448.39M

Purpose: To construct three wind farms of 100-300 MW installed capacity and two hydro facilities to supply base-load power.

Key expected results: Additional 550 MW of wind installed capacity and hybrid-hydro storage and generation of 520 MW; 533,000 new connections.

NIGERIA LINE OF CREDIT FOR RENEWABLE ENERGY AND ENERGY EFFICIENCY

CTF \$25M, AfDB \$75M

Purpose: To facilitate provision of affordable financing through a local bank for indigenous RE/EE projects.

Key expected results: 0.15 million tons of CO₂ per year, newly installed capacity of 107 MW.

SOUTH AFRICA ESKOM RENEWABLES SUPPORT

CTF \$100M, AfDB \$260M

Purpose: To introduce CSP to Sub-Saharan Africa and scaled-up wind energy to South Africa.

Key expected results: 0.58 million tons CO₂ emissions avoided through CSP, 0.24 million tons avoided through wind.

SOUTH AFRICA XINA SOLAR ONE PROJECT (SUSTAINABLE ENERGY ACCELERATION PROGRAM)

CTF \$41.5M AfDB \$100M

Purpose: The construction of a 100MW CSP plant to alleviate peak load demand and reduce CO₂ emissions in South Africa.

Key expected results: Annual reduction of 400,000 tons of CO₂, creation of 1,370 jobs during construction phase and 45 jobs during operation.

PIPELINE OF PROJECTS IN ENDORSED INVESTMENT PLANS

CLEAN TECHNOLOGY FUND (CTF)					
PROJECT/PROGRAM TITLE	INVESTMENT PLAN	PUBLIC/PRIVATE	PROJECT STATUS	CIF FUNDING (US\$ MILLION)	AFDB FUNDING (US\$ MILLION)
200MW Gulf of Suez Wind Farm	Egypt	Public	Preparation	48.95	
120–160 MW CSP Complex in Ouarzazate Morocco	MENA	Public	AfDB Approved	100.00	240.00
Morocco Ouarzazate CSP — Project II	MENA	Public	AfDB Approved	119.00	140.00
One Wind Energy Plan	Morocco	Public	AfDB Approved	125.00	448.39
Abuja Mass transit	Nigeria	Public	Identification	49.00	
Renewable Energy Utility-scale Solar PV — Bauchi Solar PV	Nigeria	Private	Preparation	25.00	
Line of credit for Renewable Energy / Energy Efficiency	Nigeria	Private	AfDB Approved	25.00	75.00
Eskom Renewable supp projects (Wind & CSP)	South Africa	Public	AfDB Approved	100.00	260.00
Sustainable Energy Acceleration Program — Xina CSP Project	South Africa	Private	AfDB Approved	41.50	100.00
Utility Scale renewable Energy: Geothermal (Kenya) / Concessional Finance Program for Geothermal Generation	Kenya	Private	Preparation	30.00	
Utility Scale Renewable Energy: Geothermal	Kenya	Private	Preparation	20.00	
Utility Scale Renewable Energy: Solar Photovoltaic Financing I	Regional	Private	Preparation	20.00	
Utility Scale Renewable Energy: Solar Photovoltaic Financing II	Regional	Private	Preparation	20.00	
Morocco-Phase II of Midelt or Tata	MENA	Public	Preparation	25.00	

CTF OPERATIONS UNDERWAY: THE 2016 STATE OF PLAY

A number of middle-income countries in Africa, both north and south, are leading the continent in harnessing their massive renewable resources for energy consumption and mitigation of greenhouse gas emissions. AfDB and CTF are partnering with Morocco, Nigeria and South Africa — three of Africa's conventional energy powerhouses— to create this transformative move to sustainable energy.

Morocco leads on deployment of the transformative Concentrated Solar Power (CSP) technology and showcasing both wind and solar solutions. With the country's demand for primary energy expected to triple and demand for electricity to quadruple by 2030, these solutions are in line with its goal of covering 42% of its energy with renewables by 2020.

The *Noor Moroccan Solar Energy Program* has begun to transform the energy sector by deploying a number of CSP power plants. In February 2016, His Majesty Mohammed VI inaugurated Noor I, the first 160 MW CSP power plant, and brought it into commercial operation. Subsequent power stations, Noor II and III, will add an additional capacity of 350 MW. Once fully operational, the three plants will have an estimated cumulative production of over 1,100 GWh per year, reduce carbon emissions by 760,000 tons per year, and supply power to 1.1 million Moroccan households. Low-cost debt provided by the CTF, AfDB and other partners helped cut cost and establish a track record which will likely lead to a broad cost decrease for this promising technology.

One Wind Energy Project is a transformational project made up of a wind energy generating system with hydro-storage and a rural electrification plan. The program originally included three new wind farms and one hydro facility. In 2016, the government informed the CTF and its MDB partners that it faced delays in the hydro sub-component and sought to reallocate that sub-component, a restructuring to which the CTF agreed. The newly structured project, with the AfDB continuing as lead agency,

includes addition of the Midelt Wind Farm with a total installed capacity of 150MW, and revision of the Tanger II Wind Farm installed capacity from 150MW to 100MW. The program is expected to prevent 65 million tons of CO₂ emissions over its total life-span, and to generate electricity for 86,000 households, many in rural areas.

South Africa, under the auspices of Eskom, its electricity utility, is tapping into its abundant solar and wind resources to meet 42% of its power through renewables. The *Sere Wind Farm Project*, one of the largest wind energy projects in South Africa and the first of its kind for Eskom, is now under commercial operations and has created 140 direct jobs during the construction phase. It is targeted to reduce South Africa's CO₂ emissions by 5 million tons during its first 20 years. Average annual energy production is estimated at about 298,000 MWh, enough to supply about 68,000 homes. CTF \$100 million and commercial funding from AfDB and other partners bridged the cost gap relative to coal power and provided positive investment incentives.

In **Nigeria**, where only 40% of urban and 10% of rural residents have access to electricity, the Government has adopted an ambitious renewable energy agenda to catalyze low carbon private investments and transform the country's energy landscape, with renewable energy as 20% of the energy supply by 2030. However, many Nigerian financial institutions lack experience evaluating and investing in green technologies. The *Line of Credit for Renewable Energy and Energy Efficiency Project* is supporting capacity building to address market barriers and accelerate low-carbon investments in the private sector, facilitating the use of Lines of Credit (LOC) for local banks to on-lend to SMEs for renewable energy and energy efficiency projects. The project has helped establish the country's first \$50 million LOC, a first-mover in this approach, to on-lend for renewable energy and energy efficiency.

STIMULATING PRIVATE SECTOR ENGAGEMENT

Through its New Energy Deal for Africa, AfDB is putting extra emphasis on its ability to originate new private sector-led transactions in renewable energy resources. Private sector engagement is one of the hallmarks of the CTF program. In Africa, all three CTF pilot countries are engaging in innovative public-private partnerships and financial mechanisms to advance their projects.

Morocco's Noor CSP plant is based on an innovative financing structure which leverages the capacity of a consortium of Independent Power Producers (IPPs) to sell the power generated by the plant back to the government in a public-private partnership arrangement. The project's financing mechanism will bring the CSP capital cost down to levels comparable with traditional technologies and the wholesale cost of power in the country, reducing the CSP global cost curve by 3%.

In **South Africa**, the 100 MW *Xina Solar One Project* is supporting the construction and operations of a 100MW CSP plant using parabolic trough technology and a superheated steam cycle, designed to store energy and dispatch it during peak load periods, allowing South Africa to replace peak generation power plants that are more inefficient and operate on fossil fuels. In the context of this project, AfDB implemented a cross-currency swap that availed the equivalent of \$41.5 million in South African Rand (ZAR) funding to the borrower and mitigated a key risk.



AFP Photo/Fadel Senna

Moroccan King Mohammed VI (C) waves the Moroccan flag as he inaugurates the Noor 1 Concentrated Solar Power plant



"FINDING CLEAN WAYS TO POWER THE WORLD IS A MORAL IMPERATIVE."

LEANDRO AZEVEDO
SENIOR CLIMATE FINANCE OFFICER,
MANAGER AFDB OF AFRICAN DEVELOPMENT BANK



FOREST INVESTMENT PROGRAM (FIP)

Reduced Emissions Through Reforestation and REDD+*

The AfDB FIP portfolio includes 4 public and 2 private sector projects in the pipeline. Of these, four projects were under implementation in 2016. This section explores their 2016 state of play.

APPROVED PROJECTS UNDER IMPLEMENTATION

BURKINA FASO GAZETTED FORESTS PARTICIPATORY MANAGEMENT

FIP \$12M*

Purpose: To build carbon sequestration capacity in the forests, improving local people's resilience to climate change, and reducing poverty by diversifying income sources, developing gazetted forest wood and non-wood products such as almond and shea processing and beekeeping.

Key expected results: Development of a measurable, reportable, verifiable system for REDD+, improvement of forest governance, securitization and management of 284,000 ha of gazetted forests; establishment of a socio-economic support infrastructure for neighboring municipal councils.

DEMOCRATIC REPUBLIC OF CONGO INTEGRATED REDD+ PROJECT IN THE MBUJI-MAYI/KANANGA AND KISANGANI BASINS

FIP \$22.3M*

Purpose: To reduce forest GHG emissions and poverty in a degraded savannah area and a closed forest area to address land tenure security, agriculture, forestry and energy

Key expected results: 4 million tons CO₂ emissions reduced; 30,000 improved stoves; 8,500 ha forests sustainably managed; 20,000 rural micro-enterprises; 4,500 land usufruct rights formalized (50% women, youth)

GHANA ENGAGING LOCAL COMMUNITIES IN REDD+/ENHANCEMENT OF CARBON STOCKS (ELCIR+)

FIP \$10M*, AfDB \$5.33M

Purpose: To reduce deforestation and forest degradation and financially benefit local communities

Key expected results: Emissions reduction; protection of carbon reservoirs; 12,000 direct beneficiaries (50% women) to receive seeds, equipment, financial incentives to develop forestry, agroforestry and alternative livelihoods activities; 175,000 additional indirect beneficiaries

GHANA RESTORATION OF DEGRADED FOREST RESERVE THROUGH CERTIFIED PLANTATION

FIP \$10M, AfDB \$14M

Purpose: To catalyze private sector involvement in large-scale sustainable and commercial teak plantations in degraded forest reserves by expanding an existing forest plantation; utilizing debt to catalyze private sector investment.

Key expected results: Emissions reduction; 11,700 ha of sustainably managed forest plantation; 400 direct full-time jobs and 600 direct seasonal jobs created

*Project totals include project preparation grant financing

PIPELINE OF PROJECTS IN ENDORSED INVESTMENT PLANS

FOREST INVESTMENT PROGRAM (FIP)					
PROJECT/PROGRAM TITLE	INVESTMENT PLAN	PUBLIC/PRIVATE	PROJECT STATUS	CIF FUNDING (US\$ MILLION)	AFDB FUNDING (US\$ MILLION)
Gazetted forests participatory management REDD+	Burkina Faso	Public	AfDB Approved	11.50	
Integrated REDD+ Project in the Mbuji-Mayi/Kananga and Kisangani Basins	DRC	Public	AfDB Approved	21.50	
Engaging Local communities in REDD+/Enhancing carbon stocks	Ghana	Public	AfDB Approved	9.75	5.33
Restoration of degraded forest reserve through VCS and FSC certified plantations	Ghana	Private	AfDB Approved	10.00	
Climate change mitigation and poverty reduction through the development of the cashew sector in Burkina Faso (Wouol project)	Burkina Faso	Private	Preparation	4.00	
Tai National Park Management Support Project (PAGT)	Cote d'Ivoire	Public	Identification	3.00	

* Reducing emissions from deforestation and forest degradation, and fostering conservation, sustainable management of forests, and enhancement of forest carbon stocks.

FIP OPERATIONS UNDERWAY: THE 2016 STATE OF PLAY

The rich forests of West Africa and the Congolese forest tracts — some of the world's most treasured forest bodies — have been facing alarming loss over the past decades. Three of these forest-rich countries are implementing transformative forest solutions with support from the AfDB and FIP.

In West Africa, Ghana continued work in 2016 on two FIP-funded forest projects. The private sector *Restoration of Degraded Forest Reserve through Certified Plantations* project was approved in September, allowing project developers to begin partnership plans with the government to restore and expand an existing Forest Stewardship Council certified forest plantation to nearly 12,000 ha of sustainable commercial forest plantations made up of 10% indigenous tree species and 90% teak. Loan signature is expected in early 2017.

In Ghana's public sector *Engaging Local Communities in REDD+/Enhancement of Carbon Stocks* project, implementation progressed well and measures were put in place to accelerate further. The project aims to help communities restore degraded off-reserve forests and agricultural landscapes, promote climate-smart cocoa and agroforestry systems, and enhance efficient charcoal production. To achieve its objectives, the project will provide capacity building, seeds, equipment and financial incentives to develop agroforestry and alternative livelihoods activities. The project is designed to directly benefit 12,000 people, half of them women, and indirectly benefit 175,000 people.

Burkina Faso is implementing the *Gazetted Forests Participatory Management Project for REDD+ (PGFC/REDD+)* to transform its vast forests which provide livelihoods to much of the country's rural

population. The project is providing capacity building, institutional strengthening and governance reform, and will improve the carbon sequestration capacity of 12 gazetted forests (284,000 ha). The CO₂e savings generated by the project over 25 years has been estimated at 4.7 million tons. The country is engaged in a REDD+ preparation process supported by the FIP and Forest Carbon Partnership Facility (FCPF), to enable them to sell forest carbon in the framework of REDD+. From 2014 to 2016, the country faced a political crisis which slowed project implementation; but in March 2016, the government reached agreement on a project action plan and began to move forward again. Between March and July, the project signed 15 contracts and began to execute their terms.

In Central Africa, two-thirds of the Democratic Republic of Congo is covered by the Congo Rainforest, the second largest in the world. The country is implementing the *Integrated REDD+ Project in the Mbuji-Mayi/Kananga and Kisangani Basin* to reduce forest GHG emissions by approximately 4 MtCO₂ and poverty in large swaths of degraded savannah and closed forest areas, to be completed by 2019. The project will rehabilitate 11,405 ha of degraded forests through simplified management plans and establish 11,000 ha of forest plantations, and will provide distribution of improved stoves and promote other sources of energy. The project faced early delays, but in 2016 began to move ahead: establishing a project management unit and provincial project teams, acquiring and delivering equipment, notifying Local Implementing Agencies (LIAs) for contracts, and working to engage political and administrative authorities, civil society and rural populations.

EXAMPLES OF STAKEHOLDER ENGAGEMENT AND BENEFITS

In **Ghana**, the *Restoration of Degraded Forest Reserve through VCS and FSC Certified Plantations* project has been structured through extensive engagement with all relevant stakeholders throughout the impacted region, and will produce 400 direct full-time jobs and 600 direct seasonal jobs. The project includes a goal of ensuring that, in this heavily male-dominated industry, 40% of the jobs generated through the project will be held by women.

Burkina Faso's *Gazetted Forests Participatory Management Project for REDD+ (PGFC/REDD+)* is designed to benefit nearly 5,400 producers, mostly smallholders and vulnerable women who depend on forest products for their livelihood, as well as 31 municipal councils belonging to 4 administrative regions near the forests, which are home to approximately 850,000 people, 52% of which are women.

STIMULATING PRIVATE SECTOR ENGAGEMENT

In **Burkina Faso**, the government has taken on an innovative \$4 million private sector project supported by AfDB and funded through FIP's Private Sector Set-Aside Program, to revive its cashew sector and mitigate climate change, working through an innovative public-private sector business model between the national union of farmers' cooperatives and the government. The *Climate Change Mitigation and Poverty Reduction Through the Development of the Cashew Sector in Burkina Faso Project* received approval by end December 2016.

In **Ghana**, the *Restoration of Degraded Forest Reserve through VCS and FSC Certified Plantations* project is a first-of-its-kind project for AfDB, also developed under the FIP's Private Sector Set-Aside Program. The project is a partnership with Form Ghana, a private Ghanaian company which applies sustainable plantation management solutions. The project's business model supports production of wood products with quality and sustainability to help meet increasing market demand while avoiding pressure on natural reserve forests. It stands to become a replicable approach for attracting private sector finance to the sector.





PILOT PROGRAM FOR CLIMATE RESILIENCE (PPCR)

Embedding Resilience In National Planning

The AfDB PPCR portfolio includes 1 private and 5 public sector projects in the pipeline. Of these, 5 projects were under implementation in 2016. This section explores their 2016 status of implementation.

APPROVED PROJECTS UNDER IMPLEMENTATION

MOZAMBIQUE BAIXO LIMPOPO IRRIGATION AND CLIMATE RESILIENCE

PPCR \$15.75M, AfDB \$25.79M

Purpose: To provide climate resilient infrastructure for increased agricultural productivity.

Key expected results: Increased incomes 150% and crop production in project area, reduced poverty rate to 42%.

MOZAMBIQUE SUSTAINABLE LAND AND WATER RESOURCES MANAGEMENT

PPCR \$15.75M, AfDB \$3.2M

Purpose: To promote community-based watershed/landscape management approaches.

Key expected results: 1,500 ha of forests restored and forest fires reduced by 75%.

NIGER IMPROVEMENT OF CLIMATE FORECASTING AND OPERATIONALIZATION OF EARLY WARNING SYSTEMS

PPCR \$13M

Purpose: To build capacity in climate data processing, prepare an agropastoral vulnerability map, and scale up the national early warning system.

Key expected results: Strengthened food security, 10% reduction in annual crop losses in project areas.

NIGER WATER RESOURCE MANAGEMENT AND DEVELOPMENT

PPCR \$22M

Purpose: To improve resilience in rural communities dependent on rainfed farming.

Key expected results: Reduced rural poverty 52%, increased annual agricultural production to 2860 tons in project areas.

ZAMBIA STRENGTHENING CLIMATE RESILIENCE IN THE KAFUE SUB-BASIN

PPCR \$38M

Purpose: To strengthen 800,000 rural households to respond to climate change impacts and strengthen roads linking farmers to markets.

Key expected results: Increased resilient infrastructure and production systems in project area; increased Integrated Development Plans in districts with mainstreamed resilience.

PIPELINE OF PROJECTS IN ENDORSED INVESTMENT PLANS

PILOT RESEARCH FOR CLIMATE RESILIENCE (PPCR)					
PROJECT/PROGRAM TITLE	INVESTMENT PLAN	PUBLIC/PRIVATE	PROJECT STATUS	CIF FUNDING (US\$ MILLION)	AFDB FUNDING (US\$ MILLION)
Sustainable Land & Water Resources Management Project (SLWRMP)	Mozambique	Public	AfDB Approved	15.75	3.23
Baixo Limpopo irrigation & climate resilience program	Mozambique	Public	AfDB Approved	15.75	25.79
Lurio Sustainable Forestry Project	Mozambique	Private	Preparation	11.00	
Water resources mobilization & development (PROMOVARE)	Niger	Public	AfDB Approved	22.00	
Climate information dev & forecasting (PDIPC)	Niger	Public	AfDB Approved	13.00	
Strengthening climate resilience Kafue sub-basin	Zambia	Public	AfDB Approved	38.00	

PPCR OPERATIONS UNDERWAY: THE 2016 STATE OF PLAY

Southern Africa Development Community countries are increasingly vulnerable to climate change, exacerbated by population growth, rainfall and temperature changes, loss of cropland, and sea level rise. **Mozambique and Zambia** have entered into ambitious pilot programs with PPCR, engaging in projects to build their resilience and strengthen their land and water resource use.

In **Mozambique**, the *Baixo Limpopo Irrigation and Climate Resilience Project* is working to help farmers cope with climate impacts through intensified agricultural production, improved rural roads and access to markets, developing up to 3,050 ha for cash crops and marketing and agro-processing facilities, and rehabilitating irrigation and drainage infrastructure. The project will provide training for 1,000 farm families on irrigated agriculture; rice and vegetable productivity is expected to increase to 6,000 and 2,400 tons respectively per year. In 2016, the road construction contract was signed and the drainage network contract rehabilitated. The agro-processing contract also started in February 2016 and is progressing with drying platforms and at agro-processing facilities now largely constructed, to strengthen 800,000 farmers' capacity to better respond to climate variability.

The country's *Sustainable Land & Water Resources Management Project* is designed to scale up water harvesting infrastructure, restore natural habitats and landscapes, improve drought-tolerant seeds, and enable capacity building in rural communities, providing direct benefits to 20,000 farmers. Expected outcomes include: enhanced water storage and food production, improved resilience to climate change through diversified livelihoods, and restored natural habitats. In 2016, all major procurement contracts were awarded, with more than half of project funds committed to the approved contracts, and release of funds was on schedule.

Zambia's *Strengthening Climate Resilience in the Kafue Sub-Basin Project* is designed to strengthen capacity to respond to climate variability in the Kafue sub-basin, where rural communities face

increasing climate impacts. The project uses output and performance-based road contracting for upgrading and maintenance of rural roads, and takes into account the entire agriculture value chain to ensure that roads are accessible throughout the year. The project is expected to directly generate about 2,000 new jobs for women and youth. In 2016, climate-resilient road construction was underway, and civil society became more involved in information sharing.

Far to the **north and west**, **landlocked Niger** faces equally serious problems as a result of droughts which have damaged agro-pastoral production, food security, and socio-economic development. As a PPCR pilot country, Niger has projects addressing solutions through better management of its water resources and climate information systems.

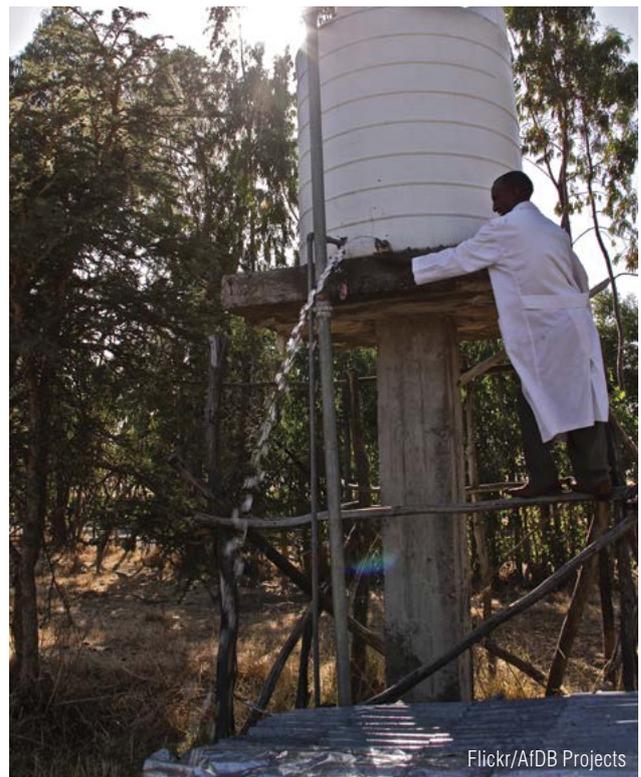
In **Niger's** *Water Resources Mobilization and Development Project (PROMOVARE)*, the country is boosting food production and improving livelihoods for 700,000 people by implementing mini-dams, irrigation schemes, and other water management measures, introducing climate-resilient seeds and farming techniques, and providing capacity building which will be particularly beneficial for women. In 2016, technical studies progressed, and rehabilitation of the stations and the 8 regional centers got underway.

In the country's *Climate Information Development and Forecasting Project*, the government is integrating climate-resilient water and land management programs into local and national planning to improve climate information. The expected outputs are development of climate information and products, capacity building for mainstreaming climate products in development, preparation of an agro-pastoral vulnerability map for district councils, and upgrading the early warning system to a multi-hazard system. In 2016, the project moved forward with recruitment of consultants to provide capacity building to generate climate data, and acquisition of equipment. AfDB procurement experts provided recommendations to the project implementation unit to improve the project's disbursement rate.

EXAMPLES OF STAKEHOLDER ENGAGEMENT AND BENEFITS

In **Zambia**, the *Strengthening Climate Resilience in the Kafue Sub-Basin Project* has signed micro-grant agreements with seven communities that will receive funding for the approved sub-projects that will upgrade community- and farm-level infrastructure.

In **Ethiopia**, under World Bank leadership, AfDB participated in joint missions including a multi-sector multi-stakeholder workshop in June 2016, which resulted in a draft approach to developing their unique Multi-Sectoral Investment Plan (MSIP), the country's Strategic Program for Climate Resilience (SPCR). Following a portfolio review and country-wide stakeholder consultation, actions are on track to deliver the MSIP for endorsement in June 2017.





SCALING UP RENEWABLE ENERGY PROGRAM IN LOW INCOME COUNTRIES (SREP)

Economic Growth Through Renewables

The AfDB SREP portfolio includes 12 public and 4 private sector projects in the pipeline. Of these, three projects were under implementation in 2016. This section explores their 2016 status of implementation.

APPROVED PROJECTS UNDER IMPLEMENTATION

KENYA MENENGAI GEOTHERMAL DEVELOPMENT

SREP \$25M, AfDB \$120M

Purpose: To develop the Menengai geothermal steam field to produce steam for 120 MW power.

Key expected results: 540,000 tons CO₂ emissions avoided per year, connecting 185,000 households and 110,000 small businesses.

MALI PROJECT FOR SCALING UP RENEWABLE ENERGY (PAPERM)

SREP \$1.5, AfDB \$0.53M

Purpose: To foster development of renewable energy by improving policy, strategy, regulatory and institutional frameworks for scaling up renewable energy.

Key expected results: Approval of 40 RE projects between 2015 and 2017.

MALI SEGOU SOLAR PV

SREP \$25M, AfDB \$8.93M

Purpose: To design and construct a 33 MW Solar PV power plant and a 33kV transmission line

Key expected results: 53.7 GWh annually generated over 25 years



Flickr/AfDB Projects

PIPELINE OF PROJECTS IN ENDORSED INVESTMENT PLANS

SCALING-UP RENEWABLE ENERGY PROGRAM (SREP)					
PROJECT/PROGRAM TITLE	INVESTMENT PLAN	PUBLIC/PRIVATE	PROJECT STATUS	CIF FUNDING (US\$ MILLION)	AFDB FUNDING (US\$ MILLION)
Assela wind farm project	Ethiopia	Public	Identification	18.30	
Menengai Geothermal Development	Kenya	Public	AfDB Approved	25.00	120.00
Menengai Geothermal Project	Kenya	Public	Identification	15.00	
Kopere Solar Park	Kenya	Private	Identification	11.60	
Olkaria VI Geothermal Power Plant	Kenya	Private	Identification	20.50	
RE-Electrification Eastern Liberia	Liberia	Public	Identification	23.50	
Mini/Micro hydro development	Mali	Public	Identification	8.70	
Solar photovoltaic	Mali	Private	Identification	11.05	
Solar Mali Ségou PV	Mali	Private	AfDB Approved	25.00	8.93
Promoting the Scaling Up of Renewable Energy	Mali	Public	AfDB Approved	1.50	0.53
Geothermal Power Development	Tanzania	Public	Identification	24.30	
Renewable Mini-grids and Stand-alone Systems	Ghana	Public	Identification	16.60	
Net Metered Solar PV for SMEs and Lighting Project	Ghana	Public	Identification	11.89	
Development of 130MW of Geothermal in Uganda	Uganda	Public	Identification	31.80	
Decentralized Renewables Development Program	Uganda	Public	Identification	7.10	
Wind Assessment and Pilot Wind Farms	Uganda	Public	Identification	4.93	

SREP OPERATIONS UNDERWAY: THE 2016 STATE OF PLAY

East Africa: Transforming the Rift Valley Through Geothermal

In East Africa's Rift Valley region, countries have traditionally relied on hydropower for their electricity; but the region's 10,000MW geothermal power potential offers an ideal source of renewable base-load power. As a vital step in this direction, the region's energy base is due to be substantially shifted with advances taken in several SREP pilot countries in 2016.

In 2016, as one of the top 10 geothermal energy producers in the world, Kenya advanced the *Menengai Geothermal Project*, the most advanced SREP project being implemented by AfDB. By end-2016, Menengai was working to select bidders to construct three 35MW power plants. The Geothermal Development Company (GDC), Kenya's government-owned green energy corporation, announced that groundbreaking for the plants was scheduled for February 2017 although they are likely to face some delays until later in the year. Once operational, the plants will produce sufficient electricity to power 300,000 small businesses and 500,000 households.

The Bank is also working with the Government of Kenya on a \$440,000 PPG to establish innovative financial mechanisms to fund the *Olkaria VI Geothermal power plant*, an SREP private sector-led project that will add 140 MW in power capacity from this promising technology.

Tanzania is also developing its geothermal power potential: its *Geothermal Power Development Project* neared design completion in 2016 and SREP approval is expected in mid-2017. Concurrently, preparations were underway in 2016 to develop a broader geothermal strategic, legal, institutional and regulatory framework.

West Africa: Building Capacity for Transformation

In **Mali**, the *Project for Scaling Up of Renewable Energy in Mali* received a second disbursement of funds in 2016. The project is creating an enabling environment: improving the policy, legal, regulatory and institutional framework for renewables; strengthening stakeholder capacity and building knowledge management, communication and advocacy; and improving monitoring and evaluation. As part of this effort, in 2016 the government established a communications office for stakeholder needs, education, and voice.

In addition, **Mali's private sector-led *Segou Solar Photovoltaic (PV) project*** was approved in November 2016 for SREP \$25 million. The project consists of design, construction and operations of a 33MW solar PV power plant and a 33kV transmission line. The project will benefit from a Power Purchase Agreement (PPA) to be signed between the borrower and Énergie du Mali as the off-taker. All parties are moving towards financial close and construction shall begin before the end of 2017. Once operational, the plant will provide about 4% of Mali's electricity demand.

EXAMPLES OF STAKEHOLDER ENGAGEMENT AND BENEFITS

As an underlying CIF principle, stakeholder engagement and voice is critical to every project. In 2016 there was stakeholder movement in SREP's approved projects.

In Kenya's Menengai, GDC has drilled a large well with a water kiosk through which water is distributed to neighboring households, benefitting 3,000 families, livestock and a school. In addition, GDC has set up a demonstration project to show how geothermal by-products can benefit communities in greenhouses, leather tanneries, meat processing and development of spas, among others.



“”

We can now drink clean water, wash our clothes, and provide water for our animals. I now walk less than a kilometre to the water point.

—Tabitha Karimi, a Menengai community member

Mali's Project for Scaling Up of Renewable Energy was designed to ensure that women comprise at least 35% of the beneficiaries of training and capacity building. Sector policies and strategies are being revised taking gender issues into account, increasing access by women and youth to energy services and building their economic capacities, integrating women and young people into participatory processes, and including gender-disaggregated data in monitoring and evaluation data.

STIMULATING PRIVATE SECTOR ENGAGEMENT

The Independent Power Producer Model

In **Kenya's Menengai**, private companies are expected to install 105 MW in geothermal resources. In 2016, GDC and the private promoters have signed a Project Implementation and Steam Supply Agreement where GDC agrees to sell steam and purchase power while the promoters will finance, design, construct, install, operate and maintain the power plants. This Independent Power Producer (IPP) arrangement will allow the Government to allocate valuable public resources to other pressing sectors such as health or education.

The **Olkaria VI Geothermal Power Plant** project will likely be structured as a PPP with well-defined roles between both counterparts. New partnerships between project developers, local banks, local suppliers, and the Government of Kenya are expected to take shape.



What Lies Ahead:

2017 CHALLENGES AND OPPORTUNITIES

THE AfDB CLIMATE-SMART HORIZON

By the end of 2016, AfDB was restructured and poised to enter a new phase to more effectively support a roll-out to a more empowered, prosperous, and sustainable Africa. Key to this process are three primary action trends.

Climate Change Action Plan for 2016–2020 (CCAP2).

The soon to be launched CCAP2 will outline the Bank's climate change program for 2016–2020, and provide a clear framework of action for the Bank to deliver the High 5s and the broader objectives of Ten Year Strategy (2013–2022) while safeguarding environmental integrity. The CIF portfolio will remain a key operational platform for effecting the kinds of transformation outlined in the plan.

The Nationally Determined Contribution (NDC) Partnership. The AfDB looks forward to joining other international development institutions in setting the agenda for the NDC Partnership. Launched at COP22, the Partnership seeks to ensure that countries receive technical and financial

support to implement their NDCs swiftly and effectively, in line with their development policies. CIF projects, already linked to countries' development policies, will be considered for their contribution to NDC goals as operations evolve and results emerge.

African Risk Capacity (ARC). The AfDB is looking for opportunities to work together with ARC to strengthen mechanisms to manage weather-related risk on the continent. This partnership, that will formalize in 2017, will include a technical collaboration to enhance risk management infrastructure and policy across Africa; it will also support African countries in building resilience against climate shocks and in taking ownership of their disaster response.

AfDB CIF ACTIONS PLANNED FOR 2017

During 2017, AfDB will continue to advance its CIF portfolio, supporting implementation of projects by undertaking supervision and continuing work on reporting & monitoring, and advancing countries' pilots as follows:

- **CTF:** Continued contribution of knowledge and experience to development of "CTF 2.0", a global exercise to develop new enhanced CTF modalities. In early 2017, AfDB will participate in joint work to develop the next CTF 2.0 proposed iteration.
- **FIP:** Continuing support for approved projects; continuing work to support development of IPs in Cameroon, Republic of Congo, Uganda and Zambia and Rwanda; support to Burkina Faso for early 2017 approval of a project focused on cashew sector development.
- **PPCR:** Leading work with Uganda and The Gambia to get IP endorsement; continuing ongoing support in Madagascar, Ethiopia, Malawi, Rwanda.
- **SREP:** Continuing support for approved projects; support to countries working to complete their IPs; support for implementation of all PPGs; support to finalize project funding proposals for Liberia, Tanzania, and Kenya.

ADAPTATION ACTION

Adaptation to climate impact is a byword for Africa's success. More finance, capacity building for communities and institutions, and use of technology are vital to making Africa adapt to climate change.

In 2015, AfDB called for a "fundamental revamp of the climate finance architecture for adaptation". A global funding mechanism for adaptation would accelerate Africa's adaptation to climate change. As such, AfDB is working with CIF and other partners, taking the lead on redefining the approach to adaptation solutions, building on PPCR resilience work and exploring new innovations, such as the Adaptation Benefit Mechanism (ABM), a proposed mechanism to be introduced during 2017 as a potential business model for adaptation solutions.

UPCOMING AfDB CIF RELATED EVENTS

Gender Workshop and Knowledge

Product: In 2017 AfDB will prepare a gender-based workshop focusing on capacity building and strengthening knowledge management for best practices for gender-inclusive climate financing. A study will also be developed on gender and climate change challenges in Africa focused on CIF-related sectors.

African Forestry Investment

Conference: Under FIP, AfDB and Form Ghana are organizing the first African Forestry Investment Working Conference, to be held in Accra, Ghana, on June 2017. The workshop will reach out to potential national and international investors, project developers, plantation owners, local commercial banks, universities, Forestry Commission and other relevant stakeholders to highlight beneficial conditions for forestry investments in Ghana and in the region.

“”

Africa needs support both in terms of global climate financing and bilateral support for adaptation. We need to support initiatives that address risks associated with climate change, build disaster response capacity, and recovery programs for those who are most affected. This includes building their assets, providing catastrophic bonds, weather index insurance schemes and crop/livestock insurance schemes for farmers.

—Akinwumi Adesina, AfDB President

KNOWLEDGE AND LEARNING IN 2016

AfDB/CIF KNOWLEDGE PRODUCTS 2016

EVENTS

AfDB Annual Meetings 2016:

African journalists join AfDB to explore the path to a green and powered Africa



COP22:

Africa's renewable energy revolution must engage public and private financing partners to break down economic, political and social risks, experts agree



COP22:

Niger: strengthening climate change resilience

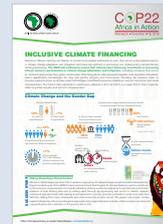
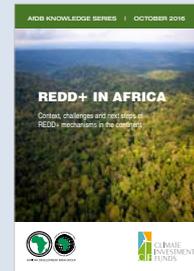
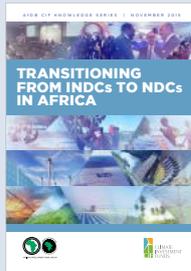
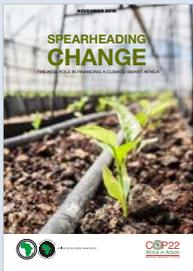
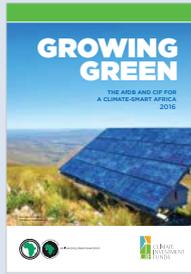


CIF Talk:

The power of solar



PUBLICATIONS



VIDEO



BLOG



To bulwark program and project preparation, CIF offers countries Investment Plan Preparation Grants (IPPGs) and Project Preparation Grants (PPGs).

AFRICA'S CREATIVE USE OF PREPARATION GRANTS UNDER CIF

During 2016, as the global climate finance architecture evolved, the CIF governing bodies began to consider how best to help countries prepare CIF plans and programs flexibly to enable them to seek supporting operational funding from other sources, including the Green Climate Fund (GCF). One effective source of CIF support remains the use of preparation grants, used by countries to prepare Investment Plans (IPPGs) and projects (PPGs).

These highly valuable grants help recipient countries:

- strengthen consensus among key national stakeholders and development partners;
- enhance capacity of national institutions for robust policy reforms;
- ensure that investments are based on sound analytical work linking activities to economic growth and poverty alleviation; and

- advance preparation of projects, making them ready for long-term funding

As of December 2016, AfDB and CIF were supporting countries through 2 IPPGs under SREP, 2 under the FIP and 2 under the PPCR; and 3 PPGs under the CTF, 10 under SREP, and 4 under FIP.

APPROVED PROJECT PREPARATION GRANTS (PPGS)

PROJECT/PROGRAM TITLE	COUNTRY	PROGRAM	CIF FUNDING (US\$ MILLION)
Egypt Kom Ombo CSP	CSP-MENA	CTF	0.996
200MW Wind Farm	Egypt	CTF	1.000
Abuja Mass transit	Nigeria	CTF	0.950
Gazetted forests participatory management project REDD+	Burkina Faso	FIP	0.500
Addressing deforestation & degradation in the Mbuji Mayi/Kananga/Kisangani Supply area	DRC	FIP	0.800
Engaging Local communities in REDD+/Enhancing carbon stocks	Ghana	FIP	0.250
Form Ghana Project—Restoration of Degraded Forest Reserve through VCS and FSC Certified Plantations	Ghana	FIP	0.300
Assela wind farm project	Ethiopia	SREP	1.700
RE-Electrification Eastern Liberia	Liberia	SREP	1.500
Mini/Micro hydro development	Mali	SREP	2.200
Solar photovoltaic IPP	Mali	SREP	0.950
Geothermal power development	Tanzania	SREP	0.700
Renewable Mini-grids and Stand-alone Systems	Ghana	SREP	0.900
Net Metered Solar PV for SMEs and Lighting Project	Ghana	SREP	0.611
Decentralized Renewables Development Program: Mini-Grids	Uganda	SREP	2.30
Wind Resource Map and Pilot Wind Power Development Program	Uganda	SREP	1.88
Olkaria VI Geothermal Power Plant	Kenya	SREP	0.44

APPROVED INVESTMENT PLAN PREPARATION GRANTS (IPPGS)

COUNTRY	PROGRAM	AfDB IPG CIF FUNDING (US\$ MILLION)
Mali	SREP	0.2
Sierra Leone	SREP	0.3
Rwanda	FIP	0.25
Ghana	FIP	0.25
Gambia	PPCR	1.5
Uganda	PPCR	1.5

CTF: At the project level, CTF has approved \$2.945 million for 3 PPGs for public sector operations. One PPG is pending implementation.

- **Egypt** 200 MW Wind Farm in the Gulf of Suez: Completed
- **MENA** Egypt Kom Ombo Solar CSP: Completed
- **Nigeria** Urban Transport Project: Closed

FIP: FIP has approved \$1.850 million for 3 PPGs for public sector operations and 1 private sector operation.

- **Burkina Faso** Gazetted Forests Participatory Management Project REDD+: on-going
- **Democratic Republic of Congo** Addressing Deforestation & Degradation in the Mbuji Mayi/ Kananga/ Kisangani Supply Area: completed
- **Ghana** Engaging Local Communities in REDD+/Enhancing Carbon Stocks: completed
- **Ghana** Restoration of Degraded Forest Reserve through VCS and FSC Certified Plantations: Implemented and completed

SREP: As of December 2016, SREP approved \$0.5 million for 2 IPPGs to assist Mali and Sierra Leone to develop their IPs. At the project level, SREP has approved \$13.2 million for 10 PPGs — 8 public sector and 2 private sector operations; five PPGs are pending implementation.

- **Mali** Micro and Mini Hydro Power Plants Development: Feasibility studies due to be finalized in early 2017.
- **Ethiopia** Assela Wind Farm: Feasibility studies underway, completion scheduled for June 2017
- **Tanzania** Geothermal Power Development Project: Completion scheduled for March 2017
- **Liberia** Renewable Energy for Electrification in Eastern Liberia: Feasibility studies for 3 mini-hydro and 1 biomass site completed by December 2016.
- **Ghana** Renewable Mini Grid and Standalone Systems: Market studies advancing for electrifying islands near lake communities; Letters of Agreement signed December 2016
- **Ghana** Net Metered Solar PV for SMEs and Lighting: Feasibility studies advancing for net-metering program in urban areas for SMEs; Letters of Agreement signed December 2016
- **Uganda** Wind Resource Map and Pilot-Wind Power Development: Delayed, follow-up in 2017
- **Uganda** Decentralized Renewable Energy Program: Delayed, follow-up in 2017
- **Kenya** Olkaria VI Geothermal Power Plant (Private): Implementation has started in late 2016

2016 AfDB CIF PORTFOLIO

AfDB CIF INVESTMENT PLANS

APPROVED PILOT COUNTRY	CIF PROGRAM	INVESTMENT PLAN ENDORSEMENT	CIF FUNDING (US\$ MILLION)
Benin	SREP		40
Burkina Faso	FIP	Jun-11	30
Cameroon	FIP		0.25*
Congo Republic	FIP		24
DRC	FIP	Jun-11	60
Egypt	CTF	Jan-09	140
Ethiopia	SREP	Mar-12	50
	PPCR		1.5*
Gambia	PPCR		1.5*
Ghana	FIP	Nov-12	50**
	SREP	May-15	40
Ivory Coast	FIP	Jun-16	24
Kenya	SREP	Sep-11	82.1**
Lesotho	SREP		30
Liberia	SREP	Oct-13	50
Madagascar	SREP		50
	PPCR		1.5*
Malawi	SREP		50
	PPCR		1.5*
Mali	SREP	Nov-11	65**
MENA	CTF	Dec-09	750
Morocco	CTF	Oct-11	150
Mozambique	PPCR	Jun-11	91**
	FIP	Jun-16	24
Niger	PPCR	Nov-10	110
Nigeria	CTF	Nov-10	250
Rwanda	SREP	Nov-15	50
	PPCR		1.5*
	FIP		0.25*
Sierra Leone	SREP		40
South Africa	CTF	Oct-09	500
Tanzania	SREP	Sep-13	50
Tunisia	FIP	Dec-16	0.25*
Uganda	SREP	Nov-15	50
	PPCR		1.5*
	FIP		0.25*
Zambia	PPCR	Jun-11	91
	SREP		40
	FIP		0.25*

*IP preparation **Includes private sector set-aside funds

APPROVED PROJECT PREPARATION GRANTS (PPGS)

PROJECT/PROGRAM TITLE	COUNTRY	PROGRAM	CIF FUNDING (US\$ MILLION)
Egypt Kom Ombo CSP	CSP-MENA	CTF	0.996
200MW Wind Farm	Egypt	CTF	1.000
Abuja Mass transit	Nigeria	CTF	0.950
Gazetted forests participatory management project REDD+	Burkina Faso	FIP	0.500
Addressing deforestation & degradation in the Mbuji Mayi/ Kananga/Kisangani Supply area	DRC	FIP	0.800
Engaging Local communities in REDD+/Enhancing carbon stocks	Ghana	FIP	0.250
Form Ghana Project— Restoration of Degraded Forest Reserve through VCS and FSC Certified Plantations	Ghana	FIP	0.300
Assela wind farm project	Ethiopia	SREP	1.700
RE-Electrification Eastern Liberia	Liberia	SREP	1.500
Mini/Micro hydro development	Mali	SREP	2.200
Solar photovoltaic IPP	Mali	SREP	0.950
Geothermal power development	Tanzania	SREP	0.700
Renewable Mini-grids and Stand-alone Systems	Ghana	SREP	0.900
Net Metered Solar PV for SMEs and Lighting Project	Ghana	SREP	0.611
Decentralized Renewables Development Program: Mini-Grids	Uganda	SREP	2.30
Wind Resource Map and Pilot Wind Power Development Program	Uganda	SREP	1.88
Olkaria VI Geothermal Power Plant	Kenya	SREP	0.44

APPROVED INVESTMENT PLAN PREPARATION GRANTS (IPPGS)

COUNTRY	PROGRAM	AfDB IPG CIF FUNDING (US\$ MILLION)
Mali	SREP	0.2
Sierra Leone	SREP	0.3
Rwanda	FIP	0.25
Ghana	FIP	0.25
Gambia	PPCR	1.5
Uganda	PPCR	1.5

PIPELINE OF PROJECTS IN ENDORSED INVESTMENT PLANS

CLEAN TECHNOLOGY FUND (CTF)					
PROJECT/PROGRAM TITLE	INVESTMENT PLAN	PUBLIC/PRIVATE	PROJECT STATUS	CIF FUNDING (US\$ MILLION)	AFDB FUNDING (US\$ MILLION)
200MW Gulf of Suez Wind Farm	Egypt	Public	Preparation	48.95	
120–160 MW CSP Complex in Ouarzazate Morocco	MENA	Public	AfDB Approved	100.00	240.00
Morocco Ouarzazate CSP — Project II	MENA	Public	AfDB Approved	119.00	140.00
One Wind Energy Plan	Morocco	Public	AfDB Approved	125.00	448.39
Abuja Mass transit	Nigeria	Public	Identification	49.00	
Renewable Energy Utility-scale Solar PV — Bauchi Solar PV	Nigeria	Private	Preparation	25.00	
Line of credit for Renewable Energy / Energy Efficiency	Nigeria	Private	AfDB Approved	25.00	75.00
Eskom Renewable supp projects (Wind & CSP)	South Africa	Public	AfDB Approved	100.00	260.00
Sustainable Energy Acceleration Program — Xina CSP Project	South Africa	Private	AfDB Approved	41.50	100.00
Utility Scale renewable Energy: Geothermal (Kenya) / Concessional Finance Program for Geothermal Generation	Kenya	Private	Preparation	30.00	
Utility Scale Renewable Energy: Geothermal	Kenya	Private	Preparation	20.00	
Utility Scale Renewable Energy: Solar Photovoltaic Financing I	Regional	Private	Preparation	20.00	
Utility Scale Renewable Energy: Solar Photovoltaic Financing II	Regional	Private	Preparation	20.00	
Morocco-Phase II of Midelt or Tata	MENA	Public	Preparation	25.00	
FOREST INVESTMENT PROGRAM (FIP)					
Gazetted forests participatory management REDD+	Burkina Faso	Public	AfDB Approved	11.50	
Integrated REDD+ Project in the Mbuji-Mayi/Kananga and Kisangani Basins	DRC	Public	AfDB Approved	21.50	
Engaging Local communities in REDD+/Enhancing carbon stocks	Ghana	Public	AfDB Approved	9.75	5.33
Restoration of degraded forest reserve through VCS and FSC certified plantations	Ghana	Private	AfDB Approved	10.00	
Climate change mitigation and poverty reduction through the development of the cashew sector in Burkina Faso (Wouol project)	Burkina Faso	Private	Preparation	4.00	
Tai National Park Management Support Project (PAGT)	Cote d'Ivoire	Public	Identification	3.00	
PILOT RESEARCH FOR CLIMATE RESILIENCE (PPCR)					
Sustainable Land & Water Resources Management Project (SLWRMP)	Mozambique	Public	AfDB Approved	15.75	3.23
Baixo Limpopo irrigation & climate resilience program	Mozambique	Public	AfDB Approved	15.75	25.79
Lurio Sustainable Forestry Project	Mozambique	Private	Preparation	11.00	
Water resources mobilization & development (PROMOVARE)	Niger	Public	AfDB Approved	22.00	
Climate information dev & forecasting (PDIPC)	Niger	Public	AfDB Approved	13.00	
Strengthening climate resilience Kafue sub-basin	Zambia	Public	AfDB Approved	38.00	
SCALING-UP RENEWABLE ENERGY PROGRAM (SREP)					
Assela wind farm project	Ethiopia	Public	Identification	18.30	
Menengai Geothermal Development	Kenya	Public	AfDB Approved	25.00	120.00
Menengai Geothermal Project	Kenya	Public	Identification	15.00	
Kopere Solar Park	Kenya	Private	Identification	11.60	
Olkaria VI Geothermal Power Plant	Kenya	Private	Identification	20.50	
RE-Electrification Eastern Liberia	Liberia	Public	Identification	23.50	
Mini/Micro hydro development	Mali	Public	Identification	8.70	
Solar photovoltaic	Mali	Private	Identification	11.05	
Solar Mali Ségou PV	Mali	Private	AfDB Approved	25.00	8.93
Promoting the Scaling Up of Renewable Energy	Mali	Public	AfDB Approved	1.50	0.53
Geothermal Power Development	Tanzania	Public	Identification	24.30	
Renewable Mini-grids and Stand-alone Systems	Ghana	Public	Identification	16.60	
Net Metered Solar PV for SMEs and Lighting Project	Ghana	Public	Identification	11.89	
Development of 130MW of Geothermal in Uganda	Uganda	Public	Identification	31.80	
Decentralized Renewables Development Program	Uganda	Public	Identification	7.10	
Wind Assessment and Pilot Wind Farms	Uganda	Public	Identification	4.93	



WWW.**AfDB**.ORG



AFRICAN DEVELOPMENT BANK GROUP

