IDEV
Independent Development Evaluation
Évaluation indépendante du développement

Evaluation of the Bank's Support for Renewable Energy (2012-2021)

Inception Report

May 2022

AFRICAN DEVELOPMENT BANK GROUP

Table of Contents

List of tables

List of figures

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List of acronyms

ADE	Aide à la Décision Economique
AEP	African Energy Portal
AfDB	African Development Bank Group
AU	African Union
CCS	Country Case Study
CLUSTER	Cluster Evaluation
CO	Country Office
COP	Conference of the Parties
CSP	Country Strategy Papers
GHG	Greenhouse Gas
IDEV	Independent Development Evaluation (at the AfDB)
IEA	International Energy Agency
INTV	Interviews
IRENA	International Renewable Energy Agency
KNOWL	Evaluation Knowledge Product
L&PR	Literature and Policy Review
LCOE	Levelized Cost of Energy
MDG	Millennium Development Goals
Mt	Mega tonnes
NDC	Nationally Determined Contribution
NDEA	New Deal on Energy for Africa
PA	Paris Agreement
PEVAL	Past Evaluation
PORTF	Portfolio Review

PRA	Project Results Assessment
PV	Photovoltaics
RE	Renewable Energy
REEEP	Renewable Energy and Energy Efficiency Partnership
RISP	Regional integration strategy papers
RMC	Regional Member Country
SDG	Sustainability Development Goals
SQ	Sub-Question
ToR	Terms of Reference
TW/GW/MW	Tera/Giga/Mega Watt
TWh/GWh/MWh	Tera/Giga/Mega Watt Hour
UA	Unit of Account
UN	United Nation
UNFCCC	United National Framework Convention on Climate Change
USD	United States Dollar
VRE	Variable Renewable Energy

1. Introduction

1.1. Background to the Inception Report

As part of its 2021 work program, Independent Development Evaluation (IDEV) at the African Development Bank Group (AfDB or 'the Bank') has launched an evaluation of the Bank's assistance to the Renewable Energy (2012-2021). A consortium has been selected to carry out the evaluation, and consists of ADE, a widely recognized and experienced consultancy in conducting complex evaluations for international donors including IDEV-AfDB, and MARGE, who are specialized in energy, the environment and sustainable development with a track record in studies linked to renewable energy in Africa.

An Evaluation Concept note was developed in December 2021 by IDEV. The proposed evaluation builds on a series of previous IDEV work that integrated RE (geothermal, hydro, solar, wind, etc.) into broader assessments of the AfDB's support to the energy sector, green growth, climate change mainstreaming, rural electrification, power interconnection, or other themes. Although RE has been a component in several IDEV evaluations, this proposed assessment will be the first time that it is undertaking a sector evaluation focused exclusively on RE from an AfDB perspective.

Past BDEV evaluations that covered RE projects found that AfDB support has led to an increase in the supply of and access to electricity through boosting power generation and rural electrification, cross-border power exchange, and transmission infrastructure, in addition to increased use of conventional and renewable energy sources. Evidence related to the value of the Bank's interventions was found in (i) private sector participation, (ii) climate change, and (iii) regional cooperation. The Bank's support to the energy sector was found relevant for the African continent to address energy sector challenges, although with shortcomings in some critical areas such as risk assessment, long-term sector planning, regulatory environments in RMCs, and less focus on transmission and distribution. Overall, the effectiveness of the Bank's support to the energy sector was assessed as satisfactory, although progress has been slow on the high-level objectives that the Bank's support aims to contribute to. In general, access to energy in Africa remains low, and progress towards access-for-all is slow.

The Bank's support to the energy sector was generally found to have delivered the planned outputs, especially better access to electricity. Overall, the Bank's support to the energy sector achieved and sometimes exceeded the expected outputs (e.g., assets delivered, capacity developed, and policies implemented) to improve access coverage of electricity. However, challenges were found in the following areas: improving sector governance, RMCs' regulatory frameworks, increasing the affordability of RMCs' energy services to end-user beneficiaries, especially to the poor, and providing adequate non-lending policy and Technical Assistance (TA) support that could have contributed to the success of operations. Despite the progress made, the challenges to reliability of electricity and regular power shortages continue to limit access and use of electricity, with electricity prices remaining high. This situation is due to several reasons including a heavy reliance on oil-based electricity generation and the financial gap to address an increasing demand due to population growth.

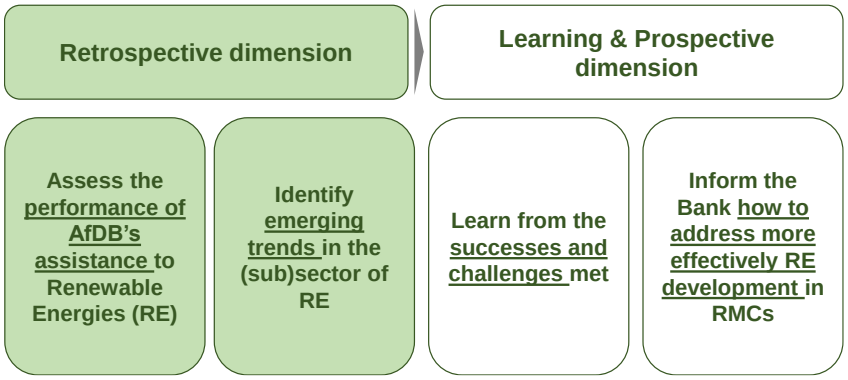
Thus, this evaluation is intended to build on lessons from previous evaluations and inform the Bank's future strategies, and ultimately answer the following question: "In what ways and how well has the AfDB contributed to addressing the evolving RE needs of its RMCs within the context of their overall energy sector development objectives?"

1.2. Objectives and scope of the evaluation

Objectives

As per the evaluation Concept Note, the goal of the evaluation is to inform the Bank's strategies and operational approach to renewable energy supply sector assistance, by identifying emerging trends in the sector, assessing how the Bank has responded to these trends, taking stock of the results of the Bank's assistance, and drawing lessons for future work. The purpose of the evaluation is twofold:

- On the one hand, it has an **accountability and retrospective dimension** aimed at reporting to stakeholders on the performance and the contribution of the Bank's assistance to the development of the renewable energy (sub)sector in Regional Member Countries (RMCs), through an analysis of its interventions and the achievement of related development results as well as identifying emerging trends in the sector.
- On the other hand, it has a **learning and prospective dimension,** seeking to draw lessons derived from the Bank's experience and to propose strategic and operational recommendations, particularly about the factors which positively and/or negatively affect its assistance to Renewable Energy (RE), to guide the future commitment of the Bank and improve its subsequent strategies and operations in that field and deal with key hindering factors of RE development in the future.



Scope

The scope of the evaluation is the AfDB support for the electricity sector as related to Renewable Energy (RE) generation specifically. As mentioned in the evaluation Concept Note, *the concept of renewable energy within this independent evaluation covers geothermal, hydro, solar, and wind.* The evaluation will cover the interventions approved and implemented during the period 2012-2021. The interventions include both investment projects, enabling environment-related interventions including institutional strengthening, technical assistance, and project preparation. Finally, the evaluation will focus on both utility-grid scale renewable energy and smaller decentralized energy access solutions.

The evaluation period coinciding with the entry into force of the AfDB Energy Sector Policy (2012) and the New Deal on Energy for Africa NDEA (2016-2025). The geographic scope corresponds to the Regional Member Countries (RMCs) which the Bank assisted in the (sub-)sector of RE. As the Bank supports various regional hydropower projects (e.g., Rusumo falls, Kariba dam, Ruzizi plant, etc.), it is important to take into consideration the contribution to the regional integration and development objectives.

2. Context of the evaluation

2.1. Energy as a driver of development

General overview

In 2018, was estimated that over half of Africans, around 548 million, didn't have access to electricity, while 900 million people used traditional biomass as their primary energy for cooking (IRENA, 2021a). The lack of reliable modern energy supply affects individuals and holds back businesses on the continent.

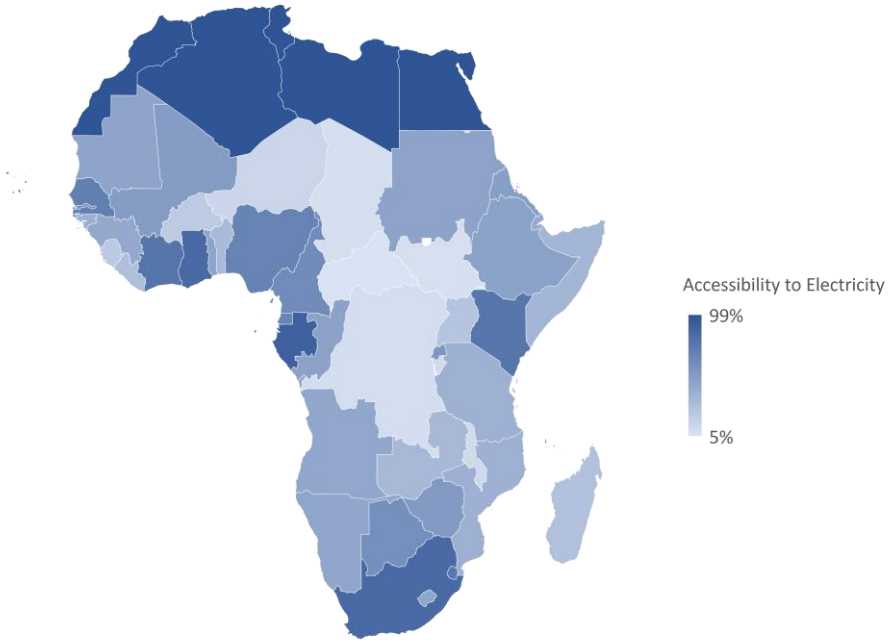


Figure 1 – Accessibility to Electricity in Africa (source: ADE based on IEA data, 2019)

Accessibility and energy affordability remains a significant challenge in Africa, with important disparities between regions and countries:

- Between the various African countries. Sub-Saharan African countries, except Ghana, Mauritius, Seychelles and South Africa, have access to an electricity rate that does not exceed 50 per cent, while most North African countries have a relatively high level of access to electricity.
- A considerable difference in accessibility can be encountered between Urban and Rural areas. For example, while 52 per cent of the population in Urban Sub-Saharan Africa has access to electricity, only 8 per cent in rural areas do (Renewable Energy and Energy Efficiency Partnership (REEEP), n.d.). In a given country, like Malawi, 45% of the urban population had access to electricity in 2019, while in the rural areas just 4% of the population did (AEP, 2022).

A vital driver of development

A reliable and affordable energy supply is a vital driver of development as it contributes to economic growth and rising living standards, with studies often showing a positive relationship between energy consumption and GDP per capita (e.g., EEA, 2015). The lack of a reliable source of electricity is often

quoted as a major obstacle faced by enterprises in sub-Saharan Africa when developing their businesses.

The absence of reliable energy sources obliges people to spend considerable amounts of time gathering biomass for energy needs at the household level. This constrains women from participating in economic activities and children from attending school, further undermining economic growth and gender equality.

Electricity generation, at continent and country level

The total electricity consumption in Africa in 2019 was around 700 TWh[1]. The bulk was produced from thermal stations running on coal (30%), natural gas (40%) or oil (8%), thus accounting for almost 80 per cent of electricity production. Hydropower accounted for about 16 per cent of the total electricity generation in Africa (IEA, 2022), with production of about 140 TWh (installed capacity of 36 GW; IEA, 2019). Despite Africa's massive potential exploitable hydropower capacity, estimated at 1753 GW (IRENA & AfDB, 2022), its contribution to total power generation remains relatively low (REEEP, n.d.). Of the relatively small amount of electricity generated from geothermal, solar and wind, in 2019 they accounted for 15%, 31% and 54% respectively (IEA, 2022).

The major sources of electricity supply vary from one country to another. Some countries, namely the Democratic Republic of Congo, Ethiopia and Uganda, rely mostly on renewable sources, like hydropower, to generate their electricity. Others are highly dependent on fossil fuels (IEA, 2019). For some countries, fossil fuel export represents a considerable part of revenue for their national budgets. In Southern Africa, the dominant sources of electricity are coal (e.g., in South Africa and Zimbabwe) and hydropower (e.g., Lesotho, Malawi and Zambia). Kenya is the only country to commercially exploit geothermal energy for electricity generation (Ethiopia is attempting to exploit its geothermal resources). In North African countries, petroleum-based electricity generation is dominant. In most sub-Saharan African countries, biomass in the form of bagasse is used for cogeneration in sugar industries. Wind power use is growing in North Africa. Solar PV systems are often used in rural areas to meet light electrical loads such as lighting, radio and television (REEEP, n.d.).

Electricity transmission and distribution

Electricity transmission and distribution activities are an essential component of the electricity value chain. First, transmission and distribution allow the transport of energy from its production source to the end consumption point (asset/physical network). Second, permanent balancing operations need to be performed, in order to adjust the production levels to the consumption ones, maintaining the required tension and quality of electricity.

As the current infrastructure was not built to accommodate Variable Renewable Electricity (VRE), and many existing distribution lines were built in the 1950s and 1960s and need to be replaced, important investments are required today.

As the length of the networks is expanding, and as the share of (VRE) power generation increases, its management is obviously growing in complexity.

The quality of this management impacts the cost for the end used, as the costs of electricity transmission and distribution are typically a large component of the total cost of supply. (It is worth to

[1] Final consumption of electricity in Africa in 2019 reads as 669 TWh on https://www.iea.org/data-and-statistics/; 730 TWh in IEA, 2022

note that, electricity costs observed in most Sub-Saharan countries are between USD 0.20- 0.50 per kWh, against USD 0.10 per kWh on average worldwide, compromising the affordability of modern energy and the competitiveness of industries (AfDB, 2017a).

The electricity challenge, in a climate-changing world

The World Bank expects the population to increase by one billion in Sub-Sahara and 100 million in Northern Africa by the year 2050 (World Bank, 2019), albeit in a non-linear fashion. This will intensify the pressure on energy ambition (such as the Bank's stated target of universal access to energy across the continent by 2025 (NDEA, 2016)).

Furthermore, combatting climate change requires being as efficient as possible in the production, distribution and consumption of electricity, and decarbonating its production. In line with this, the 2015 Sustainable Development Goal (SDG) on energy - SDG 7 - includes three key targets: (i) ensure affordable, reliable and universal access to modern energy services; (ii) substantially increase the share of renewable energy in the global energy mix; and (iii) double the global rate of improvement in energy efficiency for the planet.

2.2. Renewable energy: global trends and potential development

2.2.1. Global trends

The start of the 21st century has coincided with a growing global awareness of the prevalence of climate change, its direct causal link with human activities and its medium and long-term impact on health, economies, environment, and societies. This multi-faceted awareness has generated a general recognition, at the level of governance and decision-making structures - both public and private, international as well as national and regional - of the need to integrate measures to mitigate the impact of our activities on this global change. No sector of activity has been spared by this self-analysis and the development of the energy sector has been particularly influenced by this new global approach.

With this general context in mind, we provide here below a quick overview of the global strategies for climate change adaptation and mitigation, including renewable energy commitments.

- ***The Kyoto Protocol***, adopted in **1997,** entered into force in February 2005 and it currently gathers 192 parties. The Protocol operationalizes the United Nations Framework Convention on Climate Change by committing industrialized countries and economies in transition to limit and reduce greenhouse gas (GHG) emissions by agreed individual targets. This accord only binds developed countries as it is based on the consideration that they have a historical responsibility for climate change, and thus relies on the principle of "common but differentiated responsibility and respective capabilities" (UNFCCC, n.d. a).

- In **2000**, the ***United Nations Millennium Development Goals (MDGs)*** were set, to be achieved by 2015. These included a set of 8 goals that all 189 UN member states agreed on, with the general objective of reducing extreme poverty (UN, n.d.). Among these 8 pillars, the 7th aimed at promoting environmental sustainability while the 8th highlighted the necessity to develop a universal partnership for development (MDG Monitor, n.d.). These goals have further been replicated and extended through the new agenda of the United Nations, the Sustainable Development Goals (SDGs) (Philippine Statistics Authority, n.d.).

- In **2015**, the ***2030 Agenda for Sustainable Development*** formulated a set of 17 international goals, to be met by the year 2030. Among these objectives that were ratified by the 193 UN member states, SDG 7 focuses on the production and use of affordable and clean energy, while SDG 13 emphasized the emergency to take action to combat climate change and its impacts (UN, n.d.).

- In December **2015,** the Paris Agreement treaty on climate change was adopted by 196 Parties at the COP 21 in Paris, and entered into force on 4 November 2016 (UNFCCC, n.d. b). The goal of this treaty is to limit global warming to well below 2 degrees compared to pre-industrial levels. To achieve this goal, countries aim to achieve a climate-neutral world by mid-century. The Paris Agreement constitutes a major turning point as for the first time in the history of global commitments for tackling climate change, a binding agreement brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects. Through the development and ratification of the Nationally Determined Contribution (NDCs), the member countries were asked to state the specific actions they are to take to reduce drastically their GHG emissions. The agreement has already sparked new initiatives as more and more countries, regions, cities and companies are now establishing carbon neutrality targets.

- In November 2021, the Glasgow Climate Pact was adopted at the COP26. The package of decisions consists of a range of agreed items, including strengthened efforts to build resilience to climate change, to curb greenhouse gas emissions and to provide the necessary finance for both. Nations reaffirmed their duty to fulfill the pledge of providing 100 billion dollars annually from developed to developing countries. And they collectively agreed to work to reduce the gap between existing emission reduction plans and what is required to reduce emissions, so that the rise in the global average temperature can be limited to 1.5 degrees. For the first time, nations are called upon to phase down unabated coal power and inefficient subsidies for fossil fuels (UN Climate Change).

The International Renewable Energy Agency (IRENA) and International Energy Agency (IAE) indicated that a global energy transition is urgently needed to meet the objectives of limiting average global surface temperature increase below 2° Celsius. The implications of the Paris agreement for the energy sector will be profound to an extent that is not yet fully captured by existing energies scenarios. A transition away from fossil fuels to low-carbon solutions will play an essential role. This energy transition will require social (consumption habits and patterns) and technological innovation, notably in the field of renewable energy.

2.2.2. Potential of renewable energy in Africa

Africa accounts for only 3% of the world's installed renewables-based electricity generation capacity despite large resource potential (IRENA & AfDB, 2022). Africa's renewable energy resources are immense and diverse: UNEP refers to estimated capacities, with almost unlimited solar potential (10,000 GW), abundant hydro (350 GW), wind (110 GW) and geothermal energy sources (15 GW) (UNEP, 2017). This vast potential of renewable energy resources is currently exploited at a still limited scale. Theoretically, it could cover the entire energy needs of the continent, and the potential is much larger than the current electricity consumption in Africa (732 TWh in 2019 (IEA, 2022)). For illustrative purposes, estimates of the annual production potentials include: 1,584,670 GWh for hydro, 15 GW for geothermal, 1,128,315TWh for solar and 457,665TWh for wind (UNEP, 2017).

Renewable energy exploitation remains modest due to limited access to financing, underdeveloped grids and infrastructure, unstable off-taker financial arrangements and, in many countries, an uncertain policy environment (IEA, 2018). However, renewable-based generation capacity on the continent has risen by 7% in the last decade (2010-2020). (It should be noted that this is a relatively low rate of growth for the sector and is well below population growth.) Meanwhile, the expansion of renewable energy technologies in the market worldwide has generated important cost reductions over time, which can facilitate more sustainable and equitable growth in Africa.

Moreover, the decentralized option that renewable energy technology offers is a solution to energy accessibility in remote and rural areas. These anchoring efforts are bringing modern energy services and new sources of productive employment to remote populations, facilitated by digital technologies and payment tools (IEA, 2019). As well, some utility-scale projects have entered into service in Egypt, Ethiopia, Kenya, Morocco and South Africa.

Solar

The development of solar energy in Africa has been slow, challenged by limited institutional capacities within government, lack of scale and competition, high transaction costs and the perceived high risk of such projects (World Bank, 2019). Also, it is daunted by the challenges related to storage. However, the solar energy cost has fallen by over 85% since 2010, reaching a Levelized Cost of Energy (LCOE) around 0.057USD/kWh. The cost of Concentrated Solar Power energy has fallen by 68%, reaching an LCOE of 0.108 USD/kWh (IRENA, 2021b).

- **Installed capacity:** the availability of sunlight for around 300 days in most of the African region and the ability of the solar power systems to reach most locations without the need for large-scale grid infrastructure give solar power an interesting advantage. Yet, the cumulative installed capacity was 1334 MW by the end of 2014, with an estimate of prospective solar photovoltaic electricity supply to reach between 15 GW and 62GW by 2030 (APP, 2015).
- **Potential**: As discussed above, solar presents a high potential. IRENA estimated the potential of Concentrated Solar Power as being around 470 000 TWh a year at the continent level. Here, development has been slow, except for large solar Concentrated Solar Power projects in Morocco and South Africa (IEA, 2019). East Africa has the highest potential, followed by Southern Africa (IRENA, 2014).

Hydropower

Hydropower is conducive to rural electrification projects in sub-Saharan, Central and South-Eastern parts of the continent, where small-scale and mini-hydropower projects can be implemented in isolated, off-grid areas with favorable topography and water supply. Larger hydropower can be a good contributor to covering electricity demands on a regional level, where the development of this resource would benefit from regional interconnections. Hydropower has experienced a rise in the LCOE by 16% between 2010 and 2020. Also, with time, as lower-cost hydropower sites throughout the world are developed first, the overall LCOE will escalate.

- **Installed capacity:** hydropower has been the main renewable energy resource developed to date, with around 35 GW of installed hydro capacity across Africa; with Angola, Ethiopia, DR Congo, Zambia, South Africa, Sudan, Mozambique and Nigeria each having 2 GW or more. Ethiopia has an installed hydropower capacity of nearly 4 GW and more developments are planned, most notably the 6 GW Grand Ethiopian Renaissance Dam, which will be the largest in Africa when it comes into service in 2022. South Africa has installed a hydropower capacity of close to 4 GW including the recent 1.3 GW Ingula plant (IEA, 2019). As of 2011, Africa had at least 588 smaller hydro plants with an average size of 2.5 MW for a total of around 1.5 GW (IRENA, 2012).
- **Potential**: it is estimated that Africa's exploitable hydropower potential can reach up to 283 GW. So far, just around 8% of this potential has been tapped. The amount of energy from this potential is three times greater than the current electricity consumption in all of sub-Saharan Africa (UNEP, 2017).

Wind

Wind power is cost-competitive compared with other renewable energy resources, but technical factors can still limit its installation. These factors are common across renewable energy technologies and are usually related to the underdevelopment of the power grid to accommodate such technology. Both off-shore and on-shore showed a decline in the LCOE by 48% and 56% respectively between 2010 and 2020, reaching 0.084 USD/kWh for off-shore and 0.039 USD/kWh for on-shore wind energy (IRENA, 2021a).

- **Installed capacity** -The current capacity of wind power installed in Africa is estimated to be around 5.5 GW (IRENA, 2014). Most wind resources are found close to coastal locations, mountain ranges and other natural channels in the eastern and northern regions of the continent. Algeria, Egypt, Somalia, South Africa and Sudan are among the countries with the highest wind energy potentials (IRENA, 2014).
- **Potential** – IRENA (2014) forecasted that wind power could generate up to 460 000 TWh of electricity a year (although the discrepancy with the UNEP potential referenced above, of 110 GW, is noted here). The best offshore wind energy potential is found off the coasts of Madagascar, Mozambique, Tanzania, Angola and South Africa.

Geothermal

Despite available financial support from foreign countries to support geothermal energy, its expansion is burdened by the limited awareness of the geothermal applications, and the shortage of technical skills. In addition, geothermal technology can pose risks including land use change, gas and water discharge and soil subsidence. The LCOE has remained more or less steady over the last couple of years around 0.071 USD/kWh (IRENA, 2021b).

- **Installed capacity**: at the end of 2020, Kenya was the continent's only substantial producer of electricity from geothermal power, with a generation capacity of 824 MW. Ethiopia, the only other African country currently producing geothermal energy, operates a small pilot plant (IRENA & AfDB, 2022).
- **Potential:** although Africa enjoys geothermal resources throughout the continents, its industrial exploitation is concentrated in the East Africa region, with an estimated potential of 15 GW. This potential is largely untapped at present, with the exception of Kenya, previously mentioned. Other countries in East Africa are now taking steps to exploit geothermal energy: Ethiopia is operating a 7 MW pilot plant and new developments totaling more than 1 GW are planned in Djibouti, Eritrea, Tanzania and Uganda (IEA, 2019).

Bioenergy

Although out of the scope of this study, one cannot avoid mentioning bioenergy as part of the global renewable energy landscape.

The deployment of bioenergy in large-scale electricity generation is challenging, as the cost of power generation is higher than gas-fired generation and hydropower, primarily because the feedstock requires a certain amount of treatment before it can be used as fuel.

Biogas has emerged as a substitute for firewood for cooking purposes in some areas, primarily in rural East Africa.

At the same time, advanced biofuels for transport have significant potential in many African countries. West Africa alone is estimated to have the potential to produce over 100 Mt per year of agriculture residues that could be converted into electricity or advanced biofuels such as ethanol and bio-butanol.

If the important financial and technical challenges are addressed, biogas could contribute to reducing indoor air pollution (if used as a substitute for basic biomass such as firewood or coal) and decreasing premature deaths, limiting deforestation, and improving sanitation and the quality of life (especially for women) in rural and agricultural areas (IEA, 2019). Despite some global fluctuations in the LCOE from bioenergy since the years 2010, it has returned to the same level of 0.076 USD/kWh in 2020 (IRENA, 2021b).

- **Installed capacity**: in 2018, 60% of the energy mix in sub-Saharan Africa was primarily bioenergy, used traditionally in the residential sector for cooking and heating. Bioenergy can generate around 800 MW of electricity from the current installed capacity, mainly in East and South Africa (IEA, 2019).
- **Potential**: an estimate for the continental potential of bioenergy does not seem to be available. West Africa is thought to have the potential to exploit 100Mt per year of agriculture residues. These can present an interesting potential for electricity production as well as for transportation, if converted in advanced biofuels such as ethanol and bio-butanol (IEA, 2019).

2.3. AfDB engagement in Renewable energy

How to power up Africa sustainably? How to reconcile global climate goals with local energy needs? These are some of the key questions that the African Development Bank (AfDB) has been answering by taking its decisive shift towards renewable energy investments since the period 2012-2015, marked by the New Deal on Energy for Africa (NDEA 2016-2025).

The growing interest in clean energy generation and the transition is rooted in this ambitious partnership-driven effort to foster economic, inclusive and green growth. The NDEA has identified the opportunity of new approaches in the energy sector and focused on strategic themes which include the enabling policy environment and utility companies, the increasing number of bankable energy projects, funding pools and 'bottom of the pyramid' energy access programs, as well as integration through major, regional projects. The strategy intends to play a global role by:

- Contributing to the achievement of the SDGs, more specifically the SDG7 energy access for all which encompasses a target to sustainably increase RE in the energy mix.
- Assisting African countries in their energy transition to a low carbon future and achieving the COP21 Agreement on climate change, as many INDCs include ambitious plans and policies to scale up renewable electricity generation, increase energy efficiency and reduce emissions from the energy sector.

Strategic orientations

At the level of the Bank Group, several strategic documents are guiding its work, concerning the challenge of conciliating the continent's natural strengths, economic opportunities, and development needs with the global climate change goals. In chronological order of appearance these are:

- ***Medium-Term Strategy (2008-2012):*** this AfDB Strategy highlighted the necessity to give special attention to the cross-cutting theme of environment and climate change, through compliance of the Bank's investments to the Environmental Safeguards Policy and the Environmental and Social Impact Assessment (ESIA) to guarantee the mitigation of potential negative environmental impact from its investments. The Strategy also stressed the commitment of the Bank to engage resources in the screening for opportunities for clean energy investments (AfDB, 2008).
- ***Bank Group Climate Risk Management and Adaptation Strategy (2009***) the specific objectives of this Strategy, to inform all Country Strategy Papers (CSP) and operations of the Bank are (A) to reduce vulnerability within the RMCs to climate variability and promote climate resilience in past and future Bank-financed development investments making them more effective and (B) to build capacity and knowledge within the RMCs to address the challenges of climate change and ensure sustainability through policy and regulatory reforms through the support of three main areas of intervention: (i) "Climate Proofing" Investments, (ii) Policy, Legal and Regulatory Reforms and (iii) Knowledge Generation and Capacity Building (AfDB, 2009).
- ***Climate Change Action Plan I 2011-2015:*** the general goal of the CCAP is to support the Bank's Regional Member Countries (RMCs) to adapt to climate change and mitigate its effects while supporting the Bank's focus on infrastructure development and regional operations. It is organized around three pillars (Low Carbon Development, Climate Resilient Development and Funding Platform) to help African countries strengthen their capacity to respond to climate change while mobilizing resources from climate finance, the private sector and market mechanisms (AfDB, 2012a).
- ***AfDB Energy Sector Policy 2012:*** this Policy provides a general framework for all the Bank Group's energy sector operations, with a dual objective of: (i) supporting Regional Member Countries

(RMCs) in their efforts to provide all of their populations and productive sectors with access to modern, affordable and reliable energy services and (ii) helping RMCs develop their energy sector in a socially, economically and environmentally sustainable manner. To address current and future energy demands, while contributing to the development of sustainable energy, the Bank decided to focus on several subsectors that include: (i) renewable energy, (ii) fossil fuels (coal, oil and gas), (iii) power transmission and distribution, (iv) regional cooperation, and (v) supply-side and demand-side energy efficiency. As of the geographic scope chosen, and since access to energy varies across regions and countries, the Bank decided to tailor the supply options to specific energy needs of countries and segments of the population (AfDB, 2012b).

- ***Ten-Year Strategy (TYS) 2013-2022 "At the Center of Africa's Transformation":*** the ten-year AfDB strategy relies on a twofold objective of ensuring more inclusive and sustainable growth in Africa through the financial and operational support of five sectorial priorities: 1) Infrastructure development, 2) Regional economic integration, 3) Private sector development, 4) Governance and accountability and 5) Skills and technology (AfDB, 2013).
- ***Climate Change Action Plan II 2016-2020***: the CCAP II builds on lessons learned and recommendations from the CCAP I and it aligns with the "High 5s" Agenda and African Union Agenda 2063. The action plan activities are organized along four main pillars: adaptation and climate-resilient development; mitigation and low carbon development; financial resource mobilization; and enabling environments addressing cross-cutting issues, including policies and institutional reforms, capacity development, technology development and transfer, and creation of partnerships and networks. The CCAP2 intends to guide the Bank in achieving the climate finance target (i.e., by 2020, 40% of the Bank's finance should be identified and reported as climate finance using the MDB Climate Finance Tracking methodologies) (AfDB, 2017b)***.***
- ***New Deal on Energy for Africa 2016-2025:*** this Strategy sets out the priorities for the Bank's interventions in the energy sector from 2016 to 2025. The New Deal focuses on seven strategic themes that are seen as holding back the development of the energy sector: (i) setting up the right enabling policy environment, (ii) enabling utility companies for success, (iii) dramatically increasing the number of bankable energy projects, (iv) increasing the funding pool to deliver new projects, (v) supporting 'bottom of the pyramid' energy access programs, (vi) accelerating major regional projects and driving integration, and (vii) rolling out waves of country-wide energy 'transformations'. The Bank implements these themes through a series of flagship programs such as the unfolding of an Independent Power Producer (IPP) Procurement Programme (IPP), power utility transformation, early-stage project support facilities, funding catalyst programs, the bottom of the pyramid energy financing facilities, mobile payment programs, regional project acceleration programs, countrywide energy sector turnarounds and transformative partnerships (AfDB, 2017a).
- The High 5s for Transforming Africa: elaborated in 2015 as a response to the SDGs, the Paris Agreement and, more specifically, the call sent by the global community to the Multilateral Development Banks (MDBs) to significantly increase the volume of their leveraging and crowding in financial resources - expressed in the UN Financing for Development conference (also in 2015). Hence the Bank highlighted 5 priority areas to focus its investments on 1) Light up & power Africa, 2) Feed Africa, 3) Industrialize Africa, 4) Integrate Africa, 5) Improve the Quality of Life for the People in Africa (AfDB,2015).

Moreover, since 2015 and the formulation of the MDGs, the AfDB has taken clear steps towards an alignment to global commitments regarding the mitigation and adaptation to climate change, including the creation of the NDC (Nationally Determined Contributions) Hub to serve as a resource pool to support the Regional Member Countries (RMCs) fulfilling their obligations related to the COP21 Paris Agreement and implement their NDCs.

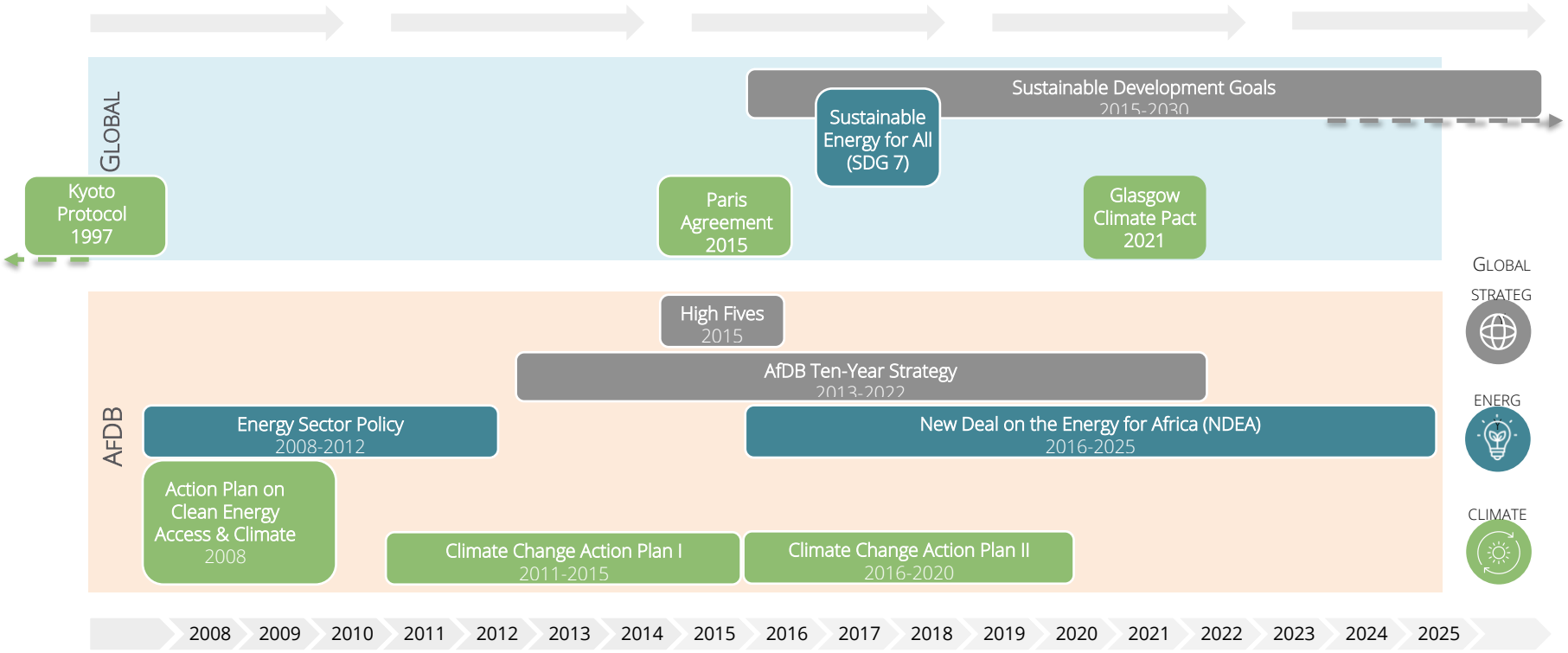


Figure 2 - Timeline of Global and AfDB strategic orientations

AfDB initiatives

The Bank is contributing to Africa's efforts on transitioning to green growth and has promoted several initiatives to support renewable energy and implement the strategic orientations referred to previously. These initiatives include different RE financial tools and modalities designed by the Bank as well as different sources of financing, in which the Bank is a partner, host or recipient. A description of the AfDB instruments and sources of funding identified during the inception phase is available in Annex 1.

Some examples of these initiatives are illustrated below.

- The Bank has a leading role in the **Africa Renewable Energy Initiative (AREI)** as a Trustee and as a host of its Independent Delivery Unit.

- The **Sustainable Energy Fund for Africa (SEFA)** is a Special Fund established in 2011 by the African Development Bank to contribute to universal access to affordable, reliable, sustainable, and modern energy services for all in Africa. It provides finance to unlock private sector investments in renewable energy and energy efficiency. It offers technical assistance and concessional finance instruments to remove market barriers, build a more robust pipeline of projects and improve the risk-return profile of individual investments.

- The **Facility for Energy Inclusion (FEI)** (AfDB, 2020) is a targeted $400 million fund to improve energy access across Africa through small-scale renewable energy and mini-grid projects. Spearheaded by the African Development Bank, FEI serves as a financing platform to catalyze financial support for innovative energy access solutions since 2016.

- The **Desert to Power initiative (AfDB, 2021a)** has aimed to develop a broad project of solar energy production in the Sahel since 2019, to generate 10 GW of additional capacity to provide clean electricity for 250 million people.

- The **Leveraging Energy Access Finance Framework (AfDB, 2021b)** is a program coordinated by the African development bank since 2021, unlocking commercial and local-currency financing for decentralized renewable energy (DRE) projects.

Energy infrastructure development is a core priority of the AfDB's assistance to RMCs, which is reflected in the AfDB portfolio in Renewable energy. Energy infrastructure development is a core priority of the AfDB's assistance to RMCs, which is reflected in the AfDB portfolio in Renewable energy, and the nearly UA 13 billion of support to investment and noninvestment interventions in RMCs. The sector's share of total Bank net approvals rose from a low of 5% in 1999 to a high of 39% in 2007, and then declined to approximately 18% in 2018. Thus, over the 1999-2018 period, the sector accounted for about 19% of overall Bank Group commitments, ranking third in terms of total assistance after Multisector (22%) and Transport (19%).

There is also a growing interest in clean electricity generation. The Bank is making inroads in renewable energy development in recent years. While conventional energy (i.e., energy generated from non-renewables sources) constituted the bulk (55.3%) of Bank-funded power generation investments over the two-decade period, investments in renewable energy have picked up since the approval of the Bank's 2012 Energy Strategy. The share of conventional energy commitments in total Bank power generation assistance has seen a sharp decline, from nearly 99 percent over the 1999-2003 period to a low percent over the 2016-2018 period.

3. Theory of change

Landscape

To better understand the state-of-play of renewable electricity production – including its constraints - in Africa, a first exercise was performed to draw the general landscape (see Figure 3**Error! Reference source not found.**). This diagram is *not* a representation of the Theory of Change, which follows later in this section.

A brief narrative of this landscape is presented below:

- Top left corner: Africa has abundant energy resources, however unevenly spread. Some are fossil (very unevenly spread), some are renewable (some uneven spread).

- Central zone:
  - Both fossil and renewable resources allow for the production of heat and electricity supply. In the case of fossil, the electricity supply generates CO2 emissions, which is not the case when renewable resources are used. There is thus a need to gradually shift from fossil to renewable (for climate and energy independence reasons).
  - Electricity produced needs a form of grid distribution (taken in broad terms, including direct off-grid distribution). The expansion of the grid goes hand in hand with the increase of electricity production to reach 1) the productive sector; 2) households.
  - On the grid, electricity produced from other countries/zones, thanks to interconnections and power pools, can also be fed in. From a market point of view, the broader the interconnected grid, the better prices and reliability. Interconnections also allow to better balance and share Variable Renewable Electricity.
  - If the electricity price is affordable, available, reliable and of good quality, households and productive sectors can rely on electricity to increase their economic and social development, contributing to the inclusive and green growth of Africa's transformation, and reducing poverty? Note however that the mere provision of electricity to the productive sector seems to be insufficient, as such, to generate increased economic activities. Accompanying measures are required as well.
  - Economic and social transformation, and population growth, induce and increased electricity demand, which, in turn, require an increase in electricity production and connections. Back to square "production".
  - Energy efficiency measures, targeting electricity production, distribution and/or consumption, contribute to lower carbon emissions.

- Bottom left corner: the increase in Renewable electricity production requires:
  - The existence of a sufficiently robust regulatory and governance context for the energy market
  - The emergence of bankable projects in numbers requires upstream to have a lively private sector, in an attractive business environment, for which regulatory, governance, human capacities, and reliable and efficient utilities, are keys.
  - The provision of financial means.

The present evaluation will essentially be focusing on the yellow zone, in which the question of the grid expansion and its strategy (grid/mini-grid/off-grid; the context of large or smaller countries; density of population, …) appear only as it may influence the renewable technology chosen for investments.

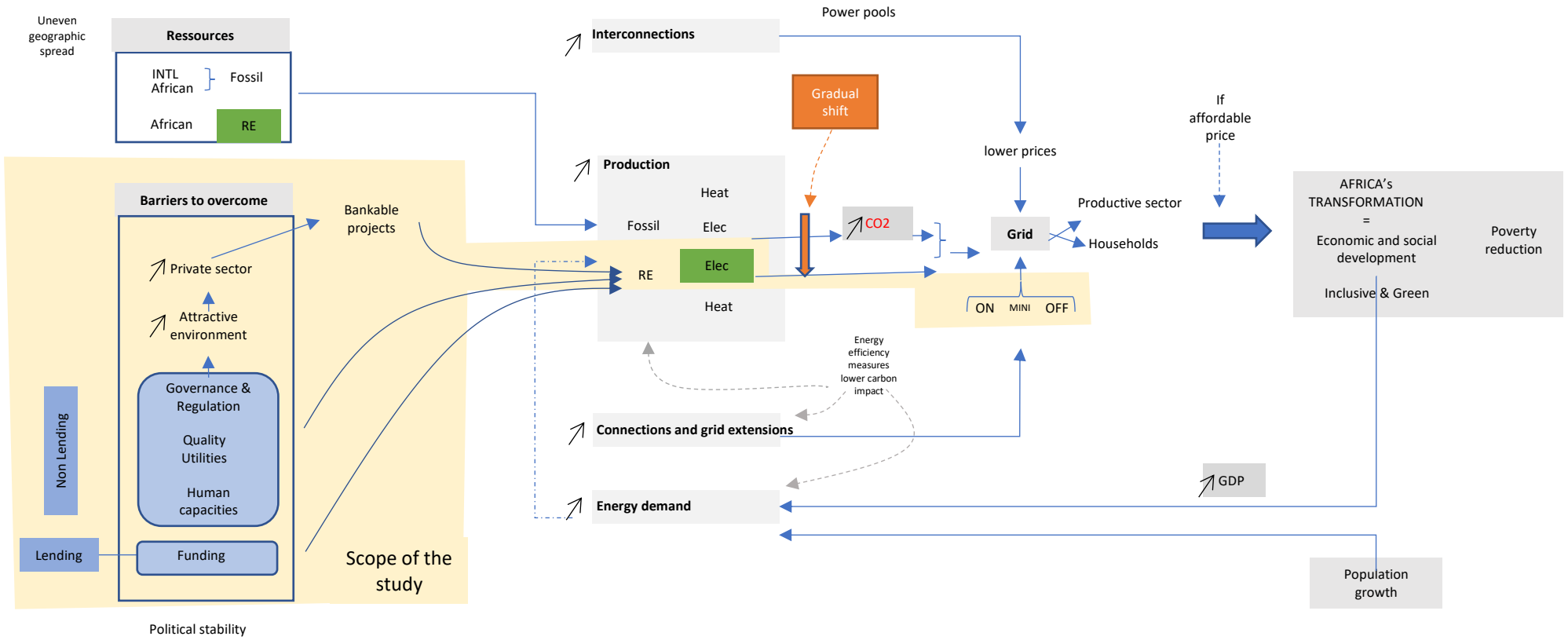


Figure 3 – Landscape of renewable energy context (source: ADE)

Results Chain and Theory of Change

Results Chain. Taking into consideration the general understanding of the landscape, the results chain proposed in the Concept Note has been adjusted in the following manner:

- **Problems**:
  - have been categorized (production / Governance / Connection / Climate Change / Health).
  - Governance issues are developed in more detail.
    The lack of access to clean fuels, and dependence on biomass for cooking, remain as a health problem, that renewable energy access could fill.

- **Inputs** have been better segregated, in non-lending and lending activities.

- **Outputs** have been completed, making a distinction between:
  - Reduced barriers to RE.
  - Production of a pipe of bankable projects.
  - grid development and electricity production capacity, in physical infrastructure production.

- **Outcomes** have 2 aspects:
  - The emergence of a favorable environment to 1) the development of renewable electricity production capacities and consumption, 2) the development of private sector initiatives in RE.
  - The factual increase in renewable electricity production diminishes the exposure to electricity insecurity, displaces fossil fuels and avoids pollution.

- Some **assumptions** have been added:
  - The inclusive aspect of intermediate outcomes requires an inclusive tariffication of electricity and an inclusive strategy in the development of grid connections.
  - "Attendant measures to promote the productive use of electricity" are now considered an assumption, necessary to obtain an increase in the productive use of electricity
  - The long-term outcome of inclusive and green growth requires an assumption on the scale of increase of renewable electricity produced and distributed.

In a nutshell, the narrative of the Theory of Change at this stage appears to be:

1. Thanks to *non-lending* activities, barriers to RE investments are reduced. This allows the production of a pipeline of bankable projects, and in the longer run, the creation of a more favorable environment for the development of RE production and consumption, and private sector initiatives in RE projects.
2. Thanks to *lending* activities, production capacity in RE increases, as well as grid development and connections. Each induces, respectively, an increase in RE supply and an increase in electricity access.
3. Under the condition of an inclusive tariffication and an inclusive strategy of deployment of grid connections, and the condition of the existence of attendant measures, this leads to an *inclusive* increase of 1) the productive use of electricity, 2) job creation, 3) quality of life and education.
4. Under the condition of a sufficient scale of increase in RE production, and electricity distribution, this contributes to inclusive and green growth.

Renewable electricity result chain

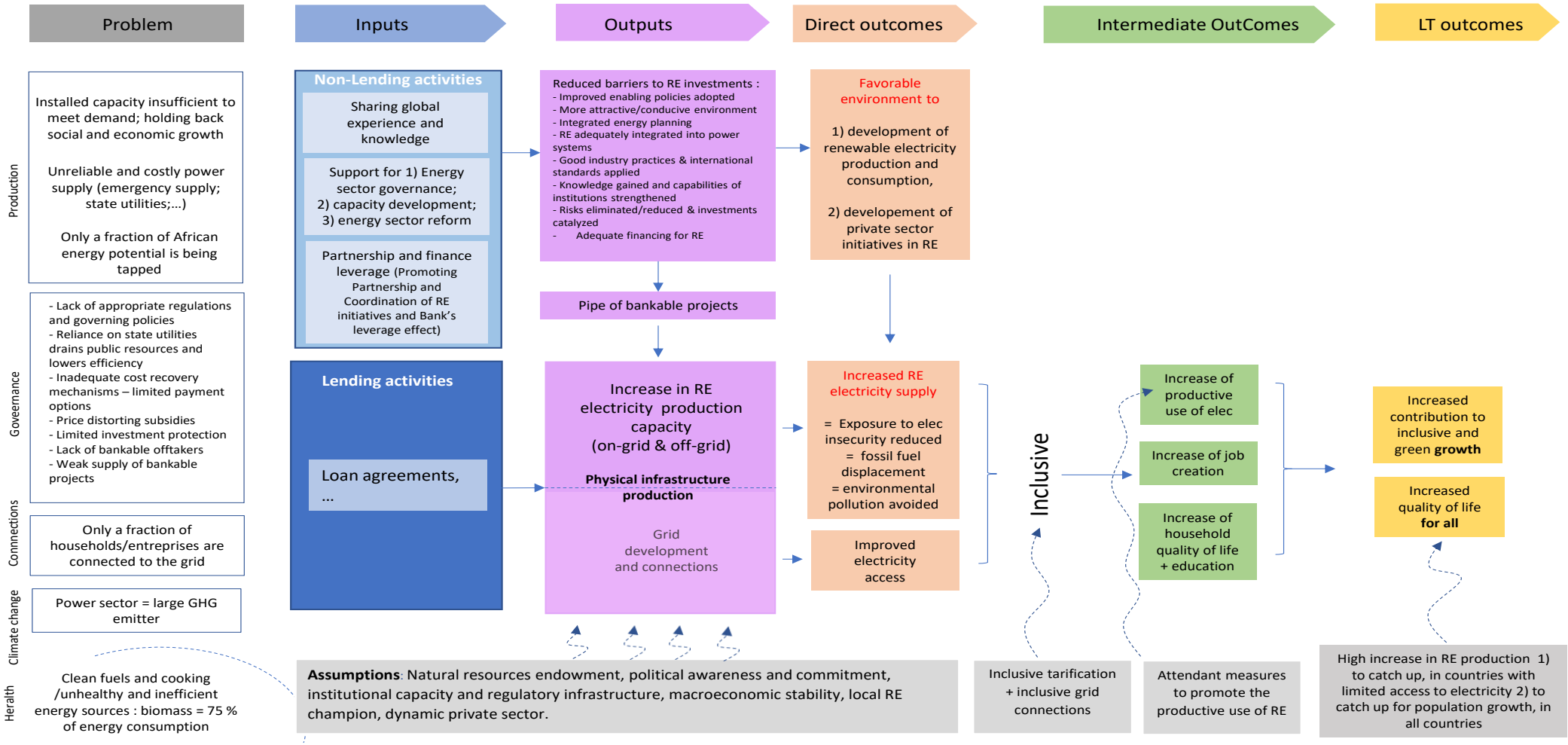


Figure 4 – Theory of Change

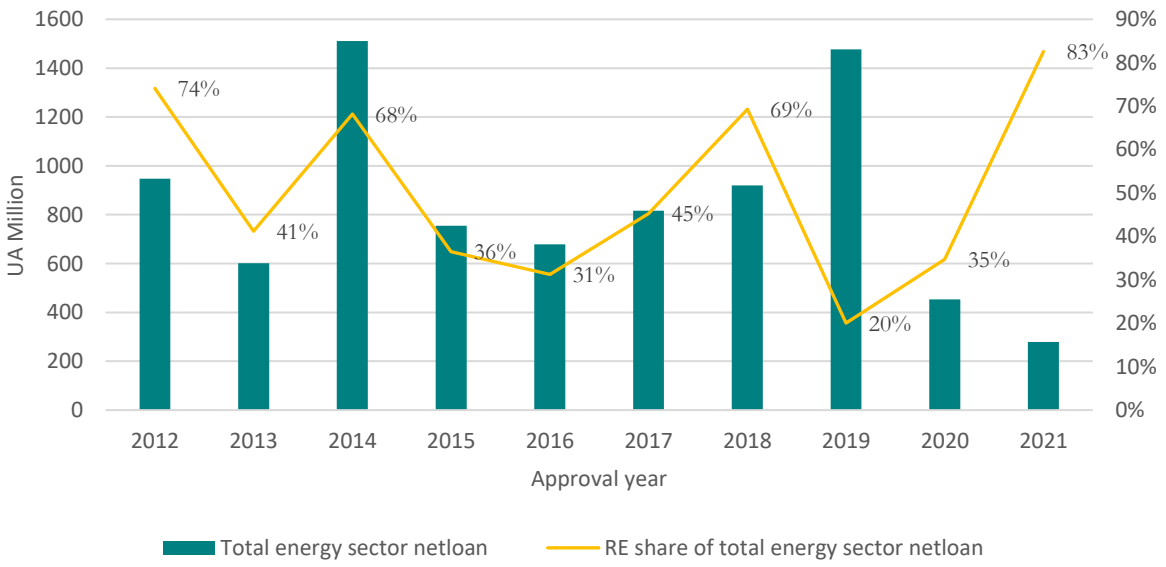
4. AfDB's portfolio review in Renewable energy

This section presents a snapshot of the AfDB's portfolio review in Renewable energy, that will be more elaborated in the technical report.

4.1. Renewable Energy Subsector Portfolio Trends

Nearly half of the Bank's energy sector support was devoted to RE in RMCs over the 2012-2021 period. As shown in figure 5, RE share of total energy sector net loan ranged from a low 20% in 2019 to 83% in 2021. Noticeably, RE share of total energy sector net loan increased sharply between 2016 (31%) and 2018 (69%) but recorded declines in 2019 (20%) and 2020 (35%), partly attributable to the onset of the Covid-19 pandemic. However, 2021 saw a drastic rise in RE share of total energy sector net loan, about 83%.

Figure 5 – Trend in the RE Share in Total Bank Energy Sector Commitment (2012-2021)



Source: Calculated by IDEV, based on Bank internal databases

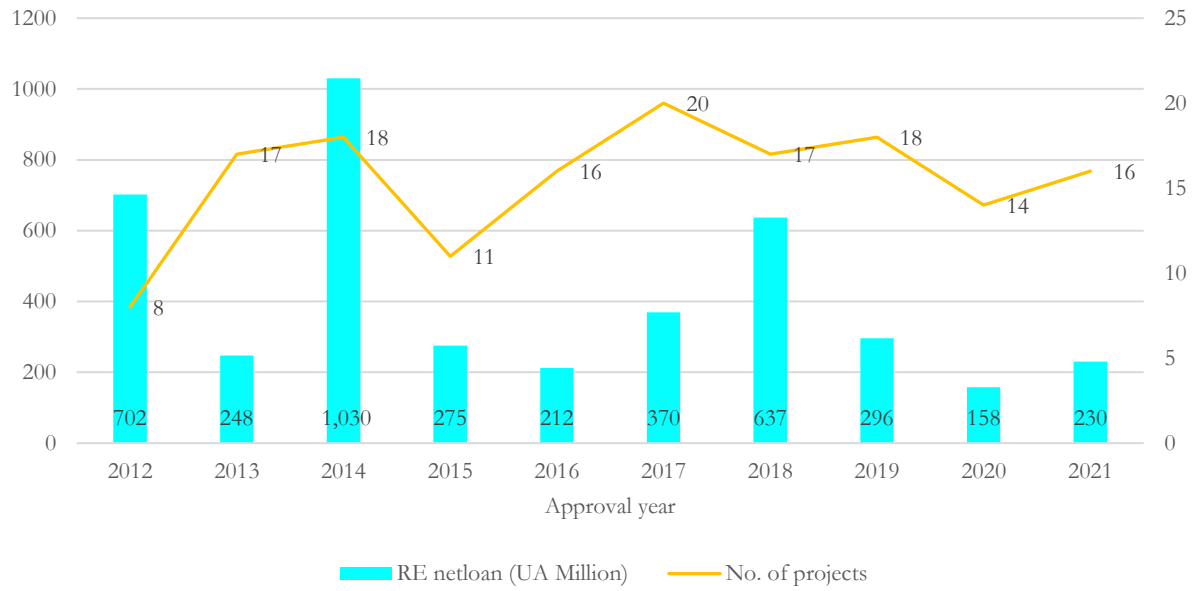
Put together, RE accounted for 49% of the Bank's total energy sector assistance to RMCs over the 2012-2021 period, making RE a critical component of the Bank's energy sector assistance. This development can be attributed to the Bank's implementation of the Bank Group's 2012 Energy Policy and the 2016 Strategy for the New Deal on Energy for Africa[2] 2016-2025 (NDEA), both of which prioritize RE development in RMCs.

Overall, the Bank Group's net commitment to the RE subsector totaled UA 4.16 billion between 2012 and 2021. As shown in figure 6, the highest volume of RE support was recorded in 2014, about UA 1.03

[2] The NDEA has been introduced as part of the Bank's High 5 agenda of Lighting Up and Powering Africa. It seeks to achieve universal access to energy in Africa by 2025 through a strong partnership with governments, the private sector, and bilateral and multilateral agencies.

billion (or UA 1,030 million) comprising a total of 18 operations. This is followed by 2012, with RE support totaling UA 702 million comprising a total of 8 projects. The third highest approval year is 2018 which recorded an amount of UA 637 million comprising 17 operations.

Figure 6 – Annual RE Net Loan by Number of Projects (2012-2021)



Source: Calculated by IDEV, based on Bank internal databases

Notably, 2020 recorded the lowest volume of RE support. Even though a total of 14 operations were approved, total RE support amounted to UA 158 million, which is a decline from the volume for 2019, UA 296 million. This is attributable to the onset of Covid-19 and its associated lockdowns in 2020. In 2021, RE support starts to rise again with total volume of UA 230 million comprising 16 RE operations.

What is apparent in figure 6 is that of the UA 4.16 billion committed to RE development, the 2012-2015 period accounted for more than half, about 54% (UA 2.26 billion) comprising a total of 54 operations. Between 2016 and 2021 however, total RE commitment was UA 1.90 billion comprising a total of 101 operations. This finding maybe explained by the fact that the period after the launch of the NDEA saw a shift towards increased support for projects targeting enabling environment and other catalytic efforts. The volumes of support for these operations tend to be small in nature, which explains why the average annual number of approved projects over the 2016-2021 period is high (17) compared to case for the 2012-2015 period (14).

4.2. Bank Support to RE by Investment Type

Two-thirds of the Bank's RE assistance was devoted to power generation. As shown in table 1, the portfolio comprises a mixed bag of investments, ranging from power generation to technical assistance (TA) and advisory services. Of the UA 4.16 billion RE support provided by the Bank to RMCs, 67% targeted power generation operations whereas 22% and 11% were respectively devoted to TA/advisory services and green min-grids/off-grids.

Table 1 – Share of Net loan by Investment Type (2012-2021)

Investment Type	2012-2015	2016-2018	2019-2021	Combined
Power generation	64.8%	70.6%	66.8%	66.9%
TA/Advisory	35.2%	1.1%	14.8%	21.8%
GMG / Off-grid	0.0%	28.3%	18.4%	11.3%
Total (%)	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Total net loan (UA Million)	**2,255.30**	**1,218.62**	**683.51**	**4,157.44**

Source: Calculated by IDEV, based on Bank internal databases

Post-2016, support for off-grid renewable energy increased substantially. A close examination of table 1 reveals that even though support for off-grid RE was zero over the 2012-2015 period, between the 2016-2018 period, the share of total RE commitment was 28% and about 18% for the 2019-2021 period. This development can be attributed to the Bank's commitment to increasing electricity access across the continent as enshrined in the 2016 NDEA strategy. Regarding TA/advisory services, RE commitment share over the 2012-2015 period was 35% compared to 1% and 15% respectively for 2016-2018 and 2019-2021 periods.

4.3. Bank Support to RE by Technology Type

Aside from operations that target multi-RE technologies, solar energy and hydropower are the top two technologies that benefit from the Bank's RE support over the 2012-2021 period. Overall, 30% each of the Bank's RE assistance was devoted to general/multi-RE and solar energy development in RMCs (see table 2). Also, nearly 28% was dedicated to operations supporting hydro energy development while wind and geothermal technologies accounted for approximately 11% and 1% respectively.

Table 2 – Share of Net loan by RE Technology (2012-2021)

RE Technology	2012-2015	2016-2018	2019-2021	Combined
General/multi RE	41.6%	8.1%	32.8%	30.3%
Solar	17.6%	56.0%	24.6%	30.0%
Hydro	20.6%	32.8%	42.0%	27.7%
Wind	19.4%	0.2%	0.4%	10.7%
Geothermal	0.7%	2.9%	0.0%	1.2%
Others (Bioenergy, Wave & Energy Efficiency)	0.0%	0.1%	0.2%	0.1%
Total (%)	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Total net loan (UA Million)	**2,255.30**	**1,218.62**	**683.51**	**4,157.44**

Source: Calculated by IDEV, based on Bank internal databases

Post-2016, solar and hydro technologies make up the bulk of the Bank's RE commitment. Wheras about 18% (or UA 397.68 million) of the Bank's assitance specifically targeted solar energy development over the 2012-2015 period, a drastic increase was observed over the 2016-2018 period, about 56%. Meaning that over this period, the majority of the RE support was dedicated to solar energy development. Over the 2019-2021 period however, support to solar development accounted a quarter of RE commitment while that of hydro accounted for 42%, about 9 percentage points more than the

case for the 2016-2018 period. Overall, post-introduction of NDEA, both solar and hydro have been the dominant beneciaries of the Bank's RE support, accounting for 45% (or UA 850.88 million) and 36% (or UA 686.27 million) respectively over the 2016-2021 period.

Over the 2012-2021 period, the Bank Group's active portfolio in the RE constituted 64% of total approved projects. This comprises 32 newly approved projects (20.6%) and 67 (43.2%) on-going projects (table 3). Completed/closed projects make up about 32% while projects which were approved but either abandoned or cancelled constitute about 4% (6 projects).

Table 3 – Project Status by RE Approval Period and RE Technology Type (2012-2021)

Project status	Approval period			RE Technology Type						Combined
	2012-2015	2012-2015	2016-2018	General RE	Geothermal	Hydro	Solar	Wind	Other	
Approved	5.6%	18.9%	39.6%	10.7%	16.7%	22.2%	33.3%	25.0%	0.0%	20.6%
Ongoing	33.3%	43.4%	54.2%	46.4%	50.0%	50.0%	31.1%	37.5%	75.0%	43.2%
Closed/ completed	53.7%	34.0%	6.3%	42.9%	33.3%	19.4%	31.1%	25.0%	25.0%	32.3%
Cancelled	7.4%	3.8%	0.0%	0.0%	0.0%	8.3%	4.4%	12.5%	0.0%	3.9%
Total (%)	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**
Total no. of projects	**54**	**53**	**48**	**56**	**6**	**36**	**45**	**8**	**4**	**155**

Source: Calculated by IDEV, based on Bank internal databases

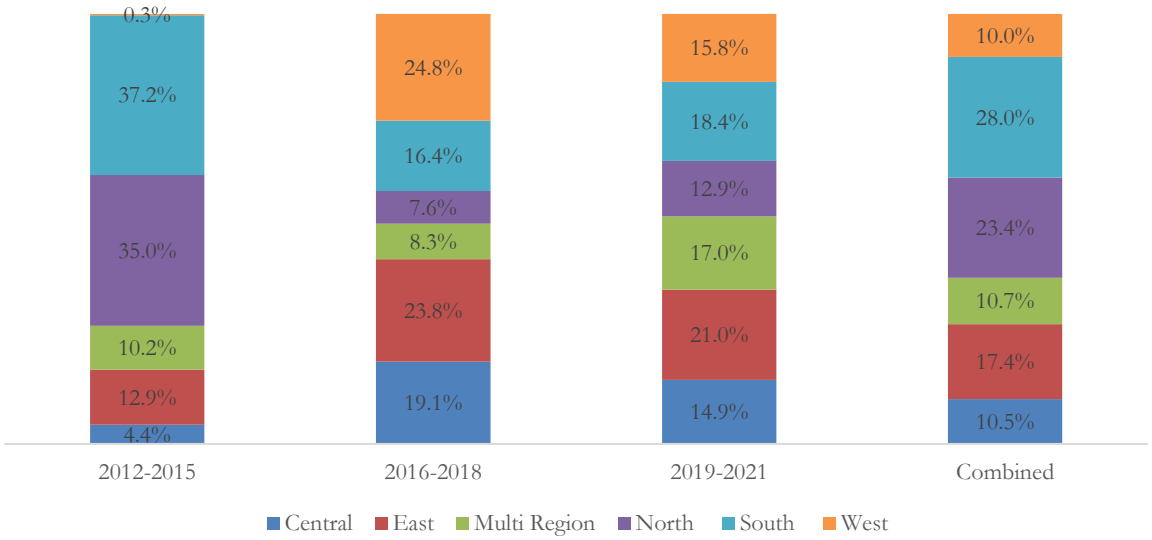
Nearly 2 out of every 5 projects approved over the 2012-15 period are still active, raising likely concerns about implementation delays. Of the 54 projects approved over the 2012-2015 period, approximately 39% (6% being approved and 33% being ongoing) compared to 62% and 94% respectively for 2016-2018 and 2019-2021 approval periods. What this implies is that for these projects, even though they were approved about 7-10 years ago, they are yet to be completed.

When disaggregated by RE technology type, the share of active portfolio over the 2012-2021 is high for hydropower projects relative to solar, wind and geothermal. Within the overall RE portfolio, about 72% of hydropower projects are active compared to 67%, 64% and 63% respectively for geothermal, solar and wind projects (see table 3). In terms of active projects that were approved over the 2012-2015 period, approximately half are hydropower projects, indicative of the fact that hydropower operations often take longer to complete by nature.

4.4. Portfolio Distribution by Region and Fragility

At the regional level, Southern Africa is the largest recipient of the Bank's RE assistance, 28% (UA 1.16 billion). This is followed by North Africa and East Africa, with RE assistance shares of 23% and 17% respectively (figure 7). Central Africa received the least support, about 10.5% while a sizable amount of RE assistance targeted multi-region interventions, about 10.7%.

Figure 7 – RE Assistance by sub-region (2012-2021)

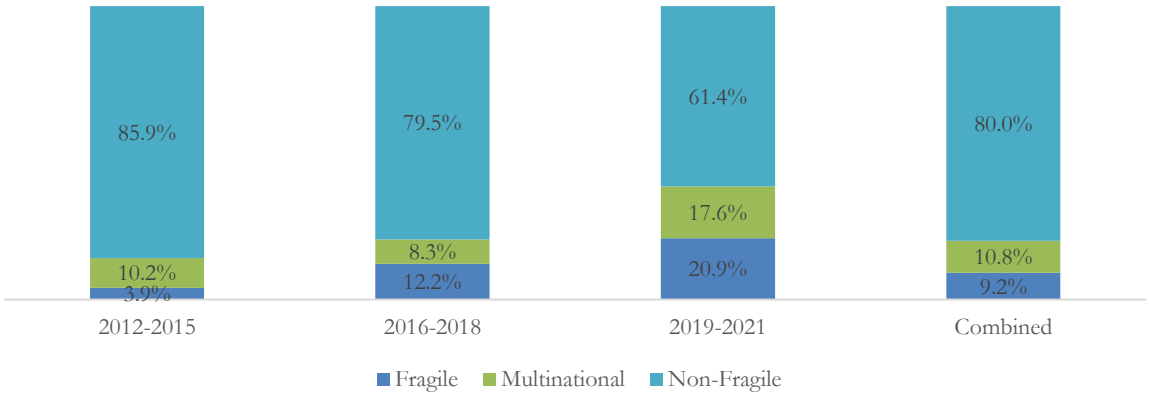


Source: Calculated by IDEV, based on Bank internal databases

It is however important to note that while share of RE support going to Southern and North Africa declined over the years, RE support targeting West and Central Africa saw significant improvements over the 2016-2018 and 2019-2021 periods. For instance, the share of RE assistance devoted to the West Africa region increased from a mere 0.3% over the 2012-2015 period to 25% and 16% over the 2016-2018 and 2019-2021 periods respectively. Collectively, these shifts reflect efforts to adopt a more equitable approach in the Bank's RE assistance to RMCs. In addition, **besides support to multinational operations, Morocco, Angola, South Africa and Kenya make up the top 4 recipients of the Bank's RE assistance**, accounting for nearly half of total RE commitments over the 2012-2021 period.

Overall, the share of the Bank's RE assistance devoted to fragile states was 9% (UA 0.38 billion) despite a steady rise over the 2019-2021 period. The greatest share of the Bank's RE support was devoted to non-fragile states, about 80% (figure 8). A trend analysis over the period however reveals a shift in composition, with approximately 21% (UA 0.14 billion) of the RE support between 2019 and 2021 targeting fragile states, an increase of about 9 percentage points over the 2016-2018 period. This depicts a positive development in favor of fragile states. It is likely that the Bank's recent emphasis on fragile states with introduction of the Fragility and Resilience Strategy is indirectly exerting an influence on RE commitment to fragile states. This will need further probing during the country case studies as well as key informant interviews with Bank staff on their reflection on RE and fragility.

Figure 8 – RE Assistance by fragility (2012-2021)



Source: Calculated by IDEV, based on Bank internal databases

Similarly, the share of RE assistance targeting multinational operations increased post-2016, increasing from 8.3% (UA 0.10 billion out of UA 1.22 billion) over the 2016-2019 period to about 18% (UA 0.12 billion out of UA 0.68 billion) over the 2019-2021 period.

5. Methodology

5.1. Overview of the evaluation approach

The overview below explains the evaluation framework, data collection tools, sources of information and approach to producing the different expected deliverables.

Evaluation framework

The evaluation matrix proposed in the Concept Note has been revised with the following objectives:

1. Validating the structuring of the questioning and associated judgement criteria
2. Disaggregating the judgement criteria into indicators/elements of analysis
3. Specifying the levels of collection by distinguishing data to be collected at the intervention level, country level and corporate level.

For each indicator, the information sources have been identified. The revised evaluation matrix is briefly presented in section 5.2 and in detail in Annex 2.

Design of the data collection tools

Building upon the evaluation matrix, different data collection tools were prepared for the different levels of collection:

- **Intervention level:** the indicators/elements of analysis at the intervention level made it possible to refine the structuring of the PRAs and to present an analysis grid, as well as the interview guides, according to the stakeholders to be met.
- **Country-level:** country-level indicators/analysis elements were used to structure country case studies and interview guides.
- **Corporate level:** the corporate level made it possible to identify the specific issues to be examined in depth with the relevant departments of the Bank at its headquarters.

The different data collection tools are presented in section 5.3.1 and in detail in the Annexes.

Synthesis of information collected

Section 5.2 describes how the information collected at different levels will be synthesized to produce the expected deliverables: Clusters' synthesis, Country case studies, Technical Report. Available project documentation, such as PRAs, will be used to prepare intervention analytical grids to be used for clusters synthesis and country case studies. The analysis and information contained in the Country case studies and clusters synthesis will serve as inputs for the Technical Report.

5.2. Evaluation approach

5.2.1. Evaluation framework

The proposed methodological approach builds on the Theory of Change-driven Pyramidal Approach, described below, building on a strong articulation of the interventions, cluster and strategic levels while considering the contextual, policy, governance and organizational influences on the Bank's performance at each of those levels.

The revised evaluation matrix is presented below in Table 4. The detailed version, including judgement criteria, and respective indicators and sources of information, is available in Annex 2.

Table 4 – Evaluation Matrix (reduced version)

Criterion Main question	Sub-question	
Relevance & Coherence To what extent are the Bank's interventions aligned with the clients' priority RE needs as they navigate changing RE markets and expanding global initiatives?	SQ. 1.1 Strategy	How adequate is the Bank's strategic focus on renewable energy to assist RMCs to achieve: the SDGs, the Kyoto Protocol and the Paris Agreement?
	SQ. 1.2 Alignment	To what extent were the Bank's lending and non-lending activities in renewable energy aligned with the priorities of RMCs and end beneficiaries' needs?
	SQ. 1.3 Adaptation	To what extent were the Bank's interventions adapted over time taking into account RMCs' implementation performances and emerging challenges (including risk related to climate change)?
	SQ. 1.4 Coordination	To what extent are the Bank's interventions (i) coordinated with those of governments and other development organizations' interventions and (ii) are they complementary to these interventions?
Effectiveness To what extent has the Bank's support in renewable energy been effective in addressing barriers, mobilizing finance, leveraging experience and partnerships, and achieving the expected results for advancing RE development in meeting client's energy and environment needs?	SQ 2.1 Achieved outcomes	To what extent have the Bank's renewable energy interventions achieved their expected direct and indirect outcomes?
	SQ 2.2 Influencing factors	What are the factors that enable or hinder the achievement of the expected RE interventions' direct and intermediates outcomes?
	SQ 2.3 Partnerships	How effective has the Bank been in engaging in productive partnerships in the renewable energy sector?
	SQ 2.4 Leverage	How well has the Bank leveraged resources?
	SQ 2.5 Knowledge, advisory	Has the Bank fulfilled its role as a knowledge broker, advisor and convener?
Efficiency To what extent has the Bank's assistance to renewable energy results been delivered efficiently?	SQ 3.1 Design	To what extent did the Bank's identification, design, and approval mechanisms contribute to ensuring an efficient implementation of the renewable energy interventions (Optimize Cost-benefit ratio, Cost-effectiveness)?
	SQ 3.2 Delivery	To what extent has the Bank's renewable energy portfolio delivered expected outputs promptly and within the planned cost?
	SQ 3.3 Supervision	To what extent has the Bank's supervision been supportive of achieving the expected outputs (Compliance with Bank's project implementation principles)?

Criterion Main question	Sub-question	
Sustainability To what extent are the results of the Bank's assistance with renewable energy sustainable?	SQ 4.1 Technologies	To what extent do renewable energy projects' achievements rely on sound technologies and maintenance mechanisms?
	SQ 4.2 Financial sustainability	To what extent has the Bank contributed to RMCs securing financial resources, to ensure the continued flow of benefits associated with renewable energy projects?
	SQ 4.3 Capacities	To what extent has the Bank contributed to strengthening institutional capacities to facilitate the continuous flow of benefits associated with renewable energy projects?
	SQ 4.4 Stakeholders	To what extent has the Bank effectively assisted RMCs by involving relevant stakeholders, promoting a sense of ownership amongst the beneficiaries, and putting in place effective partnerships with relevant stakeholders (e.g., local authorities, civil society organizations, private sector, donors) through its interventions in renewable energy in RMCs?
	SQ 4.5 E&S impact	To what extent has the Bank assisted RMCs to appropriately assess and implement environmental and social mitigation/enhancement as well as climate change mitigation and adaptation measures through the renewable energy interventions?

The matrix proposed above is the result of a revision of the initial matrix proposed in the ToR, undertaken during the inception phase, which included the following steps:

1. **The judgement criteria have been revised and indicators for analysis have been identified.**

To illustrate point 1 above, the table below presents the different specific indicators for judgement criteria 1.1.1. Each sub-question comprises judgement criteria which are informed by several indicators. Each of these indicators are addressed, where relevant, to the intervention or country in question.

Sub-Question: SQ. 1.1 Strategy
C#: 1.1.1.
Criteria: To what extent does the Bank's RE strategy take into consideration the underlying objectives and indicators related to (i) M/SDG, (ii) AU agenda 2063 and (iii) Paris Agreement (PA)?

I#	Indicators
1.1.1.1	Identification and extraction of objectives and indicators related to (renewable) Energy and Electricity under M/SDGs; African Union agenda 2063 and the Paris agreement
1.1.1.2	Screening of the AfDB Energy policy, NDEA, High 5 objectives & indicators for explicit reference to and consistency with those defined for the period 2012-2021 under M/SDGs, AU agenda & the Paris agreement
1.1.1.3	Opinion on the way how the Bank fits in with the trends and global objectives in the field of RE development
1.1.1.4	Opinion on the Quality of design, the Strategic importance; and the Role Played by the Energy Policy and NDEA; Perception of the specific role played by the NDEA in the field of RE
1.1.1.5	Existence of specific approach(es) by technology/cluster deriving from global or AfDB specific initiatives (Energy policy, NDEA)
1.1.1.6	Evolution of the portfolio in RE over time: is there an influence of the NDEA (paradigm break or business as usual), or other strategic documents?

2. **Data collection has been distinguished at different levels: intervention, country and corporate levels.**

3. **For each indicator, key information sources at each level have been identified.**

To illustrate points 2 and 3 above, the table below presents selected information sources for each specific indicator of judgement criteria 1.1.1. These sources, which are interconnected, are further described below and in Figure 3. The different resulting data collection tools are presented in section 5.3.1.

Sub-Question: SQ. 1.1 Strategy
Level: Corporate
C#: 1.1.1.
Criteria: To what extent does the Bank's RE strategy take into consideration the underlying objectives and indicators related to (i) M/SDG, (ii) AU agenda 2063 and (iii) Paris Agreement (PA)?

I#	Indicators	DATA	LR	INT	PRA	CCS
1.1.1.1	Identification and extraction of objectives and indicators related to (renewable) Energy and Electricity under M/SDGs; African Union agenda 2063 and the Paris agreement		LR	INT		
1.1.1.2	Screening of the AfDB Energy policy, NDEA, High 5 objectives & indicators for explicit reference to and consistency with those defined for the period 2012-2021 under M/SDGs, AU agenda & the Paris agreement		LR	INT		
1.1.1.3	Opinion on the way how the Bank fits in with the trends and global objectives in the field of RE development			INT		
1.1.1.4	Opinion on the Quality of design, the Strategic importance; and the Role Played by the Energy Policy and NDEA; Perception of the specific role played by the NDEA in the field of RE			INT		
1.1.1.5	Existence of specific approach(es) by technology/cluster deriving from global or AfDB specific initiatives (Energy policy, NDEA)			INT		
1.1.1.6	Evolution of the portfolio in RE over time: is there an influence of the NDEA (paradigm break or business as usual), or another strategic document?	DATA		INT		

Please note that the following convention is used in the table above:
- DATA: information from the portfolio database
- LR: literature review
- INT: Interviews that are not performed for PRA completion or Country Case Studies
- PRA: information gathering from PRA, and their completion
- CCS: all information gathering activities performed during Country Case Studies.

4. **Initial questions present in the TOR were numbered, some displaced in the matrix, and a few of them dropped.**

An Excel file makes it possible to track all initial questions and understand how and where they were integrated into the new matrix (see sheet Initial Qs, and columns C and D for example in sheet Relevance). A few of them were displaced or merged (see sheet Other Qs).

One original question remains to be discussed, as its added value remains unclear: "How strong are synergies between and among Bank sector departments/units (e.g., energy, climate change, water resources etc.)?"

5.2.2. Pyramidal approach

The evaluation is articulated around the following overarching question "In what ways and how well has the AfDB contributed to addressing the evolving RE needs of its RMCs, within the context of their overall energy sector development objectives?"

The Pyramidal Approach includes the following building blocks, seen in ascending order in Figure 9:

Portfolio analysis - all relevant interventions funded by the Bank in RE development which may cover (i) infrastructural investments in one technology (with some examples of multi-tech approach); (ii) enhancement of the sector-specific governance, institutional support and enabling environment; and (iii) accompanying measures such as studies, technical assistance, capacity building, etc

Sector, market and technology trends (to be carried out during literature review discussed below) – Bank's assistance evolves into a broader context of a global policy, strategy and conceptual framework which influences the intervention in RE development within the African context. The emergence of RE in the Energy sector, the Bank's contribution to the evolution of RE in Africa (including in terms of corporate and sector-specific strategies) and a comparison with other majors Development financing institutions will be considered. This exercise will involve surveying other development finance institutions' publicly available information regarding their support to renewable energy programs. Such support is not only financed by development banks but also by development agencies. It will therefore be important to select examples of such support which is most relevant and comparable to the Bank's activities.

Countries with major investments in the field of RE – 10 countries will be subject to a case study capturing lending and non-lending activities in RMCs. These activities are framed by Regional integration strategy papers (RISPs) and especially Country strategy papers (CSPs). Lending activities correspond to interventions while non-lending activities are related to policy dialogue, capacity building, knowledge products and advisory. The selection of RMCs to be the subject of a case study is presented under section 5. For each case study a separate report will be prepared, as well as a synthesis report will be drafted based on case studies.

Clusters – each cluster corresponds to the main RE technology such as (i) solar, (ii) wind and (iii) hydro as per the scope of the evaluation. For each cluster, a synthesis of main findings and lessons learned against IDEV evaluation criteria and sub-criteria will be performed and recorded in Cluster evaluation reports. The cluster reports will draw on available data regarding all RE projects supported by the Bank within the ten countries chosen for the case study reports.

Technical report to inform the future AfDB's strategic framework.

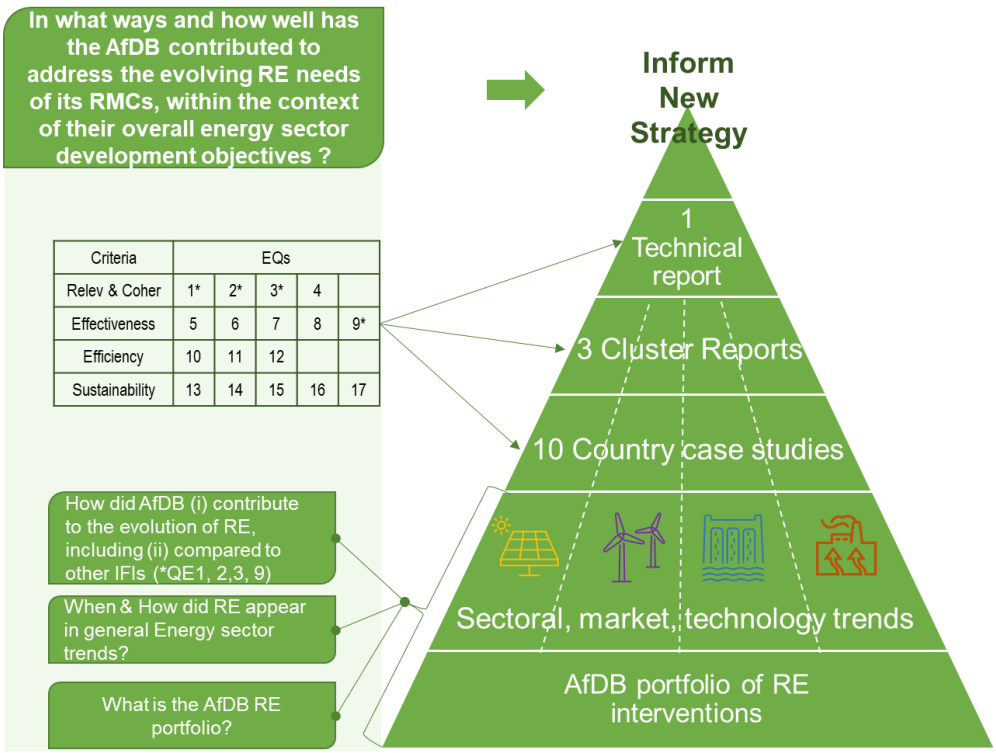


Figure 9 – Pyramidal approach (source: ADE)

Note that in ADE's original proposal, based on the TOR, the pyramidal approach proposed was based on the provision of PRAs by IDEV. However, during the inception phase, it was found that the number of PRAs available was very low and did not allow the planned approach to be carried out. Hence, the evaluation team proposed to replace the PRAs by *intervention analytical grids* for the selected interventions in the country case studies. These grids will compile all available information for all completed and almost completed interventions. More information is available in section 5.5. Intervention Analytical Grids.

Note that the number of cluster reports has been adjusted to 3 (Solar, Wind, Hydro), as explained further down in this report.

The 4 key principles in the proposed Pyramidal Approach (scoring, aggregation, triangulation and sourcing) remain. These principles are further described below:

- Scoring is used in the analysis of selected interventions in RE (Intervention analytical grids).
- Aggregation will facilitate the cluster-specific analysis and strategic thinking.
- Triangulation and sourcing are cross-cutting principles used throughout the evaluation work at each level of analysis.

Scoring

The scoring rules used by IDEV have been incorporated in the intervention analytical grids. The evaluation team is fully aware of proposed scoring methodology: the performance ratings from the IDEV Evaluation Manual (Chapter 3) have been used several times in other country and strategic evaluations supported by ADE. This is to say that the evaluation team is experienced with the type of scoring requested by the Bank.

Aggregation

The aggregation of results and scoring is necessary and useful for establishing findings and analysis at both cluster, sector and strategic levels. The aggregation will *not* consist of the arithmetic average of project assessments. The analysis will focus instead on the frequency of observations: "do all projects of the same type obtain the same results? What are the factors explaining the observed scores? Are there patterns emerging?".

Triangulation

To ensure the robustness of evaluation findings, it is essential to put in place a clear triangulation strategy. Evaluation analysis is valid if it derives from several sources of information. It requires cross-verification and demonstration of the evidence on which an assessment is based. Triangulation is a key factor in an evaluation. It entails:

- **Confirmation** – verification and comparison of information from different sources and tools to determine the extent to which the evidence reinforces or weakens itself.
- **Enrichment** – by increasing the ability to assess and make explicit the multiple factors influencing the analysis.
- **Explanation** – by enabling the evaluator to deepen and widen understanding of the analyzed question or issue.

Three levels of triangulation are envisaged for this evaluation:

- **Triangulation of evidence collected by evaluators**: the findings will result from the crossing of data collected from different sources and via various collection tools while considering the evolution of observed trends and the specificities of clusters analyzed.
- **Cross-fertilization of expertise for a multi-sector approach**: the study will be carried out by experts with different specializations in the field of renewable energy who will each have the specific technical knowledge and strategic experience, as well as be able to compare findings and forms of understanding.

Sourcing

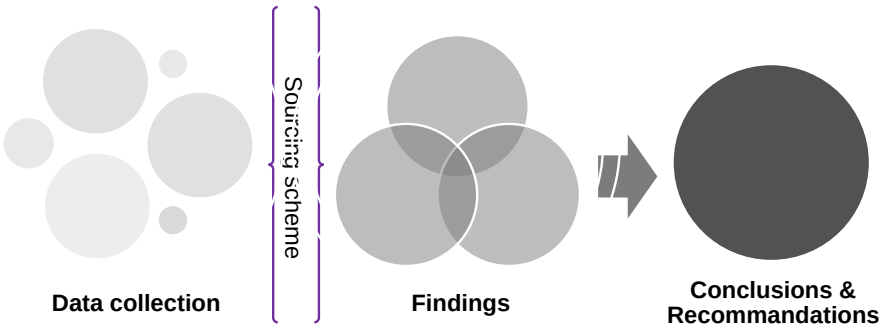


Figure 10 – Sourcing principle in pyramidal approach

The sourcing is of particular importance for an evidence-based evaluation approach. The proposed methodological setup aims to ensure traceability of argumentative chains as illustrated below. Linkages between data sources, findings and conclusions and recommendations will be established and demonstrated using a specific sourcing scheme.

From the different sources of evidence, the information will be gathered and linked to an indicator informing specific evaluation questions and/or sub-questions. This sourcing scheme includes an approach adapted from the information sources and data collection tools:

- *Regarding the **literature review***, the sourcing will be ensured by referencing all documents according to their type (Strategies, portfolio review, Report typology, etc.)
- *Regarding **real-time field consultation, observations during field visits and***, all collected data will be summarized in a systematic and harmonized manner using a common template. It will contain key messages from verbal interactions, structured against the indicators and criteria of the EQs. It will be developed during the inception phase, after discussion between IDEV and ADE regarding the draft inception report.

This approach allows full transparency and “traceability" of the information on which the assessments are based, thus making more solid the chain of reasoning on which the answer to each Evaluation Question is based. This high-performance coding of information has been formalized by ADE and is currently in use in other evaluations.

5.3. Country case studies selection

5.3.1. Selected countries

Based on the selection criteria mentioned above, the objective pursued in defining the selection was to adequately illustrate the diversity of:

- Regions,
- Country contexts in terms of access to electricity, the importance of renewables in the energy mix or their potential, obstacles posed by situations of fragility; and
- RE technologies mobilized.

Two scenarios were defined, each comprising 10 case studies. Scenario 1 included one case study each for ten selected countries; but Scenario 2, which also include one case study for nine selected countries as well as a multinational hydroelectric project (Ruzizi DRC-Rwanda-Burundi), has been chosen upon discussions with the Bank. This offers the opportunity to further analyze the regional integration dimension of RE. A detailed description of this selection can be found in Annex 3. The figure below illustrates the geographical distribution of countries chosen to be subject to a case study: **Burkina Faso, Côte d'Ivoire, DR Congo (which will cover the multinational project), Kenya, Madagascar, Morocco, Uganda, Cameroon, South Africa and Zambia**.

Figure 11 - Country case study selection

Key information is presented in the overview of the selection criteria per country below, in Table 5. All projects within the solar, geothermal, hydro and wind subsectors within each country will be taken into account. The table shows considerable variation in terms of electricity access (from 18,4% in Burkina Faso to 100% in Morocco), AfDB RE Portfolio (from UA 48,1 million in Côte d'Ivoire to UA 708,5 million in Morocco), and electricity from RE (from 5,3% in South Africa to 95% in Uganda), as examples of comparative variables. These speak to the between-country disparities mentioned in Chapter 2. A complete descriptive analysis is provided in Annex 3, which presents the extent to which the selection covers and illustrates the technologies supported by the AfDB RE portfolio, the sources and instruments of financing mobilized by the Bank as well as the strengths and weaknesses of the scenario chosen.

Table 5 – Selection criteria overview

Country	Morocco		Burkina Faso		Côte d'Ivoire		Kenya		Uganda		Madagascar		MULTI RUZIZI DRC		Cameroon		South Africa		Zambia	
Region	North		West		West		East		East		East		Central-East		Central		South		South	
Income class	LMIC		LIC		LMIC		LMIC		LIC		LIC		LIC		LMIC		UMIC		LMIC	
AfDB classification	ADB		ADF		ADB		Blend		ADF		ADF		ADF		Blend		ADB		Blend	
AfDB RE Portfolio	#	UA million	#	UA million	#	UA million	#	UA million	#	UA million	#	UA million	#	UA million	#	UA million	#	UA million	#	UA million
	9	**708,5**	**7**	**129,8**	**2**	**48,1**	**8**	**212,6**	**5**	**77,9**	**5**	**45,5**	**1**	**98,5**	**3**	**131,7**	**3**	**268,8**	**5**	**123,5**
solar	*4*	*417,1*	*4*	*94,1*	*1*	*6,6*	*1*	*13,1*							*1*	*0,5*	*2*	*227,9*	*2*	*37,2*
hydro	*2*	*234,7*			*1*	*41,5*			*3*	*74,9*	*3*	*31,0*	*1*	*98,5*	*2*	*131,2*			*3*	*86,3*
wind	*3*	*56,7*					*4*	*162,7*	*1*	*1,3*										
geothermal							*2*	*36,1*												
multi-tech																	*1*	*40,9*		
PBO			*2*	*35,0*							*1*	*13,8*								
All RE			*1*	*0,7*			*1*	*0,7*	*1*	*1,64*	*1*	*0,6*								
Electricity access (%)	100		18,4		68,5		69,7		41,3		26,9				63,5		85		43	
Electricity from RE (%)	20		16,5		34		82,3		95		35,5				52,8		5,3		95	
Fragility & conflict situation			2020-2021 MIC		*2010-2019*						*2014-2017*		*DRC & BDI 2010-2019* 2020-2021 MIC		2020-2021 MIC					
AfDB presence	CO		CO		HQ		RH		CO		CO		CO		CO		RH		CO	

5.3.2. Country selection criteria

The pyramidal approach foresees 10 Country Case Studies. The selection of the countries has been carried out during the inception phase in close collaboration with the Bank, to ensure the preparation and execution of the Country Case Studies on time and be in line as much as possible with the calendar of execution of the evaluation. The country missions are scheduled to take place between May and July 2022. These missions will be composed of IDEV staff and members of the ADE-Marge consulting team. The following selection criteria have been proposed, and the underlying available data:

Criteria	Source
Geographical spread across African regions	Portfolio
Number and size of AfDB interventions per country, and technology (S, H, W, G), in the considered period, including a view on PBO activities, and multinational interventions	Portfolio
% of current access to electricity per country, as this may influence the strategy to deploy renewables.	African Energy Portal World Bank database
% of capacity from renewable sources in the current total electricity generation	IEA
Fragility & conflict situation	World Bank: Harmonized List of Fragile Situations (covering the period 2009-2019) and List of Fragile and Conflict-affected Situations (since 2020)
Presence of the AfDB office	AfDB
Security issues (if necessary)	International SOS

The reflection on the choice of country case studies (CCS) is based on the portfolio database provided by IDEV in February 2022. The ADE team carried out a data consistency check in this database. Some information has been cleaned up and reorganized. Some categories have been "reconstituted" from several columns of the Excel file. A complete descriptive analysis is provided in Annex 3.

The analysis mainly focused on the following **qualitative information**:

- The cluster was obtained based on the following columns of the Excel file: *"Sub (sub) sector name"; " RE " and "Main source of energy"*. Thus, the following 6 clusters have been defined: C1-Hydro; C2-Solar; C2-Solar & C3-Wind; C3-Wind; C4-Geothermal; C5-PBO; C6 - All RE. Interventions in the fields of Energy Efficiency and Clean cooking were not considered in the scope of the study, they were therefore excluded from all calculations performed.
- The source of funding - based on the data in the "Company name" column
- The financial instrument - based on both the *"Financial instrument" and "FI breakdown"* columns
- The situation of fragility was captured via a dynamic approach over time instead of being limited to information referring to the year 2019. 'Fragility' here is in line with the World Bank Group's (2020) definition as "deep governance issues and state institutional weaknesses".
- Geographical references (countries, regions) and country classifications (revenues, ADB counters, etc.) have been used as they are provided.

The analysis used the following **quantitative information**:

- The *"Net loan"* amount has been retained as a reference for AfDB approvals.
- The number of projects presented in the Excel file does not entirely correspond to reality. As part of the same project, several budgetary lines can be used (depending on the sources of funding, the types of instruments used, the timeframe of the intervention, etc.). At this stage, the number of projects presented corresponds to the source Database. Il could be further reworked for countries subject to case studies.

Some information could not be used because of its non-systematicity, non-consistency and/or incompleteness, specifically the information corresponding to the following headings (columns of the Excel file):

- "Type of project"
- Amounts relating to the Total project cost – they do not have a unit/currency (UA, USD, EUR?)
- "Phases"
- "Type of investments"
- "Planned project completion"

Key data for the choice of CCS are the rates of progress/maturity of the interventions. At the time of analysis, the database did not provide information on the disbursement rate. The proxy used is the status of the project (approved, ongoing, completed), but this information is probably not very up to date.

5.3.3. Interventions selection in each of the selected countries

As there is a limited number of interventions in most of the 10 countries selected, all interventions will be taken into account in the country case studies reports. The list of interventions selected in each of the 10 countries is presented in the table below, with a total of 38 interventions.

However,

- there are important differences in the number of interventions across countries, with some countries such as Kenya and Morocco having a high number of interventions.
- little or no documentation is available for interventions that have just started or have even been dropped or abandoned, according to the portfolio database.

Considering this, in each of the 10 countries, the focus will be on interventions which are either completed or almost completed (in bold in the table below). For these, intervention analytical grids will be completed based on available project documentation and interviews, allowing to understand the performance and sustainability of AfDB's operations in the field of RE. This exercise is further described in detail in section 5.5.

For interventions that were recently approved, that were dropped or abandoned (not in bold in the table below), the analysis will focus more on the strategic lessons that can be learned, without completing the detailed intervention analytical grids.

This approach allows to take the most out of the resources available for the evaluation, especially in the countries having an important number of interventions.

Annex 4 presents an overview of the selected interventions, including the status on the available documentation and execution level of each intervention.

Burkina Faso 	✓ Burkina Faso Green Mini-Grid Country Programme - Enabling Environment (GMG Support Programme #4) ✓ Construction of mini-grids powered by solar systems and the deployment of stand-alone domestic solar kits (Programme « Desert to Power » - Yeleen Rural Electrification Project) ✓ Construction of a 26.8 MWp solar PV power plan (Windiga Solar Power - PPG)
Cameroon 	✓ **Construction of a hydroelectric plant of 420 MW (Nachtigal Hydro Power Project)** ✓ **Construction of a 72 MW solar PV power plant (JCM Solar PV - PPG)**
Cote d'Ivoire 	✓ **Deployment and maintenance of Solar Home System (SHS) kits composed of solar panels and appliances to households through 3-year rent-to-own contracts (Zola Energy CI Pay-as-you-go Solar Home Systems – PCG)** ✓ Operation and transfer of a 44 MW hydroelectric plant and a 3.5 km transmission line and substation to evacuate the power generated onto an existing transmission line (SINGROBO 44 MW HYDRO POWER PROJECT)
DRC 	✓ DRC Green Mini-Grid Country Programme - Enabling Environment (GMG Country Package #5) ✓ **Hydroelectric Power Plants Project in North Kivu Province (Nord-Kivu HPP)** ✓ Project to Support Governance and Improvement of the Electricity System (PAGASE) ✓ **Multinational Inga Site Development and Electricity Access Support Project (PASEL/Hydro Power Project Inga III, Preparatory Phase)**

	✓ Construction of a run-of-river dam straddling the Ruzizi River between the DRC and Rwanda, as well as a 147 MW power plant and distribution station (Ruzizi III - DRC)
Kenya 	✓ **Development and construction of a 300 MW wind farm (Lake Turkana Wind Power Project).** ✓ Construction and operation of a 35MW geothermal power plant, located in the Menengai geothermal field (Quantum Power Menengai 35 Mw Geothermal IPP) ✓ Construction of a 50 MWp (40 MWac net capacity) solar PV power project (KOPERE 40 MW SOLAR PV IPP) ✓ **Construction of a 7.8 MW run-of-the-river Small Hydro Power Project (Mutunguru 20 MW HPP (SEFA PPG))** ✓ Scaling-Up Renewable Energy Program (SREP): Olkaria VI Geothermal Power Plant ✓ Develop the Menengai geothermal steam field to produce enough steam for the construction of 400 MW power generation facilities by the private sector (TGDC Menengai 105 MW IPP PRG)
Madagascar 	✓ Construction of 200MW hydroelectric power plant, expected to produce approximately 1,570 GWh per year (PROJET DE LA CENTRALE HYDROÉLECTRIQUE DE SAHOFIKA–GPR FAD) ✓ **Project Preparation Grant for constructing a renewable energy power generation complex on Nosy Be Island through a public-private partnership (Renewable energy project in Nosy-Be (pre-investment activities for a hybrid renewable energy project) PPG)**
Morocco 	✓ Wind farm construction, operation and maintenance of 70MW installed power, to fall under the integrated wind project implemented by ONEE, the national electricity utility (PIEHER - PARC ÉOLIEN DE TANGER II) ✓ **Construction of storage hydroelectric plant of 350 MW PIEHER- STEP D'ABDELMOUMEN** ✓ **Solar complex in Morocco (Noor Ouarzazate complex). (COMPLEXE SOLAIRE OUARZAZATE - PHASE I - CENTRALE NOOR I and COMPLEXE SOLAIRE OUARZAZATE - PHASE II - CENTRALE NOOR II - COMPLEXE SOLAIRE OUARZAZATE - PHASE II - CENTRALE NOOR III)** ✓ Hydroelectric complex including one hydro plant with installed capacity of 45 MW and another with 125 MW (PIEHER - Complexe hydroélectrique M'DEZ –EL MENZEL) ✓ Phase 1 of a solar meja-project, which will have a capacity of 800 MW split between concentrated solar power and photovoltaic (COMPLEXE SOLAIRE MIDELT - PHASE I - CENTRALE NOORM I) ✓ Development of a Wind Farm to include 40 wind turbines and a total capacity of 120 MW (Jbel-Sendoug (Khalladi) Wind Project (PPG)) ✓ **Construction of a wind farm to add 250 MW additional capacity to the grid (PIEHER - Parc Eolien de KOUDIA EL BAIDA)** ✓ Support to (i) improve energy security; (ii) increase the share of renewable and clean energies in the energy; and (iii) ensure access to energy for rural areas by electrifying 86,000 households (PROGRAMME INTEGRE EOLIEN, HYDRAULIQUE & ELECTRIFICATION RURALE)
South Africa 	✓ **Concentrated Solar Power plant design, construction and operation, with a planned capacity of 100 MW (XINA SOLAR ONE PROJECT)**

	✓ Construction of a 100 MW concentrated solar power plant to act as an independent power producer and feed into the national renewable energy independent power producers program (Redstone 100 MW CSP IPP) ✓ The development of 360 MW storage systems at various distribution sites across the country operated by the national electricity utility (ESKOM DISTRIBUTED BATTERY ENERGY STORAGE PROGRAMME)
Uganda 	✓ **Construction of 41MW hydroelectric power plant (ACHWA II HYDROPOWER PLANT)** ✓ Project Preparation Grant to map wind resources for optimal windfarm location and construct a 20MW pilot windfarm (Wind Resource Map and Pilot-Wind Power Development Program (2*10MW)) ✓ **Restructuring the project debt of a 250 MW hydropower facility developed through a build-own-operate-transfer model (BUJAGALI ENERGY LIMITED)** ✓ Development of an off-grid electrification master plan for the islands on Lake Victoria and pilot net-metering using grid-tie PV solar systems (DECENTRALIZED RENEWABLES DEVELOPMENT PROGRAM)
Zambia 	✓ **Construction, operation and maintenance of a 120MW hydro power plant and a transmission line to evacuate the power to substations (ITEZHI-TEZHI HYDROPOWER PROJECT)** ✓ Rehabilitation of the Kariba Dam infrastructure through reshaping the plunge pool and rehabilitating the spillway, to dissipate energy from the spilled water. The dam is a source of 1,626 MW of electricity to both Zambia and Zimbabwe (KARIBA DAM REHABILITATION) ✓ Development of framework to catalyze private investment in the RE sector in Zambia as well as providing debt financing to selected projects (Renewable Energy Financing Framework) ✓ Programme intended to finance small-scale RE projects and diversify the country's electricity supply (Zambia RE IPP Programme)

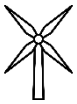
5.4. Interventions selection for cluster reports

Cluster evaluations are designed to provide insight into the following specific sub-sectors: hydro, solar and wind. Note that geothermal related interventions will be the object of a note to be used an input for the technical report, given the low number of interventions available for analysis.

Cluster evaluations will be performed on a selection of completed or almost completed interventions of the portfolio, present in the 10 selected countries, or in other countries, proposed by IDEV. The complete list of selected interventions for cluster reports presented in the table below, with a total of 24 interventions.

The aim of the selection is to identify interventions that could bring interesting lessons learned. A priori, this requires each intervention 1) to be sufficiently advanced in its execution rate, 2) to benefit from sufficient available documentary evidence.

Annex 4 presents an overview of the selected interventions for the cluster reports, including technology type(s), available documentation, current status of each intervention and total project cost. This includes interventions in the 10 selected countries and a list of other interventions proposed by IDEV, including intervention out of the initial temporal scope of the evaluation, in order to ensure the 2 points mentioned above.

Wind 	✓ CABEOLICA WIND POWER (Cape Verde) ✓ ASSELA WIND FARM – SCALING-UP RENEWABLE ENERGY PROGRAM (Ethiopia) ✓ LAKE TURKANA WIND POWER PROJECT (Kenya) ✓ PIEHER - Parc Eolien de KOUDIA EL BAIDA (Morocco) ✓ ESKOM RENEWABLE ENERGY - SERE WIND (South Africa) ✓ PROGRAMME INTEGRE EOLIEN, HYDRAULIQUE & ELECTRIFICATION RURALE (Morocco)
Hydro 	✓ NACHTIGAL HYDRO POWER PROJECT (Cameroon) ✓ PROJET DE REHABILITATION DES CENTRALES HYDROELECTRIQUES D'INGA ET DU RESEAU DE DISTRIBUTION DE KINSHASA (DRC) ✓ Nord-Kivu HPP (DRC) ✓ Mutunguru 20 MW HPP (SEFA PPG) (Kenya) ✓ Renewable energy project in Nosy-Be (pre-investment activities for a hybrid renewable energy project) PPG (Madagascar) ✓ SAHANIVOTRY SMALL HYDRO POWER (Madagascar) ✓ PROJET D'APPUI A LA PROMOTION DES ENERGIES RENOUVELABLES (Mali) ✓ PIEHER- STEP D'ABDELMOUMEN (Solar) ✓ ACHWA II HYDROPOWER PLANT (Uganda) ✓ BUSERUKA HYDROPOWER PROJECT (Uganda) ✓ ITEZHI-TEZHI HYDROPOWER PROJECT (Zambia)
Solar 	✓ JCM Solar PV (PPG) (Cameroon) ✓ Zola Energy CI Pay-as-you-go Solar Home Systems – PCG (Cote d'Ivoire) ✓ Renewable energy project in Nosy-Be (pre-investment activities for a hybrid renewable energy project) PPG (Madagascar) ✓ PROJET D'APPUI A LA PROMOTION DES ENERGIES RENOUVELABLES (Mali) ✓ CENTRALE THERMO-SOLAIRE AIN BENI MATHAR (Morocco) ✓ COMPLEXE SOLAIRE OUARZAZATE - CENTRALE NOOR (Morocco) ✓ XINA SOLAR ONE PROJECT (South Africa) ✓ SCALING-UP RENEWABLE ENERGY PROGRM-GRANT (Tanzania) ✓ Renewable energy project in Nosy-Be (pre-investment activities for a hybrid renewable energy project) PPG (Madagascar)
Geothermal 	✓ GEOTHERMAL EXPLORATORY DRILLING PROJECT (Djibouti) ✓ MENENGAI GEOTHERMAL DEVELOPMENT PROJECT (Kenya) ✓ SCALING-UP RENEWABLE ENERGY PROGRM-GRANT (Tanzania)

Considering the limited number of interventions in the geothermal cluster, no cluster report will be produced for this technology.

A global view is presented, per technology, in the table below, in order to ensure a reasonable balance between the technologies analyzed:

Technology	Number of interventions per technology	%
Solar	7	26%
Hydro	11	41%
Wind	6	22%
Geothermal	3	11%

Total	**27[3]**	**100%**

Cluster analysis will be performed based on existing documentary evidence, complemented by either intervention analytical grids completed during the Country Case Studies by ADE-MARGE, or by IDEV/ADE-Marge for interventions which are not covered during the Country Case Studies. The repartition of work is further detailed in Annex 4.

5.5. Data collection tools

The approach for answering the evaluation questions and sub-questions rests on a combination of tools to collect evidence and data. The choice of tools allows the crosschecking of evidence collected to ensure validity and avoid bias. Figure 12 illustrates how the different sources of evidence relate to one another.

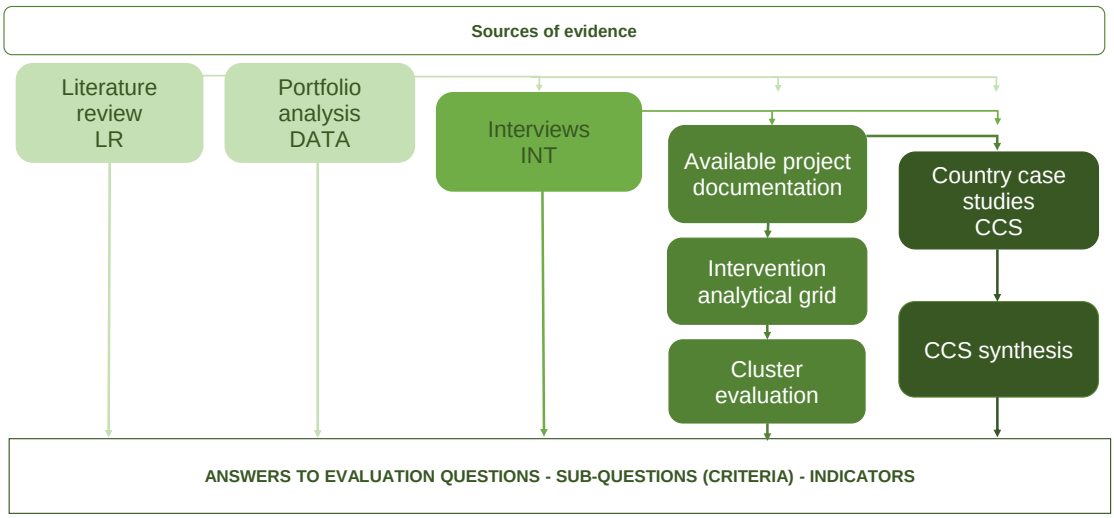


Figure 12 – Data sources

Literature review

The Concept Note highlighted the need to establish an overview of the development of RE and emerging trends. For that purpose, the evaluation team will handle many documents of different types, perspectives, importance and meaning for this evaluation. These include notably: (i) policy frameworks of international institutions, (ii) global development or sector targeted strategies, (iii) donors' regional or country strategies, (iv) regional or national development strategies, plans, laws and regulations, (v) project/program related documentation, (vi) evaluation studies, literature on the development of RE produced by other development partners as well as research institutes/academia, etc.

- **Literature Review (LR)**: identify emerging trends and lessons in the development of RE, while capturing and comparing AfDB's policy framework evolution. This is not the same as the Literature and policy review outlined as a standalone deliverable in the next section.

- **Past Evaluation** studies (PEVAL): a review of PEVAL conducted by IDEV as well as other institutions if applicable.

[3] There is a total of 24 selected interventions. Some of the selected interventions cover more than one technology. In these cases, the focus on a single technology will be defined during the cluster evaluations.

- **Knowledge Products** (KNOWL): these activities and products will be identified, collected, and analyzed during the country case studies. Special attention will be drawn to the role of the policy dialogue (its objectives, dedicated financial, technical and human resources, its achievements in terms of influence on policy and sector reforms, etc.).

- **AfDB's strategic and operational framework in specific RMCs**: This documentation includes Country Strategy Papers (CSP, selected for a case study) and associated documents (quality assessment at the entry, mid-term and end-term reviews, country portfolio performance reviews, etc.) as well as project documentation (appraisal reports, loan agreements, grant documentation, monitoring and mid-term review, completion reports).

This analysis will be performed according to the outline of the evaluation matrix. The documentary analysis will contribute to the constitution of several sources of evidence, as described in the evaluation matrix. The list of documents reviewed during the inception phase is available in Annex 5.

Portfolio review

Portfolio analysis will be conducted by IDEV and used as a source of evidence by the evaluation team. The latter can provide additional analysis on specific themes, depending on the availability of basic data and access granted to it. The portfolio database (version of February 2022) has been used to select the 10 country case studies during the inception phase, as described in section 5.3.

Individual and Collective Interviews

Interviews will be organized with relevant stakeholders at the different identified levels:

- **Corporate** level: including the Energy Complex AfDB and task managers at AfDB HQ.
- **Country** and **intervention** levels (interviews integrated into the case studies): including AfDB Country offices staff, Country Government officials (including local), Executive agency, PM staff, Sector Regulators, Utilities, Private sector, Civil society organizations and other TFPs.

The evaluation matrix available in Annex 2 includes an overview of the targeted actors for each indicator and level of analysis. Interview questions will be prepared and adapted to each interviewee's context and include themes derived from the EQs, criteria and indicators, as well as hypotheses, informational gaps, and specific issues to be addressed, as identified in the literature, portfolio and project reviews. An interview guide is available in Annex 6 for each level of data collection, which also includes an interview protocol.

Key themes from interview guides could be shared with stakeholders in advance to ensure a higher quality discussion and guarantee a faster sharing of data and other relevant resources. Strategic interviews are foreseen and will only be organized remotely with selected relevant stakeholders agreed upon in advance, and they will primarily contribute to the literature and policy review. Interviews within case studies will be implemented face-to-face.

Intervention Analytical Grids

This assessment will be conducted jointly by ADE-Marge (interventions for country case studies reports, and some for the cluster report) and IDEV (some interventions for cluster reports) for all selected interventions that are completed or almost completed. These will be completed using available project documentation (including PAR, PCR, PCREN, XSR, XSR Review, PRAs, etc) as key sources of evidence for case studies and further cluster analysis. This will mainly help (i) understanding

the performance (positive/negative results) and sustainability of AfDB's operations in the field of RE, by their logical model (ii) identifying success and failure factors and (iii) drawing key lessons and recommendations for improvement. The four main criteria are namely: relevance, effectiveness, efficiency and sustainability. All activities intended and implemented in the framework of selected projects will be analyzed, in their specific socio-economic and political context.

The proposed structure for the intervention analytical grid is available in Annex 7. This will prepare the country's missions, by reconstructing the most up-to-date intervention logic, aligned with the evaluation framework. According to the level of completeness of each intervention analytical grid, the ADE-Marge evaluation team will complement the review by updating the arguments with the latest available qualitative and quantitative information collected under the 10 country case studies, including (i) interviews at intervention level and (ii) field visits in case studies, as country missions will allow targeted interventions to be visited and thus make a first cross-comparison of the information collected by IDEV's team with the observed realities in the field.

Country case studies

The purpose of country case studies is to approach AfDB's interventions in their national context with the main renewable energy sector stakeholders involved in physical infrastructure development, capacity building, awareness creation and reforms. Case studies have a particular role in understanding the relative success of interventions and have strong learning potential. 10 countries have been selected during the inception phase, as described in detail in section 5.3.

The implementation of the case studies is based on the following tools:

- **Contextual analysis**: case studies will be thoroughly prepared by specific documentary reviews. For each case study, a preliminary contextual analysis will be performed. This covers the specific country's strategy and policy towards renewable energy, with a review of the CSPs established with the AfDB and the country's energy transition strategy. Relevant elements relating to the different criteria or performance indicators of the evaluation matrix will be considered.
- **Mapping of key stakeholders of the renewable energy sector** will be provided by IDEV to ease the organization of interviews/focus groups. This mapping will include a brief description of the governance mechanism in play within the sector (distribution of responsibilities and roles – ministries, agencies, utilities – energy suppliers, regulation authorities, the private sector, consumer organizations, other civil society representatives, etc.)
- **Review of the Bank Group's knowledge products**, including non-lending technical assistance, economic and sectoral work as well as policy dialogue that supports the renewable energy sector in the country.
- **Interviews**: the evaluation team will conduct interviews with representatives of different stakeholders including executing agencies, the Bank's country office, development partners involved in the renewable energy sector, independent renewable energy suppliers, regulators, and related private sector institutions etc. These interviews will be semi-structured and adapted according to the interviewees and missing information. They will be both backward- and forward-looking. Where useful, group interviews will also be conducted.
- **Field visits in a case of infrastructure development/equipment provision:** these visits will be framed by a targeted "visit protocol", including quality and sustainability aspects, testimonials from final beneficiaries and visual materials to be collected.

Note on country field missions

Field missions will be carried out in the 10 country case studies by experts in order to deploy the above-mentioned tools. However, the format of these missions (presential/remote) might be adapted accordingly to the size portfolio of interventions available in each country. Remote missions might be envisaged for countries with a limited portfolio and/or with few completed projects, in order to maximize the efficiency of the resources available for the evaluation.

This will allow the core team to support remotely the experts during interviews at the strategic level, with AfDB country staff and government officials, notably for the case of Morocco, Kenya, South Africa and Uganda.

Cluster reports

Cluster evaluations are framed by the evaluation matrix and respective evaluation questions. They cover sub-questions regarding relevance and coherence, elements of effectiveness at a project level and all sub-questions on efficiency and sustainability.

The main input for the cluster reports will be the intervention analytical grids, built based on existing PRAs and other available project documentation. These will be prepared as follows:

- ADE-Marge will prepare these for completed or almost completed interventions analyzed in the context of the country case studies, and for some interventions for the cluster report.
- IDEV will prepare these for some other interventions selected for the cluster reports. The repartition of work is further detailed in Annex 4.

5.6. Analytical process and deliverables

The figure below illustrates the linkages between the main data sources, key information collection tools and analytical approaches and deliverables, which are presented in this section.

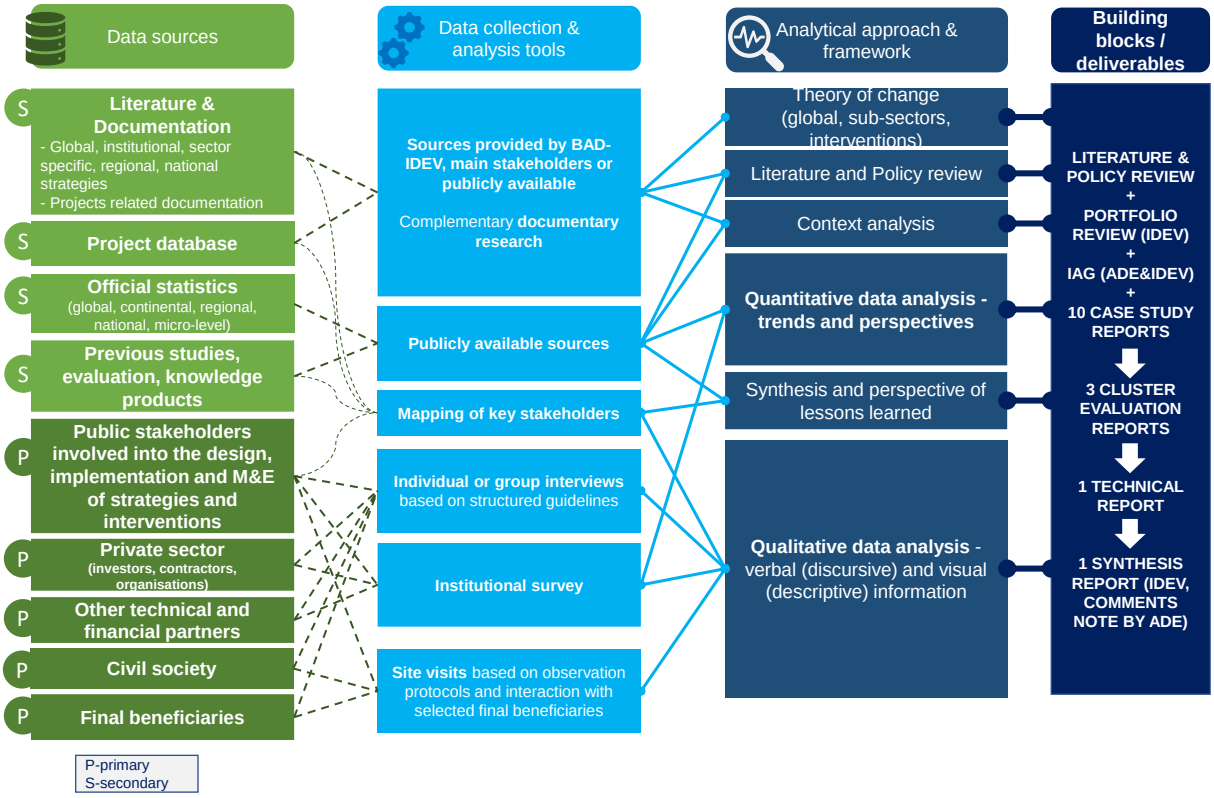


Figure 13 – Data collection and analysis approach

The proposed Theory of Change-driven Pyramidal Approach builds on a strong articulation of the interventions, cluster and strategic levels while considering the contextual, policy, governance and organizational influences on the Bank's performance at each of those levels and intends to feed into several building blocks and deliverables:

- **Literature and policy review:** based on a documentary review and interviews with strategic stakeholders, the review will help understand the policy discourse and key trends in assistance to renewable energy in Africa. A comparative and critical analysis of AfDB's role and place in the field of RE versus major global and continental donors will be performed. This review will facilitate the refining of the (sub)-sector theory of change and evaluation questions. Annex 8 presents the Literature and policy review plan, including a list of documents to be reviewed.
- **Country case study reports (10):** these will further explore policy and strategic issues, analyze the influence of specific contextual elements, capture the performance of interventions and understand factors of success and failure in assisting RMCs for the development of renewables (policies, governance, investments in infrastructure), and explore the comprehensiveness and value-added of the Bank's approach. These reports will be structured according to Evaluation Questions (EQs). Annex 9 presents the Country case study report plan.
- **Cluster evaluation reports (3):** Interventions in RE sub-sectors will be analyzed. Cluster evaluation reports will include a targeted analysis of the sector-specific context and challenges during the evaluation. Results will derive from relevant intervention analytical grids and country case study

reports. These reports will be structured according to Evaluation Questions (EQs). Annex 10 presents the Cluster report plan.

- **Technical report:** The Technical Report will offer a comprehensive analysis based on the articulation of the above-mentioned deliverables (1 to 3). An examination of the overall Theory of Change will be conducted as well as an analysis of the specific strategic issues largely relating to AfDB's strategic and programmatic approach. Answers to the EQs will be drafted, clearly stating the key messages, supportive evidence, and triangulated sources. The reasoning linking findings, conclusions and recommendations will be made explicit.
- **Note on the synthesis report -** the synthesis report, to be prepared by IDEV, will be circulated and constructive comments will be provided by selected evaluation team members.

5.7. Risks and limitations

This evaluation is of major interest since it will help to shape the future of RE strategy and project cycle delivery, in line with one of 5 top priorities of the Bank. However, it is quite challenging. Below, the major challenges and risks are presented with their mitigation strategies.

Table 6 – Main challenges of the evaluation and mitigation strategy

Challenges	Mitigation strategy
Management structure and short timeline: coordinate and conduct 10 case studies and do synthesis in a short period (6.5 months)	The evaluation team is sufficiently large to conduct all the case studies (partly simultaneously). A long inception phase has been proposed to ensure coherence and effectiveness in the evaluation process. The Team Leader supervises international experts who supervise the national experts. Finally, ADE's experience in conducting complex evaluations and quality assurance processes are strong guarantees for the delivery of a quality evaluation that respects the deadlines.
The requirement to provide analysis at different levels: project, sector (geothermal, hydro, solar and wind), country and corporate level.	We propose to implement a "pyramidal approach" that allows us to collect, analyze and synthesize information coherently. This approach has been used successfully by ADE in many strategic studies. The approach has been specifically updated for the present study (see section 5.2.2).
Rationalize the large and non-uniform documentary bases produced in the previous evaluations and the PRAs carried out by the IDEV team, for the purpose of this evaluation.	ADE is familiar with the structure of AFDB evaluation products. ADE has developed tools to be used in all strategic evaluations conducted for IDEV. This knowledge of ADE of the products of the IDEV evaluation will ensure good coordination with the IDEV team that has carried out the different assessments.
Lack of PRAs for a significant number of interventions, due to the recent nature of these	ADE proposes to focus on the completed or almost completed interventions in the 10 countries selected. For these, intervention analytical grids will be prepared. The remaining interventions will also be included in the analysis, but at a strategic level only, through interviews and documentary review. The approach has been further detailed in section 5.3.3
Differences in the size of the portfolio across the selected 10 countries	ADE proposes to adapt the format the field missions (presential/remote) accordingly to the size portfolio of interventions available in each country. Remote missions might be envisaged for countries with a limited portfolio and with few completed projects, in order to balance the resources available for the evaluation. This will allow the core team to support remotely the experts during interviews at strategic level, with AfDB country staff and government officials, in order to ensure the quality of data collected.
Synthesis of 10 case studies: the challenge is to extract the most relevant strategic messages	The proposed work plan foresees sufficient time during the inception phase to be well organized from the very start. A standard coding scheme for the 10 case studies will be used. Moreover, the evaluation team will reflect on the use of appropriate result

	visualization tools. Finally, the TL, core team and quality assurance experts are experienced in conducting such synthesis work.
Sanitary context (Covid pandemic) and accessibility to country case studies	Our proposal assumes accessibility to the country's case studies and sites. The choice of experts for the case studies makes it possible to cover a large part of the countries with high-level national experts, which limits the risk of being constrained by border closures for health reasons. Nevertheless, since the beginning of the COVID crisis, ADE has learned to quickly adjust to the constraints of movement and accessibility to sites. ADE has developed specific approaches to conduct data collection either completely remotely or partially remotely. If necessary, in accordance with IDEV staff, a remote or semi-remote country case study could be carried out.

6. Stakeholder engagement, evaluation team & quality assurance

6.1. Stakeholder engagement and communication strategy

The evaluation team will conduct a participatory approach to share information, compare points of view, develop a common framework of understanding, and strengthen ownership of the evaluation process by the various stakeholders.

The following actions will contribute to strengthening this involvement during the data collection phase:

- At the beginning of the collection phase, the team will present to AfDB officials in each country subject to a case study the detailed approach to conducting the investigations (which will have been sent beforehand). This presentation will be an opportunity to gather suggestions about the interlocutors to be met.
- In-depth interviews will take place with the various executives of the AfDB-Country Offices. In addition, as far as possible, focus groups bringing together certain members of the AfDB, focused on key themes will be organized. These two modes of interaction will contribute to fueling the reflections of the evaluation team on the effectiveness, efficiency and impact of AfDB interventions in the field of RE.
- An in-country workshop closing the field mission to validate and discuss the preliminary findings from the mission and lessons learned will be an opportunity to allow all the stakeholders invited to react to the results of the evaluation and to participate actively in the reflection on perspectives and recommendations of the study. At this stage, it will not be a question of presenting definitive conclusions but of opening a discussion with the stakeholders to maximize their participation in the process as well as the ownership of lessons learned.

In addition, during the synthesis phase, a discussion session of the draft technical report will be organized. This teleconference meeting will validate the analyses carried out and discuss the relevance of the conclusions and recommendations. It is based on this discussion and other comments received elsewhere that the final technical report will be prepared.

The involvement of other important categories of stakeholders in the evaluation exercise will be carried out mainly through visits to the sites of the interventions selected for a detailed analysis during the country case studies if conditions are suitable. These visits will make it possible to conduct interviews and to gather the points of view of the beneficiaries, the structures implementing the projects (if applicable), the organizations of the civil society or stakeholders from other TFPs. These interactions will make it possible to address the questions of the relevance, effectiveness, and sustainability of the interventions.

The following table presents the broader evaluation stakeholder Matrix.

Table 7 – Stakeholder Matrix: Evaluation of the Bank's Support for Renewable Energy (2012-2021

No.	Stakeholder	Activity	Tools	Engagement Tools
AfDB				
1	The Board	• Evaluation launch meeting • Share inception note & Summary report • Presentation to CODE	Meetings Email, Summary Report (SR), CODE Presentation	Virtual meetings (Zoom), Outlook (emails)
2	VP Power, Energy, Climate Change and Green Growth (PEVP)	• Initial consultations • Share inception note, approach paper, and technical report	Evaluation Reference Group (ERG) Meetings, Email, SR, CODE Presentation	Virtual meetings (MS Teams /Zoom), MS Teams for documents, Outlook
3	Renewable Energy and Energy Efficiency Department (PERN), Power sector managers at Regional offices	• Evaluation Launch meeting. • Inception note, approach paper, technical report & summary report • Information collection • Interviews • Validation of deliverables • Management response • Presentation to CODE	ERG Meetings, Email, Interviews, Inception Report (IR), Country case studies, Technical Report (TR), SR, Knowledge Product (K-product), Knowledge event (K-event)	Teams for docs, virtual meetings, Outlook, phone calls (Skype/Teams), Website, Webinar
4	Bank Depts: PESR, FIRM, PERN, ECNR, PICU, PEVP, SNOQ, BDEV	• Information collection • Evaluation report sharing & Knowledge event	ERG Meetings, Email IR, TR, SR, K-product, K-event	Outlook, virtual meetings, Website Webinar
5	RE Task managers HQ, Country Offices, Regional offices	• Information collection • Knowledge event & Evaluation report sharing	Email, Interviews, Meetings, IR, Country case studies, TR, SR, K-product K-event	Outlook, Virtual Meetings, Website Webinar
Case Study RMCs				
6	RE (geothermal, hydro, solar, and wind) Government ministries (Energy, Mineral, natural resources, Finance) and Executive agencies, Sector Regulators	• Information collection • Evaluation report sharing & Knowledge event	Interviews Email exchange SR, K-product, K-event	Physical + Virtual meetings, Outlook, Website, Webinar
7	RE Project Mgt. staff	• Information collection • Evaluation report sharing & Knowledge event	Interviews, focus group discussions (FGDs), Email, SR, K-Event	Physical + Virtual meetings, Outlook, phone calls, Website, Webinar
8	Utilities – state and independent energy suppliers, RE Private sector	• Information collection • Evaluation report sharing	Interviews, FGDs, SR, K-Event	Physical + Virtual meetings, phone calls, Website
9	Technical and Financial Partners	• Information collection	Interviews, SR, K-Event	Virtual meetings, Outlook, phone calls, Website, Webinar

No.	Stakeholder	Activity	Tools	Engagement Tools
	(TFPs), UN (UNDP, UNEP)	• Evaluation report sharing & Knowledge event		
10	Regional RE NGOs & CSOs (e.g., CARE, Power for All, Sustainable Energy for All, ACRA, SNV, Climate Action Network)	• Information collection • Evaluation report sharing & Knowledge event	Interviews, FGDs News release, SR, K-Event	Physical+ Virtual meetings, Outlook, phone calls, Website, Webinar, Twitter
Others				
11	RE Universities/Think Tanks/ CSOs, Media	• Evaluation report sharing and other KM products	News release, SR, K-Event	Website, Webinar, Twitter, RE forums
12	EvalPartners	• Evaluation report sharing and other KM products	News release, SR, K-Event	Website, Webinar, Twitter, RE forums
13	Other MDBs, African Union, bilateral agencies, UNEP	• Knowledge event & Evaluation Report sharing and other KM products	News release, SR, K-Event	Website, Webinar, Twitter, RE forums

Source: IDEV

6.2. Organization of the Evaluation team

This evaluation includes three levels of analysis that will successively feed the next one:

- Case studies in 10 selected countries, to gather information at the Bank's project level,
- Three thematic cluster evaluations, to synthesize technical findings on renewable energy sub-sectors: (1) Hydropower, (2) Solar and (3) Wind.
- An encompassing technical and strategic evaluation of the renewable energy sector in Africa.

As shown in Figure 14 below, the team members will be involved in the evaluation at different levels, to make the most of each experience, expertise (thematic and geographical) and, very importantly, availability to ensure the best teamwork and quality of deliverables. The organization of the team includes a clear distribution of responsibilities and tasks, which is summarized below. The distribution of the tasks made it possible to estimate the number of days per expert to build the financial proposal.

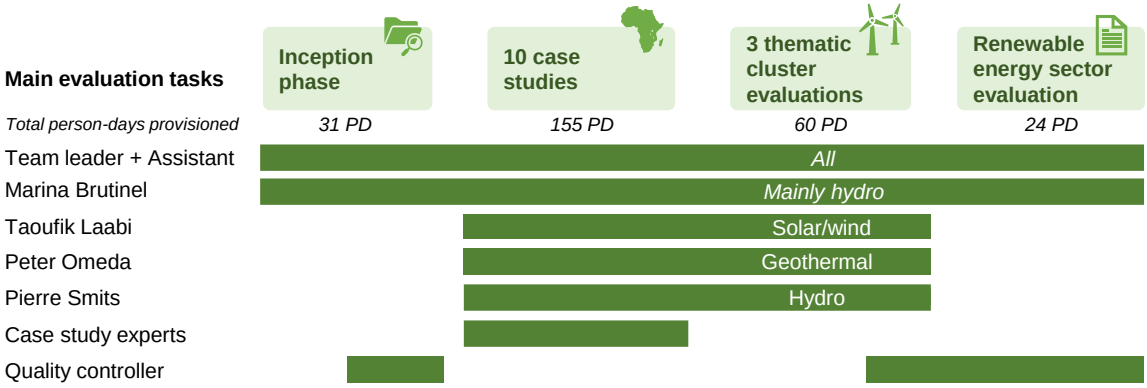


Figure 14 – Distribution of main evaluation tasks

A Team Leader involved throughout the evaluation. The philosophy of the team composition is to have a Team Leader, **Jean-Yves Saliez**, with strong leadership and energy sector experience, managing the entire process, supported by two professional ADE evaluators, **Jean-Marie Wathelet** and **Bruna Almeida.**

The mandate of the team leader and associate will be as follows:

- Organize the work throughout the evaluation process and ensure the distribution of tasks between evaluation team members.
- Coordinate the experts and the different contributions: an individualized follow-up of the contributions of each of the experts will be ensured, as well as verification of the coherence and quality of the case study and cluster evaluation reports offered by the various members of the team, to ensure the maintenance of a global vision of the evaluation.

More specifically, the Team Leader, assisted by the in-house ADE evaluation experts, will play a structuring role at the different stages of the study:

- *Inception phase:* analysis of the Theory of Change, structuring of Evaluation Questions, collection of information and distribution of documentation to experts, guiding the development of data collection and methodological tools, integration of their contributions after proofreading, validation and deepening of the findings.
- *Data collection and analysis phase:* coordination of investigations conducted in all case study countries, organization of team meetings, validation of mission programs and joint work, cross-analysis of results. The team leader himself will be in charge of one case study.
- *Reporting phase:* contribution to the cluster evaluation reports, with the thematic cluster experts, drafting of the sector evaluation report, with answers to Evaluation Questions, and formulation of

conclusions and recommendations based on the elements proposed by each cluster evaluation and a cross-sectional analysis of the answers to the Evaluation Questions.

Senior experts. The Team Leader will further be supported throughout the study by two senior experts with extensive experience in the energy sector, evaluation and the AfDB, **Taoufik Laabi** and **Marina Brutinel**. In addition to carrying out case studies and contributing to/leading cluster analysis, they will take part in the documentary analysis (*inception phase*) and the final sector evaluation drafting (*reporting*), according to their respective availabilities and specific expertise.

Thematic cluster and case study experts. Each cluster will be coordinated by a sectorial expert with international experience in the specific field: **Taoufik Laabi** for solar and wind, **Peter Omenda** for geothermal and **Pierre Smits** for hydropower. They will be in charge of the corresponding cluster evaluation synthesis report that will feed into the sector technical report and Evaluations Questions, following the structure of the study established during the inception phase. More specifically:

- At each stage, the experts will contribute in line with the instructions of the Team Leader.
- They will carry out revision and proofreading of the different deliverables, contributing to the feeding of the global analysis produced by the team.

All international experts involved in the evaluation will be in charge of one or two case studies. **Case study experts** will also complement the team, to conduct 10 case studies in (quasi)-parallel. Case studies will be implemented by national and/or international experts with expertise in the country and the specific field. Several experts were already identified within the extended networks of ADE and MARGE but shall be confirmed following the selection of case study countries. If the expert in charge of a country case study is not a resident from this area, he/she will be assisted by local experts to facilitate contact with relevant stakeholders.

Furthermore, for the good conduct of case studies and to ensure an optimal contribution to the cluster analysis, exchange times will be organized for all members of the team: work sessions will be organized during the field mission to cross-check the data collected by the different team members and feed into the overall analysis.

Support functions. The Team Leader will be supported throughout the study by an experienced ADE quality controller, **Monika Beck**. She will be responsible for the quality control system during the evaluation stages (see section 6.3).

Finally, the team will benefit throughout the process from the **standard services provided by ADE to the evaluation teams**. ADE has more than 40 employees, including many internal analysts, a financial department and a secretariat. ADE facilitates the work of the teams through, *inter alia*, providing support to the organization of workshops, booking of trips, formatting of reports, provision and maintenance of computer equipment and user license software, and so forth, as well as for exchanges on specific issues of content or methodology. Depending on the needs, the team could be reinforced by ADE staff analysts, who will participate in the computer encoding of data collected during the evaluation process (NVivo software).

6.3. Quality assurance

The quality of services provided is a crucial aspect of ADE's activities. Our company is committed to high-quality standards, has been ISO 9001 certified for more than 20 years (1998). Both the strong leadership of the management and the highly professional involvement of each collaborator are crucial for ADE's quality management system.

ADE is specifically organized to conduct complex and challenging studies, having extensive work experience in managing evaluations for various development donors, including AfDB / IDEV.

The key objectives of our approach to quality assurance are:

- Quality deliverable
- Reliable and professional interaction with the client
- Timeliness of all deliverables.

The proposed three-component approach to quality assurance in this evaluation is illustrated in Figure 15 below. This quality assurance approach is implemented throughout the evaluation process: during (i) the inception phase (quality of evaluation design), (ii) the data collection and analysis phase (quality and reliability of data), and (iii) the reporting phase (quality of deliverables).

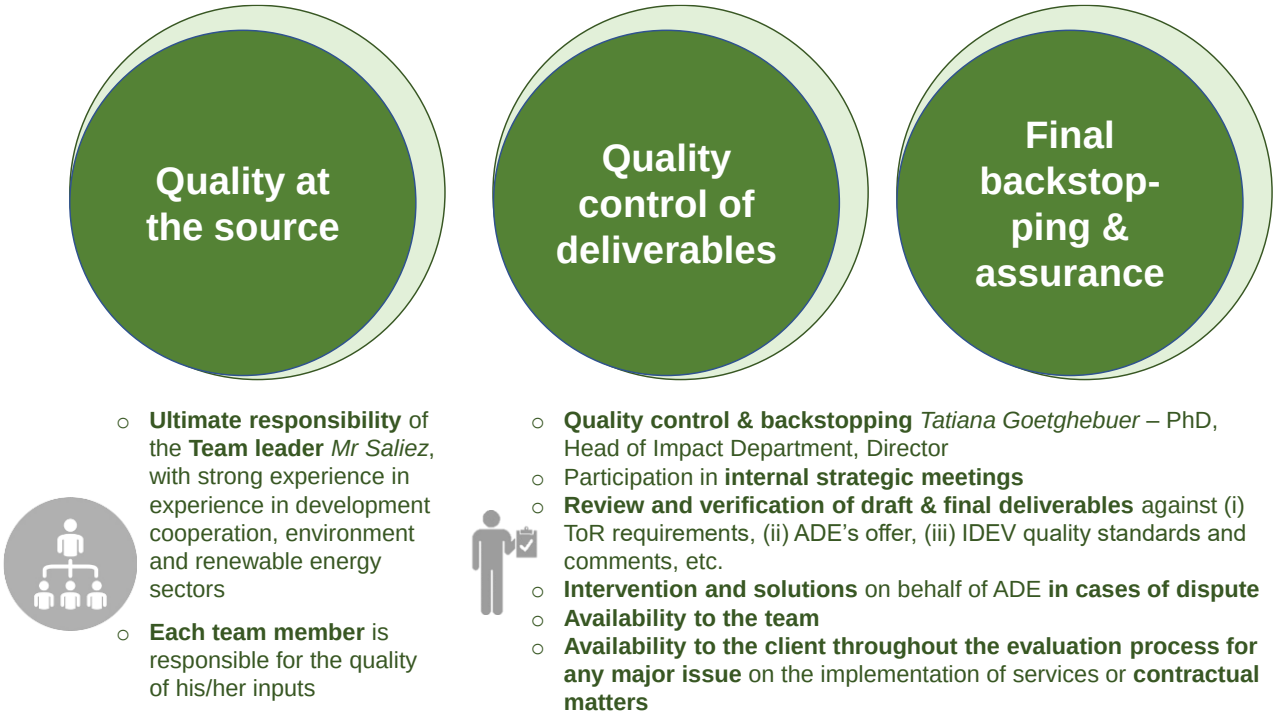


Figure 15 – Approach to quality assurance

7. Work plan

The evaluation process is structured in three phases: an inception phase, a data collection and analysis phase, and a reporting and quality assurance phase. Figure 16 below summarizes for each phase the tasks to be carried out about the methodological approach and the corresponding deliverables.

Inception phase

The inception phase culminates in the preparation and submission of the Inception Report for approval, for which a draft was submitted on 01 April 2022. Based on the exchanges with IDEV and the comments provided by the peer-reviewers (internal and external), the evaluation team has produced this final Inception Report. The inception report is intended as a basis for discussion that will validate on the following points in particular:

- Theory of change.
- Sources of information and data collection tools to be used.
- The choice of interventions to be monitored in the countries of the country case studies.

Data collection and analysis phase

This phase will involve implementing the approved evaluation approach to collect the information needed to answer the evaluation questions. The data collection and analysis phase is the most resource-intensive phase of the study where the evaluation team will gather evidence from various source.

Main activities are expected to be implemented between May and July 2022. This phase will involve the whole evaluation team, including field missions for the Team Leader and all case study experts. The activities to be implemented will include the literature review, interviews and field visits, as well as debriefing meetings with IDEV.

Reporting phase

During the reporting phase, the information gathered during the field phase will enrich, qualify, and amend the information gathered during the documentary phase in order to allow the formulation of the final answers to the EQs. On this basis, the conclusions and recommendations of the study will be drafted. Main activities are expected to be implemented between July and September 2022. The proposed approach can be summarized as follows:

- Within each case study, information will be triangulated to verify its validity. In particular, the accuracy and credibility of interview sources will be compared to written sources. Similarly, whenever possible, data from national sources will be compared with data from international sources. The team will indicate its assessment of the quality of information available at the level of the key findings to inform their strength. This will result in ten analytical reports for each of the country case studies.
- Based on all previous existing building blocks, each cluster expert will synthesize findings, providing preliminary answers to each EQ at a cluster-specific level, preparing the cluster evaluation reports. This phase will culminate in the preparation of the three cluster reports, for each of the selected technologies, by the end of July 2022. After submission of the Technical Report, the team will

remain available to incorporate comments from peer-reviewers, IDEV members and other stakeholders.

- The main findings from the case studies will be cross-referenced to formulate an overall judgment of the evaluation responses, based on team discussions conducted during the field phase and at an internal team meeting. This will allow the team to benefit from a multidisciplinary approach and to take advantage of the comparison of analyses and perspectives of the different evaluators (local - international). This phase will lead to the drafting of a Technical Report, to be submitted by the end of August 2022. This report will be presented to the Bank's services for discussion.
- The evaluation team will organize a **workshop with ADB staff to present the preliminary findings**, which will focus on the following: 1) Reporting on the evaluation work done to date; 2) Presentation and discussion of preliminary findings from the case studies and 3) Discussion of perspectives and options for recommendations. At this stage, the aim is not to present final conclusions and recommendations but to open a discussion with stakeholders so that they can concretely participate in the evaluation exercise and take on board the main elements emanating from these discussions for the production of the final technical report.
- As with previous reports, based on the discussions and comments received, a final version of the technical report will be prepared and sent to the client.

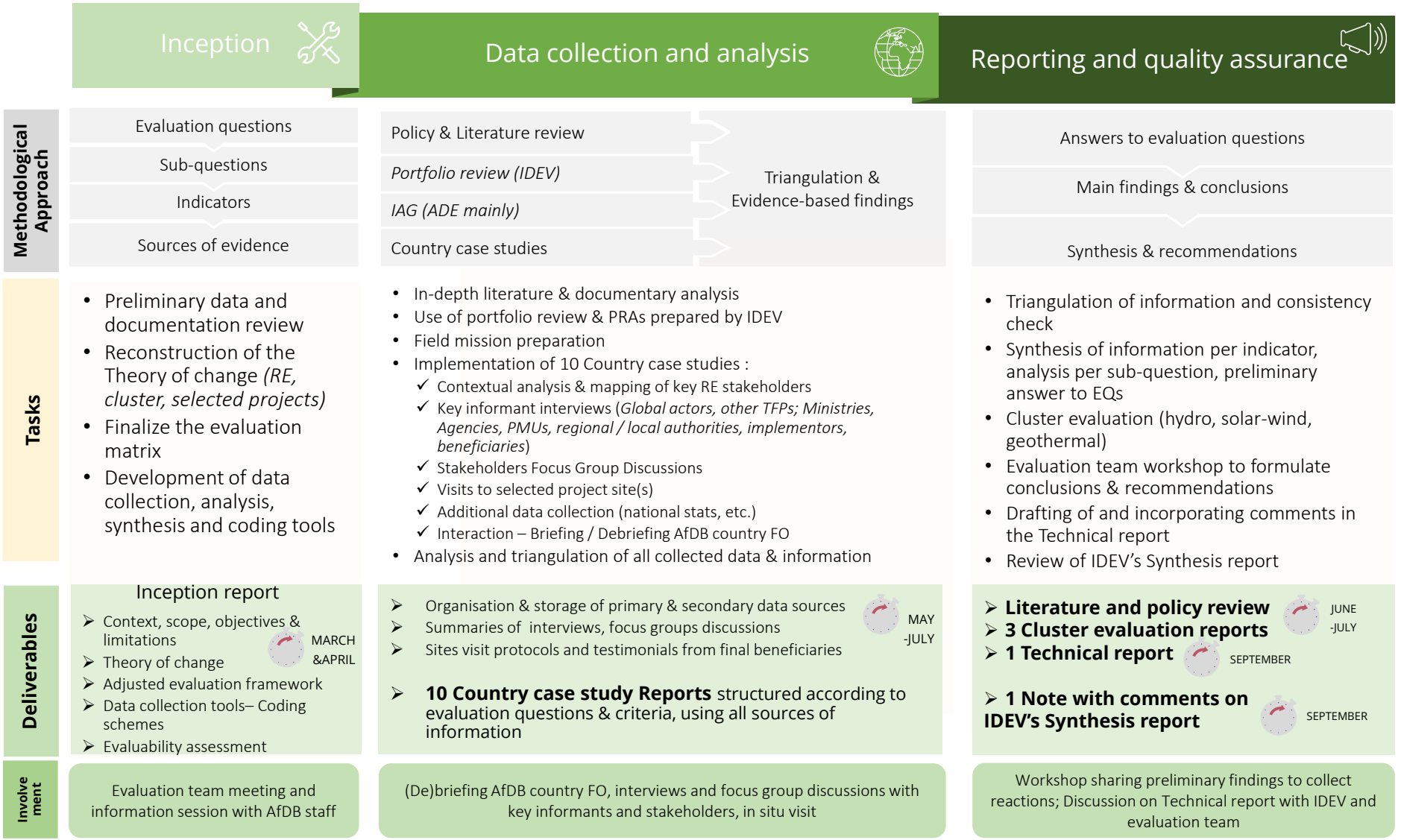


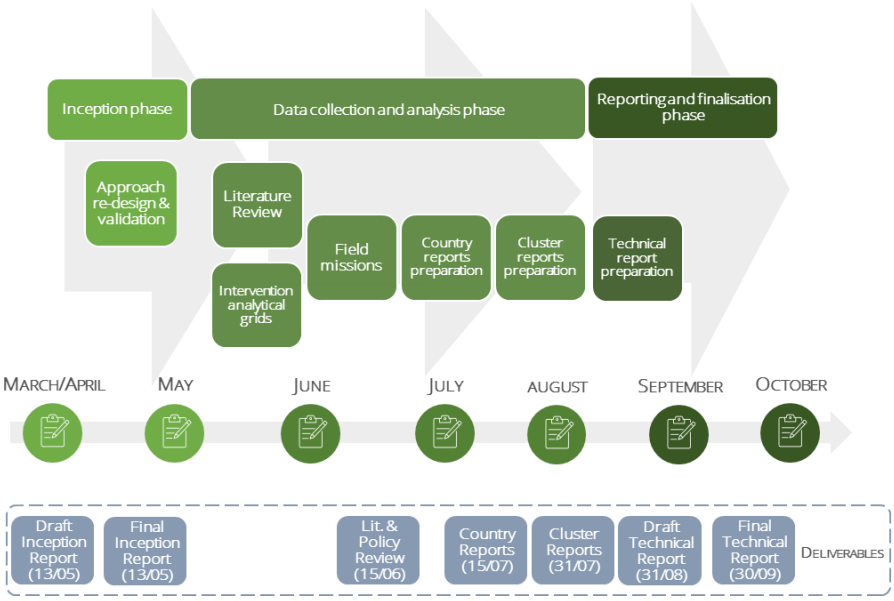
Figure 16 – Overview of the evaluation process (source: ADE)

8. Calendar

The following timeline is proposed for this evaluation:

- **Data collection and analysis phase: May - July 2022**
  1. Literature and Policy Review: May/June 2022
     - The review will help understand the policy discourse and key trends in assistance to renewable energy in Africa.
  2. Intervention analytical grids: May/June 2022
     - In preparation for the country case studies, analytical grids will be prepared for all selected interventions, based on available project documentation.
  3. Analysis report for case studies and field missions: July 2022
     - An initial desk review for the 10 case study countries will be conducted prior to the mission (general context, Bank strategies in the countries/regions, Bank operations in the countries/regions, etc).
     - The missions in the 10 countries will also be prepared logistically. They will take place simultaneously. A feedback session will be organized in the country at the end of each mission. The tentative agendas for the missions can be found in Annex 11, including mission dates.
  4. Analysis for cluster reports: August 2022
     - Cluster reports will be performed on a selection of interventions of the portfolio, present in the 10 selected countries, or in other countries, whenever relevant.

- **Reporting phase: July – September 2022**
  - A country case study report will be prepared for each country. Country case study reports will be submitted by mid-July.
  - Cluster reports will be submitted in August .
  - Based on the country case study and cluster reports, and other analysis and information collected, a draft technical report will be prepared and submitted in September.


Inception phase
Data collection and analysis phase
Reporting and finalisation phase
Approach re-design & validation
Literature Review
Intervention analytical grids
Field missions
Country reports preparation
Cluster reports preparation
Technical report preparation
MARCH/APRIL
MAY
JUNE
JULY
AUGUST
SEPTEMBER
OCTOBER
Draft Inception Report (13/05)
Final Inception Report (13/05)
Lit. & Policy Review (15/06)
Country Reports (15/07)
Cluster Reports (31/07)
Draft Technical Report (31/08)
Final Technical Report (30/09)
DELIVERABLES

Annexes

Annex 1 - Description of AfDB Instruments and Sources of funding

As identified by the information and data shared about the RE projects funded by AfDB, the evaluation team was able to identify various tools and sources of funds, as summarized below.

We have differentiated between the "Instruments" as the financial products and modalities designed by the bank:

- African Development Fund (ADF) – The Fund
- African Development Bank (ADB) – The Bank
- Private Sector Credit Enhancement Facility (PSF)
- Fragile States Facility (FSF)
- Middle Inc Countries Fund (MICF)

And the "Sources", refer to the various financing means, special funds in which the Bank is a partner, host or recipient:

- Sustainable Energy for Africa (SEFA)/Sustainable Energy For All – Africa Hub (SE4Africa)
- Infrastructure project preparation facility NEPAD/IPPF
- Nigerian Trust Fund (NTF)
- EU Africa Investment Platform (EUAIP)
- Climate investment fund (CIF)
- Strategic Climate Fund (SCF)
- Clean Technology Fund (CTF)
- Global Environmental Facility (GEF)
- Africa Growing Together Fund (AGTF)[4]
- Facility for Energy Inclusion (FEI)[5]

African Development Fund (ADF) – The Fund	
Creation date	1972 operational in 1974
Source	The matrix of commitment is not accessible for not authorised accounts
Volume	The Fund has cumulatively invested UA 29.4 billion (USD 45 billion) over its 44 years
Target audience/ Eligibility	https://adf.afdb.org/adf/eligibility/
Purpose	Contributes to poverty reduction and economic and social development in the least developed African countries

[4] The only reference to this source is a loan provided to Nigeria;
[5] This was not part of the list yet found it on AfDB website as a collaboration between AfDB, NDF and SEFA

<table>
<tr><td>Geographic scope</td><td>
<table>
<tr><th>CATEGORY C – ADB (17)</th><th>CATEGORY B - BLEND (5)</th><th colspan="3">CATEGORY A
ADF-Only (32)</th></tr>
<tr><td></td><td></td><td>ADF-Gap (4)</td><td colspan="2">ADF-Only (28)</td></tr>
<tr><td>Algeria
Angola
Botswana
Cape Verde
Congo, Rep. of
Egypt
Equatorial Guinea
Gabon
Libya
Mauritius
Morocco
Namibia
Nigeria
Seychelles
South Africa
Swaziland
Tunisia</td><td>Zambia
Cameroon
Kenya
Senegal
Côte d'Ivoire</td><td>Djibouti
Ghana
Lesotho
Sao Tome</td><td>Benin
Burkina Faso
Burundi
CAR
DRC
Comoros
Chad
Eritrea
Ethiopia
Gambia
Guinea
Guinea-Bissau
Liberia</td><td>Madagascar
Malawi
Mali
Mauritania
Mozambique
Niger
Rwanda
Sierra Leone
Somalia
South Sudan
Sudan
Tanzania
Togo
Uganda
Zimbabwe</td></tr>
</table>
</td></tr>
<tr><td>Market distribution mechanism, if applicable / Priorities</td><td>- Performance-Based Allocation
- Transition Support Facility
- Project Preparation Facility (PPF)
- Regional Operation
- Risk Mitigation Instruments
These are the allocation frameworks https://adf.afdb.org/adf/resource-allocation-framework/ they are not restricted to the sector but each is designed to serve the general objectives (from a specific level of interventions)</td></tr>
<tr><td>Modality (loans/grants); possibly sub-categories of forms of loans, if useful.</td><td>- Grants
- Loans
- Project Preparation Loans
- Guarantees
- Debt Sustainability and ADF Grant Eligibility
o Enhanced Engagement in the Fragile States
o Non-Concessional Debt Accumulation Policy</td></tr>
<tr><td>Any special conditions</td><td>37 ADF eligible countries. Out of these 37 countries, 13 receive only grants; 19 receive concessional loans and grants and 5 are eligible for both ADF and ADB resources (blend).</td></tr>
<tr><td>Comment</td><td>The Fund's resources are replenished every three years by its donor countries.</td></tr>
<tr><td>References</td><td>- https://www.afdb.org/en/projects-and-operations/financial-products/african-development-fund
- https://adf.afdb.org/adf/the-fund/</td></tr>
</table>

African Development Bank (ADB) – The Bank	
Creation date	
Source	Resources that have been raised in the international capital markets
Volume	
Target audience/ Eligibility	Each one of the modalities has an eligibility criteria
Purpose	Enhance the social and economic well-being of its Regional Member Countries (RMCs)
Geographic scope	
Market distribution	Responsive to the varied and evolving requirements of its borrowers

mechanism, if applicable / Priorities	

Modality (loans/grants); possibly sub-categories of forms of loans, if useful.	• Loans
	  ○ Fully Flexible Loan (FFL) for sovereign financing from the Bank Group non-concessional resources (ADB)
	  ○ ADF Loan for sovereign guaranteed financing from the Bank Group concessional window (ADF)
	  ○ Fixed Spread Loan (FSL) for the financing of private-sector borrowers from the Bank Group non-concessional resources (ADB) including in local currencies. Within the FSL, the Bank Group provides (a) Lines of Credit; (b) Agency Lines; (c) Corporate Loans; and (d) Project Finance
	• Guarantees
	• Risk Management Products (i.e. derivative-based hedges)
	• Equity and Quasi-Equity
	• Trade Finance
	• Grants

Any special conditions	
Comments	
References	• https://www.afdb.org/en/projects-and-operations/financial-products/african-development-bank • https://www.afdb.org/fileadmin/uploads/afdb/Documents/Financial-Information/Financial%20Products%20-%20Offered%20by%20the%20African%20Development%20Bank.pdf

Private Sector Credit Enhancement Facility (PSF)	
Creation date	2015
Source	
Volume	
Target audience/ Eligibility	• Project or corporate loans and guarantees in the ADB Group's operational priority areas as they evolve over time • Intermediated financial sector loans and guarantees in favour of banks, leasing companies or debt funds • Majority private or public-owned entities well as Public-Private Partnership Borrowers, provided the Commitment is made without sovereign guarantees.
Purpose	• A risk-sharing vehicle to support private sector financing in ADF countries • Support the financing of private sector projects in Low-Income Countries ("LICs")and transition states in ADF eligible countries
Geographic scope	The Facility covers NSOs that are deployed in one or more ADF-eligible countries
Market distribution mechanism, if applicable / Priorities	• (i)Projects rated "high-risk" primarily because of the country risk rating, rather than the stand-alone risk of the Borrower. • (ii)Operations contributing to enhanced diversification of the PSF portfolio (regions and sectors), with a preference for operations in new countries or where the PSF has little or no exposure. • (iii)Operations that have a positive impact on the PSF's compliance with its prudential parameters; • (iv)Operations in ADF only and transition countries.

	• (v)Operations that take into consideration NSO-specific drivers of fragility in the country and include integrated or parallel mitigants. • (vi)Operations that are guided by the "Do No Harm" principle, where the execution of the covered undertaking requires the structuring of contingent liabilities (for instance in the form of sovereign counter-indemnity), only those operations where the net incremental impact of the contingent liabilities does not adversely affect the sovereign debt sustainability position of countries in debt distress; • (vii) Operations that directly and indirectly benefit affected communities in terms of economic opportunities and mitigating adverse impacts on livelihoods; • (viii) Operations that comprise targeted measures to support women's livelihoods and economic opportunities; • (ix)Projects with superior additionality and development outcomes ratings; and • (x)Projects that exhibit a high level of readiness for signature and/or disbursement
Modality (loans/grants); possibly sub-categories of forms of loans, if useful.	Credit risk of the Non-Sovereign Operations (NSOs) financed by the African Development Bank (ADB or "the Bank")
Any special conditions	
Comments	
References	https://www.afdb.org/en/documents/revised-strategic-framework-private-sector-credit-enhancement-facility-psf

Fragile States Facility (FSF)	
Creation date	2008
Source	
Volume	
Target audience/ Eligibility	- Countries experiencing marked deterioration in performance. - Countries undergoing conflict or in a prolonged crisis. - Post-conflict/transitional countries; and - Countries considered being gradual improvers
Purpose	Provide a broader and integrated framework through which the Bank can more effectively assist eligible fragile states, especially those emerging from conflict or crisis, to consolidate peace, stabilize their economies and lay the foundation for sustainable poverty reduction and long-term economic growth.
Geographic scope	Fragile Country in Africa
Market distribution mechanism, if applicable / Priorities	
Modality (loans/grants); possibly sub-	• Grant resources to support operations • PBA – Performance-Based Allocation

categories of forms of loans, if useful.	
Any special conditions	
Comments	
References	- https://www.afdb.org/sites/default/files/documents/policy-documents/fsf_guidelines_administration_tcb_program_of_pillar_iiix1.pdf - https://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/39-%20EN-%20Operations_guidelines_of_the_fragile_states_facility_(3)%5B1%5D_01.pdf

Middle Income Country Technical Assistance Fund (MIC TAF)	
Creation date	2002
Source	
Volume	$2.1 billion was generated in AfDB-financed projects between 2002 and 2018
Target audience/ Eligibility	- Category C countries, which are only eligible to receive financing from the non-concessional ADB window and - Category B countries, otherwise known as blend countries, are eligible to receive financing from both the non-concessionary ADB window and the concessional ADF window.
Purpose	MIC TAF aims to support eligible Regional Member Countries (RMCs)in the preparation of quality priority projects that have a high likelihood of implementation by the recipient, as well as to support in improving the performance of ongoing Bank projects
Geographic scope	Category B – Countries Eligible for a Blend of ADB and ADF Resources - Cameroon - Côte d'Ivoire - Kenya - Senegal - Zambia Category C – Countries Eligible for ADB Resources Only - Algeria - Angola - Botswana - Cape Verde - Congo, Republic of - Egypt - Equatorial - Guinea - Eswatini - Gabon - Libya - Mauritius - Morocco - Namibia - Nigeria - Seychelles - South Africa - Tunisia
Market distribution	i) **Project preparation** linked to investment, results-based financing and other relevant Bank instruments(such as Program-Based Operations)

mechanism, if applicable / Priorities	in the country's pipeline of operations (Pre-feasibility studies, feasibility studies, preparation/updating of project engineering designs, technical specifications, environmental and social impact assessment and management plans) ii) **Technical assistance** and advisory services linked to project cycle activities, the Bank's pipeline or strategic high-level policy dialogue issues for enhanced engagement. (Capacity Building, Policy Advisory Services and technical assistance on strategic development issues, and project cycle-related activities)
Modality (loans/grants); possibly sub-categories of forms of loans, if useful.	
Any special conditions	
Comments	Energy is not seen on the 2021 portfolio (it can be under Multi-Sector)
References	- https://www.afdb.org/en/topics-and-sectors-initiatives-partnerships/middle-income-country-technical-assistance-fund-mic-taf - https://www.afdb.org/en/documents/2020-guidelines-administration-and-utilization-middle-income-country-technical-assistance-fund-mictaf

Sustainable Energy Fund for Africa (SEFA)	
Creation date	2011
Source	Partnership with Denmark Government and contribution of: • The United States • The United Kingdom • Italy • Norway • Spain • Sweden, • Nordic Development Fund • Germany
Volume	56 million USD
Target audience/ Eligibility	Special attention will be given to proposals which: • Are implemented in countries with limited renewable energy experience • Present demonstration and replication potential, with "first-of-a-kind" features. • Provide cross-cutting benefits across several domains such as agriculture, education, food, gender, health, and water.
Purpose	• Supports the sustainable energy agenda in Africa • Scale-up its engagement in the small to medium-sized renewable energy and energy efficiency space • Unlocking private investments in small to medium scale sustainable energy projects
Geographic scope	All African Countries
Market distribution mechanism, if	• Green baseload: Increasing the penetration of renewable energy in power systems, with a strong focus on power system stability, and delivering alternatives to fossil-fuel baseload generation options.

applicable / Priorities	• Green mini-grids: Accelerating electricity access to underserved populations through clean energy mini-grid solutions. • Energy efficiency: Improving the efficiency of energy services delivered through a variety of technologies and business models, also including clean cooking and pico-solar technologies.
Modality (loans/grants); possibly sub-categories of forms of loans, if useful.	• **Grants** to facilitate the preparation of bankable projects. • **equity investments** to bridge the financing gap and infuse managerial capacity. • Support public sector institutions in improving the enabling environment for private sector investments.
Any special conditions	
Comments	• SEFA played a key role in structuring the first truly Pan-African US$200 million private equity fund focused on renewable energy, the Africa Renewable Energy Fund (AREF), contributing US$35 million.
References	• https://www.se4all-africa.org/seforall-in-africa/financing-opportunities/sustainable-energy-fund-for-africa/ • https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/sustainable-energy-fund-for-africa

Infrastructure project preparation facility NEPAD-IPPF	
Creation date	2005
Source	AfDB is a host for multi-donor special funds: • Canada, • Denmark, • Norway, • Germany, • UK and • Spain
Volume	Currently $111.4 million
Target audience/ Eligibility	
Purpose	• Increased availability of viable well-prepared regional infrastructure projects. • Enhanced collaboration among project stakeholders and project financiers • Improved sustainability of project preparation financing for regional projects
Geographic scope	All Africa
Market distribution mechanism, if applicable / Priorities	The activities eligible for financing are: (i) Pre-feasibility studies. (ii) feasibility studies. (iii) project structuring. (iv) capacity building for infrastructure development; and (v) facilitation and creation of an enabling environment for regional infrastructure development within the sectors: • Transport, • Energy, • ICT, and • Water resources management

Modality (loans/grants); possibly sub-categories of forms of loans, if useful.	• Investment • Co-financing • PPP Projects (Not enough information found about that)
Any special conditions	
Comments	The Fund supports the preparation of Bankable regional infrastructure projects in line with the priorities of the Regional Member Countries (RMCs), the African Union Commission (AUC) and the African Union Development Agency (AUDA-NEPAD), Regional Economic Communities (RECs) as well as Specialized Infrastructure Institutions
References	• https://nepadippf.org/en/ • https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/nepad-infrastructure-project-preparation-facility-nepad-ippf

The Nigeria Trust Fund (NTF)	
Creation date	1976
Source	The Federal Republic of Nigeria
Volume	USD 151 Million
Target audience/ Eligibility	Only low-income countries are eligible for loans i.e.: classified with a moderate risk " yellow " or a low risk " green " according to the *Debt sustainability framework*
Purpose	Assist the development efforts of the Bank's low-income regional member countries whose economic and social conditions and prospects require concessional financing
Geographic scope	All Africa
Market distribution mechanism, if applicable / Priorities	Not specific as long as: the resources of the Fund shall be used to provide financing for projects of national or regional importance that further economic and social development in the territories of member countries of the Bank whose economic and social conditions and prospects require financing on non-conventional terms.
Modality (loans/grants); possibly sub-categories of forms of loans, if useful.	• Concessional loan operations with long-term maturity • Concessional loan operations with short-term maturity • Private sector operations
Any special conditions	- NTF resources are allocated to projects, and not to countries - the Bank may not use the resources of the Fund to finance more than 60% of the total estimated cost of any single project
Comments	- NTF resources can co-finance operations with the ADB and the ADF, as well as fund stand-alone operations, in both the public and the private sector. Supplementary loans for Bank Group financed projects can also be considered.
References	- https://www.afdb.org/en/about-us/corporate-information/nigeria-trust-fund-ntf

	- https://www.afdb.org/fileadmin/uploads/afdb/Documents/Legal-Documents/00157770-EN-NTF-AGREEMENT.PDF

EU Africa Investment Platform (EUAIP)	
Creation date	
Source	blending grant resources from the EU
Volume	Energy is 36.2% (Euro 330.2 M)
Target audience/ Eligibility	
Purpose	to promote actions that foster economic activity, to promote socio-economic development, poverty reduction and a strong formal economy.
Geographic scope	sub-Saharan Africa: - Kenya - Madagascar - Malawi - Mali - Senegal - Tanzania - Zambia - Cameroon
Market distribution mechanism, if applicable / Priorities	- Energy Energy efficiency Low-carbon energy supply Innovation and new types of energy infrastructure Enabling infrastructure - Environment - Information and Communication Technologies - Agriculture - Social development - Private sector development - Transport
Modality (loans/grants); possibly sub-categories of forms of loans, if useful.	- Investment Grants - Interest rate subsidies - Technical assistance - Risk capital in the form of equity and quasi-equity - Guarantees
Any special conditions	
Comments	
References	- https://www.eib.org/en/products/mandates-partnerships/aip/index.htm - https://ec.europa.eu/eu-external-investment-plan/sites/default/files/documents/efds-report_en.pdf

Climate Investment Funds (CIF)	
Creation date	2009
Source	Under Climate Investment Funds (CIF)
Volume	USD 10.3 Billion (26% going to Africa)
Target audience/ Eligibility	

Purpose	accelerates climate action by empowering transformations in clean technology, energy access, climate resilience, and sustainable forests in developing and middle-income countries.
Geographic scope	
Market distribution mechanism, if applicable / Priorities	• Clean Technology Fund • Pilot Program for Climate Resilience • Scaling Up Renewable Energy Program • Forest Investment Program • CIF Accelerating Coal Transition Investment • CIF Industry Decarbonization • CIF Nature Solutions • CIF Renewable Energy Integration • CIF Smart Cities
Modality (loans/grants); possibly sub-categories of forms of loans, if useful.	• as technical assistance and advisory services for public and private sector operations, often through non-reimbursable grants; and • as investments, deployed through a variety of instruments such as senior concessional loans, subordinated loans/mezzanine instruments, equity, convertible grants and contingent recovery grants, investment grants, and guarantees
Any special conditions	
Comments	
References	https://www.climateinvestmentfunds.org/

Strategic climate fund (SCF)	
Creation date	2009
Source	Under Climate Investment Funds (CIF)
Volume	
Target audience/ Eligibility	
Purpose	Support three targeted programs with dedicated funding to pilot new approaches with the potential for scaled-up, transformational action aimed at a specific climate change challenge or sectoral response.
Geographic scope	
Market distribution mechanism, if applicable / Priorities	• The Forest Investment Program (FIP) • The Pilot Program for Climate Resilience (PPCR) • The Program for Scaling-Up Renewable Energy in Low-Income Countries (SREP)
Modality (loans/grants); possibly sub-categories of forms of loans, if useful.	• Provide experience and lessons through learning-by-doing. • Channel new and additional financing for climate change mitigation and adaptation. • Provide incentives for scaled-up and transformational action in the context of poverty reduction. • Provide incentives to maintain, restore and enhance carbon-rich natural ecosystems, and maximize the co-benefits of sustainable development
Any special conditions	
Comments	

References	https://www.climateinvestmentfunds.org/node/5

Clean Technology Fund	
Creation date	2008
Source	Multi-donor under Climate Investment Funds (CIF)
Volume	$5.3 billion on August 8, 2019, approved $20 million for the Facility for Energy Inclusion (FEI), a facility sponsored by the African Development Bank
Target audience/ Eligibility	The country should have: • ODA-eligibility (according to OECD/DAC guidelines) • Existence of active multilateral development bank (MDB) country programmes
Purpose	promote scaled-up financing for demonstration, deployment and transfer of low-carbon technologies with significant potential for long-term greenhouse gas emissions savings
Geographic scope	Middle-Income and developing countries. (Not specific for Africa)
Market distribution mechanism, if applicable / Priorities	• Power Sector: renewable energy and highly efficient technologies to reduce carbon intensity • Transport Sector: efficiency and modal shifts • Energy Efficiency: buildings, industry, and agriculture.
Modality (loans/grants); possibly sub-categories of forms of loans, if useful.	Under the bank and in Africa: • $4 million junior equity tranche • $16 million senior concessional loan
Any special conditions	
Comments	
References	• https://climatefundsupdate.org/the-funds/clean-technology-fund/ • https://www.afdb.org/fr/news-and-events/african-development-bank-welcomes-20-million-investment-clean-technology-fund-facility-energy-inclusion-28940#:~:text=The%20Clean%20Technology%20Fund%20(CTF,sustainable%20financing%20for%20small%2Dscale

Global environmental facility (GEF)	
Creation date	1992
Source	40 donor countries
Volume	
Target audience/ Eligibility	government agencies, civil society organizations, private sector companies, research institutions, among the broad diversity of potential partners, to implement projects and programs in recipient countries
Purpose	available to developing countries and countries with economies in transition to meet the objectives of the international environmental conventions and agreements.
Geographic scope	Recipient countries
Market distribution mechanism, if applicable / Priorities	

Modality (loans/grants); possibly sub-categories of forms of loans, if useful.	- Least Developed Countries Fund (LDCF) - Special Climate Change Fund (SCCF) - Capacity- Building Initiative for Transparency (CBIT) - Nagoya Protocol Implementation Fund (NPIF) - Adaptation Fund
Any special conditions	
Comments	
References	https://www.thegef.org/who-we-are/funding

Facility for Energy Inclusion (FEI)	
Creation date	2018
Source	
Volume	Total budget €1216.8 million EU contribution of €40.2 million
Target audience/ Eligibility	
Purpose	first blended finance programme dedicated to increasing access to renewable energy is seen as a key instrument to help achieve the on-grid and off-grid connection targets of the New Deal, through increased co-financing and private sector investment in innovative on-grid and off-grid clean energy access solutions.
Geographic scope	Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, the Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, Sudan, Tanzania, Togo, Uganda, Zambia, Zimbabwe
Market distribution mechanism, if applicable / Priorities	• the On-Grid Window (FEI On-Grid) • the Off-Grid Window (FEI Off-Grid)
Modality (loans/grants); possibly sub-categories of forms of loans, if useful.	• Long-term debt through project finance structures • Lending to loans corporates and special purpose vehicles (SPVs)
Any special conditions	
Comments	
References	• https://ec.europa.eu/eu-external-investment-plan/projects/facility-energy-inclusion-fei_en • https://www.afdb.org/fr/documents/multinational-facility-energy-inclusion-fei-sefa-project-summary-note • https://www.afdb.org/fr/documents/multinational-facility-energy-inclusion-grid-energy-access-fund-p-z1-ff0-012-es-policy

Annex 2 - Evaluation matrix

Overview

Criterion Main question	Sub-question	
Relevance & Coherence To what extent are the Bank's interventions aligned with the clients' priority RE needs as they navigate changing RE markets and expanding global initiatives?	SQ. 1.1 Strategy	How adequate is the Bank's strategic focus on the renewable energy to assist RMCs achieve: the SDGs, the Kyoto Protocol and the Paris Agreement?
	SQ. 1.2 Alignment	To what extent were the Bank's lending and non-lending activities in the renewable energy aligned with the priorities of RMCs and end beneficiaries' needs?
	SQ. 1.3 Adaptation	To what extent were the Bank's interventions adapted over time taking into account RMCs' implementation performances and emerging challenges (including risk related to climate change)?
	SQ. 1.4 Coordination	To what extent are the Bank's interventions (i) coordinated with those of governments and other development organizations' interventions and (ii) are they complementary to these interventions?
Effectiveness To what extent has the Bank's support in renewable energy been effective in addressing barriers, mobilizing finance, leveraging experience and partnerships, and achieving the expected results for advancing RE development in meeting client's energy and environment needs?	SQ 2.1 Achieved outcomes	To what extent have the Bank's renewable energy interventions achieved their expected direct and indirect outcomes?
	SQ 2.2 Influencing factors	What are the factors that enable or hinder the achievement of the expected RE interventions' direct and intermediates outcomes?
	SQ 2.3 Partnerships	How effective has the Bank been in engaging in productive partnerships in renewable energy sector?
	SQ 2.4 Leverage	How well has the Bank leveraged resources ?
	SQ 2.5 Knowledge, advisory	Has the Bank fulfilled its role as knowledge broker, advisor and convener?
Efficiency To what extent has the Banks assistance to renewable energy results been delivered efficiently?	SQ 3.1 Design	To what extent did the Bank's identification, design, and approval mechanisms contribute to ensure an efficient implementation of the renewable energy interventions (Optimize Cost-benefit ratio, Cost-effectiveness)?
	SQ 3.2 Delivery	To what extent has the Bank's renewable energy portfolio delivered expected outputs in a timely manner and within the planned cost?
	SQ 3.3 Supervision	To what extent has the Bank's supervision been supportive to achieving the expected outputs (Compliance with Bank's project implementation principles)?

Criterion Main question	Sub-question	
Sustainability To what extent are the results of the Bank's assistance to renewable energy sustainable?	SQ 4.1 Technologies	To what extent do renewable energy projects' achievements rely on sound technologies and maintenance mechanisms?
	SQ 4.2 Financial sustainability	To what extent has the Bank contributed to RMCs securing financial resources, to ensuring the continued flow of benefits associated with renewable energy projects?
	SQ 4.3 Capacities	To what extent has the Bank contributed to strengthening institutional capacities to facilitate the continued flow of benefits associated with renewable energy projects?
	SQ 4.4 Stakeholders	To what extent has the Bank effectively assisted RMCs by involving relevant stakeholders, promoting a sense of ownership amongst the beneficiaries, and putting in place effective partnerships with relevant stakeholders (e.g., local authorities, civil society organizations, private sector, donors) through its interventions in renewable energy in RMCs?
	SQ 4.5 E&S impact	To what extent has the Bank assisted RMCs to appropriately assess and implement environmental and social mitigation/enhancement as well as climate change mitigation and adaptation measures through the renewable energy interventions?

Relevance and Coherence: To what extent are the Bank's interventions aligned with the clients' priority RE needs as they navigate changing RE markets and expanding global initiatives?

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
SQ. 1.1 Strategy	**Corporate**	**A.b.**	**1.1.1.**	**To what extent does the Bank's RE strategy take into consideration the underlying objectives and indicators related to (i) M/SDG, (ii) AU agenda 2063 and (iii) Paris Agreement (PA)?**	1.1.1.1	Identification and extraction of objectives and indicators related to (renewable) Energy and Electricity under M/SDGs; African Union agenda 2063 and the Paris agreement		LR	INT			x								
					1.1.1.2	Screening of the AfDB Energy policy, NDEA, High 5 objectives & indicators for explicit reference to and consistency with those defined for the period 2012-2021 under M/SDGs, AU agenda & the Paris agreement		LR	INT			x								
					1.1.1.3	Opinion on the way how the Bank fits in with the trends and global objectives in the field of RE development			INT			x								
					1.1.1.4	Opinion on the Quality of design, the Strategic importance; and the Role played by the Energy policy and NDEA; Perception of the specific role played by the NDEA in the field of RE			INT			x								
					1.1.1.5	Existence of specific approach(es) by technology / cluster deriving from global or AfDB specific initiatives (Energy policy, NDEA)			INT			x								
					1.1.1.6	Evolution of the portfolio in RE over time: is there an influence of the NDEA (paradigm break or business as usual), or other strategic document?	DATA		INT			x								
SQ. 1.1 Strategy	**Country**	**A.a**	**1.1.2.**	**To what extent are the Bank RE strategies coherent with key RE development challenges in the RMC?**	1.1.2.1	AfDB regional & country portfolio analysis - geographic distribution of interventions according to technologies (clusters) and comparison with estimated potential	DATA				CCS			X	X					
					1.1.2.2	Screening of the AfDB Energy policy and the NDEA, and the Climate Change Action Plans for explicit,		LR			CCS			X	X					

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
						systematic et detailed analysis of RE challenges (potential, barriers, enablers, etc.) in RMCs														
					1.1.2.3	Feedback from AfDB staff involved in the design of RE strategies on how RE challenges were analyzed and considered; how this analysis is updated - existence of recurrent analytical work; how lessons learned from RISPs and CSPs implementation with major RE projects are used (learning mechanisms, data bases, regular analysis work)			INT		CCS	x		x						
					1.1.2.4	Opinion on the actual and future coverage of RE development challenges by AfDB corporate strategy - new challenges, missing challenges, etc. in the RMC			INT		CCS	x	x	x	x		x	x		
SQ. 1.1 Strategy	**Country**	**A.c**	**1.1.3.**	**To what extent do RISPs and CSPs take into consideration the underlying objectives and indicators related to (i) M/SDG, (ii) AU agenda and (iii) PA?**	1.1.3.1	Screening of objectives & indicators within RISPs & selected CSPs for explicit reference to and consistency with those defined for the period 2012-2021 under M/SDGs, AU agenda & the Paris agreement		LR	INT		CCS			x						
					1.1.3.2	Opinion from in-country AfDB and national stakeholders on the way how the Bank fits in with the trends and global objectives in the field of RE development, including in terms of perspectives for the future					CCS			x	x	x				
SQ. 1.1 Strategy	**Country**	**A.c**	**1.1.4. 1.1.5.**	**To what extent are RISPs and CSPs coherent with key RE development challenges in RMCs?**	1.1.4.1	Intensity of consideration of and alignment with RE development challenges by RISPs & CSPs: (i) Analysis of country / regional context; (ii) National development & sector specific policies; (iii) Bank country assistance strategy (pillars, results framework & indicators, non-lending activities). Screening of key words in all CSPs & RISPs approved by the Bank for the period 2012-2021		LR			CCS			x	x		x	x		
					1.1.4.2	Assessment & feedback from national stakeholders on the (i) quality and soundness of Bank's analysis of the context; (ii) quality and soundness of National					CCS				x	x	x	x	x	

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
						development & sector specific policies and how adequately they are considered by the Bank; (iii) coverage by Bank's country assistance strategy (pillars, results framework & indicators, non-lending activities) of RE development challenges (incl. reasons of exclusion)														
					1.1.4.3.	How is the articulation of lending & non lending (soft components) activities considered and demonstrated in CSPs?					CCS			x						
SQ. 1.1 Strategy	**Interventions**	**A.b**		**Is the quality of RE development interventions design ensured (objectives clearly stated and result-oriented; results are realistic with regard to the current circumstances), for achieving the defined objectives? Do RE development intervention design integrate explicitly consideration of M/SDG, AU agenda 2063, and PA agendas?**	1.1.5.1	Explicit reference in RE development interventions to M/SDGs; African Union Agenda and Paris Agreement objectives / indicators				PRA										
					1.1.5.2	Extent to which AfDB RE interventions include: (i) project's objectives clearly stated and focused on outcomes as opposed to outputs; (ii) realistic intended outcomes in the country's current circumstances; and to Bank's role, capacity and lending & non-lending capabilities for achieving the defined objectives; (iii) appropriate solutions to the identified problems [PRA, section 1.2 Relevance of intervention design to achieve defined objectives]				PRA									
SQ. 1.1 Strategy	**Interventions**	A.d	**1.1.6.**	**To what extent are major climate change risks for long term**	1.1.6.1	Quality of risk assessment (assumptions made in the logic model) *[PRA, section 1.2 Relevance of intervention design to achieve defined objectives] & [Feedback from*				PRA				x		x	x		x	

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
				sustainability considered within RE development interventions?		*national stakeholders - Authorities, executive agencies, operators, beneficiaries]*														
					1.1.6.2	Implementation status, existing monitoring and feedback on the relevance of modifications made to project design *[PRA, section 1.2 Relevance of intervention design to achieve defined objectives] & [Feedback from national stakeholders - Authorities, executive agencies, operators, beneficiaries]*				PRA				x		x			x	
					1.1.6.3	Analysis of the circumstances prevailing at the time of the evaluation; Extent to which potential negative impacts were identified, their likelihood of occurring and how they might be avoided *[PRA, section 1.2 Relevance of intervention design to achieve defined objectives] & [Feedback from national stakeholders - Authorities, executive agencies, operators, beneficiaries]*				PRA				x		x			x	
SQ. 1.2 Alignment	**Country**	**B.a**	**1.2.1.**	**To what extent are RE development objectives defined under CSPs & RISPs aligned with RMCs own strategic priorities (global and sector specific)?**	1.2.1.1	Assessment & feedback from national stakeholders on Bank's consideration of main national objectives driving the RE development (selectivity vs broad consideration; gaps)					CCS				x	x	x	x	x	

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
SQ. 1.2 Alignment	**Interventions**	**B.e**	**1.2.2. 1.3.1.**	**To what extent are RE interventions aligned with RMCs strategies: (i) AfDB corporate, sectoral, RISPs and CSPs; (ii) National development, sectoral strategies) ; and with beneficiaries specific needs (appropriate solutions provided to identified problems and barriers)?**	1.2.2.1	Explicitly demonstrated alignment of interventions with applicable: • AfDB corporate strategies (Mid-term strategy 2008-2012; Ten Years Strategy 2013-2022; High 5) • AfDB sectoral strategies (Energy policy, NDEA, Climate change action plans) • RISPs and CSPs • National general development strategies (and respective contribution to specific national development objective(s), usually time bound and quantified) • National sector specific (Energy, Electricity, RE, Climate) strategies ; • Beneficiaries specific needs (appropriate solutions provided to identified problems and barriers) • For PBO: ensure alignment with the Poverty Reduction Strategy paper (PRSP), Performance Assessment Framework (PAF) or applicable country and Bank sector strategies *[PRA, section 1.2 Relevance of objectives] & [Feedback from national stakeholders-executive agencies in selected countries]*				PRA					x				
SQ. 1.3 Adaptation	**Country**	**C.a et C.c**		**To what extent do RISPs and CSPs provide an assessment of drivers / obstacles for RE development, and how is it used for adapting the RE overall strategy of the Bank?**	1.3.1.1	Intensity of consideration of RE development challenges by RISPs & CSPs: (i) Analysis of country / regional context; (ii) National development & sector specific policies; (iii) Bank country assistance strategy (pillars, results framework & indicators, non-lending activities). Screening of key words in all CSPs & RISPs approved by the Bank for the period 2012-2021		LR			CCS			x					
					1.3.1.3	Opinion of in-country AfDB and national stakeholders on the quality, completeness and adequacy of the assessment on drivers and barriers for RE development, included in CPSs /RISPs					CCS			x	x	x	x			

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
					1.3.1.4	Feedback from AfDB in-country staff on the way this assessment is performed (resources, frequency, robustness) and how its results are considered at AfDB HQ / Energy complex					CCS			x						
SQ. 1.3 Adaptation	**Country**	**C.a**	**1.3.2.**	**To what extent are lessons learned in the field of RE development from country / regional experiences considered in RISPs and CSPs?**	1.3.2.1	Analysis of the section "Portfolio Management and Lessons Learnt from previous CSP" under CSPs and prominence of RE development aspects		LR			CCS									
					1.3.2.2	Opinion of in-country AfDB and national stakeholders on the quality, completeness and adequacy of considering lessons learned in RE development from past or current experiences at national / regional level					CCS			x	x	x				
SQ. 1.3 Adaptation	**Country**	**1.3.2.**	**1.3.3.**	**How does the portfolio structure (lending vs non lending) at regional and country level evolve over time?**	1.3.3.1	Portfolio analysis at regional level as well as at the level of selected countries (clusters / technologies, regions & countries, sources of financing)	DATA				CCS			x						
					1.3.3.2	Perception of in-country AfDB and national stakeholders regarding the evolution of Bank portfolio (adequacy to needs; good timing to take advantage of opportunities)					CCS			x	x		x	x		
					1.3.3.3	Understanding & analysis of objectives, main themes to be covered by non-lending activities (Policy dialogue, Analytical work; Institutional support & capacity building [RISPs & CSPs])					CCS			x						
					1.3.3.4	Assessment & feedback from AfDB country office (Country economist, Country portfolio manager and Experts) on the implementation (stock taking) and achievements of non-lending activities in targeted countries					CCS			x						
SQ. 1.3 Adaptation	**Interventions**	**C.a**	**1.3.4.**	**Have RE Interventions been adapted over time in line with evolving context (technical,**	1.3.4.1	Reactive vs Proactive approach in adapting RE interventions due to positive or negative changes or trends *[PRA, section 1.2 Relevance of objectives; Criterion "Relevance of modifications made to intervention design"] & [Feedback from national stakeholders -*				PRA					x					

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
				financial, political, governance- and capacity-related opportunities & threats)?		*Authorities, executive agencies, operators, beneficiaries]*														
SQ. 1.3 Adaptation	**Interventions**	**B.b**	**1.3.5.**	**Are RE interventions managed and conducive to leverage innovation (social and/or science and technology development) in a changing global context?**	1.3.5.1	Innovation identified as specific objective or cross-cutting issue (clarity, means dedicated to innovation & adequate management and monitoring tools)				PRA				x		x				
					1.3.5.2	Opinion from stakeholders involved in the management of the Bank RE development interventions about their innovative character in terms of process and achievements				PRA				x		x		x		
SQ. 1.4 Coordination	**Country**	**D.a et D.b**	**1.4.1**	**Complementarity - What is the degree of sector/thematic specialization of other TFPs compared to AfDB in selected countries?**	1.4.1.1	Identification of interventions by other TFPs in selected countries during 2012-2021 and linkages with main clusters (check DAC database).	DATA				CCS			x	x	x				x
					1.4.1.2	Opinion of in-country AfDB and national stakeholders on complementarity with other TFPs; and on the degree of specialization					CCS			x	x	x				x
					1.4.1.3	Analysis of CSPs and outputs from non-lending activities regarding interventions of other donors active in countries subject to a case study					CCS			x						x
					1.4.1.4	Feedback from other key donors in the field of RE development (CCS): (i) portfolio presentation and awareness about AfDB funded interventions; (ii) focus on specific technologies / clusters					CCS									x
SQ. 1.4 Coordination	**Country**	**D.a**	**1.4.2.**	**Coordination - Is the design and the implementation of RE development interventions**	1.4.2.1	Identification of existing development assistance coordination mechanisms at country level (general, sector specific and related to RE); description and assessment of coordination modalities, existence of explicit joint strategy AfDB-other TFP(s)					CCS			x	x	x				x

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
				coordinated between the Bank and other TFPs at country level?	1.4.2.2	Feedback from in-country AfDB and national stakeholders on the functioning of coordination mechanisms - regularity, quality, resulting influence on decision-making					CCS			x	x	x				x
					1.4.2.3	Feedback from in-country AfDB and national stakeholders on the concrete coordination during design, implementation and exploitation phases of RE projects: (i) participative design of RE intervention(s); (ii) leadership for specific aspects where each donor demonstrates its comparative advantage; (iii) Common mechanisms in managing (Project coordination unit, Procurement, Supervision, etc.), monitoring, assessing achievements of RE development interventions					CCS			x	x	x				x
SQ. 1.4 Coordination	**Interventions**	**D.a et D.b**	**1.4.3.**	**Complementarity and coordination - What is the degree of mutual reinforcement in the design, funding and implementation of interventions financed by the Bank and other TFPs?**	1.4.3.1	Specific attention to co-financed RE development interventions If recent PRA, section 2 Coherence (external)				PRA				x						x
					1.4.3.2	Evidence on (i) existence of coordination platforms between TFPs; (ii) participative design of RE intervention(s) ; (ii) clear leadership for specific aspects where each donor demonstrates its comparative advantage; (iii) common mechanisms in managing (Project coordination unit, Procurement, Supervision, etc.) and monitoring / assessing achievements of RE development interventions				PRA				x						x
Total					**43**		**4**	**7**	**9**	**11**	**26**	**8**	**1**	**29**	**15**	**17**	**7**	**6**	**5**	**9**

Effectiveness: To what extent has the Bank's support in renewable energy been effective in addressing barriers, mobilizing finance, leveraging experience and partnerships, and achieving the expected results for advancing RE development in meeting client's energy and environment needs?

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
SQ 2.1 Achieved outcomes	**Country**	**2.1.1.**	**Evidence of progress towards MDGs/SDGs, Agenda 2063 objectives and targets: what is the estimated contribution to sector development results (improvement of sector indicators) in targeted countries?**	2.1.1.1	Figures demonstrating the contribution of AfDB activities to sector (& general) development results: (i) progress towards key targets under SDGs and AU Agenda; (ii) noticeable improvement of key sector indicators	DATA				CCS			x		x				
				2.1.1.2	Estimation and perception of stakeholders regarding the contribution of AfDB activities to sector (& general) development results: (i) progress towards key targets under SDGs and AU Agenda; (ii) noticeable improvement of key sector indicators					CCS			x	x					
SQ 2.1 Achieved outcomes	**Country**	**2.1.2.**	**How did non-lending activities contribute to changes in RMCs renewable energy policy and institutional framework?**	2.1.2.1	Stocktaking of non-lending activities conducted in selected countries (planned vs implemented): policy dialogue; analytical work; other advisory and accompanying activities					CCS			x	x	x	x			
				2.1.2.2	Explicit linkages between non-lending activities and RE development					CCS			x	x	x	x			
				2.1.2.3	Recorded contribution of non-lending activities to the improvement of national RE policy and institutional framework					CCS			x	x					

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
				2.1.2.4	Opinion of in-country AfDB staff and national public / private stakeholders regarding the contribution of non-lending activities to the improvement of national RE policy and institutional framework, including explanatory factors					CCS			x	x			x	x	
SQ 2.1 Achieved outcomes	**Interventions**	**2.1.3.**	**Do RE development interventions produce tangible outputs, obtain direct and intermediate outcomes, as planned within their results-based logical frameworks?**	2.1.3.1	Achievement of outputs against those planned in the logical framework • For PBO: assessment should not only review the extent to which outputs were delivered (i.e., agreed-upon policy reforms took place), but also the degree to which complementary measures necessary for their implementation occurred (eg. public awareness, policy dialogue and institutional arrangements). [section 3.1 in PRAs]				PRA				x		x				
				2.1.3.2	Achievement of outcomes against those planned in the logical framework [section 3.2 in PRA]				PRA				x		x				
SQ 2.1 Achieved outcomes	**Interventions**	**2.1.4.**	**What are the key barriers and risks identified, and faced in practice, by RE interventions? (And typology: Categorization of RE interventions according to the type of key barriers and**	2.1.4.1	Record on key barriers and risks as explanatory factors of the RE interventions' performance (policy-governance; economic & financial; environmental & sustainability-related; technical; operational and capacity-related factors) *[section 3.2 in PRA which generally includes an analysis of explanatory factors regarding the performance of the intervention]*				PRA						x		x		

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
			risks being addressed)																
SQ 2.2 Influencing factors	**Corporate**	**2.2.1.**	**What are the key enabling and hindering factors allowing RE interventions to achieve AfDB expected outcomes at corporate level?**	2.2.1.1	Identification of enabling and/or hindering factors for achieving expected outcomes in RE development at corporate level [previous evaluations & studies]			INT			x	x							
				2.2.1.2	Feedback from AfDB HQ-Energy complex; in-country AfDB staff and national stakeholders on enabling and/or hindering factors for achieving expected outcomes			INT			x	x							
SQ 2.2 Influencing factors	**Country**	**2.2.2.**	**What are the key enabling and hindering factors allowing RE interventions to achieve RMCs RE objectives?**	2.2.2.	Opinion of in-country AfDB staff and national public / private stakeholders regarding explanatory factors of the RE development interventions' performance					CCS			x	x	x		x	x	
SQ 2.2 Influencing factors	**Interventions**	**2.2.3.**	**What are the key enabling and hindering factors allowing RE interventions to achieve their expected direct and intermediates outcomes?**	2.2.3.1	Record and feedback by stakeholders on key enabling factors and barriers and risks (see 2.1.4.1) as explanatory factors of the RE interventions' performance (policy-governance; economic & financial; environmental & sustainability-related; technical; operational and capacity-related factors) [section 3.2 in PRA which generally includes an analysis of explanatory factors regarding the performance of the intervention]				PRA					x				

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
SQ 2.2 Influencing factors	**Interventions**	**2.2.4.**	**What are the underlying causes and lessons learned that could inform the design and management of future interventions?**	2.2.4.1	Experience-based recommendations by stakeholders on key improvements regarding the design and operational management of RE interventions (dimensions: policy-governance; economic & financial; environmental & sustainability-related; technical; operational and capacity-related factors) [section 3.2 in PRA which generally includes an analysis of explanatory factors regarding the performance of the intervention]				PRA			x	x	x	x				
SQ 2.2 Influencing factors	**Interventions**	**2.2.5.**	**What instruments and approaches did the Bank use to address key barriers and risks faced by RE development interventions?**	2.2.5.1	Record and feedback by stakeholders on solutions they found and used to address barriers and risks they were confronted with. *[section 3.2 in PRA which generally includes an analysis of explanatory factors regarding the performance of the intervention]*				PRA				x		x				
SQ 2.3 Partnerships	**Corporate / Country**	**2.3.1.**	**To what extent did the Bank establish effective partnership arrangements and frameworks in the field of RE, including the role of AfDB in building partnerships?**	2.3.1.1	Identification of major partnership arrangements & frameworks in selected countries: (i) with other global actors/TFPs; (ii) with major private sector investors; (iii) with national stakeholders in RE - public, private or mixed - Ministries, Agencies and Regulation authorities, Facilities; (iv) with other relevant stakeholders involved in interventions – e.g., civil society			INT		CCS	x	x	x	x	x		x		x
				2.3.1.2	Feedback from AfDB in-country staff and national stakeholders on the specific role played by the Bank in building partnerships (orientations, dedicated human & material			INT		CCS	x		x	x	x				x

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
					means; approach adopted: proactivity vs reactivity)														
				2.3.1.3	Feedback from AfDB in-country staff and national stakeholders on the quality of partnerships, their functioning & evolution through the time			INT		CCS	x		x	x	x				x
				2.3.1.4	Analysis of the functioning and structuring of specific RE instruments (e.g.: trust funds)	DATA		INT		CCS	x	x	x						x
				2.3.1.5.	From a partnership point of view, how did instruments evolve over time in their support to RE?			INT			x								
SQ 2.3 Partnerships	**Corporate / Country**	**2.3.2.**	**What are their tangible achievements, which factors enabled or hindered the performance of those arrangements & frameworks?**	2.3.2.1	Feedback from AfDB in-country staff and national stakeholders on concrete achievements and benefits from partnering (regarding understanding of the context; response to needs; results obtained)			INT		CCS	x		x	x	x				x
				2.3.2.2	Opinion on enabling and/or hindering factors for the establishment, functioning and performance of partnership arrangements and frameworks			INT		CCS	x		x	x	x				x
SQ 2.3 Partnerships	**Interventions**	**2.3.3.**	**What is the degree of partners' involvement and ownership under RE interventions (at main stages**	2.3.3.1	Record & (crossed) perception on the commitment & involvement of co-financing other TFPs: during (i) project preparation; (ii) project implementation; (iii) further accompanying measures; and with regard to the various dimension of partnership: (a) technical; (b) governance & decision-making;			INT	PRA			x	x		x				x

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
			of interventions life cycle; considering technical, political, financial and management dimensions, etc.)?		(c) mobilization of financing; (d) operational & strategic steering														
				2.3.3.2	Record perception on the commitment & involvement of national authorities: during (i) project preparation; (ii) project implementation; (iii) further accompanying measures; and with regard to the various dimension of partnership: (a) technical; (b) governance & decision-making; (c) mobilization of financing, notably national counterparts; (d) operational & strategic steering				PRA				x						
SQ 2.3 Partnerships	**Interventions**	**2.3.4.**	**To what extent are AfDB interventions supported by partnership programs effective? (see QS2.1 & SQ 2.2 on obtaining outputs, achieving outcomes, identifying enabling & hindering factors)? Can a difference be**	2.3.4.1					PRA										

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
			observed between RE interventions in partnerships, compared to RE interventions conducted by the Bank alone?																
SQ 2.3 Partnerships	**Interventions**	**2.3.5.**	**To what extent were selected partners within RE interventions appropriate for achieving expected results and guaranteeing their sustainability?**	2.3.5.1	Record and feedback from in-country AfDB and national stakeholders on appropriateness of the partnership(s) structure, management arrangement and division of tasks, operational modalities and instruments used. Influence on effectiveness and sustainability			INT	PRA			x	x	x	x				x
SQ 2.4 Leverage	**Corporate / Country**	**2.4.1.**	**To what extent did the Bank's RE assistance (lending and non-lending activities) have a catalytic effect in the RE sector in Africa and selected RMCs?**	2.4.1.1	AfDB portfolio demonstrates a catalyst effect - interventions are the driving force in enhancing the volume, the coverage and the performance of investments in RE development			INT		CCS	x		x	x	x				
				2.4.1.2	Identification of lessons learned from previous evaluations regarding Bank's catalyst effect in the energy sector			INT		CCS	x								
				2.4.1.3	Identification of instruments and interventions with catalyst effect			INT		CCS	x								

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
				2.4.1.4	From a leverage point of view, how did instruments evolve over time in their support to RE ?			INT			x								
				2.4.1.5	Perception of in-country AfDB staff and national public / private stakeholders regarding the catalyst effect of the Bank, feedback on the role of lending & non-lending activities			INT		CCS	x		x	x	x				x
SQ 2.4 Leverage	**Corporate / Country**	**2.4.2.**	**What are Bank's leveraging activities in RE and what are their achievements between 2012-2021 (Africa and selected RMCs)?**	2.4.2.1	Identification of leveraging activities at continental, regional and national levels		LR	INT		CCS	x		x	x					
				2.4.2.2	Recorded achievements of leveraging activities in Bank's documentation (studies, evaluations); feedback from AfDB HQ and in-country stakeholders; from national public / private stakeholders		LR	INT		CCS	x	x	x	x	x		x		
SQ 2.4 Leverage	**Corporate / Country**	**2.4.3.**	**What are the key enabling (strengths) and hindering (weaknesses) factors influencing the Bank leveraging activities in RE (Africa and selected RMCs)?**	2.4.3.1	Strengths and weaknesses of the Bank leveraging activities perceived by stakeholders (AfDB HQ-Energy complex; in-country AfDB staff; national public / private stakeholders)		LR	INT		CCS	x		x	x	x		x		

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
SQ 2.4 Leverage	**Interventions**	**2.4.4.**	**To what extent has the Bank had the leadership on cofinanced interventions in the RE sector?**	2.4.4.	Record & (crossed) perception on the leadership of the Bank: during (i) project preparation; (ii) project implementation; (iii) further accompanying measures; and with regard to the various dimension of partnership: (a) technical; (b) governance & decision-making; (c) mobilization of financing; (d) operational & strategic steering; (e) focus on specific components (e.g., social & environmental sustainability, etc.)				PRA				x	x	x	x	x	x	x
SQ 2.5 Knowledge & advisory	**Corporate / Country**	**2.5.1.**	**How well is the Bank's organizational capacity in delivering RE interventions and obtaining results appreciated?**	2.5.1.1	Identification of lessons learned from previous evaluations regarding Bank's capacity in delivering interventions in the Energy sector		LR	INT		CCS	x								
				2.5.1.2	Feedback from HQ / Energy complex on (i) design, coordination and supervision of RE interventions; (ii) choice of instruments and approaches			INT		CCS	x								
				2.5.1.3	Feedback from AfDB in-country staff and national stakeholders on (i) coordination and supervision of RE interventions; (ii) choice of instruments and approaches			INT		CCS	x	x	x		x				x
SQ 2.5 Knowledge & advisory	**Corporate / Country**	**2.5.2.**	**To what extent does the Bank play a leading role in knowledge and advisory related to RE development? At which level (global, continental,**	2.5.2.1	Stated leading role in knowledge & advisory - identification with AfDB HQ-Energy complex of (i) the specific focus given to technologies, intervention modalities; (ii) dedicated means and mobilized expertise; (iii) initiatives and their visibility			INT		CCS	x								
				2.5.2.2	Perception of stakeholders at global, continental or regional level regarding the role and the visibility of the Bank funded knowledge and advisory activities in the field of RE development			INT		CCS	x		x	x					

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organizations	Other TFPs
			regional, country specific)? In which areas?	2.5.2.3	Feedback from in-country AfDB stakeholders and national public / private actors regarding the role of the Bank as a knowledge & advisory broker					CCS			x	x	x		x		
SQ 2.5 Knowledge & advisory	**Country**	**2.5.3.**	**Are the Bank knowledge and advisory products (policy guidance, technical expertise, training) available and accessible for relevant stakeholders in RE development? Did they identify and find them useful ?**	2.5.3.1	Perception of national stakeholders about availability and accessibility of key knowledge and advisory products provided by the Bank (policy guidance, technical expertise, training)					CCS				x	x		x	x	x
				2.5.3.2	Perception of national stakeholders about the quality and usefulness of key knowledge and advisory products					CCS				x	x		x	x	x
SQ 2.5 Knowledge & advisory	**Country**	**2.5.4.**	**How appropriate is the Bank's organizational capacity in delivering RE interventions and obtaining results?**	2.5.4.	Feedback on Country offices capacities in managing RE-related lending & non-lending activities: adequacy of dedicated resources for supervision and monitoring, availability and quality of thematic expertise, capacity to conduct policy dialogue, etc.					CCS			x	x	x				
Total						**2**	**4**	**24**	**11**	**29**	**22**	**9**	**30**	**24**	**27**	**3**	**10**	**5**	**13**

Efficiency: To what extent has the Banks assistance to renewable energy results been delivered efficiently?

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organisations	Other TFPs
SQ 3.1 Design	**Interventions**	**3.1.1.**	**Did the Bank's RE projects appraisal include a comprehensive range of assessments (engineering design, sector political economy, institutional governance and performances, PFM, corruption)? Were they of sufficient quality and were they used and useful to optimize RE development interventions costs?**	3.1.1.1	Existence, quality and use of technical and context assessment tools & approaches for costs optimization at appraisal stage *(engineering design, sector political economy, institutional governance and performances, PFM, corruption)* [screening of existing PAR]				PRA				x		x				
SQ 3.1 Design	**Interventions**	**3.1.2.**	**Did the Bank make a consistent use of economic and financial analysis (IRRs) at appraisal stages,**	3.1.2.1	Cost-effectiveness analysis: consideration of the cost of alternative ways to achieve project objectives, unit costs for comparable activities, sector or industry standards, and/or other available evidence of the efficient use of project resources.				PRA				x		x				

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organisations	Other TFPs
			including systematic testing of alternative designs?		[screening of existing PAR]														
SQ 3.1 Design	**Interventions**	**3.1.3.**	**Did the Bank implement internally a specific and reliable quality control mechanisms prior to approval for avoiding overambitious, overoptimistic designing or budget underestimation by task teams?**	3.1.3.1	Evidence on quality control activities regarding the definition of project's scope (technical, geographic - zones; number of beneficiaries to be covered) objectives and output-outcome-impact indicators in reference to available budget [Task managers, Country office staff]				PRA				x		x				
SQ 3.1 Design	**Interventions**	**3.1.4.**	**Are assumptions, risks identified, and mitigation measures defined under RE development interventions closely monitored during**	3.1.4.1	Existence, coverage & soundness of risk analysis and proposed mitigation measures at appraisal stage [screening of existing PAR]				PRA				x		x				
				3.1.4.2	Evidence on monitoring mechanisms regarding the evolution of risks as well as the implementation and/or the adaptation of mitigation measures (specific competences used, frequency of monitoring / updating risks analysis)				PRA				x		x				

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organisations	Other TFPs
			implementation, completion and handover to beneficiaries?																
SQ 3.2 Delivery	**Interventions**	**3.2.1.**	**Did the Bank's RE interventions face delays (comparison of the estimated duration and the actual duration from the date of entry into force of RE interventions; duration of the approval process and delay of the first disbursement, etc.)? What are the determining explanatory factors (technical, financial, governance, management capacities, administrative**	3.2.1.1	(i) Comparison between the planned and the actual period of implementation from the date of signature (ii) Duration of the approval process (iii) Delay of the first disbursement [PRA, section 4.2 Timeliness]				PRA				X		x				
				3.2.1.2	Identification of explanatory factors: (i) technical, (ii) financial, (iii) governance-related: political will, management capacities, administrative procedures, etc.				PRA				x		x				

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organisations	Other TFPs
			procedures, etc.)?																
SQ 3.2 Delivery	**Interventions**	**3.2.2.**	**3.2.2. Was the procurement of the Bank financed RE interventions conducted in a timely manner?**	3.2.2.1	Duration of procurement process and explanatory factors (notice of non-objection; unsuccessful tendering procedures; availability and quality of procurement experts' competencies)				PRA				x		x				
SQ 3.2 Delivery	**Interventions**	**3.2.3.**	**3.2.3. Are expected results of the Bank RE interventions achieved in line with planned costs (economic rate of return ERR) or did they face cost overruns?**	3.2.3.1	Analysis of budgetary mobilization and absorption (paid vs planned budget; alignment with sector specific standards, etc.) [PRA, section 4.1 Cost-benefit analysis]				PRA						x				
SQ 3.3 Supervision	**Interventions**	**3.3.1.**	**3.3.1. Did the Bank's staff conduct sufficient supervision missions both in terms of quantity,**	3.3.1.1	Evidence on existence and regularity of (i) supervision reports, (ii) mid-term reports and (iii) reports on project implementation status and results according to planification. Opinion from in-country AfDB stakeholders and perception from project implementation units' responsible			INT	PRA			x	x		x				

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organisations	Other TFPs
			regularity of (i) supervision reports, (ii) mid-term reports and (iii) reports on project implementation status and results according to planification; and in terms of quality (adequate quantity of human resources, adequate mix of expertise, involvement of main stakeholders, sufficient data collected and adequately analyzed, quality of indicators included in M&E systems - realism, clarity and comprehensiveness) ?	3.3.1.2	Evidence on quality, use and usefulness of supervision: (i) adequate human resources dedicated to supervision, (ii) adequate mix of expertise, (iii) involvement of main stakeholders, (iv) sufficient data collected and adequately analyzed, (v) quality of indicators included in M&E systems (SMART nature)			INT	PRA			x	x		x				

Sub-Questions	Corporate / Country / Intervention	C#	Judgment Criteria or Performance Indicators (Tentative)	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organisations	Other TFPs
SQ 3.3 Supervision	**Interventions**	**3.3.2**	**3.3.2 Did the Bank supervision reports provide a balanced and realistic view of the implementation prospects (ownership, reform undertaking, timeliness, cost, and setting of a reliable monitoring system)?**	3.3.2.1	Evidence on considering project implementation prospects in supervision reports: (i) level of partners' & beneficiaries' ownership; (ii) commitment for sector specific reforms; (iii) efficiency-oriented management			INT	PRA			x	x		x				
				3.3.2.2	Implementation process (IP) assessment: i) compliance with covenants (project covenants, environmental and social safeguards and audit compliance), ii) project systems and procedures (procurement, financial management and monitoring and evaluation), and iii) project execution and financing (disbursement, budget commitments, counterpart funding and co-financing). The IP rating will be derived from the IPR that shall be updated in tandem with the PCR preparation [Section Implementation Process of PRAs]				PRA				x		x				
Total						0	0	3	12	0	0	3	11	0	12	0	0	0	0

Sustainability: To what extent are the results of the Bank's assistance to renewable energy sustainable?

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc	Private sector	Civil society organizations	Other TFPs
SQ 4.1 Technologies	***Interventions***	**M.a**	**4.1.1.**	**Did the Bank interventions select the right technology for RE infrastructures and was it installed in the adequate way?**	4.1.1.1	Technology chosen is adapted to local context, needs and capacities [Section 5.1 Technical Soundness of PRAs]				PRA					x	x		x		
					4.1.1.2	Infrastructure and equipment are installed adequately for a proper and longlisting functioning [Section 5.1 Technical Soundness of PRAs]				PRA						x		x		
SQ 4.1 Technologies	***Interventions***	**M.b**	**4.1.2.**	**Did the Bank support RMCs for getting the required technical skills for all maintenance processes?**	4.1.2.1	Evidence on availability (or future perspective) of technical skills for the maintenance of installed infrastructure and equipment; arrangements chosen (private sector-based or community-based providers) [Section 5.1 Technical Soundness of PRAs]				PRA					x	x		x		
SQ 4.1 Technologies	***Interventions***	**M.c**	**4.1.3.**	**Did the Bank support RMCs for getting the equipment and spare parts for capital assets maintenance?**	4.1.3.1	Existence and importance of Bank's support for maintenance of infrastructure (technical equipment, spare parts) [Section 5.1 Technical Soundness of PRAs]				PRA					x	x		x		
SQ 4.2 Financial sustainability	***Country / Interventions***	**N.a**	**4.2.1.**	**To what extent did AfDB support RMCs for securing the financial viability of RE interventions: revenue**	4.2.1.1	Evidence on creating or reinforcing funding mechanisms and modalities (eg. tariffs, user fees, maintenance fees, budgetary allocations, other stakeholder contributions, aid flows,				PRA					x	x	x	x	x	

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc	Private sector	Civil society organizations	Other TFPs
				collection mechanisms, via institutional reform/management capacity building/enhancement of financial viability of Electricity utilities/Municipal or Community-based service providers/ for all maintenance processes?		etc.) to ensure the continued flow of benefits after project completion.															
					4.2.1.2	Evidence on institutional arrangements and management tools for the sound financial and economic management of the Energy sector / Electricity sub-sector [Section 5.2 "Financial & Economic sustainability" of PRAs]				PRA				x	x	x	x	x	x	
					4.2.1.3	Evidence on the financial viability of national-wide Utilities and local service providers involved in the maintenance of the infrastructure, equipment and sectoral management				PRA				x	x		x			
SQ 4.3 Capacities	***Interventions***	**O.a**	**4.3.1.**	**To what extent did the Bank contribute to enhance the management of the energy demand in RMCs, through (i) appropriate tariff structure - do adequate funding mechanisms and**	4.3.1.1	**Tariffication**: (i) existence of specific targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to tariff structure (% of national subsidies, etc.)				PRA					x	x	x				

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc	Private sector	Civil society organizations	Other TFPs
				modalities (e.g., tariffs, user fees, maintenance fees, budget allocations, other stakeholder contributions, aid flows, etc.) have been put in place; (ii) building awareness and changing consumer behaviors; and (iii) regulatory enforcement and modernizing the sector?	4.3.1.2	**Awareness & consumer behavior**: (i) existence of specific targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to consumers behaviors				PRA					x	x		x	x	
					4.3.1.3	**Regulation and modernization**: (i) existence of specific targeted activities under AfDB projects / programs; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to regulatory and sectoral governance aspects				PRA					x	x	x			
SQ 4.3 Capacities	***Interventions***	**O.b**	**4.3.2**	**Did the Bank contribute to enhance the management of the energy offer in RMCs, through (i) generating more renewable energy; (ii) improving the allocation of renewable energy; (iii) limiting energy loss; and (iv) promoting effective management**	4.3.2.1	**Additional RE generation**: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to RE generation	DATA			PRA			x	x	x	x	x	x	x	
					4.3.2.2	**Allocation of RE**: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to allocation of RE				PRA			x	x	x	x	x			

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc	Private sector	Civil society organizations	Other TFPs
				of utilities and end-users' associations?	4.3.2.3	**Energy efficiency**: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to energy loss reduction				PRA				x	x	x	x			
					4.3.2.4	**Utilities & consumers associations**: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to the management of utilities and participation of consumers associations				PRA							x		x	
SQ 4.3 Capacities	***Interventions***	**O.c**	**4.3.3.**	**To what extent did the Bank contribute to reshape the institutional framework by (i) strengthening institutional systems and capacities, (ii) promoting research and development, and (iii) stimulating the development of local suppliers of equipment related to RE generation?**	4.3.3.1	Contribution to strengthen institutional capacities that will facilitate the continued flow of benefits associated with the project: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to the institutional framework Appreciation of whether or not improved governance practices or improved skills, procedures, incentives, structures, or institutional mechanisms				PRA				x	x	x	x	x		

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc	Private sector	Civil society organizations	Other TFPs
						came into effect as a result of the operation.														
					4.3.3.2	**R&D:** (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to the institutional framework				PRA			x	x	x	x	x		
					4.3.3.3	**Local industry:** (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to the institutional framework				PRA				x	x		x	x		
SQ 4.4 Stakeholders	***Country***	**P.a**	**4.4.1.**	**To what extent did the Bank CSPs involve key stakeholders in decision making and design for creating a sense of high-level ownership?**	4.4.1.1	Record and feedback on policy dialogue specific to RE development conducted by Country office: (i) stakeholders involved (technical vs decision-making level); (ii) level of commitment & ownership in the design of CSP					CCS			x	x		x	x	x	

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc	Private sector	Civil society organizations	Other TFPs
SQ 4.4 Stakeholders	***Country***		**4.4.2.**	**To what extent did the Bank built effective partnerships with relevant stakeholders (e.g., local authorities, civil society organizations, private sector, other TFPs) committed to sustain the achievements at sectoral level and with regard to specific RE interventions?**	4.4.2.1	Evidence and feedback on the role of the Bank in building partnerships with local authorities, CSO, private sector					CCS			x	x	x		x	x	
					4.4.2.2	Evidence on the capacity & commitment of those partners to sustain achievements at local level					CCS			x	x	x		x	x	
SQ 4.4 Stakeholders	***Interventions***		**4.4.3.**	**To what extent did RE interventions involve relevant stakeholders in design, implementation, and facilitation measures after their completion for creating a sense of ownership by the beneficiaries?**	4.4.3.1	Evidence on ownership and sustainability of partnerships: extent to which the project has effectively involved relevant stakeholders, promoted a sense of ownership amongst the beneficiaries (both men and women) and put in place effective partnerships with relevant stakeholders (e.g., local authorities, civil society organizations, private sector, donors) as required for the continued maintenance of the project outputs)				PRA				x	x	x	x	x	x	x
SQ 4.4 Stakeholders	***Interventions***	**P.b**	**4.4.4.**	**To what extent did RE interventions contribute to enhance the equal access to RE services by the beneficiaries?**	4.4.4.1	Existence and achievements of affordability measures under RE development interventions				PRA				x	x	x				

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc	Private sector	Civil society organizations	Other TFPs
SQ 4.5 E&S impact	***Country***		**4.5.1.**	**Did AfDB assistance contribute to mainstream environmental and social sustainability into RE interventions, including climate change, via national governance mechanisms and strategies?**	4.5.1.1	Existence of explicit objectives under CSPs for mainstreaming environmental, climate & social sustainability through national strategies				PRA				x						
					4.5.1.2	Means dedicated to such mainstreaming and concrete achievements				PRA				x						
SQ 4.5 E&S impact	***Interventions***	**Q.a**	**4.5.2.**	**To what extent did the Bank assess the environmental and social risks, along with mitigation measures, in its RE interventions, meeting all AfDB environmental, social, health and safety (ESHS) standards?**	4.5.2.1	Extent to which environmental and social mitigation/enhancement measures of the project were implemented, the capacity of country institutions and systems and the availability of funding to ensure the environmental and social sustainability of the operation				PRA				x		x			x	
SQ 4.5 E&S impact	***Interventions***	**Q.c**	**4.5.3.**	**To what extent did the Bank identify and support climate change mitigation & adaptation measures in its RE development interventions?**	4.5.3.1	Record and feedback on the existence of climate change mitigation & adaptation measures under RE development interneurons				PRA				x		x			x	
SQ 4.5 E&S impact	***Interventions***	**Q.b**	**4.5.4.**	**To what extent were the mitigation measures effectively**	4.5.4.1	Record and feedback on the implementation, monitoring and				PRA				x	x	x			x	

Sub-Questions	Corporate / Country / Intervention	Initial Question?	C#	Criteria	I#	Indicators	DATA	LR	INT	PRA	CCS	Energy complex AfDB-HQ	Task managers AfDB-HQ	AfDB Country offices	Country Government officials (including local)	Executive agency, PM staff	Sector Regulators, Utilities, etc	Private sector	Civil society organizations	Other TFPs
				implemented to ensure environmental and social safeguards?		effectiveness of those climate change mitigation & adaptation measures														
SQ 4.5 E&S impact	***Interventions***	**E.e**	**4.5.5.**	**Did RE interventions produce significant unintended negative ESHS impacts?**	4.5.5.1	Detection of unintended negative ESHS impacts, existing analysis of root causes and explicit strategy to deal with them at short-, mid- and long-term.				PRA				x	x	x			x	
Total							1	0	0	25	3	0	2	19	22	22	#	15	#	1

Annex 3 - Descriptive analysis for country case study selection

Proposed scenarios

Scenario 1: inclusion of Djibouti (geothermal projects, full coverage of this cluster, as Kenya and Djibouti are the two only countries with projects under this technology).

Scenario 2: inclusion of a regional hydropower project at the borders of DRC-Rwanda and Burundi (Ruzizi power plant), offering the opportunity to further analyze the regional integration dimension of RE.

Scenario 1	Scenario 2
	

Proposed countries

MOROCCO (S1&S2)

1. North Africa
2. Contribution of the Bank to 4 large programs/projects with 9 interventions (4 Solar; 2 Hydro; 3 Wind)
    - **Solar** : *Complexe S Ourzazate : Phase 1 (154,5 mUA; 2012-CO[6]MP) ; Phase 2.1 & 2.2 (168 mUA; 2014-OnGo[7]) ; Complexe S Midelt P1 (94,7 mUA 2017-APVD[8])*
    - **Hydro** : *PIEHER[9] - Complexe hydroélec M'DEZ EL MENZEL (80,6 mUA; 2012-OnGo) and PIEHER - STEP D'ABDELMOUMEN (154,1 mUA; 2012-OnGo)"*

[6] Completed (project status)
[7] On-going (project status)
[8] Approved (project status)
[9] Programme Intégré Eolien Hydraulique et Electrification Rurale

   - **Wind** : *PIEHER - PARC ÉOLIEN DE TANGER II (55,4 mAU; 2012-OnGo) ; Jbel-Sendoug Wind Project PPG (0,63 mUA; 2013-OnGo) and TA Super ESCO (0,69 mUA, 2021-OnGo)"*
3. Quasi 100% electricity access context
4. About 20% of electricity produced is from renewables (challenge of the transition)
5. Fragility & conflict situation*:*
   - Not included in the Harmonized List of Fragile Situations (period 2009-2019)
   - Not Included in the List of Fragile and Conflict-affected Situations (since 2020)
6. *AfDB country office*

BURKINA FASO (S1&S2)

1. West Africa
2. Desert to Power (DTP) G5 Financing Facility (solar) and Programme based operation in two phases (PBO):
   - **Solar:** Windiga Solar Power PPG (0,62 mUA; 2014-OnGo); DTP | Projet Yeleen : Dév centrales solaires et réseaux élec (40,5 mUA; 2019-OnGo) ; DTP | Projet Yeleen : Electrification rurale (3 mUA; 2018/19 - APVD); DTP | Projet d'électrification et de développement des connexions (50 mUA; 2021-APVD)
   - **PBO:** Energy Sector Support Programme - Phase I (20 mUA; 2015-COMP) and Phase II (15 mUA; 2018-APVD)
3. Limited electricity access (national 18,4 %)
4. 16,5 % from renewables
5. Fragility & conflict situation
   - Not included in the Harmonized List of Fragile Situations (covering the period 2009-2019)
   - *Included in the List of Fragile and Conflict-affected Situations (since 2020) for 2020 and 2021 under Medium-intensity conflict*
6. *AfDB country office*
7. *Caution: security issues (on 09-03-2022) might impact access and execution of the mission.*

CÔTE D'IVOIRE (S1&S2)

1. West Africa
2. Two projects during the period:
   - **Solar**: Zola Energy CI Pay-as-you-go Solar Home Systems (6,57 mUA; 2018-APVD)
   - **Hydro**: SINGROBO 44 MW HYDRO POWER PROJECT (41,5 mUA; Loan in 2018-APVD) and Guarantee in 2021
3. About 70% of electricity access context
4. About 35% of electricity produced from renewables
5. Fragility & conflict situation:
   - *Included in the Harmonized List of Fragile Situations (covering the period 2009-2019) for the period 2010-2019*
   - Not included in the List of Fragile and Conflict-affected Situations (since 2020)
6. *AfDB HQ (+ interaction with Energy department / complex at AfDB's HQ)*

DJIBOUTI (S1 only)

1. East Africa
2. Geothermal project articulating an exploratory phase and a development phase:
    - GEOTHERMAL EXPLORATORY DRILLING PROJECT (3,8 mUA; 2013-OnGo)
    - GEOTHERMAL DEVELOPMENT PROJECT (10,7 mUA; 2018-OnGo)
3. About 60% of electricity access context, but only 25% in rural areas
4. About 30% of electricity produced from renewables
5. Fragility & conflict situation:
    - *Included in the Harmonized List of Fragile Situations (covering the period 2009-2019) for 2010, and for the period 2017-2019*
    - Not included in the List of Fragile and Conflict-affected Situations (since 2020)
6. *No AfDB representation*

KENYA (S1&S2)

1. East Africa
2. AfDB contribution to large projects, in 3 technologies (solar; wind; geothermal)
    - **Solar**: *KOPERE 40 MW SOLAR PV IPP (13,1 mUA; 2018/19 - APVD)*
    - **Wind**: *LAKE TURKANA WIND POWER PROJECT: (i) Loan 95,46 mUA in 2013 & Guarantee 29,83 mUA in 2015 - OnGo; (ii) Sub-debt tranche 4,15 mUA in 2013-OnGo; (iii) Guarantee for T-Line 16,6 mUA in 2013-APVD; (iii) EKF 16,6 mUA 2013-OnGo*
    - **Geothermal**: *QUANTUM POWER MENENGAI 35 MW GEOTHERMAL IPP (35,4 mUA;* 2018-APVD); and *KPLC SUPER ESCO DEVELOPMENT (0,7 mUA; 2021-APVD)*
3. About 70% of electricity access context (90% in cities, and 62% rural)
4. About 80% of electricity produced from renewables
5. Fragility & conflict situation:
    - Not included in the Harmonized List of Fragile Situations (covering the period 2009-2019)
    - Not included in the List of Fragile and Conflict-affected Situations (since 2020)
6. *AfDB Regional Hub*

MADAGASCAR (S1&S2)

1. East Africa
2. AfDB assistance through 2 investment projects in hydropower, one PBO and support for the preparation of a hybrid RE project :
    - **Hydro**: SAHOFIKA HYDRO PROJECT articulating (i) an ADF Guarantee (? mUA; 2019-APVD) and (ii) ADF Loan & Grant (3,2 mUA; 2020-APVD); and PRIRTEM I articulating (i) a FSF loan (18,2 mUA; 2019-OnGo) and (ii) an ADF loan (9,7 mUA; 2019-OnGo)
    - **PBO:** ENERGY SECTOR REFORM SUPPORT PROGRAMME-PARSE (13,8 mUA; 2016-COMP)
    - **All RE**: Renewable energy project in Nosy-Be (pre-investment activities for a hybrid renewable energy project) PPG : Grant under SE4Africa 0,6 mUA; 2013-OnGo
3. About 40% of electricity access context (70% in cities; 32% rural)
4. About 95% of electricity produced from renewables
5. Fragility & conflict situation:

- *Included in the Harmonized List of Fragile Situations (covering the period 2009-2019) between 2014-2017.*
- Not included in the List of Fragile and Conflict-affected Situations (since 2020)

6. *AfDB country office*

UGANDA (S1&S2)

1. East Africa
2. AfDB assistance through 2 investment projects in hydropower and institutional support for wind-power development program:
   - BUJAGALI HYDROPOWER: (i) Guarantee (14,9 mUA; 2015-OnGo); (ii) Loan (46,4 mUA; 2017-APVD); and ACHWA II HYDROPOWER PLANT (13,6 mUA; 2016-OnGo)"
   - Wind Resource Map and Pilot-Wind Power Development Program 2*10MW (1,3 mUA; 2016-APVD)
3. About 40% of electricity access context (70% in cities; 32% rural)
4. About 95% of electricity produced from renewables
5. Fragility & conflict situation:
   - Not included in the Harmonized List of Fragile Situations (covering the period 2009-2019)
   - Not included in the List of Fragile and Conflict-affected Situations (since 2020)
6. *AfDB country office*

CAMEROON (S1&S2)

1. Central Africa
2. Contribution to a large hydropower project and to a photovoltaic project preparation
   - **Hydro**: NACHTIGAL HYDRO POWER PROJECT: (i) Loan (124,5 mUA, 2017-APVD); (ii) Guarantee (6,6 mUA; 2021-APVD)
   - **Solar**: JCM Solar PV PPG (0,53 mUA; 2015-OnGo)
3. About 65% of electricity access context (93% in cities, 24% rural)
4. About 50% of electricity produced from renewables
5. Fragility & conflict situation:
   - Not included in the Harmonized List of Fragile Situations (covering the period 2009-2019)
   - *Included in the List of Fragile and Conflict-affected Situations (since 2020) for 2020 and 2021 under Medium-intensity conflict*
6. *AfDB country office*

SOUTH AFRICA (S1&S2)

1. Southern Africa
2. AfDB contribution to two large solar projects and a RE storage programme
   - **Solar**: X*INA SOLAR ONE PROJECT (70,3 mUA; 2014-OnGo) and Redstone 100 MW Concentrated Solar Power IPP (157,6 mUA; 2018-APVD)*
   - **RE storage**: *ESKOM DISTRIBUTED BATTERY ENERGY STORAGE PROGRAMME (40,92 mUA, 2021-APVD)*
3. About 85% of electricity access context (cities and rural)
4. Less than 10 % of electricity produced from renewables (challenge for the transition to RE)

5. Fragility & conflict situation:
    - Not included in the Harmonized List of Fragile Situations (covering the period 2009-2019)
    - Not included in the List of Fragile and Conflict-affected Situations (since 2020)
6. *AfDB Regional Hub*

ZAMBIA (S1&S2)

1. Southern Africa
2. AfDB assistance through large solar and hydro projects:
    - Solar: Renewable Energy Financing Framework[10] (36,2 mUA; 2018-APVD) and Zambia RE IPP Programme (1,1 mUA; 2018-APVD)
    - Hydro: POWER TRANSMISSION PROJECT[11] (36,4 mUA; 2012-OnGo); ITEZHI-TEZHI HYDROPOWER PROJECT (24,7 mUA; 2012-COMP) and KARIBA DAM REHABILITATION (25,2 mUA; 2014-OnGo).
3. About 40% of electricity access context (80% cities; 14% rural)
4. About 95% of electricity produced from renewables
5. Fragility & conflict situation:
    - Not included in the Harmonized List of Fragile Situations (covering the period 2009-2019)
    - Not included in the List of Fragile and Conflict-affected Situations (since 2020)
6. *AfDB country office*

MULTINATIONAL (S2 only)

1. Central / East Africa
2. AfDB support to RUZIZI III HYDROPOWER PROJECT, covering DRC, Burundi and Rwanda, articulating sources of financing such as FSF (60 mUA) and ADF (38,5 mUA; 2015-OnGo)
3. Variable electricity access according to countries (from 11% in Burundi and 19% in DRC to 38% in Rwanda)
4. Major % of electricity produced from renewables in Burundi and DRC (70% and >90%), and to a lesser extent in Rwanda (41%)
5. Fragility & conflict situation:
    - DRC and Burundi included in the Harmonized List of Fragile Situations (covering the period 2009-2019) between 2010-2019.
    - DRC and Burundi included in the List of Fragile and Conflict-affected Situations (since 2020) under medium-intensity conflict (RDC 2020-2021; Burundi 2020) and high institutional & social fragility (Burundi 2021).
6. *AfDB country office in each of the 3 countries*

[10] Our investigations did not conclude that this intervention is to be included in the Solar cluster. We cannot find the Project appraisal report. To be further explored

[11] Our investigations did not conclude that this intervention is targeted to hydro power. We cannot find the Project appraisal report. To be further explored

Coverage of main portfolio features based on the proposed selection and scenarios

	Dimensions	SCENARIO 1	SCENARIO 2
STRENGTHS	**Clusters (technologies)**	▪ S1 offers a full coverage of **Geothermal (100%)**; major proportions of Wind (~90%), Solar (73%) and **Hydro (57%)** projects are covered	▪ S2 covers major proportions of approved amounts under Wind (~90%), Solar (73%), **Geothermal (71%)** and **Hydro (66%)** power projects within the AfDB RE portfolio 2012-2021.
	Sources of financing	▪ Full coverage of the Clean technology fund CTF (3rd source of overall importance) in both scenarios	
		▪ Important coverage of ADB (48%) and **ADF (40%)**	▪ Important coverage of ADB (48%) and **ADF (45%)**. Fragile States Facility FSF better covered (61%)
		▪ Almost entire coverage of the Private sector credit enhancement facility (PSCEF, 92% covered) in both scenarios.	
	Financial instruments	▪ Adequate coverage of main financial instruments used by the Bank in supporting RE development: 71% of Loans; 60% of Guarantees and **20% Grants**	▪ Even more important coverage of main financial instruments used by the Bank in supporting RE development compared to S1: 72% of Loans; 60% of Guarantees and **38 % of Grants**
	Regions	Both scenarios cover all African regions in terms of approved amounts: ▪ They capture large investments in Northern Africa (Morocco; 82%) as well as a major part of AfDB approvals in Central (71%) and Eastern Africa (~60%). ▪ Southern (South Africa and Zambia; 37%), as well as investments in Western Africa (33%) are well represented.	
			▪ Scenario 2 includes a multinational hydropower project (Ruzizi plant between RDC-BDI-RWA) representing 1/3 of the total amount dedicated to multiregional project in the portfolio.
	Electricity access	▪ Both scenarios offer a consideration of various contexts of access to electricity. They take into account contexts of (i) almost full or large access to electricity (Morocco, South-Africa); (ii) important access to electricity (e.g. countries such as Kenya, Côte d'Ivoire, Cameroon, *Djibouti in Scenario 1*) but where 30% to 40% of the population (in 2019) has still no access to electricity; (iii) the majority of the population has no access to electricity (Burkina, Madagascar, Uganda, Zambia 80% to 60% without access).	
			▪ As a mitigation measure regarding the non-direct coverage of countries with largest population with no access to power, Scenario 2 includes a multinational project which involves DR Congo.
	Types of projects (public / private)	▪ Adequate coverage and opportunity to capture the key strengths and weaknesses which may vary according to the public or private-driven investments in RE development	
WEAKNESSES	**Clusters (technologies)**	✶ In both S1 & S2, the coverage of PBOs is rather limited. In fact, PBOs account for a total of 957,6 mUA in the portfolio, while the single PBO in Angola represents 714,4 mUA (75%). This programme has as an objective the structural sector reform and only one of the 3 components is targeted to RE & private sector participation.	
	Sources of financing	✶ Sources of funding not covered by both scenarios include specific funds which represent a very limited proportion in the overall portfolio (= or <1%) such as : EUAIP; CIF; GEF; AGTF, NEPAD IPPF (project preparation), etc.	
		✶ Rather limited coverage of the Fragile States Facility FSF (14%) under S1	
	Financial instruments	✶ Programme based lending has a limited coverage (2% only) in both scenarios. As a reminder, the PBO in Angola, not selected, represents 714,4 mUA (75% of PBOs)	
		✶ Other specific instruments such as Line of credit and RBF are not covered. They were punctually used during the period and/or recently mobilised (e.g. in 2021 for RBF, instrument recently designed)	
	Regions	✶ S1 does not cover multinational projects (regional integration)	
	Electricity access	✶ non-direct coverage of countries with large population with no access to power. As a mitigation measure, note that Scenario 2 considers a multinational project which involves the DRC (see above S2).	
	Types of projects (public / private)	✶ Both scenarios tend to cover more investments targeted to the private sector. This is linked to the presence of large PBOs in the public sector (e.g the PBO to Angola accounting for 714 mUA), which are not considered in the proposed selection.	

Coverage of RE Clusters (technologies)

Comment: *Full (S1) or major (S2, 71%) coverage of Geothermal, Major part of Wind (~90%[12]), Solar (73%) and Hydro (57% in S1 or 66% in S2) portfolio covered. Limited coverage of PBOs (as the PBO in Angola, not selected, represents 720 mUA, structural sector reform as objective, only one of the 3 components is targeted to RE & private sector participation.*

[12] All amounts and % are related to the AfDB net loan (not the total project cost)

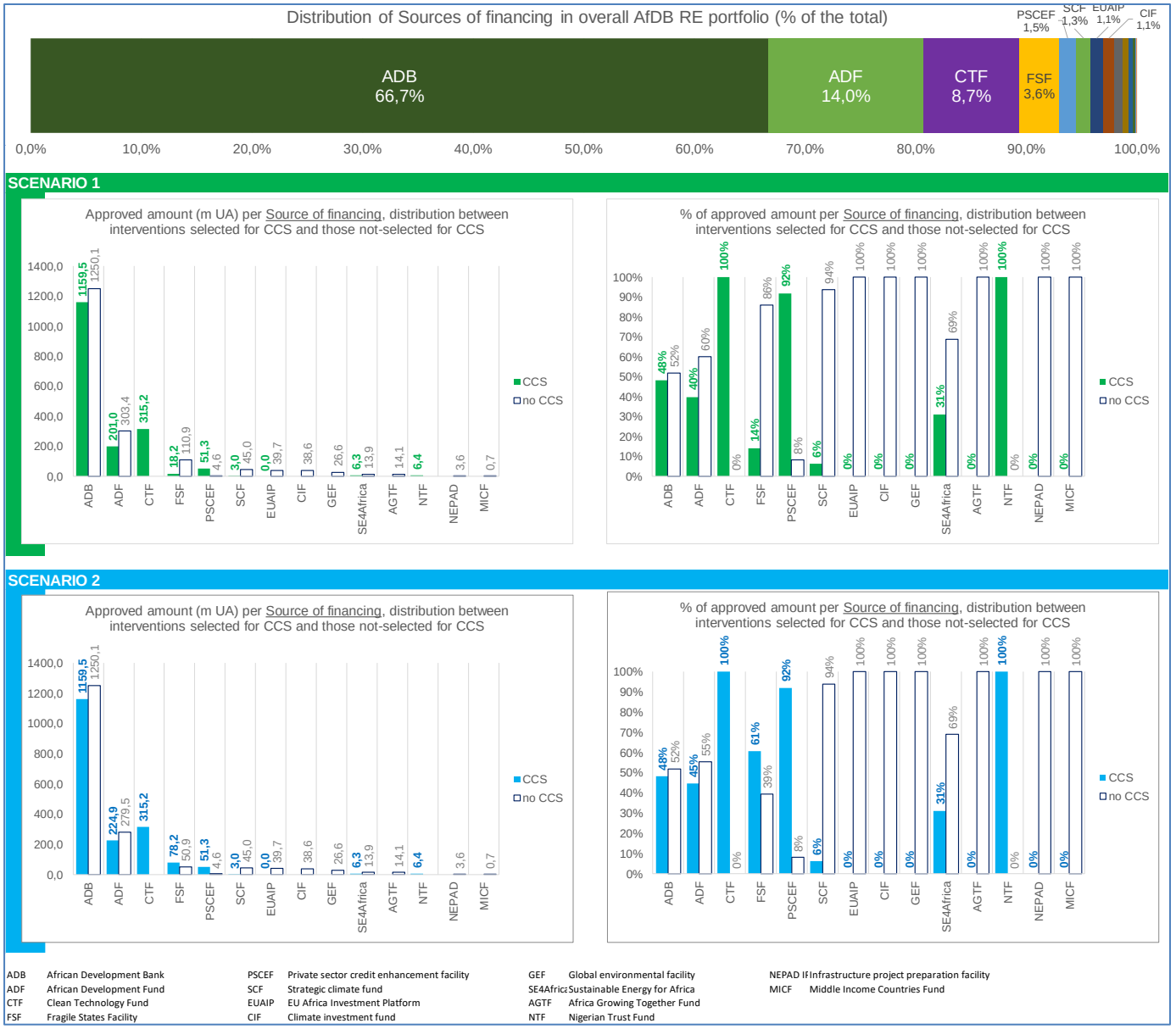
Coverage of RE Clusters (technologies)

Comment: *Full (S1) or major (S2, 71%) coverage of Geothermal, Major part of Wind (~90%[13]), Solar (73%) and Hydro (57% in S1 or 66% in S2) portfolio covered. Limited coverage of PBOs (as the PBO in Angola, not selected, represents 720 mUA, structural sector reform as objective, only one of the 3 components is targeted to RE & private sector participation.*

[13] All amounts and % are related to the AfDB net loan (not the total project cost)

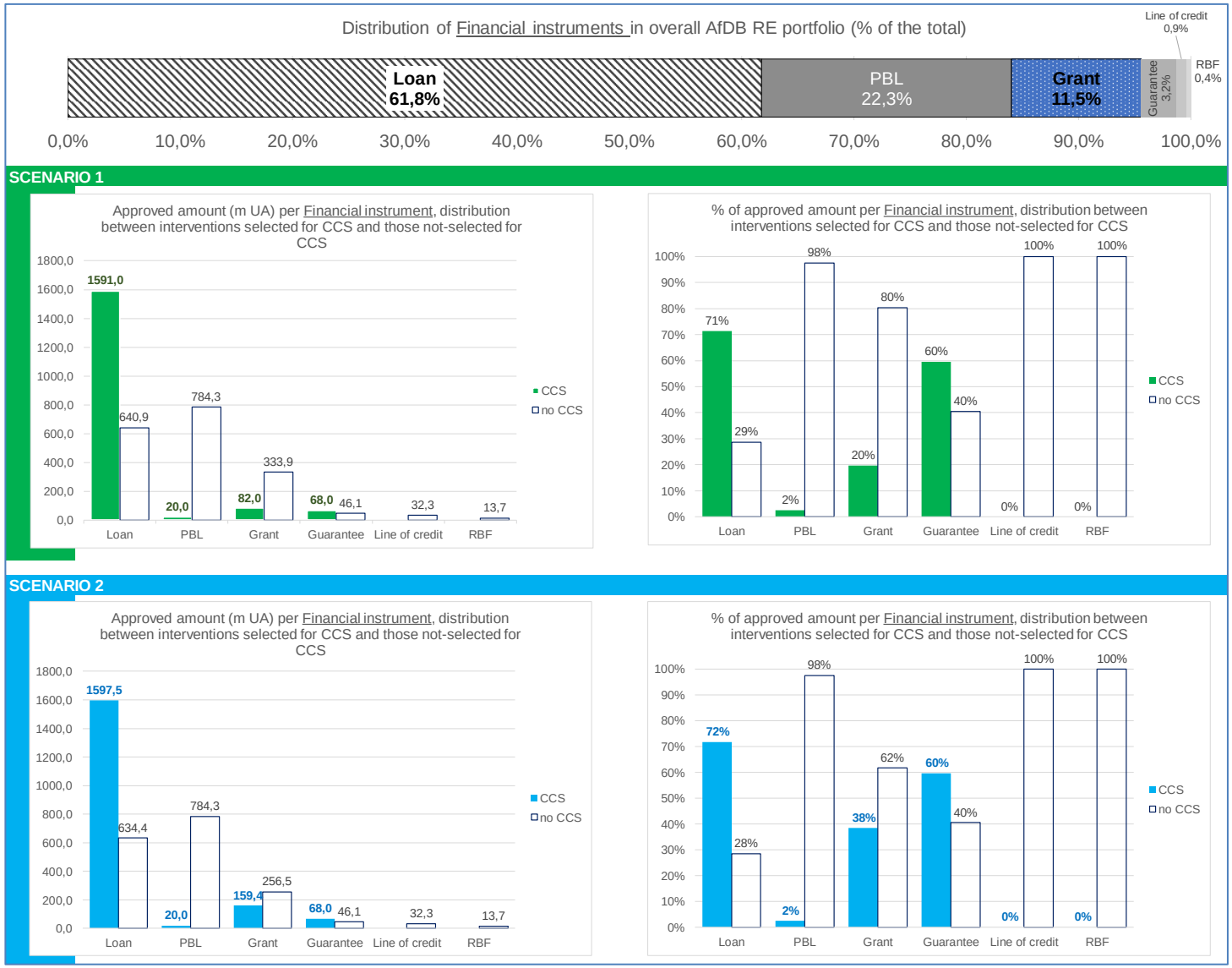
Coverage of Sources of funding

Comment: *Full coverage of the Clean technology fund CTF in both scenarios (3rd source of overall importance), important coverage of ADB and ADF windows (~40-50%). In scenario 2, the Fragile States Facility FSF is even better covered (61%) than in S1 (14%). The proposed selection covers almost entirely the Private sector credit enhancement facility (PSCEF, 92% covered). Sources of funding which are not covered by the proposed selection include specific funds which represent a very limited proportion in the overall portfolio (= or <1%) : EUAIP; CIF; GEF; AGTF, NEPAD IPPF (project preparation), etc.*



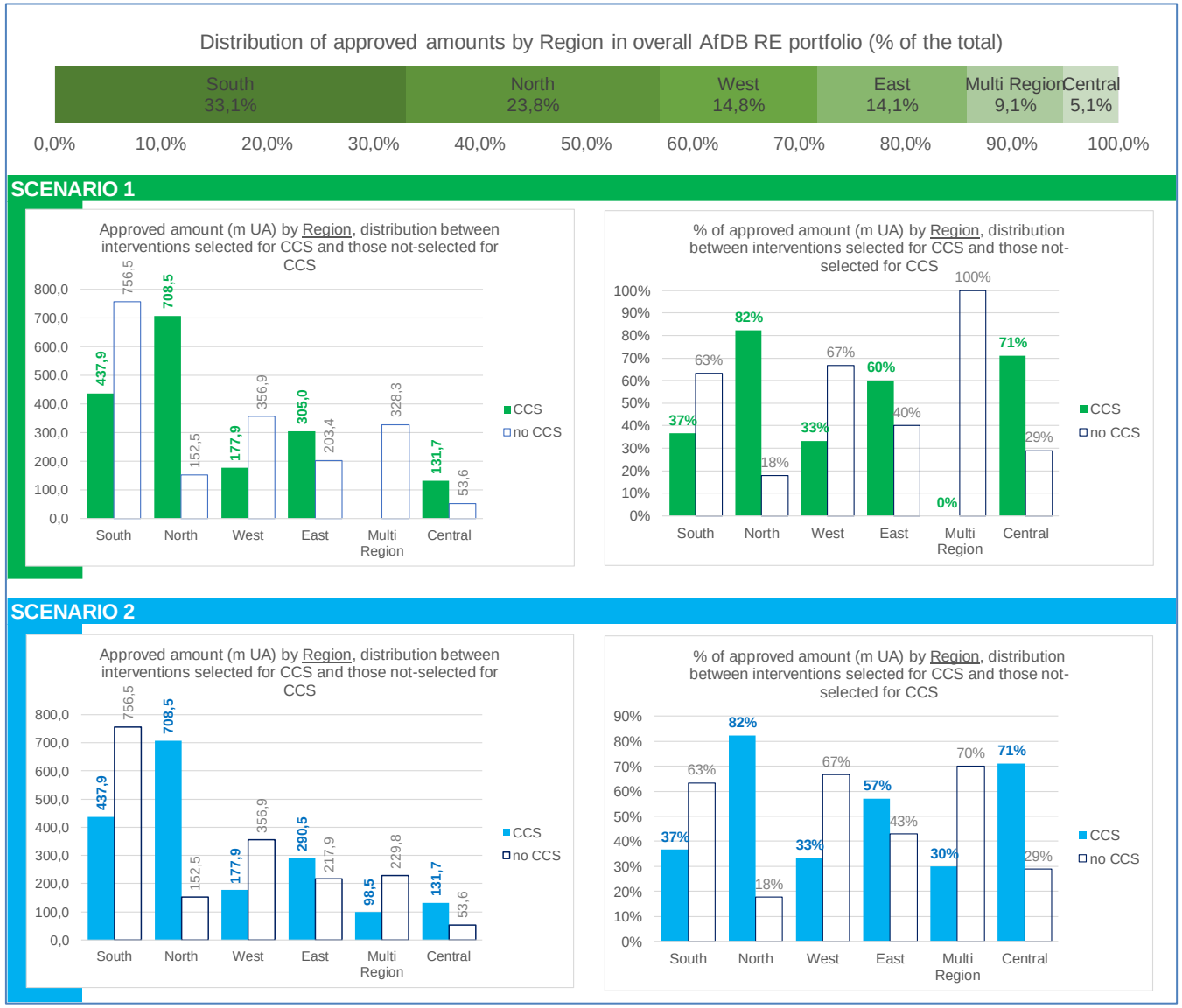
Coverage of Financial instruments

Comment: *the selection offers an adequate coverage of main financial instruments used by the Bank in supporting RE development (>70% of amounts dedicated to Loans; 60% of Guarantees; 20% to 40% of Grants), except the Programme based lending. As a reminder, the PBO in Angola, not selected, represents 720 mUA, it has a structural sector reform as objective, only one of the 3 components is targeted to RE & private sector participation. Other specific instruments such as Line of credit and RBF were punctually used during the period and/or recently mobilised (in 2021 for RBF, instrument recently designed)*



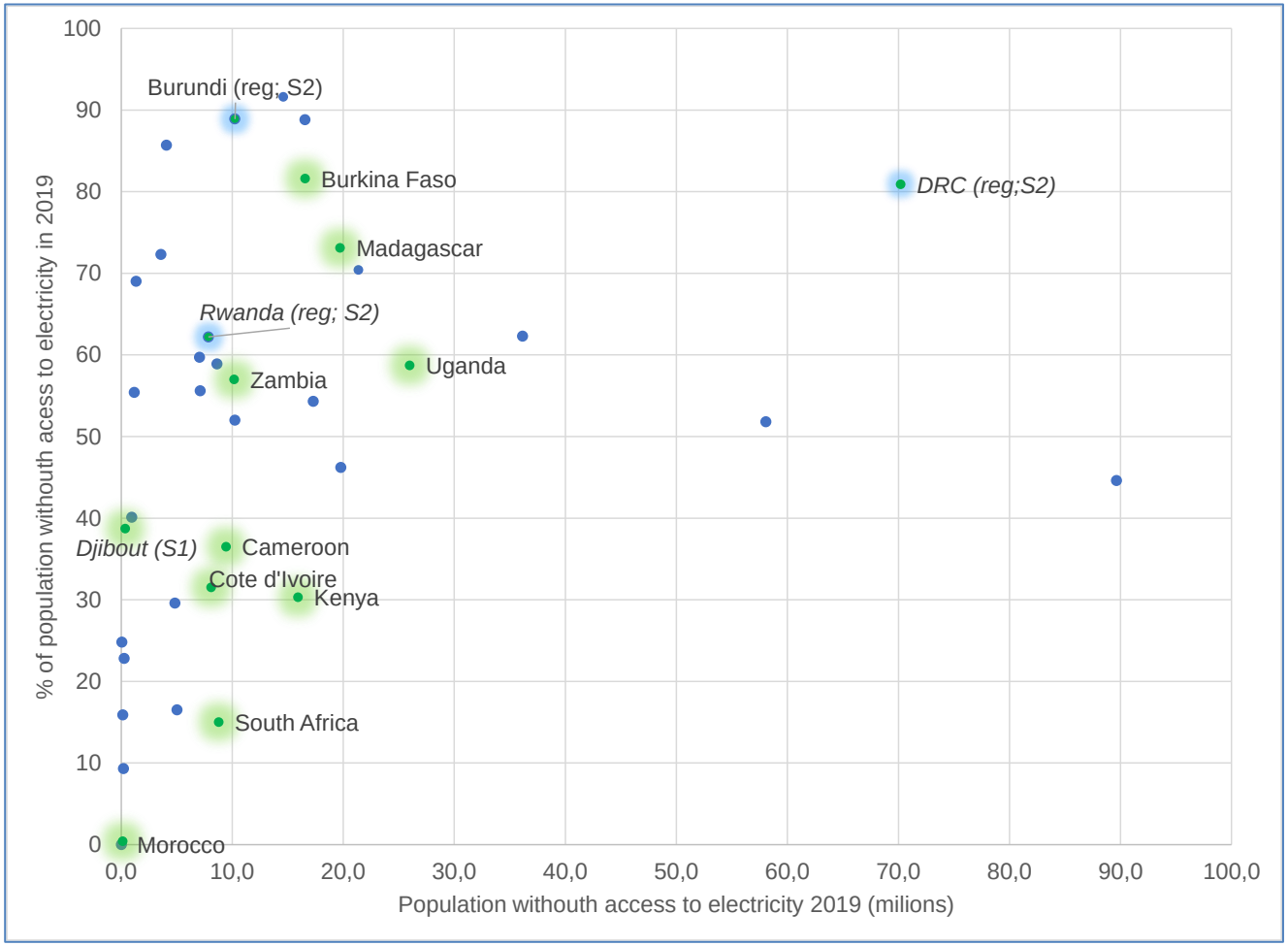
Coverage of African Regions

Comment: *the proposed selection **covers all African regions** both in terms of approved amounts and number of projects (overleaf). It captures the **major part of AfDB approvals in Central and Eastern Africa** (~60%-70%), **important investments in Northern Africa** (Morocco), Southern (South Africa and Zambia), as well as investments in Western Africa (30-40%). The Scenario 2 includes a multinational hydropower project (Ruzizi plant between RDC-BDI-RWA) representing 1/3 of the total amount dedicated to multiregional project in the portfolio.*



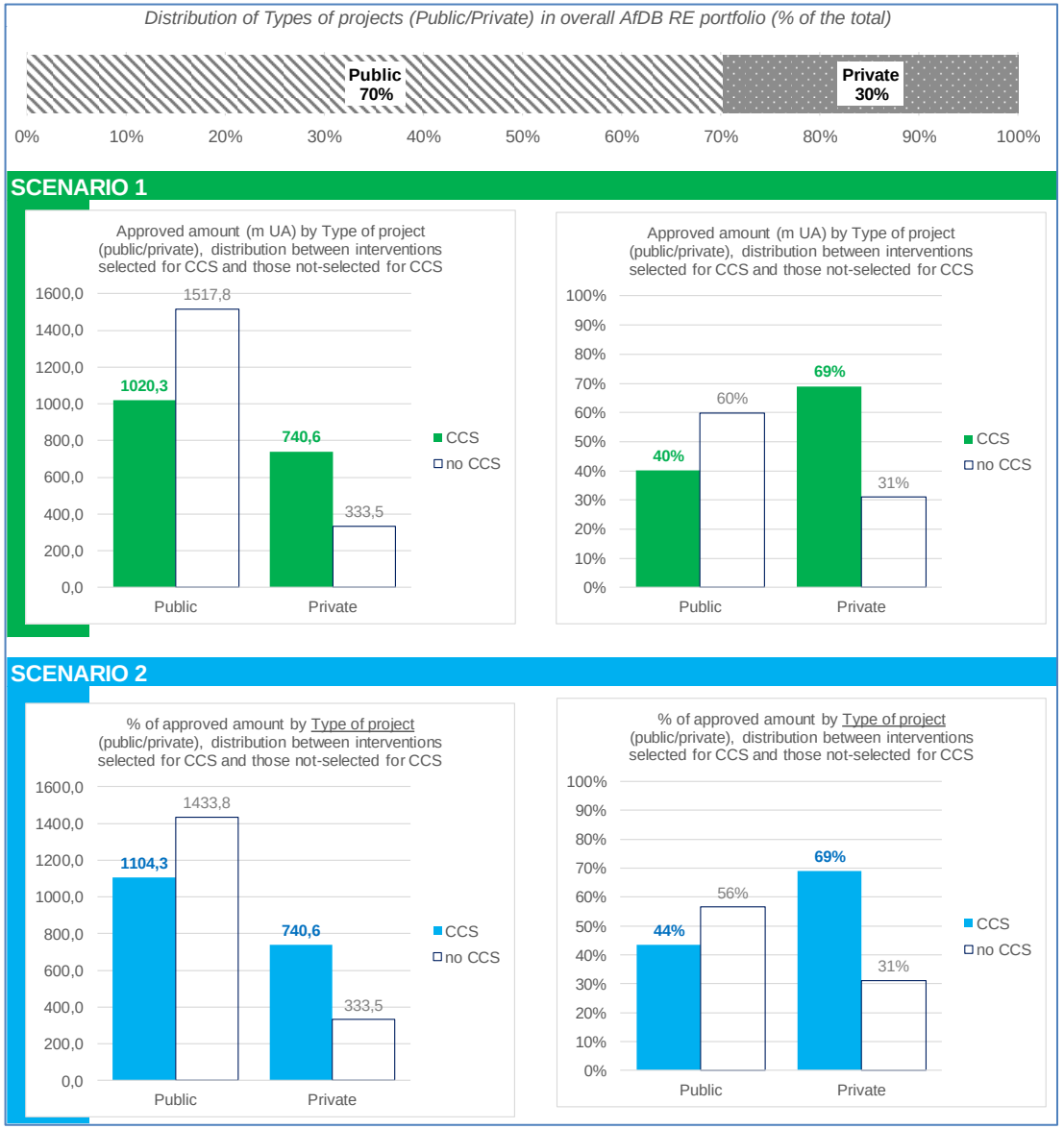
Coverage of different situations regarding the access to electricity (national level)

Comment: *the proposed selection considers various contexts of access to electricity. As illustrated in the Figure below, the selection takes into account contexts of (i) almost full or large access to electricity (Morocco, South-Africa); (ii) important access to electricity (e.g. countries such as Kenya, Côte d'Ivoire, Cameroon, Djibouti in Scenario 1) but where 30% to 40% of the population has still (in 2019) no access to electricity; (iii) the majority of the population has no access . The limitation here is the non-direct coverage of countries with largest population with no access to power. As a mitigation measure, Scenario 2 was conceived to consider a multinational project which involves the DRC.*



Coverage of Types of projects (public / private sector)

Comment: *the proposed selection tends to cover more investments targeted to the private sector. This is linked to the presence of large PBOs in the public sector (e.g the PBO to Angola accounting for 714 mUA). Nevertheless, the selection offers an adequate coverage and opportunity to capture the key strengths and weaknesses which may vary according to the public or private-driven investments in RE development.*



Coverage of country classifications (Bank windows, income level)

Comment: *the proposed selection covers all types of AfDB windows (ADB, ADF and Blending), except Multinational.*
In terms of economic and development context, counties from all income categories are considered: (i) LIC – Burkina; Uganda; Madagascar (DRC, Rwanda and Burundi under the regional project if S2); (ii) LMIC Morocco; Côte d'Ivoire, Djibouti (S1); Kenya; Cameroon; Zambia; (iii) UMIC – South Africa.

Projects by approval year, status and country for proposed CCS

Overview (portfolio)

Approval ye	APVD #	mUA	OnGo #	mUA	COMP #	mUA	Total #	Total mUA
2012			6	374,8	3	180,3	9	555,2
2013	1	16,6	11	181,0	2	3,2	14	200,8
2014			18	351,4	1	714,4	19	1065,8
2015	2	21,0	8	219,2	2	70,0	12	310,2
2016	3	44,0	3	20,7	2	14,0	8	78,6
2017	21	387,5	1	20,0	1	19,9	23	427,4
2018	21	600,8	1	17,0			22	617,8
2019	4	14,4	3	91,4			7	105,8
2020	3	104,3	1	10,0			4	114,3
2021	15	110,3	1	25,9			16	136,2
TOTAL	**70**	**1298,9**	**53**	**1311,5**	**11**	**1001,79**	**134**	**3612,2**

All CCS – Scenario 1

Approval ye	APVD #	mUA	OnGo #	mUA	COMP #	mUA	Total #	Total mUA
2012			4	326,5	2	179,2	6	505,7
2013	1	16,6	6	121,3			7	137,9
2014			6	264,7			6	264,7
2015			1	44,7	1	20,0	2	64,7
2016	1	1,3	1	13,6	1	13,8	3	28,7
2017	7	310,1					7	310,1
2018	8	267,9	1	10,7			9	278,6
2019	1	0,0	2	68,3			3	68,3
2020	1	3,2					1	3,2
2021	5	99,0					5	99,0
TOTAL	**24**	**698,1**	**21**	**849,9**	**4**	**212,937**	**49**	**1760,9**

All CCS – Scenario 2

Approval ye	APVD #	mUA	OnGo #	mUA	COMP #	mUA	Total #	Total mUA
2012			4	326,5	2	179,2	6	505,7
2013	1	16,6	5	117,5			6	134,1
2014			6	264,7			6	264,7
2015	2	21,0	4	122,2	1	20,0	7	163,2
2016	1	1,3	1	13,6	1	13,8	3	28,7
2017	7	310,1					7	310,1
2018	8	267,9					8	267,9
2019	1	0,0	2	68,3			3	68,3
2020	1	3,2					1	3,2
2021	5	99,0					5	99,0
TOTAL	**26**	**719,1**	**22**	**912,8**	**4**	**212,937**	**52**	**1844,9**

Morocco

Approval ye	APVD #	mUA	OnGo #	mUA	COMP #	mUA	Total #	Total mUA
2012			3	290,1	1	154,5	4	444,5
2013			1	0,6			1	0,6
2014			2	168,0			2	168,0
2017	1	94,7					1	94,7
2021	1	0,7					1	0,7
TOTAL	**2**	**95,3**	**6**	**458,7**	**1**	**154,452**	**9**	**708,5**

Burkina Faso

Approval ye	APVD #	mUA	OnGo #	mUA	COMP #	mUA	Total #	Total mUA
2014			1	0,6			1	0,6
2015					1	20,0	1	20,0
2017	1	0,7					1	0,7
2018	2	18,0					2	18,0
2019	0	0,0	1	40,5			1	40,5
2021	1	50,0					1	50,0
TOTAL	**4**	**68,7**	**2**	**41,1**	**1**	**20**	**7**	**129,8**

Côte d'Ivoire

Approval ye	APVD #	mUA	Total #	Total mUA
2017	1	41,5	1	41,5
2018	1	6,6	1	6,6
2021	0	0,0	0	0,0
TOTAL	**2**	**48,1**	**2**	**48,1**

Djibouti (S1)

Approval ye	OnGo #	mUA	Total #	Total mUA
2013	1	3,8	1	3,8
2018	1	10,7	1	10,7
TOTAL	**2**	**14,5**	**2**	**14,5**

Kenya

Approval ye	APVD #	mUA	OnGo #	mUA	Total #	Total mUA
2013	1	16,6	3	116,2	4	132,8
2015			0	29,8	0	29,8
2017	1	0,7			1	0,7
2018	2	48,5			2	48,5
2019	0	0,0			0	0,0
2021	1	0,7			1	0,7
TOTAL	**5**	**66,5**	**3**	**146,0**	**8**	**212,6**

Uganda

Approval ye	APVD #	mUA	OnGo #	mUA	Total #	Total mUA
2015			1	14,9	1	14,9
2016	1	1,3	1	13,6	2	15,0
2017	2	48,0			2	48,0
TOTAL	**3**	**49,4**	**2**	**28,5**	**5**	**77,9**

Madagascar

Cameroon

South Africa

Approval ye	APVD #	mUA	OnGo #	mUA	COMP #	mUA	Total #	Total mUA
2013			1	0,6			1	0,6
2016					1	13,8	1	13,8
2019	1	0,0	1	27,8			2	27,8
2020	1	3,2					1	3,2
TOTAL	**2**	**3,2**	**2**	**28,5**	**1**	**13,77**	**5**	**45,5**

Approval ye	APVD #	mUA	OnGo #	mUA	Total #	Total mUA
2014			1	0,5	1	0,5
2017	1	124,5			1	124,5
2021	1	6,6			1	6,6
TOTAL	**2**	**131,2**	**1**	**0,5**	**3**	**131,7**

Approval ye	APVD #	mUA	OnGo #	mUA	Total #	Total mUA
2014			1	70,3	1	70,3
2018	1	157,6			1	157,6
2021	1	40,9			1	40,9
TOTAL	**2**	**198,5**	**1**	**70,3**	**3**	**268,9**

Zambia

Approval ye	APVD #	mUA	OnGo #	mUA	COMP #	mUA	Total #	Total mUA
2012			1	36,4	1	24,7	2	61,1
2014			1	25,2			1	25,2
2018	2	37,2					2	37,2
TOTAL	**2**	**37,2**	**2**	**61,6**	**1**	**24,7157**	**5**	**123,5**

Ruzizi hydropower plant (S2; DRC-RWA-BDI)
Approved in 2015, 2 interventions have the status APVD et 2 OnGo

Approval ye	APVD #	mUA	OnGo #	mUA	Total #	Total mUA
2015	2	21,0	3	77,5	5	98,5
TOTAL	**2**	**21,0**	**3**	**77,5**	**5**	**98,5**

Annex 4 - List of interventions in country case studies and cluster evaluations

The table below presents an overview of the selected interventions for the country case studies and cluster evaluations, including available documentation, technology type and current status of each intervention.

Note that in the original database provided by IDEV, different project lines can make reference to a same intervention, but different sources of financing or different phases, for example. The list below considers all lines referring to a same intervention as a single intervention, keeping the reference to the original project codes.

					Technology				Available documentation								
Country	**Long Name**	**In CCS**	**In Cluster Reports**	**Intervention grids prepared by**	**Wind**	**Hydro**	**Solar**	**Geothermal**	**PCR**	**PCR EV**	**XSR**	**XSR EV**	**PRA**	**Division**	**Status of**	**Disb.Ratio**	**Total project cost (UAM)**
Burkina Faso	DESERT TO POWER - PROJET YELEEN DE DEVELOPPEMENT DE CENTRALE SOLAIRE	X		n.a.			X								Ongoing	0,00	106,56
Burkina Faso	GMG Support Programme #4	X		n.a.			X								Ongoing	15,00	0,73
Burkina Faso	Windiga Solar Power PPG	X		n.a.			X								Cancelled	n.a.	1,68
Cameroon	JCM Solar PV (PPG)	X	X	ADE-Marge			X								Completed	100,00	23,13
Cameroon	NACHTIGAL HYDRO POWER PROJECT	X	X	ADE-Marge		X									Ongoing	55,41	1,96
Cape Verde	CABEOLICA WIND POWER		X	IDEV	X								X	PINS2	OnGo	100,00	81,63
Cote D'Ivoire	SINGROBO 44 MW HYDRO POWER PROJECT	X		n.a.		X									Ongoing	0,00	28,80
Cote D'Ivoire	Zola Energy CI Pay-as-you-go Solar Home Systems - PCG	X	X	ADE-Marge			X								Ongoing	0,56	2,90

Country	Long Name	In CCS	In Cluster Reports	Intervention grids prepared by	Technology				Available documentation					Division	Status of	Disb.Ratio	Total project cost (UAM)
					Wind	Hydro	Solar	Geothermal	PCR	PCR EV	XSR	XSR EV	PRA				
Djibouti	GEOTHERMAL EXPLORATORY DRILLING PROJECT		X	ADE-Marge				X						RDGE1	OnGo	100,00	21,20
DRC	PROJET DE REHABILITATION DES CENTRALES HYDROELECTRIQUES D'INGA ET DU RESEAU DE DISTRIBUTION DE KINSHASA	X	X	ADE-Marge		X			X	X				RDGC1	COMP	100,00	300,63
DRC	Green Mini-Grid Financing Framework (GREEN MINI-GRID PROGRAM)	X		n.a.			X								Ongoing	6,00	70,70
DRC	Nord-Kivu HPP	X	X	ADE-Marge		X									Completed	59,00	7,00
DRC	Projet d'Appui à la Gouvernance et à l'Amélioration du Système Electrique (PAGASE)	X		n.a.		X									Ongoing	11,66	74,35
DRC	RUZIZI III - DRC	X		n.a.		X									Ongoing	0,45	593,21
Ethiopia	ASSELA WIND FARM – SCALING-UP RENEWABLE ENERGY PROGRAM		X	IDEV	X				X	X				RDGE1	COMP	100,00	2,69
Kenya	KOPERE 40 MW SOLAR PV IPP	X		n.a.			X								Completed	0,00	888,28
Kenya	LAKE TURKANA WIND POWER PROJECT	X	X	ADE-Marge	X								X	PINS2	OnGo	100,00	781,84
Kenya	MENENGAI GEOTHERMAL DEVELOPMENT PROJECT	X	X	ADE-Marge				X	X	X				RDGE1	COMP	100,00	110,00
Kenya	Mutunguru 20 MW HPP (SEFA PPG)	X	X	ADE-Marge		X									Completed	100,00	0,77

Country	Long Name	In CCS	In Cluster Reports	Intervention grids prepared by	Technology				Available documentation					Division	Status of	Disb.Ratio	Total project cost (UAM)
					Wind	Hydro	Solar	Geothermal	PCR	PCR EV	XSR	XSR EV	PRA				
Kenya	Olkaria VI Geothermal Power Plant	X		n.a.				X							Ongoing	n.a.	23,50
Madagascar	Renewable energy project in Nosy-Be (pre-investment activities for a hybrid renewable energy project) PPG	X	X	ADE-Marge	X	X	X								Completed	100,00	1,08
Madagascar	SAHANIVOTRY SMALL HYDRO POWER		X	ADE-Marge		X					X	X		PESD1	CLSD	100,00	17,86
Madagascar	SAHOFIKA HYDRO PROJECT	X		n.a.		X									APVD	0,00	10,72
Mali	PROJET D'APPUI A LA PROMOTION DES ENERGIES RENOUVELABLES		X	IDEV		X	X		X					PERN1	COMP	90,69	3,46
Morocco	CENTRALE THERMO-SOLAIRE AIN BENI MATHAR		X	IDEV			X		X				X	RDGN4	CLSD	100,00	273,58
Morocco	COMPLEXE SOLAIRE MIDELT - PHASE I - CENTRALE NOORM I	X		n.a.			X								Approved	0,00	126,60
Morocco	COMPLEXE SOLAIRE OUARZAZATE - CENTRALE NOOR	X	X	ADE-Marge			X		X	X			X	RDGN1	CLSD	100,00	685,00
Morocco	Jbel-Sendoug (Khalladi) Wind Project (PPG)	X		n.a.	X										Cancelled	n.a.	0,21
Morocco	PIEHER - Complexe hydroélectrique M'DEZ –EL MENZEL	X		n.a.		X									Abandoned	n.a.	0,16
Morocco	PIEHER - COMPOSANTE PARC ÉOLIEN DE TANGER II	X		n.a.	X								X	RDGN1	APVD	0,00	160,00
Morocco	PIEHER - Parc Eolien de KOUDIA EL BAIDA	X	X	ADE-Marge	X										Ongoing	93,01	48,63

Country	Long Name	In CCS	In Cluster Reports	Intervention grids prepared by	Technology				Available documentation					Division	Status of	Disb.Ratio	Total project cost (UAM)
					Wind	Hydro	Solar	Geothermal	PCR	PCR EV	XSR	XSR EV	PRA				
Morocco	PIEHER- STEP D'ABDELMOUMEN	X	X	ADE-Marge		X									Ongoing	73,00	4,29
Morocco	PROGRAMME INTEGRE EOLIEN, HYDRAULIQUE & ELECTRIFICATION RURALE	X	?	n.a.	X	X									n.a.	n.a.	n.a.
South Africa	ESKOM DISTRIBUTED BATTERY ENERGY STORAGE PROGRAMME	X		n.a.	X		X								Approved	0,00	178,50
South Africa	ESKOM RENEWABLE ENERGY - SERE WIND		X	ADE-Marge	X				X	X				RDGS4	CLSD	100,00	504,11
South Africa	Redstone 100 MW CSP IPP	X		n.a.			X								Approved	0,00	155,30
South Africa	XINA SOLAR ONE PROJECT	X	X	ADE-Marge			X						X	PINS2	OnGo	100,00	190,22
Tanzania	SCALING-UP RENEWABLE ENERGY PROGRM-GRANT		X	ADE-Marge			(X)	X		X				RDGE1	COMP	100,00	0,94
Uganda	ACHWA II HYDROPOWER PLANT	X	X	ADE-Marge		X									Completed	100,00	
Uganda	BUJAGALI HYDROPOWER PROJECT	X		n.a.		X			X		X		X	PESD0	OnGo	0,00	147,87
Uganda	BUSERUKA HYDROPOWER PROJECT		X	IDEV		X					X	X		PINS2	COMP	100,00	36,08
Uganda	DECENTRALIZED RENEWABLES DEVELOPMENT PROGRAM	X		n.a.			X								Ongoing	n.a.	0,00
Uganda	Wind Resource Map and Pilot-Wind Power Development Program (2*10MW)	X		n.a.	X										Ongoing	n.a.	0,73
Zambia	ITEZHI-TEZHI HYDROPOWER PROJECT	X	X	ADE-Marge		X					X			PINS2	OnGo	100,00	321,29

Country	Long Name	In CCS	In Cluster Reports	Intervention grids prepared by	Technology				Available documentation					Division	Status of	Disb.Ratio	Total project cost (UAM)
					Wind	Hydro	Solar	Geothermal	PCR	PCR EV	XSR	XSR EV	PRA				
Zambia	KARIBA DAM REHABILITATION	X		n.a.		X									Ongoing	25,05	6,29
Zambia	Renewable Energy Financing Framework	X		n.a.			X								Approved	1,00	128,00
Zambia	Zambia RE IPP Programme	X		n.a.			X								Ongoing	0,00	1,08

Annex 5 - List of documents used and reviewed during the inception phase

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AfDB (2012b) Energy Sector Policy of the AfDB Group https://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/Energy_Sector_Policy_of_the_AfDB_Group.pdf

AfDB (2013) African Development Bank Group At the Center of Africa's Transformation Strategy for 2013–2022 https://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/AfDB_Strategy_for_2013%E2%80%932022_-_At_the_Center_of_Africa%E2%80%99s_Transformation.pdf

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AfDB (2017b) https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AfricanDevelopmentBankClimateChangeActionPlan2016-2020.pdf

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AfDB (n.d. a) The High 5s https://www.afdb.org/en/high5s

AfDB (n.d. b) Africa NDC Hub https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/africa-ndc-hub

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UNFCCC (n.d. b) https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

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Annex 6 - Interview guides

INTERVIEW GUIDE – CORPORATE, COUNTRY &LEVEL

This guide enables qualitative information to be collected in a targeted manner according to the stakeholders consulted. The topics to be covered are indicative and should be adapted according to the category of interlocutors:

- Energy complex AfDB – HQ
- Task managers AfDB - HQ
- AfDB Country offices staff
- Country Government officials (including local)
- Executive agency, Project Management (PM) staff
- Sector Regulators, Utilities
- Private sector
- Civil society organisations
- Other TFPs

MN 00X – 2022-XX-XX – TITLE

Details of the interview / appointment	
Country	•
Organisation	•
Participants	XXX
Contact	•
Team member conducting the interview	XXX
Subject	XXX
Location	XXX
Date & time	XXX

Summary

- **Key points for the evaluation**
  -
- **Actions to be undertaken**
  - Document to be collected / received
  - Person(s) to meet
  - Other issues

Corporate Level

Priority issues to be addressed:

- Understanding the sectoral context
- Clarification of certain aspects and documents collected / to be collected
- Request for additional documents, including statistics, reports etc.
- People to be interviewed in other departments/ministries in order to advance the evaluation process

RE context in the country:

- Key events, strengths, risks and limitations
- Bank's strategy and operations in the country

A. Relevance of Bank's support to renewable energy in the country (To what extent are the Bank's interventions aligned with the clients' priority RE needs as they navigate changing RE markets and expanding global initiatives?)
A.1. Adequacy of Bank's strategy to assist RMCs (SQ 1.1. Strategy)
A.1.1. To what extent are the Bank RE strategies coherent with key RE development challenges in the RMC? **(Criteria 1.1.2)** • AfDB regional & country portfolio analysis - geographic distribution of interventions according to technologies (clusters) and comparison with estimated potential • Screening of the AfDB Energy policy and the NDEA, and the Climate Change Action Plans for explicit, systematic et detailed analysis of RE challenges (potential, barriers, enablers, etc.) in RMCs • Feedback from AfDB staff involved in the design of RE strategies on how RE challenges were analysed and considered; how this analysis is updated - existence of recurrent analytical work; how lessons learned from RISPs and CSPs implementation with major RE projects are used (learning mechanisms, data bases, regular analysis work) • Opinion on the actual and future coverage of RE development challenges by AfDB corporate strategy - new challenges, missing challenges, etc. in the RMC

Answer

A.1.2. To what extent do RISPs and CSPs take into consideration the underlying objectives and indicators related to (i) M/SDG, (ii) AU agenda and (iii) PA? **(Criteria 1.1.3)**

- Screening of objectives & indicators within RISPs & selected CSPs for explicit reference to and consistency with those defined for the period 2012-2021 under M/SDGs, AU agenda & the Paris agreement

Opinion from in-country AfDB and national stakeholders on the way how the Bank fits in with the trends and global objectives in the field of RE development, including in terms of perspectives for the future

Answer

A.1.3. To what extent are RISPs and CSPs coherent with key RE development challenges in RMCs? **(Criteria 1.1.4)**

- Intensity of consideration of and alignment with RE development challenges by RISPs & CSPs: (i) Analysis of country / regional context; (ii) National development & sector specific policies; (iii) Bank country assistance strategy (pillars, results framework & indicators, non-lending activities). Screening of key words in all CSPs & RISPs approved by the Bank for the period 2012-2021
- Assessment & feedback from national stakeholders on the (i) quality and soundness of Bank's analysis of the context; (ii) quality and soundness of National development & sector specific policies and how adequately they are considered by the Bank; (iii) coverage by Bank's country assistance strategy (pillars, results framework & indicators, non-lending activities) of RE development challenges (incl. reasons of exclusion)

How is the articulation of lending & non lending (soft components) activities considered and demonstrated in CSPs?

Answer

A.2	***To what extent were the Bank's lending and non-lending activities in the renewable energy aligned with the priorities of RMCs and end beneficiaries' needs? (SQ 1.2. Alignment)***
A.2.1	To what extent are RE development objectives defined under CSPs & RISPs aligned with RMCs own strategic priorities (global and sector specific)? **(Criteria 1.2.1.)** Assessment & feedback from national stakeholders on Bank's consideration of main national objectives driving the RE development (selectivity vs broad consideration; gaps)

Answer

A.3.	***To what extent were the Bank's interventions adapted over time taking into account RMCs' implementation performances and emerging challenges (including risk related to climate change)? (SQ 1.3 Adaptation)***
A.3.1.	To what extent do RISPs and CSPs provide an assessment of drivers / obstacles for RE development, and how is it used for adapting the RE overall strategy of the Bank? **(Criteria 1.3.1.)** • Intensity of consideration of RE development challenges by RISPs & CSPs: (i) Analysis of country / regional context; (ii) National development & sector specific policies; (iii) Bank country assistance strategy (pillars, results framework & indicators, non-lending activities). Screening of key words in all CSPs & RISPs approved by the Bank for the period 2012-2021 • Opinion of in-country AfDB and national stakeholders on the quality, completeness and adequacy of the assessment on drivers and barriers for RE development, included in CPSs /RISPs Feedback from AfDB in-country staff on the way this assessment is performed (resources, frequency, robustness) and how its results are considered at AfDB HQ / Energy complex

Answer

A.3.2.	To what extent are lessons learned in the field of RE development from country / regional experiences considered in RISPs and CSPs? **(Criteria 1.3.2.)** • Analysis of the section "Portfolio Management and Lessons Learnt from previous CSP" under CSPs and prominence of RE development aspects Opinion of in-country AfDB and national stakeholders on the quality, completeness and adequacy of considering lessons learned in RE development from past or current experiences at national / regional level

Answer

A.3.3.	How does the portfolio structure (lending vs non lending) at regional and country level evolve over time? **(Criteria 1.3.3.)** • Portfolio analysis at regional level as well as at the level of selected countries (clusters / technologies, regions & countries, sources of financing) • Perception of in-country AfDB and national stakeholders regarding the evolution of Bank portfolio (adequacy to needs; good timing to take advantage of opportunities) • "Understanding & analysis of objectives, main themes to be covered by non-lending activities (Policy dialogue, Analytical work; Institutional support & capacity building [RISPs & CSPs])"

	Assessment & feedback from AfDB country office (Country economist, Country portfolio manager and Experts) on the implementation (stock taking) and achievements of non-lending activities in targeted countries

Answer

A.4.	***To what extent are the Bank's interventions (i) coordinated with those of governments and other development organizations' interventions and (ii) are they complementary to these interventions? (SQ 1.4. Coordination)***
A.4.1.	Complementarity - What is the degree of sector/thematic specialization of other TFPs compared to AfDB in selected countries? **(Criteria 1.4.1.)** • Identification of interventions by other TFPs in selected countries during 2012-2021 and linkages with main clusters (check DAC database). • Opinion of in-country AfDB and national stakeholders on complementarity with other TFPs; and on the degree of specialization • Analysis of CSPs and outputs from non-lending activities regarding interventions of other donors active in countries subject to a case study Feedback from other key donors in the field of RE development (CCS): (i) portfolio presentation and awareness about AfDB funded interventions; (ii) focus on specific technologies / clusters

Answer

A.4.2.	Coordination - Is the design and the implementation of RE development interventions coordinated between the Bank and other TFPs at country level **(Criteria 1.4.2.)** • Identification of existing development assistance coordination mechanisms at country level (general, sector specific and related to RE); description and assessment of coordination modalities, existence of explicit joint strategy AfDB-other TFP(s) • Feedback from in-country AfDB and national stakeholders on the functioning of coordination mechanisms - regularity, quality, resulting influence on decision-making Feedback from in-country AfDB and national stakeholders on the concrete coordination during design, implementation and exploitation phases of RE projects: (i) participative design of RE intervention(s); (ii) leadership for specific aspects where each donor demonstrates its comparative advantage; (iii) Common mechanisms in managing (Project coordination unit, Procurement, Supervision, etc.), monitoring, assessing achievements of RE development interventions

Answer

B. Effectiveness of Bank's support to renewable energy in the country (To what extent has the Bank's support in renewable energy been effective in addressing barriers, mobilizing finance, leveraging experience and partnerships, and achieving the expected results for advancing RE development in meeting client's energy and environment needs?)	
B.1.	***To what extent have the Bank's renewable energy interventions achieved their expected direct and indirect outcomes? (SQ 2.1. Achieved Outcomes)***
B.1.1.	Evidence of progress towards MDGs/SDGs, Agenda 2063 objectives and targets: what is the estimated contribution to sector development results (improvement of sector indicators) in targeted countries? **(Criteria 2.1.1.)** • Figures demonstrating the contribution of AfDB activities to sector (& general) development results: (i) progress towards key targets under SDGs and AU Agenda; (ii) noticeable improvement of key sector indicators Estimation and perception of stakeholders regarding the contribution of AfDB activities to sector (& general) development results: (i) progress towards key targets under SDGs and AU Agenda; (ii) noticeable improvement of key sector indicators

Answer

B.1.2.	How did non-lending activities contribute to changes in RMCs renewable energy policy and institutional framework ? **(Criteria 2.1.2.)** • Stocktaking of non-lending activities conducted in selected countries (planned vs implemented): policy dialogue; analytical work ; other advisory and accompanying activities • Explicit linkages between non-lending activities and RE development • Recorded contribution of non-lending activities to the improvement of national RE policy and institutional framework Opinion of in-country AfDB staff and national public / private stakeholders regarding the contribution of non-lending activities to the improvement of national RE policy and institutional framework, including explanatory factors

Answer

B.2.	***What are the factors that enable or hinder the achievement of the expected RE interventions' direct and intermediates outcomes? (SQ 2.2. Influencing Factors)***
B.2.1.	What are the key enabling and hindering factors allowing RE interventions to achieve RMCs RE objectives? **(Criteria 2.2.2.)** Opinion of in-country AfDB staff and national public / private stakeholders regarding explanatory factors of the RE development interventions' performance

Answer

B.3.	***Has the Bank fulfilled its role as knowledge broker, advisor and convener? (SQ 2.3. Partnerships)***
B.3.1.	Are the Bank knowledge and advisory products (policy guidance, technical expertise, training) available and accessible for relevant stakeholders in RE development ? Did they identify and find them useful? **(Criteria 2.3.1.)** • Perception of national stakeholders about availability and accessibility of key knowledge and advisory products provided by the Bank (policy guidance, technical expertise, training) Perception of national stakeholders about the quality and usefulness of key knowledge and advisory products

Answer

B.3.2.	How appropriate is the Bank's organizational capacity in delivering RE interventions and obtaining results? **(Criteria 2.3.2.)** Feedback on Country offices capacities in managing RE-related lending & non-lending activities: adequacy of dedicated resources for supervision and monitoring, availability and quality of thematic expertise, capacity to conduct policy dialogue, etc.

Answer

C. Sustainability of Bank's support to renewable energy in the country (To what extent are the results of the Bank's assistance to renewable energy sustainable?)	
C.1.	***To what extent has the Bank contributed to RMCs securing financial resources, to ensuring the continued flow of benefits associated with renewable energy projects? (SQ 4.2. Financial sustainability)***
C.1.1.	To what extent did AfDB support RMCs for securing the financial viability of RE interventions: revenue collection mechanisms, via institutional reform/management capacity building/enchancement of financial viability of Electricity utilities/Municipal or Community-based service providers/ for all maintenance processes ? **(Criteria 4.2.1.)** • Evidence on creating or reinforcing funding mechanisms and modalities (eg. tariffs, user fees, maintenance fees, budgetary allocations, other stakeholder contributions, aid flows, etc.) to ensure the continued flow of benefits after project completion.

	• "Evidence on institutional arrangements and management tools for the sound financial and economic management of the Energy sector / Electricity sub-sector • [Section 5.2 ""Financial & Economic sustainability"" of PRAs]" Evidence on the financial viability of national-wide Utilities and local service providers involved in the maintenance of the infrastructure, equipment and sectoral management

Answer

C.2.	***To what extent has the Bank effectively assisted RMCs by involving relevant stakeholders, promoting a sense of ownership amongst the beneficiaries, and putting in place effective partnerships with relevant stakeholders (e.g., local authorities, civil society organizations, private sector, donors) through its interventions in renewable energy in RMCs? (SQ 4.4. Stakeholders)***
C.2.1.	To what extent did the Bank CSPs involve key stakeholders in decision making and design for creating a sense of high-level ownership? **(Criteria 4.4.1)** Record and feedback on policy dialogue specific to RE development conducted by Country office: (i) stakeholders involved (technical vs decision-making level); (ii) level of commitment & ownership in the design of CSP

Answer

C.2.2.	To what extent did the Bank built effective partnerships with relevant stakeholders (e.g. local authorities, civil society organizations, private sector, other TFPs) committed to sustain the achievements at sectoral level and with regard to specific RE interventions? **(Criteria 4.4.2)** • Evidence and feedback on the role of the Bank in building partnerships with local authorities, CSO, private sector Evidence on the capacity & commitment of those partners to sustain achievements at local level

Answer

C.3.	***To what extent has the Bank assisted RMCs to appropriately assess and implement environmental and social mitigation/enhancement as well as climate change mitigation and adaptation measures through the renewable energy interventions? (SQ 4.5. E&S Impact)***

C.3.1.	Did AfDB assistance contribute to mainstream environmental and social sustainability into RE interventions, including climate change, via national governance mechanisms and strategies? **(Criteria 4.5.1.)** • Existence of explicit objectives under CSPs for mainstreaming environmental, climate & social sustainability through national strategies Means dedicated to such mainstreaming and concrete achievements

Answer

Country Level

Priority issues to be addressed:

- Understanding the sectoral context
- Clarification of certain aspects and documents collected / to be collected
- Request for additional documents, including statistics, reports etc.
- People to be interviewed in other departments/ministries in order to advance the evaluation process

RE context in the country:

- Key events, strengths, risks and limitations
- Bank's strategy and operations in the country

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Answer

A.1.2. To what extent do RISPs and CSPs take into consideration the underlying objectives and indicators related to (i) M/SDG, (ii) AU agenda and (iii) PA? **(Criteria 1.1.3)** • Screening of objectives & indicators within RISPs & selected CSPs for explicit reference to and consistency with those defined for the period 2012-2021 under M/SDGs, AU agenda & the Paris agreement Opinion from in-country AfDB and national stakeholders on the way how the Bank fits in with the trends and global objectives in the field of RE development, including in terms of perspectives for the future

Answer

A.1.3. To what extent are RISPs and CSPs coherent with key RE development challenges in RMCs? **(Criteria 1.1.4)** • Intensity of consideration of and alignment with RE development challenges by RISPs & CSPs: (i) Analysis of country / regional context; (ii) National development & sector specific policies; (iii) Bank country assistance strategy (pillars, results framework & indicators, non-lending activities). Screening of key words in all CSPs & RISPs approved by the Bank for the period 2012-2021 • Assessment & feedback from national stakeholders on the (i) quality and soundness of Bank's analysis of the context; (ii) quality and soundness of National development & sector specific policies and how adequately they are considered by the Bank; (iii) coverage by Bank's country assistance strategy (pillars, results framework & indicators, non-lending activities) of RE development challenges (incl. reasons of exclusion) How is the articulation of lending & non lending (soft components) activities considered and demonstrated in CSPs?

Answer

A.2	***To what extent were the Bank's lending and non-lending activities in the renewable energy aligned with the priorities of RMCs and end beneficiaries' needs? (SQ 1.2. Alignment)***
A.2.1	To what extent are RE development objectives defined under CSPs & RISPs aligned with RMCs own strategic priorities (global and sector specific)? **(Criteria 1.2.1.)** Assessment & feedback from national stakeholders on Bank's consideration of main national objectives driving the RE development (selectivity vs broad consideration; gaps)

Answer

A.3.	***To what extent were the Bank's interventions adapted over time taking into account RMCs' implementation performances and emerging challenges (including risk related to climate change)? (SQ 1.3 Adaptation)***
A.3.1.	To what extent do RISPs and CSPs provide an assessment of drivers / obstacles for RE development, and how is it used for adapting the RE overall strategy of the Bank? **(Criteria 1.3.1.)** • Intensity of consideration of RE development challenges by RISPs & CSPs: (i) Analysis of country / regional context; (ii) National development & sector specific policies; (iii) Bank country assistance strategy (pillars, results framework & indicators, non-lending activities). Screening of key words in all CSPs & RISPs approved by the Bank for the period 2012-2021 • Opinion of in-country AfDB and national stakeholders on the quality, completeness and adequacy of the assessment on drivers and barriers for RE development, included in CPSs /RISPs Feedback from AfDB in-country staff on the way this assessment is performed (resources, frequency, robustness) and how its results are considered at AfDB HQ / Energy complex

Answer

A.3.2.	To what extent are lessons learned in the field of RE development from country / regional experiences considered in RISPs and CSPs? **(Criteria 1.3.2.)** • Analysis of the section "Portfolio Management and Lessons Learnt from previous CSP" under CSPs and prominence of RE development aspects Opinion of in-country AfDB and national stakeholders on the quality, completeness and adequacy of considering lessons learned in RE development from past or current experiences at national / regional level

Answer

A.3.3.	How does the portfolio structure (lending vs non lending) at regional and country level evolve over time? **(Criteria 1.3.3.)** • Portfolio analysis at regional level as well as at the level of selected countries (clusters / technologies, regions & countries, sources of financing) • Perception of in-country AfDB and national stakeholders regarding the evolution of Bank portfolio (adequacy to needs; good timing to take advantage of opportunities) • "Understanding & analysis of objectives, main themes to be covered by non-lending activities (Policy dialogue, Analytical work; Institutional support & capacity building [RISPs & CSPs])" Assessment & feedback from AfDB country office (Country economist, Country portfolio manager and Experts) on the implementation (stock taking) and achievements of non-lending activities in targeted countries

Answer

A.4.	***To what extent are the Bank's interventions (i) coordinated with those of governments and other development organizations' interventions and (ii) are they complementary to these interventions? (SQ 1.4. Coordination)***
A.4.1.	Complementarity - What is the degree of sector/thematic specialization of other TFPs compared to AfDB in selected countries? **(Criteria 1.4.1.)** • Identification of interventions by other TFPs in selected countries during 2012-2021 and linkages with main clusters (check DAC database). • Opinion of in-country AfDB and national stakeholders on complementarity with other TFPs; and on the degree of specialization • Analysis of CSPs and outputs from non-lending activities regarding interventions of other donors active in countries subject to a case study Feedback from other key donors in the field of RE development (CCS): (i) portfolio presentation and awareness about AfDB funded interventions; (ii) focus on specific technologies / clusters

Answer

A.4.2.	Coordination - Is the design and the implementation of RE development interventions coordinated between the Bank and other TFPs at country level **(Criteria 1.4.2.)** • Identification of existing development assistance coordination mechanisms at country level (general, sector specific and related to RE); description and assessment of coordination modalities, existence of explicit joint strategy AfDB-other TFP(s) • Feedback from in-country AfDB and national stakeholders on the functioning of coordination mechanisms - regularity, quality, resulting influence on decision-making Feedback from in-country AfDB and national stakeholders on the concrete coordination during design, implementation, and exploitation phases of RE projects: (i) participative design of RE intervention(s); (ii) leadership for specific aspects where each donor demonstrates its comparative advantage; (iii) Common mechanisms in managing (Project coordination unit, Procurement, Supervision, etc.), monitoring, assessing achievements of RE development interventions

Answer

B. Effectiveness of Bank's support to renewable energy in the country

(To what extent has the Bank's support in renewable energy been effective in addressing barriers, mobilizing finance, leveraging experience and partnerships, and achieving the expected results for advancing RE development in meeting client's energy and environment needs?)

B.1.	***To what extent have the Bank's renewable energy interventions achieved their expected direct and indirect outcomes? (SQ 2.1. Achieved Outcomes)***
B.1.1.	Evidence of progress towards MDGs/SDGs, Agenda 2063 objectives and targets: what is the estimated contribution to sector development results (improvement of sector indicators) in targeted countries? **(Criteria 2.1.1.)** • Figures demonstrating the contribution of AfDB activities to sector (& general) development results: (i) progress towards key targets under SDGs and AU Agenda; (ii) noticeable improvement of key sector indicators Estimation and perception of stakeholders regarding the contribution of AfDB activities to sector (& general) development results: (i) progress towards key targets under SDGs and AU Agenda; (ii) noticeable improvement of key sector indicators

Answer

B.1.2.	How did non-lending activities contribute to changes in RMCs renewable energy policy and institutional framework? **(Criteria 2.1.2.)** • Stocktaking of non-lending activities conducted in selected countries (planned vs implemented): policy dialogue; analytical work; other advisory and accompanying activities • Explicit linkages between non-lending activities and RE development • Recorded contribution of non-lending activities to the improvement of national RE policy and institutional framework Opinion of in-country AfDB staff and national public / private stakeholders regarding the contribution of non-lending activities to the improvement of national RE policy and institutional framework, including explanatory factors

Answer

B.2.	***What are the factors that enable or hinder the achievement of the expected RE interventions' direct and intermediates outcomes? (SQ 2.2. Influencing Factors)***
B.2.1.	What are the key enabling and hindering factors allowing RE interventions to achieve RMCs RE objectives? **(Criteria 2.2.2.)** Opinion of in-country AfDB staff and national public / private stakeholders regarding explanatory factors of the RE development interventions' performance

Answer

B.3.	***Has the Bank fulfilled its role as knowledge broker, advisor and convener? (SQ 2.3. Partnerships)***
B.3.1.	Are the Bank knowledge and advisory products (policy guidance, technical expertise, training) available and accessible for relevant stakeholders in RE development? Did they identify and find them useful? **(Criteria 2.3.1.)** • Perception of national stakeholders about availability and accessibility of key knowledge and advisory products provided by the Bank (policy guidance, technical expertise, training) Perception of national stakeholders about the quality and usefulness of key knowledge and advisory products

Answer

B.3.2.	How appropriate is the Bank's organizational capacity in delivering RE interventions and obtaining results? **(Criteria 2.3.2.)** Feedback on Country offices capacities in managing RE-related lending & non-lending activities: adequacy of dedicated resources for supervision and monitoring, availability and quality of thematic expertise, capacity to conduct policy dialogue, etc.

Answer

C. Sustainability of Bank's support to renewable energy in the country (To what extent are the results of the Bank's assistance to renewable energy sustainable?)	
C.1.	***To what extent has the Bank contributed to RMCs securing financial resources, to ensuring the continued flow of benefits associated with renewable energy projects? (SQ 4.2. Financial sustainability)***
C.1.1.	To what extent did AfDB support RMCs for securing the financial viability of RE interventions: revenue collection mechanisms, via institutional reform/management capacity building/enhancement of financial viability of Electricity utilities/Municipal or Community-based service providers/ for all maintenance processes? **(Criteria 4.2.1.)** • Evidence on creating or reinforcing funding mechanisms and modalities (e.g., tariffs, user fees, maintenance fees, budgetary allocations, other stakeholder contributions, aid flows, etc.) to ensure the continued flow of benefits after project completion. • "Evidence on institutional arrangements and management tools for the sound financial and economic management of the Energy sector / Electricity sub-sector • [Section 5.2 ""Financial & Economic sustainability"" of PRAs]"

	Evidence on the financial viability of national-wide Utilities and local service providers involved in the maintenance of the infrastructure, equipment and sectoral management

Answer

C.2.	***To what extent has the Bank effectively assisted RMCs by involving relevant stakeholders, promoting a sense of ownership amongst the beneficiaries, and putting in place effective partnerships with relevant stakeholders (e.g., local authorities, civil society organizations, private sector, donors) through its interventions in renewable energy in RMCs? (SQ 4.4. Stakeholders)***
C.2.1.	To what extent did the Bank CSPs involve key stakeholders in decision making and design for creating a sense of high-level ownership? **(Criteria 4.4.1)** Record and feedback on policy dialogue specific to RE development conducted by Country office: (i) stakeholders involved (technical vs decision-making level); (ii) level of commitment & ownership in the design of CSP

Answer

C.2.2.	To what extent did the Bank built effective partnerships with relevant stakeholders (e.g., local authorities, civil society organizations, private sector, other TFPs) committed to sustain the achievements at sectoral level and with regard to specific RE interventions? **(Criteria 4.4.2)** • Evidence and feedback on the role of the Bank in building partnerships with local authorities, CSO, private sector Evidence on the capacity & commitment of those partners to sustain achievements at local level

Answer

C.3.	***To what extent has the Bank assisted RMCs to appropriately assess and implement environmental and social mitigation/enhancement as well as climate change mitigation and adaptation measures through the renewable energy interventions? (SQ 4.5. E&S Impact)***
C.3.1.	Did AfDB assistance contribute to mainstream environmental and social sustainability into RE interventions, including climate change, via national governance mechanisms and strategies? **(Criteria 4.5.1.)** • Existence of explicit objectives under CSPs for mainstreaming environmental, climate & social sustainability through national strategies Means dedicated to such mainstreaming and concrete achievements

Answer

Intervention Level

Intervention Level
Priority issues to be addressed:

- Understanding the sectoral context
- Clarification of certain aspects and documents collected / to be collected
- Request for additional documents, including statistics, reports etc.
- People to be interviewed in other departments/ministries in order to advance the evaluation process

Validation of the Intervention Logic:
- Did the expected effects and causal links materialize?
- Are there any unforeseen effects?
- Were the target groups reached as planned?

Answer

A. Relevance of Bank's support to renewable energy in the country (To what extent are the Bank's interventions aligned with the clients' priority RE needs as they navigate changing RE markets and expanding global initiatives?)	
A.1.	***How adequate is the Bank's strategic focus on the renewable energy to assist RMCs achieve: the SDGs, the Kyoto Protocol and the Paris Agreement? (SQ 1.1 Strategy)***
A.1.1.	Is the quality of RE development interventions design ensured (objectives clearly stated and result-oriented; results are realistic with regard to the current circumstances), for achieving the defined objectives? Do RE development intervention design integrate explicitly consideration of M/SDG, AU agenda 2063, and PA agendas? **(Criteria 1.1.5.)** • Explicit reference in RE development interventions to M/SDGs; African Union Agenda and Paris Agreement objectives / indicators Extent to which AfDB RE interventions include: (i) project's objectives clearly stated and focused on outcomes as opposed to outputs; (ii) realistic intended outcomes in the country's current circumstances; and to Bank's role, capacity and lending & non-lending capabilities for achieving the defined objectives; (iii) appropriate solutions to the identified problems [PRA, section 1.2 Relevance of intervention design to achieve defined objectives]

Answer

A.1.2.	To what extent are major climate change risks for long term sustainability considered within RE development interventions? **(Criteria 1.1.6.)** • "Quality of risk assessment (assumptions made in the logic model) *[PRA, section 1.2 Relevance of intervention design to achieve defined objectives] & [Feedback from national stakeholders - Authorities, executive agencies, operators, beneficiaries]"* • "Implementation status, existing monitoring and feedback on the relevance of modifications made to project design *[PRA, section 1.2 Relevance of intervention design to achieve defined objectives] & [Feedback from national stakeholders - Authorities, executive agencies, operators, beneficiaries]"* • "Analysis of the circumstances prevailing at the time of the evaluation; Extent to which potential negative impacts were identified, their likelihood of occurring and how they might be avoided *[PRA, section 1.2 Relevance of intervention design to achieve defined objectives] & [Feedback from national stakeholders - Authorities, executive agencies, operators, beneficiaries]"*	

Answer

A.2.	***To what extent were the Bank's lending and non-lending activities in the renewable energy aligned with the priorities of RMCs and end beneficiaries' needs? (SQ 1.2. Alignment)***
A.2.1.	To what extent are RE interventions aligned with RMCs strategies: (i) AfDB corporate, sectoral, RISPs and CSPs; (ii) National development, sectoral strategies) ; and with beneficiaries specific needs (appropriate solutions provided to identified problems and barriers) ? **(Criteria 1.2.2.)** • "Explicitly demonstrated alignment of interventions with applicable: • AfDB corporate strategies (Mid-term strategy 2008-2012; Ten Years Strategy 2013-2022; High 5) • AfDB sectoral strategies (Energy policy, NDEA, Climate change action plans) • RISPs and CSPs • National general development strategies (and respective contribution to specific national development objective(s), usually time bound and quantified) • National sector specific (Energy, Electricity, RE, Climate) strategies. • Beneficiaries specific needs (appropriate solutions provided to identified problems and barriers) • For PBO: ensure alignment with the Poverty Reduction Strategy paper (PRSP), Performance Assessment Framework (PAF) or applicable country and Bank sector strategies *[PRA, section 1.2 Relevance of objectives] & [Feedback from national stakeholders-executive agencies in selected countries]"Indicators*

Answer

A.3.	***To what extent were the Bank's interventions adapted over time taking into account RMCs' implementation performances and emerging challenges (including risk related to climate change)? (SQ 1.3. Adaptation)***
A.3.1.	Have RE Interventions been adapted over time in line with evolving context (technical, financial, political, governance- and capacity-related opportunities & threats) ? **(Criteria 1.3.4.)** • "Reactive vs Proactive approach in adapting RE interventions due to positive or negative changes or trends *[PRA, section 1.2 Relevance of objectives; Criterion "Relevance of modifications made to intervention design"] & [Feedback from national stakeholders - Authorities, executive agencies, operators, beneficiaries]"*

Answer

A.3.2.	Are RE interventions managed and conducive to leverage innovation (social and/or science and technology development) in a changing global context? **(Criteria 1.3.5.)** • Innovation identified as specific objective or cross-cutting issue (clarity, means dedicated to innovation & adequate management and monitoring tools) Opinion from stakeholders involved in the management of the Bank RE development interventions about their innovative character in terms of process and achievements

Answer

A.4.	***To what extent are the Bank's interventions (i) coordinated with those of governments and other development organizations' interventions and (ii) are they complementary to these interventions? (SQ 1.4. Coordination)***	
A.4.1.	Complementarity and coordination - What is the degree of mutual reinforcement in the design, funding and implementation of interventions financed by the Bank and other TFPs? **(Criteria 1.4.3.)** • "Specific attention to co-financed RE development interventions If recent PRA, section 2 Coherence (external)" Evidence on (i) existence of coordination platforms between TFPs; (ii) participative design of RE intervention(s) ; (ii) clear leadership for specific aspects where each donor demonstrates its comparative advantage; (iii) common mechanisms in managing (Project coordination unit, Procurement, Supervision, etc.) and monitoring / assessing achievements of RE development interventions	

Answer

B. Effectiveness of Bank's support to renewable energy in the country (To what extent has the Bank's support in renewable energy been effective in addressing barriers, mobilizing finance, leveraging experience and partnerships, and achieving the expected results for advancing RE development in meeting client's energy and environment needs?)	
B.1.	***To what extent have the Bank's renewable energy interventions achieved their expected direct and indirect outcomes? (SQ 2.1. Achieved Outcomes)***
B.1.1.	Do RE development interventions produce tangible outputs, obtain direct and intermediate outcomes, as planned within their results-based logical frameworks? **(Criteria 2.1.3.)** • "Achievement of outputs against those planned in the logical framework • For PBO: assessment should not only review the extent to which outputs were delivered (i.e., agreed-upon policy reforms took place), but also the degree to which complementary measures necessary for their implementation occurred (e.g., public awareness, policy dialogue and institutional arrangements). [section 3.1 in PRAs]" Achievement of outcomes against those planned in the logical framework [section 3.2 in PRA]

Answer

B.1.2.	What are the key barriers and risks identified, and faced in practice, by RE interventions? (And typology: Categorization of RE interventions according to the type of key barriers and risks being addressed) **(Criteria 2.1.4.)** Record on key barriers and risks as explanatory factors of the RE interventions' performance (policy-governance; economic & financial; environmental & sustainability-related; technical; operational and capacity-related factors) *[section 3.2 in PRA which generally includes an analysis of explanatory factors regarding the performance of the intervention]*

Answer

B.2.	***What are the factors that enable or hinder the achievement of the expected RE interventions' direct and intermediates outcomes? (SQ 2.2. Influencing factors)***
B.2.1.	What are the key enabling and hindering factors allowing RE interventions to achieve their expected direct and intermediates outcomes? **(Criteria 2.2.3.)**

	Record and feedback by stakeholders on key enabling factors and barriers and risks (see 2.1.4.1) as explanatory factors of the RE interventions' performance (policy-governance; economic & financial; environmental & sustainability-related; technical; operational and capacity-related factors) [section 3.2 in PRA which generally includes an analysis of explanatory factors regarding the performance of the intervention]

Answer

B.2.2.	What are the underlying causes and lessons learned that could inform the design and management of future interventions? **(Criteria 2.2.4.)** Experience-based recommendations by stakeholders on key improvements regarding the design and operational management of RE interventions (dimensions: policy-governance; economic & financial; environmental & sustainability-related; technical; operational and capacity-related factors) [section 3.2 in PRA which generally includes an analysis of explanatory factors regarding the performance of the intervention]

Answer

B.2.3.	What instruments and approaches did the Bank use to address key barriers and risks faced by RE development interventions? **(Criteria 2.2.5.)** Record and feedback by stakeholders on solutions they found and used to address barriers and risks they were confronted with. *[section 3.2 in PRA which generally includes an analysis of explanatory factors regarding the performance of the intervention]*

Answer

B.3.	***How effective has the Bank been in engaging in productive partnerships in renewable energy sector? (SQ 2.3. Partnerships)***
B.3.1.	What is the degree of partners' involvement and ownership under RE interventions (at main stages of interventions life cycle, considering technical, political, financial and management dimensions, etc.)? **(Criteria 2.3.3.)** • Record & (crossed) perception on the commitment & involvement of co-financing other TFPs: during (i) project preparation; (ii) project implementation; (iii) further accompanying measures; and with regard to the various dimension of partnership: (a) technical; (b) governance & decision-making; (c) mobilization of financing; (d) operational & strategic steering

	Record perception on the commitment & involvement of national authorities: during (i) project preparation; (ii) project implementation; (iii) further accompanying measures; and with regard to the various dimension of partnership: (a) technical; (b) governance & decision-making; (c) mobilization of financing, notably national counterparts; (d) operational & strategic steering

Answer

B.3.2.	To what extent are AfDB interventions supported by partnership programs effective? (see QS2.1 & SQ 2.2 on obtaining outputs, achieving outcomes, identifying enabling & hindering factors)? Can a difference be observed between RE interventions in partnerships, compared to RE interventions conducted by the Bank alone? **(Criteria 2.3.4.)** To what extent are AfDB interventions supported by partnership programs effective? (see QS2.1 & SQ 2.2 on obtaining outputs, achieving outcomes, identifying enabling & hindering factors)? Can a difference be observed between RE interventions in partnerships, compared to RE interventions conducted by the Bank alone?

Answer

B.3.3.	To what extent were selected partners within RE interventions appropriate for achieving expected results and guaranteeing their sustainability? **(Criteria 2.3.5)** Record and feedback from in-country AfDB and national stakeholders on appropriateness of the partnership(s) structure, management arrangement and division of tasks, operational modalities and instruments used. Influence on effectiveness and sustainability

Answer

B.4.	***How well has the Bank leveraged resources? (SQ 2.4. Leverage)***
B.4.1.	To what extent has the Bank had the leadership on cofinanced interventions in the RE sector? **(Criteria 2.4.4.)** Record & (crossed) perception on the leadership of the Bank: during (i) project preparation; (ii) project implementation; (iii) further accompanying measures; and with regard to the various dimension of partnership: (a) technical; (b) governance & decision-making; (c) mobilization of financing; (d) operational & strategic steering ; (e) focus on specific components (e.g. social & environmental sustainability, etc.)

Answer

C. Efficiency of Bank's support to renewable energy in the country (To what extent has the Banks assistance to renewable energy results been delivered efficiently?)	
C.3.1.	***To what extent did the Bank's identification, design, and approval mechanisms contribute to ensure an efficient implementation of the renewable energy interventions (Optimize Cost-benefit ratio, Cost-effectiveness)? (SQ 3.1. Design)***
C.1.1.	Did the Bank's RE projects appraisal include a comprehensive range of assessments (engineering design, sector political economy, institutional governance and performances, PFM, corruption)? Were they of sufficient quality and were they used and useful to optimize RE development interventions costs? **(Criteria 3.1.1.)** • "Existence, quality and use of technical and context assessment tools & approaches for costs optimization at appraisal stage *(engineering design, sector political economy, institutional governance and performances, PFM, corruption)* [screening of existing PAR]"

Answer

C.1.2.	Did the Bank make a consistent use of economic and financial analysis (IRRs) at appraisal stages, including systematic testing of alternative designs? **(Criteria 3.1.2.)** • Cost-effectiveness analysis: consideration of the cost of alternative ways to achieve project objectives, unit costs for comparable activities, sector or industry standards, and/or other available evidence of the efficient use of project resources. [screening of existing PAR]

Answer

C.1.3.	Did the Bank implement internally a specific and reliable quality control mechanisms prior to approval for avoiding overambitious, overoptimistic designing or budget underestimation by task teams? **(Criteria 3.1.3.)** • "Evidence on quality control activities regarding the definition of project's scope (technical, geographic - zones; number of beneficiaries to be covered) objectives and output-outcome-impact indicators in reference to available budget

	[Task managers, Country office staff]"

Answer

C.1.4.	Are assumptions, risks identified, and mitigation measures defined under RE development interventions closely monitored during implementation, completion and handover to beneficiaries? **(Criteria 3.1.4.)** • "Existence, coverage & soundness of risk analysis and proposed mitigation measures at appraisal stage [screening of existing PAR]" Evidence on monitoring mechanisms regarding the evolution of risks as well as the implementation and/or the adaptation of mitigation measures (specific competences used, frequency of monitoring / updating risks analysis)

Answer

C.2.	***To what extent has the Bank's renewable energy portfolio delivered expected outputs in a timely manner and within the planned cost? (SQ 3.2. Delivery)***
C.2.1.	Did the Bank's RE interventions face delays (comparison of the estimated duration and the actual duration from the date of entry into force of RE interventions; duration of the approval process and delay of the first disbursement, etc.)? What are the determining explanatory factors (technical, financial, governance, management capacities, administrative procedures, etc.)? **(Criteria 3.2.1.)** • (i) Comparison between the planned and the actual period of implementation from the date of signature (ii) Duration of the approval process (iii) Delay of the first disbursement [PRA, section 4.2 Timeliness] Identification of explanatory factors: (i) technical, (ii) financial, (iii) governance-related: political will, management capacities, administrative procedures, etc.

Answer

C.2.2.	Was the procurement of the Bank financed RE interventions conducted in a timely manner? **(Criteria 3.2.2.)**

	Duration of procurement process and explanatory factors (notice of non-objection; unsuccessful tendering procedures; availability and quality of procurement experts' competencies)

Answer

C.2.3.	Are expected results of the Bank RE interventions achieved in line with planned costs (economic rate of return ERR) or did they face cost overruns? **(Criteria 3.2.3.)** • "Analysis of budgetary mobilization and absorption (paid vs planned budget, alignment with sector specific standards, etc.) [PRA, section 4.1 Cost-benefit analysis]"

Answer

C.3.	***To what extent has the Bank's supervision been supportive to achieving the expected outputs (Compliance with Bank's project implementation principles)? (SQ 3.3. Supervision)***
C.3.1.	Did the Bank's staff conduct sufficient supervision missions both in terms of quantity, regularity of (i) supervision reports, (ii) mid-term reports and (iii) reports on project implementation status and results according to planification; and in terms of quality (adequate quantity of human resources, adequate mix of expertise, involvement of main stakeholders, sufficient data collected and adequately analyzed, quality of indicators included in M&E systems - realism, clarity and comprehensiveness) ? **(Criteria 3.3.1.)** • Evidence on existence and regularity of (i) supervision reports, (ii) mid-term reports and (iii) reports on project implementation status and results according to planification. Opinion from in-country AfDB stakeholders and perception from project implementation units' responsible Evidence on quality, use and usefulness of supervision: (i) adequate human resources dedicated to supervision, (ii) adequate mix of expertise, (iii) involvement of main stakeholders, (iv) sufficient data collected and adequately analyzed, (v) quality of indicators included in M&E systems (SMART nature)

Answer

C.3.2.	Did the Bank supervision reports provide a balanced and realistic view of the implementation prospects (ownership, reform undertaking, timeliness, cost, and setting of a reliable monitoring system)? **(Criteria 3.3.2.)**

	• Evidence on considering project implementation prospects in supervision reports: (i) level of partners' & beneficiaries' ownership; (ii) commitment for sector specific reforms; (iii) efficiency-oriented management • Implementation process (IP) assessment: i) compliance with covenants (project covenants, environmental and social safeguards and audit compliance), ii) project systems and procedures (procurement, financial management and monitoring and evaluation), and iii) project execution and financing (disbursement, budget commitments, counterpart funding and co-financing). The IP rating will be derived from the IPR that shall be updated in tandem with the PCR preparation [Section Implementation Process of PRAs]

Answer

D. Sustainability of Bank's support to renewable energy in the country (To what extent are the results of the Bank's assistance to renewable energy sustainable?)	
D.1.	***To what extent do renewable energy projects' achievements rely on sound technologies and maintenance mechanisms? (SQ 4.1. Technologies)***
D.1.1.	Did the Bank interventions select the right technology for RE infrastructures and was it installed in the adequate way? **(Criteria 4.1.1.)** • Technology chosen is adapted to local context, needs and capacities [Section 5.1 Technical Soundness of PRAs] • Infrastructure and equipment are installed adequately for a proper and longlisting functioning [Section 5.1 Technical Soundness of PRAs]

Answer

D.1.2.	Did the Bank support RMCs for getting the required technical skills for all maintenance processes? **(Criteria 4.1.2.)** • "Evidence on availability (or future perspective) of technical skills for the maintenance of installed infrastructure and equipment; arrangements chosen (private sector-based or community-based providers) [Section 5.1 Technical Soundness of PRAs]"

Answer

D.1.3.	Did the Bank support RMCs for getting the equipment and spare parts for capital assets maintenance? **(Criteria 4.1.3.)** • "Existence and importance of Bank's support for maintenance of infrastructure (technical equipment, spare parts) [Section 5.1 Technical Soundness of PRAs]"

Answer

D.2.	***To what extent has the Bank contributed to RMCs securing financial resources, to ensuring the continued flow of benefits associated with renewable energy projects? (SQ 4.2. Financial sustainability)***
D.2.1.	To what extent did AfDB support RMCs for securing the financial viability of RE interventions: revenue collection mechanisms, via institutional reform/management capacity building/enhancement of financial viability of Electricity utilities/Municipal or Community-based service providers/ for all maintenance processes? **(Criteria 4.2.1.)** • Evidence on creating or reinforcing funding mechanisms and modalities (e.g., tariffs, user fees, maintenance fees, budgetary allocations, other stakeholder contributions, aid flows, etc.) to ensure the continued flow of benefits after project completion. • "Evidence on institutional arrangements and management tools for the sound financial and economic management of the Energy sector / Electricity sub-sector [Section 5.2 ""Financial & Economic sustainability"" of PRAs]" Evidence on the financial viability of national-wide Utilities and local service providers involved in the maintenance of the infrastructure, equipment and sectoral management

Answer

D.3.	***To what extent has the Bank contributed to strengthening institutional capacities to facilitate the continued flow of benefits associated with renewable energy projects? (SQ 4.3. Capacities)***
D.3.1.	To what extent did the Bank contribute to enhance the management of the energy demand in RMCs, through (i) appropriate tariff structure - do adequate funding mechanisms and modalities (e.g. tariffs, user fees, maintenance fees, budget allocations, other stakeholder contributions, aid flows, etc.) have been put in place; (ii) building awareness and changing consumer behaviors; and (iii) regulatory enforcement and modernizing the sector? **(Criteria 4.3.1.)** • Tariffication: (i) existence of specific targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to tariff structure (% of national subsidies, etc.)

	• Awareness & consumer behavior: (i) existence of specific targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to consumers behaviors Regulation and modernization: (i) existence of specific targeted activities under AfDB projects / programs; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to regulatory and sectoral governance aspects

Answer

D.3.2.	Did the Bank contribute to enhance the management of the energy offer in RMCs, through (i) generating more renewable energy; (ii) improving the allocation of renewable energy; (iii) limiting energy loss; and (iv) promoting effective management of utilities and end-users' associations? **(Criteria 4.3.2.)** • Additional RE generation: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to RE generation • Allocation of RE: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to allocation of RE • Energy efficiency: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to energy loss reduction Utilities & consumers associations: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements ; (iii) feedback from stakeholders on perspectives related to the management of utilities and participation of consumers associations

Answer

D.3.3.	To what extent did the Bank contribute to reshape the institutional framework by (i) strengthening institutional systems and capacities, (ii) promoting research and development, and (iii) stimulating the development of local suppliers of equipment related to RE generation? **(Criteria 4.3.3.)** • "Contribution to strengthen institutional capacities that will facilitate the continued flow of benefits associated with the project: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to the institutional framework • Appreciation of whether or not improved governance practices or improved skills, procedures, incentives, structures, or institutional mechanisms came into effect as a result of the operation." • R&D: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to the institutional framework

	Local industry: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to the institutional framework

Answer

D.4.	***To what extent has the Bank effectively assisted RMCs by involving relevant stakeholders, promoting a sense of ownership amongst the beneficiaries, and putting in place effective partnerships with relevant stakeholders (e.g., local authorities, civil society organizations, private sector, donors) through its interventions in renewable energy in RMCs? (SQ 4.4. Stakeholders)***
D.4.1.	To what extent did RE interventions involve relevant stakeholders in design, implementation and facilitation measures after their completion for creating a sense of ownership by the beneficiaries? **(Criteria 4.4.3.)** Evidence on ownership and sustainability of partnerships: extent to which the project has effectively involved relevant stakeholders, promoted a sense of ownership amongst the beneficiaries (both men and women) and put in place effective partnerships with relevant stakeholders (e.g., local authorities, civil society organizations, private sector, donors) as required for the continued maintenance of the project outputs)

Answer

D.4.2.	To what extent did RE interventions contribute to enhance the equal access to RE services by the beneficiaries? **(Criteria 4.4.4.)** Existence and achievements of affordability measures under RE development interventions

Answer

D.5.	***To what extent has the Bank assisted RMCs to appropriately assess and implement environmental and social mitigation/enhancement as well as climate change mitigation and adaptation measures through the renewable energy interventions? (SQ 4.5. E&S impact)***
D.5.1.	To what extent did the Bank assess the environmental and social risks, along with mitigation measures, in its RE interventions, meeting all AfDB environmental, social, health and safety (ESHS) standards? **(Criteria 4.5.2.)** Extent to which environmental and social mitigation/enhancement measures of the project were implemented, the capacity of country institutions and systems and the availability of funding to ensure the environmental and social sustainability of the operation

Answer

D.5.2.	To what extent did the Bank identify and support climate change mitigation & adaptation measures in its RE development interventions? **(Criteria 4.5.3.)** Record and feedback on the existence of climate change mitigation & adaptation measures under RE development interneurons

Answer

D.5.3.	To what extent were the mitigation measures effectively implemented to ensure environmental and social safeguards? **(Criteria 4.5.4.)** Record and feedback on the implementation, monitoring and effectiveness of those climate change mitigation & adaptation measures

Answer

D.5.4.	Did RE interventions produce significant unintended negative ESHS impacts? **(Criteria 4.5.5.)** Detection of unintended negative ESHS impacts, existing analysis of root causes and explicit strategy to deal with them at short-, mid- and long-term.

STAKEHOLDERS TO BE CONSULTED, PER THEME AND LEVEL

The case studies will collect information from key stakeholders. The table here below depicts the topics to be discussed with the different stakeholders, at the different levels, country and intervention.

Aspects to cover during interviews during field missions	Level		Stakeholders to be consulted						
	Country	Intervention	AfDB Country offices	Country Government officials	Executive agency, PM staff	Sector Regulators, Utilities, etc.	Private sector	Civil society organisations	Other TFPs
Country context and recent development									
Timeline with key events in the period covered	X								
Renewable energy context in the country	X								
Risks identified and mitigation measures envisaged	X								
Bank's strategy and operations in the country									
Theory of Change reflected in the Country Strategy (CSP)	X								
Portfolio of Bank Operations in the Country	X	X							
Place of Bank operations in relation to other TFPs operating in the country	X								
1. Relevance of Bank's support to renewable energy in the country									
1.1. Adequacy of Bank's strategy to assist RMCs	X	X							
- Coherence of Bank's RE strategies and key RE development challenges in the RMC	X								
- Extent to which RISPs and CSPs consider the underlying objectives and indicators related to (i) M/SDG, (ii) AU agenda and (iii) PA	X								
- Coherence of RISPs and CSPs and with key RE development challenges in RMCs	X								
- Appreciation of the quality of RE development interventions design		X							
- Consideration of major climate change risks for long term sustainability in RE development interventions		X							
1.2. Alignment of Bank's lending and non-lending activities in RE with the priorities of RMCs and end beneficiaries' needs	X	X							
- Alignment of CSPs & RISPs RE development objectives with RMCs own strategic priorities	X								
- Alignment of RE interventions with RMCs strategies and with beneficiaries' specific needs		X							
1.3. Adaptation of Bank's interventions to RMCs' implementation performances and emerging challenges (including risk related to climate change)	X	X							
- Extent to which CSPs & RISPs provide an assessment of drivers/obstacles for RE development and use of it for adapting the RE overall strategy of the Bank	X								
- Consideration of lessons learned in the field of RE development from country/regional experiences in RISPs and CSPs	X								
- Evolution of the portfolio structure (lending vs non-lending) at regional and country level	X								
- Adaptation of RE interventions to evolving context		X							
- Extent to which RE interventions are managed and conducive to leverage innovation in a changing global context		X							

1.4. Coordination and complementarity of Bank's interventions with those of governments and other development organizations	X	X							
- Degree of sector/thematic specialization of other TFPs compared to AfDB in selected countries	X								
- Coordination of the design and the implementation of RE development interventions between the Bank and other TFPs at country level	X								
- Degree of mutual reinforcement in the design, funding and implementation of interventions financed by the Bank and other TFPs		X							
2. Effectiveness of Bank's support to renewable energy in the country									
2.1. Achievement of the Bank's expected direct and indirect outcomes	X	X							
- Progress towards MDGs/SDGs, Agenda 2063 objectives and targets	X								
- Non-lending activities contribution to changes in RMCs renewable energy policy and institutional framework	X								
- Extent to which RE development interventions produce tangible outputs, obtain direct and intermediate outcomes, as planned within their results-based logical frameworks		X							
- Key barriers and risks faced in practice by RE interventions		X							
2.2. Factors enabling or hindering the achievement of the expected direct and intermediates outcomes	X	X							
- Key enabling and hindering factors allowing RE interventions to achieve RMCs RE objectives	X								
- Key enabling and hindering factors allowing RE interventions to achieve their expected direct and intermediates outcomes		X							
- Underlying causes and lessons learned to inform the design and management of future interventions		X							
- Instruments and approaches used by the Bank to address key barriers and risks faced by RE development interventions		X							
2.3. Bank's engagement in productive partnerships in renewable energy sector	X	X							
- Extent to which the Bank establish effective partnership arrangements and frameworks in the field of RE	X								
- Tangible achievements and which factors that enabled or hindered the performance partnerships	X								
- Degree of partners' involvement and ownership under RE interventions		X							
- Effectiveness of Bank's interventions supported by partnership programs		X							
- Extent to which partners were selected within RE interventions appropriate to achieving expected results and guaranteeing their sustainability		X							
2.4. Bank's leverage of resources	X	X							
- Extent to which Bank's support (lending and non-lending activities) has a catalytic effect in the RE sector	X								
- Bank's leveraging activities in RE and achievements between 2012-2021	X								
- Key strengths and weaknesses of the Bank's leveraging activities in RE	X								
- Degree of Bank' leadership on cofinancing interventions in the RE sector		X							
2.5. Bank's role as knowledge broker, advisor and convener	X								
- Appreciation of Bank's organization capacity to delivering RE interventions and obtaining results	X								

- Extent to which the Bank plays a leading role in knowledge and advisory related to RE development	X								
- Availability, accessibility and usefulness of Bank's knowledge and advisory products (policy guidance, technical expertise, training)	X								
- Appropriateness of Bank's organizational capacity in delivering RE interventions and obtaining results	X								
3. Efficiency of Bank's support to renewable energy in the country									
3.1. Contribution of Bank's identification, design, and approval mechanisms to ensure an efficient implementation of the renewable energy interventions		X							
- Appreciation of the quality and completeness of the Bank's RE projects appraisals		X							
- Extent to which the Bank make a consistent use of economic and financial analysis (IRRs) at appraisal stages		X							
- Bank's implementation of specific and reliable quality control mechanisms prior to approval		X							
- Monitoring of assumptions, risks and mitigation measures defined under RE development interventions during implementation, completion and handover to beneficiaries		X							
3.2. Timeliness delivery of expected outputs of Bank's renewable energy portfolio within the planned time and financial resources		X							
- Extent to which the Bank's RE interventions face delays and respective determining explanatory factors		X							
- Timeliness of procurement of the Bank financed RE interventions		X							
- Extent to which the achievement of the expected results of the Bank RE interventions is in line with planned costs		X							
3.3. Supervision and compliance with Bank's project implementation principles		X							
- Extent to which the Bank's staff conducts sufficient supervision missions both in terms of quantity, regularity and quality		X							
- Extent to which the Bank's supervision reports provide a balanced and realistic view of the implementation prospects		X							
4. Sustainability of Bank's support to renewable energy in the country									
4.1. RE projects' achievement's reliability on sound technologies and maintenance mechanisms		X							
- Adequation of the Bank' interventions selected technologies for RE infrastructures and respective installation		X							
- Degree of Bank's support to RMCs in getting the required technical skills for all maintenance processes		X							
- Degree of Bank's support to RMCs in getting the equipment and spare parts for capital assets maintenance		X							
4.2. Bank's contribution to RMCs in securing financial resources and ensuring the continued flow of benefits associated with renewable energy projects	X								
4.3. Bank's contribution to strengthening institutional capacities to facilitate the continued flow of benefits associated with renewable energy projects		X							
- Appreciation of Bank's contribution to enhance the management of the energy demand in RMCs		X							

-	Appreciation of Bank's contribution to enhance the management of the energy offer in RMCs		X							
-	Appreciation of Bank's contribution to reshape the institutional framework in RMCs		X							
4.4.	Effectiveness of Bank's assistance to RMCs in involving relevant stakeholders, promoting a sense of ownership amongst the beneficiaries, and putting in place effective partnerships through its interventions in renewable energy	X	X							
-	Extent to which the Bank CSPs involve key stakeholders in decision making and design for creating a sense of high-level ownership	X								
-	Extent to which the Bank built effective partnerships with relevant stakeholders committed to sustain the achievements at sectoral level and with regard to specific RE interventions	X								
-	Extent to which RE interventions involve relevant stakeholders in design, implementation and facilitation measures after their completion for creating a sense of ownership by the beneficiaries		X							
-	Extent to which RE interventions contribute to enhance the equal access to RE services by the beneficiaries		X							
4.5.	Bank's assistance to RMCs to appropriately assess and implement environmental and social mitigation/enhancement as well as climate change mitigation and adaptation measures through the renewable energy interventions		X							
-	Extent to which the Bank assesses the environmental and social risks, along with mitigation measures, in its RE interventions, meeting all AfDB environmental, social, health and safety (ESHS) standards		X							
-	Bank's identification and support of climate change mitigation & adaptation measures in its RE development interventions		X							
-	Effective implementation of mitigation measures to ensure environmental and social safeguards		X							
-	Unintended negative ESHS impacts of RE interventions		X							

PROTOCOL FOR INDIVIDUAL OR GROUP INTERVIEWS

General notes

- Keep in mind that certain contextual factors or people at the interview site may influence the behavior/responses of the respondents (e.g., the presence of a manager or Bank staff, people around may discourage people from telling all they know). If you notice such things before or during the interview, try to mitigate them. In any case, mention it in your interview notes.
- Keep track of how many representatives of vulnerable groups are present in your focus group discussions/interviews; if you find that there are very few, seek out more such respondents as soon as possible.

Preparation

- Read carefully the evaluation framework from which the type of response we are looking for is derived - having the questions, criteria and indicators in mind will help you to conduct the interview without being too constrained by the structure of the questionnaire.
- The indicators in the evaluation framework at project and sector level are not exhaustive, but present the main questions to focus on, so do not hesitate to ask additional relevant questions. By identifying the type of stakeholder, you are going to meet, check which themes/issues you are going to raise first.
- Focus on the intervention/sector you have been allocated - however, you may be able to capture interesting and important information that is more general to the sector or even to Bank support in general. It is important that the information collected for specific interventions helps to inform the broader question about AfDB support. Any relevant information that contributes to this but does not fit into the evaluation framework should be recorded in the meeting notes.
- For the first part of the interview/focus group, make sure you are able to present a quick summary of the Bank's strategies (general, sectoral and country-specific). Most people do not know them spontaneously.
- Make sure you take full notes (in pencil and paper or on your computer).
- If possible, fill in the identification part of the interview note in advance
- Keep a good record of your diary, which should be annexed to the technical report.
- For focus groups - prepare sheets of paper to record participants (name, position, email address, phone number).

During the interview/focus group

- Start with an introduction:

"We are conducting an evaluation of AfDB support for the electricity sector as related to Renewable Energy (RE) generation specifically. The objective is to inform the Bank's strategies and operational approach to renewable energy supply sector assistance, by identifying emerging trends in the sector, assessing how the Bank has responded to these trends, taking stock of the results of the Bank's assistance, and drawing lessons for future work. For this meeting, we will focus our questions on this specific [project / sector XX], but any relevant and valuable general information on the Bank's support is also welcome."

- Introduction of each participant and therefore of yourself (international and national consultants):

"My name is XXX & YYY, we are the evaluation team in charge of [project/sector XX], we are working in collaboration with ADE, a Belgian consulting firm that is supervising the study".

- Confidentiality aspects:

"Before we start, I would already like to thank you for your time and availability - we would also like to stress the confidentiality of your answers - please feel free to share what you think in a very open way."

- Identification of respondent(s) - use the prepared document!
  - Name and function

  - E-mail address
  - Telephone number of at least one person (if focus group) in case you need to ask more questions, or you didn't understand everything

- It is not possible, not relevant and not desirable to ask the long list of questions to all the different respondents - however, the more answers we get for the same question, the more we are able to triangulate the information received and build a well-founded answer to the evaluation questions. There is a trade-off between quality and quantity, so please note that we prefer quality while remaining mindful of quantity (number of responses per question).

- Be flexible in conducting the discussion
  - Keep the discussion interesting and involve people - let the discussion flow and formulate questions in your own way but use the evaluation framework as a guide to the information you should collect, knowing that it must be recorded to meet the Bank's expectations for information collection and tracking.
  - Be open and remain curious about what you learn.
  - If a topic is of particular interest - explore it further.
  - Let the interviewees speak but do not hesitate to rephrase your question if you feel they are not really answering your questions.
  - If time is short - try to focus on the most relevant questions / those for which you lack answers / those for which you need more information.

- Try to keep the interview to about one hour.

- Take active notes so that you can complete the meeting note after the interview

- If respondents disagree in a focus group - mention the different opinion (this is a statement). If respondents do not know an answer, this is also a constant (e.g., do you know where the Bank operates in this country? - NO = interesting information).

After the interview

- Fill in the meeting note on the day of the interview/focus group.
- Make sure you have filled in all the general information about the interview (part 1) - who / where / when?
- For all the questions you raised during the interview / focus group, fill in the meeting note - even if the answer is "they don't know" (DK).
- Add relevant general comments / remarks / observations in terms of recommendations etc. in the last part of the meeting note - this is important!
- List some key issues / outstanding questions that might be of interest in the summary section of the meeting note.

Annex 7 - Intervention analytical grids

Country XXX – INTERVENTION NAME

Project Name	
Project type	
Project code	
Starting date	
End date	
Sub-sector	
Approval date	
Project status	
Sub-sector	
Main source of energy	
Public or private	
AfDB country	
Company name	
Source of financing	
Financial instrument	
Net loan value (UA million)	
Total project cost	
Type of investment	
Budget (and source)	
PRA	
PRA av2	
Tech Annex	
Other appraisal	
XSR	
PCR - project completion	
PCREN	

Intervention Logic

Summary of scores

Criteria / Sub-criteria	Score
1. RELEVANCE	
1.1 Strategy	
1.2 Alignment	
1.3 Adaptation	
1.4 Coordination	
2. EFFECTIVENESS	
2.1 Achieved outcomes	
2.2 Influencing factors	
2.3 Partnerships	
2.4 Leverage	
3. EFFICIENCY	
3.1 Design	
3.2 Delivery	
3.3 Supervision	
4. SUSTAINABILITY	
4.1 Technologies	
4.2 Financial sustainability	
4.3 Capacities	
4.4 Stakeholders	
4.5 E&S impact	

Scoring scale:
4 - Highly Satisfactory
3 - Satisfactory
2 - Partly Unsatisfactory
1 - Unsatisfactory

1. RELEVANCE - To what extent are the Bank's interventions aligned with the clients' priority RE needs as they navigate changing RE markets and expanding global initiatives?

Criteria / Indicators	Analysis	Sources	Rating	Score
1.1. Strategy: How adequate is the Bank's strategic focus on the renewable energy to assist RMCs achieve: the SDGs, the Kyoto Protocol and the Paris Agreement?				
1.1.1. Explicit reference in RE development interventions to M/SDGs; African Union Agenda and Paris Agreement objectives / indicators		PRA CSP Etc. …	**4 - Highly Satisfactory**: The intervention design encompasses/considers all of the mentioned elements. **3 - Satisfactory**: The intervention design encompasses/considers most of the mentioned elements. **2 - Partly Unsatisfactory**: The intervention design encompasses/considers few of the mentioned elements. **1 - Unsatisfactory**: The intervention design encompasses/considers just one or none of the mentioned elements.	
1.1.2 Extent to which AfDB RE interventions include: (i) project's objectives clearly stated and focused on outcomes as opposed to outputs; (ii) realistic intended outcomes in the country's current circumstances; and to Bank's role, capacity and lending & non-lending capabilities for achieving the defined objectives; (iii) appropriate solutions			**4 - Highly Satisfactory**: The intervention design encompasses/considers all of the factors (1.1.2-1.1.5) **3 - Satisfactory**: The intervention design encompasses/considers most of the factors. **2 - Partly Unsatisfactory**: The intervention design encompasses/considers few of the factors. **1 - Unsatisfactory**: The intervention design encompasses/considers just one or none of the factors.	

Criteria / Indicators	Analysis	Sources	Rating	Score
to the identified problems [PRA, section 1.2 Relevance of intervention design to achieve defined objectives]				
1.1.3 Quality of risk assessment (assumptions made in the logic model) [PRA, section 1.2 Relevance of intervention design to achieve defined objectives] & [Feedback from national stakeholders - Authorities, executive agencies, operators, beneficiaries]				
1.1.4 Implementation status, existing monitoring and feedback on the relevance of modifications made to project design [PRA, section 1.2 Relevance of intervention design to				

Criteria / Indicators	Analysis	Sources	Rating	Score
achieve defined objectives] & [Feedback from national stakeholders - Authorities, executive agencies, operators, beneficiaries]				
1.1.5 Analysis of the circumstances prevailing at the time of the evaluation; Extent to which potential negative impacts were identified, their likelihood of occurring and how they might be avoided. [PRA, section 1.2 Relevance of intervention design to achieve defined objectives] & [Feedback from national stakeholders - Authorities, executive agencies, operators, beneficiaries]				
1.2. Alignment: To what extent were the Bank's lending and non-lending activities in the renewable energy aligned with the priorities of RMCs and end beneficiaries' needs?				
1.2.1 Explicitly demonstrated alignment of			**4 - Highly Satisfactory**: The intervention objectives are clearly **aligned to all** mentioned in the list. **3 - Satisfactory**: The intervention objectives are clearly **aligned to any three** of the above.	

Criteria / Indicators	Analysis	Sources	Rating	Score
interventions with applicable: • AfDB corporate strategies (Mid-term strategy 2008-2012; Ten Years Strategy 2013-2022; High 5) • AfDB sectoral strategies (Energy policy, NDEA, Climate change action plans) • RISPs and CSPs • National general development strategies (and respective contribution to specific national development objective(s), usually time bound and quantified) • National sector specific (Energy, Electricity, RE, Climate) strategies. • Beneficiaries specific needs (appropriate solutions provided to identified problems and barriers) • For PBO: ensure alignment with the Poverty Reduction Strategy paper (PRSP), Performance			**2 - Partly Unsatisfactory**: The intervention objectives are clearly **aligned to any one or two** of the above. **1 - Unsatisfactory:** The intervention objectives are **not aligned to any** of the above.	

Criteria / Indicators	Analysis	Sources	Rating	Score
Assessment Framework (PAF) or applicable country and Bank sector strategies [PRA, section 1.2 Relevance of objectives] & [Feedback from national stakeholders-executive agencies in selected countries]				
1.3. Adaptation: To what extent were the Bank's interventions adapted over time taking into account RMCs' implementation performances and emerging challenges (including risk related to climate change)?				
1.3.1. Reactive vs Proactive approach in adapting RE interventions due to positive or negative changes or trends [PRA, section 1.2 Relevance of objectives; Criterion "Relevance of modifications made to intervention design"] & [Feedback from national stakeholders - Authorities, executive agencies, operators, beneficiaries]			**4 - Highly Satisfactory**: The intervention design encompasses/considers all of the factors (1.3.1-1.3.3) **3 - Satisfactory**: The intervention design encompasses/considers most of the factors. **2 - Partly Unsatisfactory**: The intervention design encompasses/considers few of the factors. **1 - Unsatisfactory**: The intervention design encompasses/considers just one or none of the factors.	
1.3.2. Innovation identified as specific				

Criteria / Indicators	Analysis	Sources	Rating	Score
objective or cross-cutting issue (clarity, means dedicated to innovation & adequate management and monitoring tools)				
1.3.3. Opinion from stakeholders involved in the management of the Bank RE development interventions about their innovative character in terms of process and achievements				
1.4. Coordination: To what extent are the Bank's interventions (i) coordinated with those of governments and other development organizations' interventions and (ii) are they complementary to these interventions?				
1.4.1 Specific attention to co-financed RE development interventions If recent PRA, section 2 Coherence (external)			**4 - Highly Satisfactory**: The intervention has very good support, synergies and interlinkages, consistency (complementarity, harmonization and coordination), with other interventions. **3 - Satisfactory**: The intervention has mixed support, synergies and interlinkages, consistency (complementarity, harmonization, and coordination), with other interventions. **2 - Partly Unsatisfactory: The intervention has poor support, synergies and interlinkages, consistency (complementarity, harmonization,** and coordination), with other interventions. **1 - Unsatisfactory: The intervention has very Poor support, synergies and interlinkages, consistency (complementarity, harmonization,** and coordination), with other interventions.	
1.4.2 Evidence on (i) existence of coordination platforms between TFPs; (ii) participative design of RE intervention(s); (ii) clear leadership for specific aspects where each donor				

Criteria / Indicators	Analysis	Sources	Rating	Score
demonstrates its comparative advantage; (iii) common mechanisms in managing (Project coordination unit, Procurement, Supervision, etc.) and monitoring / assessing achievements of RE development interventions				

2. EFFECTIVENESS - To what extent has the Bank's support in renewable energy been effective in addressing barriers, mobilizing finance, leveraging experience and partnerships, and achieving the expected results for advancing RE development in meeting client's energy and environment needs?

Criteria / Indicators	Analysis	Sources	Rating	Score
2.1. Achieved outcomes: To what extent have the Bank's renewable energy interventions achieved their expected direct and indirect outcomes?				
2.1.1. Achievement of outputs against those planned in the logical framework • For PBO: assessment should not only review the extent to which outputs were delivered (i.e. agreed-upon policy reforms took place), but also the degree to which complementary measures necessary for their		PRA CSP Etc. …	**4 - Highly Satisfactory**: The intervention fully achieved or exceeded its intended outputs, or is likely to do so **3 - Satisfactory**: The intervention almost fully achieved its intended outputs or is likely to do so. **2 - Partly Unsatisfactory**: The intervention partly achieved its intended outputs or is likely to do so. **1 - Unsatisfactory:** The intervention barely achieved its intended outputs or is likely to do so.	**X**

Criteria / Indicators	Analysis	Sources	Rating	Score
implementation occurred (eg. public awareness, policy dialogue and institutional arrangements). [section 3.1 in PRAs]				
2.1.2 Achievement of outcomes against those planned in the logical framework • Production of the amount of energy output anticipated, in the planned timeframe. • Achievement of the cost of the electricity produced, within the target range. [section 3.2 in PRA]			**4 - Highly Satisfactory**: The intervention fully achieved or exceeded its intended outcomes, or is likely to do so **3 - Satisfactory**: The intervention almost fully achieved its intended outcomes or is likely to do so. **2 - Partly Unsatisfactory**: The intervention partly achieved its intended outcomes or is likely to do so. **1 - Unsatisfactory:** The intervention barely achieved its intended outcomes or is likely to do so.	
2.1.3 Record on key barriers and risks as explanatory factors of the RE interventions' performance (policy-governance; economic & financial; environmental & sustainability-related; technical; operational and capacity-related factors)				

Criteria / Indicators	Analysis	Sources	Rating	Score
[section 3.2 in PRA which generally includes an analysis of explanatory factors regarding the performance of the intervention]				
2.2. Influencing factors: What are the factors that enable or hinder the achievement of the expected RE interventions' direct and intermediates outcomes?				
2.2.1 Record and feedback by stakeholders on key enabling factors and barriers and risks as explanatory factors of the RE interventions' performance (policy-governance; economic & financial; environmental & sustainability-related; technical; operational and capacity-related factors) [section 3.2 in PRA which generally includes an analysis of explanatory factors regarding the performance of the intervention]			**4 - Highly Satisfactory**: The intervention design encompasses/considers all of the factors (2.2.1-2.2.3) **3 - Satisfactory**: The intervention design encompasses/considers most of the factors. **2 - Partly Unsatisfactory**: The intervention design encompasses/considers few of the factors. **1 - Unsatisfactory**: The intervention design encompasses/considers just one or none of the factors.	
2.2.2 Experience-based recommendations by stakeholders on key improvements regarding the design and operational management of RE interventions				

Criteria / Indicators	Analysis	Sources	Rating	Score
(dimensions: policy-governance; economic & financial; environmental & sustainability-related; technical; operational and capacity-related factors) [section 3.2 in PRA which generally includes an analysis of explanatory factors regarding the performance of the intervention]				
2.2.3 Record and feedback by stakeholders on solutions they found and used to address barriers and risks they were confronted with. [section 3.2 in PRA which generally includes an analysis of explanatory factors regarding the performance of the intervention]				
2.3. Partnerships: How effective has the Bank been in engaging in productive partnerships in renewable energy sector?				
2.3.1 Record & (crossed) perception on the commitment & involvement of co-financing other TFPs: during (i) project preparation; (ii) project			**4 - Highly Satisfactory**: The intervention has been fully effective in engaging in productive partnerships in RE sector, or is likely to do so **3 - Satisfactory**: The intervention has almost fully effectively engaged in productive partnerships in RE sector, or is likely to do	

Criteria / Indicators	Analysis	Sources	Rating	Score
implementation; (iii) further accompanying measures; and with regard to the various dimension of partnership: (a) technical; (b) governance & decision-making; (c) mobilization of financing; (d) operational & strategic steering			**2 - Partly Unsatisfactory**: The intervention partly engaged in productive partnerships in RE sector, or is likely to do **1 - Unsatisfactory:** The intervention barely engaged in productive partnerships in RE sector	
2.3.2 Record perception on the commitment & involvement of national authorities: during (i) project preparation; (ii) project implementation; (iii) further accompanying measures; and with regard to the various dimension of partnership: (a) technical; (b) governance & decision-making; (c) mobilization of financing, notably national counterparts; (d) operational & strategic steering				
2.3.3 To what extent are AfDB interventions supported by partnership programs effective? (See QS2.1 & SQ 2.2 on obtaining				

Criteria / Indicators	Analysis	Sources	Rating	Score
outputs, achieving outcomes, identifying enabling & hindering factors)? Can a difference be observed between RE interventions in partnerships, compared to RE interventions conducted by the Bank alone?				
2.3.4 Record and feedback from in-country AfDB and national stakeholders on appropriateness of the partnership(s) structure, management arrangement and division of tasks, operational modalities and instruments used. Influence on effectiveness and sustainability				
2.4. Leverage: How well has the Bank leveraged resources?				
2.4.1 Record & (crossed) perception on the leadership of the Bank: during (i) project preparation; (ii) project implementation; (iii) further accompanying measures; and with regard to the various			**4 - Highly Satisfactory**: The Bank has fully leveraged its resources, in the scope of this intervention, or is likely to do so **3 - Satisfactory**: The Bank has almost fully leveraged its resources, in the scope of this intervention, or is likely to do so **2 - Partly Unsatisfactory**: The Bank partly leveraged its resources, in the scope of this intervention	

Criteria / Indicators	Analysis	Sources	Rating	Score
dimension of partnership: (a) technical; (b) governance & decision-making; (c) mobilization of financing; (d) operational & strategic steering; (e) focus on specific components (e.g., social & environmental sustainability, etc.)			**1 - Unsatisfactory:** The Bank barely leveraged its resources, in the scope of this intervention	

3. EFFICIENCY - To what extent has the Banks assistance to renewable energy results been delivered efficiently?

Criteria / Indicators	Analysis	Sources	Rating	Score
3.1. Design: To what extent did the Bank's identification, design, and approval mechanisms contribute to ensure an efficient implementation of the renewable energy interventions (Optimize Cost-benefit ratio, Cost-effectiveness)?				
3.1.1 Existence, quality and use of technical and context assessment tools & approaches for costs optimization at appraisal stage (engineering design, sector political economy, institutional governance and performances, PFM, corruption) [screening of existing PAR]		PRA CSP Etc. …	**4 - Highly Satisfactory**: The intervention design encompasses/considers all of the mentioned elements. **3 - Satisfactory**: The intervention design encompasses/considers most of the mentioned elements. **2 - Partly Unsatisfactory**: The intervention design encompasses/considers few of the mentioned elements. **1 - Unsatisfactory**: The intervention design encompasses/considers just one or none of the mentioned elements.	**X**
3.1.2 Cost-effectiveness analysis: consideration of the cost of alternative ways to achieve project objectives, unit costs for comparable activities, sector or industry standards, and/or other available evidence of the efficient use of project resources. [screening of existing PAR]			**4 - Highly Satisfactory**: The intervention design encompasses/considers all of the mentioned elements. **3 - Satisfactory**: The intervention design encompasses/considers most of the mentioned elements. **2 - Partly Unsatisfactory**: The intervention design encompasses/considers few of the mentioned elements. **1 - Unsatisfactory**: The intervention design encompasses/considers just one or none of the mentioned elements.	
3.1.3 Evidence on quality control activities regarding the definition of project's scope (technical, geographic - zones; number of			**4 - Highly Satisfactory**: The intervention encompasses/considers all of the mentioned elements.	

Criteria / Indicators	Analysis	Sources	Rating	Score
beneficiaries to be covered) objectives and output-outcome-impact indicators in reference to available budget [Task managers, Country office staff]			**3 - Satisfactory**: The intervention encompasses/considers most of the mentioned elements. **2 - Partly Unsatisfactory**: The intervention encompasses/considers few of the mentioned elements. **1 - Unsatisfactory**: The intervention encompasses/considers just one or none of the mentioned elements.	
3.1.4 Existence, coverage & soundness of risk analysis and proposed mitigation measures at appraisal stage [screening of existing PAR]			**4 - Highly Satisfactory**: The intervention encompasses/considers all of the mentioned elements. **3 - Satisfactory**: The intervention encompasses/considers most of the mentioned elements. **2 - Partly Unsatisfactory**: The intervention encompasses/considers few of the mentioned elements. **1 - Unsatisfactory**: The intervention encompasses/considers just one or none of the mentioned elements.	
3.1.5 Evidence on monitoring mechanisms regarding the evolution of risks as well as the implementation and/or the adaptation of mitigation measures (specific competences used, frequency of monitoring / updating risks analysis)			**4 - Highly Satisfactory**: The intervention encompasses/considers all of the mentioned elements. **3 - Satisfactory**: The intervention encompasses/considers most of the mentioned elements. **2 - Partly Unsatisfactory**: The intervention encompasses/considers few of the mentioned elements. **1 - Unsatisfactory**: The intervention encompasses/considers just one or none of the mentioned elements.	

Criteria / Indicators	Analysis	Sources	Rating	Score
3.2. Delivery: To what extent has the Bank's renewable energy portfolio delivered expected outputs in a timely manner and within the planned cost?				
3.2.1 (i) Comparison between the planned and the actual period of implementation from the date of signature. (ii) Duration of the approval process (iii) Delay of the first disbursement [PRA, section 4.2 Timeliness]			**4 - Highly Satisfactory**: Implementation **on time** (compared to the original Project Appraisal Report). **3 - Satisfactory**: Implementation with **less than 25% delay**. **2 - Partly Unsatisfactory**: Implementation with **less than 50%** (but with 25% or more) delay. **1 - Unsatisfactory**: Implementation with **50% of more delay**.	
3.2.2 Identification of explanatory factors: (i) technical, (ii) financial, (iii) governance-related: political will, management capacities, administrative procedures, etc.				
3.2.3 Duration of procurement process and explanatory factors (notice of non-objection; unsuccessful tendering procedures; availability and quality of procurement experts' competencies)				
3.2.4 Analysis of budgetary mobilization and absorption (paid vs planned budget; alignment with sector specific standards, etc.) [PRA, section 4.1 Cost-benefit analysis]			**4 - Highly Satisfactory**: **EIRR** is **equal or above** the opportunity cost of capital (**OPC**). **3 - Satisfactory**: EIRR is **greater or equal to 80%** of the OPC **but less than** the OPC. **2 - Partly Unsatisfactory**: EIRR is **greater than 40%** of the OPC but **less than 80%** of the OPC. **1 - Unsatisfactory:** EIRR is **less than 40 %** of the OPC.	
3.3. Supervision: To what extent has the Bank's supervision been supportive to achieving the expected outputs (Compliance with Bank's project implementation principles)?				
3.3.1 Evidence on existence and regularity of (i) supervision reports, (ii) mid-term reports and (iii) reports on project implementation status			**4 - Highly Satisfactory**: The intervention design encompasses/considers all of the elements (3.3.1-3.3.3)	

Criteria / Indicators	Analysis	Sources	Rating	Score
and results according to planification. Opinion from in-country AfDB stakeholders and perception from project implementation units' responsible			**3 - Satisfactory**: The intervention design encompasses/considers most of the elements. **2 - Partly Unsatisfactory**: The intervention design encompasses/considers few of the elements. **1 - Unsatisfactory**: The intervention design encompasses/considers just one or none of the elements.	
3.3.2 Evidence on quality, use and usefulness of supervision: (i) adequate human resources dedicated to supervision, (ii) adequate mix of expertise, (iii) involvement of main stakeholders, (iv) sufficient data collected and adequately analyzed, (v) quality of indicators included in M&E systems (SMART nature)				
3.3.3 Evidence on considering project implementation prospects in supervision reports: (i) level of partners' & beneficiaries' ownership; (ii) commitment for sector specific reforms; (iii) efficiency-oriented management				
3.3.4 Implementation process (IP) assessment: i) compliance with covenants (project covenants, environmental and social safeguards and audit compliance), ii) project systems and procedures (procurement, financial management and monitoring and evaluation), and iii) project execution and financing (disbursement, budget commitments, counterpart funding and co-financing).			**4 - Highly Satisfactory**: the average rating of applicable IP criteria ratings is comprised between 3 and 4. The implementation processes have for the most part been highly satisfactory and has to lead to the anticipated results. **3 - Satisfactory**: The average rating of applicable IP criteria ratings is comprised between 2 and 2.95. The implementation processes has for the most part been satisfactory and has for the most part lead to the anticipated results. **2 - Partly Unsatisfactory**: The average rating of applicable IP criteria ratings is comprised between 2 and 2.49. The implementation processes has for the	

Criteria / Indicators	Analysis	Sources	Rating	Score
The IP rating will be derived from the IPR that shall be updated in tandem with the PCR preparation [Section Implementation Process of PRAs]			most part been partly satisfactory and has for the most part lead to the anticipated results. **1 - Unsatisfactory**: The average rating of applicable IP criteria ratings is comprised between 1.0 and 1.95. Most dimensions of implementation processes have not been satisfactory which has jeopardized the achievement of project results.	

4. SUSTAINABILITY - To what extent are the results of the Bank's assistance to renewable energy sustainable?

Criteria / Indicators	Analysis	Sources	Rating	Score
4.1. Technologies: To what extent do renewable energy projects' achievements rely on sound technologies and maintenance mechanisms?				
4.1.1 Technology chosen is adapted to local context, needs and capacities [Section 5.1 Technical Soundness of PRAs]		PRA CSP Etc. …	**4 - Highly Satisfactory**: There is **a very low likelihood** that the achievement of the results is adversely affected by factors related to the technical design of the intervention. Reasons for this could include the following: the operation is technically simple; it was informed by extensive analytical work; the client and the Bank have extensive experience with similar interventions. **3 - Satisfactory**: There is **relatively low likelihood** that factors related to the technical design may adversely impact the achievement of the results. Such factors could include the following: the intervention is technically moderately complex; it was informed by adequate analytical work; it has a small number of components and sub-components; the client or the Bank has some experience with similar operations; and the technologies and processes used in the design have been successfully used elsewhere. **2 - Partly Unsatisfactory**: There is **a substantial likelihood** that factors related to the technical design of the intervention may adversely impact the achievement of the results. Such factors could include the following: the intervention is technically complex; it was informed by limited analytical work; it has several components and subcomponents; the client or the Bank has limited experience with similar operations; and the design incorporates or relies on relatively new technologies and processes, which do not yet have a track record.	
4.1.2 Infrastructure and equipment are installed adequately for a proper and longlisting functioning [Section 5.1 Technical Soundness of PRAs]				
4.1.3 Evidence on availability (or future perspective) of technical skills for the maintenance of installed infrastructure and equipment; arrangements chosen (private sector-based or community-based providers) [Section 5.1 Technical Soundness of PRAs]				
4.1.4 Existence and importance of Bank's support for maintenance of infrastructure (technical equipment, spare parts) [Section 5.1 Technical Soundness of PRAs]				

Criteria / Indicators	Analysis	Sources	Rating	Score
			1 - Unsatisfactory: There is **a high likelihood** that factors related to the technical design of the intervention may severely impact the achievement of the results. Such factors could include the following: the intervention is of high technical complexity; it was not informed by strong analytical work; it has a large number of components and subcomponents; the client or the Bank has no experience designing similar operations; the design incorporates or relies on untested or unfamiliar technologies and processes.	
4.2. Financial sustainability: To what extent has the Bank contributed to RMCs securing financial resources, to ensuring the continued flow of benefits associated with renewable energy projects?				
4.2.1 Evidence on creating or reinforcing funding mechanisms and modalities (e.g., tariffs, user fees, maintenance fees, budgetary allocations, other stakeholder contributions, aid flows, etc.) to ensure self-sustainability and the continued flow of benefits after project completion. • For PBO: assessment should focus on the financial sustainability of the reforms, as well as the Bank's policy dialogue to promote financial sustainability of the reforms. [Section 5.2 "Financial & Economic sustainability" of PRAs]			**4 - Highly Satisfactory**: The intervention has put in place **robust** mechanisms for economic and financial sustainability that are very likely to ensure the continued flow of benefits associated with the intervention after completion. **3 - Satisfactory**: The intervention has put in place **sufficient** mechanisms for economic and financial sustainability that are deemed sufficient to ensure the continued flow of benefits associated with the intervention after completion. **2 - Partly Unsatisfactory**: The intervention has put in place **very few** mechanisms for economic and financial sustainability, but they are not expected to be sufficient to ensure the continued flow of benefits associated with the intervention after completion **1 - Unsatisfactory**: The intervention has **not put in place** any mechanisms for economic and financial sustainability, and the flow of benefits associated with the intervention are not expected to continue after completion.	
4.2.2 Evidence on institutional arrangements and management tools for the sound financial and				

Criteria / Indicators	Analysis	Sources	Rating	Score
economic management of the Energy sector / Electricity sub-sector. Level of subsidization required, if any. [Section 5.2 "Financial & Economic sustainability" of PRAs]				
4.2.3 Evidence on the financial viability of national-wide utilities and local service providers involved in the maintenance of the infrastructure, equipment and sectoral management				
4.3. Capacities: To what extent has the Bank contributed to strengthening institutional capacities to facilitate the continued flow of benefits associated with renewable energy projects?				
4.3.1 Tariffication: (i) existence of specific targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to tariff structure (% of national subsidies, etc.)			**4 - Highly Satisfactory**: The intervention design encompasses/considers all of the mentioned elements (4.3.1-4.3.7) **3 - Satisfactory**: The intervention design encompasses/considers most of the mentioned elements. **2 - Partly Unsatisfactory**: The intervention design encompasses/considers few of the mentioned elements. **1 - Unsatisfactory**: The intervention design encompasses/considers just one or none of the mentioned elements.	
4.3.2 Awareness & consumer behavior: (i) existence of specific targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to consumers behaviors				
4.3.3 Regulation and modernization: (i) existence of specific targeted activities under				

Criteria / Indicators	Analysis	Sources	Rating	Score
AfDB projects / programs; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to regulatory and sectoral governance aspects				
4.3.4 Additional RE generation: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to RE generation				
4.3.5 Allocation of RE: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to allocation of RE				
4.3.6 Energy efficiency: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to energy loss reduction				
4.3.7 Utilities & consumers associations: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from				

Criteria / Indicators	Analysis	Sources	Rating	Score
stakeholders on perspectives related to the management of utilities and participation of consumers associations				
4.3.8 Contribution to strengthen institutional capacities that will facilitate the continued flow of benefits associated with the project: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to the institutional framework Appreciation of whether or not improved governance practices or improved skills, procedures, incentives, structures, or institutional mechanisms came into effect as a result of the operation.			**4 - Highly Satisfactory**: The intervention was critical in building or strengthening institutional capacities in the concerned area. Country systems and capacities are **excellent and sufficient** to ensure the continued flow of benefits associated with the intervention after completion. **3 - Satisfactory**: The intervention significantly contributed to strengthening institutional capacities in the concerned area. Country systems and capacities are **very good and deemed sufficient** to ensure the continued flow of benefits associated with the intervention after completion. **2 - Partly Unsatisfactor**y: The intervention very marginally contributed to strengthening institutional capacities in the concerned area. Country systems and capacities remain **weak and are deemed insufficient** to ensure the continued flow of benefits associated with the intervention after completion. **1 - Unsatisfactory**: The intervention did not contribute to strengthening institutional capacities in the concerned area. Country systems and capacities are **very weak** and very likely not able to ensure the continued flow of benefits associated with the intervention after completion.	
4.3.9 R&D: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from			**4 - Highly Satisfactory**: The intervention design encompasses/considers all of the mentioned elements (4.3.9-4.3.10)	

Criteria / Indicators	Analysis	Sources	Rating	Score
stakeholders on perspectives related to the institutional framework			**3 - Satisfactory**: The intervention design encompasses/considers most of the mentioned elements. **2 - Partly Unsatisfactory**: The intervention design encompasses/considers few of the mentioned elements. **1 - Unsatisfactory**: The intervention design encompasses/considers just one or none of the mentioned elements.	
4.3.10 Local industry: (i) stocktaking of targeted activities under AfDB projects / programs or non-lending activities; (ii) evidence on concrete achievements; (iii) feedback from stakeholders on perspectives related to the institutional framework				
4.4. Stakeholders: To what extent has the Bank effectively assisted RMCs by involving relevant stakeholders, promoting a sense of ownership amongst the beneficiaries, and putting in place effective partnerships with relevant stakeholders (e.g., local authorities, civil society organizations, private sector, donors) through its interventions in renewable energy in RMCs?				
4.4.1 Evidence on ownership and sustainability of partnerships: extent to which the project has effectively involved relevant stakeholders, promoted a sense of ownership amongst the beneficiaries (both men and women) and put in place effective partnerships with relevant stakeholders (e.g., local authorities, civil society organizations, private sector, donors) as required for the continued maintenance of the project outputs)			**4 - Highly Satisfactory**: The intervention has been highly effective at involving **all the relevant stakeholders** and there is a strong sense of ownership amongst the beneficiaries. Effective partnerships with relevant stakeholders (e.g. local authorities, civil society organizations, private sector) have been put in place to ensure the continued maintenance and management of results. **3 - Satisfactory**: The intervention has been effective at involving **most stakeholders** and promoting a sense of ownership amongst the beneficiaries. Partnerships with relevant stakeholders have been put in place and are deemed sufficient to ensure the continued maintenance and management of results. **2 - Partly Unsatisfactory**: The intervention has involved only a **small number of stakeholders** and there is limited ownership amongst the beneficiaries. No or marginally effective partnerships with relevant stakeholders have	
4.4.2 Existence and achievements of affordability measures under RE development interventions				

Criteria / Indicators	Analysis	Sources	Rating	Score
			been put in place and are not considered sufficient to ensure the continued maintenance and management of results. **1 - Unsatisfactory**: The intervention has **not been effective at involving the relevant stakeholders** and there is no sense of ownership amongst the beneficiaries. No partnerships with relevant stakeholders have been established to ensure the continued maintenance and management of results.	
4.5. E&S Impact[14]: To what extent has the Bank assisted RMCs to appropriately assess and implement environmental and social mitigation/enhancement as well as climate change mitigation and adaptation measures through the renewable energy interventions?				
4.5.1 Extent to which environmental and social mitigation/enhancement measures of the project were implemented, the capacity of country institutions and systems and the availability of funding to ensure the environmental and social sustainability of the operation			**4 - Highly Satisfactory: The intervention fully meets all of AfDB's environmental, social, health and safety (ESHS) standards and has resulted in significant environmental improvements.** The interventions have in place robust mechanisms that are very likely to ensure the continued flow of ESHS benefits associated with the intervention after completion; and produced no notable negative unintended ESHS impacts. **3 - Satisfactory**: **The intervention fully meets AfDB's ESHS standards.** Most intervention components have in place robust mechanisms that are likely to ensure the continued flow of ESHS benefits associated with the intervention after completion; and produced no notable negative unintended ESHS impacts. **2 - Partly Unsatisfactory**: **The intervention only partially meets AfDB's ESHS standards, but corrective actions are under way.** Only some intervention components have in place robust	
4.5.2 Record and feedback on the existence of climate change mitigation & adaptation measures under RE development interneurons				
4.5.3 Record and feedback on the implementation, monitoring and effectiveness of those climate change mitigation & adaptation measures				
4.5.4 Detection of unintended negative ESHS impacts, existing				

[14] Accordingly, to PRA guidelines, this criterion would normally only apply to Environmental Category I and II projects.

Criteria / Indicators	Analysis	Sources	Rating	Score
analysis of root causes and explicit strategy to deal with them at short-, mid- and long-term.			mechanisms that are likely to ensure the continued flow of ESHS benefits associated with the intervention after completion, but there are no notable negative unintended ESHS impacts. **1 - Unsatisfactory**: **The intervention does not meet AfDB's ESHS standards and corrective action is unlikely, or the intervention has already resulted in significant negative ESHS impacts.** Few or no intervention components have in place robust mechanisms that are likely to ensure the continued flow of ESHS benefits associated with the intervention after completion.	

Annex 8 - Literature and policy review plan

Purpose

In the framework of the independent evaluation of the African Development Bank Group's support to Renewable Energy, the pyramidal approach foresees, among others, the production of a literature and policy review report.

As per the concept note (p11) the "Literature and policy review will focus on: 1) highlighting the emerging Trends and Lessons in the renewable energy sector and 2) the Evolution of the Bank's Policy Framework. This will update the work already done during the broader energy sector evaluation, with a focus on renewable energy."

The literature review and policy review is an output of this evaluation. It will be used as a source of data to complete the evaluation matrix in order to answer the evaluation questions

Additionally, the literature and policy review may help refine the generic theory of change during the evaluation process as well as the evaluation questions.

In the following sections we propose the structure of the Literature and Policy review report.

Proposed structure for the Literature and Policy Review

1. **Executive summary**

2. **Introduction**
   - *2.1. Context and objectives of the evaluation*
   - *2.2. Methodology of the LPR*

3. **Key trends and factors of influence for the renewable energy sector in Africa**
   - *3.1. Main trends in the sector since 2012*
   - *3.2. Conclusions*

4. **AfDB's renewable energy strategy**
   - **4.1 Evolution of the AfDB's renewable energy strategy**
   - **4.2 Lessons learnt from previous evaluation/studies**

5. **Renewable energy policy frameworks of other development agencies**
   - *5.1. World Bank Group*
   - *5.2. European Union*
   - *5.3. Asian Development Bank*
   - *5.4. Other donors*
   - *5.5. Conclusions in relation to AfDB policies*

6. **Conclusions**

7. **Bibliography & Annexes**

Questions from the evaluation matrix to be addressed by literature review

1. Relevance of Bank's support to renewable energy
How adequate is the Bank's strategic focus on the renewable energy to assist RMCs achieve: the SDGs, the Kyoto Protocol and the Paris Agreement? **(SQ. 1.1)** - To what extent does the Bank's RE strategy take into consideration the underlying objectives and indicators related to (i) M/SDG, (ii) AU agenda 2063 and (iii) Paris Agreement (PA)? - To what extent does the Bank's RE strategy take into consideration the underlying objectives and indicators related to (i) M/SDG, (ii) AU agenda 2063 and (iii) Paris Agreement (PA)? - To what extent are the Bank RE strategies coherent with key RE development challenges in the RMC? - To what extent do RISPs and CSPs take into consideration the underlying objectives and indicators related to (i) M/SDG, (ii) AU agenda and (iii) PA? To what extent were the Bank's interventions adapted over time taking into account RMCs' implementation performances and emerging challenges (including risk related to climate change)? **(SQ. 1.3)** - To what extent are RISPs and CSPs coherent with key RE development challenges in RMCs? - To what extent do RISPs and CSPs provide an assessment of drivers / obstacles for RE development, and how is it used for adapting the RE overall strategy of the Bank? - To what extent are lessons learned in the field of RE development from country / regional experiences considered in RISPs and CSPs?
2. Effectiveness of Bank's support to renewable energy in the country
How well has the Bank leveraged resources? **(SQ. 2.4)** - What are Bank's leveraging activities in RE and what are their achievements between 2012-2021 (Africa and selected RMCs)? - What are the key enabling (strengths) and hindering (weaknesses) factors influencing the Bank leveraging activities in RE (Africa and selected RMCs)? Has the Bank fulfilled its role as knowledge broker, advisor and convener? **(SQ 2.5)** - How well is the Bank's organizational capacity in delivering RE interventions and obtaining results appreciated ?

Documents to be reviewed for literature review

1. Global initiatives, partnerships & funds

1.1 *Initiatives*

African Union (2015). Agenda 2063. https://au.int/sites/default/files/documents/36204-doc-agenda2063_popular_version_en.pdf

SEforALL (2021). Tracking SDG7 Report. https://trackingsdg7.esmap.org/downloads

UN (2021). Sustainable Development Goals Report. https://unstats.un.org/sdgs/report/2021/The-Sustainable-Development-Goals-Report-2021.pdf

UNFCCC (n.d.). https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

1.2 Climate Funds

ODI (2021). Climate Finance Regional Briefing: Sub-Saharan Africa. https://climatefundsupdate.org/wp-content/plugins/download-attachments/includes/download.php?id=5469

GEF (2021). Africa Minigrids Program. https://www.thegef.org/sites/default/files/2021-11/gef_africa_minigrids_program_2021_11.pdf

2. Regional initiatives and policies

ECREEE (2020). Regional progress report on renewable energy, energy efficiency and energy access in ECOWAS region 2018. http://www.ecreee.org/sites/default/files/documents/regional_progress_report_2018_final.pdf

ECREE (2015). ECOWAS Renewable Energy Policy. http://www.ecreee.org/sites/default/files/documents/ecowas_renewable_energy_policy.pdf

Africa-EU Energy Partnership (2010). Africa-EU Renewable Energy Cooperation Programme. https://europa.eu/capacity4dev/afretep/documents/africa-eu-renewable-energy-cooperation-programme-recp

3. AfDB corporate & sector specific strategies and analysis

3.1 Corporate

AfDB (2008) African Development Bank Group Medium-Term Strategy 2008-2012 https://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/MTS%20anglais.pdf

AfDB (2009) Bank Group Climate Risk Management and Adaptation Strategy https://www.afdb.org/en/documents/document/bank-group-climate-risk-management-and-adaptation-strategy-16137

AfDB (2012a) Climate Change Action Plan (CCAP) 2011-2015 https://www.afdb.org/en/documents/document/climate-change-action-plan-ccap-2011-2015-29231

AfDB (2013) African Development Bank Group At the Center of Africa's Transformation Strategy for 2013–2022 https://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/AfDB_Strategy_for_2013%E2%80%932022_-_At_the_Center_of_Africa%E2%80%99s_Transformation.pdf

AfDB (2017b) https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/AfricanDevelopmentBankClimateChangeActionPlan2016-2020.pdf

AfDB (2021b) The Green Climate Fund approves $170.9m in co-financing for African Development Bank's LEAF program https://www.afdb.org/en/news-and-events/press-releases/green-climate-fund-approves-1709m-co-financing-african-development-banks-leaf-program-44512

AfDB (n.d. a) The High 5s https://www.afdb.org/en/high5s

AfDB (n.d. b) Africa NDC Hub https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/africa-ndc-hub

AfDB (n.d. c) Cooperative Actions to Support NDC Implementation in Africa The Africa NDC Hub https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/The_Africa_NDC_Hub.pdf

AfDB (n.d. d) Strategy for 2013-2022 https://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/AfDB_Strategy_for_2013%E2%80%932022_-_At_the_Center_of_Africa%E2%80%99s_Transformation.pdf

3.2 Sector specific strategies

AfDB (2012b) Energy Sector Policy of the AfDB Group https://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/Energy_Sector_Policy_of_the_AfDB_Group.pdf

AfDB (2017a). The Bank Group's Strategy for The New Deal on Energy for Africa 2016 – 2025 https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Bank_s_strategy_for_New_Energy_on_Energy_for_Africa_EN.pdf

AfDB (2020) The African Development Bank's Facility for Energy Inclusion attracts $160m in commitments for small-scale renewable energy https://www.afdb.org/en/news-and-events/african-development-banks-facility-energy-inclusion-attracts-160m-commitments-small-scale-renewable-energy-34792

AfDB (2021a) Desert to Power https://www.afdb.org/sites/default/files/news_documents/dtp-brochure-2021.pdf

3.3 Analysis

IRENA and AfDB (2022), Renewable Energy Market Analysis: Africa and Its Regions – A Summary for Policy Makers. https://www.irena.org/publications/2022/Jan/Renewable-Energy-Market-Analysis-Africa

4. Other IFIs & partners

4.1 Multilateral development banks

Asian Development Bank (2021). Energy Policy. https://www.adb.org/sites/default/files/institutional-document/737086/energy-policy-r-paper.pdf

European Commission (2020). EU renewable energy financing mechanism. https://energy.ec.europa.eu/system/files/2020-09/eu_renewable_energy_financing_mechanism_en_0.pdf

IFC (2021). IFC-Canada Climate Change Program. https://www.ifc.org/wps/wcm/connect/fa98138f-8b40-457e-943c-b68c35ecd213/Canada_ClimateChangeProgram+2020-PUBLIC.pdf?MOD=AJPERES&CVID=nHOzkC0

IDB (2021). Sustainability Report 2020. https://publications.iadb.org/publications/english/document/Inter-American-Development-Bank-Sustainability-Report-2020.pdf

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IsDB (2019). Climate Change Policy. https://www.isdb.org/sites/default/files/media/documents/2022-02/IsDB Climate Change Policy.pdf

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UNDP (2022). 2020 Africa Sustainable Development Report. https://www.africa.undp.org/content/rba/en/home/library/reports/2020-africa-sustainable-development-report.html

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5. Relevant past evaluation studies

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IDEV (2018). Powering Africa through interconnection: cluster evaluation report. https://idev.afdb.org/en/document/powering-africa-through-interconnection-cluster-evaluation-report

IDEV (2018). Spurring local socio-economic development through rural electrification: cluster evaluation. https://idev.afdb.org/en/document/spurring-local-socio-economic-development-through-rural-electrification-cluster-evaluation

IDEV (2019). Evaluation of the African Development Bank's Program Based Operations: Energy and Governance Cluster. https://idev.afdb.org/en/document/evaluation-african-development-banks-program-based-operations-energy-governance-cluster

IDEV (2020). Evaluation of the AfDB's Support to the Energy Sector in Africa. https://idev.afdb.org/en/document/evaluation-afdbs-support-energy-sector-africa

IDEV (2021). Evaluation of Mainstreaming Green Growth and Climate Change into the AfDB's Interventions: Energy and Transport Cluster. https://www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/AfDB_Strategy_for_2013%E2%80%932022_-_At_the_Center_of_Africa%E2%80%99s_Transformation.pdf

5.2 Conducted by Climate Funds

Climate Investment Funds (2019). Evaluation of Transformational Change in the Climate Investment Funds. https://www.climateinvestmentfunds.org/cif_enc/sites/cif_enc/files/knowledge-documents/evaluation_of_transformational_change_in_the_cif_final2.pdf

5.3 Conducted by other IFI's

World Bank Group (2020). Renewable Energy: Evaluation of the World Bank Group's Support for Electricity Supply from Renewable Energy Resources, 2000-2017. https://openknowledge.worldbank.org/bitstream/handle/10986/34640/Renewable-Energy-Evaluation-of-the-World-Bank-Group-s-Support-for-Electricity-from-Renewable-Energy-Resources-2000-2017.pdf?sequence=8&isAllowed=y

5.4 Conducted by bilateral organization

NORAD (2014). Review of Support to the Renewable Energy and Energy Efficiency Partnership. https://www.norad.no/globalassets/import-2162015-80434-am/www.norad.no-ny/filarkiv/vedlegg-til-publikasjoner/review-of-support-to-the-renewable-energy-and-energy-efficiency-partnership-reeep.pdf

SIDA (2020). Sida's Power Africa Results 2020. https://cdn.sida.se/app/uploads/2022/01/18163813/Sida-Power-Africa-2020-Results-Report.pdf

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6 AfDB's strategic and operational framework in specific regions

6.1 RISP's

AfDB (2019). Central Africa Regional Integration Strategy Paper 2019-2025. https://www.afdb.org/en/documents/central-africa-regional-integration-strategy-paper-2019-2025

AfDB (2019). Eastern Africa Regional Integration Strategy Paper 2018 – 2022. https://www.afdb.org/en/documents/document/eastern-africa-regional-integration-strategy-paper-2018-2022-106393

AfDB (2020). North Africa Regional Integration Strategy Paper 2020 - 2026. https://www.afdb.org/en/documents/north-africa-regional-integration-strategy-paper-risp-na-2020-2026

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Annex 9 - Country case study plan

This document presents the objectives of the country missions and the proposed structure of the case studies for the 10 selected countries - Burkina Faso, Côte d'Ivoire, DR Congo, Kenya, Madagascar, Morocco, Uganda, Cameroon, South Africa and Zambia.

Purpose of the country missions

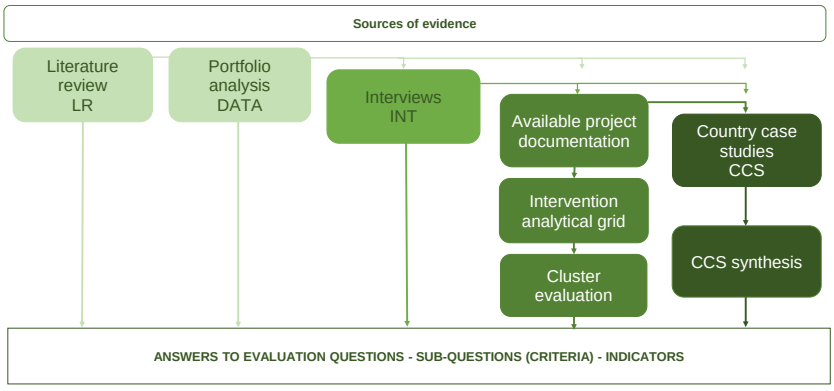
The case studies are part of the independent evaluation of the African Development Bank Group's support to Renewable Energy.
The objective of these missions is to cover both the strategic and operational dimensions of the Bank's support in each of the 10 countries.
The case studies will collect information from the main stakeholders, namely:

- AfDB Country offices staff
- Country Government officials (including local)
- Executive agency, PM staff
- Sector Regulators, Utilities
- Private sector
- Civil society organizations
- Other TFPs

The evaluation team would kindly appreciate the Bank's support in identifying and contacting key stakeholders to meet in these country missions well in advance.

In the following sections we propose the structure of the country case study reports and key data sources envisaged, which are interconnected as described in Figure 1 below. The proposed structure is built based on the main points of the evaluation matrix and result analysis grid for interventions proposed by ADE in the Inception Report. The information collected at intervention level is currently presented in blue.

Data sources



Portfolio review (DATA): implemented by IDEV and used as a source of evidence by the evaluation team to provide additional analysis on specific themes, depending on the availability of basic data and access granted to it.

Literature review (LR): based on documentary review and interviews with strategic stakeholders, the review will help understand the policy discourse and key trends in assistance to renewable energy in Africa. A comparative and critical analysis of AfDB's role and place in the field of RE versus major global and continental donors will be performed. This review will facilitate the refining of the (sub)-sector theory of change and evaluation questions.

Interviews (INT): interviews with relevant stakeholders integrated in the case studies, at country level. These include themes derived from the EQs, criteria and indicators, as well as hypotheses, informational gaps, and specific issues to be addressed, as identified in the literature, portfolio, and project reviews.

- **Project Results Assessment (PRA):** internal evaluation background documents prepared by IDEV when conducting Sector, Thematic, and Country Strategy and Program Evaluations. These will be used as key sources of evidence for the PRA synthesis and case studies.
- **Analysis of other relevant intervention documents**
- **Interviews at intervention level**
- **Intervention analytical grid**

Country case studies (CCS): country case studies will be carried out in order to approach AfDB's interventions in their national context with the main renewable energy sector stakeholders involved in physical infrastructure development, capacity building, awareness creation and reforms.

Proposed structure for the 10 country case study reports

A. Country context and recent development

A.1. Timeline with key events in the period covered
A.2. Renewable energy context in the country
A.3. Risks identified and mitigation measures envisaged

B. Bank's RE strategy and operations in the country

B.1. Theory of Change reflected in the Country Strategy (CSP)
B.2. Portfolio of Bank Operations in the Country
B.3. Place of Bank operations in relation to other TFPs operating in the country

C. Answers to the evaluation questions

1. Relevance of Bank's support to renewable energy in the country

1.1. Adequacy of Bank's strategy to assist RMCs

1.1.1. Coherence of Bank's RE strategies and key RE development challenges in the RMC
Data source: DATA, LR, INT & CCS

1.1.2. Extent to which RISPs and CSPs consider the underlying objectives and indicators related to (i) M/SDG, (ii) AU agenda and (iii) PA

Data source: LR, INT & CCS

1.1.3. Coherence of RISPs and CSPs and with key RE development challenges in RMCs
Data source: LR & CCS

1.1.4. Appreciation of the quality of RE development interventions design
Data source: PRA

1.1.5. Consideration of major climate change risks for long term sustainability in RE development interventions
Data source: PRA

1.2. Alignment of Bank's lending and non-lending activities in RE with the priorities of RMCs and end beneficiaries' needs

1.2.1. Alignment of CSPs & RISPs RE development objectives with RMCs own strategic priorities
Data source: CCS

1.2.2. Alignment of RE interventions with RMCs strategies and with beneficiaries' specific needs
Data source: PRA

1.3. Adaptation of Bank's interventions to RMCs' implementation performances and emerging challenges (including risk related to climate change)

1.3.1. Extent to which CSPs & RISPs provide an assessment of drivers/obstacles for RE development and use of it for adapting the RE overall strategy of the Bank
Data source: LR & CCS

1.3.2. Consideration of lessons learned in the field of RE development from country/regional experiences in RISPs and CSPs
Data source: LR & CCS

1.3.3. Evolution of the portfolio structure (lending vs non-lending) at regional and country level
Data source: DATA & CCS

1.3.4. Adaptation of RE interventions to evolving context
Data source: PRA

1.3.5. Extent to which RE interventions are managed and conducive to leverage innovation in a changing global context
Data source: PRA

1.4. Coordination and complementarity of Bank's interventions with those of governments and other development organizations

1.4.1. Degree of sector/thematic specialization of other TFPs compared to AfDB in selected countries
Data source: DATA & CCS

1.4.2. Coordination of the design and the implementation of RE development interventions between the Bank and other TFPs at country level
Data source: CCS

1.4.3. Degree of mutual reinforcement in the design, funding and implementation of interventions financed by the Bank and other TFPs

Data source: PRA

2. Effectiveness of Bank's support to renewable energy in the country

2.1. Achievement of the Bank's expected direct and indirect outcomes

2.1.1. Progress towards MDGs/SDGs, Agenda 2063 objectives and targets
Data source: DATA & CCS

2.1.2. Non-lending activities contribution to changes in RMCs renewable energy policy and institutional framework
Data source: CCS

2.1.3. Extent to which RE development interventions produce tangible outputs, obtain direct and intermediate outcomes, as planned within their results-based logical frameworks
Data source: PRA

2.1.4. Key barriers and risks faced in practice by RE interventions.
Data source: PRA

2.2. Factors enabling or hindering the achievement of the expected direct and intermediates outcomes

2.2.1. Key enabling and hindering factors allowing RE interventions to achieve RMCs RE objectives add up
Data source: CCS

2.2.2. Key enabling and hindering factors allowing RE interventions to achieve their expected direct and intermediates outcomes
Data source: PRA

2.2.3. Underlying causes and lessons learned to inform the design and management of future interventions
Data source: PRA

2.2.4. Instruments and approaches used by the Bank to address key barriers and risks faced by RE development interventions
Data source: PRA

2.3. Bank's engagement in productive partnerships in renewable energy sector

2.3.1. Extent to which the Bank establish effective partnership arrangements and frameworks in the field of RE
Data source: DATA, INT & CCS

2.3.2. Tangible achievements and which factors that enabled or hindered the performance partnerships
Data source: INT & CCS

2.3.3. Degree of partners' involvement and ownership under RE interventions
Data source: INT & PRA

2.3.4. Effectiveness of Bank's interventions supported by partnership programs
Data source: PRA

2.3.5. Extent to which partners were selected within RE interventions appropriate to achieving expected results and guaranteeing their sustainability
Data source: INT & PRA

2.4. Bank's leverage of resources

2.4.1. Extent to which Bank's support (lending and non-lending activities) has a catalytic effect in the RE sector
Data source: INT & CCS

2.4.2. Bank's leveraging activities in RE and achievements between 2012-2021
Data source: LR, INT & CCS

2.4.3. Key strengths and weaknesses of the Bank's leveraging activities in RE
Data source: LR, INT & CCS

2.4.4. Degree of Bank' leadership on cofinancing interventions in the RE sector
Data source: PRA

2.5. Bank's role as knowledge broker, advisor and convener

2.5.1. Appreciation of Bank's organization capacity to delivering RE interventions and obtaining results
Data source: LR, INT & CCS

2.5.2. Extent to which the Bank plays a leading role in knowledge and advisory related to RE development
Data source: INT & CCS

2.5.3. Availability, accessibility and usefulness of Bank's knowledge and advisory products (policy guidance, technical expertise, training)
Data source: CCS

2.5.4. Appropriateness of Bank's organizational capacity in delivering RE interventions and obtaining results
Data source: CCS

3. Efficiency of Bank's support to renewable energy in the country

3.1. Contribution of Bank's identification, design, and approval mechanisms to ensure an efficient implementation of the renewable energy interventions

3.1.1. Appreciation of the quality and completeness of the Bank's RE projects appraisals
Data source: PRA

3.1.2. Extent to which the Bank make a consistent use of economic and financial analysis (IRRs) at appraisal stages
Data source: PRA

3.1.3. Bank's implementation of specific and reliable quality control mechanisms prior to approval
Data source: PRA

3.1.4. Monitoring of assumptions, risks and mitigation measures defined under RE development interventions during implementation, completion and handover to beneficiaries
Data source: PRA

3.2. Timeliness delivery of expected outputs of Bank's renewable energy portfolio within the planned time and financial resources

3.2.1. Extent to which the Bank's RE interventions face delays and respective determining explanatory factors

Data source: PRA

3.2.2. Timeliness of procurement of the Bank financed RE interventions
Data source: PRA

3.2.3. Extent to which the achievement of the expected results of the Bank RE interventions is in line with planned costs
Data source: PRA

3.3. Supervision and compliance with Bank's project implementation principles

3.3.1. Extent to which the Bank's staff conducts sufficient supervision missions both in terms of quantity, regularity and quality
Data source: INT & PRA

3.3.2. Extent to which the Bank's supervision reports provide a balanced and realistic view of the implementation prospects
Data source: INT & PRA

4. Sustainability of Bank's support to renewable energy in the country

4.1. RE projects' achievement's reliability on sound technologies and maintenance mechanisms

4.1.1. Adequation of the Bank' interventions selected technologies for RE infrastructures and respective installation
Data source: PRA

4.1.2. Degree of Bank's support to RMCs in getting the required technical skills for all maintenance processes
Data source: PRA

4.1.3. Degree of Bank's support to RMCs in getting the equipment and spare parts for capital assets maintenance
Data source: PRA

4.2. Bank's contribution to RMCs in securing financial resources and ensuring the continued flow of benefits associated with renewable energy projects
Data source: PRA

4.3. Bank's contribution to strengthening institutional capacities to facilitate the continued flow of benefits associated with renewable energy projects

4.3.1. Appreciation of Bank's contribution to enhance the management of the energy demand in RMCs
Data source: PRA

4.3.2. Appreciation of Bank's contribution to enhance the management of the energy offer in RMCs
Data source: PRA

4.3.3. Appreciation of Bank's contribution to reshape the institutional framework in RMCs
Data source: PRA

4.4. Effectiveness of Bank's assistance to RMCs in involving relevant stakeholders, promoting a sense of ownership amongst the beneficiaries, and putting in place effective partnerships through its interventions in renewable energy

4.4.1. Extent to which the Bank CSPs involve key stakeholders in decision making and design for creating a sense of high-level ownership
Data source: CCS

4.4.2. Extent to which the Bank built effective partnerships with relevant stakeholders committed to sustain the achievements at sectoral level and with regard to specific RE interventions
Data source: CCS

4.4.3. Extent to which RE interventions involve relevant stakeholders in design, implementation, and facilitation measures after their completion for creating a sense of ownership by the beneficiaries *Data source: PRA*

4.4.4. Extent to which RE interventions contribute to enhance the equal access to RE services by the beneficiaries
Data source: PRA

4.5. Bank's assistance to RMCs to appropriately assess and implement environmental and social mitigation/enhancement as well as climate change mitigation and adaptation measures through the renewable energy interventions

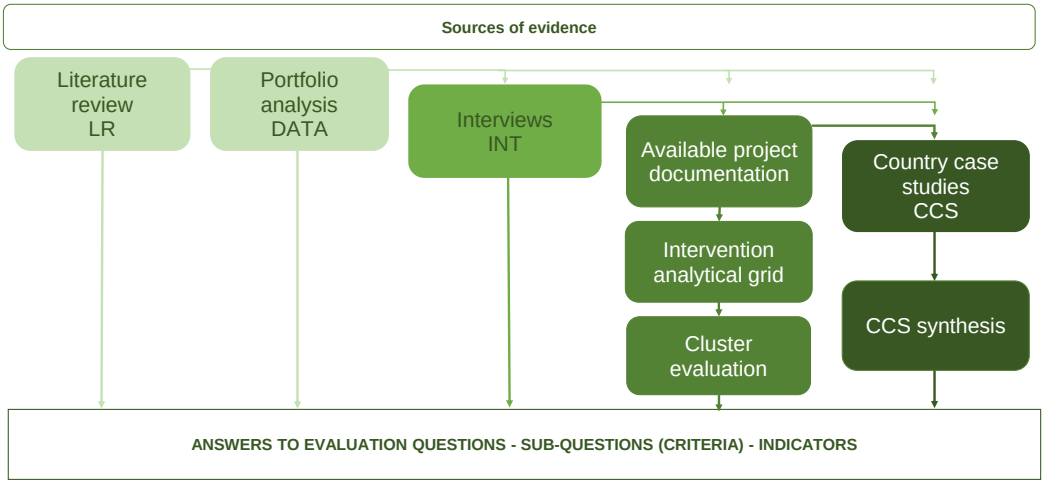
Annex 10 - Cluster report plan

Purpose

In the framework of the independent evaluation of the African Development Bank Group's support to Renewable Energy, the pyramidal approach foresees, among others, the production of a cluster evaluation report, looking at the entire relevant Bank portfolio, in parallel to the production of 10 in depth country case studies.

The objective of the Cluster evaluation is to present an overview of lessons that can be learned from the experience of the Bank, taking into account, for each technological cluster (Solar, wind, hydro, geothermal), the information available in related existing PRAs and intervention analytical grids. The PRAs might need to be completed by additional desk review of additional intervention documents and interviews during country case study missions, in order to cover the scope of the evaluation questions.

As shown in the Figure below, this will feed in the answers to the evaluation questions.



Additionally, in a sector that is rapidly changing, not all past lessons will be applicable going forward in the support to RE. Therefore, it is important to establish the key challenges facing the expansion of renewable electricity in Africa, against which the Bank's readiness to support RMCs going forward can be analyzed, by taking into consideration the technology-specific trends and requirements, and the specific risk profile, for supporting RMCs deployment of investments, within each cluster.

In the following sections we propose the structure of the Cluster Evaluation report, which is built on the structure of the evaluation matrix proposed by ADE in the Inception Report.

Proposed structure

A. Introduction

B. Cluster X context and trends

B.1. Timeline with key events in the period covered
Market trends (price, powers, market penetration…)
Specific political events affecting the technology?

B.2. Current level of exploitation, and potential
Continental level, and subregions
B.3. Essential differentiating [15]technical characteristics
- Technical requirement/constraints/properties – range of available power in the market
- Implications regarding type of network distribution
- VRE
- Maintenance issues
- Specific differentiating requirements regarding the enabling environment (regulatory, funding sources, …)
- Risks identified and mitigation measures envisaged
B.4. TOC: specificities regarding technology X
B.5. Key differentiating challenges facing its expansion in Africa

C. Bank's strategy and operations in Cluster X

C.1. Portfolio of Bank Operations in the Cluster
-Number, places, timeline of projects related to the cluster, budgets
-Financial instruments used to support intervention of cluster X

C.2. Available PRAs
Overview + how was it completed
Completion analysis and risks (incomplete data)

D. Answers to the evaluation questions for Cluster X

1. Relevance of Bank's support to renewable energy related to technology X

1.1 Adequacy of Bank's strategy to assist RMCs

1.1.1 Appreciation of the quality of RE development interventions design

1.1.2 Consideration of major climate change risks for long term sustainability in RE development interventions

1.2 Alignment of Bank's lending and non-lending activities in RE with the priorities of RMCs and end beneficiaries' needs

1.2.1 Alignment of RE interventions with RMCs strategies and with beneficiaries' specific needs

[15] Differentiating: in comparison with other renewable technologies

1.3 Adaptation of Bank's interventions to RMCs' implementation performances and emerging challenges (including risk related to climate change)

1.3.1 Adaptation of RE interventions to evolving context

1.3.2 Extent to which RE interventions are managed and conducive to leverage innovation in a changing global context

1.4 Coordination and complementarity of Bank's interventions with those of governments and other development organizations

1.4.1 Degree of mutual reinforcement in the design, funding and implementation of interventions financed by the Bank and other TFPs

2. Effectiveness of Bank's support to renewable energy related to technology X

2.1 Achievement of the Bank's expected direct and indirect outcomes

2.1.1 Extent to which RE development interventions produce tangible outputs, obtain direct and intermediate outcomes, as planned within their results-based logical frameworks

2.1.2 Key barriers and risks faced in practice by RE interventions.

2.2 Factors enabling or hindering the achievement of the expected direct and intermediates outcomes

2.2.1 Key enabling and hindering factors allowing RE interventions to achieve their expected direct and intermediates outcomes

2.2.2 Underlying causes and lessons learned to inform the design and management of future interventions

2.2.3 Instruments and approaches used by the Bank to address key barriers and risks faced by RE development interventions

2.3 Bank's engagement in productive partnerships in renewable energy sector

2.3.1 Degree of partners' involvement and ownership under RE interventions

2.3.2 Effectiveness of Bank's interventions supported by partnership programmes

2.3.3 Extent to which partners were selected within RE interventions appropriate to achieving expected results and guaranteeing their sustainability

2.4 Bank's leverage of resources

2.4.1 Degree of Bank' leadership on cofinancing interventions in the RE sector

3. Efficiency of Bank's support to renewable energy related to technology X

3.1 Contribution of Bank's identification, design, and approval mechanisms to ensure an efficient implementation of the renewable energy interventions

3.1.1 Appreciation of the quality and completeness of the Bank's RE projects appraisals

3.1.2 Extent to which the Bank make a consistent use of economic and financial analysis (IRRs) at appraisal stages

3.1.3 Bank's implementation of specific and reliable quality control mechanisms prior to approval

3.1.4 Monitoring of assumptions, risks and mitigation measures defined under RE development interventions during implementation, completion and handover to beneficiaries

3.2 Timeliness delivery of expected outputs of Bank's renewable energy portfolio within the planned time and financial resources

3.2.1 Extent to which the Bank's RE interventions face delays and respective determining explanatory factors

3.2.2 Timeliness of procurement of the Bank financed RE interventions

3.2.3 Extent to which the achievement of the expected results of the Bank RE interventions is in line with planned costs

3.3 Supervision and compliance with Bank's project implementation principles

3.3.1 Extent to which the Bank's staff conducts sufficient supervision missions both in terms of quantity, regularity and quality

3.3.2 Extent to which the Bank's supervision reports provide a balanced and realistic view of the implementation prospects

4. Sustainability of Bank's support to renewable energy related to technology X

4.1 RE projects' achievement's reliability on sound technologies and maintenance mechanisms

4.1.1 Adequation of the Bank' interventions selected technologies for RE infrastructures and respective installation

4.1.2 Degree of Bank's support to RMCs in getting the required technical skills for all maintenance processes

4.1.3 Degree of Bank's support to RMCs in getting the equipment and spare parts for capital assets maintenance

4.2 Bank's contribution to RMCs in securing financial resources and ensuring the continued flow of benefits associated with renewable energy projects

4.3 Bank's contribution to strengthening institutional capacities to facilitate the continued flow of benefits associated with renewable energy projects

4.3.1 Appreciation of Bank's contribution to enhance the management of the energy demand in RMCs

4.3.2 Appreciation of Bank's contribution to enhance the management of the energy offer in RMCs

4.3.3 Appreciation of Bank's contribution to reshape the institutional framework in RMCs

4.4 Effectiveness of Bank's assistance to RMCs in involving relevant stakeholders, promoting a sense of ownership amongst the beneficiaries, and putting in place effective partnerships through its interventions in renewable energy

4.4.1 Extent to which RE interventions involve relevant stakeholders in design, implementation, and facilitation measures after their completion for creating a sense of ownership by the beneficiaries

4.4.2 Extent to which RE interventions contribute to enhance the equal access to RE services by the beneficiaries

4.5 Bank's assistance to RMCs to appropriately assess and implement environmental and social mitigation/enhancement as well as climate change mitigation and adaptation measures through the renewable energy interventions

4.5.1 Extent to which the Bank assesses the environmental and social risks, along with mitigation measures, in its RE interventions, meeting all AfDB environmental, social, health and safety (ESHS) standards

4.5.2 Bank's identification and support of climate change mitigation & adaptation measures in its RE development interventions

4.5.3 Effective implementation of mitigation measures to ensure environmental and social safeguards

4.5.4 Unintended negative ESHS impacts of RE interventions

Annex 11 - Tentative country mission program

Country/City	ADE-MARGE Expert	In-country Mission Dates		IDEV Expert (Dates)
		Start Date	End Date	
1. Burkina Faso	Taoufik LAABI	Monday, 20 June 2022	Friday, 24 June 2022	Online
2. Cameroon	Maxime KAMDEM	Monday, 4 July 2022	Monday, 11 July 2022	Latefa CAMARA (4-8 July)
3. Cote d'Ivoire	Jean-Yves SALIEZ	Monday 20 June 2022	Friday, 24 June 2022	Latefa CAMARA (20-24 June)
4. DRC	Pierre SMITS	Monday, 18 July 2022	Wednesday 27 July 2022	Joseph MOUANDA (18-22 July)
5. Kenya	Peter Ayodo OMENDA	Monday, 27 June 2022	Friday 8 July 2022	Joseph MOUANDA (27 June – 1 July) Clement MENSAH (27 June – 1 July)
6. Madagascar	Norohanitra NALISON	Monday 20 June 2022	Friday, 1 July 2022	-
7. Morocco	Taoufik LAABI	Monday, 11 July 2022	Friday, 22 July 2022	Joseph MOUANDA (11-15 July) Latefa CAMARA (11-22 July
8. South Africa	Sibongile MDLULI	Monday 4 July 2022	15 July 2022	Joseph MOUANDA (04-08 July) Clement MENSAH (04-15 July)
9. Uganda	Tobias KAREKAHO	Monday, 20 June 2022	Monday 4 July 2022	Joseph MOUANDA (20 June – 01 July)
10. Zambia 3	Marina BRUTINEL	Monday, 25 July 2022	Friday, 29 July 2022	Joseph MOUANDA (25-29 July)