AFRICAN DEVELOPMENT FUND

PROGRAMME: **Mozambique Energy for ALL (MEFA)**

COUNTRY: **Mozambique**

PROJECT APPRAISAL REPORT

Date: September 2021

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Public Disclosure Authorized

AFRICAN DEVELOPMENT FUND

REPUBLIC OF MOZAMBIQUE

MOZAMBIQUE ENERGY FOR ALL (MEFA)

Public Disclosure Authorized

RDGS/PESD DEPARTMENTS

September 2021

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CURRENCY AND EQUIVALENTS

(April 2021)

1 UA = USD 1.41
1 UA = 95.57 MZN
1USD= 60.44 MZN

BANK'S FISCAL YEAR

1st January – 31st December

Recipient's (Mozambique) Fiscal Year

1st January – 31st December

WEIGHTS AND MEASURES

1metric tonne	=	2204 Pounds (lbs)
1 kilogramme (kg)	=	2.200 lbs
1 metre (m)	=	3.28 feet (ft)
1 millimetre (mm)	=	0.03937 inch (")
1 kilometre (km)	=	0.62 mile
1 hectare (ha)	=	2.471 acres

ACRONYMS & ABBREVIATIONS

ADF	African Development Fund
AfDB	African Development Bank Group
ATI	African Trade Insurance Agency
AWPB	Annual Workplan and Budget,
BDS	Business Development Services
CERUNS	Market Centres
CONDES	Technical Council of Environment
CPI	Corruption Perception Index
CPIA	Country Policy and Institutional Assessment
CSP	Country Strategy Paper
CTA	Confederation of Economic Associations of Mozambique
DFID	Department for International Development
DP(s)	Development Partners
DPCG	Development Partners Coordination Group
ESMP	Environmental Social Management Plan
EDM	Electricidade de Moçambique
FAO	Food for Agriculture Organization
FE	Foreign Exchange
FRA	Fiduciary Risk Assessment
GDP	Gross Domestic Project
GCF	Green Climate Fund
GHG	Greenhouse Gas
GoM	Government of Mozambique
ICT	Information and Communication Technology
IFAD,	International Fund for Agriculture
INGD	National Institute of Disaster Management
JICA	Japanese International Cooperation Agency
KfW	Kreditanstalt für Wiederaufbau
MEFA	Mozambique Energy for All
MASA	Ministry of Agriculture and Food Security
MDB	Multilateral Development Banks
MIS	Management Information System
MITADER	Ministry of Land Environment and Rural Development
NAPA	National Adaptation Plan
NCCAMS	National Climate Change Adaptation and Mitigation Strategy
PCN	Project Concept Note
PCR	Project Completion Report
PIU	Project Implementation Unit
PMP	Bank Procurement Methods and Procedures
PNISA	Development Strategy of the Agrarian Sector
PPCR	Pilot Program for Climate Resilience
SEFA	Sustainable Energy for Africa
SEP	Socio-Economic Plan
USAID	United States Agency for International Development
UNDP	United Nation Development Program
VRE	Variable Renewable Energy

GRANT INFORMATION

CLIENT'S INFORMATION

RECIPIENT: Republic of Mozambique
EXECUTING AGENCY: EDM (Electricidade de Mocambique)

Financing plan

Source	Amount (UA million)	Instrument
ADF	25.9	Grant
KfW	14.8	Grant
Embassy of Sweden	12.1	Grant
SEFA	1.3	Grant
EDM	2.7	
TOTAL COST	**56.8**	

Key financing information

	ADF	
Grant currency	UA 25.9 million	
Interest type*	NA	
Interest rate spread*	NA	
Commitment fee*	NA	
Other fees*	NA	
Tenor	NA	
Service Charge	NA	
Grace period	NA	
	Outcome (investment)	**Outcome (RBF component)**
FNPV @ 6% real discount rate	USD 285 million	USD 1.6 million
FIRR, real	38%	7.2%
ENPV @ 12% real discount rate	USD 141 million	USD 6 million
EIRR, real	39%	19%

Timeframe - Main Milestones (expected)

Concept Note approval	December 2020
Project approval	September 2021
Effectiveness	December 2021
Completion	December 2025
Last Disbursement	March 2026

TIMEFRAME – MAIN MILESTONES (EXPECTED)

No	Description	Year	2020				2021				2022				2023				2024				2025			
		Quarters	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Concept Note Approval																									
2	Project Appraisal																									
3	Board Approval of ADF (AfDB)																									
4	Grant Signing AfDB Grant Agreement																									
5	Grant Agreement Effectiveness																									
6	Bidding Process (Closure)																									
7	Evaluation of Bids																									
8	Contract Award																									
9	Finalization of Designs																									
10	Actual First Disbursement																									
11	Long Lead Items																									
12	Construction Start																									
13	Construction Complete																									
15	Closing Date																									
16	Project Completion Report																									

PROGRAMME SUMMARY

Programme overview: The MEFA Programme has three components that respond to key development challenges in Mozambique. The first component entails the construction and taking into operation a new National Control Centre which will be pivotal in expanding power exports. The national electricity utility, Electricidade de Moçambique (EDM) is aiming for a threefold increase), incorporating more variable renewable energy sources, such as solar and wind, and facilitating inward investments due to availability of much better quality of power supply. The second component will provide nearly 49,000 new connections in support of the Government of Mozambique's (GoM), Energy for all Plan. The third component targets operational support to the above components, supporting Mozambique's membership of the Africa Trade Insurance Agency and improving the financial health of EDM. The Programme Objectives are: (i) to increase stability of the Mozambican power system, (ii) enable a large expansion of power sales to Southern Africa Power Pool (SAPP), (iii) expand access to electricity and (iv) assist in improving EDM's financial sustainability. The programme will be co-financed with the Governments of Germany and Sweden.

Needs Assessment: Mozambique is a fragile country with large remaining developmental issues that include a need to monetize its ample energy resources through exports and increased domestic productive use, a need to expand one of the lowest access to electricity rates in Sub Saharan Africa and the need to attract foreign direct investment into electricity generation. The MEFA programme is strongly aligned with Mozambique's Country Strategy Paper (CSP), which focuses on two pillars, (i) Development of Infrastructure for Broad Inclusive Growth: Energy and Integrated Development Corridors; the GoM's recently launched "*Programa Nacional de Energia para Todos*" [Electricity for All National Programme], which is an ambitious plan to reach all Mozambicans with electricity access by 2030; the NCC component is consistent with the two mutually reinforcing pillars of the Southern Africa Regional Integration Strategy Paper 2020-2025 articulated around (i) Infrastructure Connectivity; and (ii) Market Integration and Industrialization; and finally the programme aligns closely with the Banks Energy Policy and High 5's: Light up and Power Africa; Feed Africa; Industrialize Africa; Integrate Africa; and Improve the Quality of Life for the People of Africa and the Bank's Strategy for Addressing Fragility and Building Resilience in Africa.

The Bank's Added Value: This operation is a key element of the Bank's strategy to help Mozambique turn its energy sources into development outcomes, complementing interventions in developing the natural gas resources and expanding transmission capacity of the country. The Bank has allocated UA 25.9 million of its own envelope and raised additional co-funding from SEFA (UA 1.3 million equivalent USD 1.9 million), KfW (UA 14.8 million equivalent EUR 18 million) and of the Swedish Government (UA 12.1 million equivalent SEK 150 million) in support of the MEFA Programme. All three components represent innovation in either technology or delivery methodology in Mozambique and as such represent key drivers of the development agenda in Mozambique. The country will at the end of the Programme have its own National Control Centre and become a SAPP supply area with resultant expanded exports of power to neighbouring countries, it will have completed the first Results Based Financing intervention of the Bank in Southern Africa and it will be a member of the African Trade Insurance Agency (ATI) with enhanced possibilities to attract private capital to investments in generation such as the floating solar PV installation where the Bank will fund required detailed studies. The financial impact on the utility through the programme will be strongly positive. Direct benefits include increased exports of electricity, potentially at higher unit prices in SAPP's day-ahead market, a business plan for gaining income from its optical fibre assets and a full feasibility study with a business plan for a 38 MW[1] floating solar PV installation. The social impacts will be equally significant because 264,600[2] Mozambicans will have electric connections in parts of the country affected by poverty, fragility and lately struggling to support Internally Displaced People (IDP) and refugees coming from northern areas with unrest. Supporting the improvement of the financial situation of the utility will enhance its ability to sustain the roll-out of access and the resulting improvements in technical quality of electricity supply which will assist Mozambique in attracting foreign direct investment and expanding inward investment in productive sectors, creating more and better quality jobs for future generations.

Knowledge Management: The lessons from previous Bank projects in Mozambique, and in Results Based Financing have been synthesized and incorporated into the design of the MEFA Programme. For both major components, the National Control and electricity access, the emphasis has been on simplifying the design to ease and assist in implementation and supervision by both the Bank and the utility (EDM). The programme will be subject to a mid-term review and the Bank and EDM will jointly prepare a programme completion report.

[1] Tentative estimate
[2] As per Mozambique National Statistics Institute the average number of family members in a household is 5.4 x 49,000.

RESULTS FRAMEWWORK						
A	**Project Information**					
Project Name and SAP Code Mozambique Energy for All Programme - P-MZ-FA0-021				**Country/Region: Republic of Mozambique (SOUTHERN AFRICA)**		
Project Development Objective: To enhance Mozambique's power exports, improve power quality domestically and regionally and increase number of connections						
Project Alignment:		**a. Country/Region Strategy:** Mozambique CSP 2018-2022 **b. Bank's priority/sector strategy:** High 5 Priority of Light Up & Power Africa **c. Alignment indicators:** (1) Contribute to increased access to 64% by 2025. (2) Contribute to SAIFI-System Average Interruption Frequency Index to 25.14 by 2025. (3) Promote EDM gender mainstreaming plan by increasing the number of female employees to 31% by 2025; increase women owned enterprises getting contracts; and train EDM staff on Gender				
B	**Results Matrix**					
RESULTS CHAIN AND INDICATOR DESCRIPTION	**RMF INDICATOR**	**UNIT OF MEASUREMENT**	**BASELINE (2021)**	**TARGET AT COMPLETION (2025)**	**MEANS OF VERIFICATION**	**Frequency of Reporting**
OUTCOME STATEMENT 1: Power trade between Mozambique and neighbours expanded						
OUTCOME INDICATOR **1.1.** EDM exports of power	☐	MWh	1,679,572	5,483,746	EDM and SAPP Annual reports	Annual
OUTCOME STATEMENT 2: Access to electricity increased						
OUTCOME INDICATOR 2**.1** Contribute to Electricity access rate	☐	Percentage	38%	64%[3] (2.5%[4])	MIREME, EDM	Annual
OUTCOME STATEMENT 3: Capacity Building, Gender Mainstreaming, Technical assistance & studies						
OUTCOME INDICATOR 3.1 Renewable Energy IPP reaching Financial Close	☐	MW	0	40MW	MIREME, EDM	Annual
Output Statement 1: NCC system						
OUTPUT INDICATOR **1.1** NCC constructed (substations connected to the new NCC).	☐	Number	0	150	Supervising engineer, Bank missions.	Annual
OUTPUT INDICATOR 1.2: SCADA system buildings erected or rehabilitated.	☐	Number	0	2	Supervising engineer	Annual
Output Statement 2: Increased Access to Electricity (RBF)						

[3] Government Programme "Energia para Todos" guiding figures
[4] AFDB contribution to the national plan.

OUTPUT INDICATOR 2.1: Number of Connections done	☐	Number	0	44,060	Bank missions, internal documentation obtained from EDM and reports from the verification agent	Annual
OUTPUT INDICATOR 2.2: Female headed households connected	☐	Number	TBD[5]	4,895	Bank missions, internal documentation obtained from EDM and reports from the verification agent	Annual
Output Statement 3: Capacity building, Gender mainstreaming, Technical Assistance & studies						
OUTPUT INDICATOR 3.1: Staff trained (Women inclusive)	☐	Number	0	3498 (629)	Bank missions and internal documentation obtained from EDM	Annual
OUTPUT INDICATOR 3.2 Commercialisation & Business plan for EDM's Optical Fibre-Unit develop	☐	Number	0	1	MIREME, EDM	Annual
OUTPUT INDICATOR 3.3 Floating Solar Feasibility Study performed	☐	Number	0	1	MIREME, EDM	Annual
OUTPUT INDICATOR 3.4 Training and support to market operator and EDM dispatch (Green Baseload)	☐		0	1	MIREME, EDM	Annual
OUTPUT INDICATOR 3.5 Membership of ATI attained	☐		No	Yes	MIREME, Ministry of Finance, EDM	Annual
OUTPUT INDICATOR 3.6 Energy efficiency study conducted	☐	Number	0	1	EDM	Annual

ACTIVITIES

1. National Control Centre
2. Energy Access Component
3. Technical Assistance, Gender mainstreaming, Studies, expenses

INPUTS

Sources of funding						
Institution	**Amount**	**Currency**	**Foreign Costs UA**	**Local Costs UA**	**Total cost UA**	**Percentage**
AfDB - ADF	25.9	MUA	12.2	13.7	25.9	46%
SEFA	1.9	MUSD	1.3	0	1.3	2%
KfW	18.0	MEUR	13.8	1	14.8	26%
Embassy of Sweden	150.0	MESEK	12.1	0	12.1	21%
EDM	3.9	MUSD	0	2.7	2.7	5%
Total			39.4	14.7	56.8	100%

[5] The Independent Verification Agent will start its work by establishing the baseline

REPORT AND RECOMMENDATION OF THE MANAGEMENT OF THE ADB GROUP TO THE BOARD OF DIRECTORS ON A PROPOSED GRANT TO MOZAMBIQUE FOR THE MOZAMBIQUE ENERGY FOR ALL PROGRAMME (MEFA)

Management submits the following Report and Recommendation on a proposed ADF Grant of UA 25.9 million comprising (i) ADF Grant of UA 12.2 million for financing the Investment Lending component; and (ii) ADF Grant of UA 13.7 million for financing the Results Based Financing component.

I – STRATEGIC THRUST & RATIONALE

The MEFA Programme has been designed combining two instruments, the investment financing and the results-based financing (RBF) which have two distinct templates.

The option of combining two instruments has been taken to maximize developmental impact and to reduce the transaction costs for both the Government, noting that the execution of both instruments will be done by the same agency. Quantifying the benefits in monetary terms is hard but separate Executing Agencies would entail an estimated 30-40 per cent more staff being dedicated or recruited. A complex undertaking such as the construction and taking into operation a new National Control Centre requires the use of the Bank's investment lending instrument. However, the use of the RBF instrument for peri-urban electrification entails substantial monitoring benefits – costs and efficiency - as new connections are captured in the utility's pre-payment meter database. Monitoring of the technical quality of installations and verifying the number of connections resulting from the Bank's funding is executed through an independent verification agent, which puts pressure on the utility to provide value-for-money and significantly reduces the space for diverting funding to other purposes.

1.1. Programme linkages with country strategy and objectives

1.1.1 Mozambique is a low-income country in transition with a gross domestic product of USD 417 per capita and a population of approximately 30 million inhabitants. The country is located in the south-eastern corner of Southern Africa, sharing its boarders with six countries, of which four are landlocked, and with the Indian Ocean to the east. Mozambique is endowed with arable land, water, mineral resources and recently discovered offshore natural gas, three deep seaports, a youthful population and ample energy resources, renewable and fossil based. Over the last decade, the Mozambique energy sector has recorded significant gains. The country is a net exporter of electricity despite its low access rates, mostly because of long term contractual arrangements[6] and because of gaps in transmission capacity to bring electricity to demand centres. However, domestic peak demand has increased from about 320 MW in 2006 to 1,179 MW in 2020. The current energy mix comprises 78% hydropower, 16% gas, 5% diesel and 1% a mix of solar, wind, biomass and coal. A recent report[7] states that Mozambique has a solar potential at 23,000 GW, followed by hydro (19 GW), wind (5 GW), biomass (2 GW), and geothermal (0.1 GW). From this total resource, approximately 7.5 GW of priority projects have been identified for potential development, comprising 5.6 GW of hydro, 1.1 GW of Wind, 0.6 GW of solar, 0.13 GW of biomass, and 20 MW of geothermal.

[6] 1,330 MW of Hydroelectrica de Cahora Bassa's 2,075 MW capacity is committed to South Africa's Eskom under a long-term PPA ending in 2029, entered into by the pre-independence colonial administration.
[7] https://www.get-invest.eu/market-information/mozambique/renewable-energy-potential/

1.1.2 Despite its potential in terms of energy resources the access rate is at 38%. In rural areas and in the north of the country it is even below the average for Sub-Saharan Africa of 28%[8]. This is despite significant gains in recent years. Provision of electricity services demonstrates disparities between urban and rural areas – as 54% of urban population have access compared with only 6 percent of rural population. In rural areas, an overwhelming majority use kerosene and candles to cope with the absence of electricity. Both the electricity utility, *Electricidade de Moçambique E.P.* (EDM) and the Energy Fund (*O Fundo de Energia*, FUNAE) tasked with developing off-grid projects are facing financial challenges mainly due to non-cost reflective electricity tariffs or ineffective pricing structures for connections, unfunded capital expenditure programs and high energy losses[9]. The fragility assessment for Mozambique, updated in the 2020 Mid Term Review, shows that geographic inequality in provision of services, including energy access, is one of the drivers of vulnerabilities in the country, which this operation aims to address by targeting expanded electricity access in two of the least served provinces.

1.1.3 Financial sustainability issues in the sector were exacerbated by the Covid-19 pandemic which led to a severe reduction in electricity demand. The situation was compounded by the government decreeing a 50% tariff reduction and the deferral of payment of the fixed part of tariffs for 6 months (between June and December 2020). As a result, EDM currently losses close to USD 30 million per month. The Bank provided a Policy Based Operation to Mozambique through which EDM received an amount of USD 20 million to alleviate some of its cash-flow challenges.

1.1.4 Mozambique's five-year Government Plan (2020–2024) highlights agricultural and industrial development as the basis for socioeconomic development of the country. The five-year Government Plan presents five strategic pillars to achieve accelerated economic growth and social development. It also targets expanded infrastructure as a key element to enhance the productive sectors of the economy, promote economic diversification, and improve access to markets. Expanding access to electricity services is a key Government of Mozambique (GoM) target. The GoM recently launched the "*Programa Nacional de Energia para Todos*" [Electricity for All National Programme], which is an ambitious plan to reach all Mozambicans with electricity access by 2030. The funding requirement to reach universal access by 2030 is USD 540 million annually; equal to an estimated investment of USD 6.5 billion for the complete Programme. Electricity connections will need to ramp up from 165,000 a year to 350,000 from 2020 and to 590,000 on average between 2025 and 2030 to achieve universal access by 2030. The actual yearly number of connections is 200.000. It is expected that 70% of the population will be connected to the grid while 30% will be served with off-grid energy solutions. Quadrupling the number of consumers from about 2 million in 2019 to about 8 million by 2030 challenges not only distribution and commercial practices but also transmission and generation.

1.1.5 Mozambique has launched and is in the process of launching significant policy reform in the energy sector. An independent regulator, ARENE[10], was established in 2017 and a new energy policy is expected to be passed in late 2021. The Mozambican electricity transmission system remains weak and is separated in two subsystems. The Bank and other partners continue to invest in transmission lines and the recent commercial closure of the Temane gas-to-power project with associated transmission line[11] is a step towards an integrated national transmission system. In the central – north system there is a strong need to strengthen and upgrade the Caia – Nacala line. There is no internal connection with the southern system, where most of demand is located. The transmission network

[8] Source: World Bank web page.
[9] As of 2019 total system losses were estimated at 30% (Technical 6% and Non-Technical 24%), which is slightly higher than the weighted average for Africa, excluding South Africa (23%).
[10] *Autoridade Reguladora de Energia*
[11] The transmission line is part-funded by AfDB using regional funding.

lacks resilience and is not sufficiently geospatially distributed to expand lower voltage networks to facilitate access. Lack of national interconnectivity prevents the installed capacity from being efficiently dispatched to meet the growing electricity demand in the north. EDM struggles with its technical quality of service as it cannot directly on a "minute-to-minute basis" control voltage and frequency, posing serious problems especially for large consumers using sophisticated modern equipment. The lack of control also means that the power system must be operated with wider reserve margins than would otherwise be required, thus making less power available to customers and reducing income.

1.1.6 Regional energy deficits, ageing power plants, missing links in regional power connectivity and under-developed backbone transmission lines have been consistently identified as posing major infrastructural challenges in Southern Africa. The region has been suffering from electricity shortages, with severe implications for economic growth and social development. Over the last decade, Botswana, Namibia, South Africa, Zambia and Zimbabwe have had to resort to load-shedding. However, in instances, this was at a time when there were surpluses in other countries, with potential trade to meet the shortfall constrained by limited transmission capacity. Mozambique has for a while been active in electricity trade with existing bilateral arrangements to export, but the lack of the National Control Center, hinders expansion of trade in power with other regional member countries. The Program for Infrastructure Development in Africa (PIDA), and the SADC Revised Regional Indicative Strategic Development Plan (RISDP) 2015-2020 identify a number of generation and transmission projects in Mozambique, namely Mozambique-Malawi Interconnector, Mozambique-Zambia Interconnector, Mozambique-Tanzania Interconnector, Mozambique-Zimbabwe-South Africa Interconnector. The SAPP Pool Plan also identifies the STE (Central Transmission Corridor in Mozambique) line, Mpanda Nkuwa (1,500MW) and Cahora Bassa North Bank (1,245MW) as key regional projects.

1.2 Rationale for Bank Engagement

1.2.1 The expansion and strengthening of the Mozambican power system through the construction of the National Control Centre (NCC) will facilitate power trading, enable increased electricity access and optimization of the use generation resources. The NCC component is consistent with the two mutually reinforcing pillars of the Bank's Southern Africa Regional Integration Strategy Paper 2020-2025 articulated around (i) Infrastructure Connectivity; and (ii) Market Integration and Industrialization. Pillar 1 seeks to strengthen regional connectivity through the development of strategic regional infrastructure whilst the second pillar focusses on strengthening regional connectivity through the strengthening of regional trade. The NCC component will of course also have huge positive effects in Mozambique itself. It will aid industrialization and job creation as operating the southern and northern supply networks separately is increasingly presenting problems for the utility. Absence of an NCC entails that voltage and frequency control can only be controlled manually, leading to over- and under- voltage and frequency related problems becoming common for both commercial and private consumers. Wind power and solar PV are some of the cheapest sources of new generation capacity for the region, however, integration of VREs is challenging for African utilities as greater degrees of electricity system control are needed as the percentage of VREs increase. Through the programme, EDM will be in a position to integrate higher shares of VRE generation into its system thus making cheaper power available domestically and regionally. The NCC's effect on voltage and frequency stability will even assist neighbouring countries in deploying more VRE generation.

1.2.2 The MEFA Programme is well aligned to Mozambique's Country Strategy Paper (CSP), which focuses on two pillars, (i) Development of Infrastructure for Broad Inclusive Growth: Energy and Integrated Development Corridors – aimed at creating an enabling business environment that is more competitive in order to incentivize and dynamize the private sector through investments in the country's energy and transport infrastructure, which connect rural areas to development corridors and thus improve access to local and regional markets; and (ii) support to agricultural transformation and value chain development which seeks to contribute to agricultural transformation and expand agriculture value chains. Increased electricity exports will strengthen the Mozambican economy and greater access to electricity will boost agricultural production and agro-processing activities. Finally, increasing the availability and stability of power supply is instrumental in creating additional jobs for youth, women, and the general population through foreign direct investment inflows. As part of its pioneer investment in LNG Area 1 megaproject, the Bank committed to further invest in the energy value chains in the country, to ensure that energy sources are exploited for the broader benefit of the population.

1.2.3 The MEFA Programme complements the wider GoM program (*Energia para Todos*) to expand access to electricity, which is being funded by other development partners such as the World Bank, Norway, Sweden and others. The Bank support will therefore complement the efforts of other partners in bridging the financing requirements of Mozambique towards its quest of universal access, the target if the Bank's New Deal for Energy in Africa. The MEFA programme therefore aligns closely with the Bank's Energy Policy and the High 5's: Light up and Power Africa, Feed Africa, Industrialise Africa, Integrate Africa and Improve the Quality of Life for the People of Africa.

1.2.4 Bank support to undertake feasibility studies for the floating solar PV power plant (FPV) complements the Bank's efforts in developing a pan-African programme of rehabilitation of existing large HPPs with FPV sub-components. The FPV-project in Mozambique is therefore proof-of-concept of the approach. The New Deal on Energy for Africa recognises that utility viability is key to the growth and sustainability of energy access. The Bank will furthermore support EDM to develop and operationalise a subsidiary that will host and develop the utility's optical fibre business could develop a significant secondary income-stream that will contribute to enhancing the company's financial health.

1.3 Development Partners Coordination

1.3.1 Development Partner activities at Southern Africa level are coordinated through the Energy Thematic Group (ETG) which meets bi-annually and is hosted by the Southern Africa Development Community. The Bank is the current co-chair of the ETG. The platform is used to share information, highlight gaps in the support to the sector at regional level and coordinate interventions to avoid overlaps in activities. In Mozambique, the Bank is a member of the Energy Sector Working Group (ESWG) which coordinates all donor supported programs. DPs have with the GoM co-developed a 2020 – 2030 electricity access program with an overall envisaged investment of the equivalent of UA 5.5 billion. The first phase – Proenergia 1 – is financed by the World Bank, Sweden Norway and the EU, with a budget of USD 238 million. The proposed AfDB MEFA operation has the overall support of the ESWG and as outlined below Sweden and Germany have decided to co-finance.

II – Programme Description

2.1 Programme Development Objectives and Description

2.1.1 Programme High Level Development Objective is to enhance Mozambique's power exports, improve power quality domestically and regionally and increase number of connections.

2.1.2 At the sector level, the programme development objectives are (i) to increase stability of the Mozambican power system, (ii) enable a large expansion of power sales through the SAPP, (iii) expand access to electricity; and (iv) assist in improving EDM's financial sustainability.

2.2 Programme Components

2.2.1 The three components are summarized below.

	Component name	**Est. cost (UA million)**	**Component description**
1	National Control Centre	31.2	▪ Supervisory control and data acquisition/ Energy Management Systems (SCADA/EMS) system with redundancy ▪ Remote terminal units (RTU) & adaptation works, reusing existing assets as much as feasible ▪ Telecommunication, using optical fibres and wireless solutions ▪ Buildings that will host the systems and be physically separated ▪ Training ▪ 5 years of technical support and upgrades
2	Energy Access Programme	13.7	▪ Roll out approximately 49.000 new electricity connections in the provinces of Nampula (26,455) and Zambezia (22,500)..In the northernmost province Nampula EDM is engaging with UNHCR to include IDP[12] and refugee camps[13] in the access intervention.
3	Technical Assistance, Studies, expenses	11.9	▪ African Trade Insurance Agency (ATI) membership[14] ▪ Recruitment of third-party verification agent for RBF programme ▪ Floating Solar PV feasibility study ▪ Business plan for commercialization of EDM's telecommunications unit ▪ Development of EDM's market operator. ▪ Energy Efficiency study ▪ Operating costs

2.2.2 **Component 1: National Control Centre:** The NCC component will connect all substations above 66 kV using optical fibres and wireless solutions. The system will be configured to handle 150 substations and it will have full redundancy and a dedicated connection to the SAPP operations centre in Harare. The component will re-use existing infrastructure installed in 2009/2010 as part of a limited scope southern control centre, it will supplement with leased lines (as an interim solution) where fibre links are not available or to provide redundancy. Selected lines will be retrofitted with All-dielectric self-supporting[15] optical fibres, and spare capacity of the optical fibre system will be exploited commercially to generate a secondary income stream for EDM.

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[12] Internally Displaced People

[13] https://www.unhcr.org/news/briefing/2021/4/608bb1be4/nearly-30000-people-displaced-march-attacks-northern-mozambique.html

[14] Joining ATI entails buying 75 shares in the Agency. The last 3 years the shares have generated a positive return for members. There are NO further costs for Mozambique associated with joining ATI. Use of the services of ATI is restricted by the number of shares owned and thus most countries decide to grow its shareholding over time. ATI membership will allow Mozambique to make use of the Agency's services which include an array of risk mitigation products. Mozambique is planning to initially use ATI for the energy sector, only.

[15] All-dielectric self-supporting (**ADSS**) cable is a type of optical fiber cable that is strong enough to support itself between structures without using conductive metal elements. The cables are designed to be strong enough to allow lengths of up to 700 meters to be installed between transmission towers.

2.2.3 The existing outdated SCADA system in Mozambique with limited functionality and geographical coverage has delivered important lessons summarized as: i) EDM needs to be able to control its full territory in order to effectively engage in regional power trade, ii) the northern provinces need reliable power in order to catch up with economic development in the south, and iii) expansion of variable renewable energy - wind and solar PV - generation will not proceed beyond a fairly low level of penetration without effective control; however, iv) the need for technical assistance and continued support to EDM to maintain and derive value from the system are very important.

2.2.4 **Component 2: RBF Energy Access.** The RBF access program will increase the number of grid connections by 48,955. EDM has in agreement with the Bank identified peri-urban areas in two adjacent provinces (Lot 1: Nampula Province - 26,455 new connections and Lot 2: Zambezia Province - 22,500 new connections). The relatively close geographical proximity of the two lots will optimize the use of the Independent Verification Agent (IVA) and lower the supervision costs of EDM and the Bank. The costs per connection have been agreed at USD 400 and thus the budget for the access intervention is UA 13.7 million.

Table 1: Results Framework for Results-Based Financing of Access

Results Indicators	DLI (Yes/ No?	Unit of measure	Baseline (Year - 2019) Data	Target Values				Frequency	Data Source/method	Resp. for Data collection
				Year 1	Year 2	Year 3	Year 4			
IMPACT: Increase electricity access rates in Mozambique.										
OUTCOMES										
Contribute to Improve access rates	No/DLI1	%	**38%**	0.25%	1%	1%	0.25%	Yearly	EDM	EDM, MIREME, ARENE
OUTPUTS										
Number of new connections made (households and productive uses of energy)	Yes/DLI1	Number	2 million	8,060	13,500	13,500	9,000	Yearly	IVA. EDM	EDM, supports by IVA
Female-headed households electrified	YES/DLI 2	Index	TBD by IVA	895	1,500	1,500	1,000	Yearly	IVA. EDM	EDM, supports by IVA

Table 2: Disbursement linked indicators

			Baseline	Year 1	Year 2	Year 3	Year 4
Number of new additional connections made (households and productive uses of energy)	Yes /DLI 1	Number	2 million	8,060	13,500	13,500	9,000
Female-headed households electrified	YES/ DLI 2	Index (percentage increase from baseline)	TBD by IVA	895	1,500	1,500	1,000

2.2.5 The area of intervention is summarized below.

Table 3: Component 2 results areas

SCOPE OF RESULTS AREA	
EXPECTED RESULTS	**GEOGRAPHIC SCOPE (Use other boundaries as applicable)**
Results Area: Access to electricity Component	
48,955 electricity connections made in two provinces	Peri-urban areas, including IDP camps of the cities Nampula, Nacala, Quelimane and Mocuba

2.2.6 A competitively recruited Independent Verification Agent (IVA) will support monitoring of the Disbursement Linked Indicators (DLIs) and hence disbursement. The IVA will verify results through management reports, quarterly and annual reports, financial audits, procedural verification, use of EDM's pre-payment system and physical inspection that will test the completeness, accuracy and quality of results reported by EDM. The DLIs will have clear verification protocols to define how they will be achieved, measured, and verified by the IVA. EDM is preparing the ToR for the IVA, which when satisfactory to the Bank, using advance procurement, will be tendered.

Table 4: The Integrated Risk Assessment summary for the RBF Access component.

Risk	**Moderate**	**Observation**
Technical	Low	Low voltage connections are not complicated to install. EDM staff makes around 30,000 connections per year and has the capacity to run the Access component
Fiduciary	Moderate	The Banks Fiduciary assessment is satisfactory
Climate, Environmental and Social	Low	Peri-urban electrification has great social benefits and modest positive climate and environmental impacts.
Disbursement-linked Indicators	Moderate	It is relatively easy to track the number of connections made. There is some uncertainty about the baseline in relation to the number of female-headed households.
Other Risk	Moderate	Areas of implementation are quite far away from conflict-affected areas.

2.2.7 **Component 3: Technical Assistance:** Three important activities support Components 1 & 2. Component 3 will fund the verification agent, the development of EDM's market operator to ensure that the EDM derives maximum commercial benefit from regional trade and the development of a business plan for commercializing EDMs' optical fibre assets. Component 3 will also support studies needed for launching Southern Africa's first large-scale floating solar PV installation and the Bank and KFW will fund Mozambique's entry into the African Trade Insurance Agency (ATI) with a view to expand funding of private investments in energy projects in the country. Access to the ATI will, among others, allow Mozambique to benefit from a facility expected to expand generation by 125 MW, funded by KfW, that provides cash flow backstopping for renewable energy IPPs, thus supporting the Government's efforts to scale up renewable generation in the energy mix.

2.3. Technical solution retained and other alternatives explored

Table 5: MEFA Programme Alternatives Considered and Reasons for Rejection

Alternative name	**Brief description**	**Reasons for rejection**
Scaled-down NCC or use the South Africa system or other neighbouring country for control of Mozambique's electricity system.	The current obsolete regional control centre in southern Mozambique could be upgraded and continue to deliver some functionality or control could be ceded to a neighbouring country.	▪ A full system allows Mozambique to become a member of the SAPP operation area and fully control its territory ▪ Mozambique has vast current and future potential for electricity exports, enabled by a full system ▪ Integration and expansion of variable renewable energy sources, solar and wind, require much tighter and better control of the grid in Mozambique ▪ The network control issues are most acute in northern Mozambique, particularly affected by fragility, which currently totally lack a control system.
Developing other forms of RE projects instead of floating solar PV	Traditional RE projects such as utility scale solar PV and wind power are mature technologies and developing feasibility studies are not in need of support from DFIs.	▪ The Bank is developing a pan-African programme of rehabilitation of existing HPPs with FPV sub-components ▪ The FPV-project in Mozambique is proof-of-concept of the approach and hence grant-funded by SEFA and aligned with SEFA's Green Baseload priority area of intervention.

2.3.1 The choice of using RBF for access expansion comes down to a number of factors. From a strategic programming point of view, since the suspension of PBOs following the "hidden debt" scandal the Bank has been looking at implementation modalities that allow efficient implementation while maintaining very close tracking of results. Moreover, using national systems is important to over time increase national capacity in Mozambique and making EDM the main driver of electrification. The use of RBF incentives EDM to do efficient procurement and implementation and it avoids the creation of parallel structures with the risk of straining limited (human) resources within the utility. Easily quantifiable activities such as making electricity connections are particularly well suited to RBF because of the ease of verification (new connections can be physically observed, will appear in EDM's pre-paid system and through sampling the quality can be checked). RBF in electrification furthermore allows EDM at its own discretion – with its own funding or other donor funds – to cost-effectively add additional activities such as public illumination.

2.3.2 In summary and in line with the Bank Group's Policy on Results-Based Financing (**see section 1.2.1**) the MEFA Programme' access component is tied to the GoM's programme Energy for All and shift the focus from inputs to outcomes. It thus contributes to the objectives of the aid effectiveness agenda, as it will improve efficiency, effectiveness, and governance of development programmes in Mozambique.

2.4. Programme Type

2.4.1 The MEFA programme is a distinct undertaking by the Bank and RGDS as it is the first programme, that combines a Results Based Financed (RBF) component with a normal investment instrument of the Bank. Moreover, the electricity access component of the MEFA programme is the first RBF intervention in the Southern region of the Bank.

2.5. Programme Cost and Financing Arrangements

2.5.1 The MEFA Programme costs inclusive of taxes and duties is UA 56.8 million. A physical and price contingency of 5% and 13% of taxes and duties has been factored into the total program cost.

Table 6: Programme Cost Estimates by Component

Component	USD Million			UA Million			%
	Foreign Costs	Local Costs	Total	Foreign Costs	Local Costs	Total	Total
National Control Centre	38.7	6.0	44.7	27.0	4.2	31.2	55%
Electricity Access	5.7	13.9	19.6	4.0	9.7	13.7	24%
Technical Assistance	11.3	5.6	16.9	7.9	3.9	11.9	21%
TOTAL Programme COST	55.8	21.6	81.2	38.9	17.9	56.8	100%

2.5.2 The Bank proposes to extend an ADF grant of approximately UA 25.9 million, which will cover 48% of the project cost. The other financiers include KfW (UA 14.8 million), Embassy of Sweden (UA 12.1 million) and SEFA co financing (UA 1.3 million). EDM will contribute with UA 2.7 million.

Table 7: Sources of Financing (UA millions)

Sources of funding						
Institution	Amount	Currency	Foreign Costs	Local Costs	Total cost UA	Percentage
ADF	25.9	MUA	12.2	13.7	25.9	46%
SEFA	1.9	MUSD	1.3	0	1.3	2%
KfW	18.0	MEUR	13.8	1	14.8	26%
Embassy of Sweden	150.0	MESEK	12.1	0	12.1	21%
EDM	3.9	MUSD		2.7	2.7	5%
Total			39.4	17.4	56.8	100.0%

2.5.3 Co-financing of component 1 NCC and ATI membership (component 3) will be done by KfW. The Embassy of Sweden will co-finance component 1 - NCC. The electricity access component will be solely financed by ADF funds. It should be noted that other partners World Bank, Sweden, Norway and the EU have already contributed USD 238 million towards the GoM's Energy for All Programme to which the Bank's component is also contributing. Finally, the Bank will in component 3 co-finance ATI membership and the optical fibre commercialization and energy efficiency study. The SEFA will co-finance two sub-components, a floating solar PV feasibility study and technical assistance to EDM's market and system operator functions. Given EDM's precarious financial situation and the fragility of Mozambique the utility will provide a financial contribution to the MEFA programme to finance some gender and social and environmental activities in the amount of UA 2.7 million. Despite this contribution the project will finance 100% project total cost including taxes and duties (see appendix 1 for the request to waive the obligation in line with the Bank policy on Eligible Expenditures). However, the utility will also indirectly contribute in the form of staff, vehicles and productive assets, in particular in the RBF access component amount included in the total UA 2.7 million.

Table 8: Programme Costs per Categories

Programme Categories	(USD million)					
	ADF	SEFA	KfW	Embassy of Sweden	EDM	Total
1. Goods						
IT Equipment	0.01					0.01
2. Works						
National Control Centre	6.9		18.3	18		43.3
Electricity Access	19.6	-	-			19.6
3. Consulting services						
Business Plan Optical Fibres	0.4					0.4
Verification Agent (RBF)	1.1					1.1
Supervising Engineer NCC	1.3					1.3
Floating Solar PV & Green Baseload support to Market Operator		1.9				1.9
Energy Efficiency Study						0.1
4. Non-Consulting Services						
Operating Costs	0.6				3.9	4.5
ATI Membership	6	-	3	-		9
Total	35.9	1.9	21.3	18	3.9	81.2

2.5.4 Expenditure will be carried out according to the schedule below during the implementation period for each component. The Programme will be implemented for a period of four years.

Table 9: Expenditure schedule by component

Component Description	Cost (UA million)					
	2021	2022	2023	2024	2025	Total
National Control Centre	-	3.12	9.36	15.60	3.12	31.2
Electricity Access	2.69	1.66	4.36	4.43	0.55	13.7
Technical Assistance	2.34	1.44	3.78	3.85	0.48	11.9
Total Programme Costs	5.03	6.23	17.50	23.89	4.16	56.8

2.6. Programme's Target area and Population

2.6.1 The implementation of the MEFA Programme will have impacts across the whole of Mozambique. Component 1 NCC entails interventions and impacts across the country and future benefits will even expand into neighbouring countries. Component 2 will increase the number of connections in the provinces of Zambezia and Nampula, (the two most populous and with the highest poverty incidence in Mozambique), entails interventions on the outskirts of the cities of Nampula, Nacala, Quelimane and Mocuba. In particular in the province of Nampula, refugees and IDPs, and hosting communities will also directly benefit from the access component[16]. The selection of these four cities was undertaken by EDM reflecting the need to support activities in central-north and keeping the implementation of the Component efficient and effective. The third Component involves

[16] https://www.afdb.org/en/news-and-events/press-releases/multilateral-development-banks-pledge-step-support-forcibly-displaced-populations-global-refugee-forum-33318

non-tangible benefits with positive impacts across Mozambique due to facilitation of new generation capacity dispersed in several locations and TA.

2.7. Participatory Process for Programme Identification, Design and Implementation

2.7.1 The MEFA Programme will be implemented over a period of four years**.** The identification was a consultative process with the Government of Mozambique (Ministry of Finance), the Ministry of Energy and Mineral resources and the national utility EDM, supplemented with discussions with key stakeholders HCB and MOTRACO. Development partners active in the energy sector such as Embassies of Norway, Sweden, KfW, World Bank, IFC, AFD were engaged, and inputs received from partners. EDM has played a central role in furnishing the Bank with relevant information and expediting the selection of intervention areas for the access component.

2.8. Bank Group Experience, Lessons Reflected in Programme Design

2.8.1 Lessons from the Bank experience in Mozambique's power sector, coupled with experience from across the region, indicates that using the RBF instrument for the access component is likely to lead to effective implementation in Mozambique. Emerging lessons from the Bank-financed RBF energy sector operation in Rwanda and other RBF operations in Egypt and Morocco provide support for using incentive-based funding mechanisms in order to deliver results rapidly. The RBF instrument provides a unique opportunity to inject the right incentives for performance improvement. The use of RBF will therefore enable Mozambique to generate the same results as investment lending, although through a much more efficient and effective manner with the right accountability and incentive mechanisms in place. The use of RBF as a lending modality in Mozambique's energy sector will, thus, enhance the Bank's responsiveness to the growing energy needs and demands, while concurrently repositioning the institution to do more with limited resources. The RBF component of the MEFA Programme also incorporates the lesson that the IVA (independent Verification Agent) should be procured competitively.

2.8.2 Based on previous projects it is also important to ensure that human resources and skills are upgraded to handle new challenges. Thus, targeted technical assistance and training will support EDM in i) using the RBF instrument, which increasingly is expected to be adopted in Mozambique for access, ii) effective operation of the advanced SCADA system for increased regional trade TA, and iii) strengthening EDM's market operator and technical teams. Additional lessons learnt from the implementation of the Bank Projects in Mozambique which have informed the design features of the MEFA include the need to: i) ensure that the programme design ensures timely implementation; ii) programme readiness and quality at entry; iii) rationalize the number of conditions necessary to declare the grant effective in order to reduce implementation delays; iv) increase capacity of implementing agencies especially in the programme management; v) enhance the supervision of programmes particularly monitoring and evaluation to minimize delays in completion; and vi) eliminate the need for provision of counterpart funds (see Appendix 1). For the closed Projects, the Completion Reports (PCRs) are up to date with all the reports prepared and posted on the Bank website.

2.9. Key Performance Indicators

2.9.1 The key performance indicators for the programme have been outlined in the Result Based Logical Framework. Special emphasis will be placed on the targeting indicators that should be monitored and those related specifically to women. Regular implementation progress will be measured through bi-annual Bank supervision missions led by Mozambique Country Office, Quarterly Progress

Reports, and annual technical and financial audits. The M&E of the EDM PIU will collect and analyse programme data to monitor performance, supported by the verification agent for the RBF Component.

III – PROGRAMME FEASIBILITY

3.1. Economic and financial performance

The financial analysis indicates a positive Financial Net Present value (FNPV) of USD 285 million using a real discount rate of 6.0% and gives a Financial Internal rate of return (FIRR) of 38%. The 6.0% should approximate the Weighted Average Cost of Capital (WACC) for the Utility and a programme such as this one given the huge amount of subsided financing provided to the power sector in Mozambique. The financial impact is supported by the fact that NCC will increase export sales to the region. The financial outcomes on the RBF financed component 2 of the project results into a positive FNPV of USD 1.6 million and a FIRR of 7.2%. This result reflects the low tariff to domestic users.

The Economic analysis from the country perspective yields an Economic Net Present Value (ENPV) of USD 141 and Economic IRR of 39%. Also, economic assessment of RBF financed component 2 gives the positive ENPV of USD 1.6 million and EIRR of 19 The Table below summarises the results of the analysis.

Table 10: Summary of Results from the Financial and Economic Analysis

Indicator	Outcome (investment)	Outcome (RBF component)
FNPV @ 6% real discount rate	USD 285 million	USD 1.6 million
FIRR, real	38%	7.2%
ENPV @ 12% real discount rate	USD 141 million	USD 6 million
EIRR, real	39%	19%

Sensitivity Test: Key sensitive parameters include investment costs overrun, tariff and the cost of energy.

3.2. Environmental and Social Impacts

3.2.1 **Categorization:** In line with the Bank's ISS, the MEFA Programme category was confirmed as 2 on 9 June 2021 and the justification for this category is that activities under both components will trigger low to moderate E&S risks.

3.2.2 **Document and Disclosure Requirements**: An environmental and social management framework (ESMF) for the NCC Component was prepared by EDM, reviewed and cleared by the Bank, and disclosed by the EDM on 14 June 2021 and by the Bank on 15 June 2021 in accordance with the ISS requirements. For the RBF Component an Environmental and Social System Assessment (ESSA) has been prepared by the Bank in line with the ISS requirements.

3.2.3 **Programme Impacts:** a.) The RBF Component is likely to trigger low to moderate E&S risks given that the financing will only provide funding for new connections. Under the RBF component, the risks relate to new connections with waste-induced nuisances and installation works also come with possible employee and community health and safety issues. b.) The NCC Component will make use of an existing NCC installation and the system will trigger construction related impacts including land clearance that could impact on site specific drainage, waste and occupational health and safety.

3.2.4 **Costs**: As part of the RBF Component two considerations are included as part of the programme cost, being engaging of young and professional trainees (USD 38,080) and individual consulting services (USD 96,000). The total costs of implementing environmental and social considerations under the RBF Component have been estimated at USD 23,445. The total cost is included in the cost table in the technical annex.

3.2.5 **Institutional Arrangements and Capacity**: The institutional capacity to implement E&S requirements has been assessed. EDM has an Environmental and Social Department with 8 staff. The department is divided into Environmental Licensing Working, Social and Land Working Group and the Environmental Management Systems Working Group. The same department undertakes studies for EDM as the need may arise and experience has shown that the team has successfully implemented environmental and social considerations as per their mandate. In relation to the RBF Component the ESSA identified the following: i) the RBF will be implemented in two provinces and at least 2 dedicated staff will be required to handle the environmental and social aspects of the component; and ii) In relation to functional equivalence an assessment of the country systems revealed that for compliance monitoring, a third party is required to verify that the component is implemented in line with the Bank's ISS requirements. NC Component considerations will be implemented through an E& S consultant.

3.3 Climate Change

3.3.1 The MEFA Programme project is identified as Climate risk Category 2 given its nature and using the Banks Climate Safeguards System. On one hand, the construction/upgrading of the National Power Control Centre to be climate-proof to enhance its resilience to climate extremes. while, component on floating solar feasibility study to integrate current and future climate risks; to estimate potential associated net Green House Gas (GHG) emission to be displaced, and building EDM institutional capacity in design cost-effective climate resilience solar floating investment project. On the other hand, the operation by stabilizing the Southern power system network, will reduced electricity losses; enhancing energy efficiency capacity. However, in a conservative scenario of 463 kWh of electricity consumption per capita/ (World Bank,2018), increasing 48955 electricity connection will improve access to cleaner sources of energy to 209950.8251 households respectively 115454.69 households in Zambezia and 94496.14 households in Nampula provinces with an estimated 77.77 Mt[17] of carbon dioxide (CO2) eq displaced per year. In a related development, the operation through emission reduction; enhancing the resilience of electricity supply, and reduction of network electricity loss will contribute to the Mozambique Nationally Determined Contribution (NDC,2015) mitigation goal. It is therefore aligned with the Mozambique National Climate Change Adaptation and Mitigation Strategy (NCCAMS,2013-2025), the Bank Climate Change Action Plan (CCAP) with 100% of the project budget accounting for climate mitigation finance.

[17] Million tons

3.4 Gender

3.4.1 The program targets to improve access to clean energy in the provinces of Mozambique by making 48,955 new connections (households and productive uses of energy) mainly in peri-urban areas. This will reduce the high levels of energy poverty prevalent in the country. Energy poverty has negative impact on women and widens gender inequalities in the country. A UNIDO/UNWomen report from 2013 indicates that every year, 4.3 million people - mainly women, girls, and children from both sexes - die because of indoor air pollution, resulting from the burning of biomass. Mozambique is no exception to such adverse effects of clean energy poverty where women and girls hold the social responsibility of providing fuel for the household. In rural and peri-urban areas they thus spend considerable time collecting biomass for energy or procuring charcoal. This results in lost time, affecting their ability to get involved in other economic productive activities, deprives girl children of educational, exposes women and girls to insecurity and gender-based violence (GBV) and limits their options for social and political interaction outside the home. EDM has a new Gender Mainstreaming Strategy which is aiming at improving and promoting the Company's performance in gender equality. The strategy promotes doing business with women entrepreneurs in the company's supply value chains and ensuring that company contractors consider gender issues including job opportunities for women, increasing employment of women in both technical and managerial positions of the company, and addressing gender related issues including GBV. The design of the programme will include a Gender Action Plan for the Electricity Access component to guide the implementation of gender mainstreaming activities throughout the implementation process. and the Verification Agent will be tasked with recording the number of Women Headed Households that are benefitting. The programme is Category 3 according to the Bank's Gender Marker System.

3.5 Social

3.5.1 The Programme is expected to have significant positive social impacts. Electrifying peri-urban households will increase the quality of life for more than 250,000 people (based on 5.4 people per household). In addition, EDM is planning to use the component to also electrify refugee and IDP settlement areas. Improving the quality and availability of power in Mozambique will significantly support the provision of public illumination, the business climate for SMEs and delivery of services from public institutions, e.g., health stations. Component 3 entails support to building new generation capacity in the country which in the longer perspective is key to further expanding access and promoting economic growth.

3.6 Involuntary resettlement

3.6.1 No resettlements are expected to be originated by the programme.

3.7 Fragility Assessment

3.7.1 The African Development Bank's (AfDB) 'Strategy on Addressing Fragility and Building Resilience in Africa (2014- 2019)/ extended to 2021' gives a high premium to fragility-sensitive programming in fragile situations, as well as identifying levers of resilience in transition and post-conflict situations. Within this preliminary conceptualization, a fragile situation manifests when the social capital is neither optimal nor inclusive; security risks are elevated and diffuse; and/or service provision is inadequate or incomplete. This fragility assessment report seeks to unpack the drivers of fragility in Mozambique. The goal is to understand how these power dynamics inform investments and programming decisions in the Country, as well as to identify strategic priorities and priority areas for programming.

3.7.2 The lack of energy infrastructure is key constraint to Mozambique's development and business environment, as well as to the improvement of living conditions of the population. This energy infrastructure deficit leads to high service costs (e.g. rural populations pay about 60-80 times per unit more for energy than the urban populations in the developed world) and hampers business competitiveness. There is need for energy infrastructure to facilitate energy trade across borders, strengthen operational and financial efficiency of the power utility, expansion of electricity access and crowding in Independent Power Producers (IPPs). The MEFA programme seeks to enhance Mozambique's power exports, improve power quality domestically and regionally and increase number of connections. In Mozambique unequal geographical access to public services, including energy, and inequalities in per capita spending have deepened marginalization. The targeting of this programme towards the two least served provinces aims to address this driver of fragility. Generally increasing the access, availability and stability of power supply is instrumental in creating jobs for youth, women, and the general population.

IV – IMPLEMENTATION

4.1. Institutional and Implementation arrangements

The Executing Agency

4.1.1 The grant recipient is the Republic of Mozambique and EDM will act as the Executing agency. EDM has experience in managing Bank-funded operations and producing satisfactory results. EDM will set up a PIU led by a Programme Coordinator supported by a procurement specialist; and accountant; and a monitoring and evaluation specialist. The PIU will consist of dedicated EDM staff and will be augmented by staff resources who cover gender, environment, and in addition for the NCC component - SCADA, telecommunications, transmission, and market operations. The NCC component will be fully supported by an owner's engineer and the component includes 5 years of technical support after the defect liability period. The floating solar PV feasibility study will be handled by EDM's renewable energy department.

Procurement arrangements

4.1.2 EDM as the executing agency, will coordinate the implementation of the programme, as far as procurement is concerned, through its Procurement Unit (UGEA). For the components 1 and 3, the programme will use the Bank's Procurement Framework. Procurement under the Electricity Access Component, which is solely financed by the Bank will be undertaken in accordance with the Recipient's Procurement System (BPS), relying on the country's own oversight institutions (e.g., internal controls, audit, fraud, and corruption etc.). This is in line with the Procurement Framework for Bank Group Funded Operations and Bank's Policy on Results-Based Financing.

4.1.3 Procurement of goods, works and the acquisition of consulting services, financed by the Bank for the programme, will be carried out in accordance with the "Procurement Policy and Methodology for Bank Group Funded Operations" (BPM), dated 2015 and following the provisions stated in the Financing Agreement. Specifically, Procurement would be carried out following:

i) Recipient Procurement System (BPS): Specific Procurement Methods and Procedures (PMPs) under BPS comprising its Laws and Regulations namely Decreto 5/2016 de 8 de Março –

Regulamento de Contratação de Empreitadas de Obras Públicas, Fornecimento de Bens, e Prestação de Serviços ao Estado (Regulations for Contracting of Public Works, Supply of Goods and Consultancy & Non-Consultancy Services to the State), using the national Standard Solicitation Documents (SSDs) or other Solicitation Documents agreed during programme negotiations for various group of transactions to be entailed under the investment lending component of the programme. Additionally, Component 2 using RBF will entirely be implemented using the BPS.

ii) Bank Procurement Policy and Methodology (BPM): Bank standard PMPs, using the relevant Bank Standard Solicitation Documents SSDs, for contracts that are either: (i) above the thresholds indicated in Annex B5, para. B.5.3.2, or (ii) in case BPS is not relied upon for a specific transaction or group of transactions; and (iii) in case BPM have been found to be the best fit for purpose for a specific transaction or group of transactions.

4.1.4 **Procurement Risks and Capacity Assessment (PRCA):** the assessment of procurement risks at the Country, Sector, and Programme levels and of procurement capacity at the Executing Agency (EA), were undertaken for the programme and the output has informed the decisions on the procurement regimes (BPS or Bank PMPs) being used for specific transactions or groups of similar transactions under the programme. The appropriate risks mitigation measures have been included in the procurement PRCA action plan proposed in Annex B5, Para. 5.3.8.

4.1.5 The procurement arrangements for the various components, elements, and items, under the different expenditure categories to be financed by the grant, are summarized in the Table 10 below. Details of each group of similar transactions/contracts, the different PMPs, estimated costs, oversight requirements, and the timeframe as agreed between the Recipient and the Bank, are documented in the Procurement Plan. The Bank has advised the GOM to request the use of Advance Contracting (AC) for consulting services for Independent Verification Agent (RBF) and NCC Supervising Engineer. It is anticipated that EDM will conclude the procurement process for the Verification Agent (RBF) and NCC Supervising Engineer in the third Quarter of 2021. Table 11 below shows a summary of procurement arrangement for the programme.

Table 11: Summary of Procurement Arrangement (UA'000)

#	**Programme Components/Categories**	**BPS[18]**	**BPM[19], OCBI (ICB)**	**BPM, OCB (Short List)**	**Total**
1	**Goods**				**4,232**
1.1	Supply of IT Equipment	7			7
2	**Works**				**31,549**
2.1	National Control Centre		17,746		17,746
2.2	Electricity Access (RBF)	13,803			13,803
3	**Consultant Services (Firms)**				**4,117**
3.1	Business Plan Optical Fibres			282	282
3.2	Verification Agent (RBF)			775	775
3.3	NCC Supervising Engineer			1,590	1,590
3.4	Floating Solar			900	900
3.5	VRE Study			400	400
3.6	Energy Efficiency			100	100

[18] BPS: Recipient Procurement System
[19] BPM: Bank Procurement Methods

3.7	Financial and Financial Audit			70	70
4	**Operating costs**				**4,585**
4.1	Operating Costs[20]	4,585			4,585

4.1.6 **Procurement Governance:** Over the last few years, and in particular after the "hidden debts" scandal, Mozambique has adopted a range of reforms that have been implemented to increase accountability and transparency of the use of Public Funds. Mozambique's legal, regulatory and institutional framework facilitates accountability in decision-making. The country has a policy supported by robust Anti-Corruption laws and strong institutions to enforce accountability, such as the Administrative Tribunal, *Procuradoria da Republica* and the Cabinet Against Corruption. Civil society is active in monitoring use of public resources, notably with the platform of the Foruam de Monitoria do Orcamento.

Financial Management, Disbursement and Auditing Arrangement

4.1.7 A Financial Management (FM) assessment of EDM, as the designated Executing Agency, was carried out in accordance with the Bank's Policy Instrument on Results-Based Financing and associated Operational Guidelines on the Implementation of the Bank Group 'RBF policy', the Financial Management Policy Applicable to Bank Group Financed Operations (2014) and the related Manuals and Guidelines. The objective of the assessment was to determine whether EDM has acceptable FM arrangements, capable of (i) correctly and completely recording all transactions and balances relating to the programme; (ii) facilitating the preparation of regular, timely and reliable financial statements; (iii) safeguarding the assets of the programme; and (iv) being subjected to auditing arrangements acceptable to the Bank. The assessment was done virtually in April 2021 as part of appraisal. The assessment also considered the latest Mozambique Country Fiduciary Risk Assessment (CFRA) in addition to the lessons learnt from the implementation of previous projects in Mozambique. The overall FM risk for the programme is assessed as moderate, the detailed analysis and financial management arrangement are contained in PAR Volume II, Technical Annex B9.

4.1.8 The progamme will follow the EDM's financial management systems and processes, including budgeting, accounting and reporting. EDM's internal audit will cover the programme and the reports resulting from the audits will be shared with the Bank during supervisions. All deficiencies identified by internal audits will be communicated in a timely manner to the overall programme management for action. The programme will follow EDM's financial and administrative procedures' manual; however, the manual will be updated to provide adequate guidance to the operations of the programme. EDM's experience with implementation of projects with other development partners contributed to the satisfactory assessment of its financial management capacity. The Accountant of the existing Projects Unit will be the designated Accountant for the programme, under the overall supervision of the Director of Finance of EDM. The overall conclusion of the FM assessment is that EDM has the capacity to handle the financial management aspects of the programme as per the Bank FM guidelines.

4.1.9 The programme has three components and two financing instruments from the Bank: i.e. Results Based Financing and investment lending; will be used to finance the project. The programme will also be co-financed by the SEFA Trust Fund, KfW and the Government of Sweden. The utility will indirectly contribute to the programme in the form of staff, vehicles and productive assets, in particular in the RBF access component. EDM will develop formal methods of incorporating the counterpart contribution in kind.

[20] Includes ATI Membership with an estimated cost of UA 4.225 million

4.1.10 Components 1 and 3 will be financed through the ADF Grant, SEFA Trust Fund. EDM will be responsible for the financial management activities for the components. There is a projects unit within EDM that is responsible for the financial management and reporting for projects implemented by EDM. Recording and reporting for resources from all the funders will have the same financial management procedures. When reporting, the funder will be identified for the activities implemented. EDM will prepare Interim Quarterly Financial Reports to be submitted 45 days after the end of the calendar quarter. Disbursement will be primarily by direct payment where the Bank will pay consultants/suppliers/contractors directly based on satisfactory performance in accordance with the Bank's Disbursement Handbook. In addition, a Special Account denominated in USD and its associated MZN denominated project operating account shall be opened in a reputable Bank acceptable to Bank and will be limited for use in paying for the small operating project expenses that are recurring in nature. The operating expenses and the special account will be in relation to the ADF financing. The SEFA will only disburse through direct payments. A Disbursement Letter will be issued by the Bank. A separate audit report will be prepared annually with the audit carried out by an independent external auditor recruited in accordance with the Bank's requirements.

4.1.11 Component 2 will be financed using RBF which entails using EDM's financial management processes, systems and internal controls. Disbursements for this component will be based on the achievement of the disbursement linked indicators (DLIs). The DLIs will have clear verification protocols to define how they will be achieved, measured, and verified by an Independent Verification Agent (IVA). The Bank Group will allow partial disbursements in cases where a DLI is achieved partially. This will allow the Bank to exercise flexibility under cases of deviations between planned and actual implementation progress. As part of their responsibility, the IVA will review the financial management information to provide assurance of the resources utilized to achieve the DLI's. Disbursement will be made to an EDM bank account.

4.1.12 In accordance with the Bank's requirements the financial statements reflecting resources from the Bank will be subject to audit on an annual basis. On the funds disbursed through RBF directly to EDM, the audit of the EDM financial statements will be undertaken using the existing arrangements within EDM. EDM's Financial Statements are audited by an independent auditor engaged by EDM. The Bank will rely on these audit arrangements. EDM will share the audited Financial Statements and Management Letter within six months from the end of the financial year. In addition to the annual audits the entity audit terms of reference will be augmented with a value for money and procurement audit, supported by a "life of programme" financial report, highlighting contributions by program financiers, and how the funds were used. The financial statements for funds disbursed under investment lending for Components 1 and 3 will be subject to periodic (annual) audits conducted by an experienced and qualified external private audit firm. The external auditor will be recruited on a competitive basis, using the Bank's approved terms of reference. The audit report comprising audited financial statements and the management letter shall be submitted to the Bank within six months from the end of the financial year.

4.2. Governance

4.2.1 The current institutional structure of the power sector derives from the 1997 Electricity Law, although a revised law is expected to be approved in 2021. The Ministry of Mineral Resources and Energy (Ministerio de Recursos Minerais e Energia, MIREME) is the government entity responsible for energy policy and planning, as well as monitoring sector performance and governance. Electricidade de Moçambique, (EDM) is the state-owned, vertically integrated utility with operations in generation, transmission, and distribution countrywide. Hidroeléctrica de Cahora Bassa, (HCB) is the largest power generation company, in charge of operating the 2,075 MW Cahora Bassa power plant and the associated transmission system. The generation sector is complemented by independent power producers (IPPs) that have signed power purchase agreements (PPAs) with EDM. In May 2017, Parliament approved the creation of an energy regulatory authority, Autoridade Reguladora de Energia, (ARENE) in an effort to separate regulatory and policy functions in MIREME. The new regulatory body has been given the authority – inter alia – to regulate the electricity tariff, promote and monitor competition in the power sector, and monitor and enforce the terms and conditions of the licenses or concession contracts in the sector. The Energy Fund (Fundo de Energia, FUNAE) is a public body subordinated to MIREME with the aim of promoting the development and use of different forms of low-cost energy and the sustainable management of energy resources. Initially setup as a fund, FUNAE currently mostly implements off-grid access projects. In addition to the Electricity Law, private investments in the electricity sector are also governed by the Public-Private Partnership Law (2011).

4.3. Monitoring

4.3.1 Monitoring and impact evaluation of the overall programme will be the responsibility of EDM, with the support of the Ministry of Energy and Mineral Resources as appropriate. The EDM programme Team and EDM programme managers will be responsible for coordination and monitoring of progress of the programme's components and the overall programme. EDM's programme Team will consist of staff well versed in working with international donors and their programmes. The NCC component will have a full-time supervision engineering company based in Maputo and the RBF access component will be supported by a verification agent (a consulting firm) which will work with EDM. The RBF component can furthermore be monitored by assessing EDM's pre-payment system. Outcomes and outputs will be measured against the Results Framework. A mid-term review will be conducted and there will be a programme completion report, jointly prepared by the Bank and EDM. The Bank's office in Maputo, supported by the regional office in South Africa, will be responsible for the ongoing supervision of the programme and continuous dialogue with EDM, Government and stakeholders.

4.4. Sustainability

4.4.1 **The access component involves using robust technical solutions very familiar to EDM** and the combined technical and economic case is solid. The long-lasting installations will produce an economic return for EDM. The NCC component entails implementation of a complex programme, which, as set out above, will generate additional income for EDM and provide improved services to EDM's customers. The implementation design of the EPC contract includes 5 years of technical support to EDM.

4.4.2 EDM is in a fragile financial situation. This is due to a combination of: (i) a deteriorating macroeconomic situation; (ii) retail tariffs not recovering the cost of power purchases and operations - over the last for years the tariff has increased 36.7% while EDM cost increased by 59.7%, a situation aggravated by COVID 19; (iii) capital expenditures (CAPEX) for rehabilitation of the network and increasing energy access not being adequately funded; (iv) limited supply from HCB due to hydrological constraints; and (v) high electricity losses, estimated at 30% (in 2019). Despite several tariff adjustments, the last one being in December 2018, EDM has been accumulating operational losses on an accrual basis as well as significant payable arrears on cash basis. EDM's financial position also worsened due to the accumulation of receivables arrears, particularly from electricity exports to the Zambia Electricity Supply Corporation (ZESCO). Despite a partial debt restructuring process and more regular electricity supply from HCB in 2018, EDM remains exposed to several exogenous factors and its financial position is becoming critical. However, the NCC component and several aspects of Component 3 seek to improve EDM's financial situation. The NCC component will result in increases in EDM's power exports. The intended commercialization of EDM's optical fibre assets will potentially produce a second income stream and the floating solar PV installation will add value to EDM's hydropower assets in central Mozambique. The affordability of the tariffs to consumers has been an important attribute of tariff design. EDM's social tariff (Mt 1.07/kWh = US$c1.7/kWh) is adequate to ensure the affordability at subsistence level (about 30 kWh) of electricity service – at about 1.3 percent of a low-income household's expenditure. This is true for all provinces of Mozambique, even in poor provinces, households can afford subsistence volumes of electricity. Under the GoM's universal tariff policy, this tariff would apply for both grid connection and mini-grid connection, ensuring that the electricity service is affordable to the poor segments of Mozambican population.

4.5. Risk management

Table 12: Identified risks and mitigating actions

	Description	Risk Rating	Mitigation action
1.	Governance environment and EDM's financial performance	High	The Bank and like-minded development partners will continue to push for cost-reflective tariffs. In addition, the MEFA programme is intended to provide additional income for EDM setting it on a path of financial stability.
2.	Technology Risk – EDM will not have the required skills and expertise to fully develop and execute the NCC component	High	The NCC component is clearly a complex undertaking and its implementation will challenge EDM. However, has adequate resources have been allocated towards recruiting the supervising engineer and the ToR will reflect the complexity of the assignment. In addition, the EPC contractor will be asked to provide five years of technical support.
3.	Market opportunity risk – EDM fails to fully take advantage of the NCC in terms of regional sales.	Medium	Through the SEFA funding the Bank will provide training and technical assistance to the market operator function of EDM to ensure the company captures value from the NCC component.
3.	Problems in RBF access implementation.	Medium	In technical terms EDM is fully familiar with implementation modalities of the access component based on experience working with other partners. Due to EDM's financial situation the Bank will provide an advance to the utility to facilitate cash-flow and ensure timely start of the component. The agreed cost per connection has been adjusted to ensure that EDM's finances are not compromised. The final RBF risk relates to the use of national procedures. These have been reviewed by the Bank and found satisfactory.
4.	Programme cost overruns.	Medium	Sweco, an experienced consulting firm, is designing the tender material for the recruitment of the EPC contractor. Particular care will be taken in recruiting the supervising engineering company which will have procedures in place in accordance with agreed procurement principles (FIDIC) to control claims and variation orders during implementation.

V – LEGAL INSTRUMENTS AND AUTHORITY

5.1. Legal instrument

The programme will be financed pursuant to:

(i) an ADF Protocol of Agreement between the ADF and the Republic of Mozambique for a grant in the sum of UA12.2 million for the Investment Lending components ("Investment Lending Agreement");

(ii) an ADF Protocol of Agreement for a grant in the sum of UA13.7 million between the ADF and the Republic of Mozambique for the Results Based Financing component (RBF Agreement); and

(iii) a SEFA Letter of Agreement for a grant in the sum of USD 1.9 Million between the African Development Bank (the "Bank"), acting as administrator of SEFA and the Republic of Mozambique SEFA Letter of Agreement.

5.2. Conditions associated with Bank's intervention

(i) **Entry into Force Conditions**: The Agreements shall enter into force upon signature by the Recipient and the Fund/ Bank (as administrator of SEFA resources).

(ii) **Conditions Precedent to first disbursement**

Investment Lending Agreement and SEFA Letter of Agreement

Conditions Precedent to first disbursement: The obligation of the Fund to make first disbursement shall be conditional upon entry into force of the Agreement, and the satisfaction of the following conditions by the Recipient: (i) the execution and delivery of Subsidiary Agreement between the Recipient and EDM in form and substance satisfactory to the Fund; (ii) submit the evidence of the designation of the following experts: (a) programme coordinator; (b) procurement; (c) accountant; (d) monitoring and evaluation; whose qualifications and experience shall be acceptable to the Fund;

Results Based Financing Agreement

Conditions Precedent to first disbursement : The obligation of the Fund to make first disbursement shall be conditional upon entry into force of the Agreement, and the satisfaction of the following conditions by the Recipient: (i) the execution and delivery of Subsidiary Agreement between the Recipient and EDM in form and substance satisfactory to the Fund and (ii) for purpose of prior result financing, the Fund's approval of the ToR for the hiring of the IVA;

Advance Financing: The Advance financing (not exceeding 25% of the RBF component) shall be enunciated in the Grant agreement and will only be made upon effectiveness of the Protocol of Agreement.

Prior Result Financing: Disbursement may be made up to an aggregate amount not to exceed 25% of the RBF component subject on the approval by the Fund of the ToR for the appointment of the IVA. Details shall be captured in the Protocol of Agreement.

Condition Precedent to Subsequent Disbursements. The obligations of the Fund to make subsequent disbursements of the Grant shall be subject to the submission of evidence satisfactory to the Fund that the said DLI has been achieved, including a Verification Report from the IVA, in accordance with the Verification Protocol and procedures and arrangements satisfactory to the Fund.

(iii) **Covenants**: Under the Protocol of Agreements, the Recipient agrees, in form and substance satisfactory to the Fund to:

(a) Carry out, and cause its contractors to carry out, the programme in accordance with: (i) national legislation; and (ii) the recommendations, requirements and procedures set forth in the Environmental and Social Management Plan (ESMP) prepared for the programme; and

(b) Deliver to the Fund programme quarterly reports (QPRs), in form and substance acceptable to the Fund, describing the Recipient implementation of the ESMP (including any implementation failures and related remedies, if any).

Compliance with the Bank's Policies: This programme complies with all applicable Bank Group policies and guidelines.

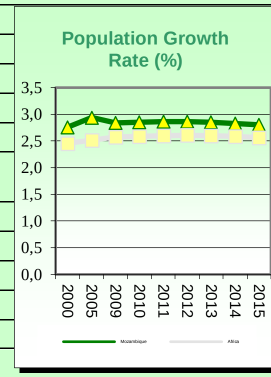
VI – RECOMMENDATION

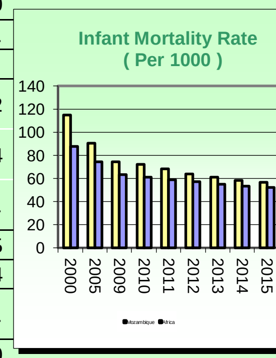
Management recommends that the Boards of Directors approve the proposed ADF Grant of UA 25.9 million to the Republic of Mozambique for financing of the MEFA programme comprising (i) ADF Grant of UA 12.2 million for financing the Investment Lending component and (ii) ADF Grant of UA 13.7 million for financing the Results Based Financing component.

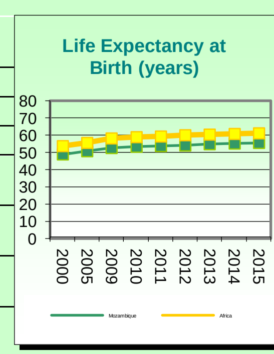
Last, management recommends that the Board authorised ADF funds to cover VAT and other taxes and waive the Government contribution to this Programme, as detailed in Appendix 4 and in line with the Bank policy on eligible expenditures.

APPENDIX I. COUNTRY'S COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Mozambique	Africa	Developing Countries	Developed Countries
Basic Indicators					
Area ('000 Km²)	2016	799	30,067	97,418	36,907
Total Population (millions)	2016	28.8	1,214.4	6,159.6	1,187.1
Urban Population (% of Total)	2016	31.4	40.1	48.7	81.1
Population Density (per Km²)	2016	36.6	41.3	65.1	33.8
GNI per Capita (US $)	2015	580	2 153	4 509	41 932
Labor Force Participation *- Total (%)	2016	79.1	65.7	63.5	60.0
Labor Force Participation **- Female (%)	2016	82.3	55.7	48.9	52.1
Sex Ratio (per 100 female)	2016	95.7	100.1	106.0	105.0
Human Develop. Index (Rank among 187 countries)	2015	181	...	...	...
Popul. Living Below $ 1.90 a Day (% of Population)	2008	68.7	...	21.1	...
Demographic Indicators					
Population Growth Rate - Total (%)	2016	2.8	2.5	1.3	0.6
Population Growth Rate - Urban (%)	2016	3.4	3.6	2.4	0.8
Population < 15 years (%)	2016	45.1	40.9	27.9	16.8
Population 15-24 years (%)	2016	20.1	19.3	16.9	12.1
Population >= 65 years (%)	2016	3.4	3.5	6.6	17.2
Dependency Ratio (%)	2016	94.2	79.9	54.3	52.0
Female Population 15-49 years (% of total population)	2016	23.1	24.0	25.7	22.8
Life Expectancy at Birth - Total (years)	2016	55.8	61.5	69.9	80.8
Life Expectancy at Birth - Female (years)	2016	57.0	63.0	72.0	83.5
Crude Birth Rate (per 1,000)	2016	38.4	34.4	20.7	10.9
Crude Death Rate (per 1,000)	2016	11.0	9.1	7.6	8.6
Infant Mortality Rate (per 1,000)	2015	56.7	52.2	34.6	4.6
Child Mortality Rate (per 1,000)	2015	78.5	75.5	46.4	5.5
Total Fertility Rate (per woman)	2016	5.2	4.5	2.6	1.7
Maternal Mortality Rate (per 100,000)	2015	489.0	476.0	237.0	10.0
Women Using Contraception (%)	2016	18.7	31.0	62.2	...
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2005-2015	5.5	41.6	125.7	292.2
Nurses and midwives (per 100,000 people)	2005-2015	40.1	120.9	220.0	859.4
Births attended by Trained Health Personnel (%)	2010-2015	54.3	53.2	69.1	...
Access to Safe Water (% of Population)	2015	51.1	71.6	89.4	99.5
Access to Sanitation (% of Population)	2015	20.5	39.4	61.5	99.4
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2015	10.5	3.4	...	...
Incidence of Tuberculosis (per 100,000)	2015	551.0	240.6	166.0	12.0
Child Immunization Against Tuberculosis (%)	2015	95.0	81.8	...	...
Child Immunization Against Measles (%)	2015	85.0	75.7	83.9	93.9
Underweight Children (% of children under 5 years)	2010-2015	15.6	18.1	15.3	0.9
Prevalence of stunding	2010-2014	43.1	33.3	25.0	2.5
Prevalence of undernourishment (% of pop.)	2015-2016	25.3	16.2	12.7	...
Public Expenditure on Health (as % of GDP)	2014	3.9	2.6	3.0	7.7
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2010-2016	105.8	101.2	104.9	102.4
Primary School - Female	2010-2016	101.2	98.4	104.4	102.2
Secondary School - Total	2010-2016	32.4	52.6	71.1	106.3
Secondary School - Female	2010-2016	31.1	50.2	70.5	106.1







Primary School Female Teaching Staff (% of Total)	2010-2016	43.1	47.1	59.8	81.0
Adult literacy Rate - Total (%)	2010-2015	58.8	66.8	82.3	...
Adult literacy Rate - Male (%)	2010-2015	73.4	74.3	87.1	...
Adult literacy Rate - Female (%)	2010-2015	45.5	59.4	77.6	...
Percentage of GDP Spent on Education	2010-2015	6.5	5.0	4.0	5.0
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2014	7.2	8.7	11.2	10.3
Agricultural Land (as % of land area)	2014	63.5	41.7	37.9	36.4
Forest (As % of Land Area)	2014	48.5	23.2	31.4	28.8
Per Capita CO2 Emissions (metric tons	2014	0.2	1.1	3.5	11.0

*Sources : AfDB Statistics Department Databases; WB: World Development Indicators; UNAIDS; UNSD; WHO, UNICEF, UNDP; Country Reports.: Last updated June 2017 ; Data Not Available. * Labor force participation rate, total (% of total population ages 15+) Note n.a.: Not Applicable,** Labor force participation rate, female (% of female population ages15+*

APPENDIX 2: TABLE OF ADB'S PORTFOLIO IN THE COUNTRY

#	Sector	Project code	Loan number	Project name	Sou	Fin. Inst.	Division	Sector	App. Date	Sig. Date	Entry Into Force Date	Eff. for 1st Disb. Date	Last Disb. Date	Final Disb. Date	Disb. (MUA)	Disb. Ratio	Com Ratio	Age(yrs)	Status
1	Agriculture	P-MZ-AA0-031	2100150039194	Ppf-Value Chain And Market Development Program Along Pemba_L	ADF	Loan	RDGS2	Agriculture	06/12/2017	25/05/2018	25/05/2018	25/05/2018	21/10/2020	30/06/2021	1	71.3%	87%	3.4	OnGo
2	Agriculture	P-MZ-AA0-033	2100155036468	Drought Recovery And Agriculture Resilience Project	ADF	Grant	RDGS2	Agriculture	18/01/2018	21/02/2018	21/04/2018	05/06/2018	27/04/2021	30/06/2023	9	91.6%	88%	3.3	OnGo
3	Agriculture	P-MZ-AA0-034	2100155037718	Agricultural Value Chain And Youth Empowerment Project	ADF	Grant	RDGS2	Agriculture	20/07/2018	01/10/2018	01/10/2018	01/10/2018	19/04/2021	31/12/2023	2	19.6%	51%	2.8	OnGo
4	Agriculture	P-MZ-AZ0-003	2100150027693	Baixo Limpopo Irrigation & Climate Resilience Project	ADF	Loan	RDGS2	Agriculture	26/09/2012	08/11/2012	03/04/2013	20/06/2013	14/04/2021	30/06/2022	16	94.1%	83%	8.6	OnGo
5	Agriculture	P-MZ-AZ0-003	5565155000051	Baixo Limpopo Irrigation & Climate Resilience Project	SCF	Grant	RDGS2	Agriculture	26/09/2012	08/11/2012	08/12/2012	20/06/2013	26/04/2021	30/06/2022	1	75.6%	98%	8.6	OnGo
6	Agriculture	P-MZ-AZ0-003	5565130000001	Baixo Limpopo Irrigation & Climate Resilience Project	SCF	Loan	RDGS2	Agriculture	26/09/2012	08/11/2012	03/04/2013	20/06/2013	29/09/2020	30/06/2022	7	75.0%	88%	8.6	OnGo
7	Transport	P-MZ-D00-007	2100155033673	Mueda - Negomano Road Project Phase I	ADF	Grant	RDGS1	Transport	09/12/2016	02/02/2017	02/02/2017	11/11/2017	03/05/2019	31/12/2022	0	0.3%	22%	4.4	OnGo
8	Transport	P-MZ-D00-007	2100150036499	Mueda - Negomano Road Project Phase I	ADF	Loan	RDGS1	Transport	09/12/2016	02/02/2017	30/08/2017	11/11/2017	23/04/2021	31/12/2022	11	20.6%	54%	4.4	OnGo
9	Transport	P-MZ-DB0-012	2100150028343	Nacala Transport Corridor Phase-Iii	ADF	Loan	RDGS1	Transport	05/12/2012	15/03/2013	29/11/2013	10/04/2014	08/04/2021	31/12/2022	29	74.7%	79%	8.4	OnGo
10	Transport	P-MZ-DB0-012	2100155024216	Nacala Transport Corridor Phase-Iii	ADF	Grant	RDGS1	Transport	05/12/2012	15/03/2013	15/03/2013	10/04/2014	28/11/2016	31/12/2022	0	100.0 %	100 %	8.4	OnGo
11	Water Sup/Sanit	P-MZ-EAZ-003	5600155004651	Urban Sanitation, Drainage And Solid Waste Management In Chi	AWF	Grant	RDGS4	Water Sup/Sanit	14/07/2016	27/01/2017	27/01/2017	01/02/2018	13/01/2021	31/12/2021	1	61.9%	73%	4.8	OnGo
12	Power	P-MZ-FD0-003	2000130021093	Mozambique Lng Area 1	ADB	Loan	PITD4	Power	21/11/2019	11/06/2020	11/06/2020	23/03/2021	---	15/03/2025	0	0.0%	0%	1.4	APVD
13	Finance	P-MZ-HAB-001	2000130013582	Africa Sme Program Loc - Mozabanco S.A Mozambique	ADB	Loan	PIFD	Finance	11/04/2014	14/11/2014	14/11/2014	10/04/2015	31/05/2016	30/05/2016	6	100.0 %	0%	7	OnGo
14	Finance	P-MZ-HAB-004	2000130020680	Line Of Credit Banco Comercial E De Investimentos S.A. Mozam	ADB	Loan	PIFD1	Finance	15/07/2019	---	---	---	---	---	0	0.0%	0%	1.8	APVD
15	Finance	P-MZ-HAB-004	5060140000551	Line Of Credit Banco Comercial E De Investimentos S.A. Mozam	PSF	Loan	PIFD1	Finance	13/11/2019	---	---	---	---	---	0	0.0%	0%	1.4	APVD
16	Social	P-MZ-I00-002	2100155036425	Unilurio~Support To Skills Development For Agriculture And I	ADF	Grant	RDGS2	Social	16/01/2018	21/02/2018	21/02/2018	21/02/2018	26/04/2021	31/08/2023	2	17.9%	36%	3.3	OnGo

17	Social	P-MZ-IZ0-002	2100150030643	Consolidation Women's Entrepreneurship	ADF	Loan	RDGS2	Social	18/12/2013	25/03/2014	05/12/2014	30/09/2015	27/11/2018	30/12/2021	1	86.2%	100 %	7.4	OnGo
18	Social	P-MZ-IZ0-002	2100155026666	Consolidation Women's Entrepreneurship	ADF	Grant	RDGS2	Social	18/12/2013	25/03/2014	22/04/2014	08/08/2014	30/03/2021	31/12/2021	2	80.6%	70%	7.4	OnGo
19	Social	P-MZ-IZ0-003	2100155032268	Job Creation And Livelihood Improvement Project	ADF	Grant	RDGS2	Social	18/05/2016	17/06/2016	17/06/2016	17/06/2016	12/04/2021	30/06/2023	2	32.7%	44%	4.9	OnGo
20	Multi-Sector	P-MZ-K00-012	2100155040738	Multi-Country Covid-19 Response Support Program For Mozambiq	ADF	Grant	ECGF	Multi-Sector	22/07/2020	28/07/2020	28/07/2020	06/08/2020	21/08/2020	30/04/2021	15	100.0 %	0%	0.8	APVD
21	Multi-Sector	P-MZ-K00-012	5900155016266	Multi-Country Covid-19 Response Support Program For Mozambiq	TSF	Grant	ECGF	Multi-Sector	22/07/2020	28/07/2020	28/07/2020	06/08/2020	03/09/2020	30/06/2021	15	100.0 %	0%	0.8	APVD
22	Multi-Sector	P-MZ-KB0-001	5700155002751	Nacala Corridor Business Linkages Ta Project	FAPA	Grant	RDGS2	Multi-Sector	14/06/2017	14/09/2017	27/11/2017	08/02/2018	23/02/2021	30/12/2021	1	73.3%	67%	3.9	OnGo
23	Transport	P-Z1-DB0-039	2100150020398	Multi-Nacala Corridor Project (Mozambique)	ADF	Loan	RDGS1	Transport	24/06/2009	23/10/2009	24/02/2010	20/07/2011	22/04/2021	30/10/2021	83	81.0%	76%	11.8	OnGo
24	Power	P-Z1-FA0-073	2100150030595	Enabling Large Scale Gas & Pwr Investmnt	ADF	Loan	RDGS1	Power	18/12/2013	25/03/2014	03/02/2015	03/02/2015	23/04/2021	30/06/2022	5	54.1%	63%	7.4	OnGo
25	Agriculture	P-Z1-AZ0-014	5900155015802	Post Cyclone Idai Emergency Recovery And Resilience Programm	TSF	Grant	RDGS4	Agriculture	05/06/2019	20/08/2019	20/08/2019	20/08/2019	25/03/2021	30/12/2023	1	10.4%	21%	1.9	OnGo
26	Agriculture	P-Z1-AZ0-014	2100155040216	Post Cyclone Idai Emergency Recovery And Resilience Programm	ADF	Grant	RDGS4	Agriculture	05/06/2019	20/08/2019	20/08/2019	20/08/2019	23/02/2021	31/12/2023	5	26.6%	33%	1.9	OnGo
27	Agriculture	P-Z1-AZ0-014	5900155015801	Post Cyclone Idai Emergency Recovery And Resilience Programm	TSF	Grant	RDGS4	Agriculture	05/06/2019	20/08/2019	20/08/2019	20/08/2019	26/11/2020	31/12/2023	0	0.9%	21%	1.9	OnGo
28	Transport	P-Z1-DB0-039	5110155000758	Multi-Nacala Corridor Project (Mozambique)		Grant	RDGS1	Transport	28/11/2019	---	---	---	---	---	0	0.0%	0%	1.4	OnGo
29	Transport	P-Z1-DB0-039	6550655000451	Multi-Nacala Corridor Project (Mozambique)		Loan	RDGS1	Transport	10/03/2010	10/03/2010	06/07/2010	20/07/2011	---	06/07/2016	0	0.0%	100 %	11.1	OnGo
30	Transport	P-Z1-DB0-222	5900155016172	Mueda-Negomano Phase Ii (Lot A)	TSF	Grant	RDGS1	Transport	25/11/2019	24/02/2020	24/02/2020	30/10/2020	---	31/12/2023	0	0.0%	0%	1.4	OnGo
31	Transport	P-Z1-DB0-222	2100155040649	Mueda-Negomano Phase Ii (Lot A)	ADF	Grant	RDGS1	Transport	25/11/2019	24/02/2020	24/02/2020	30/10/2020	27/04/2021	31/12/2023	0	0.4%	0%	1.4	OnGo
32	Power	P-Z1-FA0-164	2100155040366	Temane Transmission Project (Ttp)	ADF	Grant	RDGS1	Power	19/07/2019	29/08/2019	29/08/2019	17/08/2020	06/11/2020	31/12/2023	0	0.2%	0%	1.8	APVD

APPENDIX 3 RBF ASSESSMENT SUMMARY

RESULTS FRAMEWORK FOR RESULTS-BASED FINANCING OF ACCESS

Results Indicators	DLI (Yes/ No?	Unit of measure	Baseline (Year - 2019) Data	Target Values				Frequency	Data Source/method	Resp. for Data collection
				Year 1	Year 2	Year 3	Year 4			
IMPACT: Increase electricity access rates in Mozambique.										
OUTCOMES										
1. Contribute to Improve access rates	No/DLI1	%	**38%**	0.25%	1%	1%	0.25%	Yearly	EDM	EDM, MIREME, ARENE
OUTPUTS										
2. Number of new connections made (households and productive uses of energy)	Yes/DLI1	Number	2 million	8,060	13,500	13,500	9,000	Yearly	IVA. EDM	EDM, supports by IVA
3. Female-headed households electrified	YES/DLI 2	Index	TBD by IVA	895	1,500	1,500	1,000	895	IVA. EDM	EDM, supports by IVA

APPENDIX 4 DISBURSEMENT LINKED INDICATOR (DLI) _VERIFICATION PROTOCOL

				Protocol to evaluate achievement of the DLI and data/result verification		
Disbursement Linked Indicators (DLI) #	**Disbursement Linked Indicators (DLI)**	**Definition/Description of achievement**	**Scalability of disbursements (Yes/No)**	**Data source/agency**	**Verification Entity**	**Procedure**
DLI 1	number of connections to the grid	Male and Female productive use of energy	Yes	IVA. EDM management reports, quarterly and annual reports, financial audits, procedural verification, EDM's pre-payment system and physical inspection	IVA	EDM to send the following to IVA (i) management reports; (ii) quarterly and yearly reports; (ii) financial audits; (iii) procedural verification; and (iv) EDM's pre-payment system and physical inspection. IVA to verify progress.
DLI 2	Female-headed households electrified	Female productive use of energy	Yes	IVA. EDM management reports, quarterly and annual reports, financial audits, procedural verification, EDM's pre-payment system and physical inspection	IVA	EDM to send the following to IVA (i) management reports; (ii) quarterly and yearly reports; (ii) financial audits; (iii) procedural verification; and (iv) EDM's pre-payment system and physical inspection. IVA to verify progress.

APPENDIX 5 JUSTIFICATION FOR 100% PROJECTS' COST FINANCING INCLUDING VAT

Context

The Government of Mozambique (GoM) has submitted a request to the Bank Group to finance 100% of the projects' costs, including VAT and duties, initially for new projects approved in 2017 and 2018. A second request was submitted in October 2020 to include 2021 and 2022 approved projects. This would bring the practice of the Bank in line with other development partners such as the World Bank and address some emerging project implementation issues. The Policy on expenditure eligible for Bank financing[21] (2008) allows the Bank Group to waive the principle that its projects are exempt from duties and taxes on a case-by-case basis, in cases where (para 4.2.1 of the mentioned policy):

(i) the country's tax system has a reasonable level of tax and duty rates; and (ii) the taxes and duties do not constitute a significant proportion of project costs or are not specifically directed at Bank-financed projects, activities or expenses.

This annex considers the justification to accede to this request on grounds of improved project implementation during a period of tight fiscal space and shrinking departmental budgets.

The fiscal context

Mozambique has made progress in restoring macroeconomic stability, but challenges remain. Mozambique has grown on average at 3.3% a year from 2016-2019, below the historic 7% average between 2004-2015. In 2020, economic performance was drastically impacted by the COVID-19 social, economic and health crisis, which led to a 1.3% GDP contraction. Before COVID-19, Mozambique was just recovering from the series of financial shocks it was subjected to, which included in 2015-16 the disclosure of "hidden debts" (that was followed by the suspension of the IMF's programme and donors' budget support operations[22]), and the impact of cyclones IDAI and Kenneth in 2019, which caused damages equal to around a fifth of GDP. Further pressures are expected to impact the economic and fiscal scenarios, such as the prolongation of the COVID-19 pandemic and the increasing nature of the conflicts in the North of the country that may not only increase the budget for military and humanitarian expenditure needs, but also postpone the start-up of the natural-resources based mega-projects and its revenues.

The GoM has taken measures in consolidating the fiscal situation, bringing more transparency to its budget and financial discipline into management of State-Owned Enterprises. It reached a restructuring agreement with bond-holders and also filed a fraud claim in the U.K., disputing the validity of two of the "hidden" loans, while continuing to service multilateral debt. Inflation was put under control and market distortions such as fuel subsidies were eliminated.

Fiscal reform effort has been significant. Fuel and wheat subsidies were eliminated, an automatic fuel price adjustment mechanism was adopted, and electricity and public transportation tariffs were increased in 2017-18. These efforts combined with cuts in public investment have reduced significantly the primary fiscal deficit to about 2 percent of GDP in 2018, compared to 4¾ per-cent of GDP in 2016. Budget has become more realistic than in the previous assessment. Macroeconomic reforms were coupled with Public Financial Management improvements, such as improved rules on public debt issuing and guarantees as

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[21] BD/WP/2007/106/Rev.2

[22] The suspension of these financing programmes were partly a consequence of the discovery of previously undisclosed commercial debt obligations, which saw the Government own up to USD1.2 billion (10% of the country's GDP) in loans between 2013 and 2014. Debt/GDP ratio increased from 87.4% in 2015 to 126.9% in 2016 putting public debt on an unsustainable path and requiring fiscal consolidation of the public budget.

well as SOE management law and regulation, new framework for public Funds and other public entities, the creation of a fiscal risk unit within the Ministry of Finance and Economy (MEF) with IMF's assistance and the regular publication of fiscal risks. Investigation and implication of serving and former officials in the illegal contracted debt also followed suit. The GoM is committed to monitoring any new spending that would be financed by the debt service standstill and to fully disclose this information and their public sector financial commitments.

Debt situation - Mozambique's debt remains in distress as debt restructuring discussions are ongoing, and nonetheless sustainable in the medium-long term, according to the 2020 DSA. The sustainability assessment is also anchored in the authorities' strong commitment to implement fiscal consolidation and a prudent borrowing strategy. The approval and disbursement of the IMF Rapid Credit Facility of about US$ 309 million played a catalytic role in securing needed external grants from development partners to help the authorities deal with the economic effects of the COVID-19 pandemic. The authorities request for forbearance from creditors under the recently announced G-20 DSSI (Debt Service Suspension Initiative) would deliver further cushion for health and social expenditures needs amid the pandemic.

Policy response and implications. The GoM has implemented reforms to enhance financial governance and actions towards resolving the hidden debts case. It also undertook a gradual fiscal consolidation since 2016, reducing arrears consistently until 2019. Moreover, the GoM has responded to the sequence of crisis swiftly where the AfDB has played a crucial role on funding, implementation and dialogue. The GoM tapped in (i) a short-term relief and a reconstruction plan after cyclones and IDAI and Kenneth, (ii) a set of comprehensive measures towards mitigating COVID-19 impacts such as increasing social programs, applying tax waivers and reducing electricity bills for the MSMEs, and is designing together with the AfDB, EU, UN and WB to an integrated development strategy to address the drivers of fragility and resilience in the North. Mozambique leveraged, to a larger extent, grants and highly concessional funds to finance such responses but given their magnitude and frequency, fiscal constraints are significant. As highlighted in Table 10, larger deficits are expected in the Mozambique's fiscal accounts making it difficult for the government to fulfil its financial obligations.

Table 10: Mozambique's budget position (figures in % of GDP).

Government Operations	2018	2019	2020	2021
Total revenue	23.8	28.9	24.1	24.2
Total expenditure & net lending	31.3	30	30.9	33.3
Overall balance, after grants	-8.2	-1.2	-4.1	-6.3
Primary Balance after grants	-3.8	2	-1	-3.2

Source: IMF NO. 21/101 on Mozambique

Prior to this request Bank-funded projects in Mozambique have experienced challenges relating to co-financing of VAT and other expenses as well as with VAT reimbursement to private operators. In 2018/19, at least 14 active Bank projects had reported arrears in payment of VAT from Government, causing significant delays in project implementation. The 100% financing has positively impacted on project implementation and helped to restore the confidence of the private sector operators in particular of small local businesses in biding to Bank's financed activities.

Compliance with Bank policy requirements. The request for the Bank to cover tax and duties on project activities is consistent with the conditions laid out in the policy:

1. Tax and duty rates in Mozambique are broadly in line with continental average. VAT rates, at 17% are slightly above the SADC average but broadly in line with similar economies in the continent (see table 11 below).

Table 11: Comparative VAT rates

Mozambique	**17%**	Tanzania	18%
Ghana	17.5%	Kenya	16%
Cote d'Ivoire	18.%	RSA	14%
Zambia	16%	Namibia	15%

2. Taxes and duties are estimated to amount to around 13% of total project costs in the MEFA project, with the infrastructure component attracting most duties.

3. Charging of taxes and duties are not specifically directed at Bank projects; in fact, the World Bank already covers these expenditures under its projects in Mozambique.

4. The project will benefit from the Government Decree 13/2016, art. 15 stabilising that infrastructure and its operation and maintenance are cover by an especial exemption of 60% of the total cost.

Table 12 Cost by expenditure category (VAT)

Expenditure categories	**Items**	**Amount USD**	%
WORKS	Access component	19.3	28%
	SCADA/EMS	9.5	14%
	RTU & adaptation works	3.9	6%
	Telecommunication	10.5	15%
	Buildings	5.5	8%
TRAINING	Training	2.8	4%
SUB TOTAL	Subtotal	51.5	74%
CONSULTANCY	Consultancy fees (7.5%)	3.9	6%
CONTIGENCIES	Contingencies (10%)	5.5	8%
TOTAL FOREIGN (excl. taxes)	**Total (excl. taxes and duties)**	60.9	
LOCAL TAXES	**Custom duties, VAT and other taxes (estm. 15 %)**	9.1	13%
TOTAL	**Total (incl. taxes, VAT and duties**	70.0	100%

The MEFA project is to enhance Mozambique's exports of power in addition to providing more and better power quality domestically and regionally. However, by nature it is not expected to generate short to medium term revenue gains for the Government. It makes sense to ease its implementation by allowing it to cover VAT and duty costs over 2021 and to 2024.

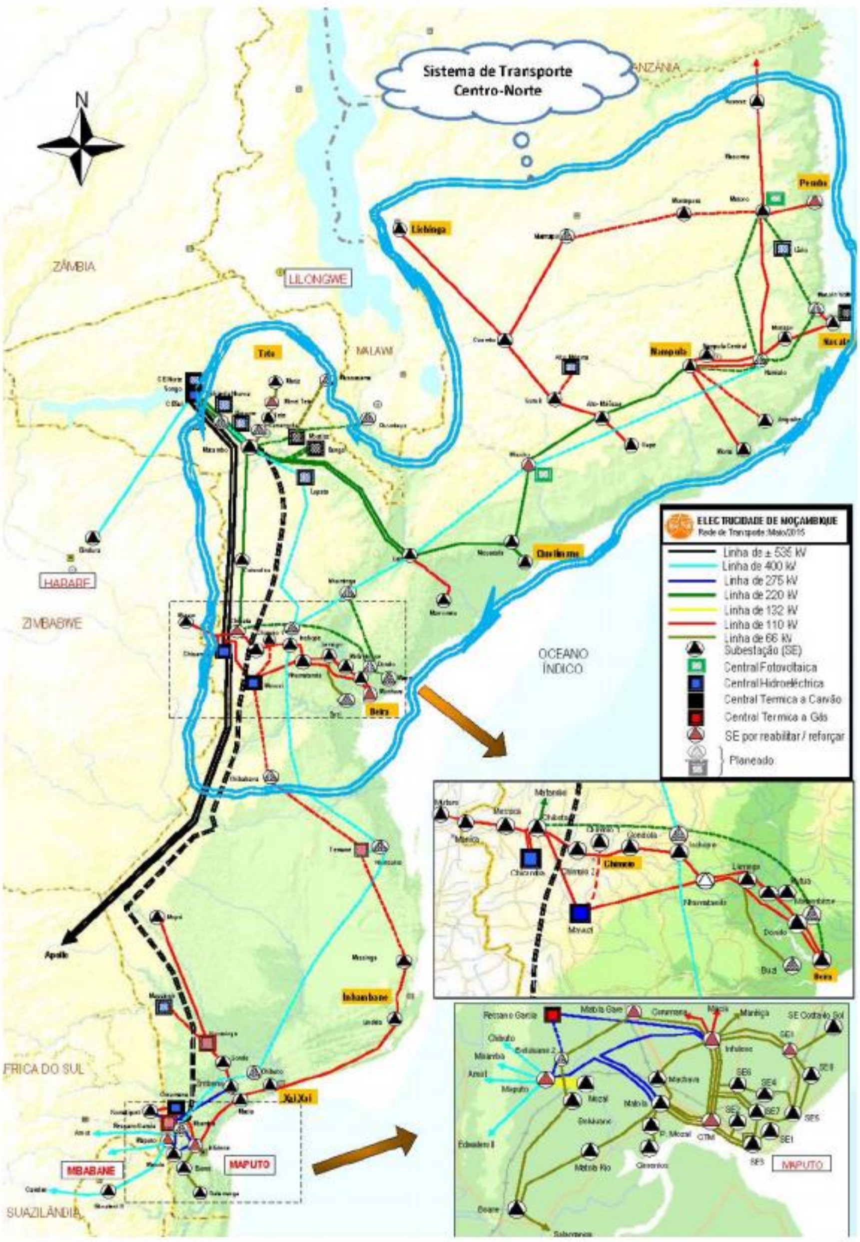
The requested exception should be considered as a temporary measure to be applied on a case-by-case basis, to reflect the current macroeconomic and fiscal conjuncture and to support the Government in its re-engagement with International Financial Institutions and with creditors, while ensuring smooth project implementation. Therefore, the above-mentioned context provides a case for the Bank Group to provide a waiver of the co-financing requirement and non-tax payment principle for the current MEFA project.

APPENDIX 6 GENDER ACTION PLAN

PROJECT TITLE	**Mozambique Energy for All Programme - P-MZ-FA0-021**			
GMS CATEGORY	**111**			
Outputs	**Activities to be undertaken**	**Timelines**	**Budget**	**Responsibility**
1. Increased Access to Electricity (RBF)	i. Promote rural women participation in public community consultations and decision-making related to the development programs such as electricity access in their areas and related usages taking place in their communities and districts. (bring girls to visit EDM)	Throughout the project implementation period	EDM budget. MZN 250,000.00 USD 4,032.26	EDM
	ii. Preparation and Implementation of a Code of Conduct (CoC) an instrument to mitigate Gender Based Violence (GBV), Sexual Exploitation and Abuse (GBV), Violence Against Children (VAC)-related risks by raising the awareness of workers and local communities during civil works such rehabilitation of existing infrastructure (NCC) and household connections to existing grid infrastructure.		Contractor's Budget MZN 42,550.000.00 USD 686.290.23	Contractors
	iii. Ensure equal participation and benefit of both men and women (youth inclusive) from job opportunities – unskilled, semi-skilled and skilled especially for people living near and/ or affected communities by the civil works. At least 40% of the jobs during rehabilitation and connection activities go to women.		EDM Budget MZN 126,271,667.00 USD 2,036,639.79	EDM
	iv. Preparation of the GRM, formation and training of the GRM committees, ensuring active participation of women in decision making.			
2. Implementation of EDM's Gender Mainstreaming Strategy	i. Facilitate and through affirmative action improve recruitment of women in EDM to increase women employees from 18.1% at baseline to 31% by 2025.	Throughout the project implementation period	EDM Budget MZN 60,114,500.1 USD 969,588,71	EDM

	ii. EDM staff training on Gender mainstreaming and how to guard against gender discrimination, GBV, Sexual harassment and abuse in and outside of work places etc.		Twice a year MZN 9,100,000.00 USD 146,774.19	EDM

APPENDIX 7 MAP OF MOZAMBIQUE



ENVIRONMENTAL AND SOCIAL COMPLIANCE NOTE (ESCON)	AFRICAN DEVELOPPEMENT BANK GROUP

A. Basic Information[23]

Project Title: Mozambique Energy For All Progamme		**Project ''SAP code'' P-MZ-FA0-021**
Country: Mozambique	**Lending Instrument**[24]: DI ☒ FI ☐ CL☐ BS☐ GU☐ RPA☐ EF☐ RBF☒	
Project Sector: Energy		**Task Team Leader**: Mario BATSANA
Appraisal date: 29th March to 8th April 2021		**Estimated Approval Date**: 22nd September 2021
Environmental Safeguards Officer:		
Social Safeguards Officer: Edith Birungi Kahubire		
Environmental and Social Category: 2	**Date of categorization**: 10th June 2021	**Operation type**: SO ☒ NSO ☐ PBO ☐
Is this project processed under rapid responses to crises and emergencies?		Yes ☐ No ☒
Is this project processed under a waiver to the Integrated Safeguards System?		Yes ☐ No ☒

B. Disclosure and Compliance Monitoring
B.1 Mandatory disclosure

Environmental Assessment/Audit/System/Others (specify: ESMF)	
Was/Were the document (s) disclosed ***prior to appraisal?***	Yes ☐ No ☒ NA ☐
Date of "in-country" disclosure by the borrower/client	15th June 2021
Date of receipt, by the Bank, of the authorization to disclose	15th June 2021
Date of disclosure by the Bank	15th June 2021
Resettlement Action Plan/Framework/Others (specify:)	
Was/Were the document (s) disclosed ***prior to appraisal?***	Yes ☐ No ☐ NA ☒
Date of "in-country" disclosure by the borrower/client	[Date]
Date of receipt, by the Bank, of the authorization to disclose	[Date]
Date of disclosure by the Bank	[Date]
Vulnerable Peoples Plan/Framework	
Was the document disclosed ***prior to appraisal?***	Yes ☐ No ☐ NA ☒
Date of "in-country" disclosure by the borrower/client	[Date]
Date of receipt, by the Bank, of the authorization to disclose	[Date]
Date of disclosure by the Bank	[Date]
If in-country disclosure of any of the above documents is not expected, as per the country's legislation, please explain why: NA.	

B.2. Compliance monitoring indicators

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes ☒ No ☐ NA ☐
Have costs related to environmental and social measures, including for the running of the grievance redress mechanism, been included in the project cost?	Yes ☒ No ☐ NA ☐
Is the total amount for the full implementation for the Resettlement of affected people, **as integrated in the project costs, *effectively mobilized and secured***?	Yes ☐ No ☐ NA ☒
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes ☒ No ☐ NA ☐
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes ☒ No ☐ NA ☐

23 **Note**: *This ESCON shall be appended to project appraisal reports/documents before Senior Management and/or Board approvals.*

24 **DI**=Direct Investment; **FI**=Financial Intermediary; **CL**=Corporate Loan; **BS**=Budget Support; **GU**=Guarantee; **RPA**=Risk Purchase Agreement; **EF**=Equity Financing; **RBF**=Results Based Financing.

C. Clearance

Is the project compliant to the Bank's environmental and social safeguards requirements, and to be submitted to the Board?

Yes ☒ No ☐

Prepared by:	***Name***	***Signature***	***Date***
Environmental Safeguards Officer:	-		-
Social Safeguards Officer:	Edith Birungi KAHUBIRE		19.07.2021
Task Team Leader:	Mario BATSANA		19.07.2021
Submitted by:			
Sector Director:	BALDEH, HENRY PAUL BATCHI		19/07/2021
Cleared by:			
Director SNSC:	Maman-Sani ISSA		21/07/2021