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**THIS ACTION IS FUNDED BY THE EUROPEAN UNION**

## **ANNEX 2**

of the Commission Decision on the financing of the Annual Action Programme 2019 – part 2 in favour of the Republic of Mozambique

### **Action Document for "PROMOVE Energia"**

<b>1. Title/basic act/ CRIS number</b>	PROMOVE Energia CRIS number: MZ/FED/040-055 Financed under the 11 <sup>th</sup> European Development Fund (EDF)	
<b>2. Zone benefiting from the action/location</b>	Republic of Mozambique The action shall be carried out at the following location: Republic of Mozambique, countrywide.	
<b>3. Programming document</b>	National Indicative Programme (NIP) 2014-2020 for Mozambique	
<b>4. Sustainable Development Goals (SDGs)</b>	Main SDGs: SDG-7 Universal access to affordable and clean energy SDG-13 Climate action to combat climate change and its impact Other significant SDGs: SDG 3- Ensure healthy lives and promote wellbeing for all at all ages	
<b>5. Sector of intervention/ thematic area</b>	Rural Development	DEV. Aid: YES <sup>1</sup>
<b>6. Amounts concerned</b>	Total estimated cost: EUR 83 500 000 Total amount of EDF contribution: <b>EUR 83 500 000</b>	
<b>7. Aid modality and implementation modalities</b>	Project Modality - <b>Indirect management</b> with the entities to be selected in accordance with the criteria set out in section 5.4.2 and 5.4.3 - - <b>Indirect management</b> with the World Bank (WB) This contribution to the <b>Regional Blending Platform</b> shall be implemented in indirect management by the entities indicated in the appendix to this	

<sup>1</sup> Official Development Assistance is administered with the promotion of the economic development and welfare of developing countries as its main objective

	action document, in accordance with the Regional Blending Platform's award procedure.			
<b>8 a) DAC code</b>	23000 – Energy generation and supply			
<b>b) Main Delivery Channel</b>	44000 – World Bank ; 13000 Third country Government			
<b>9. Markers (from CRIS DAC form)</b>	<b>General policy objective</b>	<b>Not targeted</b>	<b>Significant objective</b>	<b>Main objective</b>
	Participation development/good governance	<input type="checkbox"/>	X	<input type="checkbox"/>
	Aid to environment	<input type="checkbox"/>	<input type="checkbox"/>	X
	Gender equality (including Women In Development)		X	<input type="checkbox"/>
	Trade Development	X	<input type="checkbox"/>	<input type="checkbox"/>
	Reproductive, Maternal, New born and child health	X	<input type="checkbox"/>	<input type="checkbox"/>
	Disaster Risk Reduction	X	<input type="checkbox"/>	<input type="checkbox"/>
	Inclusion of persons with disabilities	X	<input type="checkbox"/>	<input type="checkbox"/>
	Nutrition	X	<input type="checkbox"/>	<input type="checkbox"/>
	<b>RIO Convention markers</b>	<b>Not targeted</b>	<b>Significant objective</b>	<b>Main objective</b>
	Biological diversity	X	<input type="checkbox"/>	<input type="checkbox"/>
	Combat desertification	X	<input type="checkbox"/>	<input type="checkbox"/>
	Climate change mitigation	<input type="checkbox"/>	<input type="checkbox"/>	X
	Climate change adaptation	X	<input type="checkbox"/>	<input type="checkbox"/>
<b>10. Global Public Goods and Challenges (GPGC) thematic flagships</b>	Sustainable energy. Contribution to the SE4All objectives: (i) ensure universal access to modern energy services, (ii) double the rate of improvement in energy efficiency and (iii) double the share of renewable energy in the global energy mix. Investment support for improved access to sustainable energy services.			

### Summary

The Renewable Energy Atlas of Mozambique (2015) confirmed that Mozambique is rich in conventional and renewable energy sources. Mozambique's vast energy resources are far in excess to satisfy domestic demand, including access expansion. The country is also well positioned to engage in significant regional trade and to emerge as a regional energy hub. In addition, the country has world-class reserves of natural gas and coal, sufficiently large to be used simultaneously for exports, major industry and power generation.

Despite its large energy resources and considerable efforts to extend the electricity grid more than three times in the past 10 years, the current energy access rate in Mozambique remains amongst the lowest in the region, with an electrification rate of 31 % in 2018. The national power utility (EDM) has increased access to electricity services from 8 % in 2006 to 31 % in 2018. In the off-grid space, in the past few years, emerging new players have started providing high-quality certified solar products with more flexible payment schemes such as the pay-as-you-go (PAYGO) model but their impact remains very low.

The Government of Mozambique is showing a significant commitment to develop the available resources to ensure equal access to energy. Mozambique has subscribed both to the SE4All objectives and the Sustainable Development Goals with the main objective to bring energy to all Mozambicans by 2030. The National Electrification Strategy, launched end of 2018 under the National Energy for All Program, confirms this goal. This plan also calls for the entry of private operators into the electricity market. In 2018 the Integrated Master Plan for Electricity Infrastructure was also approved. It aimed at increasing the country's capacity to generate, consume and export electricity over the next quarter of a century. To accompany the reform process the Government created at the end of 2017 the Energy Regulatory Authority (ARENE), launched the restructuration of the National Energy Fund (FUNAE) and initiated the review of the national electricity law in order to create a more conducive business environment. Additionally, the Government's recent signature of the Joint Declaration on Renewable Energy with the EU and its Member States is another proof of the country's commitment to the development of the renewable energy sector and the fight against climate change to which Mozambique is one of Africa's most vulnerable countries.

The PROMOVE Energy Action is a key component of EU's comprehensive "PROMOVE" approach to rural development in the provinces of Nampula and Zambézia under the 11<sup>th</sup> EDF that includes support to energy, agriculture, biodiversity, nutrition and rural roads, protecting the rights and promoting the social and economic inclusion of rural communities with a particular focus on women and girls.

The proposed action will contribute to boost progress towards the United Nations 2030 Agenda for Sustainable Development, in particular to the SDGs promoting universal access to energy and fighting climate change. In line with PROMOVE, its **overall objective** is to promote sustainable, inclusive and gender equitable economic growth and reduce poverty in the context of national food and nutrition security (FNS). Its **specific objective** is to guarantee that citizens and businesses across the country, particularly in rural areas, are benefitting from improved access to sustainable and affordable electricity. **Expected results** are: i) Peri-urban and rural areas have enhanced access to energy services through both the grid network and adapted off-grid solutions; ii) The power utility improves its energy efficiency and reduces its losses; and iii) The availability and use of improved cook stoves increases.

This action is complementary to the "Energy Project Preparation" Facility that is already being implemented (EUR 10 500 000 from the 11<sup>th</sup> EDF NIP) aiming at project development and enabling business environment and with the External Investment Plan (EIP) specific action for Mozambique that foresees an additional envelope of EUR 50 000 000 aimed to increase the renewable energy generation capacity installed in the country by leveraging funds from the private sector. The action will also ensure complementarity with the European Fund for Sustainable Development (EFSD) Guarantees of the European EIP.

Implementation of the activities will be through a combination of modalities aimed to provide adapted solutions to the context of Mozambique and leverage other public and private funds. That includes a contribution to a Multi-donor trust fund managed by the World Bank, channelling funds through the Africa Investment Platform and delegation agreements with Member State cooperation agencies.

## 1 CONTEXT ANALYSIS

### 1.1 Context Description

#### Country

Mozambique has a population of 27.9 million, growing at 2.8 % per year<sup>2</sup>, highly dispersed all over the country (low density of 37 people per square km.<sup>3</sup>), of which 46 % are under 15 years of age. Roughly 64 % live in rural areas and depend mostly on agricultural activities for their livelihood. Mozambique ranks 180<sup>th</sup> out of 189 in the Human Development Index of 2017 and has one of the lowest annual Gross Domestic Product (GDP) per capita (USD 1 136). In spite of significant progress in poverty reduction since the late 1990's, over 46 % of the population continue to live below the national poverty line and the absolute number of poor has remained relatively constant (11.8 million people) as the population has been growing faster. Living standards remain extremely low, in particular in rural areas, where 50 % of the rural population was living under the national poverty line in 2018<sup>4</sup> leading to expected electricity use of less than 1 kWh per day per household.

Mozambique's impressive economic growth, reflected by a GDP growth of 7 % per year over a decade was largely driven by the discovery of natural resources (mainly extractives including coal and gas). This growth trajectory abruptly slowed down in 2015, falling to 3.7 % in 2017. The economic downturn factors included droughts and floods that hit agriculture production, lower commodity prices affecting mineral exports, and a contraction of Foreign Direct Investment (FDI) inflows as several mega-projects reached completion. These were aggravated by the discovery in 2016 of undisclosed state-guaranteed loans representing 10 % of GDP (approx. USD 1.4 billion) and the resulting serious breach of trust in the national systems. Access to international development finance was seriously reduced. Stability has been partly re-established: exchange rates have been stable since mid-2017 and assisted in reducing inflation to a single digit number. Nevertheless, GDP growth is low at a projected 3.3 % for 2018.

Mozambique's economic diversification remains weak, with a high dependence on primary sectors such as mining, forestry, fisheries, natural energy. Manufacturing contributes minimally to GDP (8 % in 2016), and the country's exports consists mainly of unprocessed or semi-processed basic or raw products (mining, agriculture and fisheries). The opportunities that value-chains could provide are not yet exploited. The lack of economic diversification is very much related to the country's challenging economic infrastructure and business environment, including inadequate transport infrastructure, lack of access to reliable electricity, low productivity and low-skilled labour, as well as excessive cost of borrowing and a challenging regulatory environment and weak enforcement.

### Energy sector

The Renewable Energy Atlas of Mozambique (2015) confirms the huge potential in renewable energy and in particular its hydropower potential, identifying hundreds of possible projects, from pico and mini hydro projects to the large hydro plants of the Zambezi River. Besides, solar photovoltaics appears to be a viable option for electrification of remote communities. Approximately 7 GW of potential hydro, solar and wind capacity have been identified as specific projects, at a Levelised Cost of Energy (LCOE) lower than 150 USD/MWh. Mozambique's untapped energy resources could not only contribute to meet growing demand and secure supply within the Southern African Development Community (SADC) region but also generate more

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<sup>2</sup> Fourth National Population Census – 2017.

<sup>3</sup> <http://data.un.org/CountryProfile.aspx?crName=mozambique>.

<sup>4</sup> Income poverty head count using PLEASE methodology. Adjusted foodbasket. Ministry of Economics and Finance. Directorate of Economic and Financial Studies. Poverty and well-being in Mozambique. October 2016

export revenues. Selling electricity to neighbouring countries through the Southern African Power Pool (SAPP) is currently one of Mozambique's main sources of revenues<sup>5</sup>.

The total installed capacity in Mozambique is estimated at 2,533MW, mostly thanks to the Hidroeléctrica de Cahora Bassa (HCB) 2,075MW hydropower plant. Despite the high installed capacity in the country, most of it is used for export. The country is well interconnected with South Africa, the country's largest purchaser of electricity, and with other neighbouring countries, with opportunities for onward trade with the wider region forming the Southern African Power Pool (SAPP).

Internal peak power demand rose to 913MW in 2017. Despite annual increases of the electricity tariff (30 % on average) over the last three years, the tariff is not yet cost reflective (mainly due to devaluation of local currency) which undermines the utility's financial sustainability. EDM has been accumulating operational losses on an accrual basis as well as significant payable arrears, further aggravated by the deteriorating macroeconomic situation. Furthermore, EDM's technical and non-technical electricity losses in 2018 were over 28 %<sup>6</sup> (18 % considered as commercial losses). Recent drought hitting Southern Africa region has limited supply from HCB and proves once more how vulnerable Mozambique is to climate change impact due to its high dependence on a unique large hydropower scheme.

Although access to grid electricity has expanded more than three times in past 10 years through grid extension and the off-grid energy market is starting to emerge, the current energy access rate in Mozambique is amongst the lowest in the region, with an electrification rate of 31 % in 2018<sup>7</sup>. The national power utility has increased access to electricity services from 8 % in 2006 to 31 % in 2018. Provision of electricity services demonstrates disparities between urban and rural areas (more than half of urban population has access compared with only about 6 % of rural population with electricity service). Great efforts were made to extend the national grid to all administrative centres across the country while also serving some isolated areas, in the absence of a nationally interconnected grid system. However, uptake of existing power supply is very low, technical losses have accentuated and the financial sustainability has been further compromised. The National Energy Fund (FUNAE), with a focus on renewables, has been acting in complementarity of EDM and is already implementing solutions based mainly on solar off-grid systems and off-grid hydropower. In the off-grid space, in the past few years, emerging new players have started providing high-quality certified solar products with more flexible payment schemes such as the pay-as-you-go (PAYGO) model.

Mozambique holds extensive biomass resources, with 50 % of the country under forest cover. 80 % of the energy used in the country is in the form of traditional biomass, mainly for cooking. Population growth, urbanisation and agricultural expansion all lead to further pressure on the remaining biomass resource base, the situation in some regions is critical and irreversible damages are being caused, also to biodiversity and the quality of soils. Every year it is estimated that 16 000 000 m<sup>3</sup> of forestry resources are burnt to meet rural energy requirements. Moreover, cooking with biomass violates the right to health, as it contributes to a high frequency of respiratory deficiencies and deaths (11 750 premature deaths and 501 700 disability-adjusted life years

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5 Electricity ranks among the top five exporting products and accounts for more than 360 000 000 USD annual revenues.

6 EDM annual statistical account.

7 Access to the national grid is 31 % as per EDM; FUNAE estimates access to electricity by mini-grids and PV stand-alone systems as 14 % but these figures are not contrasted.

(DALYs)<sup>8</sup>, mainly affecting women and children as they are responsible for cooking activities and spend more time in confined spaces exposed to biomass combustion gases. Rural population also rely almost exclusively on fossil fuels and disposable batteries for lighting purposes.

## **1.2 Policy Framework (Global, EU)**

This action, respecting the Rights Based Approach, will fully contribute to the New European Consensus on Development "our world, our dignity, our future"<sup>9</sup>, aligned with the United Nations 2030 Agenda for Sustainable Development. The Staff Working Document "Empowering Development. Implementation of the new European Consensus on Development in energy cooperation"<sup>10</sup> states that EU's development cooperation will support improving the access for all to clean and affordable energy without damaging the environment. Cooperation with all relevant parties, including the private sector, will be increased on energy demand management, energy efficiency, renewable energy generation and clean technology development and transfer. The action will also be guided by the "Empowering Development" strategic approach to contribute to the Paris Agreement on Climate Change, which entered into force on 4 November 2016.

The action is also in line with the "Communication on a new Africa-Europe Alliance for Sustainable Investment and Jobs: Taking our partnership for investment and jobs to the next level"<sup>11</sup> that was set in motion to be a renewed partnership to substantially boost investment in Africa, strengthen trade, create jobs, and invest in education and skills. Besides, the action is coherent with the EU "Global Public Goods and Challenges" adopted for the period 2014-2020. Finally, part of the funds will be channelled through the African Investment Platform created under the European External Investment Plan (EIP) to encourage investment in Africa.

The National Indicative Programme for Mozambique (2014-2020) financed by the 11<sup>th</sup> European Development Fund (EDF) is focused on improved governance and fostering rural development. The action will contribute more specifically to the rural development focal sector by increasing equal access to energy services in order to catalyse sustainable economic growth and rural competitiveness. The action will also contribute to achieve the SDG5 and the EU "Gender Equality and Women's Empowerment: Transforming the Lives of Girls and Women through EU External Relations 2016-2020"<sup>12</sup> Policy.

## **1.3 Public Policy Analysis of partner country/region**

The country's main policy document is the Government's Five-Year Plan for 2015-2019. It identifies enhanced access to energy as a strategic objective in order to contribute to the global objective of "improving the living conditions of the Mozambican People, increasing employment, productivity, creating wealth and generating and equilibrated and inclusive development". Also, Mozambique was one of the first countries in Africa to fully endorse the Sustainable Energy for All (SE4ALL) Initiative back in 2013. A more recent step towards renewable energy is the signature in 2016 between Mozambique, the EU, 13 Member States and Norway of the "Joint Declaration on reinforced cooperation in the field of renewable energy". Finally, in order to achieve SDG-7, in 2018, the Government approved the National Electrification Strategy and the Integrated Master Plan for Electrification that defines the institutional framework and sets the technical and financial

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<sup>8</sup> World Bank, Air pollution-related health and climate benefits of clean cook stove programs in Mozambique: A scoping analysis, June 2016.

<sup>9</sup> OJ C 210 of 30.6.2017.

<sup>10</sup> SWD(2017)482 final of 15.12.2017.

<sup>11</sup> COM(2018)643 final of 12.9.2018.

<sup>12</sup> SWD(2015)182 final of 21.9.2015.

scheme to succeed in this objective. For the implementation of this strategy, the Government also launched the "Energy for All" programme to which this action should contribute. Besides, the Government has undertaken the review of the electricity law in order to create a more conducive business environment. The revised law is expected to be approved in 2020.

The action will contribute to the implementation of Mozambique's Nationally Determined Contributions (NDC) under which the country is committed to develop and finance 2.200 MW of new renewable energy projects and to reduce greenhouse gas emissions for about 76.5 metric tons of carbon dioxide equivalent (MtCO<sub>2</sub>eq) from 2020 to 2030.

The country has a national gender strategy, a specific strategy for the prevention of child marriage as well as a gender country profile which suggests priorities, coordination and monitoring mechanisms.

#### **1.4 Stakeholder analysis**

- The Ministry of Mineral Resources and Energy (MIREME) plans the national energy strategy and oversees the operations and development of the energy sector. The MIREME is present in all the provinces through Provincial Directorates for Mineral Resources and Energy (DIPREME).
- Supervised by the Minister, the Energy Regulatory Authority (ARENE) – created by decree in 2017 – is a fully independent body with the role of regulating, sanctioning and supervising in the area of energy. Electricidade de Mozambique (EDM) is the publicly owned utility responsible for generation, transmission, distribution and retail supply of electricity to more than 1 800 000 grid-connected users. It is the fourth largest company in Mozambique. Through its 2018-2028 Strategy, "Lighting Mozambique's Transformation", EDM aims to become a commercial, financially viable and smart utility.
- National Energy Fund (Fundo de Energia, FUNAE) is a rural electrification fund subordinated to the MIREME established to develop and promote a sustainable management of power sources and to develop off-grid projects to increase electricity access for people living in rural areas. Although initially setup as a fund, at present, FUNAE mostly implements liquid fuel and off-grid access projects in rural areas.
- The Ministry of Agriculture and Food Security, the Ministry of Seas, Internal waters and Fisheries, the Ministry of Industry and Trade, as well as the Ministry of Land, Environment and Rural Development are institutions called to play an important role in the coordination of activities aiming to increase access to energy.
- The private sector including businesses, financial intermediaries and associations active in the promotion of sustainable energy access such as the recently created Mozambican Association for Renewable Energy (AMER). The number of companies registered in the association is quite limited with a small number of them with capacity to promote large investments. Less than a handful of companies are present in the segment of the Solar Home Systems (SHS) market, due to a non-conducive business environment and this despite the country's huge potential.
- International Finance Institutions (IFIs) are well represented in Mozambique. Are present through local offices: KfW, *Agence française du Développement* (AFD), the African Development Bank (AfDB) and the World Bank (WB) / International Finance Corporation (IFC). All of them have renewable energy as direct or indirect priority area of intervention in the country. After the discovery of undisclosed government loans worth up to USD 2 billion in 2016 and the withdrawal of the International Monetary Fund's (IMF) aid, IFIs have reduced their loan operations to nil prioritising the use of grants and limiting their activities to the preparation of projects for the pipeline. However, IFIs continue their support to Mozambique by

extending financial support to the private sector privileging credit lines through local commercial banks and equity or debt funding instruments.

- Final beneficiaries getting access to energy services, and women and girls in particular.

### 1.5 Problem analysis/priority areas for support

The following are the main problem areas identified in the Sector that need to be addressed, also to achieve SDG7 and SDG13:

- In 2017, Mozambique was positioned almost at the bottom of the Regulatory Indicators for Sustainable Energy (RISE) ranking with a score of 18 out of 100. Mozambique's poor performance is mainly due to the very low access rate to energy (31 %), absence of energy efficiency and renewable energy policies, programmes, planning, incentives, penetration, appropriate legal frameworks, etc.
- The increasing electricity demand in the system (average peak load growth has been 14 % per year in the last 7 years) demands huge investments in generation, which are difficult to meet, but also in transmission and distribution.
- More than 66 %<sup>13</sup> of the Mozambique population is living in rural areas mostly in a scattered distribution pattern. The population's spatial distribution together with their low purchase capacity entails that traditional solutions for electrification, i.e. grid extension, are not economically, financially and commercially sustainable. New technologies and approaches such as mini-grids, solar home systems, improved cook stoves, PAYGO, etc. appear to be more appropriate ways to deliver energy services in Sub-Saharan Africa.
- The losses of EDM are amongst the highest in the Southern Africa Region. Commercial (18 %) and technical (10 %) losses have an enormous impact on the balance sheet of the utility. While reduction of losses can improve notably the commercial operations and financial sustainability, power saving can be used to increase the number of customers and the supply quality.
- Cost-recovery of rural electrification: It has been observed that both grid extension and off-grid solutions are not yet financially profitable for the private sector. For them to invest in the provision of energy services, public support is required.
- Maximising benefits of rural electrification: other stakeholders, namely the ones who provide the link to productive uses of energy (Ministries of Agriculture, Fisheries, Environment or Industry), need to be involved to maximise return from electrification programs.
- Very limited number of donors and private investors attracted by rural electrification projects because of low return, low bankability and high risk. Donors, development banks and private investors are mainly focused on large generation and transmission projects, as well as grid maintenance/rehabilitation projects.

## 2 RISKS AND ASSUMPTIONS

Risks	Risk level (H/M/L)	Mitigating measures
The debt crisis constitutes a major risk for the macro-economic stability and for the debt sustainability in general	H	<ul style="list-style-type: none"> <li>• Continue promoting improved and transparent public finance management (EU funded project).</li> </ul>

<sup>13</sup>

2017 Census data



		<ul style="list-style-type: none"> <li>• Close follow up of art.4 missions by IMF.</li> </ul>
Failure to attract private sector to the renewable energy sector due to high country risk.	H	<ul style="list-style-type: none"> <li>• Use of grant financing and guarantees to reduce the country risk.</li> </ul>
Failure to identify roles and responsibilities of institutional organizations to achieve SDG-7 by 2030.	L	<ul style="list-style-type: none"> <li>• Implementation of the National Electrification Strategy.</li> <li>• Advocacy and policy dialogue to define objectives and roles and introduce sector reforms.</li> </ul>
Failure to recover investment costs.	M	<ul style="list-style-type: none"> <li>• Support the approval of the new Electricity Law that set up a new cost-reflective tariffs policy.</li> <li>• Stimulate demand growth through marketing and synergies with other productive sectors.</li> </ul>
Lack of capacity to implement projects.	M	<ul style="list-style-type: none"> <li>• Technical assistance provision to direct beneficiaries (both public and private) to be included in the direct support to investment.</li> <li>• Strengthening complementarity and synergies with the EU funded Energy Project Preparation Facility for Mozambique (including Get.Invest and the Resource Centre technical assistance).</li> </ul>
Insufficient incentives for the private sector to invest in the energy sector.	H	<ul style="list-style-type: none"> <li>• Consolidation of ARENE by the Government.</li> <li>• Monitoring of overall economic development and adjustment of percentage of the private sector contribution, if required.</li> <li>• Reinforce policy dialogue in the framework of the Sustainable Energy Joint Declaration and the ongoing Project Preparation Facility to support measures for enabling investment environment.</li> </ul>
Market distortion.	L	<ul style="list-style-type: none"> <li>• Rural electrification projects are generally low return and low bankability projects.</li> <li>• Limited by remoteness, country size and reduced number of interested investor.</li> <li>• A market analysis to be conducted.</li> </ul>
Structural (social, cultural, economic) constraints affecting gender equitable access to energy services are a risk and may hinder outcomes and sustainability of the action.	M	<ul style="list-style-type: none"> <li>• Gender analysis to be elaborated by projects being supported.</li> </ul>
Rapid on-set disasters can heavily affect the country.	H	<ul style="list-style-type: none"> <li>• Mobilisation of crisis modifier.</li> </ul>
<b>Assumptions</b>		
<ul style="list-style-type: none"> <li>• All players are cognisant of the fact that without energy there can be no sustainable economic development leading to rural development and poverty alleviation.</li> <li>• Political and security stability is granted.</li> <li>• Macro-economic situation is stabilised/improved.</li> <li>• Business environment continues to improve.</li> </ul>		

### **3 LESSONS LEARNT AND COMPLEMENTARITY**

#### **3.1 Lessons learnt**

Lessons learnt stem mainly from the Mozambique's energy related reports, Results-oriented monitoring (ROM) missions, final evaluation of the projects under the 9<sup>th</sup> EDF Energy Facility in Mozambique, regular participation at the energy sector working group, the stocktaking mission by the Technical Assistance Facility (TAF) and the intense exchange carried out during the identification missions with stakeholders, public and private:

- Access to electricity is rarely a stand-alone action and takes a long time for implementation. Program approaches are to be favoured so as to integrate the stakeholders in charge of access in the action, namely EDM, FUNAE and the private sector.
- In order to optimise efforts and investments in the energy sector, there is a need for a framework for action with an overall perspective of the system such as an energy planning tool, which also considers off-grid electrification and energy efficiency. The National Electrification Strategy (November 2018) should guide efforts from different stakeholders to achieve the SDG7.
- Institutional capacity needs to be strengthened to ensure strategic planning and programs implementation is done efficiently, coherently and timely to achieve expected results.
- The capacity reinforcement of the ARENE in order to become a real regulator in the energy market will be key to provide for more transparency in the energy sector, especially in a context where provision of energy services is likely to escape the monopoly of EDM and FUNAE if openness to the private sector as provider of services is accomplished through the approval of the new Electricity Law.
- It is important to make as much use as possible of new policies and tools that provide room for private Sector participation, such as review of the electricity law, clean energy auctions/tenders, country risk guarantees, etc.
- EU funded interventions should be coordinated with other donors for joint purposes and to maximise impact.
- Level of project maturity is overall very low which requires additional support in terms of technical assistance for project development.

#### **3.2 Complementarity, synergy and donor coordination**

Important synergies are expected with the 11<sup>th</sup> EDF supported programmes in particular with the first phase of the energy programme for Mozambique, the Project Preparation Facility that aims to provide technical assistance, capacity building, regulatory framework reforms and project development. It is expected that projects supported and having reached financial close under the Project Preparation Facility will be prioritised for investment support under this action.

Moreover, the action will be complementary with the activities funded under the EIP, both the specific envelope allocated to Mozambique and the different guarantee schemes to support renewable energy development (EFSD Guarantees<sup>14</sup>) plus activities already ongoing such as PROLER<sup>15</sup> or GET.Fit<sup>16</sup>.

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<sup>14</sup> In particular, Room2run and European Guarantee for Renewable Energy.

<sup>15</sup> PROLER is the "Renewable Energy Auction Project" funded by the EU through the Africa Infrastructure Trust Fund for EUR 4 000 000 and implemented by AFD. PROLER will contribute to the installation of over 200MW of solar and wind power by developing a legal and operational framework favourable for IPPs. The first auction round is expected by end 2019.

In addition, the action is complementary with the EU PROMOVE strategy to implement projects on Trade, Agro business, Road Transport, Nutrition and Biodiversity with a particular focus on the provinces of Zambezia and Nampula. PROMOVE Energia will concentrate its interventions in the two mentioned provinces but other geographical areas are not excluded to ensure absorption, best use of funds and higher results impact. It will also be complementary with the activities supported by the Global Climate Change Alliance + Programme in Mozambique.

The energy sector in Mozambique is one of the most challenging and competitive sectors for donors. Currently more than 15 donors are implementing energy programmes/actions. Donor coordination is ensured by an active Energy Sector Working Group (ESWG) that meets bi-monthly and ensures coordination and exchange of information and ideas about the whole non-extractive part of the energy sector. Traditional donors regularly attend the meeting. However, other important partners in the energy sector such as China, India, South Korea or the Islamic Development Bank have shown no interest in participating. Government officials participate regularly in the group. The ESWG is currently co-chaired on donors' side by Norway and the EU. Attempts of the ESWG to increase ownership of the matrix by government as a coordination tool have had limited results.

The following table summarises the focus of the different donors active in the energy sector in Mozambique, related to the specific objective of the action.

<b>Donor/actor</b>	<b>Focus</b>
AFD	EDM Hydropower/gas to power projects
AfDB	Capacity Building of EDM, MIREME Promotion of renewable energy, transmission backbone, EDM Hydropower project
Enabel (Belgian Cooperation Agency)	MIREME/FUNAE Technical Assistance, FUNAE direct investment, Technical Assistance to ARENE
UK - DFID (The Department for International Development)	MIREME/FUNAE Capacity Building. Promotion of solar home systems and improved cook stoves.
EIB (European Investment Bank)	EDM transmission/distribution projects. Large generation projects
GIZ	Pico solar and improved cook stoves; vocational training in solar energy
KfW (	EDM Hydropower projects, EDM transmission/distribution; GET Fit Mozambique Programme
Norway / NORAD (Norwegian Agency for Development Cooperation)	Institutional Technical Assistance to MIREME, EDM grid densification, Independent Power Producers (IPP) solar generation, Technical assistance to FUNAE, transmission backbone
Sweden / SIDA (Swedish International	EDM expansion of grid, Technical Assistance for

<sup>16</sup> The acronym stands for "Global Energy Transfer Feed-in Tariff". GET FiT was first successfully implemented in Uganda where it contributed to the installation of roughly 160 MW through 17 small-scale renewable energy generation projects promoted by private developers. GET FiT Uganda was also funded with an EU contribution of EUR 20 000 000. KfW, the implementing partner, is now rolling out the project to other countries in East Africa. In Mozambique, the target is to contribute to the installation of an additional generation capacity of 130 MW solar and small hydropower in a period of 6 years. of. KfW has already secured EUR 25 000 000 from BMZ.

Development Cooperation Agency )	Hydropower projects; transmission backbone; hydropower generation
USAID	Energy regulation framework, energy efficiency,
JICA (Japan International Cooperation Agency)	EDM power transmission and gas generation project
WB	EDM grid densification, Transmission back bone, gas power generation (IFC), EDM energy efficiency,
The Netherlands	Multi-stakeholder platform for coordination.

The action will be complementary to all these programmes. Activities will be coordinated bilaterally where necessary and in general through the Energy Sector Working Group.

## 4 DESCRIPTION OF THE ACTION

### 4.1 Overall objective, specific objective, expected outputs and indicative activities

The **overall objective** of the action is to promote sustainable, inclusive and gender equitable economic growth and reduce poverty in the context of national food and nutrition security (FNS) and climate change.

One **specific objective (OS)** is defined for the action:

OS1. Citizens and businesses, particularly in rural areas, are benefitting from improved access to sustainable and affordable electricity.

The **expected outputs** of the action are:

1. Peri-urban and rural areas get access to energy services through both the grid network and adapted off-grid solutions;
2. Power utility improves its energy efficiency and reduces its technical and financial losses;
3. The availability and effective use of improved cook stoves has increased.

The **main indicative activities** as per output are the following:

**Output 1: Peri-urban and rural areas get access to energy services through both the grid network and adapted off-grid solutions**

#### 1.1 Extension, strengthening and densification of the existing energy grid network.

The proposed activity contributes to the implementation of the national programme "Energy for All" and will support the electricity access expansion to peri-urban and rural areas by extending and densifying the existing grid network and by promoting the use of off-grid energy solutions in those areas where the grid extension is considered economically unfeasible. Funds will be pooled with the World Bank, Sweden and Norway in a Multi-donor trust fund expected to connect around 250 000 households (1 250 000 people), of which 185 000 are in rural areas and 65 000 in peri-urban areas. It is expected that nearly 50 % of new connections are made in the five poorest provinces of Mozambique – Niassa, Nampula, Zambezia, Cabo Delgado and Sofala. In particular, the EU's contribution will earmark the connection of over 60 000 new customers (300 000 people) in the provinces of Nampula and Zambezia, those presenting the lowest access rate to electricity.

Design, procurement of materials and construction works required to electrify all participating households and businesses in the project target areas with high population density, located close to existing electricity networks will be carried out by EDM and funded by the Multi-donors trust fund. The average cost per connection is estimated at USD 505, four times lower than the cost associated

to recent electrification projects implemented by the utility. Implementation will also strengthen EDM's procurement, management and overall efficiency. Project beneficiaries will be exempted from upfront connection charges. However, they will pay a monthly fee that is going to feed the national electrification account from where other electrification projects will be funded.

## **1.2 Provide access to finances to support investment on renewable energy and energy efficiency and in particular off-grid technologies (mini-grids and solar home systems) and solutions for a productive use of energy.**

As ongoing reforms in the sector are materialised and the overall investment climate and macroeconomic context improve, development and in-flow of companies operational in this sector are expected to rise. Access to finances will therefore be key in order to allow interested companies to develop their business plans. By the likes of ElectriFI, GET.Fit or similar financial instruments such as specific credit lines, PROMOVE Energia will make available necessary funding to de-risk investment operations related to IPPs, mini-grids and solar home systems. It is expected to leverage investment from the private sector to connect some 400 000 households. Projects developed with the support of the Project Preparation Facility (first phase of the EU energy programme for Mozambique) should benefit directly from this activity. It is also expected that access to specific credit lines through local financial institutions will facilitate the adoption of renewable energy solutions and energy efficiency technologies to catalyse productivity and competitiveness of small and medium enterprises (SMEs) in rural areas. Other programmes implemented successfully in neighbouring countries such as SUNREF could have an opportunity in Mozambique if the business environment becomes more conducive in the short-time. In addition, resources from the Project Preparation Facility (GET.Invest component) will also be mobilised to study the potential for an ElectriFi specific window for Mozambique.

## **Output 2: Power utility improves its energy efficiency and reduces its technical and financial losses**

### **2.1 Contribution to the implementation of the action plan to enhance the energy efficiency of the utility and to reduce electricity losses.**

The power utility EDM developed the "Commercial Metering and Loss Reduction Strategy". This strategy identifies several initiatives to reduce commercial losses, improve operational efficiency and enhance service. EDM has reported both commercial and technical losses amounting to 28 %. PROMOVE Energia aims to reduce these losses by contributing to the implementation of the above-mentioned strategy and the utility Master Plan 2028-2058 that also foresees a series of investments on energy efficiency and losses reduction. This should also contribute to making the company financially viable and operationally sustainable. Specific activities will be discussed in a later stage but they will address significant parts of the losses value chain with particular attention on commercial aspects and demand side management. A mix of technical assistance (establishment of a meter control centre (MCC), consolidate energy balance, establishing roles and organizational structure for loss management, increase EDM staff skills, etc.) and direct investment support (installation of split pre-paid meter, optimizing substations by installation of remote reading meters, street lighting, replacement of bulbs, etc.) will be identified for quick-wins. Alignment and potential collaboration with the Super-ESCO programme to be launched at central level by the Directorate-General for International Cooperation and Development (DG DEVCO) will be sought.

## **Output 3: The availability and effective use of improved cook stoves has increased.**

### **3.1 Marketing and promotion of improved cook stoves.**

The emerging markets for improved cook stoves will be strengthened following a fully commercial approach (no end-user price subsidies are granted). Small entrepreneurs will be supported with

training, awareness campaigns, marketing, strengthening the production and distribution chain, and access to finance options (where possible through result-based financing schemes) for their customers, mainly but not exclusively through Pay-as-you-go (PAYGO) modalities. The latter meaning that companies promoting and scaling-up pico-solar and solar home system will also benefit from these activities as they will be used as main vehicle for promotion, distribution and selling of improved cook stoves. The following four (4) types of financial support to micro, small and medium enterprises (MSMEs) will be in offer: i) managerial and financial support to companies for the initiation of new activities or expansion; ii) results-based financing; iii) technical assistance in product development and/or selection, business models and financing for selected activities (e.g. cash advances for start-up, stock or distribution) channelled through NGOs with a track record in Mozambique, and; iv) carbon credits. In addition, because the nature of the improved cook stoves, marketing and finance of this product will be also supported by development of product quality standards through the Biomass and Energy Certification and Test Center (BECT) at the University Eduardo Mondlane Foundation therefore building skilled local capacity. Complementarity and collaboration will be sought with the Clean Cooking Alliance for implementation of ISO standards in Mozambique. Promotion and distribution of biomass related activities are not foreseen under this action however transition to biomass alternative fuels will be supported in some pilot localities. Through these activities, the PROMOVE Energia could reach some 21 000 households (or 109 200 people). The activities will be implemented through a contribution to the Energising Development Programme (EnDEV) that has implemented similar activities successfully in the country during the last 10 years. Alignment and potential collaboration with the Super-ESCO (Energy Service Company) programme to be launched at central level by DG DEVCO will be sought. Overlapping with GET.Invest's activities is unlikely since the latter focuses on solar home systems, IPPs or captive power project bankability and market information. However, coordination of activities will be strengthened.

In order to align the action with the geographical focus of the NIP, all the results are expected to have a higher impact on the provinces of Nampula and Zambezia.

## **4.2 Intervention logic**

PROMOVE Energia is part of the comprehensive PROMOVE approach under the 11<sup>th</sup> EDF to tackle rural development in Mozambique and in particular in the two provinces of Zambezia and Nampula. Therefore, PROMOVE Energia is complementary with other actions supported under the rural development focal sector, in particular with PROMOVE transport (road sector), nutrition, biodiversity and agribiz (agriculture competitiveness).

PROMOVE Energia will allow the EU to provide a more coherent, responsive, efficient and effective support to increase access to sustainable energy in Mozambique. In that sense, this action should be understood as the logical continuity of the first phase of the EU energy programme for Mozambique, the energy Project Preparation Facility (PPF). The PPF is supposed to boost and to prepare the ground for project direct investment. The PPF's expected results are (1) to reinforce the capacities of public institutions to implement the energy policies and to improve programmes, (2) to create an enabling environment to facilitate investments in renewable energy and (3) to support a series of public and private investment projects in renewable energy to reach maturity level of financial close. Building on the results of the PPF and other facilities, PROMOVE Energia will provide the necessary access to finances to materialise the investment projects.

This action will also be complementary to the activities funded under the EIP specific envelope for Mozambique of EUR 99 000 000 financed on the 11<sup>th</sup> EDF National Indicative Programme (NIP). In this programme, an envelope is reserved for the energy sector with the main aim to increase the

generation capacity through utility scale IPPs, while PROMOVE Energia will particularly focus on connecting people and businesses, one of the main indicators of the NIP for Mozambique.

The diversity of activities proposed should be interpreted as the best way to: i) reduce country associated risks while delivering results, ii) ensure coordination and joint programming with Member States (MS) and other donors; and iii) ensure project management and monitoring with limited European Union Delegation human resources.

By pooling funds into a multi-donors' trust fund managed by the World Bank, the action pursues to significantly increase the number of people connected to the grid in peri-urban and rural areas. Macroeconomic situation and debt distress of both the Government and the public utility only allow for support to the utility through grants. Therefore, supporting the multi-donors trust fund is the best way of pooling resources, avoiding overlapping and overstretching of local stakeholders' limited capacities. This approach is also the most appropriate to guarantee donor coordination and to ensure coherence, efficiency and maximise results. A densification or "last-mile connection" programme will build local capacities by supporting transparent procurement for the provision of equipment/material, logistics, the appropriate use of technologies and good project management. In addition, financing the cost of connection, often the main barrier for last-mile customers, will significantly increase the number of people connected to the grid and will also improve the economic and financial return of important investments on grid extension made during the last years.

However, by increasing the number of clients there is a risk to further increase losses, in particular the commercial ones (currently 18 %). Therefore, the action proposes simultaneously the implementation of activities aimed at improving energy efficiency and reducing losses. As such, the financial sustainability of the utility should improve. At the same time, energy saving should allow for additional connections. It is estimated that these activities will increase over 12 % the number of EDM clients and increase the country access rate by more than 4 %.

In order to strike a good balance between people connected to the grid and those out of its reach, the action also foresees to increase accessibility to off-grid solutions. These have already proved how important they are to bring energy services to people living in remote or thinly populated areas where grid extension is not financially justified. Unlike the grid sector, which is dominated by a public company, the off-grid market is driven by private companies. Mozambique, with more than 66 % of its population living in rural areas, most of them isolated and distant from the grid network, offers them plenty of opportunities to expand their services. The National Electrification Strategy identifies the market potential for private-sector led off-grid electrification as approximately 4 000 000 households. The prospect of a new Electricity Law by 2020 that is more business-oriented, the operationalisation of the recently created Energy Regulator, the medium term positive economic outlook due to the materialisation of large gas projects as well as the existing support to project preparation under the energy PPF, should contribute to build a pipeline of projects requiring access to finances. In order to leverage funds from the private sector willing to invest in Mozambique, adequate financial tools must of course be available. Both AFD and AfDB have identified Mozambique as a priority country for the implementation of the European Guarantee for renewable energy (EGRE) and the Room2run guarantee respectively. Additionally, KfW also foresees the implementation in Mozambique of the African local currency bond guarantee to support SMEs' investment. Possible activities this action could contribute to through the Africa Investment Platform are the set-up of an ElectriFI country window with FMO, able to bring risk capital, the creation of specific credit lines in local commercial banks for renewable energy and energy efficiency with KfW/AFD and the extension of SUNREF with AFD. Considering the Mozambican context, it is expected to leverage the EU funds at least 3 times.

Finally, the action also intends to lower the percentage of the country's population relying on biomass (charcoal and wood) for cooking (currently 90 %). The activities to promote the use of improved cook stoves and/or the shift to biomass alternative fuels will help to improve people's health, in particular women and children, in addition to reduce the pressure over the forestry and biodiversity resources and to safeguard ecosystem resilience to climate change. To ensure sustainability, the action will privilege support to SMEs, strong synergies with PAYGO solar service companies and the empowerment of women and girls.

### **4.3 Mainstreaming**

Energy stakeholders already dispose of management policies that include various cross-cutting issues. EDM has a safety & health policy, FUNAE is already ISO 3200 certified and Sweden is supporting activities to prepare a "gender policy" that can be applied to the energy sector. The energy tariff is already structured in different steps to make energy more affordable and inclusive by ensuring its accessibility to vulnerable people.

Gender: Women play a crucial role in agriculture production and sustainable use of natural resources. Access to energy is recognised as a key factor to address gender issues. Due to poor access to energy services, their business development is over proportionally constrained by high-energy costs. Women will directly benefit from the programme, where access to energy will lead to increased availability of services, lower prices and better quality (security). Besides, promoting the use of alternative sources of energy for cooking or the use of improved cook stoves will result in better health conditions for women and girls.

Particular attention will be given during the implementation phase to include gender sensitive indicators in the log-frame of individual projects and to provide disaggregate data to monitor real impact on gender following the guidelines of the new EU gender action plan 2016-2020. Productive use of energy should consider women's empowerment and energy projects requiring resettlement plans would put the accent in women rights. In addition, women entrepreneurs will specifically be targeted in off-grid solar energy distribution networks. A gender analysis will have to be elaborated by projects being supported by this action.

Women's participation will be encouraged in community liaison groups and other representative groups on works sites. As per EDM, FUNAE and other stakeholders' policies on women in energy projects, statistics will be collected on an annual basis on the number of women benefiting of the activities, participating in the workforce and in awareness activities on site.

Climate Change: Currently, Mozambique's energy mix is overall "clean" as it relies highly on hydropower generation. However, coal and natural gas power generation, stimulated by the huge reserves available in the country as well as the increasing national and regional demand for energy, will substantially modify the energy-mix in the coming years. Biomass is widely used: over 90 % of Mozambican households rely on biomass (firewood or charcoal) for cooking which puts large pressure on the country's forest resources. A specific biomass strategy exists mostly focusing on improved cook stoves' actions as well as proposing alternative sources of energy. Linkages between sustainable energy and the fight against climate change are straightforward. Improved access to affordable, clean, safe and sustainable energy will directly reduce the CO<sub>2</sub> footprint. Sustainable energy access will reduce consumption of fossil fuels and biomass, and thus, reduction of greenhouse gases emission and deforestation, the most common sources for lighting for the final action's beneficiaries. Moreover, improved access to sustainable energy will help Mozambique to attain its Nationally Determined Contribution (NDC) target (reduction of the greenhouse gas



emissions by 76.5 megatons of CO<sub>2eq</sub> from 2020 to 2030) following the signature of the Paris Agreement.

**Environment:** New investments will respect the existing environmental policy and can only receive the greenlight after thorough environmental and social impact assessments ensuring that the project abides with national and international legislation applicable. Appropriate compensation of landowners needs to be considered as well as adequate correction and accompanying measures and clearance from the competent authority.

**Rapid onset disasters:** Specific shock-sensitive solutions, such as crisis modifiers, may be defined under implementing grants/contracts, where it is considered feasible and suitable. This will allow for supporting actions such as immediate reestablishment of critical transmission lines, transformer posts, substations or generation plants and provision of energy to water treatment plants, health and education services amongst others.

#### **4.4 Contribution to Sustainable Development Goals (SDGs)**

This programme is relevant for the Agenda 2030. It contributes primarily to the progressive achievement of SDG7, universal access to affordable and clean energy, and SDG13, climate action to combat climate change and its impact. It also contributes to SDG3, ensure healthy lives and promote wellbeing.

## **5 IMPLEMENTATION**

### **5.1 Financing agreement**

In order to implement this action, it is foreseen to conclude a financing agreement with the partner country.

### **5.2 Indicative implementation period**

The indicative operational implementation period of this action, during which the activities described in section 4 will be carried out and the corresponding contracts and agreements implemented, is 60 months from the date of entry into force of the financing agreement.

Extensions of the implementation period may be agreed by the Commission's responsible authorising officer by amending this Decision and the relevant contracts and agreements.

### **5.3 Implementation of the budget support component**

N/A

### **5.4 Implementation modalities**

The Commission will ensure that the EU appropriate rules and procedures for providing financing to third parties are respected, including review procedures, where appropriate, and compliance of the action with EU restrictive measures<sup>17</sup>.

#### *5.4.1 Indirect management with an international organisation – World Bank*

A part of this action may be implemented in indirect management with the World Bank. This implementation entails the action 1.1 Extension, strengthening and densification of the existing

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<sup>17</sup> [www.sanctionsmap.eu](http://www.sanctionsmap.eu) Please note that the sanctions map is an IT tool for identifying the sanctions regimes. The source of the sanctions stems from legal acts published in the Official Journal (OJ). In case of discrepancy between the published legal acts and the updates on the website it is the OJ version that prevails.

energy grid network contributing to output 1: "Peri-urban and rural areas get access to energy services through both the grid network and adapted off-grid solutions".

The envisaged entity has been selected using the following criteria: Recognizing the need to harmonise and simplify procedures independently of the sources of financing, WB together with Sweden and Norway have set up a Multi-Donors Trust Fund (MDTF) to be administrated by the World Bank for investments for on-grid connections. This project is part of a coordinated effort by the donor community to implement the National Electrification Strategy ensuring that resources fully support the principles of the strategy as established by the Government, particularly for on-grid with the highest potential to reach a larger number of new households in a sustainable manner. The WB is the administrator because of its sound, long-standing experience in the energy sector in Mozambique. The WB has committed \$80 million to the trust fund while Norway and Sweden will contribute each with the equivalent to \$20 million. The WB's energy portfolio in Mozambique amounts to over \$500 million. The WB has also accompanied the Government in the drafting of the National Electrification Strategy and is a key partner for redressing the national utility. Moreover, the WB has the financial solidity and experience to manage multi-donor trust funds.

#### *5.4.2 Indirect management with a Member State Organisation*

A part of this action may be implemented in indirect management with an entity, which will be selected by the Commission's services. This implementation entails all actions contributing to output 2: "Power utility improves its energy efficiency and reduces its technical and financial losses". The envisaged entity will be selected using the following criteria:

- to be a longstanding cooperation partner of the power utility, EDM, and having created a trustworthy partnership with it;
- to have also achieved successful results in different areas of collaboration with EDM including the financing of special purpose vehicle for IPPs, electrification projects and rehabilitation of productive assets;
- to prove experience in supporting EDM's shift towards a more sustainable, adapted and resilient utility;
- to have capacity to bring large experience with other utilities across the African continent addressing similar problems and mobilise additional human resources by sponsoring twinning with European utilities, therefore contributing to a real transfer of know-how;
- to be pillar assessed, and;
- to have permanent representation in Mozambique and dedicated staff to the energy sector to ensure proper follow up, close monitoring and successful implementation.

#### *5.4.3 Indirect management with a Member State Organisation*

A part of this action may be implemented in indirect management with an entity, which will be selected by the Commission's services using the following criteria. This implementation entails all actions contributing to output 3: "the availability and effective use of improved cook stoves has increased." The envisaged entity will be selected using the following criteria:

- to have previous experience in Mozambique in the successful implementation of activities related to the National Biomass Strategy;
- to have a commercial approach that puts the accent on the important role of the private sector as well as contrasted experience in supporting MSMEs;
- to be able to customise financial and technical support according to the beneficiaries (results base financing, technical assistance, investment grants);

- to prove experience in advocacy and policy dialogue with local authorities;
- to have demonstrated experience working in the improved cook stoves' sector;
- to be pillar assessed, and;
- to have permanent representation in Mozambique and dedicated staff to the energy sector to ensure proper follow up, close monitoring and successful implementation.

#### *5.4.4 Contribution to the Africa Investment Platform*

This contribution may be implemented under indirect management with the entities, called Lead Finance Institutions, identified in the appendix to this action document.

The action might contribute to create a country window for ElectriFi and support other financial mechanisms ongoing or planned by eligible European financial institutions and development banks.

### **5.5 Scope of geographical eligibility for procurement and grants**

The geographical eligibility in terms of place of establishment for participating in procurement and grant award procedures and in terms of origin of supplies purchased as established in the basic act and set out in the relevant contractual documents shall apply, subject to the following provisions:

- a) The Commission decides that natural and legal persons from the following countries having traditional economic, trade or geographical links with neighbouring partner countries shall be eligible for participating in procurement and grant award procedures: South Africa. The supplies originating there shall also be eligible.
- b) The Commission's authorising officer responsible may extend the geographical eligibility on the basis of urgency or of unavailability of products and services in the markets of the countries concerned, or in other duly substantiated cases where the eligibility rules would make the realisation of this action impossible or exceedingly difficult.

## 5.6 Indicative budget

Budget line	EU contribution (EUR)
<b>5.4.1 Indirect management with WB</b> Output 1. Peri-urban and rural areas get access to energy services through both the grid network and adapted off-grid solutions 1.1 Extension, strengthening and densification of the existing grid network	<b>30 000 000</b>
<b>5.4.2 Indirect management with MS Organisation, 3<sup>rd</sup> donor country or EU agency or international organisation</b> Output 2. Energy efficiency and losses reduction are improved 2.1. Contribution to the implementation of the utility efficiency and reduction of losses action plan	<b>10 000 000</b>
<b>Output 2. Energy efficiency and losses reduction are improved</b> 2.1. Contribution to the implementation of the utility efficiency and reduction of losses action plan	
<b>5.4.3 Indirect management with MS Organisation, 3<sup>rd</sup> donor country or EU agency or international organisation</b> <b>Output 3. Use of biomass for cooking is reduced</b> 3.1. Marketing and promotion of improved cook stoves	<b>5 000 000</b>
<b>5.4.4 Contribution to the Africa Investment Platform</b> Output 1. Peri-urban and rural areas get access to energy services through both the grid network and adapted off-grid solutions 1.2 Provide access to finances to support investment on renewable energy and energy efficiency and in particular off-grid technologies (mini-grids and solar home systems) and solutions for a productive use of energy	<b>35 000 000</b>
<b>5.9 Evaluation and 5.10 Audit</b>	<b>500 000</b>
<b>5.11 Communication and visibility</b>	<b>500 000</b>
<b>Contingencies</b>	<b>2 500 000</b>
<b>Total</b>	<b>83 500 000</b>

## **5.7 Organisational set-up and responsibilities**

A twofold approach has been chosen to implement the action:

Funds allocated to the Africa Investment Platform will be governed by its established structure. Projects will be selected according to the decisions taken in this order by the Strategic Steering Committee, the Technical Assessment Meeting and Board. The relevant financial institutions will propose the specific governance arrangements. In addition, activities implemented in indirect management by third institutions will also be governed by the specific arrangements defined on the description of the action. As such, a steering committee will be set up under the lead of the WB for the follow-up of activities financed by the multi-donors trust fund.

The EU will ensure that the Government of Mozambique, both the National Authorising Officer and technical Ministries, are implicated in all instances. Private sector and Civil Society Organisations should also participate in the governance set-up of the different activities.

## **5.8 Performance and Results monitoring and reporting**

The day-to-day technical and financial monitoring of the implementation of this action will be a continuous process, and part of the implementing partner's responsibilities. To this aim, the implementing partners shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports (not less than annual) and final reports. Every report shall provide an accurate account of implementation of the action, difficulties encountered, changes introduced, as well as the degree of achievement of its results (outputs and direct outcomes) as measured by corresponding indicators, using as reference the Log-frame matrix. Rights based indicators and related targets should be selected, with data disaggregated (by age, sex, rural/urban, etc.) wherever possible, in order to measure the action's impact on different groups, particularly the most vulnerable.

Reports shall be laid out in such a way as to allow monitoring of the means envisaged and employed and of the budget details for the action. The final report, narrative and financial, will cover the entire period of the action implementation.

The Commission may undertake additional project monitoring visits both through its own staff and through independent consultants recruited directly by the Commission for independent monitoring reviews (or recruited by the responsible agent contracted by the Commission for implementing such reviews).

## **5.9 Evaluation**

Having regard to the importance of the action, a mid-term and final evaluation will be carried out for this action or its components via independent consultants contracted by the Commission.

A mid-term evaluation will be carried out for problem solving, learning purposes, and in particular with respect to with its impact on jobs creation.

A final evaluation will be carried out for accountability and learning purposes at various levels (including for policy revision), taking into account in particular the potential impact that both EU policies supported and financial tools to leverage participation of the private sector have on the achievement of the SDGs' targets. Job creation will also be assessed with particular care.

Both mid-term and final evaluations will assess the extent the action has applied the rights-based approach (RBA), its key principles and frameworks through disaggregated data. The Commission shall inform the implementing partner at least 1 month in advance of the dates foreseen for the

evaluation missions. The implementing partners shall collaborate efficiently and effectively with the evaluation experts, and inter alia provide them with all necessary information and documentation, as well as access to the project premises and activities.

The evaluation reports shall be shared with the partner country and other key stakeholders. The implementing partners and the Commission shall analyse the conclusions and recommendations of the evaluations and, where appropriate, in agreement with the partner country, jointly decide on the follow-up actions to be taken and any adjustments necessary, including, if indicated, the reorientation of the project.

Evaluation services may be contracted under a framework contract.

#### **5.10 Audit**

Without prejudice to the obligations applicable to contracts concluded for the implementation of this action, the Commission may, on the basis of a risk assessment, contract independent audits or expenditure verification assignments for one or several contracts or agreements.

It is foreseen that audit services may be contracted under a framework contract.

#### **5.11 Communication and visibility**

Communication and visibility of the EU is a legal obligation for all external actions funded by the EU.

This action shall contain communication and visibility measures which shall be based on a specific Communication and Visibility Plan of the Action, to be elaborated at the start of implementation.

In terms of legal obligations on communication and visibility, the measures shall be implemented by the Commission, the partner country, contractors, grant beneficiaries and/or entrusted entities. Appropriate contractual obligations shall be included in, respectively, the financing agreement, procurement and grant contracts, and delegation agreements.

The Communication and Visibility Requirements for European Union External Action (or any succeeding document) shall be used to establish the Communication and Visibility Plan of the Action and the appropriate contractual obligations.

It is foreseen that a contract for communication and visibility may be contracted under a framework contract.

### **6 PRE-CONDITIONS**

N/A

## APPENDIX 1 - INDICATIVE LOGFRAME MATRIX

Item	Intervention logic	Indicators	Sources and means of verification	Assumptions
Impact (Overall Objective)	<b>OO:</b> To promote sustainable, inclusive and gender equitable economic growth and reduce poverty in the context of national food and nutrition security (FNS) and climate change	1. Real GDP growth rate** 2. Proportion of population living below \$1.25 (PPP) per day 3. HDI ranking 4. IOF	<ul style="list-style-type: none"> <li>Mozambique Social and Economic Plan</li> <li>Monitoring of the Five-Years Government Plan</li> <li>UNDP Human Development report</li> </ul>	
Outcome(s) (Specific Objective)	<b>SO1:</b> OS1. Citizens and businesses, particularly in rural areas, are benefitting from improved access to sustainable and affordable electricity.	1.1. % of people provided using sustainable energy services*, ** (EU RF L#2.9) 1.2. Non-conventional renewable energy generation capacity installed (MW) ** (EU RF L#2.10) 1.3. Number of new economic activities developed. Data can be disaggregated by gender 1.4. KWh consumption increase 1.5. Greenhouse gas (GHG) emissions avoided (tonnes CO2 eq) ** (EU RF L#2.21)	1.1.MIREME, REN21 reports  1.2.EDM, FUNAE, MIREME, MASA reports 1.3.MIREME, MEF reports  1.4.EDM, MIREME reports  1.5.UNFCC, MIREME, MITADER reports	The Government of Mozambique remains committed to rural development as part of the poverty reduction priorities.  Political and security stability are granted Mozambique institutions' staff is committed  Funds to support investment are available

Item	Results chain: Main expected results (maximum 10)	Indicators (at least one indicator per expected result)	Sources and means of verification	Assumptions
Outputs	<b>O1:</b> Peri-urban and rural areas get access to energy services through both the grid network and adapted off-grid solutions	1.1.1. Km of new LV transmission line 1.1.2. Km of new distribution line 1.1.3. Number of new split-meters installed 1.1.4. Number of mini-grids constructed 1.1.5. SHS kits sold 1.1.6. Number of MW installed for agriculture processes	EDM, reports Project implementation monitoring reports	The Government of Mozambique is committed to the implementation of the National Electrification Strategy and to improve the renewable energy business environment Macroeconomic indicators are stabilised and the country recover from the financial crisis Legal framework improved to attract private investors
	<b>O2:</b> Power utility improves its energy efficiency and reduces its technical and financial losses	2.1.1. % of losses	Project monitoring report EDM, annual reports	EDM committed to implement a Long-term loss reduction plan and improve its energy efficiency.
	<b>O3:</b> The availability and effective use of improved cook stoves (ICS) has increased.	3.1.1. Number of households using ICS (%) 3.1.2. Use of alternative fuels (%)	Project monitoring report	MASA, MITADER and MIREME committed to support this activity as an important contribution to the Government of Mozambique strategy to achieve the NDC



## **Appendix 2: List of eligible Lead Finance Institutions**

- AECID (Agencia Espanola de Cooperacion Internacional al Desarrollo, Spain)
- AFD (Agence Française de Développement, France)
- BIO (Belgian Investment Company for Developing Countries, Belgium)
- CDP (Cassa Depositi e Prestiti S.p.A., Italy)
- DEG (German Investment Cooperation, Germany)
- EIB (European Investment Bank)
- KfW (, Germany)
- COFIDES (Compañía Española de Financiación del Desarrollo, Spain)
- FMO (Nederlandse Financierings-Maatschappij voor Ontwikkelingslanden, The Netherlands)
- PROPARCO (Groupe Agence Française de Développement, France)
- SIMEST (Società italiana per le imprese all'estero, Italy)
- SOFID (Sociedade para o Financiamento do Desenvolvimento, Portugal)
  
- AfDB (African Development Bank)
- The World Bank Group