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This action is funded by the European Union

## ANNEX 3

of the Commission Decision on the Annual Action Programme 2017 in favour of the Republic of Mozambique to be financed from the 11<sup>th</sup> European Development Fund

### Action Document for Mozambique Energy Project Preparation Facility

<b>1. Title/basic act/ CRIS number</b>	<b><u>Mozambique Energy Project Preparation Facility</u></b> CRIS number: MZ/FED/039-635 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 whole country			
<b>3. Programming document</b>	National Indicative Programme (NIP) for Mozambique 2014-2020			
<b>4. Sector of concentration/ thematic area</b>	Rural Development	DEV. Aid: YES <sup>1</sup>		
<b>5. Amounts concerned</b>	Total estimated cost: EUR 11 000 000 Total amount of EDF contribution EUR 10 500 000 This action is co-financed in joint co-financing by: BMZ (EUR 500 000)			
<b>6. Aid modality and implementation modalities</b>	Project Modality Indirect management with Mozambique Indirect management with MS Cooperation Agency (GIZ)			
<b>7 a) DAC code(s)</b>	23000 – Energy generation and supply 23010 – Energy policy and administration management			
<b>b) Main Delivery Channel</b>	12000 – Recipient government			
<b>8. 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)	<input type="checkbox"/>	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"/>

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

	<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>9. 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.			
<b>10. Sustainable Development Goals (SDGs)</b>	SDG-7 Universal access to affordable and clean energy SDG-13 Climate action to combat climate change and its impact			

### Summary

Mozambique's Renewable Energy Atlas (2015) has proved that the country is endowed with an extraordinary mix of renewable energy sources. The least cost effective generation projects identified by the Atlas that could be developed in the short term add up to 7 GW. This potential could satisfy both Mozambique's internal electricity demand and the current deficit of the South African Power Pool (SAPP) making Mozambique one of the energy key players in the SADC (Southern African Development Community) region. Anyhow, current energy access rate in the country is amongst the lowest in the region, with 26% rate connection to the grid and less than 10% to the off-grid (unchecked).

The Government of Mozambique is showing a significant commitment to improve the current picture by developing available resources. Besides the implementation of the National Five Year Plan (Plano Quinquenal do Governo (PQG) 2015-2019), the Government is relying in the elaboration of a National Electrification Master Plan and a New National Energy Strategy, the restructuring of the Energy National Fund (Fundo de Energia (FUNAE)) and the creation of an Energy Regulatory Authority (ARENE) to tackle this challenge. In addition, Mozambique has subscribed both the SE4All objectives and the SDGs with the main objective of providing universal access to energy services by 2030. The Government's recent signature of the Joint Declaration on Renewable Energy with the EU and its member states present in Mozambique at the COP22 in Marrakesh is a proof of the country's commitment to the renewable energy sector development and the fight against climate change.

Universal access to modern, sustainable, affordable and clean energy services has been identified as a necessary condition to support the two-pronged approach agreed for rural development focal sector in the framework of 11<sup>th</sup> EDF NIP: (i) improving food access through production improvements and (ii) enhancement of rural competitiveness through improving living conditions in rural areas and development of private sector activities.

Therefore the Action's specific objective is to achieve and improve access to sustainable and affordable energy to population (gender equitable) and private sector operators, particularly in rural areas, by an enabling environment towards leveraging investments. The Action will try to address major barriers identified in the energy sector to facilitate the development of vast untapped renewable energy resources, mainly: i) low institutional capacity to deal with this new source of energy; ii) lack of an appropriate regulatory framework limiting the participation of the private sector; and iii) absence of tools that could contribute to mature projects up to the level of active development and/or financial close.

Major beneficiaries for this Action will be the Ministry of Mineral Resources and Energy (MIREME), the power state utility Electricidade de Mozambique (EDM), the National Energy Fund (FUNAE), the National Energy Council (CNELEC to be transformed into a Regulator) and the Private Sector. Training, policy and legal advisory services, project marketing, coordination activities reinforcement and technical assistance to conduct required studies to uplift projects to financial close are amongst the activities proposed to be implemented.

The Action will address concerns from both the public and the private sector while paving the way for quick investment. In a second phase, projects supported by this Facility should feed financial instruments such as ElectriFI and AfIF (Africa Investment Facility) under a Mozambique specific window or a direct investment programme funded by the 11<sup>th</sup> EDF NIP.

## 1 CONTEXT

### 1.1 Sector/Country/Regional context/Thematic area

Mozambique has a population of approximately 28 million (52% women)<sup>2</sup>, growing at 2.8% per year<sup>3</sup>, highly dispersed all over the country (low density of 33 people per sq. km.<sup>4</sup>), of which 46% are under 15 years of age. The country is among the poorest in the world, ranking 181 out of 188 on the 2015 Human Development Index. As well it ranks 135 out of 155 in the UNDP gender inequality index report 2015 and 27 out of the 145 in 2015 Gender Gap Report. In recent years, economic growth, driven by the extractive sector, has been strong, exceeding 7%, and income per capita rose on average by 5% per year. In the same period, poverty rates did not decrease and the Gini-coefficient deteriorated from 0.445 (1998) to 0.470 (2014). While the agricultural sector still represents more than a quarter of the Gross Domestic Product (GDP), its growth has been slower, reaching an average 5%. In the absence of a vibrant manufacturing sector and given low contribution of mineral resources development to poverty reduction, agriculture will remain, for the foreseeable future, the biggest employer of the large majority of the population living in rural Mozambique (+/- 70%). Living standards remain extremely low in rural areas among small-scale farmers<sup>5</sup> with 50.1% of the rural population under the national poverty line<sup>6</sup> in 2014. High rates of illiteracy persist in northern and central Mozambique (64% in the provinces of Cabo Delgado, Nampula and Zambézia). At national level, there is a substantial disparity between illiteracy rates for men (30.1%) and women (57.8%). The country as also a high HIV/AIDS prevalence rate of 11.5% especially among girls aged 15 to 24 (estimated to be 11.1% and nearly three times higher than in boys of the same age), and one of the worst nutrition indicator in Africa, with child stunting rates of 43% (of which 24% severely) in 2013.

The macroeconomic situation in Mozambique has deteriorated since the second quarter 2015 due to external (commodity prices, droughts, etc.) and internal shocks (hidden public debt). The lack of trust in the national systems, the drop in the international commodities prices on which Mozambique is highly dependent, reduced foreign direct investment (FDI) inflows and the unrest and political tension in the country have caused a devaluation of the local currency, the metical, against the US Dollar above 100% (year to year) and hiking of the interest rate fixed by the Bank of Mozambique close to 30%. These events drove Mozambique into a spiral of high inflation. Therefore, Mozambique's credit rating has been subsequently downgraded by most rating agencies making access to credit very difficult for the country.

<sup>2</sup> INE, Moçambique Mulheres e Homens 2014.

<sup>3</sup> WB (2014).

<sup>4</sup> <http://data.un.org/CountryProfile.aspx?crName=mozambique>.

<sup>5</sup> Median monthly expense per family in Maputo is around 110 EUR against 30 EUR in rural areas. Relatório final do instituto nacional de estatística, orçamento familiar, dezembro 2015.

<sup>6</sup> Quarta Avaliação Nacional da Pobreza e Bem-Estar em Moçambique, 2014-15. Ministério da Economia e Finanças.

### Energy sector and electricity sub-sector:

Access to electricity in Mozambique is approximately 39%<sup>7</sup> although it varies depending on the source given the lack of uniform definition of the indicator. The gap between current situation and the ambitious target of both the Sustainable Development Goal number 7- Universal access to affordable and clean energy- and the UN-Sustainable Energy for All initiative (SE4All) by 2030 is huge and requires substantial investments providing an enormous opportunity for interventions by investors and donors in power generation, grid extensions and off-grid solutions. The power public utility Electricidade de Mozambique (EDM) has, in the last years, made great efforts to extend the national grid to all the District Centres. 4 out of 128 remained without access in 2015 whereas 77 did not have access in 2004. 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 hydro power.

The total installed capacity in Mozambique is estimated at 2,533 MW, mostly due to the Hidroeléctrica de Cahora Bassa (HCB) 2,075 MW hydropower plant. The rest is composed of EDM and Independent Power Producers (IPP) hydro and thermal power plants, totalling 455 MW. While off-grid systems are numerous, they only add up approximately 3 MW installed capacity and the public nature of management / repair leaves them often in sub-optimal state of functionality. Despite the high installed capacity in the country, most of it is used for export into the South African Power Pool (SAPP). The maximum demand of electricity in EDM's system was 831 MW in 2014<sup>8</sup>, which is higher than the EDM installed capacity (251 MW). EDM therefore purchases its electricity requirements from HCB (87%), IPPs (2%) and imports (4%)<sup>9</sup>. The portion of IPP supply to EDM is bound to increase in order to displace the emergency imports which are very expensive. In fact, the purchase price of electricity is higher than the selling price and this is a cause for concern with respect to the financial viability of EDM and for the sustainable achievement of its electrification mandate. The electricity tariff review in October 2015 and 2016 – an average increase of 27% and 50% respectively – should theoretically allow EDM to gain financial sustainability and at least guarantee running costs for maintenance and operation. However, EDM will continue to rely on traditional development partners for investments.

EDM's technical and non-technical losses in 2014 were almost 26%<sup>10</sup>. Technical losses are mainly due to the very long transmission and distribution lines some of which may be heavily loaded. Industrial and commercial users operating at low Power Factor (PF) also cause high transmission and distribution line losses due to the heating effect on the electrical wires.

### Rural Development Thematic Area:

The current estimated population in Mozambique, growing at an annual rate of 2.8%, is 28 million<sup>11</sup>. Roughly 69% live in rural areas and depend mostly on agricultural activities for their livelihood<sup>12</sup>. This rural population is extremely scattered making costly and difficult the provision of centralised energy solutions. Besides, 50.1% of the rural population lives under the national poverty line in 2014, leading to expected electricity use to less than 1 kWh per day per household. Specifically, the following observations of the rural sector can be made:

- Almost all District Centres are connected to the national grid but uptake of existing power supply is very low.

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<sup>7</sup> Access to the national grid is 25% as per EDM; FUNAE estimates access to electricity by mini-grids and PV stand-alone systems as 14%.

<sup>8</sup> Excluding the demand from BHP Billiton's Mozal Aluminium smelter which is supplied by ESKOM.

<sup>9</sup> EDM 2014 Statistical report.

<sup>10</sup> EDM 2014 annual statistical account.

<sup>11</sup> UNFPA 2015 State of the world population.

<sup>12</sup> and <sup>9</sup> NIRAS Identification of the 11th EDF Geographical Focus and Rural Development Interventions –Mozambique Study.

- Overall, 95% of the total rural population rely on biomass<sup>13</sup>, mainly charcoal, for cooking (91% for urban population) which is leading to deforestation, loss of biodiversity and soils. Cooking with biomass is also behind high frequency of respiratory deficiencies and deaths, mainly affecting women and children.
- 95% of the rural population use fossil fuels and disposable batteries for lighting purposes.
- The level of fisheries and livestock development is low despite its income generation potential. Aquaculture, intensive poultry and dairy farming appear potentially profitable and demand-driven infrastructure is likely to be better managed and maintained ensuring sustainability of the services provided.
- Agriculture is characterised by its very poor productivity levels, difficult access to seeds, and a general lack of irrigation systems, large and small, and post-harvest systems (storage, processing and input supply constraints). In general, processing facilities for value addition at or close to source would allow for cost-effective installation of electricity supply systems.

### ***1.1.1 Public Policy Assessment and EU Policy Framework***

The new five years government plan (PQG) running from 2015 to 2019 has set as global objective: "To improve the living conditions of the Mozambican People, increasing employment, productivity, creating wealth and generating and equilibrated and inclusive development, in an environment of peace, security, harmony and cohesion amongst Mozambicans". To achieve this general objective, increased access to energy has been identified as one of its strategic objectives. The planned activities although are organised around two main programmes: (i) development and improvement of the energy infrastructures' backbone and (ii) socio-economic infrastructure provision, namely electrification of administration's posts, schools and health centres mainly by off-grid solutions. Strategically this is reflecting one of the problems that arose from the identification studies<sup>14</sup> which is, indeed, a need for a more coherent planning between the national grid and the off-grid solutions.

A National Energy Sector Strategy was drafted in late 2015 but it is pending approval by the Ministry of Mineral Resources and Energy. The draft document proposes three axes: (i) expanding the energy access, (ii) increasing the availability of power for economic activities, and (iii) exporting to the regional market. The preparation of the strategy has involved most of the financial partners and it is confirmed to include rural electrification. It includes an ambitious target of 200 000 new connections/year, most of them in non-electrified areas and thus mostly in rural and peri-urban areas.

Concerning renewable energy, Mozambique, acknowledging its renewable resources potential and the necessity to rely on them to provide modern energy services, has already taken significant steps to promote the use of renewable energy systems. Mozambique was one of the first countries in Africa to conduct a rapid gap analysis in terms of renewable energy (2011) and also to fully endorse the UN-launched Sustainable Energy for All (SE4All) Initiative back in 2013. Also in 2011, the Government elaborated the 2011-2025 Strategy for New and Renewable Energy. As follow up of this strategy, in 2014, the Government launched a decree to establish a "feed-in tariff", thus setting a guaranteed price for small renewable energy producers injecting power into the national grid. A further and more recent step in Mozambique's policy towards renewable energy is the signature on November 2016 of the EU-Mozambique Energy Joint Declaration promoted by the EU and its Members States plus Norway to support renewable energy development. Mozambique has also shown interest in subscribing to the Energy Charter. Additional efforts have been put in place by the Ministry

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<sup>13</sup> REN21- SADC Renewable Energy Status report 2015.

<sup>14</sup> WB – sector policy note (2015).

of Energy in order to elaborate a gender strategy for the sector which is currently being drafted.

Overall, Mozambique has well-developed constitutional and legal rights aimed at ensuring gender equality. The Constitution of 2004 explicitly recognises the principle of equality before the law for men and women. The Five Year Government Plan (2015-19) also promotes gender equality in all development, economic, social, and cultural areas and the Ministry of Gender, Children and Social Welfare has the mission to coordinate and promote actions towards gender equality. The country has a national gender strategy, a specific strategy for prevention of child marriage (2015) and also now a gender country profile which suggests priorities, coordination and monitoring mechanisms.

The National Indicative Programme (NIP) EU-Mozambique 2014-2020 to be implemented through the 11<sup>th</sup> European Development Fund (EDF) is focused on governance improvement and rural development fostering. Rural development will be implemented through a project approach. Rural development support aims to (i) improve food security and nutrition status through production improvements; and (ii) enhance rural competitiveness through improving living conditions in rural areas and development of private sector activities. Providing access to affordable, clean and sustainable energy services in the Mozambique context is a key indicator to measure improvement of public services and inclusive economic growth. In fact, the percentage of people with access to electricity in a geographically targeted area is part of the NIP framework indicators.

This action also needs to be understood within a global EU policy framework defined by:

- The Joint Communication from the European Commission and the EU High Representative on "A renewed partnership with the countries of ACP" and "Proposal for a new Consensus on Development".
- The EU Global Public Goods and Challenges adopted for the period 2014-2020 that considers provision of sustainable energy as one of its thematic flagships.
- The EU Communication on the Agenda for Change that praises for a more coherent, aligned, jointly and result oriented cooperation with beneficiaries countries and emphasises the necessity to promote the energy-water-food nexus.
- The former Commission President Barroso pledge to bring energy to half a billion persons by 2030 and the Commission commitment with the achievement of the SE4All global objectives.
- The European Commission communication on the new European External Investment Plan (EEIP) to encourage investment in Africa and the EU Neighbourhood to strengthen current partnerships and contribute to achieve the Sustainable Development Goals.
- The "Empowering Development" strategic approach confirmed by the Development and Cooperation Commissioner Mimica in the aftermath of the COP21 in Paris as a way to pursuit achievement of the Sustainable Development Goals 7 - Universal affordable and clean energy - and 13 - Fight against climate change; as well as the Council Conclusions on Energy and Development following the COP22 in Marrakesh.
- The Joint Staff Working Document on Gender Equality and Women's Empowerment: Transforming the Lives of Girls and Women through EU External Relations 2016-2020 (EU-GAP II) which emphasises that "lack of access to safe and reliable energy can result in girls' and women's premature deaths from cooking with unhealthy fuel sources".

### ***1.1.2 Stakeholder analysis***

Stakeholders of the sector, which are relevant for the Action, can be grouped as below:

*A. Energy Policy formulation, approval and sector management:*

- Ministry of Mineral Resources and Energy (MIREME) is responsible for both the national energy planning and policies plus overall overseeing and development of the energy sector in Mozambique.
- Energy and Electricity National Council (CNELEC), a body constituted in 1997 with financial and administrative autonomous capacity to enforce the energy law and the development and extension of energy services. Currently being converted into the Energy Regulator Authority (ARENE).

*B. Services Providers supervised by the MIREME:*

- Electricidade de Mozambique (EDM), the public utility responsible for the generation, transmission, distribution and retail supply of electricity to grid connected electricity users counting to more than 1.3 million throughout the country.
- National Energy Fund (Fundo de Energia, FUNAE) is a rural electrification fund responsible for promoting rural electrification and rural access to modern energy services in a sustainable manner.
- Hidroelectrica de Cahora Bassa (HCB) is the state-owned company which operates the 2075 MW hydro power plant in the Zambezi's river, the largest HPP in Sub-Saharan Africa. HCB provides almost 90% of the total electricity sold by EDM in Mozambique.
- Independent Power Producers (IPPs) are gaining importance in a slow but steady path in Mozambique. IPPs are mainly taking advantage of gas resources available in Southern Mozambique with 2 gas fired power plants commissioned in 2015 and up to 4 more gas power plants to come online by 2020.

*C. Other stakeholders, Public and Private:*

- Ministry of Agriculture and Food Security (MASA) and the Ministry of Seas, Internal waters and Fisheries (MMAIP), the Ministry of Industry and Trade (MIC), the Confederation of Businesses in Mozambique (CTA) are institutions called to play an important role in the coordination of activities aiming to increase access to energy. In particular, the recently created Ministry of Land, Environment and Rural Development (MITADER) emerges as a key player for land tenure rights (very important for concessions and PPPs), rural electrification policies and climate change mainstream. Ministry of Gender and Social Welfare, which is currently reviewing the National Gender Policy, has the mandate of ensuring the mainstreaming of gender in all public sectors including the Energy.

During project implementation specific target groups will be identified (women, children, minorities, discriminated groups, etc.). After appraisal of available data, a needs assessment/baseline will be carried out if relevant to ensure a good mapping of specific strategic needs for women's and other relevant groups.

**1.1.3 Priority areas for support/problem analysis**

- The increasing electricity demand in the system (average peak load growth has been 14% per year in the last 7 years) demands both huge investments in generation, which are difficult to meet, and an improvement in the efficiency of the system to alleviate transmission lines and make energy available.
- The bulk of the EDM future demand will come from the domestic sector in rural and peri-urban undeserved areas where the costs of connection are very high because of the sparsely populated areas.
- Lack of integrated planning for rural electrification: There is no integrated policy or strategy on rural electrification in the country, such as a Rural Electrification Masterplan to guide short-term EDM and FUNAE projects.
- Cost-recovery of rural electrification: It has been observed that grid extension, while meeting the energy access objective, becomes a burden for the sustainability of EDM.

Besides, off-grid tariff models are not defined in order to provide certainty and ensure the sustainability of the provision of electricity.

- Maximising benefits of Rural Electrification: Other stakeholders, namely the ones who provide the link to productive uses of energy, need to be involved to maximise return from electrification programs.
- The level of project maturity is extremely low limiting funding opportunities and quick project implementation.
- At all geographical levels, limited institutional capacity not only for drafting policies and tools to boost the country electrification but also to implement and monitor the sector.
- Mozambique's 137 ranking position in the 2017 World Bank Doing Business list (down from the 134 in 2016) provides a good indicator of the difficulties to conduct or launch new businesses in the country. Access to credit and quality and reliability of energy are among the three worst rated indicators contributing to the overall ranking position.

## 2 RISKS AND ASSUMPTIONS

Risks	Risk level (H/M/L)	Mitigating measures
Failure or lack of political will to implement required energy sector reforms that will ensure the efficient and effective management of the sector.	Medium	<ul style="list-style-type: none"> <li>• Institutional support and capacity building to MIREME.</li> <li>• Development of the possibilities offered by the Energy Joint Declaration signed during the COP22.</li> <li>• Signature of the Energy Charter is foreseen.</li> </ul>
Failure to clarify the roles of the various actors resulting in duplication of efforts and everyone wanting to be an implementer of infrastructure projects.	Low	<ul style="list-style-type: none"> <li>• Validation of the National Energy Sector Strategy guiding the various actors by allocating accountabilities and responsibilities (ongoing-2017).</li> <li>• Validation of the National Electrification Strategy and Plan (ongoing-2017).</li> <li>• Reinforcement of the Coordination structures and mechanisms within the energy sector.</li> </ul>
Lack of capacity to manage the various components of the action.	Medium	<ul style="list-style-type: none"> <li>• Technical assistance and capacity building to direct beneficiaries (both public and private).</li> </ul>
Insufficient incentives for the private sector to invest in the energy sector.	High	<ul style="list-style-type: none"> <li>• Constitution of the Energy Regulator Authority (ARENE) by the Government.</li> <li>• Policy advisory services and training to public institutions.</li> <li>• Technical and Financial advisory services to private sector.</li> </ul>
The multiplicity of donors in Mozambique could result in duplication of effort if not properly coordinated.	Medium	<ul style="list-style-type: none"> <li>• The EU Delegation, through the projects identified in the energy sector, could play a meaningful and important coordination role.</li> <li>• EU actions aligned with on-going donors' assistance.</li> <li>• Energy sector working group secretariat to be supported by technical assistance.</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.	Medium	<ul style="list-style-type: none"> <li>• Elaboration of a baseline for analysis and assessment of needs.</li> <li>• Inclusion of gender mainstreaming training for MIREME/EDM/FUNAE staff.</li> <li>• Inclusion of a gender focal point in the project steering committee.</li> <li>• Gender analysis to be elaborated by projects being supported.</li> </ul>
<b>Assumptions</b>		
<ul style="list-style-type: none"> <li>• All players are cognisant of the fact that without gender equitable access to 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.</li> </ul>		

### 3 LESSONS LEARNT, COMPLEMENTARITY AND CROSS-CUTTING ISSUES

#### 3.1 Lessons learnt

- Projects in the pipeline of the stakeholders are at a low maturity stage, thus there is a need to provide financial and technical support to bring these to higher maturity level leading eventually to financial close.
- Access to electricity is rarely a stand-alone action and takes a long time for implementation. Programme approaches are to be favoured so as to integrate in the action the stakeholders in charge of access, namely EDM, FUNAE and 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. Thus, a national electrification plan should be adopted to guide both the Mozambican Government and the financiers.
- Institutional capacity needs to be strengthened to ensure strategic planning and programme implementation is done efficiently, coherently and timely to achieve expected results.
- The capacity reinforcement of the CNELEC/ARENE in order to become a real regulator in the energy market will be key to provide for more transparency in the energy sector.
- It is important to make as much use as possible of new policies that provide room for Private Sector participation, such as the recently approved renewable energy feed-in tariff (REFIT).
- EU funded interventions should be coordinated with other financial instruments aiming to boost private investment, such as blending through the AfIF or ElectriFI, in order to maximise impact.

#### 3.2 Complementarity, synergy and donor coordination

Stakeholder coordination is set to become progressively more complex and will require improved tools and capacity for every actor in an environment where an increased participation of the private sector is expected. Donor coordination is ensured by an active Energy Sector Working Group (ESWG) that meets on a bi-monthly basis and ensures coordination and exchange of information and ideas about the whole non-extractive part of the energy sector. Sweden, Belgium, Germany, Norway, UK, Portugal, USAID, the KfW, AFD (Agence Française de Développement), AfDB (African Development Bank), JICA (Japan International Cooperation Agency) and the World Bank regularly attend the meeting. However, Mozambique's other important partners in the energy sector, such as China, India or the Islamic Development Bank, have shown no interest in participating. Government officials participate regularly in the group.

A donor matrix is updated regularly by the group and proves that there are rarely overlaps in investment projects although a stronger coordination effort is required for institutional support and capacity building activities. Eventually, provided the ESGW members agree, the group's secretariat could be supported by the technical assistance recruited under this project preparation facility to further reinforce coordination.

The following table summarises the different donors' focus in the energy sector in Mozambique, related to the specific objectives of the Action.

<b>Donor/actor</b>	<b>Focus</b>
AFD	EDM Hydropower/gas to power projects
AfDB	Capacity Building in EDM, MIREME Promotion of Renewable Energy (RE), EDM Hydropower project
Belgium Technical Assistance	MIREME/FUNAE Technical Assistance, FUNAE direct investment, CNELEC Technical Assistance
EIB	EDM transmission/distribution projects
GIZ	EDM Grid densification; pico solar and improved cook stoves; vocational training in solar energy
KfW	EDM Hydropower projects, EDM transmission/distribution; Feasibility study for GETFit
Norway/NORAD	MIREME Institutional Technical Assistance, EDM Technical Assistance Master Plan, FUNAE TA and investment
Sweden/SIDA	EDM expansion of grid, Technical Assistance for Hydropower projects
USAID	MIREME REFIT (feed-in tariff) regulation
JICA	EDM power transmission and gas generation project
World Bank	Energy development and access project EDAP, FUNAE, EDM grid extension, MIREME wind farm, solar thermal, National Electrification Plan

Most of the above activities have some component of being complementary to the Action. Activities will be closely coordinated bilaterally where necessary and in general through the Energy Donor Working Group.

**3.3 Cross-cutting issues**

Energy stakeholders have already management policies that oversee various cross-cutting issues. EDM has a safety and 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 to include social vulnerable and low income groups.

**Gender:** Access to energy is recognised as a key factor to address gender issues. Particular attention will be given during the implementation phase to include in the log-frame gender sensitive indicators and to provide disaggregated 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 while big energy projects requiring resettlement plans would put the accent on women's rights. In addition, women entrepreneurs will specifically be targeted in off-grid solar energy distribution networks. Gender will be a sensitive criterion when selecting projects to be supported by this facility. To this effect, the Steering Committee of the Action will include a gender focal point. As well, a gender analysis will have to be elaborated by projects being supported by this Action. Gender will also be mainstreamed during the elaboration of technical studies and capacity reinforcement activities and will get a particular attention during policy review activities.

**Renewable Energy and Climate Change:** Currently, Mozambique energy mix - relying highly on hydro power generation - is overall "clean" even if some coal generation is to be developed in a short to medium term horizon. This will remain marginal in the overall mix and is to be accepted in the light of diversification. Biomass use is widely extended and is the

object of a specific biomass strategy mostly axed on improved cook stoves actions as well as proposing alternatives sources of energy. Linkages between sustainable energy and climate change fight 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 final action's beneficiaries. Moreover, improved access to sustainable energy will help Mozambique to attain its Intended Nationally Determined Contribution (INDC) target following the signature of the Paris Agreement at the COP21.

**Environment:** New investments will follow existing environmental policy in terms of environmental impact assessments. During the implementation phase, it will be guaranteed that each activity obtains necessary approvals in due time. The project preparation facility will ensure that any project proposal brought to a financial close stage will abide with national and international legislation applicable. Furthermore, fighting and building resilience against climate change will be mainstreamed both during policy advisory activities and technical studies.

## 4 DESCRIPTION OF THE ACTION

### 4.1 Objectives/results

This programme is relevant for the United Nations 2030 Agenda for Sustainable Development. It contributes primarily to the progressive achievement of SDG 7 target - universal access to affordable and clean energy - but also promotes progress towards SDG 13 - climate action to combat climate change and its impact.

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** is defined for the Action:

OS1. To increase gender equitable access to sustainable and affordable renewable energy in rural areas

The Action is expected to result in three groups of outputs:

- R1. The capacities of public institutions to exert their roles in the implementation of the Five-year Government Programme (PQG 2015-2019) and of the sectoral energy policies and programmes are improved.
- R2. The enabling environment to facilitate investments in renewable energy in Mozambique is improved.
- R3. A series of public and private investments in access to renewable energy related activities in line with the Five-year Government Programme (PQG 2015-2019) are supported to reach maturity level of financial close.

### 4.2 Main activities

R1.A1. To increase capacity of energy stakeholders in Mozambique (MIREME, EDM, FUNAE, CNELEC (ARENE) and MITADER), appropriate training activities will be carried out. The training will be oriented amongst other towards strategy and policy making, regulation, long-term planning, dispatch of many different generation sources, auctioning, financial modelling and impact of variable Renewable Energy on grid stability.

R1.A2. To reinforce reporting and coordination tasks at MIREME level.

R2.A1. To provide policy advisory assistance to MIREME, EDM, FUNAE, CNELEC (ARENE) and MITADER to empower them in creating a private sector friendly environment to enable increased investment in renewable energy. Legal and technical assistance will contribute amongst others to review renewable energy policies, regulation, support to the

establishment of regulation for IPPs, regulation on import of solar home systems, grid code for IPPs and captive power systems, streamline processes related to concessions and licenses for renewable energy investments.

R3.A1. To provide technical assistance necessary to conduct technical and/or financial studies on support of both public and private promoted projects to increase access to energy.

R3.A2. To enhance marketing of projects both through special events addressed to promoters, local partners and financiers and through adequate tools to facilitate access to relevant products, services and information for potential investors. This includes support to local agencies for the promotion of investments.

### **4.3 Intervention logic**

Within the framework of the 11<sup>th</sup> EDF NIP for Mozambique, the SE4All initiative, the achievement of the SDG 7 and the objectives set by the Paris Agreement at the COP21 to fight climate change, this action should be understood as the first step in a short to medium-term EU comprehensive programme to address the energy access issue in Mozambique. Furthermore, this action should contribute and facilitate the EU policy dialogue with Mozambique in the energy sector in the context of the Renewable Energy Joint Declaration.

Only 39%<sup>15</sup> of the population of Mozambique has access to electricity. The gap between the current situation and the ambitious target of both SDG 7 - Universal access to affordable and clean energy - and the UN-Sustainable Energy for All initiative (SE4All) by 2030 is huge. Substantial investments are required. This challenge provides investors and donors with an enormous opportunity for supporting interventions in power generation, grid extension and off-grid solutions. Mozambique is also endowed with an extraordinary potential of renewable energy mix sources. Mozambique's Renewable Energy Atlas estimated the country has a potential to develop in the short term about 7 GW of generation capacity out of a total 23 TW. To tap into these resources will help Mozambique not only to progress in the achievement of SDG 7 and make an important contribution to SDG 13 but, most importantly, will contribute to lift several millions of people out of poverty.

Barriers to develop these untapped resources are mainly the low institutional capacity to deal with this new source of energy, the lack of an appropriate regulatory framework that could boost participation of the private sector and the absence of tools that could contribute to mature projects up to the level of financial close. Also, the country's unexpected economic and financial crisis has brought additional difficulties for the flow of both private and public capital to the sector. In order to overcome these difficulties, the Action sets up a Project Preparation Facility to implement a comprehensive set of activities that should strengthen stakeholders' capacity, improve regulatory framework in cooperation with other existing programme and uplift both public and private promoted projects' maturity to reach financial close.

The activities will be executed by: 1) GIZ that implements the EU-Africa Renewable Energy Cooperation Programme under the umbrella of the Africa-EU Energy Partnership (AEEP) (hereinafter referred to as "GIZ-RECP") being one with a focus on private sector development; and 2) A commercial TA consultant (hereinafter referred to as "ComTA") with a focus on strengthening of public institutions, development of public promoted project and supports to the implementation of the second phase of the 11th EDF energy programme (consultant to be recruited through open tender). An EU Energy Steering Committee (ESC), composed of representatives of the stakeholders, will grant overall coordination between both consultants' teams and provide guidance.

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<sup>15</sup> Access to the national grid is 26% as per EDM; FUNAE estimates access to modern electricity services by mini-grids and PV stand-alone systems as 13%.

The Project Preparation Facility will address concerns from both the public and the private sector while paving the way for quick investment ahead of the country's expected return to economic and financial normality. In a second phase, projects supported by this Facility should feed financial instruments such as ElectriFI and AfIF under a Mozambique specific window or a direct investment programme funded by the 11<sup>th</sup> EDF NIP. Support to public promoted projects should be understood in the optic of dire difficulties to access credit and high perceived risk for investment as well as in the monopoly situation in the provision of electricity specially by the state utility EDM. Notwithstanding, public projects to be supported under this facility will be carefully scrutinised, favouring mainly those oriented to the involvement of the private sector, such as PPP generation projects, technical studies to prepare and launch renewable energy auctioning or projects aimed to be concessions among others. These activities are deemed to set Mozambique in a better position to deliver and secure access to modern, reliable, clean, affordable and sustainable energy services by the end of the implementation period. By then, Mozambique's energy regulatory framework should be improved to attract a number of projects aiming to achieve the overall objective of this action. While activities of training, project marketing and project technical studies should contribute to materialise investments around EUR 200 million and 100 MW of new installed capacity and the provision of up to 1.5 million people with access to energy services.

## **5 IMPLEMENTATION**

### **5.1 Financing agreement**

In order to implement this action, it is foreseen to conclude a financing agreement with the partner country, referred to in Article 17 of Annex IV to the ACP-EU Partnership Agreement.

### **5.2 Indicative implementation period**

The indicative operational implementation period of this action, during which the activities described in section 4.2 will be carried out and the corresponding contracts and agreements implemented, is 48 months from the date of entry into force of the financing agreement.

Extensions of the implementation period may be agreed by the Commission's authorising officer responsible by amending this decision and the relevant contracts and agreements; such amendments to this decision constitute non-substantial amendment in the sense of Article 9(4) of Regulation (EU) 2015/322.

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

N/A

### **5.4 Implementation modalities**

#### ***5.4.1 Indirect management with a Member State agency***

A part of this action may be implemented in indirect management with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in accordance with Article 58(1)(c) of Regulation (EU, Euratom) No 966/2012, applicable in accordance with Article 17 of Regulation (EU) 2015/323. This implementation entails policy advisory services, institutional capacity building and promotion of the renewable energy private sector. This implementation is justified because GIZ is currently implementing the Renewable Energy Cooperation Programme (RECP) aiming to support market development for renewable energy in sub-Saharan Africa under the umbrella of the Africa-EU-Energy Partnership. The RECP was launched by African and European ministers in 2010, with a core objective of developing viable and sustainable renewable energy markets and thereby increasing energy access in Africa. In line with African priorities and EU development policy, the RECP Strategy 2020 outlines a comprehensive and integrated framework towards renewable energy market development in Africa. It directly contributes to two of the targets of the SE4All initiative (i.e.

energy access and renewable energy). The RECP promotes, inter-alia, improved policy and regulatory frameworks, private sector cooperation, technology cooperation and innovation and capacity development. Contributing to increased energy access, the RECP responds to needs in relatively young markets for renewable energy in Africa by setting up new interventions as required or complementing existing programmes and instruments. It is specifically aimed at improving the traction of existing instruments, in particular TA-support and financing facilities, by complementing their interventions, and providing focused services aimed at building up and enhancing the quality of the project pipeline. This will ultimately lead to a greater absorptive capacity, increased allocation of funding, accelerated investment into renewable energy projects, and thereby contribute towards reaching the targets of the SE4All.

GIZ-RECP has since gained thorough knowledge and experience in areas such as regulatory policy, promotion of private investment, training and capacity reinforcement and access to finance in which Mozambique requires strong support. GIZ-RECP also has the required in-house skill capacity and access to a network of expert consultants to grant success to the implementation of the Mozambique Action. Furthermore, GIZ has undergone the six-pillar assessment successfully. Besides, strong presence in Mozambique in other areas of cooperation, good knowledge of the energy sector in Mozambique through the implementation of the ENDEV programme aimed at increased access to energy in rural areas, relatively low transaction costs and capacity to be mobilised and kick-start quickly. Based on these observations, GIZ-RECP is an adequate choice to implement the private sector oriented part of this Action.

The entrusted entity would carry out the following budget-implementation tasks:

- Provide policy advisory services to Mozambique public actors.
- Provide training and skills development to Mozambique public actors.
- Conduct market studies and support B2B matchmaking alongside existing conferences.
- Provide technical and financial advisory services to private project developers.

#### **5.4.2 Indirect management with the partner country**

A part of this action with the objective of strengthening Institutional Stakeholders' capacity and uplifting projects to the stage of financial close may be implemented in indirect management with the Republic of Mozambique in accordance with Article 58(1)(c) of the Regulation (EU, Euratom) No 966/2012, applicable in accordance with Article 17 of Regulation (EU) 2015/323 according to the following modalities:

The partner country will act as the contracting authority for the procurement and grant procedures. The Commission will control ex ante all the procurement and grant procedures.

Payments are executed by the Commission.

In accordance with Article 190(2)(b) of Regulation (EU, Euratom) No 966/2012 and Article 262(3) of Delegated Regulation (EU) No 1268/2012, applicable in accordance with Article 36 of Regulation (EU) 2015/323 and Article 19c(1) of Annex IV to the ACP-EU Partnership Agreement, the partner country shall apply procurement rules of Chapter 3 of Title IV of Part Two of Regulation (EU, Euratom) No 966/2012. These rules, as well as rules on grant procedures in accordance with Article 193 of Regulation (EU, Euratom) No 966/2012, applicable in accordance with Article 17 of Regulation (EU) 2015/323, will be laid down in the financing agreement concluded with the partner country.

Tender for the Resources Centre TA will be launched under suspension clause to guarantee its activities begin along with the ones implemented by the GIZ-RECP team and overall Action coordination is strengthened.

## 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.

In accordance with Article 22(1)(a) of Annex IV to the ACP-EU Partnership Agreement, 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.

In accordance with Article 20(6) of Annex IV to the ACP-EU Partnership Agreement and with regard to the regional nature of this action, the Commission decides that natural and legal persons from the following countries, territories or regions shall be eligible for participating in procurement and grant award procedures: South Africa. The supplies originating there shall also be eligible.

The Commission's authorising officer responsible may extend the geographical eligibility in accordance with Article 22(1)(b) of Annex IV to the ACP-EU Partnership Agreement 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 (in EUR)	Indicative third party contribution (in EUR)
<b>5.4.1 Indirect management with GIZ out of which</b>	<b>5 000 000</b>	<b>500 000</b>
Capacity building and technical assistance (indicative amount)	2 000 000	200 000
Technical studies (indicative amount)	3 000 000	300 000
<b>5.4.2 Indirect management with Mozambique out of which</b>	<b>4 400 000</b>	
Capacity building and technical assistance (indicative amount)	1 500 000	
Technical studies (indicative amount)	2 900 000	
<b>5.9 Evaluation and 5.10 Audit</b>	<b>300 000</b>	
<b>5.11 Communication and visibility</b>	<b>100 000</b>	
<b>Contingencies</b>	<b>700 000</b>	
<b>Total</b>	<b>10 500 000</b>	<b>500 000</b>

## 5.7 Organisational set-up and responsibilities

To implement the action a two-fold approach has been chosen:

The Africa-EU Renewable Energy Cooperation Programme (RECP), implemented by the GIZ in the framework of the EU-Energy Africa Partnership, will be supported to facilitate investment in renewable energy projects in Mozambique by creating an enabling environment as well as through direct support to private companies and project developers.

A consultant recruited by tendering will set up a Resources Centre to deal mainly with institutional capacity building issues at EDM, FUNAE, MIREME and CENELEC/ARENE, and to support the preparation, tender and realisation of technical studies for projects to facilitate financial close, giving priority to PPPs, concessions or other private oriented.

To ensure proper coordination between the two teams, an EU Energy Steering Committee (ESG) will be established. The ESG will meet in a 6 monthly basis. The group will be composed of one representative from the National Authorising Officer (NAO), one from MIREME, one from EDM, one from FUNAE, one from CNELEC, one from MITADER, one from the GIZ-RECP, one from the Resource Centre consultant team, one from the Mozambique Renewable Energy Association plus one representative from the EU Delegation as an observer. Besides general coordination, overseeing and guidance, the ESG will be responsible for approval of requests to support project development through necessary technical studies. If required, the ESG could hold ad hoc meetings.

Furthermore, to ensure proper implementation and to reinforce activities coordination and contract management, an Energy Project Coordination Unit (EPCU) composed of one representative from the GON, one from the EU Delegation, one from the GIZ-RECP and one from the Resources Centre consultant team will meet on a monthly basis.

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

The need for additional studies (baseline/endline) to obtain monitoring data for specific indicators of the Action will be assessed before the start of the implementation.

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 partner shall establish a permanent internal, technical and financial monitoring system for the action and elaborate regular progress reports 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 logframe matrix (for project modality). The report 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 final evaluation will be carried out for this action or its components via independent consultants contracted by the Commission.

It will be carried out for accountability and learning purposes at various levels (including for policy revision), taking into account in particular the fact that this action represents the first structured support to the energy sector in Mozambique by the Commission.

The Commission shall inform the implementing partner at least 1 month in advance of the dates foreseen for the evaluation missions. The implementing partner 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 partner 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.

Indicatively, one contract for evaluation services shall be concluded under a framework contract in the 4<sup>th</sup> quarter 2021.

#### **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.

Indicatively, two contracts for audit services shall be concluded under a framework contract in the 4<sup>th</sup> quarter 2021.

#### **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 and supported with the budget indicated in section 5.6 above.

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 Manual for European Union External Action shall be used to establish the Communication and Visibility Plan of the Action and the appropriate contractual obligations.

## APPENDIX - INDICATIVE LOGFRAME MATRIX (FOR PROJECT MODALITY) <sup>i</sup>

The activities, the expected outputs and all the indicators, targets and baselines included in the logframe matrix are indicative and may be updated during the implementation of the action, no amendment being required to the financing decision. When it is not possible to determine the outputs of an action at formulation stage, intermediary outcomes should be presented and the outputs defined during inception of the overall programme and its components. The indicative logframe matrix will evolve during the lifetime of the action: new lines will be added for including the activities as well as new columns for intermediary targets (milestones) for the output and outcome indicators whenever it is relevant for monitoring and reporting purposes. Note also that indicators should be disaggregated by sex whenever relevant.

	Results chain	Indicators	Baselines (incl. reference year)	Targets (incl. reference year)	Sources and means of verification	Assumptions
Overall objective: <i>Impact</i>	To promote sustainable, inclusive and gender equitable economic growth and reduce poverty in the context of national food and nutrition security (FNS) <sup>ii</sup> and climate change.	<ul style="list-style-type: none"> <li>Real GDP growth rate<sup>*(PQG; SDG), **EURF L1 B3</sup></li> <li>Proportion of population living below USD1.25 (PPP) per day<sup>*(SDG), **EURF L1 I1</sup></li> <li>Human Development Index</li> </ul>	<ul style="list-style-type: none"> <li>3.0% (2015, forecast)</li> <li>National: 46.1% (2015)</li> <li>181 out of 188 (2015)</li> </ul>	<ul style="list-style-type: none"> <li>At least 3.0%</li> <li>National: lower than 46.1%</li> <li>At least 181</li> </ul>	<p><b>Sources:</b></p> <ul style="list-style-type: none"> <li>Country statistics (INE; IOF)</li> <li>UNDP Human Development Report</li> </ul>	
Specific objective(s): <i>Outcomes</i>	<b>SO1.</b> To increase gender equitable access to sustainable and affordable renewable energy in rural areas.	<ul style="list-style-type: none"> <li>Percentage of the population with access to energy services<sup>iii</sup> <sup>*(PQG; SDG, NIP,GAPII), ** EURF L1 I11</sup></li> <li>Upgrade of the country's institutional, regulatory and policy framework, measured by changes in the 7 criteria addressed in the TAF Energy Sector Country Fiche.</li> <li>Increase of public, private and donors investment in renewable energy projects</li> <li>Improvement on the Doing Business list of the World Bank concerning access to energy <sup>*(NIP)</sup></li> <li>Total amount of investments (MW and EUR million) supported by the action</li> </ul>	<ul style="list-style-type: none"> <li>39% total / 26% grid access / 13% rural (2016)</li> <li>Current results for indicators as of last TAF energy Country Fiche available (2017)</li> <li>0</li> <li>168 out of 190 (2017)</li> <li>0</li> </ul>	<ul style="list-style-type: none"> <li>55% (total) by 2019, as per the PQG</li> <li>Upgrade at least 40% of the total 63 aspects within the 7 criteria</li> <li>&gt;10%</li> <li>At least 168</li> <li>&gt;EUR 200 million and &gt; 100 MW reached by the end of the action</li> </ul>	<p><b>Sources:</b> EDM, FUNAE, MIREME, MITADER, PQG reports</p> <ul style="list-style-type: none"> <li>TAF Energy Sector Country Fiche</li> <li>Baseline / Endline, Ren21, IEA, ESMAP reports</li> <li>World Bank DB report</li> <li>Final Evaluation.</li> </ul>	<ul style="list-style-type: none"> <li>Government remains committed to improve renewable energy business environment</li> <li>Existence of synergies and complementarities among different stakeholders (Government, development partners, private sector, civil society, donors) within the energy sector countrywide</li> </ul>

<b>Outputs</b>	<b>R.1 - The capacities of public institutions<sup>iv</sup> to exert their roles in the implementation of the Five-year Government Programme (PQG 2015-2019) and of the sectoral energy policies and programmes<sup>v</sup> are improved.<sup>vi</sup></b>	Number of capacity building sessions / workshops organised and focusing on strategising, gender mainstreaming, policy making, regulation, auctioning, financial modelling and impact of renewable energy among others	• 0	• At least 10	<b>Sources:</b> • Final Evaluation • Project M&E data/reports • Project outputs (studies, assessments, reports, policy and regulatory reviews, presence lists) • Media clipping • Meeting minutes and reports  <b>Means:</b> Quantitative/qualitative data analysis; Quality assessments	• Government partners and public institutions take active part and ownership of project's activities.  • Public institutions and Government officials willing to participate in "on-the-job" trainings and to adopt improved knowledges, attitudes and practices.  • Consistent and reliable partnerships with development partners and external technical assistance
		Number of Government officials benefiting from on-the-job training (e.g. planning, budgeting, monitoring, etc.) to enhance their skills and capabilities. <sup>iii</sup> (disaggregated by sex)	• 0	• At least 100 (>30% women)		
		Quality and timeliness of monitoring and progress reporting by the public institutions (from the start of this action)	• 0	• >75% quality reports and timely released		
		Existence of updated information and providing data/trends on energy access, renewable energy and energy efficiency in compliance with the SDG 7 <sup>vii</sup> and Paris Agreement <sup>viii</sup> commitments and targets.	• Non existent	• Information available by the end of year 2 / Bi-annual updates		
	<b>R.2 - The enabling environment to facilitate investments in renewable energy in Mozambique is improved</b>	Number of sectoral policy instruments (e.g. policies, strategies, programmes) <sup>ix</sup> drafted/reviewed/adopted (as a result of EU support)	• 0	• At least 4 <sup>x</sup>		
		Number of legal and regulatory instruments <sup>xi</sup> (e.g. laws, decrees, resolutions, diplomas) drafted/reviewed/adopted (as a result of EU support)	• 0	• At least 5 <sup>x</sup>		
		Number of short-term missions undertaken providing on-request specific expertise to institutional stakeholders	• 0	• At least 10 short-missions		
	<b>R.3 - A series of public and private investments in access to renewable energy related activities in line with the Five-year Government Programme (PQG 2015-2019) are supported to reach maturity level of financial close.<sup>vi</sup></b>	Number of public and private investment projects put forward that reach maturity level of financial close	• 0	• At least 5 <sup>x</sup>		
		Number of projects developers supported with advisory, technical and financial services	• 0	• At least 7 <sup>x</sup>		
		Number of pre-feasibility/ feasibility/ technical/ financial studies conducted, focusing on both public and private investments in the energy sector.	• 0	• At least 7 <sup>x</sup>		
		Number of business events organised addressed to promoters, local partners, financiers and potential investors organised to attract investments	• 0	• At least 4		
		Status of the EU Energy Steering Committee (ESC).	• Non existent	• ESC established by the end of year 1; At least 2 meetings per year;		

## NOTES:

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<sup>i</sup> Indicators aligned with the relevant programming document are marked with '\*', followed by the respective acronym (<sup>POG</sup> - Five-Year Government Programme; and <sup>NIP</sup> – National Indicative Programme). Indicators aligned with the EU Results Framework are marked with '\*\*'. Indicators aligned with the SDG targets are marked with <sup>SDG</sup>. Indicators aligned with GAPII are marked with <sup>GAPII</sup>

<sup>ii</sup> All the actions under Rural Development Focal Sector of the 11<sup>th</sup> EDF in Mozambique adopt the term **Food and Nutrition Security (FNS)** as it is the approach that best reflects the conceptual and action linkages between "food security" and "nutrition security", while expressing a development objective to guide policy interventions. This formulation also intends to focus attention on the actions needed to mainstream the nutrition component in all aspects of the agri-food systems. For further information, please see <http://www.fao.org/docrep/meeting/026/MD776E.pdf>.

<sup>iii</sup> Data disaggregated by gender.

<sup>iv</sup> This action will particularly focus on the following **institutions**: Ministry of Natural Resources and Energy (MIREME), Ministry of Land and Rural Development (MITADER), National Energy Fund (FUNAE), Public Electricity Enterprise of Mozambique (EDM), National Electricity Council – National Regulation Agency (CNELEC/ARENE).

<sup>v</sup> This action will particular focus on the following **policies, programmes, strategies**: Renewable Energy Development Policy (2009); National Energy Strategy (2009); Biofuels National Strategy Policy (2009); National Strategy for Development of Renewable Energies (2011-2025); National Energy Policy (2015-2015); National Strategy for fighting Climate Change (2013-2030). New policies, programmes, strategies will be integrated during programme implementation.

<sup>vi</sup> Supported through the establishment of a Resources Centre and RECP Units.

<sup>vii</sup> See SDG 7 targets at <https://sustainabledevelopment.un.org/sdg7>.

<sup>viii</sup> Further information on the **Paris Agreement** at [https://ec.europa.eu/clima/policies/international/negotiations/paris\\_en](https://ec.europa.eu/clima/policies/international/negotiations/paris_en).

<sup>ix</sup> See note (v) above.

<sup>x</sup> To be confirmed during implementation.

<sup>xi</sup> This action will particular focus on the following **regulation**: regulation for IPPs, Off-grid regulation, wood/solar/wing regulations, tariff and feed in tariff regulations, renewable energy auctioning, grid code for IPPs and captative power systems, regulation for concessions and licenses for renewable investments, etc.