



Government of Malawi



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Access to Clean and Renewable Energy (ACRE) Project 2020-2023

February 2020

PROJECT ALIGNMENT

Country: Malawi	
National Priority or Goal: Transition Malawi to a productive, competitive and resilient nation (CPD, 2019-2023).	
Related Programme Support Impact: (From Strategic Plan 2018-2021) Outcome 1: Freedom from Poverty / Outcome 3: Sustainable Planet / Outcome 4: Resilient Societies	
MGDS III CC Goal: To provide sufficient sustainable energy for industrial and socio-economic development.	
UNDP Strategic Plan Outcome 3: Strengthening resilience to shocks and crises.	
Related CPD/UNDAF Outcome 9: By 2023, Malawi has strengthened economic diversification, inclusive business, entrepreneurship and access to clean energy.	
Country Programme Outputs: Output 3.1: Women and youth in targeted areas have access to employment opportunities. Output 3.2: Public and private sector institutions enabled to develop and implement policies and practices that enhance innovation, productivity and entrepreneurship. Output 3.3: Inclusive and sustainable solutions adopted at the national and subnational levels to achieve increased energy efficiency and universal modern energy access (especially off-grid sources of renewable energy).	
Implementing Partner: Department of Energy Affairs, Ministry of Natural Resources, Energy and Mining	Implementation Modality: Support to National Implementation (NIM) and Direct Implementation (DIM)
Responsible Parties: Ministry of Finance Economic Planning and Development; Ministry of Local Government and Rural Development; Ministry of Agriculture, Irrigation and Water Development; Malawi Bureau of Standards; Ministry of Health and Population; Ministry Education Science and Technology; Malawi Energy Regulatory Authority; Malawi Investment and Trade Centre; Renewable energy entrepreneurs and businesses.	
Project Period: 2020 - 2023 Atlas Award ID: 00123489 Project Number: 00118724 Start date: January 2020 End Date: December 2023 PAC Meeting Date: February 2020	Total resources required: UNDP TRAC: \$4,550,000 Donor: TBD Government: In-kind Other (GEF -tbc): \$ 431,776 In-kind Contributions

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ACRONYMS

CC	Climate Change
CSO	Civil Society Organization
CPD	Country Programme Document
DDP	District Development Plan
DESC	District Environment Sub Committee
DfID	Department for International Development
DIM	Direct Implementation Modality
DoE	Department of Energy Affairs
EAD	Environment Affairs Department
EWG	Expert Working Group
GCF	Green Climate Fund
GDP	Gross Domestic Product
GEF	Global Environment Facility
GHG	Greenhouse gas
GoM	Government of Malawi
GMS	General Management Support
HACT	Harmonised Approach to Cash Transfer
IP	Implementing Partner
IPCC	Intergovernmental Panel on Climate Change
PAC	Project Appraisal Committee
MGDS	Malawi Growth and Development Strategy
MoH&P	Ministry of Health and Population Services
MoNREM	Ministry of Natural Resources, Energy and Mining
MREPG	Malawi Renewable Energy Partnership Group
NCRP	National Climate Resilience Programme
NDC	Nationally Determined Contributions
NGO	Non-Governmental Organisation
NIM	National Implementation Modality
NRP	National Resilience Plan
PUEH	Productive Use of Energy Hub
RP	Responsible Party
SDG	Sustainable Development Goal
SSC	South-South Cooperation
TAC	Technical Advisory Committee
ToC	Theory of Change
TrC	Triangular Cooperation
UN	United Nations
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNITAR	United Nations Institute of Training and Research
WASH	Water and Sanitation Hygiene

BRIEF DESCRIPTION

Malawi's energy consumption pattern shows a continued heavy dependence on primary energy. Cumulatively, access to electricity is just at 18%, with grid electricity contributing 11.4% while off grid solar photovoltaics accounting for the remaining 6.6%. The access rate for electricity in the rural areas is even lower at 3.9%. Insufficient generation capacity, unreliable infrastructure, frequent outages, and severely low rates of 'last mile' connectivity impedes the availability and affordability of electricity. Lack of access to modern energy services severely constrains the achievement of Malawi's development agenda. This is the basis for sustainable scale-up of access to electricity. Scaling up the use of solar PV and other renewable sources of energy will act as a positive disruptor to propel economic transformation, particularly in rural areas.

The goal of the Access to Clean and Renewable Energy (ACRE) Project is to increase access to clean, affordable, reliable, and modern energy **by enhancing the sustainability, efficiency and cost-effectiveness of energy technologies**. The Project aligns to the UNDP CPD, specifically: **Inclusive and sustainable solutions adopted at the national and sub-national levels to achieve increased energy efficiency and universal modern energy access** (especially off grid sources of renewable energy). The ACRE Project contributes to UNDAF Outcome 3 – **"By 2023, Malawi has strengthened economic diversification, inclusive business, entrepreneurship and access to clean energy"**.

Expected results are: (1) Expanded generation capacity through scale-up of clean energy mini-grids targeting productive users in rural areas. (2) De-risked financial investments on clean and renewable energy technologies through innovative financing; (3) improved access to renewable energy in health sector through implementation of GoM "Power for Health" Master Plan; and, (4) strengthened institutional capability for effective renewable energy sector coordination, improved energy efficiency, research and development.

Contributing Outcome (UNDAF/CPD, RPD or GPD):

Indicative Output(s) with gender marker²:
Women and youth in targeted areas have access to access to energy and employment opportunities

Total resources required:	
Total resources allocated:	
	UNDP TRAC: 4,500,000
	Donor:
	Government:
	In-Kind:
Unfunded:	

Agreed by (signatures)¹:

Government	UNDP	Implementing Partner
Print Name:	Print Name:	Print Name:
Date:	Date:	Date:

¹ Note: Adjust signatures as needed

² The Gender Marker measures how much a project invests in gender equality and women's empowerment. Select one for each output: GEN3 (Gender equality as a principle objective); GEN2 (Gender equality as a significant objective); GEN1 (Limited contribution to gender equality); GEN0 (No contribution to gender quality)

I. DEVELOPMENT CHALLENGE

Malawi's energy consumption pattern shows a continued heavy dependence on primary energy sources. Cumulatively, access to electricity is just at 18%, with grid electricity contributing 11.4% while off grid solar photovoltaics accounting for the remaining 6.6%. The access rate for electricity in the rural areas is even lower at 3.9%. Insufficient generation capacity, unreliable infrastructure, frequent outages, and severely low rates of 'last mile' connectivity impedes the availability and affordability of electricity. Lack of access to modern energy services severely constrains the achievement of Malawi's development agenda. This is the basis for sustainable scale-up of access to electricity. Scaling up the use of solar PV and other renewable sources of energy will act as a positive disruptor to propel economic transformation, particularly in rural areas.

Over 97%² of the population still resort to biomass as the main source of energy for cooking, a scenario which contributes to deforestation of natural woodlands and consequent soil erosion of bare grounds, siltation of water courses, flooding and variation of the river morphology thereby affecting power generation as over 80% is hydro. Only 1.79%³ of Malawians use electricity as their source of energy for cooking and heating due to the perception that cooking using electricity is expensive.

The challenge of affordability, lack of access and lack of awareness to clean energy leads to overdependence on use of biomass energy for cooking presents a heavy burden on women and children who spend much time in fetching firewood and in the kitchen being at greater risk of health hazards from indoor air pollution. The World Health Organisation reports that more than 4.3 million⁴ young children and adults suffer premature death worldwide annually due to diseases such as pneumonia, stroke, chronic obstructive pulmonary diseases, lung cancer and ischaemic heart disease associated with household indoor air pollutants.

The limited access to modern energy services contributes to low economic activity, lower quality of life and deters new investments across the country, in particular affecting key sectors such as agriculture, mining and manufacturing⁵. Improving electricity access has positive impacts on education through expanded opportunity for school attendance, and other educational activities, including use of television, radio and Information and Communication Technologies to improve access to information and civic engagement. It is for this reason that electricity consumption per capita is directly linked to the education index on the Human Development Index determination⁶.

Malawi is one of the least electrified countries in the SADC region, with an average per capita consumption of 85 kWh per annum – amongst the lowest in the world. Provision of sufficient, reliable and clean energy in Malawi is a critical challenge, as recognized by the Government in the MGDS III (2018-2022) which identifies energy as the lifeblood of the economy as it serves as a crucial input to all economic and social services. Malawi stands

² 2018 Population census: Table I 13

³ 2018 Population census: Table I 13

⁴ <https://www.who.int/features/qa/indoor-air-pollution/en/> accessed on 24/10/2019

⁵ MERA and NSO Malawi Energy Survey Report 2012

⁶ UNDP HDR 2018

to benefit more from the newly agreed Sustainable Development Goals which have wholly embraced the tenets advocated in the Sustainable Energy for All championed by the UN. In the development of all these frameworks, energy is being recognised as central to the achievement of most of the development goals. The demand for electricity by far exceeds the installed capacity and new generation capacity is urgently needed, with the government focused on promoting diversified sources and utilization of the country's abundant renewable energy resources – particularly micro-hydro and solar. Under SE4All the government has committed to ambitious 2015/2030 targets for increasing energy access and renewable energy supply.

The country's electricity generation is over 80% from the hydro plants primarily cascaded on the Shire river, with the remaining 20% from diesel generators offering load relief due to insufficient generation from the hydro plants to meet the peak demand. The total installed capacity for electricity stands at 362.8 MW from hydro plants and 126.2 MW from diesel gensets. Malawi's projected installed capacity by 2022 is 941MW⁷ against a peak demand of 953MW. The demand for electricity which stands at 441MW is growing with the increase in population as well as business development and industrialisation and projected to reach 1859MW⁸ by 2030. Despite the existence of abundant sunshine and several mini-hydro potential sites as sources of renewable energy, public and/or private investments in the renewable energy sub-sector which could have contributed to increased electricity supply have been low mainly due to the high capital expenditure, non cost-reflective tariff, and lack of access to affordable finance.

The government's main approach to increasing access to electricity in rural areas has been utility grid extension while taking steps towards attracting private sector participation in the electricity supply industry. Among others, the Government amended the Electricity Act of 2004 to create a conducive environment for private investment in the industry. Furthermore, the government has developed mini grid regulatory framework with a less stringent regulatory compliance and licencing requirements for private mini grid operators. Despite the above interventions, achieving universal access to clean and modern energy would be a challenge with only grid extension as an option. Some areas are very isolated from the grid with less attractive demographic and economic indicators such that it would not be economically viable to connect them to the grid leaving off-grid solutions as the least cost option.

The electricity deficit emanating from limited generation capacity has led to the proliferation of fossil fuel generators as back up electricity supply for industries and businesses leading to increased cost of doing business and resultant increase in greenhouse gas emissions. The longer the power outage the more running time of the back-up systems with more losses to the economy and the environment. Not only are the back-up systems costly but also affect the operational efficiencies of the commercial entities as only a minimum of available resources are utilised. The lack of incentives such as net metering coupled with the high capital outlay required for renewable energy technologies prohibits industries from considering clean energy as an option for power back up.

⁷ ESCOM Base tariff application 2018-22

⁸ Malawi Integrated Resource Plan , MoNREM 2017

II. STRATEGY

ACRE Project will complement governments efforts aimed at increasing access to clean and modern energy services. The Project will identify and deliver affordable clean and renewable energy solutions, including financial and regulatory incentives, to address energy access challenges by targeting poor and vulnerable women, men, and children, commercial businesses and entrepreneurs, and the social sector.

Lessons Learnt

From previous energy projects have informed the development of the ACRE Project and are highlighted as follows:

- In the project design grant aided mini grids should be offered on performance related term concession as opposed to lifelong concessions. This enables the Government to have effective control over the scheme quality, costs and performance targets over the life of the scheme.
- Solar PV Minigrids are easier to be deployed within 2 years giving room for system operations and performance monitoring within the project duration. Solar PVs are therefore highly recommended for projects that are less than 3 years compared to micro hydro schemes that require more river flow monitoring data for at-least a year prior to design and construction. These are recommended for only sites with known data.
- Mini Grids can only be sustainable with utilization rate of more than 50% and therefore need to couple its development with productive use of energy and promotion of low cost cooking appliances
- Working with academia and research institutions through an MOU presents several advantages of building capacity in the institutions, quality of service assurance as well as rapid achievement of results compared to obtaining same services through open tendering.
- Baseline studies to be undertaken for project areas by the Project and not the mini grid operators to avoid over estimation of electricity demand as well as energy savings per households as was the case at Sitolo and MEGA respectively. Assumptions to obtaining these critical parameters should be agreed at the outset.
- Maintenance of a Technical Advisory Committee and the Project Board led to significant quality enhancement benefits through the reviews of the technical reports, designs and installations.
- Project training needs assessment to address capacity gaps to be undertaken at the commencement of the project and rolled out in its lifetime as opposed to relying on yearly assessments on sector specific demands. Involving more stakeholders such as ADC, VDCs, REIAMA and NCIC draw a much wider participation in the capacity building initiatives.
- Mitigating risks identified at the start of the project assisted in adaptive decision making by the Project Management Staff, TAC and PSC.

The Theory of Change for ACRE Project: Alignment to UNDAF and UNDP Country Programme Document (CPD).

ACRE Project activities will be linked directly to priority national Projects and strategic initiatives focusing on access to sustainable energy, renewable energy financing, business development services and research and development in renewable energy.

The ACRE Project Theory of Change (ToC) is in line with the UNDAF Pillar 3, “Economic diversification and clean energy”, and Outcome 9 “By 2023, Malawi has strengthened economic diversification, inclusive business, entrepreneurship, and access to clean energy”, and the UNDP CPD which states that UNDP will support the government’s efforts on reducing poverty, inequality and vulnerability to shocks.

The Project will help close the energy gap by creating an enabling environment to accelerate renewable energy uptake, with a focus on clean energy mini-grids that deploy sustainable business models and strengthen social entrepreneurship. Priorities will focus on: increasing clean energy for poor households that are unlikely to be grid-connected over the next 10 years; promoting policy and market incentives for scaling up access to and uptake of renewable energy; scaling up sustainable business models for the application of solar energy in the health and education sectors, while building markets for private sector innovation; and facilitating a transition to renewable energy by the private sector through challenge funds modelled on previous UNDP experience in Malawi. In supporting access to clean energy by increasing the financial viability and promoting scaled-up commercial investment in mini-grids in Malawi, the Project will focus on creating skilled jobs, particularly for young women and men.

Malawi is endowed with many resources of renewable energy such as solar, hydro, wind and geothermal, some of which could be distributed at isolated public facilities as stand alone or in hybrid combination. Out of the many energy resources available, solar takes exception due to its ease of deployment and environmental friendliness. The technology has relatively low maintenance costs, has long lifespan and can be modularized according to the energy demand and/or budget. Due to the comparative advantages for solar it has proven to be the technology of choice for social sector facilities in the rural areas. While ACRE Project will not promote specific technology choices, it will encourage cost-effective, affordable, and integrated energy solutions.

The ACRE Project has four main strategies, namely:

- Developing and strengthening clean energy mini-grids that promote productive uses of energy for rural economic transformation
- Accelerating and de-risking the clean energy transition in the country
- Promotion of private sector participation in renewable energy deployment in the health and social sectors.
- Enhancing power sector coordination, building institutional capacity and conducting research and development.

These strategies are expounded in the following sections

2.1 Developing and strengthening clean energy mini-grids that promote productive uses of energy for rural economic transformation

Rural electrification – both on-grid and off-grid – must be linked to productive uses of energy if they are to produce real development outcomes and be cost-effective. ACRE Project will focus on coupling electricity generation, distribution, household connectivity and productive uses based on viable business plans. Private Mini Grid Operators or social enterprises will be selected based on the viability of their proposed business plans, with a focus on capital expenditure, operational expenditure and robustness of commercial revenue projections on pre-selected potential mini-grid sites. The Project will work hand in hand with the selected Mini Grid operator who will be provided with technical assistance grants and assisted with procurement of goods and services for the installation of a greenfield mini grid.

Productive uses will focus on agriculture as well as small and medium enterprises. These productive users will provide anchor loads to improve the economic viability of clean mini-grids. Mini grids (both existing and new) will be supported in the establishment of Productive Use Energy Hubs and cooperatives. Where feasible, UNDP will support the establishment of charging stations for 'last mile' connections.

Rural cooperatives will be formed in specific energy dependent agro-enterprises targeting 50% women representation in both the existing and new mini-grid project areas. The Project will work in close collaboration with agriculture, trade and community development services extension workers in identifying, training and registration of the cooperatives. The registered cooperatives will be provided with seed capital financing through grants based on their requirements from the cooperative business plans so developed. The MITC will work in linking up the products from the cooperatives to both local and /or international markets.

2.2 Accelerating and de-risking the clean energy transition in the country

The Project component aims at de-risking the industries and commercial enterprises that invest in renewable energy technology as back-up power system either in isolation or hybrid combination with the fossil fuel genset and utility grid. Qualifying entities will be selected based on the level of impact of the operations, commitment to environmental safeguards, commitment to gender promotion in its practices, size of the proposed system and ability to provide matching grant. The beneficiaries will be selected through a competitive selection process similar to the Malawi Challenge Innovation Facility (MCIF) methodology.

In order to increase the flows of finance and reduce the cost of capital, there are a range of actions that must be taken. These include improving communication with investors, building expertise in climate finance operations, and de-risking of the sector. ACRE Project will support GoM in outward communications on foreign investment opportunities, business incentives, and domestic market growth. ACRE will support establishment of an innovative energy fund that will promote or enhance transition from biomass to clean energy cooking. The UNDP Accelerator Lab will engage beneficiary communities in consultations, conduct global searches for biomass alternatives to clean and sustainable energy for cooking and behavioural change campaigns.

The Accelerator Lab is a team within UNDP that is aiming at surfacing and reinforcing locally sourced solutions at scale while mobilizing a wide and dynamic partnership of actors to contribute knowledge, resources and experience. The lab identifies grassroots solutions that address existing or emerging challenges of development. The lab plans to unearth solutions across the 17 SDGs, including Goal 7: "Ensure access to affordable, reliable, sustainable and modern energy for all", in the country. The accelerator lab will work in a cycle of solution identification, ethnographic work to understand the solution in terms of applicability, feasibility, attached cultural undertones and values, as well refinement of the solution to make it transferable across settings. The accelerator Lab and Energy teams will work together in ethnographic work, refinement and replication of all identified and actionable energy solutions. The work will be launched through an alternative energy for cooking solutions call followed by a solutions mapping and promotion of viable solutions. Behavioural change campaigns will be run on barriers to clean energy adoption (e.g. cost, safety, availability), including in partnership with private sector companies. Randomised control trials may be designed to demonstrate effectiveness.

ACRE will embark on awareness campaign on use of gas for cooking, promoting LPG, Biogas, sustainable charcoal and briquettes for rural, peri-urban and urban areas in the country. Furthermore, ACRE will work with qualifying employers to guarantee loans to staff to procure alternative cooking appliances through a revolving fund. In addition the project will seek to advocate for the development of streamlined regulations for the LPG supply chains. ACRE will also work with private sector companies on business development, including distribution network and marketing strategies.

ACRE will work with Department of Energy Affairs and MERA to lobby the Ministry of Finance to approve Duty, Tax and levy waivers in the price build up in gas and appliances as well as for MERA to review licencing requirements for stakeholders in the LPG value chain. ACRE hopes to have subsidized pricing for LPG and appliances to promote uptake of gas at a comparable usage costs to electricity and less rigorous licencing requirements for Gas suppliers which has been identified as a barrier for rapid establishment of supply points. ACRE will also review intervention to support other areas of the Energy Policy

(and Charcoal Strategy), including certification, standards and labelling; concessions and licences for commercial production of trees; and innovative financing.

ACRE plans to work more closely with the existing private sector players in the importation and distribution of LPG and appliances such as AFROX Malawi Ltd, Industrial Oxides Company Ltd, Delta, Gasman and 265 Energy to accelerate the market interventions in the LPG supply chain.

2.3 Promotion of private sector participation in renewable energy deployment in the health sector

The population demographics in Malawi have over 85% of the people living in rural areas with structural deficits in energy services. In addition to improving quality of service provision by powering technology adoption in social sectors, energy access also serves as a catalyst for retention of public service workers in the rural areas. Noticing the energy poverty prevailing in rural areas, many development partners have invested significant resources supplying energy in health facilities. However, such support has been disjointed and has not fully benefited from professional energy and investment planning, commissioning, and operations and maintenance. Even in rare situations where modest allowances for O&M has been catered for, there are no clear systems and in-situ capability for cost-effective maintenance and scale-up of reliable energy services in the health sector. This has rendered a lot of dysfunctional solar PV systems lying idle in health and education facilities, some of which require minimal investment to resuscitate.

To illustrate the importance of energy in supply chain of medicines, each pharmacy needs adequate conditions for storage and handling for the following uses controlling temperature and hygrometry, adequate lighting, refrigeration, information and communication technology systems including for security. The absence of effective management systems for roll-out and operation of solar PV in the social sectors risks undermining public confidence in the transformative potential of renewable energy.

This strategy will:

- (a) Provide technical and financial support for establishment an Energy Services Management Unit (ESMU) in the Ministry of Health, in collaboration with Department of Energy Affairs, ESCOM, MERA, selected districts councils, and other partners.
- (b) Strengthen energy service planning, investment, scale-up, operations and maintenance in the health sector to improve the contribution of energy services for better health outcomes.
- (c) Facilitate the aggregation of existing and new solar PV systems across public health facilities.
- (d) Promote private sector participation in the operation and maintenance of energy systems in the social sector.

2.4 Enhancing Power sector coordination, building institutional capacity development, and enhancement of conducting research and development

Malawi's power sector has most of the building blocks in place to drive forward with the build-out of systems that can bring reliable, affordable energy to people across the country, through on- and off-grid solutions. However, to optimize this process, the country will need a power sector that is closely coordinated, with strong government leadership and a clear vision shared across stakeholders. The project will take a lead role in use of the Accelerator Lab to develop evidence-based opinion pieces to influence research and Development in alternative cooking fuels. Relevant government ministries and departments will be engaged to develop policies to ensure the identification and participation of young women and in staff development initiatives in the energy sector.

ACRE Project will seek to support the DoE in the implementation of the propositions in both the National Energy Policy (2018) and the Renewable Energy Strategy that were developed during the implementation of the two UNDP precursor programs of Sustainable Energy Management and Increasing access to energy. Among several propositions, the country would like to develop a measurement framework for energy access adopting the Global Tracking Framework as well as promoting standardisation of renewable energy technologies.

The project will achieve the out through the following strategies

- (a) Support legislative and regulatory changes required to implement the National Energy Policy and Renewable Energy Strategy. In particular support regulatory changes to incentivise the LPG value chain and promote the uptake of gas utilisation for cooking in Malawi; support the legislative changes leading to the development and enactment of the Renewable energy act
- (b) Support the coordination bodies in the sector such as the Malawi Renewable Energy Partnership Group, Donor Working Group on Energy, CONREMA and REIAMA
- (c) Support the equipping of the Bureau of Standards and MERA in the testing and standardisation of RETs as well as enforcement of regulations and standards
- (d) Support research and development in sustainable energy solutions and energy efficiency

III. RESULTS AND PARTNERSHIPS

3.1 Expected Results

The goal of the Access to Clean and Renewable Energy (ACRE) Project is to increase access to clean, affordable, reliable, and modern energy by enhancing the sustainability, efficiency and cost-effectiveness of energy technologies. The Project aligns to the UNDP CPD, specifically: Inclusive and sustainable solutions adopted at the national and sub-national levels to achieve increased energy efficiency and universal modern energy access (especially off grid sources of renewable energy). The ACRE Project contributes to UNDAF Outcome 3 – “By 2023, Malawi has strengthened economic diversification, inclusive business, entrepreneurship and access to clean energy”.

To achieve the overall goal, the ACRE Project aims to deliver four main expected outputs:

a) Expanded generation capacity through scale-up of clean energy mini-grids targeting productive users in rural areas.

The ACRE Project will support through grants to mini grid operators the installation of two greenfield mini grids of matched generation capacity to support productive uses in the local area in addition to electricity for household lighting and cooking. ACRE will establish Productive Energy Use hubs in new and the existing mini grid sites that will accommodate cooperatives in agro-processing and other off-farm enterprises. The agro-processing establishment will depend on the locally available raw materials. Productive Energy Use Hubs (PEUHs) will accommodate enterprises such as vending (electricity, airtime, mobile money), agro-processing, cold storage, entertainment facilities and warehousing. Each cooperative will have an option of having a facility.

PEUHs will form a dual purpose of enhancing productive off-farm productive capacity and income generating potential of the rural community as well as increasing the utilisation rate of electricity generated by the mini-grid during the off-peak times. Higher productive capacities increase the ability to pay for electricity services by the participating members and thereby providing a steady flow of electricity demand that will sustain the mini grid operations.

Vulnerable members of the community such as female headed households, disabled, child headed households will deliberately be targeted in the cooperatives to enable them access electricity and be able to pay for it. Economically vibrant rural communities will attract private investors who will create more employment opportunities in the area.

b) Innovative Energy Financing, Accelerating de-risking of Energy Investments and clean energy transition for homes, institutions and industries

Experience has shown that the cost of investment capital in Malawi's clean and renewable energy sector remains high as compared to other countries in the region, thereby increasing the cost of business among the private sector and placing Malawi at a competitive disadvantage to its neighbours. The ACRE Project will strive to de-risk clean and renewable energy, scale-up and promote effective business models to sustain the pace of expansion to meet the country's energy targets.

Industries will compete in an innovation challenge competition for matching grants for renewable energy back-up systems. The aim would be for the beneficiary to meet all or a proportion of their back up energy needs from renewable energy technologies. Organisations promoting gender equality in their workplaces will have a competitive advantage. Net metering for renewables will be explored as another de-risking intervention which could encourage private sector investment in renewable energy power system. This falls under the UNDP innovation technique of the use of real-time information systems that help decision making.

ACRE will raise awareness on the dangers of indoor air pollution caused by smoke in kitchens that use wood fuels and promote alternative fuels for cooking for rural and urban households. The project will work hand in hand with Private sector players in the LPG value chains, encourage local manufacture of appliances for cooking using gas with the aim of lowering the initial costs and promote high efficient cooking appliances from alternative fuels.

Working with the Accelerator Lab team ACRE will invite a call from stakeholders for a national alternative energy for cooking solutions and develop a solutions mapping from which the viable solutions will be promoted through grants, marketing and/or equipment capital expenditure support.

c) Sustainable Power for Health with private sector participation

There is a demand for improved energy services in the health, education and other social sectors but this cannot be realized by government alone. There is need for innovative financing to attract the private sector to participate in energy generation for powering these sectors.

The Project will facilitate the establishment of an Energy Services Management Unit (ESMU). The unit will be an implementation arm for energy service provision to healthcare facilities in the country and would have technical, project management, Information technology, public relations, fund advisory and contract management capabilities.

It is proposed to be led by a steering committee which can have representation from MoH&P, ESCOM, MERA, DoE, District Administration, Ministry of Finance and Technical

Working Group for Health Sector Finance. The EMSU is expected to implement in full the power for health master plan.

ACRE anticipates that ESMU will work hand in hand with private sector energy financing entities and RET installers in establishing long term agreements in the installation, operation and maintenance of renewable energy technology installations in health facilities through out the countries to ensure that they are sustainable. A mechanism for cost recovery or payment for the services by the ESMU will be set up through stakeholder consultations.

d) Strengthened regulatory and institutional capacity for improved energy sector coordination and research & development enhancement

The Project will support the implementation of the energy policy through among others; supporting the placement of district energy officers and strengthening Malawi Bureau of Standards, Training and Testing Centre for Renewable Energy Technologies and other institutions on the enforcement of Renewable Energy Standards.

ACRE will support the Department in collaboration with MERA in the development and consequent enactment of a Renewable Energy Act as espoused by both the NEP as well as RES. Furthermore the rural electrification act will be revised to specify the establishment of the Rural Electrification Agency as well as fully support the private investor led off-grid investors access rural electrification funds. Other regulatory areas to be supported by the project will include development and implementation of regulatory frameworks concerning LPG value chains regulatory framework as well as net metering to incentivise private investment in renewable energy technologies. These will be complimented by lobbying with MERA on the implementation of cost-reflective tariffs for electricity sales by the national utility company, ESCOM in order to attract private investment in the sector.

The Project will build on previous investments in the clearinghouse mechanism and the results of the case studies to raise awareness and mindset change, linking with the innovator lab and other initiatives. The convening of dissemination of various subject matter interactive fora and tracking knowledge management will be an important aspect of this Project. The Project will support research and development in sustainable energy solutions and energy efficiency and provide increased job opportunities in the energy sector, and increased interest in STEM subjects by male and female youth in schools, contributing to expanded energy experts and innovation in Malawi.

3.2 Resources Required to Achieve the Expected Results

To achieve the overall goal, the Project will rely on UNDP Support to NIM for delivery and operations, supplemented by contributions from development partners, and engagement with a broad spectrum of national stakeholders, including the banking and finance sectors, private sector, tertiary institutions, and other stakeholders.

To support implementation, UNDP's Program Analyst will coordinate Project implementation in partnership with national and other stakeholders, with dedicated project staff including a Project Manager and a Finance/ Administrative Associate, with further technical support from UNDP and national and international consultants as required. ACRE may also support GoM engagement with development partners through a dedicated coordinator for the Donor Group on Energy.

Under Support to NIM, the UNDP country office will provide quality assurance and operational support in terms of procurement, recruitments, and results monitoring to ensure value for money.

To realize the objectives of ACRE, a total budget of US\$4,931,776 is estimated, of which UNDP will commit a total of US\$4,550,000 over 4 years. A contribution from Malawi's STAR allocation under the Global Environment Facility (GEF) to the "GEF7 Africa Mini-Grids Programme" in the amount of \$431,776 is anticipated in 2020 for activities to strengthen the financial viability and promoting scaled-up commercial investment in clean energy mini-grids in Malawi. Further resource mobilization will be required to meet government's goal of 50 profitable mini-grids in operation by 2025.

3.3 Partnerships

The energy sector in Malawi has a number of stakeholders, partners and donors who are involved in funding, supporting or implementing sustainable energy interventions. Below are some of the stakeholders for the project.

Item	Name of Stakeholder	Category	Areas of Focus
1	USAID	Donor	Utility Grid Infrastructure, Solar Home Systems, technical assistance
2	MCHS	Donor	Clean cooking
3	World Bank	Donor	Utility Grid, Infrastructure Development, Off-grid energy access
4	Norwegian Embassy	Donor	Energy services for health
5	GIZ	Donor	Research and coordination on clean cooking initiatives and productive use
6	Scottish Government	Donor	Off-grid energy access research and development
7	EU	Donor	Off-grid energy access research and development
8	Department of Energy Affairs	Govt	Energy Policy formulation and implementation; Rural

			Electrification Planning and implementation
9	Local Government	Govt	Coordinating District level Development Planning
10	Ministry of Health	Govt	Energy investment planning
11	Malawi Bureau of Standards	Parastatal	Renewable energy standards development and compliance enforcement
12	Malawi Energy Regulatory Authority	Parastatal	Development and enforcement of energy regulations
13	University of Malawi	Academic Institution	Development of research programmes on renewable energy technologies.
14	Mzuzu University	Academic Institution	Development of tailor made RE training programmes.
15	Malawi University of Science and Technology (Malawi Industrial Research and Development Centre)	Academic Institution	Research on renewable energy technologies
16	Lilongwe University of Agriculture and Natural Resources Science Technology	Academic Institution	Development of research programme on RETs and Value Chains
17	Renewable Energy Industries Association of Malawi (REIAMA)	Industry association	Coordination of the renewable energy entrepreneurs for effective policy implementation

The ACRE Project will aim at working with these partners in complimentary roles to enhance effectiveness of energy access impact. The Project will closely work with social impact in advancing mini-grid development in rural areas as well as catalysing productive use of energy. Furthermore, it will work with the Government entities in supporting an enabling environment through development of appropriate policies, regulatory framework, legislations and standards for the deployment of renewable energy off-grid systems.

3.4 Risks and Assumptions

Risks and assumptions for this Project have been categorized into three broad areas: operational, occupational and project management risks. Against each broad area, specific risks and implications, risk scores, likelihood of occurrence and management strategies to mitigate risks have been described (see Annex 3 for more details).

There are three main underlying assumptions in the formulation of this project:

- That bilateral partners would be willing to support some outputs where there are financial gaps
- That through an active Malawi Renewable Energy Partnership Group there will be greater room for collaboration on de-risking and resource mobilization
- That the proposed composition of the Project Board will be adopted (see Annex 5) for continuity

The complete risk catalogue identified at the project document preparation stage have been included in Annex 3 of this project document.

3.5 Stakeholder Engagement

There are many stakeholders in the rural electrification and clean energy space in Malawi. The key stakeholders consists of the Department of Energy Affairs (DOE), which coordinates, policy, regional local bodies and development structures that oversee regional and district level development and through MAREP the department is also responsible for the planning and implementation of rural electrification projects; MERA which is responsible for electricity regulation; ESCOM which is responsible for rural electrification infrastructure; development agencies and international donors who support government efforts with resources and technical assistance; EGENCO responsible for generation of electricity to the main grid as well as mini grids on Likoma Islands; local energy generation and rural electrification companies; local institutions active in education and research; local and international Non-Governmental Organisations (NGOs) active in rural electrification and rural development; local private sector enterprises which are active in renewable energy implementation; private sector; renewable energy industry associations; local banks and financial institutions; and finally the rural and village communities that are the target beneficiaries of rural electrification initiatives. These institutions and stakeholders are described below:

- **DOE** was established in 1992 and is responsible for energy sector policy making; renewable energy and rural electrification planning and implementation. DOE sets targets for rural electrification and renewable energy and facilitates the achievement of targets through appropriate policy and incentives. The DOE also coordinates the Malawi Rural Electrification Programme (MAREP) and also guides the rural electrification and renewable energy development plans of ESCOM, leveraging the 99% ownership of the company by the government;
- **Local Government bodies** at the sub-national level are also responsible for electrification of the local areas and villages in coordination with MAREP and DOE. In each of the districts, the District Executive Committee (DEC) headed by the District Commissioner (DC) are supposed to coordinate the electrification activities but in practice have a limited role. Below the district level, the Area Development Committee (ADC) headed by the traditional authority coordinates rural electrification and at village level the Village Development Committee (VDC) headed by the Group Village Headman (GVH) coordinates local village electrification⁹.

⁹ Ministry of Environment and Climate Change Management, 2013, National Climate Change Investment

- **NERA** is responsible for implementing the electricity regulatory framework and approves licences for generation, transmission and distribution of electricity. NERA also approves the electricity tariffs across the country based on tariff proposals by ESCOM. NERA also develops regulations to encourage private sector participation in the electricity sector and to facilitate deployment of renewable electricity;
- **ESCOM** is an electricity utility in Malawi which was established in 1957 and was corporatized in 1998¹⁰ and unbundled in 2017 creating EGENCO and ESCOM. EGENCO operates 356 MW of electricity generation capacity predominantly powered by hydro energy whilst ESCOM owns and operates the national electricity transmission and distribution network consisting of 815 km of Steel Tower lines, 1250 km of wood pole lines, 39 substations and 70 transformers¹¹. ESCOM serves over 20,300 electricity customers primarily in urban areas. ESCOM is 99% owned by the government with 1% ownership by the Malawi Development Corporation (MDC)¹²; Furthermore, ESCOM is charged with the function of serving as a Single Buyer in the Power Market Restructured organisational arrangement to procure power generated by Independent Power Producers (IPP).
- **International development agencies and donors** are quite active in rural electrification and renewable energy development. UNDP has been active in this space since 1998 and continues to play a key role. Japanese International Cooperation Agency (JICA) is supporting development of new hydro power plants; the World Bank is providing support through the Malawi Energy Access project; the United States of America International Development (USAID) is supporting the power sector in Malawi through the Power Africa initiative, and European Union (EU) has been providing support through various energy facility for rural electrification and renewable energy projects. The United Kingdom (UK) Government's Department for International Development (DfID), Government of Scotland (GoS) and German technical assistance agency Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) also all play important roles in clean energy and rural electrification in Malawi;
- **Local and International NGOs** have also played an important role in clean energy development and rural electrification in Malawi. One of the key international NGOs have been Practical Action (PA) which is supporting mini-grid based electrification in Malawi through hydro and solar energy. Community Energy Scotland (CES) are supporting community based rural energy development in Malawi and through CEM Trading are operating the Sitolo PV Mini grid in Mchinji. The Mulanje Mountain Conservation Trust (MMCT) wholly own an electricity company (MEGA), the first vertically integrated licenced mini grid operator in Malawi and is a key local NGO active in environment and energy activities. The Cooperation Network for Renewable Energy

Plan, 2013-2018

¹⁰ Gamula, GET et al, 2013, Development of Renewable Energy Technologies in Malawi, IJRETR;

¹¹ World Bank, 2011, Project Appraisal Document for the Energy Sector Support Project

¹² Which was also owned by the government and has now ceased to exist making the government ownership 100%

in Malawi (CONREMA) is a network and information sharing platform for RE actors established by RENAMA.

- **Education and Research Institutions** have also played a role in training and capacity building for clean energy and rural electrification and testing and quality control, as well as for research, advisory and consulting services to clean energy and electrification initiatives. Mzuzu university offers bachelor's degree programmes in renewable energy and the Malawi Polytechnic offers bachelor's degree in energy engineering and manages the Government of Scotland's Malawi Renewable Energy Acceleration Programme (M-REAP). The Malawi Industrial Research and Technology Development Centre (MIRTDC) has technology development and assessment capabilities in solar and hydro energy technologies;
- **Private sector and industry associations** have been incubated by a previous UNDP/GEF project on *Barrier Removal to Renewable Energy in Malawi* (BARREM) and several international initiatives around supporting improved cook stoves and pico solar products. The local renewable energy industry¹³ is not currently active in manufacturing but is capable of sourcing and integrating photovoltaic lighting and electricity systems and fabricating or manufacturing improved cook stoves. The Renewable Energy Industry Association of Malawi (REIAMA) was originally established and supported by the UNDP/GEF BARREM project to coordinate and represent the private industry in renewable energy business whilst CONREMA represents the interests for all NGOs. The Malawi Renewable Energy Partnership Group (MREPG) was established through Renewable Energy Strategy for Malawi and comprises representation from Development partners, Government, NGOs, Academic and Research Institutions and Private Sector to coordinate the activities and share information among stakeholders to minimise duplication of efforts.
- **Banking and Financial institutions** haven't yet played any significant role in financing rural electrification through project financing, enterprise financing or end user financing. A Credit Guarantee Fund (CGF) was established by BARREM through National Bank (NB) managed by Malawi Environmental Endowment Trust (MEET) to serve as a risk management mechanism for financing Solar Home System (SHS) lenders but is no longer operating. A Revolving Fund was also established under MAREP. Banks through Bankers Association of Malawi have expressed interest in offering loan products as well as managing a revolving fund for renewable energy financing and other banks like NBS have started providing loans for solar home systems.

3.6 South-South and Triangular Cooperation (SSC/TrC)

The ACRE Project builds on the previous projects on energy, the Sustainable Energy Management and the Increasing Access to Clean and Affordable Decentralised Energy Services for Selected Vulnerable Areas of Malawi. Both these projects benefitted from south-south exchanges in the formulation of the new energy policy and well-targeted and

¹³ All renewable energy companies are licensed by MERA

tailored technical cooperation. and training will be guided by the “ACRE Training Programme” outlining UNDP’s capacity building plan over 4 years. ACRE will continue building on the south-south cooperation experiences, including learning from countries like Tanzania, Zambia, Rwanda and Kenya where investable portfolios of clean energy mini-grids are in operation.

3.7 Knowledge and Information Sharing

Key knowledge products will focus on:

- (1) Video and audio documentaries on impacts of mini-grids in rural areas.
- (2) Updates and publications on the information clearinghouse and website for investors and operators.
- (3) Policy papers on clean energy options and investment prospects for Malawi
- (4) Research and development papers on various aspects of mini-grids; energy transitions; energy efficiency; energy services in health sector; performance and impact evaluations on access to energy services; business models suitable to Malawi; market dynamics; and business development services.
- (5) Energy Poverty Statistical Bulletins (every 2 years)
- (6) Semi-annual newsletters aimed at renewable energy communities of practice in Malawi

3.8 Sustainability and Scaling Up

The Project deliverables will be sustained and scaled up through:

- (1) Social Enterprises that will operate, maintain and manage the installed mini-grid systems and charging of cost reflective tariffs. Competitively selected Social Enterprises will enter into a long-term performance-based PPP concessionary agreement with government and UNDP on the management of the mini-grid schemes.
- (2) Government, using the Rural Electrification Fund, will scale up mini-grids and off-grid solutions to increase access to energy in rural areas.
- (3) The energy transition will be sustained by the private sector that will be motivated by incentives established during the implementation of the ACRE Project
- (4) Government in collaboration with private players will ensure that there is operation and maintenance of solar installation in social institutions such as health and education facilities to achieve sustainability.

IV. PROJECT MANAGEMENT

4.1 Cost Efficiency and Effectiveness

The design of the ACRE has been guided by the need for cost effectiveness and sustainability of the interventions. The Project has put emphasis on inclusion and

partnerships to leverage technical and financial resources and will collaborate with other Projects to maximise on results. The Project will collaborate with the private sector project in ensuring that economic empowerment and private sector role is enhanced in this access to clean renewable energy Project, through review and where necessary updating existing energy standards and formulation of new ones as identified and in order to ensure that Malawi has quality and safe electrical and renewable energy products¹⁴.

Scrutiny will be made to costs, and value for money will be ensured throughout the Project implementation period. Proactive risk management methodologies will be used for early detection of potential financial abuse. Spot checks will be conducted quarterly to minimise risks and ensure delivery of performance milestones.

4.2 Project Management

The Project will be implemented over a period of 48 months (4 years) starting from January 2020 and ending in December 2023. The Department of Energy Affairs (DoE) will be the main implementing partner (IP) and is accountable to UNDP for effectively and efficiently manage project activities, including the efficient and effective implementation, monitoring and evaluation of Project interventions, achieving Project outcomes, and for the effective use of UNDP resources in accordance with UNDP rules and regulations, policies and procedures under Support to NIM. Where appropriate, UNDP will enter into direct agreements with social enterprises for operation of clean energy mini-grids and other players to achieve specific project outputs.

DoE will be responsible for overall program leadership, planning, coordination and management, and monitoring adherence to the workplan, which forms the basis of the execution (figure). DoE as the main Implementing Partner will be responsible for:

- Developing the multi-year work plan;
- Developing the Combined Delivery Report (CDR) at the end of each year; and,
- Signing the financial report or the funding authorisation and certificate of expenditures

Reporting to the UNDP Portfolio Manager, the Programme Analyst, supported by the UNDP Project Manager (PM) and Finance/Administration officer embedded in DoE, will in consultation with the National Coordinator lead the daily project management and decision making for the Project. The National Coordinator and PM will ensure that there is inclusive and active participation /involvement in the project implementation of key stakeholders from government, local councils, civil society private sectors, UN agencies and Communities. DoE and UNDP will facilitate signing of agreement with executing bodies such as local councils, NGOs etc. The PM will be supported by an administrative and finance assistant.

¹⁴ Reform 3 renewable energy action plan and reporting

There will be direct project costs associated with this project. These costs cover procurement and management oversight of the Project within the UNDP country office.

V. RESULTS FRAMEWORK¹⁵

Intended Outcome as stated in the UNDAF/Country [or Global/Regional] Programme Results and Resource Framework: By 2023, Malawi has strengthened economic diversification, inclusive business, entrepreneurship, and access to clean energy										
Outcome indicators as stated in the Country Programme [or Global/Regional] Results and Resources Framework, including baseline and targets: UNDAF outcome indicators, baseline and targets 1.3 number of rural populations with access to clean energy Baseline ;0~1,300,500(2017) Target: 1,335,700 people of whom 30% are women										
Applicable Output(s) from the UNDP Strategic Plan: Output 1.3: Inclusive and sustainable solutions adopted at the national and subnational levels to achieve increased energy efficiency and universal modern energy access (especially off-grid sources of renewable energy) Indicator 1.3.1: proportion of households benefiting from clean, affordable and sustainable energy access Baseline: 7%; Target: 15% (30% female-headed, 40% coverage of households with persons with disabilities) Data source: Department of Energy Affairs Indicator 1.3.2: Cumulative installed generation capacity for rural populations through mini-grids Baseline: 385kW; Target: 2,000 kW Data source: Department of Energy Affairs										
Project title: Access to Clean and Renewable Energy (ACRE) Project and Atlas Project Number: 00123489 and Output Number 00118724										
EXPECTED OUTPUTS	OUTPUT INDICATORS¹⁶	DATA SOURCE	BASELINE		TARGETS (by frequency of data collection)					DATA COLLECTION METHODS & RISKS
			Value	Year	Year 1	Year 2	Year 3	Year 4	FINAL	

¹⁵ UNDP publishes its project information (indicators, baselines, targets and results) to meet the International Aid Transparency Initiative (IATI) standards. Make sure that indicators are S.M.A.R.T. (Specific, Measurable, Attainable, Relevant and Time-bound), provide accurate baselines and targets underpinned by reliable evidence and data, and avoid acronyms so that external audience clearly understand the results of the project.

¹⁶ It is recommended that projects use output indicators from the Strategic Plan IRRF, as relevant, in addition to project-specific results indicators. Indicators should be disaggregated by sex or for other targeted groups where relevant.

EXPECTED OUTPUTS	OUTPUT INDICATORS	DATA SOURCE	BASELINE		TARGETS (by frequency of data collection)				FINAL	DATA COLLECTION METHODS & RISKS
			Value	Year	Year 1	Year 2	Year 3	Year 4		
Output 1 Expanded generation capacity targeting productive users in rural areas	1.1 Cumulative Installed capacity of clean energy mini-grids (kW) in project areas	NERA Government Reports	385	2019	550	1,300	1900	2,050	2050 ¹⁷ KW	Rated system capacity and Capacity assessment at system commissioning
	1.2 Proportion of households benefiting from clean, affordable and sustainable energy access in the project areas	Government Reports	7%	2019	8%	10%	12%	13%	15%	Customer database from mini grid operators and reports
	1.3 Number of Productive Users connected to the mini-grids in the project areas	Government Reports	0	2019	3	8	12	15	15	Mini Grid and Cooperative reports
	1.4 Proportion of females in PUEHs cooperatives formed within the project areas	Government Reports	0%	2019	50%	50%	50%	50%	50%	Cooperative registration documents
	1.5 Tons of equivalent CO₂ avoided from RE mini grids supported by the project	Project Reports, GHG monitoring reports	22,000	2019	28,000	34,000	38,000	44,000	44,000	System lifetime GHG calculation from the installed capacity. GEF GHG calculation Framework
Output 2 Innovative Energy financing accelerating de-risking of energy investments and clean energy transition for homes, institutions and industries	2.1 Cumulative number of households switching to alternative cooking fuels segregated by gender as a result of the project intervention.	Government Reports, LPG Suppliers, Participating Banks	0	2019	10,000	20,000	30,000	40,000	40,000	New customers from LPG Suppliers
	2.2 Cumulative number of industries accessing energy financing solutions for clean energy transition from fossil fuel generators as facilitated by the intervention of this project	Government Reports Participating Banks	0	2019	4	8	10	10	10	Innovative Challenge Fund on Energy Transition Reports
	2.3 Cumulative installed capacity of industrial power back up installations replacing fossil fuels (kW) within the scope of this project	Government Reports	0	2019	1600	3,200	4,000	4,000	4,000	
	2.4 Proportion of youth and females participating in the LPG value chain as a result of the intervention of this project	Government Reports	0%	2019	60%	60%	60%	60%	60%	LPG Suppliers and Agents employment records
	2.5 Number of awareness Campaigns conducted	Progress Reports	0		64	128	0	0	128	

¹⁷ The greenfield mini grids are distributed as follows 5 expected to be funded by MAREP of at least 200KW each (3 Solar and 2 Hydro), the regional project to add 1no 100KW, the following carry over hydro mini grid projects to be completed in year 1 and two, 50 KW Mantchewe and 50KW Kavuzi and two new mini grids to be financed through innovative financing mechanism with private sector of at least 250KW Solar PV

	2.6 Tons of equivalent CO₂ avoided from the switch from Biomass to alternative clean cooking at household level supported by the project	Project Reports, Company Reports	0	2019	0	8,000	24,000	40,000	40,000	Calculations based on per capita energy savings of 0.6 tCO ₂ per year from households switching from Biomass.
	2.7 Tons of equivalent CO₂ avoided from industries substituting fossil fuel intensive back up power with RET supported by the project	Company Reports, Project Reports	0	2019	0	5,000	10,000	15,000	15,000	RET power generation data GHG calculations. UNFCCC GHG methodology
Output 3 Sustainable Power for Health with private sector participation	3.1 Number of hard to reach Health Centres with functional RE systems	Government Reports		2019	40	80	120	160	160	ESMU Reports
	3.2 An operational Energy Support Management Unit (ESMU) catalysing private sector participation in the operation and maintenance of energy systems in Health Facilities in place	Government Reports	0	2019	1	3	4	5	5 ¹⁸	Long term agreements signed by ESMU with Private Sector for Health administrative Zone energy systems operation and maintenance support
	3.3 Number of health facilities implementing energy efficient measures.	ESMU Reports	0	2019	10	50	100	100	260	
Output 4 Strengthened power sector coordination, institutional capacity development, and research & development enhancement	4.1¹⁹ Cumulative number of enacted entities supported from the energy policy implementation. (Rural Electrification Agency, etc) as part of implementation of Power Market reforms espoused in the National Energy Policy	Gazettes DoE	4	2019	4	6	6	7	7	Enabling entities in the energy sector catalysing private sector participation and increasing power generation capacity
	4.2 Proportion of females participating in capacity building interventions at national, sub-national and local levels	Government Reports	25%	2019	25%	30%	35%	40%	40%	
	4.3 Masters in energy efficiency/energy audits or energy economics	Government Reports	0	2019	1	1	2	2	2	
	4.4 Number of institutions with new Renewable Energy standards testing equipment supported by the Project enhancing standardisation enforcement as advocated by the Malawi Renewable Energy Strategy	RE Standards	0	2019	1	1	1	1	1	
	4.5 Energy Access National Survey using globe tracking framework in support of the National Energy Policy section 3.1.6 – Definition and Measurement of Access to Electricity	Survey Reports	0	2019	1	1	1	2	2	Sampling

VI. MONITORING AND EVALUATION

In accordance with UNDP's programming policies and procedures, the project will be monitored through the following monitoring and evaluation plans: *[Note: monitoring and evaluation plans should be adapted to project context, as needed]*

Monitoring Plan

Monitoring Activity	Purpose	Frequency	Expected Action	Partners (if joint)	Cost (if any)
Track results progress	Progress data against the results indicators in the RRF will be collected and analysed to assess the progress of the project in achieving the agreed outputs.	Quarterly, or in the frequency required for each indicator.	Slower than expected progress will be addressed by project management.		
Monitor and Manage Risk	Identify specific risks that may threaten achievement of intended results. Identify and monitor risk management actions using a risk log. This includes monitoring measures and plans that may have been required as per UNDP's Social and Environmental Standards. Audits will be conducted in accordance with UNDP's audit policy to manage financial risk.	Quarterly	Risks are identified by project management and actions are taken to manage risk. The risk log is actively maintained to keep track of identified risks and actions taken.		
Learn	Knowledge, good practices and lessons will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project.	At least annually	Relevant lessons are captured by the project team and used to inform management decisions.		
Annual Project Quality Assurance	The quality of the project will be assessed against UNDP's quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project.	Annually	Areas of strength and weakness will be reviewed by project management and used to inform decisions to improve project performance.		
Review and Make Course Corrections	Internal review of data and evidence from all monitoring actions to inform decision making.	At least annually	Performance data, risks, lessons and quality will be discussed by the project board and used to make course corrections.		

Project Report	A progress report will be presented to the Project Board and key stakeholders, consisting of progress data showing the results achieved against pre-defined annual targets at the output level, the annual project quality rating summary, an updated risk long with mitigation measures, and any evaluation or review reports prepared over the period.	Annually, and at the end of the project (final report)			
Project Review (Project Board)	The project's governance mechanism (i.e., project board) will hold regular project reviews to assess the performance of the project and review the Multi-Year Work Plan to ensure realistic budgeting over the life of the project. In the project's final year, the Project Board shall hold an end-of project review to capture lessons learned and discuss opportunities for scaling up and to socialize project results and lessons learned with relevant audiences.	At least twice a year	Any quality concerns or slower than expected progress should be discussed by the project board and management actions agreed to address the issues identified.		12,000

Evaluation Plan²⁰

Evaluation Title	Partners (if joint)	Related Strategic Plan Output	UNDAF/CPD Outcome	Planned Completion Date	Key Evaluation Stakeholders	Cost and Source of Funding
End of term Evaluation	UNICEF		1.3	October 2023	DoE, MoH&P	UNDP & GEF

²⁰ Optional, if needed

VII. MULTI-YEAR WORK PLAN ²¹²²

All anticipated programmatic and operational costs to support the project, including development effectiveness and implementation support arrangements, need to be identified, estimated and fully costed in the project budget under the relevant output(s). This includes activities that directly support the project, such as communication, human resources, procurement, finance, audit, policy advisory, quality assurance, reporting, management, etc. All services which are directly related to the project need to be disclosed transparently in the project document.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year				RESPONSIBLE PARTY	PLANNED BUDGET		
		Y1	Y2	Y3	Y4		Funding Source	Budget Description	Amount
Expanded generation capacity targeting productive users in rural areas	1.1 Assessment and preparation of candidate greenfield mini grid sites from Rural Electrification Masterplan	50,000	50,000	-	-	DoE	Trac		100,000
							Other		0
	1.2 Conduct feasibility studies and Develop value chain analysis for productive use for major crops found in mini grid sites	50,000	-	-	-	DoE / MoAIWD	Trac		50,000
							Other		0
	1.3 Support supply chain development for productive users and establish productive use of energy hubs (PUEHs) for each mini grid site	50,000	40,000	40,000	25,000	DoE	Trac		155,000
							Other		0
	1.4 Provide business development services for cooperatives and other enterprises	10,000	10,000	10,000	-	MoLG/MoT	Trac		30,000
							Other		0
	1.5 Provide Technical Assistance and training in operation, maintenance and management of mini grids. Establish last mile connections.	40,000	45,000	40,000	45,000	UNDP	Trac		170,000
							Other		
	1.6 Support MAREP, EGENCO and Private Mini grid Operators in achieving cost reductions as they roll out mini grids.	7,000	7,000	7,000	7,000	UNDP	Trac		28,000
							Other		0
	1.7 Build cross sector partnerships (with Agriculture, MITC, MoLG) for energy demand stimulations in rural areas	10,000	10,000	10,000	10,000	DoE	Trac		40,000
							Other		0
		300,000	330,000	360,000	410,000	NGOs	Trac		1,400,000

²¹ Cost definitions and classifications for programme and development effectiveness costs to be charged to the project are defined in the Executive Board decision DP/2010/32

²² Changes to a project budget affecting the scope (outputs), completion date, or total estimated project costs require a formal budget revision that must be signed by the project board. In other cases, the UNDP programme manager alone may sign the revision provided the other signatories have no objection. This procedure may be applied for example when the purpose of the revision is only to re-phase activities among years.

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year				RESPONSIBLE PARTY	PLANNED BUDGET		
		Y1	Y2	Y3	Y4		Funding Source	Budget Description	Amount
	1.8 Support installation of greenfield mini grids in selected rural areas to be operated and managed by pre-selected mini grid operators under Concessionary Agreement						Other		0
	MONITORING OF OUTPUT ACTIVITIES	10,000	10,000	10,000	5,000	DOE	Trac		35,000
					100,000		Other		100,000
	Total for output 1	537,000	512,000	507,000	522,000	-		-	2,078,000
Output 2 Innovative Energy financing accelerating de-risking of energy investments and clean energy transition for homes, institutions and industries	2.1 Institutional support to MITC in the energy sector to increase outreach and improve communication with private investors.	10,000	10,000	10,000	10,000	MITC	Trac		40,000
						DoE	Other		0
	2.2 Awareness raising in health and environmental hazards of use of biomass energy and alternative fuel options for cooking such as LPG, Biogas, sustainable charcoal and clean briquettes	5,000	20,000	20,000	20,000	DoE	Trac		105,000
							Other		0
	2.3 Strengthening the ability of the private sector to replace or supplement fossil fuel power generation through matching grants. Strengthening the ability of the private sector on energy (gas / sustainable charcoal) business development for household energy use, including network and marketing.	100,000	100,000	100,000	100,000	UNDP	Trac		800,000
	2.4 Support studies to demonstrate the integration of distributed energy resources for grid stability and reliability. Support campaigns on consumer behavioural change to barriers to sustainable fuel adoption.	5,000	35,000	5,000	5,000	UNDP	Trac		50,000
									0
	2.5 Establishment and operationalisation of an Employer guaranteed clean Cooking Financing Arrangement for Staff in Organisations through micro-financing revolving fund for cooking appliances and renewable energy technologies	50,000	50,000	50,000	50,000	UNDP			200,000
	MONITORING OF OUTPUT ACTIVITIES	10,000	10,000	10,000	10,000	DOE	Trac		40,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year				RESPONSIBLE PARTY	PLANNED BUDGET		
		Y1	Y2	Y3	Y4		Funding Source	Budget Description	Amount
	Sub-Total for Output 2	165,000	185,000	210,000	175,000			-	1, 535,000
Output 3 Sustainable Power for Health with private sector participation	3.1 Support Energy Efficiency and Energy Audits of Health facilities	50,000	50,000	50,000	50,000	MoH	Trac		200,000
							Other		0
	3.2 Technical Assistance to the ESMU in resource mobilisation, private sector engagement models, energy needs assessment.	20,000	20,000	20,000	20,000	UNDP	Trac		80,000
							Other		0
	3.3 Technical support to the Installation of sustainable power for selected facilities by Private Sector through ESMU	5,000	5,000	5,000	5,000	UNDP	Trac		20,000
							Other		0
	3.4 Support to the Implementation of Energy efficiency measures in selected facilities.	5,000	5,000	5,000	5,000	UNDP	Trac		20,000
							Other		0
	MONITORING OF OUTPUT ACTIVITIES	1,000	1,000	1,000	1,000		Trac		4,000
							Other		0
	Sub-Total for Output 3	81,000	81,000	81,000	81,000			-	324,000
Output 4 Strengthened power sector coordination, institutional capacity development, and research & development enhancement	4.1 Support operations and staffing of sector working groups such as Malawi Renewable Energy Partnership Group (MREPG), REIAMA, CONREMA and DCE.	17,000	17,000	17,000	17,000	UNDP	Trac		68,000
							Other		0
	4.2 Support to policy implementation and monitoring (legislative and regulatory).	5,000	18,000	10,000	10,000	DoE	Trac		43,000
							Other		0
	4.3 Technical Support to DoEA, ESCOM, Single Buyer Unit and future Rural Electrification Agency to strengthen coordinated planning.	5,000	20,000	20,000	10,000	UNDP	Trac		55,000
							Other		0
	4.4 Support to MBS for equipping the RET testing centre.	60,000	15,000	15,000	15,000	UNDP/MB S	Trac		105,000
							Other		0
	4.5 Capacity Building in sustainable energy solutions and energy efficiency at national and local levels.	28,000	20,000	30,203	30,000	DoE	Trac		108,203
							Other		0
	4.6 Developing Global tracking framework guidelines						Trac		0
		20,000					Other		20,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year				RESPONSIBLE PARTY	PLANNED BUDGET		
		Y1	Y2	Y3	Y4		Funding Source	Budget Description	Amount
	4.7 Conducting Energy Access national survey using GTF						Trac		0
		150,000			150,000		Other		300,000
	4.8 Support to research and development in Sustainable Energy Solutions and Energy Efficiency Support to implementation of Energy Policy including VAT incentives, certification, standards and labelling, concessions and licensing using innovative financing.	20,000	20,000	20,000	20,000	UNDP	Trac		80,000
							Other		0
	MONITORING OF OUTPUT ACTIVITIES	20,000	20,000	20,000	20,000	DoE	Trac		80,000
							Other		0
	Sub-Total for Output 4	155,000	130,703	132,203	122,000	-		-	539,906
Output 5 Project management and adaptive learning	5.1 Monitoring and ADAPTIVE LEARNING								
	Support to Programme Board Meetings and Technical Advisory Committees.	12,203	22,000	15,000	15,000	DoE	Trac		64,203
	Mid Term & End of Term Evaluation	-	-	-	40,000	UNDP	Trac		40,000
	Annual Audits	3,500	3,500	3,500	4,203	UNDP	Trac		14,703
	Communication, Visibility Actions and Knowledge Product development	4,000	8,000	4,000	8,000	UNDP	Trac		24,000
	5.1 Total	19,703	33,500	22,500	67,203				142,906
	5.2 Program management costs								
	Remuneration for Project personnel and staff salaries	75,797	75,797	75,797	75,797	UNDP	Trac		303,188
	Travel by Project Manager, Project Accountant, MREPG Coordinator & UNDP staff for monitoring visits attending project related meetings, trainings and conferences	7,500	7,500	7,500	7,500	UNDP	Trac		30,000
	Procurement of Project Management office Vehicle, equipment computers & furniture, maintenance services & insurances	14,500	30,000	19,500	5,000	UNDP	Trac		69,000

EXPECTED OUTPUTS	PLANNED ACTIVITIES	Planned Budget by Year				RESPONSIBLE PARTY	PLANNED BUDGET		
		Y1	Y2	Y3	Y4		Funding Source	Budget Description	Amount
	Project Office Operations Costs (Communication, Stationery, Supplies and recurrent costs)	15,000	15,000	15,000	15,000	UNDP	Trac		60,000
	UNDP direct support costs to the project relating to procurement & financial support and project oversight management costs	67,000	67,000	67,000	67,000	UNDP	Trac		268,000
	5.2 total	179,797	195,297	184,797	170,297				730,188
	Sub-Total for Output 5	199,500	228,797	207,297	237,500				873,094
TOTAL	PROJECT TOTALFUNDED	1,137,500	1,137,500	1,138,000	1,137,000				4,550,000

VIII. GOVERNANCE AND MANAGEMENT ARRANGEMENTS

The ACRE Project is a successor project to the Increasing access to clean and affordable decentralised energy services in selected vulnerable areas of Malawi. It is with this background that the successful best practices of the previous project on governance will be carried forward with lessons learnt incorporated to attain the best practice in governance. The National Project Coordinator will be appointed by the government and will be a senior government official from DoE will be the main focal person on the Project responsible for reporting to UNDP and the Project Board on Project deliverables. The ACRE Project Manager will report both to the National Project Coordinator and the UNDP Programme Analyst (Renewable Energy). The Project Manager will be responsible for management and coordination of project outputs with supervision and strategic guidance from the DoE designated Project Coordinator.

UNDP will oversee the Project implementation, achievement of Project outputs and ensure proper use of UNDP funds and any other resources that will be mobilized. The UNDP country office will in addition oversee financial expenditures against budgets, appoint independent evaluators and financial auditors. UNDP will also be responsible for quality assurance, ensuring that the Project is implemented in accordance with rules and procedures for managing UNDP projects. UNDP will ensure that specific agreements and structures will be put in place during the first three months of the Project as regards the Project's use of micro-capital grants. UNDP will be responsible for working with the DoE and the Project Board also known as the Project Steering Committee to develop a Standard Grant Agreement (Micro-Capital Grant Agreement) between the designated institutions of the program or project (DOE and UNDP) and the recipient institutions (under Components 1, 2 and 3). The Grant Agreement will set out: a) the responsibilities of each party; b) the activities to be undertaken; c) the outputs to be produced; d) the performance criteria for the release of future tranches of funding; e) duration of activities; and f) reporting arrangements for credit related purposes.

As a member of the Project Board (Project Steering Committee) UNDP will focus on the expected Project outputs; arbitrate on, and ensure resolution, of any donor priority or resource conflicts; contribute opinions on board decisions on whether to implement proposed changes; and ensure that any standards defined for the Project are met and used for good effect, and monitor any risks in the implementation of the Project.

Ministry of Natural Resources, Energy and Mining: MONREM as the implementing partner will be responsible for the delivery of the Project results and accountable for resources provided, in accordance with UNDP rules and procedures. Specifically, the implementing partner for the Project will be Department of Energy Affairs (DoE) and will be responsible and accountable for managing the Project.

MONREM is responsible for Project implementation and at Project Board level will perform the role of the Executive. The Permanent Secretary or his/her nominated representative will chair the project board and ensure government ownership of the Project. S/He will also ensure that the Project is focused throughout its life cycle on achieving its objectives and delivering outputs that will contribute to higher level outcomes and that the Project gives value for money, ensuring a cost-cautious approach to the Project.

UN agencies in Malawi conduct micro assessments against the framework for Harmonised Approach to Cash Transfer (HACT) on all ministries and departments of the Government of Malawi. The latest HACT for the Ministry of Natural Resources, Energy and Mining is included in Annex 6 of the Project Document; the risk rating for the Ministry in that HACT was rated as Medium. Other Responsible Partners in this Project are: Ministry of Finance; Ministry of Local Government; Ministry of Agriculture, Irrigation and Water Development;

Malawi Bureau of Standards; Ministry of Health; Malawi Investment and Trade Centre; Renewable energy entrepreneurs and businesses; districts; MERA, but not all of them have not yet been assessed, however quarterly spot checks will be made by project manager as it is standard for them to be done quarterly on all implementing partners where the annual fund transfers to an IP exceeds \$ 100,000. A sample letter of agreement that can be amended to be used for an agreement between a government and an NGO for delegation as a RP is available at Annex 7. This will be amended and customized appropriately for the agreement to be concluded between MONREM/DoE.

The Project Board also known as the Project Steering Committee (PSC) will be responsible for providing overall policy guidance and direction to the Project and shall at minimum convene twice per year. Composed of representatives from GoM, UNDP, private sector associations, academia, and development partners, the ESC will be responsible for making by consensus, management decisions for the Project when such guidance is required by the Project, including making recommendations to UNDP and the implementing partner to approve Project plans and budget revisions. In case of consensus cannot be reached, the final decisions shall rest with the UNDP representative.

The Project Board will also ensure that required resources are committed and will be arbitrate on any conflicts within the Project or negotiate a solution for any problems between Project and external bodies. In order to ensure UNDP's ultimate accountability, Project Board decisions should be made in accordance with standards that shall ensure best value for money, fairness, integrity, transparency and effective international and national competition. In general, the responsibilities of the board shall include:

During implementation

The Project Board shall provide overall guidance including policy input and functional guidance as well as direction to the Project, ensuring it remains within any specified constraints;

- Address issues as raised by the Project;
- Provide guidance and agree on possible countermeasures/management actions to address specific risks;
- Conduct regular meetings to review the Project Quarterly Progress Report and provide direction and recommendations to ensure that the agreed deliverables are produced satisfactorily according to plans.
- Review Combined Delivery Reports (CDR) prior to certification by the Implementing Partner;
- Appraise the Project Annual Review Report, make recommendations for the next AWP, and inform the Outcome Board about the results of the review.
- Review and approve end of project report, make recommendations for follow-on actions;
- Assess and decide on Project changes through revisions

During Project closure

- Assure that all Project deliverables have been produced satisfactorily;
- Review and approve the Final Project Review Report, including lessons-learned;
- Make recommendations for follow-on actions to be submitted to the Outcome Board;
- Notify operational completion of the Project to the Outcome Board

Outcome Board: At the UNDP Country Project level, an Outcome Board is responsible for ensuring the realization of the expected outcome and managing the interdependency of different projects that contribute to a particular outcome. Since this Project contributes to

one of the country Project outcomes within the overall framework of the UNDAF, its outputs will be monitored at Project level through an Outcome Board. Ministry of Natural Resources Energy and Mining as the implementing partner will be responsible for reporting progress and results of this Project to the Outcome Board. The Outcome Board will be constituted by the Executing Agency (Ministry of Finance, Economic Planning and Development) and UNDP, under the auspices of the UNDAF in Malawi.

National Project Coordinator: The national project coordinator will be responsible for the following duties:

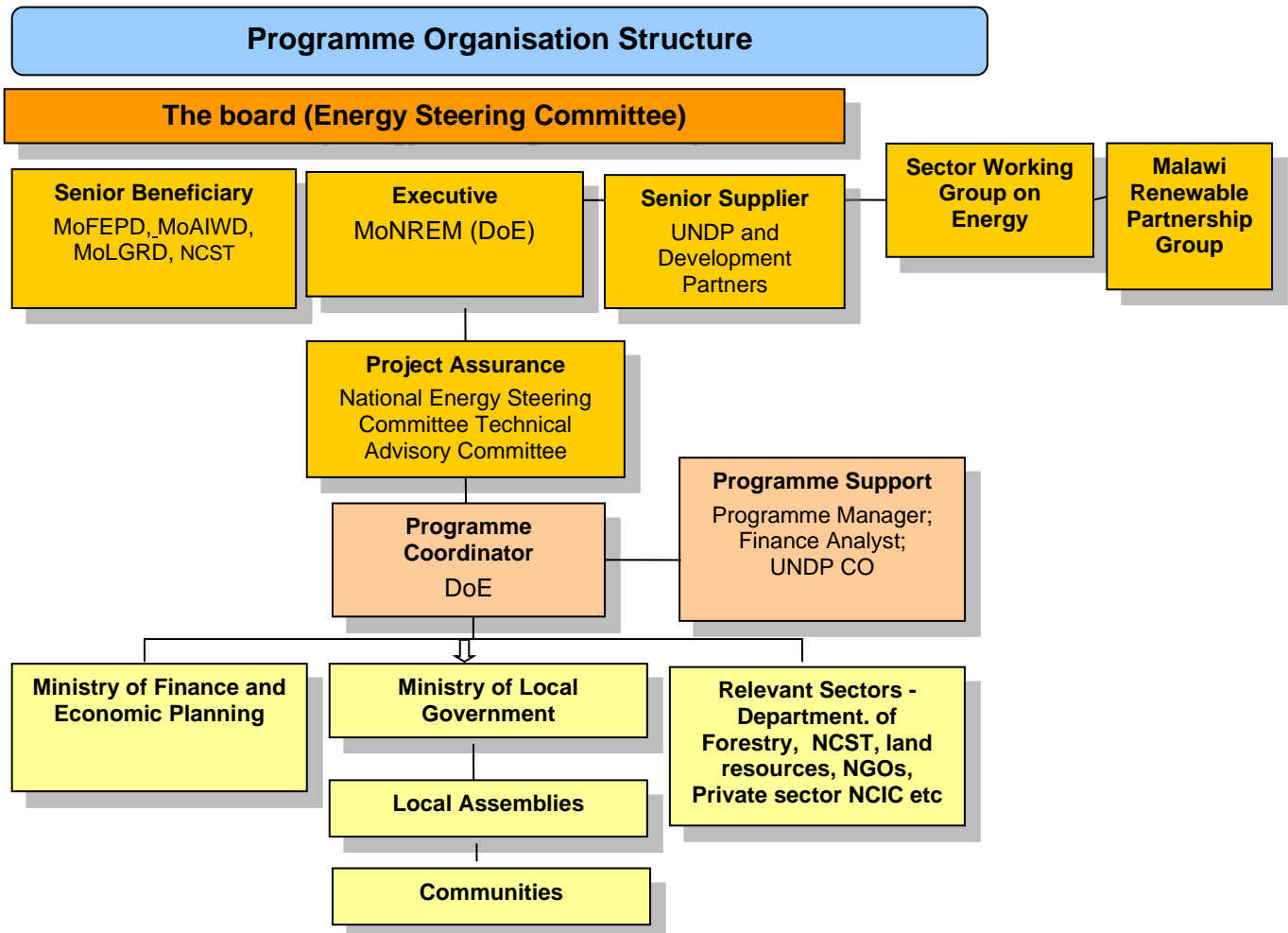
- Coordinate project management activities, resources, equipment and information.
- Liaise with relevant government agencies, private partners, and all other partners for effective coordination of all Project activities;
- Oversee and ensure timely submission of Project Implementation Review/Annual Project Report (PIR/APR), technical reports, quarterly financial reports, and other reports as may be required by UNDP, and other donors, and other oversight agencies;
- Disseminate project reports and respond to queries from stakeholders;
- Oversee the exchange and sharing of experiences and lessons learned with relevant projects nationally and internationally;
- Report progress of project to the PB(PSCESE), and ensure the fulfilment of PB directives.
- Carry out regular supervision, monitoring and inspections of all project sites and activities.

Project Manager: The project manager will carry out the following functions with oversight from the National Project Coordinator and UNDP Programme Analyst (Renewable Energy):

- Management of all project outputs to deliver the planned outputs with highest possible quality within the envisaged timeframes;
- Management of financial resources in a prudent manner to provide the best value to GEF, and UNDP;
- Supervision of outputs implemented by RP
- Closely monitor and manage Project outputs, identify possible risks and carry out risk management activities;
- Monitor and report on project and project implementation to the project steering committee, donors and UNDP;
- Consult the project steering committee and UNDP on any strategic issues relating to successful delivery of the Project.

The full terms of reference for the Project Manager are contained in Annex 5

Fig 9: Project Management Structure of the Project



IX. LEGAL CONTEXT

This project document shall be the instrument referred to as such in Article 1 of the Standard Basic Assistance Agreement between the Government of Malawi and UNDP, signed on 15th July 1977. All references in the SBAA to “Executing Agency” shall be deemed to refer to “Implementing Partner.”

This project will be implemented by Department Of Energy Affairs (“Implementing Partner”) in accordance with its financial regulations, rules, practices and procedures only to the extent that they do not contravene the principles of the Financial Regulations and Rules of UNDP. Where the financial governance of an Implementing Partner does not provide the required guidance to ensure best value for money, fairness, integrity, transparency, and effective international competition, the financial governance of UNDP shall apply.

X. RISK MANAGEMENT

Option a. Government Entity (Support to NIM)

1. Consistent with the Article III of the SBAA *[or the Supplemental Provisions to the Project Document]*, the responsibility for the safety and security of the Implementing Partner and its personnel and property, and of UNDP’s property in the Implementing Partner’s custody, rests with the Implementing Partner. To this end, the Implementing Partner shall:
 - a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
 - b) assume all risks and liabilities related to the Implementing Partner’s security, and the full implementation of the security plan.
2. UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of the Implementing Partner’s obligations under this Project Document.
3. The Implementing Partner agrees to undertake all reasonable efforts to ensure that no UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via http://www.un.org/sc/committees/1267/aq_sanctions_list.shtml.
4. Social and environmental sustainability will be enhanced through application of the UNDP Social and Environmental Standards (<http://www.undp.org/ses>) and related Accountability Mechanism (<http://www.undp.org/secu-srm>).
5. The Implementing Partner shall: (a) conduct project and Project-related activities in a manner consistent with the UNDP Social and Environmental Standards, (b) implement any management or mitigation plan prepared for the project or programme to comply with such standards, and (c) engage in a constructive and timely manner to address any concerns and complaints raised through the Accountability Mechanism. UNDP will seek to ensure that communities and other project stakeholders are informed of and have access to the Accountability Mechanism.
6. All signatories to the Project Document shall cooperate in good faith with any exercise to evaluate any Project or project-related commitments or compliance with the UNDP Social and Environmental Standards. This includes providing access to project sites, relevant personnel, information, and documentation.
7. The Implementing Partner will take appropriate steps to prevent misuse of funds, fraud or corruption, by its officials, consultants, responsible parties, subcontractors and sub-recipients in implementing the project or using UNDP funds. The Implementing Partner will ensure that its financial management, anti-corruption and anti-fraud policies are in place and enforced for all funding received from or through UNDP.
8. The requirements of the following documents, then in force at the time of signature of the Project Document, apply to the Implementing Partner: (a) UNDP Policy on Fraud and other Corrupt Practices and (b) UNDP Office of Audit and Investigations Investigation Guidelines. The Implementing Partner agrees to the requirements of the above documents, which are an integral part of this Project Document and are available online at www.undp.org.

9. In the event that an investigation is required, UNDP has the obligation to conduct investigations relating to any aspect of UNDP projects and programmes. The Implementing Partner shall provide its full cooperation, including making available personnel, relevant documentation, and granting access to the Implementing Partner's (and its consultants', responsible parties', subcontractors' and sub-recipients') premises, for such purposes at reasonable times and on reasonable conditions as may be required for the purpose of an investigation. Should there be a limitation in meeting this obligation, UNDP shall consult with the Implementing Partner to find a solution.
10. The signatories to this Project Document will promptly inform one another in case of any incidence of inappropriate use of funds, or credible allegation of fraud or corruption with due confidentiality.

Where the Implementing Partner becomes aware that a UNDP project or activity, in whole or in part, is the focus of investigation for alleged fraud/corruption, the Implementing Partner will inform the UNDP Resident Representative/Head of Office, who will promptly inform UNDP's Office of Audit and Investigations (OAI). The Implementing Partner shall provide regular updates to the head of UNDP in the country and OAI of the status of, and actions relating to, such investigation.

11. *Choose one of the three following options:*

Option 1: UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement. Recovery of such amount by UNDP shall not diminish or curtail the Implementing Partner's obligations under this Project Document.

Option 2: The Implementing Partner agrees that, where applicable, donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities which are the subject of this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Option 3: UNDP shall be entitled to a refund from the Implementing Partner of any funds provided that have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document. Such amount may be deducted by UNDP from any payment due to the Implementing Partner under this or any other agreement.

Where such funds have not been refunded to UNDP, the Implementing Partner agrees that donors to UNDP (including the Government) whose funding is the source, in whole or in part, of the funds for the activities under this Project Document, may seek recourse to the Implementing Partner for the recovery of any funds determined by UNDP to have been used inappropriately, including through fraud or corruption, or otherwise paid other than in accordance with the terms and conditions of the Project Document.

Note: The term "Project Document" as used in this clause shall be deemed to include any relevant subsidiary agreement further to the Project Document, including those with responsible parties, subcontractors and sub-recipients.

12. Each contract issued by the Implementing Partner in connection with this Project Document shall include a provision representing that no fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the proposal, have been given, received, or promised in connection with the selection process or in contract execution, and that the recipient of funds from the Implementing Partner shall cooperate with any and all investigations and post-payment audits.
13. Should UNDP refer to the relevant national authorities for appropriate legal action any alleged wrongdoing relating to the project, the Government will ensure that the relevant national authorities shall actively investigate the same and take appropriate legal action against all individuals found to have participated in the wrongdoing, recover and return any recovered funds to UNDP.
14. The Implementing Partner shall ensure that all of its obligations set forth under this section entitled "Risk Management" are passed on to each responsible party, subcontractor and sub-recipient and that all the clauses under this section entitled "Risk Management Standard Clauses" are included, *mutatis mutandis*, in all sub-contracts or sub-agreements entered into further to this Project Document.

XI. ANNEXES

1. **Project Quality Assurance Report**
2. **Social and Environmental Screening Template** [\[English\]](#)[\[French\]](#)[\[Spanish\]](#), including additional Social and Environmental Assessments or Management Plans as relevant.
(NOTE: The SES Screening is not required for projects in which UNDP is Administrative Agent only and/or projects comprised solely of reports, coordination of events, trainings, workshops, meetings, conferences, preparation of communication materials, strengthening capacities of partners to participate in international negotiations and conferences, partnership coordination and management of networks, or global/regional projects with no country level activities.
3. **Risk Analysis.** Use the standard [Risk Log template](#). Please refer to the [Deliverable Description of the Risk Log](#) for instructions
4. **Theory of Change chart**
5. **Project Board Terms of Reference and TORs of key management positions**
 - a. TORs for the Project Steering Committee
 - b. TORs for Technical Advisory Committee
 - c. TORs for National Project Coordinator
 - d. TORs for Project Personnel
6. **Capacity Assessment:** Summary of results of capacity assessments of Implementing Partner (including HACT Micro Assessment)
7. **UNDP Guidelines on Micro-Capital Grants**
8. **Sample MOU**



Annex 1: Project Quality Assurance Report

Annex 2. Social and Environmental Screening Template

The completed template, which constitutes the Social and Environmental Screening Report, must be included as an annex to the Project Document. Please refer to the [Social and Environmental Screening Procedure](#) and [Toolkit](#) for guidance on how to answer the 6 questions.

Project Information

Project Information	
1. Project Title	Access to Clean and Renewable Energy Project
2. Project Number	00123489 Output number 00118724
3. Location (Global/Region/Country)	Malawi

Part A. Integrating Overarching Principles to Strengthen Social and Environmental Sustainability

QUESTION 1: How Does the Project Integrate the Overarching Principles in order to Strengthen Social and Environmental Sustainability?

Briefly describe in the space below how the Project mainstreams the human-rights based approach

Humans have influenced most of the Earth's ecosystems through production activities such as agriculture, forestry, fisheries, herding and livestock production and energy use. While human impacts are often thought of as harmful to the environment, many such human-nature interactions are in fact favourable to or synergistic with biodiversity conservation. Unsustainable use of energy resources resulting in increased greenhouse emission has detrimental consequences to humanities survival. The ACRE programme will promote only those technologies that use a renewable energy source and lead to reduction in CO₂ emissions. Efforts will also be made to promote productive use of energy for the economic empowerment of men, women, and the youths.

Briefly describe in the space below how the Project is likely to improve gender equality and women's empowerment

The project will ensure that there is gender balance, youth development; empowerment of persons with disability; mitigation to climate, change environmental management; resilience building; peace, security and good governance. Access to Clean and Renewable Energy Project will adopt 50+ campaigns in various groupings and decision-making positions within the intervention's committees. Gender transformative approach (GTA) will be operationalized in all its activities to achieve the goal of enhancing food and nutrition security, and economic security of poor women and men and their families in a sustainable manner. GTA will be integrated in participatory action research (PAR). The project will adopt a participatory monitoring, evaluation and learning, this will empower communities to monitor trends in their livelihoods and their environment on their own.

Briefly describe in the space below how the Project mainstreams environmental sustainability

Environmental sustainability will be ensured through application of the UNDP Social and Environmental Standards and related Accountability Mechanism. Every proposed mini-grid will be subjected to an environmental assessment. In course of implementation beneficiaries will be sensitized and made aware of any likelihood consequences so that actions can be taken timely.

Part B. Identifying and Managing Social and Environmental Risks

QUESTION 2: What are the Potential Social and Environmental Risks? <i>Note: Describe briefly potential social and environmental risks identified in Attachment 1 – Risk Screening Checklist (based on any “Yes” responses). If no risks have been identified in Attachment 1 then note “No Risks Identified” and skip to Question 4 and Select “Low Risk”. Questions 5 and 6 not required for Low Risk Projects.</i>		QUESTION 3: What is the level of significance of the potential social and environmental risks? <i>Note: Respond to Questions 4 and 5 below before proceeding to Question 6</i>		QUESTION 6: What social and environmental assessment and management measures have been conducted and/or are required to address potential risks (for Risks with Moderate and High Significance)?
Risk Description	Impact and Probability (1-5)	Significance (Low, Moderate, High)	Comments	Description of assessment and management measures as reflected in the Project design. If ESIA or SESA is required note that the assessment should consider all potential impacts and risks.
Risk 1: Absence of a conducive legal regime for accessing and trading electricity via the grid and off-grid	I = 3 P = 2	Low		Risk identified through project’s capacity assessment recommended continuous engagement with government decision makers on creating incentives and continuous capacity building for civil servants.
Risk 2: Absence of a conducive legal regime for accessing and trading electricity via the grid and off-grid	I= 4 P=2	Low		Risk identified through project’s capacity assessment recommended continuous capacity building of government on creating incentives for private sector to invest in sustainable ENRM for
Risk 3: Low energy productive use	I=4 P= 2	Low		Risk identified through project’s capacity assessment recommended continuous capacity building at national level to increase budget and investments at district level.
Risk 4: Development partners and government may not allocate adequate resources to mini-grid projects	I=3 P=2	Low		Risk identified through project’s capacity assessment recommended continuous capacity building to government and increased awareness of climate related disasters.
Risk 5: Low capacity to operate mini grid plants.	I=4 P=2	Low		Risk identified through project’s capacity assessment recommended to follow UNDP accountability systems and frameworks apply throughout implementation of the project.
Risk 6: Non willingness by private sector to invest in rural areas	I = 4 P = 1	Low		Risk identified through project’s capacity assessment recommended continued joint resource mobilization among the three partners.

Risk 7: Inadequate community sensitization and involvement	I= 5 P= 1	Low		
Risk 8: Localised environmental risks associated with the installation of micro-hydro	I = 5 P= 3	Low		
QUESTION 4: What is the overall Project risk categorization?				
Select one (see SESP for guidance)			Comments	
Low Risk			<input checked="" type="checkbox"/>	Most of the risks identified can be mitigated in course of Project implementation
Moderate Risk			<input type="checkbox"/>	
High Risk			<input type="checkbox"/>	
QUESTION 5: Based on the identified risks and risk categorization, what requirements of the SES are relevant?				
Check all that apply			Comments	
Principle 1: Human Rights			<input type="checkbox"/>	
Principle 2: Gender Equality and Women's Empowerment			<input checked="" type="checkbox"/>	Deliberate efforts for women participation in the program will ensure that they benefit from clean source of energy.
1. Biodiversity Conservation and Natural Resource Management			<input type="checkbox"/>	Construction sites could lead to loss of biodiversity no mitigation measures are put in place. The program will critically review all the project briefs for selected project sites
2. Climate Change Mitigation and Adaptation			<input checked="" type="checkbox"/>	Clean energy results in low or little CO ₂ emissions
3. Community Health, Safety and Working Conditions			<input type="checkbox"/>	The project will put a requirement for worker safety in the contracts
4. Cultural Heritage			<input type="checkbox"/>	Respect for people's culture and cultural sites will be encouraged
5. Displacement and Resettlement			<input type="checkbox"/>	If there is need for displacement, compensation as per government regulations will be followed
6. Indigenous Peoples			<input type="checkbox"/>	

	7. Pollution Prevention and Resource Efficiency	<input type="checkbox"/>	Solar mini-grids use lots of batteries. The program will develop a safe disposal policy for storage batteries
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Final Sign Off

Signature	Date	Description
QA Assessor Peter Kulemeka		UNDP staff member responsible for the Project, typically a UNDP Project Officer. Final signature confirms they have “checked” to ensure that the SESP is adequately conducted.
QA Approver Andrew Spezowka		UNDP senior manager, typically the UNDP Deputy Country Director (DCD), Country Director (CD), Deputy Resident Representative (DRR), or Resident Representative (RR). The QA Approver cannot also be the QA Assessor. Final signature confirms they have “cleared” the SESP prior to submittal to the PAC.
PAC Co-Chairs Ms. Gloria Banda and Ms. Claire Medina		UNDP chair of the PAC. In some cases, PAC Chair may also be the QA Approver. Final signature confirms that the SESP was considered as part of the project appraisal and considered in recommendations of the PAC.

SESP Attachment 1. Social and Environmental Risk Screening Checklist

Checklist Potential Social and Environmental <u>Risks</u>		Answer (Yes/No)
Principles 1: Human Rights		
1.	Could the Project lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	No
2.	Is there a likelihood that the Project would have inequitable or discriminatory adverse impacts on affected populations, particularly people living in poverty or marginalized or excluded individuals or groups? ²³	No
3.	Could the Project potentially restrict availability, quality of and access to resources or basic services, in particular to marginalized individuals or groups?	No
4.	Is there a likelihood that the Project would exclude any potentially affected stakeholders, in particular marginalized groups, from fully participating in decisions that may affect them?	No
5.	Is there a risk that duty-bearers do not have the capacity to meet their obligations in the Project?	No
6.	Is there a risk that rights-holders do not have the capacity to claim their rights?	No
7.	Have local communities or individuals, given the opportunity, raised human rights concerns regarding the Project during the stakeholder engagement process?	No
8.	Is there a risk that the Project would exacerbate conflicts among and/or the risk of violence to project-affected communities and individuals?	No
Principle 2: Gender Equality and Women's Empowerment		
1.	Is there a likelihood that the proposed Project would have adverse impacts on gender equality and/or the situation of women and girls?	No
2.	Would the Project potentially reproduce discriminations against women based on gender, especially regarding participation in design and implementation or access to opportunities and benefits?	No
3.	Have women's groups/leaders raised gender equality concerns regarding the Project during the stakeholder engagement process and has this been included in the overall Project proposal and in the risk assessment?	No
4.	Would the Project potentially limit women's ability to use, develop and protect natural resources, taking into account different roles and positions of women and men in accessing environmental goods and services? <i>For example, activities that could lead to natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well being</i>	No
Principle 3: Environmental Sustainability: Screening questions regarding environmental risks are encompassed by the specific Standard-related questions below		
Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management		
1.1	Would the Project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? <i>For example, through habitat loss, conversion or degradation, fragmentation, hydrological changes</i>	No
1.2	Are any Project activities proposed within or adjacent to critical habitats and/or environmentally sensitive areas, including legally protected areas (e.g. nature reserve, national park), areas proposed for protection, or recognized as such by authoritative sources and/or indigenous peoples or local communities?	Some

²³ Prohibited grounds of discrimination include race, ethnicity, gender, age, language, disability, sexual orientation, religion, political or other opinion, national or social or geographical origin, property, birth or other status including as an indigenous person or as a member of a minority. References to "women and men" or similar is understood to include women and men, boys and girls, and other groups discriminated against based on their gender identities, such as transgender people and transsexuals.

1.3	Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? (Note: if restrictions and/or limitations of access to lands would apply, refer to Standard 5)	No
1.4	Would Project activities pose risks to endangered species?	No
1.5	Would the Project pose a risk of introducing invasive alien species?	No
1.6	Does the Project involve harvesting of natural forests, plantation development, or reforestation?	No
1.7	Does the Project involve the production and/or harvesting of fish populations or other aquatic species?	No
1.8	Does the Project involve significant extraction, diversion or containment of surface or ground water? <i>For example, construction of dams, reservoirs, river basin developments, groundwater extraction</i>	No
1.9	Does the Project involve utilization of genetic resources? (e.g. collection and/or harvesting, commercial development)	No
1.10	Would the Project generate potential adverse transboundary or global environmental concerns?	No
1.11	Would the Project result in secondary or consequential development activities which could lead to adverse social and environmental effects, or would it generate cumulative impacts with other known existing or planned activities in the area? <i>For example, a new road through forested lands will generate direct environmental and social impacts (e.g. felling of trees, earthworks, potential relocation of inhabitants). The new road may also facilitate encroachment on lands by illegal settlers or generate unplanned commercial development along the route, potentially in sensitive areas. These are indirect, secondary, or induced impacts that need to be considered. Also, if similar developments in the same forested area are planned, then cumulative impacts of multiple activities (even if not part of the same Project) need to be considered.</i>	No
Standard 2: Climate Change Mitigation and Adaptation		
2.1	Will the proposed Project result in significant ²⁴ greenhouse gas emissions or may exacerbate climate change?	No
2.2	Would the potential outcomes of the Project be sensitive or vulnerable to potential impacts of climate change?	No
2.3	Is the proposed Project likely to directly or indirectly increase social and environmental vulnerability to climate change now or in the future (also known as maladaptive practices)? <i>For example, changes to land use planning may encourage further development of floodplains, potentially increasing the population's vulnerability to climate change, specifically flooding</i>	No
Standard 3: Community Health, Safety and Working Conditions		
3.1	Would elements of Project construction, operation, or decommissioning pose potential safety risks to local communities?	No
3.2	Would the Project pose potential risks to community health and safety due to the transport, storage, and use and/or disposal of hazardous or dangerous materials (e.g. explosives, fuel and other chemicals during construction and operation)?	No
3.3	Does the Project involve large-scale infrastructure development (e.g. dams, roads, buildings)?	No
3.4	Would failure of structural elements of the Project pose risks to communities? (e.g. collapse of buildings or infrastructure)	No
3.5	Would the proposed Project be susceptible to or lead to increased vulnerability to earthquakes, subsidence, landslides, erosion, flooding or extreme climatic conditions?	No
3.6	Would the Project result in potential increased health risks (e.g. from water-borne or other vector-borne diseases or communicable infections such as HIV/AIDS)?	No
3.7	Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?	No
3.8	Does the Project involve support for employment or livelihoods that may fail to comply with national and international labour standards (i.e. principles and standards of ILO fundamental conventions)?	No

²⁴ In regard to CO₂, 'significant emissions' corresponds generally to more than 25,000 tons per year (from both direct and indirect sources). [The Guidance Note on Climate Change Mitigation and Adaptation provides additional information on GHG emissions.]

3.9	Does the Project engage security personnel that may pose a potential risk to health and safety of communities and/or individuals (e.g. due to a lack of adequate training or accountability)?	No
Standard 4: Cultural Heritage		
4.1	Will the proposed Project result in interventions that would potentially adversely impact sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge, innovations, practices)? (Note: Projects intended to protect, and conserve Cultural Heritage may also have inadvertent adverse impacts)	No
4.2	Does the Project propose utilizing tangible and/or intangible forms of cultural heritage for commercial or other purposes?	No
Standard 5: Displacement and Resettlement		
5.1	Would the Project potentially involve temporary or permanent and full or partial physical displacement?	No
5.2	Would the Project possibly result in economic displacement (e.g. loss of assets or access to resources due to land acquisition or access restrictions – even in the absence of physical relocation)?	No
5.3	Is there a risk that the Project would lead to forced evictions? ²⁵	No
5.4	Would the proposed Project possibly affect land tenure arrangements and/or community-based property rights/customary rights to land, territories and/or resources?	No
Standard 6: Indigenous Peoples		
6.1	Are indigenous peoples present in the Project area (including Project area of influence)?	No
6.2	Is it likely that the Project or portions of the Project will be located on lands and territories claimed by indigenous peoples?	No
6.3	Would the proposed Project potentially affect the human rights, lands, natural resources, territories, and traditional livelihoods of indigenous peoples (regardless of whether indigenous peoples possess the legal titles to such areas, whether the Project is located within or outside of the lands and territories inhabited by the affected peoples, or whether the indigenous peoples are recognized as indigenous peoples by the country in question)? <i>If the answer to the screening question 6.3 is “yes” the potential risk impacts are considered potentially severe and/or critical and the Project would be categorized as either Moderate or High Risk.</i>	No
6.4	Has there been an absence of culturally appropriate consultations carried out with the objective of achieving FPIC on matters that may affect the rights and interests, lands, resources, territories and traditional livelihoods of the indigenous peoples concerned?	No
6.5	Does the proposed Project involve the utilization and/or commercial development of natural resources on lands and territories claimed by indigenous peoples?	No
6.6	Is there a potential for forced eviction or the whole or partial physical or economic displacement of indigenous peoples, including through access restrictions to lands, territories, and resources?	No
6.7	Would the Project adversely affect the development priorities of indigenous peoples as defined by them?	No
6.8	Would the Project potentially affect the physical and cultural survival of indigenous peoples?	No
6.9	Would the Project potentially affect the Cultural Heritage of indigenous peoples, including through the commercialization or use of their traditional knowledge and practices?	No
Standard 7: Pollution Prevention and Resource Efficiency		
7.1	Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?	No

²⁵ Forced evictions include acts and/or omissions involving the coerced or involuntary displacement of individuals, groups, or communities from homes and/or lands and common property resources that were occupied or depended upon, thus eliminating the ability of an individual, group, or community to reside or work in a particular dwelling, residence, or location without the provision of, and access to, appropriate forms of legal or other protections.

7.2	Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?	No
7.3	Will the proposed Project potentially involve the manufacture, trade, release, and/or use of hazardous chemicals and/or materials? Does the Project propose use of chemicals or materials subject to international bans or phase-outs? <i>For example, DDT, PCBs and other chemicals listed in international conventions such as the Stockholm Conventions on Persistent Organic Pollutants or the Montreal Protocol</i>	No
7.4	Will the proposed Project involve the application of pesticides that may have a negative effect on the environment or human health?	No
7.5	Does the Project include activities that require significant consumption of raw materials, energy, and/or water?	No

Annex 3: Risk Analysis.

OFFLINE RISK LOG

(see [Deliverable Description](#) for the Risk Log regarding its purpose and use)



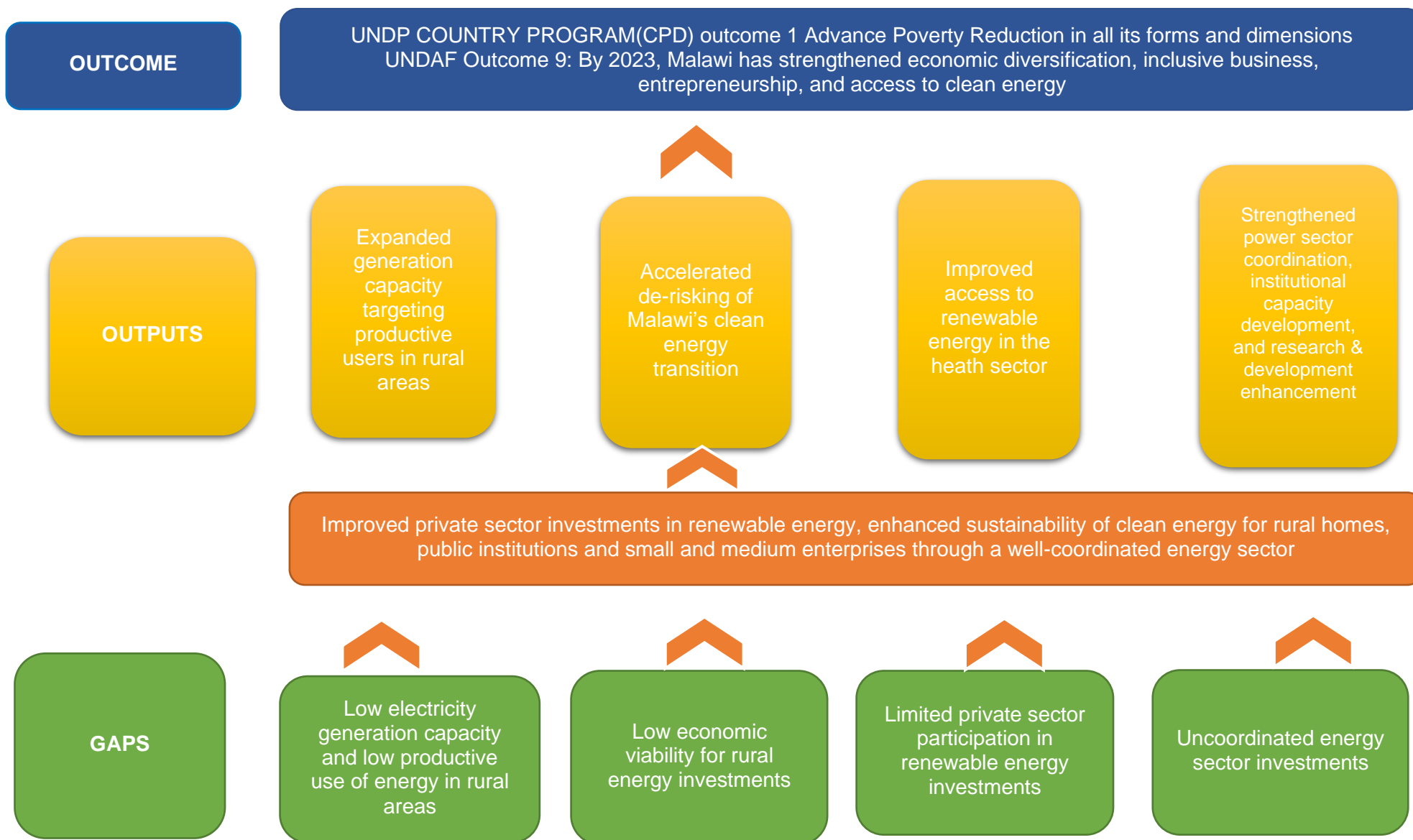
Project Title: Access to Clean and Renewable Energy	Award ID: 0012389	Project ID: 00118724	Date: 1st January 2020
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#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
	Enter a brief description of the risk <i>(In Atlas, use the Description field. Note: This field cannot be modified after first data entry)</i>	When was the risk first identified? <i>(In Atlas, select date. Note: date cannot be modified after initial entry)</i>	Environmental Financial Operational Organizational Political Regulatory Strategic Other Subcategories for each risk type should be consulted to understand each risk type (see Deliverable Description for more information) <i>(In Atlas, select from list)</i>	Describe the potential effect on the project if this risk were to occur Enter probability on a scale from 1 (low) to 5 (high) P = Enter impact on a scale from 1 (low) to 5 (high) I = <i>(in Atlas, use the Management Response box. Check "critical" if the impact and probability are high)</i>	What actions have been taken/will be taken to counter this risk <i>(in Atlas, use the Management Response box. This field can be modified at any time. Create separate boxes as necessary using "+", for instance to record updates at different times)</i>	Who has been appointed to keep an eye on this risk <i>(in Atlas, use the Management Response box)</i>	Who submitted the risk <i>(In Atlas, automatically recorded)</i>	When was the status of the risk last checked <i>(In Atlas, automatically recorded)</i>	e.g. DoEd, reducing, increasing, no change <i>(in Atlas, use the Management Response box)</i>
1	Absence of political will to implement the policy and strategy		Regulatory	No explicit policy commitment; to implement the provisions in the new energy policy	The Project will engage both policy as well as private sector stakeholders to ensure that provisions in the new policy are being				On-going

				Impact: 3 Probability: 2	followed. Special awareness sessions will be conducted				
2	Absence of a conducive legal regime for accessing and trading electricity via the grid and off-grid		Regulatory	The approval of clear legal guidelines for access to the grid and trading of power. Impact: 4 Probability: 2	The Project will include support for development of legislative guidelines, rules and regulations as well as capacity building for technical standard setting and product testing to allow GMGs to sell their power to the Grid.				
3	Low energy productive use		Operational	Low productive energy use may make mini grid investments in the rural areas un sustainable Impact: 4 Probability: 2	Continues interaction with the extension services at the district level Local level training on productive energy use for community led groups e.g village savings groups Creation of a revolving fund to enable communities access finance for electricity appliances				
4	Development partners and government may not allocate adequate resources to mini-grid projects		Strategic and Financial	In an effort to avoid duplication, development partners may end up avoiding financing of mini-grids Impact: 3 Probability: 2	Allocation of adequate resources Introduction of participatory monitoring for local level interventions				

5	Low capacity to operate mini grid plants.		Operational	<p>If mini grids are to be operated by internationals the opex will be high and sustainability may not be achieved.</p> <p>Impact: 4 Probability: 2</p>	Continuous training of technical personnel and communities					
6	Non willingness by private sector to invest in rural areas		Strategic	<p>Some of the best sites for mini grids are in very rural areas, and difficult to access. Construction in such areas would increase the CAPEX and thus discourage would be developers</p> <p>Impact: 4 Probability: 1</p>	<p>The Project will engage government in creating viable market conditions for introduction of new technologies, including possible fiscal incentives.</p> <p>Establishment of a fund for trying out and showcasing innovative new technologies.</p>					
7	Inadequate community sensitization and involvement		Strategic	<p>Lack of commitment by communities could result in vandalism of project structures and</p> <p>Impact: 5 Probability: 1</p>	<p>Adherence to EIAs for all mini-grids and continue monitoring of the recommendations.</p> <p>Inclusion of the community member sin the mini grid management team</p>					
8	Localised environmental risks associated with the installation of micro-hydro:		Strategic	<p>Poor community sensitization may result in inadequate buy in the communities</p> <p>Impact: 5 Probability: 3</p>	Continuous engagement with the communities					

ANNEX 4: Theory of Change for ACRE



ANNEX 5 TERMS OF REFERENCE FOR PROJECT COMMITTEES AND STAFFING

5.1 TERMS OF REFERENCE FOR THE ENERGY STEERING COMMITTEE

1.0 Background

The Energy Steering Committee is composed of key stakeholders in the field of energy

2. Purpose

To provide a forum for effective policy dialogue on frameworks, priority setting, and ways and means of facilitating investment and transfer of technology on climate change initiatives in the country. It will also enhance collaborative project development and implementation, with a view to optimize the contribution of climate change abatement and mitigation Projects to sustainable development, taking into account environmental, social, and economic factors.

3.0 Functions

Through the Steering Committee, Government and the development partners will seek to:

- a) Create a high-level policy dialogue on climate change, supporting national, regional and international policy discussions, in line with sustainable development principles.
- b) Develop and encourage collaborative project activities in the field of climate change adaptation and mitigation;
- c) Foster the exchange of information, knowledge, skills, and technologies by identifying and promoting potential areas of bilateral and multilateral collaboration on climate change research and development.
- d) Identify key policy issues and scope the scale of risks associated with projected climate change;
- e) Serve as a catalyst of renewable energy intervention Projects cutting across many sectors including sustainable land management, food security, [and others] to avoid duplicating ongoing and future efforts and activities;
- f) Provide a forum to analyse and develop policy recommendations on technical guidance and standards on renewable energy matters and related Projects.
- g) Increase public awareness on energy matters and its impacts on national development Projects.
- h) Engage development partners as an integral part of cooperative activities on renewable energy matters within the framework of basket funding and sector-wide approach.

4. Organization

The existing energy Steering Committee will provide management oversight of the project. It proposed to beef up the committee's representation as recommend by the

The Steering Committee will govern the overall framework, policies, procedures and activities of the Climate Change Programme.

It will provide strategic guidance to the Project and periodically review the program of collaborative activities undertaken by the stakeholders including partners,

This will include a review of the institutional and organizational structure if necessary and provide direction and instructions for actions to the Secretariat.

The Committee should meet at least four times once a year, at times and places to be determined by its appointed representatives.

Most of the members of the Steering Committee present at a meeting constitute a quorum for the transaction of business. The decisions of the Steering Committee will be made by consensus.

The principal coordinator of the Steering Committee Meetings and partners' communications and activities will be the Secretariat.

5.0 The Secretariat will:

- a) Organize the meetings of the Steering Committee,
- b) Arrange special orientation activities including workshops, seminars and experts' meetings [wherever necessary],
- c) Receive and forward new membership requests to the Steering Committee,
- d) Coordinate communications about the renewable energy Project activities and their status,
- e) Act as a clearinghouse of information on policy developments and technological information on renewable energy,
- f) Maintain procedures and responsibilities for key functions that are approved by the Steering Committee,
- g) Facilitate synergies with other relevant international initiatives and processes in the field of Climate change;
- h) Perform other tasks and duties as the Steering Committee directs.

The Department of Energy Affairs will be the Secretariat.

6.0 Membership

These Terms of Reference establish a framework for cooperation, technical assistance, development programmes, and collaboration on matters of climate change.

The Steering Committee may invite other entities to join the Project and become stakeholders through acceptance of the Terms of Reference.

Technical and other experts from within and outside the proposed Project structures may participate in activities conducted under the auspices of the Committee, if deemed necessary.

7.0 Funding

The preferred funding arrangement is support to NIM in order to effectively manage and synchronize the initiatives in a manner similar to a sector-wide approach for clean energy mini-grid development.

10.0 STEERING COMMITTEE MEMBERSHIP:

Chair: Ministry Natural Resources Energy and Mining

Co-Chair: UNDP

Secretariat: Department of Energy Affairs

Composition:

- Ministry of Natural Resources, Energy and Mining
- Department of Economic Planning and Development
- National Planning Commission
- MERA
- Academia
- Private Sector Associations
- Local Government
- Development partners

5.2: TERMS OF REFERENCE FOR THE TECHNICAL AND ADVISORY COMMITTEE ON ENERGY

Reference to “the Committee” shall mean the Technical Advisory Committee.

Reference to “the Board” shall mean the Project Board / Project Steering Committee.

The Department of Energy Affairs is, with funding from United Nations Development Program (UNDP) implementing an Access to Renewable Energy Management Project. To ensure effective and efficient implementation of the projects there is need for a Technical Advisory Committee (TAC).

The Technical Advisory Committee will be a sub Committee reporting to the Project Steering Committee (Project Board) and will provide regular technical advisory support to guide implementation and improve coordination of the Project.

1.0 Membership

- 1.1 The Committee shall be appointed by the Board, on the recommendation of the Nominating Project Coordinator and shall be made up of at least five members, the majority of whom must be independent technical specialists. At least one member of the Committee should be a Board member.
- 1.2 All members of the Committee will have relevant technical or operational experience in the Energy sector.
- 1.3 The membership will be drawn from a range of relevant stakeholders including, but not exclusively, representatives of the following: -
 - a) Ministry of Finance, Economic Planning and Development
 - b) Department of Energy Affairs,
 - c) Environmental Affairs Department
 - d) Malawi Energy Regulatory Authority
 - e) ESCOM Limited
 - f) Malawi Polytechnic and/or Mzuzu University
 - g) Renewable Energy Industries Association of Malawi (REIAMA)
 - h) EGENCO
 - i) MBS
 - j) Others as appropriate
- 1.4 Members of the Committee are expected to ensure that they are familiar with the technical activities of the Projects and its subsidiary undertakings and support ventures.
- 1.5 The Committee shall invite specialists with appropriate technical expertise to attend meetings of the committee on a regular basis as appropriate.
- 1.6 Membership of the committee shall be for the entire duration of the Projects.

2.0 TAC Chairperson

- 2.1 The Board shall appoint the Committee Chairperson who shall be Board Member. In the absence of the Committee Chairperson and/or an appointed deputy, the remaining members present shall elect one of their member present to chair the meeting. The Chairman of the Board shall not be the Chairman of the Committee.
- 2.2 The Chairperson of the Committee will ensure that all potential conflicts of interest that any member of the committee may have are identified at the beginning of every meeting

3.0 Secretary

- 3.1 The Project Manager or, if delegated, any other member from the Department of Energy Affairs, shall act as the secretary of the committee

4.0 Quorum

- 4.1 The quorum necessary for the transaction of business shall be three members. A duly convened meeting of the Committee at which a quorum is present shall be competent to exercise all or any of the authorities, powers and discretions vested in or exercisable by the Committee
- 4.2 The Committee shall determine its own procedures
- 4.3 Only members of the Committee are entitled to Vote at meetings of the Committee
- 4.4 The affirmative vote of a majority of the members of the Committee is necessary for the adoption of any resolution
- 4.5 In the event of equality of Votes, the Chairman of the Committee shall have a casting vote
- 4.6 Members of the Committee may participate in a meeting of the Committee by means of conference call or similar equipment

5.0 Frequency of Meetings

- 5.1 The Committee shall meet quarterly, two weeks prior to the scheduled Project Board Meeting, and at such other times as the Chairperson of the Committee shall require
- 5.2 One of the meetings each year will be scheduled as part of the Planning Cycle involving Annual Work Project and Budget Setting and a comprehensive review of the prior years' work Project, including review of Project deliverables.

6.0 Notice of Meetings

- 6.1 Meetings of the Committee shall be summoned by the Secretary of the Committee at the request of the Chairperson
- 6.2 Unless otherwise agreed, notice of each meeting confirming the Venue, time and date together with an agenda of items to be discussed shall be forwarded to each member of the Committee, any other person required to attend, no fewer than 14 calendar days prior to the date of the meeting. Supporting papers shall be sent to the Committee Members and to other attendees as appropriate, at the same time.

7.0 Minutes of Meetings

- 7.1 The Secretary to the Committee shall minute proceedings and resolutions of all meetings of the Committee, including recording the names of those present and in

attendance

- 7.2 Draft Minutes of the Committee meetings shall be circulated promptly to the Chairman of the Committee in the first instance, then all members of the Committee.

8.0 TAC Duties and Responsibilities

- 8.1 Generally, provide technical guidance to the Department of Energy Affairs on implementation of the two projects
- 8.2 Review of Annual Work Plans and Budgets for the two Projects and make recommendations of the same for adoption by the Board
- 8.3 Review and approval of technical designs of items of Project Components
- 8.4 Recommendations for approval of selection criteria for new Independent Power Producers (IPP) to be supported by the Project
- 8.5 Review and support Power Generation and Distribution licences for the IPPs supported by the Project
- 8.6 Oversight on the development of ToRs for external consultancies on the Projects
- 8.7 Review the effectiveness of the Project's Technical Standards, Codes of Practice and recommend remedial measures
- 8.8 Ensure that there is consistency between the Technical Activities of the Projects and relevant Government Policies and Development Strategy
- 8.9 Review the Technical Aspects of any proposal that requires Board approval under the Projects.
- 8.10 Review and Ensure linkages between the Project Outcomes with relevant Government bodies

9.0 Reporting Responsibilities

- 9.1 The Committee Chairperson shall report formally to the Board on its proceedings after each meeting on all matters within its duties and responsibilities
- 9.2 The Committee shall make whatever recommendations to the Board it deems appropriate on any area within its remit where action or improvement is needed.

5.3: TERMS OF REFERENCE FOR THE PROJECT NATIONAL COORDINATOR

Post Title: National Project Coordinator

Location: Department of Energy Affairs, Lilongwe

Duration: Four years (life time of the project, subject to the appointing authority)

Overview

The National Project Coordinator, shall be a senior official from the Department of Energy Affairs. S/He shall be responsible for the coordination of project outputs. This shall entail the coordination of delivery of the project results and accountability for resources provided by the financing partner in accordance with the financing partner's rules and procedures. The National Project Coordinator shall act as a liaison with Government, UNDP, private sector partners and other stakeholders. S/He shall report to the TAC on overall progress of project activities.

Duties and Responsibilities

The National Project Coordinator will be responsible for the following duties:

- Coordinate project management activities, resources, equipment and information
- Liaise with UNDP for effective implementation of all project activities;
- Oversee and ensure timely submission of Project Implementation Review reports
- Oversee and ensure timely submission of technical and financial reports, quarterly financial reports, and other reports as may be required by UNDP, and other donors, and other oversight agencies
- Disseminate project reports and respond to queries from stakeholders
- Oversee the exchange and sharing of experiences and lessons learned with relevant projects nationally and internationally
- Report progress of project to the Technical Advisory Committee, and ensure the fulfillment of Project Board directives
- Develop annual workplans and budgets in conjunction with UNDP
- To verify proper authorization of payments
- Carry out regular supervision, monitoring and inspections of all project sites and activities

5.4 TORs of Project Personnel

5.3.1 Project Manager

Summary Information

Post Title	Project Manager
Location	Department of Energy Affairs, Lilongwe
Duration	One, year with possibility of extension (up to four years)

Overview

The Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. As such, the PM will be responsible for the overall management of the project, including the mobilization of all project inputs; supervision over project staff, consultants and sub-contractors; and acting as a liaison with the Government, UNDP, private sector partners and other stakeholders, and maintaining close collaboration with any donor agencies providing co-financing. The PM will report to the Project Steering Committee (PSC) on overall progress of project activities. For on-going administrative and reporting functions, the PM will be responsible to the National Project Coordinator for administrative, financial and technical matters. The Project Manager will be based at the offices of the DEA in Lilongwe, Malawi. The Project Manager also will be supported by national and international experts and organisations taking the lead in the implementation of the specific technical assistance Components of the project. These services, either of individual consultants or under sub-contacts with consulting companies, will be procured in accordance with applicable UNDP guidelines.

Duties and Responsibilities

- Supervise and coordinate the production of project outputs, as per the project document;
- Mobilise all project inputs in accordance with procedures for nationally implemented projects;
- Lead the preparation of consultants' and sub-contractors' terms of reference, identification and selection of national and international sub-contractors/consultants, cost estimation, time scheduling, contracting, and reporting on project activities and budget, and supervise and coordinate the work of all consultants and sub-contractors;
- In close liaison with the project Director at DEA, prepare and revise project work and financial plans;
- Liaise with relevant government agencies, private partners, and all other partners for effective coordination of all project activities;

- Oversee and ensure timely submission of the Inception Report, Combined Project Implementation Review/Annual Project Report (PIR/APR), technical reports, CCM tracking tool, quarterly financial reports, and other reports as may be required by UNDP and other oversight agencies;
- Disseminate project reports and respond to queries from stakeholders;
- Report progress of project to the PSC, and ensure the fulfilment of PSC directives.
- Oversee the exchange and sharing of experiences and lessons learned with relevant projects nationally and internationally;
- Ensure the timely and effective implementation of all Components of the project;
- Assist relevant government agencies and implementing partners with development of essential skills through training workshops and on the job training, thereby upgrading their institutional capabilities;
- Carry out regular, announced and unannounced inspections of all sites and activities.
- Undertake other management duties that contribute to the effective implementation of the project.

Qualifications and Experience

Education

Master's degree or equivalent in engineering, economics, international development, social sciences, public administration or other relevant field.

Experience

- Minimum of 5 years of experience in the energy sector.
- Proven experience in project management
- Proven ability to draft, edit and produce written proposals and results-focussed reports.
- Strong presentation and reporting skills;
- Ability to develop and administer budgets, train and work effectively with counterpart staff at all levels and with all groups involved in the project;
- Proven experience working with Government, private sector, civil society, international organizations or donors in combination with the knowledge of economic and financial analysis, institutional, regulatory and policy frameworks.
- Good knowledge of climate change and energy issues and ability to track and understand GHG emission reductions from project activities.
- Prior knowledge and experience of the political, social and environmental factors and issues related to energy development and climate change mitigation in island countries;

- Basic knowledge of and experience with operational modalities and procedures of UNDP is an advantage
- Experience in the use of computers and office software packages (MS Word, Excel, etc.)

Language Requirements

Excellent English, both written and oral

5.3.2 Finance and Administrative Project Associate

Summary Information

Post Title

Project Associate: Finance and Administrative

Location

Department of Energy Affairs, Lilongwe

Duration

One, year with possibility of extension (up to four years)

Functions and Responsibilities

Under the overall supervision of the Project Manager the Project Finance and Administrative Associate shall be responsible for effective financial and administrative management of the Project, ensuring funds are managed and administered appropriately in accordance with the agreed activities in the work-plan and Project document. Specifically, the Finance and Administration Associate will be responsible for the following:

1. Appropriate receipt, administration and management of funds received from UNDP through the ACRE Project.
2. Appropriate preparation and maintenance of accounts in accordance with set procedures, ensuring the timely and correct management and reporting of funds to Implementing Agency and UNDP Malawi.
3. Timely and correct submission of payment requests/quarterly advances/monthly financial reports for project implementation, and provision of technical financial management and reporting support to partners and responsible parties in the district within the Framework of UNDP and government guidelines.
4. Timely disbursement of funds to subcontractors in accordance with decisions of the Project Steering Committee, and timely payment and reporting from service providers working under the Project.
5. Successfully carry out administrative functions including coordinating minutes and reports from meetings, supporting budget planning and revisions, as well as the organization of workshops and trainings and procurement of office supplies, stationery and field assets.
6. Alongside the Project Manager, take part in the overall management of the Project and track activity implementation, supporting the timely delivery of prioritized activities.

Qualifications and Experience

Education:

Bachelors degree in administration, accounting or related field, those with ACCA, professional certification will have an added advantage.

Experience:

3-5 years' experience in management of substantial multi-donor budgets.
Fluent in spoken and written English.

**Language
Requirements:**

**Additional
Requirements:**

- Knowledge of up to date accounting packages, and computer literacy in full Microsoft Office and office technology equipment.
- Progressively responsible experience in budget administration and financial reporting.
- Strong interpersonal skills with ability to work under pressure and to establish and maintain effective work relationships with people of different national and cultural backgrounds.
- Strong team working skills.
- Excellent communication skills with ability to express ideas clearly, logically and effectively, both orally and in writing.

Annex 6: Capacity Assessment

Summary of Risk Assessment Results

The table below summarizes the results and main internal control gaps found during application of the micro-assessment questionnaire (in **Annex IV**). Detailed findings and recommendations are set out in section 3 below.

Tested subject area	Risk assessment*	Brief justification for rating (main internal control gaps)
1. Implementing partner	Low	<ul style="list-style-type: none"> • Department of Energy (DoE) Affairs is a government department of the Ministry of Natural Resources, Energy and Environment (MNREE). It is not required to be legally registered. • DoE has been managing funds received from UNDP since 2016 without any significance issue. • DoE is complying with the statutory reporting requirement. • Being a government department, DoE is not required to have governing body. It is working as per government hierarchy. • DoE does not have any other office for project implementation. However, some of its activities are implemented through an external agency named Mulanje Electricity Generation Agency (MEGA). • Financial statements are not prepared for the DoE. • Government funds are management through Accountant General and donors fund are managed through banking channel. • There is no legal action pending against the IP. • DoE has a policy on anti-fraud and corruption as mentioned in Desk Instruction issued by Accountant General. • Desk Instruction advises its employees to report to its immediate supervisor as well as to Accountant General of suspected fraud. • No such key financial or operational risks identified.
2. Program Management	Low	<ul style="list-style-type: none"> • IP has system and procedures in place to develop programmes and plans. • The action plan specifies expected results and activities to be carried out to achieve results with a time frame and budget for the activities. • Risks are identified based on the previous performance and outcome as well as current performance. In some of the cases DoE also employs external consultants (for program) to identify the risks and to mitigate them. • Strategic plan is prepared for overall activities of IP which speaks about the guidelines to be followed for project implementation. • Monitoring & evaluation framework consists of indicators, baselines and targets to monitor achievement of programme results. • Respective officials visit program implementation offices on periodical basis for review of the activities. • Independent consultants are employed to review the risk and achievement of the project. • The observation and recommendations made by above

Tested subject area	Risk assessment*	Brief justification for rating (main internal control gaps)
		mentioned independent committee are strictly followed by DoE Affairs. However, no such report was shared.
3. Organizational structure and staffing	Low	<ul style="list-style-type: none"> IP's recruitment, employment and personnel practices are clearly defined and followed. There are clearly defined job descriptions for the various positions. The organizational structure provides clear lines of reporting and accountability of the various functions which makes it appropriate for the complexity of the IP and the scale of activities, Considering the current financial volume of DoE, existing staff strength are capable to manage work load. Training calendar is prepared and accordingly trainings are conducted. Background verification is performed by Human Resource Department. There has been no turnover in key finance positions in past five years. DoE has documented internal control frameworks, and these are distributed and made available to staff and updated periodically.
4. Accounting policies and procedures	Low	<p>4a. General</p> <ul style="list-style-type: none"> DoE records the financial transactions in IFMS (Integrated Financial Management System) including allocation of expenditures in accordance with the respective components and approved budget for government funds. However, it does not have computerized accounting system to record the donor related expenditure and receipts, they are recorded in MS Excel and manual registers. Allocation of cost is not required as salaries and administrative costs are borne by government. All the accounting and supporting documents are retained under defined system with serial number and proper file indexation on year to year basis that allows easy access to the authorized users. Ledgers are reconciled on daily basis as day to day expenditures related to government are recorded on IFMIS. However, general ledgers and subsidiary ledgers account are not maintained for donor projects. Only cash book is maintained in MS Excel. Hence, there is no question of its reconciliation. <p>4b. Segregation of duties</p> <ul style="list-style-type: none"> IP has well defined system for the segregation of duties. The function of ordering, receiving and accounting for and paying for goods and services are properly segregated. <p>4c. Budgeting system</p> <ul style="list-style-type: none"> Budgets prepared for all activities in sufficient detail to provide a meaningful tool for monitoring subsequent performance. Government related actual expenditures are compared with the budget in IFMIS. However, IP does not have system of

Tested subject area	Risk assessment*	Brief justification for rating (main internal control gaps)
		<p>comparison of actual expenditure with budget for project related transactions.</p> <ul style="list-style-type: none"> Any amendment to the annual budget must follow the similar approval process as the original budget is approved. Project related budgets are prepared by IP's finance team and approved by Director and respective representatives of donor agencies. <p>4d. Payments</p> <ul style="list-style-type: none"> The invoice processing and approval system are well in place. Purchase order is issued by internal procurement committee after thorough analysis of quotations /tenders received. Goods receipt details is maintained by the store keeper in the inventory/stock register. Comparison of the details of goods mentioned in invoices with actual physical receipt of goods is performed by store keeper. IP maintains authorization matrix which provide approval limit for different levels to authorize the payments. The invoices are dated, reviewed and approved and "PAID" is affixed on the vouchers. Salary costs of all the staffs are borne by the Government. Adequate controls are in place for the preparation of payroll. IP follows rules and regulations specified by Government of Malawi and UN rules for the expenses like travel, DSA etc. <p>4e. Policies and procedures</p> <ul style="list-style-type: none"> The IP follows cash basis of accounting. Treasury Instructions, Financial and Procurement related laws and regulations are distributed to appropriate staff in accordance with their responsibilities which are adequate to guide activities and ensure staff accountability. <p>4f. Cash and bank</p> <ul style="list-style-type: none"> DoE maintains Bank account only for project related payments as Government related payments are controlled by Accountant General. It requires at least two signatories for authorising bank transactions. Project related Cash Books are maintained by IP. Payments related to government expenditure are maintained by Accountant General so no cash book required to be maintained. IP is not participating in micro finance advances. Bank balances are reconciled on monthly basis and properly approved. There are no any cash transactions at IP. Project related cheques are kept in a locker in a secure location. DoE does not have online access to project's bank account. <p>4g. Other offices or entities</p> <ul style="list-style-type: none"> DoE implements some of its activities through MEGA. These are in compliance with work plan and contractual agreement. <p>4h. Internal audit</p> <ul style="list-style-type: none"> DoE neither has specific internal audit department nor internal

Tested subject area	Risk assessment*	Brief justification for rating (main internal control gaps)
		<p>audit team. However, internal audit is undertaken by auditors from Accountant General and auditors from National Audit Office.</p> <ul style="list-style-type: none"> The auditors are independent to make critical assessments. Internal auditors do not include the activities financed by UN Agencies in its work programme. DoE implements auditor's recommendations made during such audit.
5. Fixed Assets and Inventory	Moderate	<p>5a. Safeguards over assets</p> <ul style="list-style-type: none"> DoE follows Desk Instruction Issued by Ministry of Finance, to safe guard for protection and maintenance of the assets from fraud, waste and abuse. DoE maintains assets register. Issue register is also maintained for the assets issued to respective office and person. However, Assets maintained at DoE were not tagged with unique identification number except project assets. The ledgers for consumables are maintained in separate physical register. DoE conducts periodical physical verification of the assets. Fixed assets are not covered by insurance policies excluding vehicles. <p>5b. Warehousing and inventory management</p> <ul style="list-style-type: none"> DoE maintains one warehouse in Lilongwe and a store in office premises. Security guards and Malawi police are employed to secure the warehouse. Manual registers are maintained to track the receipt and issue of goods so that the inventories are identifiable. Store Keeper is responsible for receiving and updating the register both. There is no segregation of duties in terms of receiving and updating the records. Regular physical counts of inventory are carried out. However, report for the same are not shared with us.
6. Financial Reporting and Monitoring	Significant	<ul style="list-style-type: none"> DoE submits monthly expenditure report to Accountant General and periodical FACE forms to UNDP. Expenditures incurred under different projects are audited by the auditor appointed by respective donor agencies. DoE's core expenditures are audited by auditors from National Audit Office. Government expenditure related reports are generated in IFMIS, which can be directly monitored by Accountant General. However, IPs financial management system is not adequate for preparation of necessary financial reports related to donor's fund. No major issues related to ineligible expenditure of donor funds are reported in audit reports. DoE has appropriate safeguards to ensure the confidentiality, integrity and availability of the data. Data is automatically backed up in the central based IFMIS. However, there is no proper procedure to take back up of project related data.

Tested subject area	Risk assessment*	Brief justification for rating (main internal control gaps)
7. Procurement	Low	<ul style="list-style-type: none"> DoE follows Desk Instruction of Public Procurement, Public Procurement Act, 2003 and Public Procurement Regulations 2004 of Republic of Malawi. There are no exceptions to procurement procedures. DoE's procurement system is not computerized. Procurement related reports are generated containing the name of vendor, quantity, rate amount etc. These reports are submitted to Office of Directors of Public Procurement (ODPP) on quarterly basis after the approval from Director. However, procurement reports were not shared with us. Procurement Committee is formed for each procurement. All the members of the Procurement Committee are conversant with the Government procurement related rules and regulations. However, as explained, they are not conversant with UN / World Bank / European Union procurement requirements. No major recommendations related to procurement made by auditors in the prior audit reports. Procurements are authorized by Internal Procurement Committee, based on the items and thresholds mentioned in the Procurement Regulation 2004. Procurement related documents provide the ethical procurement principles and exclusion and ineligibility criteria. DoE obtains sufficient approvals before signing a contract. DoE follows guidelines and procedures to assist in identifying, monitoring, and dealing with potential conflicts of interest with potential suppliers/procurement agents as per Procurement Regulation 2004. No case of conflict of interest has been noted. DoE has well defined process for sourcing of suppliers. It includes wide broadcasting of procurement opportunities through local and national newspapers based on the threshold as defined in the Procurement Regulation 2004. DoE keeps the track of performance of suppliers. However, details are not shared. DoE's procurement process follows secure and transparent bid (quotation) evaluation process DoE awards the contract on a pre-defined basis set out in the solicitation documentation taking into account technical and financial proposals. Currently, DoE is maintaining contracts with MEGA and Component Manager is designated to deal with the contract procedures, deliverables, expiration dates etc.
Overall Risk Assessment	Low	Based on the facts and detailed assessment of Micro Assessment Questionnaire, the overall risk of Risk Analysis / Assessment of Department of Energy Affairs Affairs is assessed by the firm as " Low ". The firm has assessed the risk in seven areas as mentioned in Micro Assessment Questionnaire.

*High, Significant, Moderate, Low

Annex 7 : UNDP Guidelines on Micro-Capital Grants

United Nations Development Programme



Title	Guidance on Micro-Capital Grants
Responsible Unit	Bureau for Development Policy - Capacity Development Group
Contributor(s)	BDP/CDG, BOM/CBS Team
Date of updates	October 2019 (updated links)
Contact	judith.puyat-magnaye@undp.org , dien.le@undp.org
Document Location	Management Practice Document Repository Project Management - Prescriptive Content Documents > Resource Center
Applicability	This applies to projects
Is Part of	UNDP Programme and Operations Policies and Procedures- Programme & Project Management
Related documents	UNDP User Guide - Project Management - Initiating a Project

A. Identification of Input: Micro-capital grants

1. UNDP provides micro-capital grants for both credit and non-credit purposes as inputs to its programme and project activities. Micro-capital grants are provided to support the activities of non-governmental organizations (NGOs) and community-based organizations (CBOs). See below [Section B. Management of Input: Micro-capital grants](#) for policies and procedures on the management of micro capital grants. For information on micro-finance programmes please see the United Nations Capital Development Fund website at <http://www.uncdf.org/>
2. Micro-capital grants for credit and non-credit activities may be included among the inputs financed by UNDP. An individual micro-capital grant may not exceed \$150,000. A recipient organization may receive multiple grants provided the grants do not exceed on a cumulative basis \$300,000 within the same programme or project. To receive multiple grants, the recipient organization must have produced the results agreed to in the prior grant agreement, and a new micro-capital grant agreement must be approved by the steering committee. If the \$300,000 cumulative limit is to be exceeded, the country office must submit a request through the Regional Bureau for clearance by BOM/OFA. On all requests related to credit or microfinance, technical clearance from UNCDF is also required. For information on global small grants programmes see the BDP intranet site <http://www.undp.org/gef>. The detailed requirements and the responsibilities of the recipient organization are set forth in [Section B. Management of Input: Micro-capital grants](#) below. Of a country's TRAC allocation, no more than 10 per cent may be spent on micro-capital grants over the Country Programme period.
3. If this percentage is to be exceeded, in addition to the clearances from BOM and UNCDF noted in paragraph 2, approval must be given by the Associate Administrator. The restrictions of paragraph 3 take precedence over the restrictions of paragraph 2 above. Note: The criteria for approval for grants greater than \$300,000 or allocation of the Country Programme above 10 percent shall be: 1] documentation that the recipient has produced the results agreed

to in the prior grant agreement; 2] that the results proposed in the next grant agreement will contribute to the sustainability of the activity.

4. The following types of activities are supported by grants for non-credit purposes:
 - a. Strengthening the institutional capacity of local NGOs and CBOs;
 - b. Supporting community-based self-help initiatives, which may include income-generating activities designed to alleviate poverty;
 - c. Promoting advocacy activities and networking between civil society organizations (CSOs), government and donors; and
 - d. Supporting NGOs and CBOs involved with local environmental protection and poverty eradication activities.
5. NGOs as micro-capital grant recipients are exempted from competitive procurement process and shall be selected under programming modalities (e.g. review by PAC or project board). In all other cases in which NGOs are to be used as providers for professional service, they shall be selected only on the basis of a competitive procurement process undertaken by the Implementing Partner. NGOs as potential micro-capital grant recipients can be identified during project formulation. In such instances the PAC can recommend for RR's approval of their selection and they are listed in the annual work plan as well as the draft terms of reference for their services are attached to the project document.
6. Grants for credit activities can be used by the recipient organization to cover the costs of its operations, purchase equipment, hire new staff, or to capitalize credit funds within the financial limits set out in paragraph 2 above. See the [Financial Resources Management Section](#) for details on budget lines for reporting of grants to organizations for credit purposes and grants for non-credit purposes.
7. When grants are made to organizations involved in credit activities (loans, loan guarantees), UNDP requires that the organization have adequate procedures to ensure repayment of the credit it provides. UNDP does not receive repayment itself. The grant is considered a catalyst to help the organization to develop. See [Section B](#) on the management of grants.

B. Management of Input: Micro-capital grants

1. *Where a micro-capital grant is to be provided, a Standard Grant Agreement (Micro-Capital Grant Agreement) must be established between the designated institution of the programme or project and the recipient institution. The Grant Agreement sets out:*

-
- (a) the responsibilities of each party;
 - (b) the activities to be undertaken;
 - (c) the outputs to be produced;
 - (d) the performance criteria for the release of future tranches of funding;
 - (e) duration of activities;
 - (f) reporting arrangements for credit related purposes.

See the [UNDP Microfinance Policy](#) for the policies on micro-capital grant inputs. For credit activities the recipient institution is often a credit institution or a bank, which in turn provides loans to beneficiaries. Also see [under Initiating a Project, Templates and Forms](#) the following resources: (a) [Standard Grant Agreement \(Micro-Capital Grant Agreement\) for Non-Credit Related Activities](#) and (b) [Standard Grant Agreement \(Micro-Capital Grant Agreement\) for Credit Related Activities](#) .

2. The project document should provide for an independent mechanism that will review and endorse the selection of recipient institutions, and assess the performance of these institutions in managing the grants.

Such an independent mechanism could take the project board comprised of different actors including civil society, government, private sector and UNDP or its delegated arrangement to carry out the above specific functions (for more details, see POPP at <https://intranet.undp.org/global/popp/ppm/Pages/Programme-and-Project-Management-Arrangements.aspx>).

3. When used for credit-related activities, UNDP funds must be used in line with “Small and Micro enterprise Finance Guiding Principles for Selecting and Support Intermediaries”. The UNDP country office in consultation with the designated institution must ensure that any institution receiving a micro-capital grant is able to demonstrate competency in the following areas:

*a. **Institutional strength.** Sound institutional culture with a mission and vision that is supportive of the expansion of micro-finance services to low-income clients; management and information systems that provide accurate and transparent financial reports according to internationally recognised standards; and efficient operating systems;*

*b. **Quality service and outreach.** Focus on serving low-income clients and on expanding client reach and market penetration; financial services that meet the needs of their clients;*

Examples of needs-oriented services are small, short-term loans with collateral substitutes or alternative forms of collateral, and safe, convenient savings facilities. A reasonable time frame for sustainability is 5 to 7 years.

*c. **Sound financial performance.** Interest rates on loans sufficient to cover the full costs of efficient lending on a sustainable basis; low portfolio in arrears and low default rates; a diversified funding base for its micro-finance operations to minimise dependency on donor subsidies.*

See the [UNDP Microfinance Policy](#)

4. All recipient institutions must have a system for reporting regularly on the quality of its services, outreach and financial performance, as follows:

- (a) Reporting on outreach and performance through an initial baseline report and thereafter each quarter;

Reporting allows the partners to measure results. There should be clear expected impact on the institutions receiving grants and their clients.

- (b) Financial performance including balance sheet, income statement and audited financial statements, annually;

5. The designated institution of the programme or project is responsible for:

- (a) Approving, in consultation with a steering committee, requests for grants;
- (b) Establishing the Standard Grant Agreement (Micro-Capital Grant Agreement) between itself and the recipient institution;
- (c) Managing the release of the grant;
- (d) Monitoring and reporting to UNDP on the implementation of the activities covered by the grant and the achievement of results from the grant.

It is important to work with partners to provide enough financial volume for the credit lines to have effect. Enabling environment and support to the recipient are also crucial for success.

Annex 8 : Sample MoU



{LOGO 2 FOR SECOND PARTY TO MOU}

MEMORANDUM OF AGREEMENT

Between

THE GOVERNMENT OF MALAWI

Acting through

MINISTRY OF NATURAL RESOURCES, ENERGY AND MINING

And

{NAME OF PARTY}

THIS Memorandum of Agreement is made this _____ day of _____ YEAR between the Government of Malawi acting through the Ministry of Natural Resources, Energy, and Mining having its principal address at Private Bag 350, Lilongwe 3, Malawi (hereinafter referred to as "MoNREM") and {NAME AND ADDRESS OF PARTY} (hereinafter referred to as "{SHORT NAME}") (hereinafter individually referred to as a "Party" and jointly as the "Parties").

WHEREAS-

(A) {BACKGROUND JUSTIFICATION OF AGREEMENT}

(B) MoNREM through the Department of Energy Affairs sought approval from the Steering Committee of the Increasing Access to Clean and Affordable Decentralised Energy Services in Selected Vulnerable Areas of Malawi Project for the financial support to upgrade the power plant;

- (C) The Steering Committee approved financial support to {NAME} with a budget {OF ...} being adequate to meet the requirements of {use of the funds};

THE PARTIES do hereby agree as follows-

ARTICLE 1

AGREEMENTS BETWEEN MoNREM AND {SHORT NAME}

(1) *MoNREM and the {SHORT NAME} have agreed to refurbish the hydro power plant at Manchewe Falls, Livingstonia in Rumphi District using funds from the Access to Clean Energy Programme*

(2) *MoNREM and {SHORT NAME} have agreed to increase access to the electricity so generated by the power plant by constructing a mini-grid distribution network;*

(3) *MoNREM and {SHORT NAME} have agreed to promote productive use of the electricity generated by the power plant in addition to the already installed and connected maize mill and huller;*

(4) *MoNREM and {SHORT NAME} have agreed that a cost-reflective tariff should be considered to ensure sustainability of the power plant and that this tariff should be reflected in the Sustainability Business Plan to be developed by {SHORT NAME} under this Memorandum of Agreement (herein after referred to as "MoA");*

(5) *MoNREM and {SHORT NAME} have agreed to sustain energy generation capacity , among other undertakings, developing and implementing an Environmental and Social Management Plan and promoting catchment conservation activities; and that*

(6) *MoNREM will sign a performance-based concessionary agreement with {SHORT NAME} on operation and management of the publicly financed assets of the Mini Grid system.*

ARTICLE 2
OBLIGATIONS OF MoNREM THROUGH
DEPARTMENT OF ENERGY AFFAIRS

- (1) Lead procurement processes for the supply of materials for construction of distribution network for the power plant and supervision of the construction works;
- (2) Procure and supervise the distribution network and Household wiring contractors;
- (3) Review and confirm, including specifications, all materials to be purchased by {SHORT NAME} for the project;
- (4) Facilitate transfer of funds from the ACRE to {SHORT NAME} for implementation of project activities;
- (5) Ensure {SHORT NAME} has qualified book keepers or accounting personnel prior to transfer of funds to {SHORT NAME} under this MoA;
- (6) Review submissions from {SHORT NAME} on the Project; and
- (7) Confirm completion of tasks under this MoA.

ARTICLE 3
OBLIGATIONS OF {SHORT NAME}

- (1) Recruitment and maintenance appropriately qualified personnel to operate and manage

the various aspects of the mini grid;

- (2) Operate and manage the power plant including distribution of the electricity so-generated to households, businesses and institutions;
- (3) Undertake the activities described in the Workplan and Budget attached as Annex 1 to this MoA;
- (4) Prepare and submit progress reports to the Steering Committee of the ACRE through the Department of Energy Affairs;
- (5) Prepare and submit Income Statement and Balance Sheets to the Department of Energy Affairs;
- (6) Endeavor to meet the performance targets contained in Annex 2 to this MoA;
- (7) Timely inform the Steering Committee through the Department of Energy Affairs of any problems faced in working towards achieving the objectives enshrined in the Workplan and the agreed performance targets; and
- (8) Commit to work and share experiences with other mini-grid operators as need arises in close collaboration with the Department of Energy Affairs.

ARTICLE 4

BUDGET FOR THE PROJECT AND

FINANCIAL MANAGEMENT

- (1) MoNREM has set aside a total of _____ under the ACRE Project to support {SHORT NAME} payable in Malawi Kwacha equivalent - _____ detailed usage of it is contained _____ in Annex 1 to this MoA;
- (2) The total of _____ will be disbursed in tranches to {SHORT NAME} using the following bank details:

Name of the bank: _____

Branch: _____

Beneficiary Account Name: **{SHORT NAME}**

Beneficiary Account Number: _____

- (3) Funds disbursed to {SHORT NAME} under this MoA shall not be used for any purpose other than those expressly set forth in Annex 1 to this MoA;
- (4) Any financial obligations arising from implementation of activities under this MoA shall be settled prior to expiry of this MoA;
- (5) The Parties to this agreement will reach mutual agreement on the handing over of any financial resources owing to upgrading of the power plant or owed by the power plant;
- (6) {SHORT NAME} shall maintain clear, accurate and complete records in respect of the funds received under this MoA;
- (7) {SHORT NAME} shall compile and furnish to the Department of Energy Affairs any records or information, oral or written, which the Department of Energy Affairs may reasonably request in respect of the funds received by {SHORT NAME};
- (8) {SHORT NAME} shall, within thirty (30) days after completion of the upgrading activities, submit to the Department of Energy Affairs a final report with respect to all expenditures including salaries, travel and supplies and indicating the progress made towards achieving the goals of the activities undertaken, utilizing the reporting format contained in Annex 1 to this MoA.

ARTICLE 5

REPORTING STRUCTURE AND MANAGEMENT ARRANGEMENTS

(1) All correspondence to MoNREM regarding the implementation of this MoA shall be addressed to:

**The Secretary for Natural Resource Energy and Mining,
Private Bag 350,
Lilongwe 3.**

(2) All correspondence to {SHORT NAME} regarding the implementation of this MoA shall be addressed to:

**The Chairman,
{SHORT NAME}
{PHYSICAL AND POSTAL ADDRESS}**

(3) {SHORT NAME} shall neither seek nor accept instructions from any authority external to MoNREM or UNDP in connection with the performance of its services under this MoA;

(4) The upgrading activities will close in accordance with UNDP guidelines on project closure, as endorsed by MoNREM; and

(4) All assets bought under this MoA will remain UNDP property and shall be transferred to MoNREM at closure of upgrading activities who shall in turn decide what to do with or how to use the assets.

ARTICLE 6

MONITORING AND EVALUATION

(1) The Department of Energy Affairs will monitor progress of implementing the upgrading activities during implementation period of this MoA.

- (2) The Department of Energy Affairs will evaluate implementation of the upgrading activities upon closure of the same.

ARTICLE 7

GOOD FAITH AND CONFIDENTIALITY

- (1) The Parties will expend time and effort in upgrading the power plant and {SHORT NAME} will, in good faith, utilize finances obtained from MoNREM for the agreed purposes only.
- (2) Any information exchanged between the Parties pursuant to this MoA, as well as the fact of the co-operation envisaged under this MoA, will be confidential information and will not be released to a third party unless the Parties agree to the release and to the terms of the release of such information.

ARTICLE 8

REPRESENTATIONS AND WARRANTIES

Each of the parties to this MoA confirms that it has power and authority to enter into this MoA and perform the transactions and obligations set herein and its execution and delivery, and performance by a Party of this MoA will not violate material provision of any law, rule or regulation, order, judgment or decree applicable to such Party.

ARTICLE 9

ENTRY INTO FORCE, DURATION, AND TERMINATION

- (1) This MoA will enter into force on the date of signature by the duly authorized representatives of the Parties and will remain in force until 31st December 2020 unless terminated by either Party.
- (2) The termination of this MoA will be without prejudice to the rights and obligations of the Parties arising from the MoA prior to the effective date of the termination.
- (3) A Party may terminate this MoA by giving at least one (1) month written notice to the other Party.
- (4) Where this MoA is terminated by either Party, the Parties will take steps to ensure that the termination does not affect any prior obligation, project or activity already in progress.

ARTICLE 11

DISPUTE SETTLEMENT

- (1) In the event of a dispute, controversy or claim arising out of or relating to this MoA, or the breach, termination or invalidity thereof (a "dispute"), the Parties will use their best efforts to settle promptly such dispute, controversy or claim through direct amicable negotiations.
- (2) A dispute, controversy or claim that is not settled within sixty (60) days from the date a Party had notified the other Party of the nature of the dispute and of the measures that should be taken to rectify, the dispute, controversy or claim will be resolved through consultation between the executive heads of the Parties.
- (3) Each Party will give full and sympathetic consideration to any proposal advanced by the other Party to settle amicably any matter for which provision has not been provided for or any questions arising out of the interpretation or application of this MoA.

- (4) In the event of this MoA being terminated prior to its due expiry date, {SHORT NAME} shall be compensated on a pro-rata basis for no more than the actual amount of work performed to the satisfaction of MoNREM.
- (5) No change or modification shall be made to this MoA except with prior written agreement between the Parties.
- (6) The {SHORT NAME} shall not assign, transfer, pledge, subcontract or make other disposition of this MoA or any part thereof, or of any of MoNREM's rights, claims or obligations under this MoA except with the prior written consent of MoNREM.

IN WITNESS WHEREOF, the Parties to this MoA have executed this MoA as of the date first above written.

SIGNED at Lilongwe on this day of, _____.
For the **Ministry of Natural Resources, Energy and Mining**
Mr. Patrick C.R. Matanda

SECRETARY FOR NATURAL RESOURCES, ENERGY AND MINING

SIGNED at Lilongwe on this day of, _____.
For **{SHORT NAME} Power**
{NAME OF SIGNATORY}

CHAIRPERSON

