

2019

Project Implementation Review (PIR)

**Affordable decentralized energy services**

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# Basic Data

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| **Project Information** | |
| UNDP PIMS ID | 5270 |
| GEF ID | 5587 |
| Title | Increasing access to clean and affordable decentralized energy services in selected vulnerable areas of Malawi |
| Country(ies) | Malawi, Malawi |
| UNDP-GEF Technical Team | Energy, Infrastructure, Transport and Technology |
| Project Implementing Partner | Government |
| Joint Agencies | *(not set or not applicable)* |
| Project Type | Medium Size |

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| **Project Description** |
| Malawi is one of the least electrified countries in the SADC region, with an average per capita consumption of 85 kWh per annum – among the lowest in the world. Provision of sufficient, reliable and clean energy in Malawi is a critical challenge, as recognized by the Government which has put energy as a focus area in both the Malawi Growth and Development Strategy II (MDGS 2011 - 2016) and the Economic Recovery Plan (2012). 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 2015/202 targets for increasing energy access and renewable energy supply.    To increase access, effort is needed to develop power plants and mini-grids close to the end users in the rural areas and since financial resources are scarce, investments for new generation can only be leveraged by involving the private sector and social enterprises. Given the more remote locations of many of the communities that need to be served, and the cost reductions in renewable energy technologies, an important vehicle for meeting these targets will be clean energy mini-grids.  This project addresses rural electrification barriers in rural Malawi where 96% of people do not have electricity access. The project will scale up and strengthen Malawi’s first mini-grid, independent vertically-integrated energy company operated as a social enterprise; provide micro-capital grants and pilot innovative service arrangements for clean energy mini-grids; build capacity on mini-grids and rural electrification at the sub-national and national levels; develop an information clearing house on clean energy mini-grids for project developers; and recommend ways to mainstream mini-grids into national rural electrification financing platforms and energy regulatory frameworks. It is expected that the project will set the stage for mini-grids to play a key role going forward in electrifying rural parts of Malawi, thereby assisting the country in meeting its SE4All targets.  Mainstream mini-grids into national rural electrification and energy regulatory framework. It is expected that the CEMREM will provide the basis for mini-grids to play a key role in electrifying rural Malawi. |

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| **Project Contacts** | |
| UNDP-GEF Regional Technical Adviser | Mr. Faris Khader (faris.khader@undp.org) |
| Programme Associate | Ms. Adey Tesfaye (adey.tesfaye@undp.org) |
| Project Manager | Mr. Emmanuel Mjimapemba (emmanuel.mjimapemba@undp.org) |
| CO Focal Point | Ms. Etta M'mangisa (etta.mmangisa@undp.org)  Mr. Andrew Spezowka (andrew.spezowka@undp.org) |
| GEF Operational Focal Point | Ms. Shamiso Najira (shamiso\_b@yahoo.com) |
| Project Implementing Partner | Department of Energy Affairs (doe@doe.gov.mw) |
| Other Partners | mera@meramalawi.mw  Community Energy Malawi (edgarkbayani@gmail.com)  Practical Action (victor.mhango@practicalaction.org.zw)  MEGA Mulanje (gm@mega.mw) |

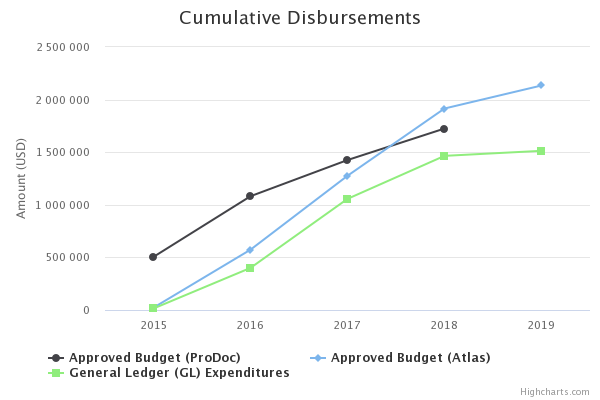
# Overall Ratings

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| Overall DO Rating | Satisfactory |
| Overall IP Rating | Highly Satisfactory |
| Overall Risk Rating | Substantial |

# Development Progress

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| **Description** | | | | | | |
| **Objective**  **To increase access to energy in selected remote, rural areas in Malawi by promoting innovative, community-based mini-grid applications in cooperation with the private sector and civil society.** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Tons of CO2 equivalent avoided. | Negligible | *(not set or not applicable)* | 33,183 tCO2e | 163 tCO2e has been avoided if a diesel generator was used to generate the 618MWh of electricity that has been generated by micro hydro for the communities. Over 50% of the total savings has been realised during the period under review. The rapid increase to electricity utilisation by the communities has been attributed to increase in household connections as well as productive uses. It should also be noted that up to 210 tCO2e would have been emitted if a Coal fired power plant was used to generate an equivalent cumulative energy. | 21,851 tCO2e will be avoided in the lifetime of the installed hydro and solar power mini-grids generating a cumulative total of 64,155MWh. Four hydro power mini-grids have a cumulative installed capacity of 360.5KW and a 25 year assumed lifetime operating for 350 days in a year and 24 hours combined with the 82.5KWp Solar PV generating for 8 sunshine hours per day for 25 years will avoid the 21,851 tons of CO2 equivalent if the energy was generated from coal or 25,867 tCO2e if the same energy was produced from wood. Three hydro plants are installed at MEGA in Mulanje 225 KW and one in Livingstonia rated at 53KW whilst the 82.5KWp Solar PV is installed at Sitolo Village in Mchinji.    The Project has also supported two more micro hydro mini-grid schemes rated at 300KW at Usingini and 50KW Scheme at Kavuzi are at various stages of development. 300KW Usingini Mini Hydro is awaiting procurement of materials and procurement of consultants to design the 50KW Kavuzi scheme. All the mini-grids supported directly by the project will cumulatively have an installed capacity of 710.5KW generating 133,655MWh in their system lifetime with a cumulative 46,885 tCO2e carbon saved from Coal and 55,502 tCO2e saved from Wood over the plants lifetime.    All the hydro plants were designed and constructed as run of river ensuring there was no dam construction across the river. |
| Cumulative renewable energy capacity installed and operational (kWp) | 56kW | *(not set or not applicable)* | 164 kWp (only mini-grids directly supported by INV)  300 kWp (all mini-grids) | One mini-grid operator with an installed capacity of 88 kW but producing only 65 kW is operating. The second operator with capacity of 80KWp from solar PV is expected to be installed, commissioned and operational within the first half of the next reporting period. The third mini-grid operator will install a 300kW mini-hydro scheme in Nkhatabay District of the Northern Region of Malawi in the last quarter of the next reporting period. There have been delays due to funding deficit of the proposed high capacity scheme. | 182.5KWp directly supported by the investment from the Project split as 100KW hydro for Mulanje Energy Generation Agency (MEGA) and 82.5KWp for Community Energy Malawi (CEM) at Sitolo Village. A cumulative installation of 360.5KW supported by the project are operational with 225KW at MEGA, 82.5KW at CEM and 53KW at Livingstonia.    Once all the mini-grids initiated with investment from the project are completed, there will be a total installed capacity of 710.5KW.    Two hydro power plants are in the pipeline 300KW at Usingini and 50KW at Kavuzi. Both are at the stage of procurement of materials and consultants respectively. |
| Cumulative renewable electricity generation (kWh/year) | 220,752 kWh/Year | *(not set or not applicable)* | 1,145,808 kWh/Year (both Component #1 and #2) | 307,933 kWh of hydro renewable energy has been generated by one mini grid operator under component 1 during the year under review. Operators under component 2 are in the process of procurement of installation suppliers with the first mini-grid operator already procured and awaiting installation in the first half of the next reporting period. | 2,566,200kWh/year of cumulative renewable electricity generation from 3 hydro plants of 65 KW, 60KW and 100KW operating synchronously at MEGA in Mulanje District whilst 82.5KWp of Solar is installed at Sitolo Village in Mchinji District and finally 53KW of hydro is installed at Livingstonia operated by Chipopomo Power Generation Trust.    These renewable energy plants have connected 964 households, 4 maize mills, 1 huller, 2 health facilities, 4 schools and 17 businesses.    To ensure sustainability of the mini-grids, a deliberate effort was made by the project to ensure that the mini-grid schemes are operated professionally as a business and that productive use of energy is encouraged. The schemes are operated on pre-payment vending system to enable the customers to pay for electricity when they have the money. |
| Household energy expenditure savings among customer base (US$) | 65969 | *(not set or not applicable)* | $352,271/Year by 2018 | US$ 568,115 of energy expenditure has been saved by the communities in the year under review. This is a milestone that from one mini grid the expenditure on energy savings target at the end of the project year has been reached by increase in household connections as well as energy usage by households through productive use and non lighting purposes. | US$851,023 is the estimated household energy expenditure savings among the 964 households connected to mini-grids. In addition to energy expenditure savings at household level from lighting needs, communities at large have saved a lot more from cellphone charging needs whose prices per charge range from US$0.07 in most rural areas in Malawi. Depending on the type of phone, this translates into a tariff ranging from US$6.5 -17.80/kWh. However, with the connection to mini-grids the tariffs are as low as US$ 0.11 - 0.19/kWh. Furthermore, in addition to electric powered maize mills and hullers being efficient, they also charge lower than fossil fuel operated maize mills.    The foregoing illustrates the enormous energy expenditure savings for the communities due to the presence of a mini-grid whether connected or not. |
| **The progress of the objective can be described as:** | | **Achieved** | | | | |
| **Outcome 1**  **Increasing the installed capacity of the Mulanje Electricity Generation Agency’s (MEGA) MHPP scheme** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Cumulative installed power generation capacity - kWp | 56 kW | *(not set or not applicable)* | 168 kWp (from mini-grids directly supported by project INV i.e. Lujeri)    216 kWp (all new MEGA MHPPs supported by the project plus the baseline) | 65 KW hydro power installed at baseline upgraded through rehabilitation is the only generation power plant operational todate. However, through co-financing of this investment with Scottish Government, a new 100 KW is under construction expected to be commissioned in the next reporting period. In addition to this an 80KW power station that was damaged by floods is under rehabilitation and expected to be completed in the next reporting period. This projects the total cumulative installed capacity for MEGA to be 245KW by the end of the GEF investment period. This will exceed the target of installed capacity by the end of the project by 30KW. | 225kWp cumulative installed capacity for MEGA running connecting 807 households, 3 maize mills, 1 health centre, 3 schools and 15 businesses. Two new micro hydro plants - one 100kW and another 60 kW - became operational in the year under review. All the three hydro plants are cascaded on the same Lichenya river which was assessed to be more reliable with comparatively better flows during the dry season. All the three power plants are synchronised and feed into the same mini-grid distribution network thereby ensuring continuous supply of power to all customers during maintenance of one power plant.    As one way of ensuring that the systems continue functioning beyond the project period without disruptions from river siltation from upstream erosion, 886 farmers were trained in catchment conservation techniques and avoidance of river catchment cultivation. The communities have an intimate understanding of the link between environmental degradation and its impact on power generation. The project has made it a point to raise awareness of this relationship in the project area. |
| Cumulative renewable electricity generation (kWh/year) | 220,752 kWh/Year | *(not set or not applicable)* | 851,472 kWh/Year | 307,933 kWh of hydro renewable energy has been generated by MEGA during the year under review. This is as a result of increasing productive use in the community as well as new households being connected to the mini grid. There is a steady increase in power generation per year. However, more generation is expected with the two additional power plants expected to be operational in the next reporting period. The targeted 851,472 kWh/yr for the project will only be realised once all the power plants are online for at least a year. | Cumulative renewable energy generation capacity of 867,240 kWh/year from the micro hydro power plants serving over 700 households, 3 maize mills, 2 health facilities and 5 schools and numerous business entities. |
| **The progress of the objective can be described as:** | | **Achieved** | | | | |
| **Outcome 2**  **Achieving MEGA’s business plan target of increasing the aggregate household energy savings among the customer base** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Household energy expenditure savings among customer base (US$) | 65969 | *(not set or not applicable)* | $296,560/Year by 2018 | US$ 568,115 from 608 directly connected households and over 4,000 households indirectly benefitting from social services institutions such as the clinic, schools and maize mills that are connected. The households used to spend US$ 1.88 per equivalent kWh of kerosene used for lighting and a lot more per kWh for phone charging. As a way of illustration MEGA has sold 307,933 kWh from the mini grid at an effective tariff of US$ 0.04 per kWh raising a revenue of US$ 11,018.90. If the same energy was obtained from non electric sources the communities would have spent US$ 579,133.49 at US$ 1.88/kWh. The difference between this value and the operator revenue represents the household savings on energy expenditure. | A cumulative expenditure savings of US$302,052 / year achieved in the year under review. |
| - | - | *(not set or not applicable)* | \_ | The household energy expenditure savings per year is expected to increase as more households are getting connected as well as more power plants come on line. The cumulative energy consumption has increased by 100% due to more households being connected as well as increase in productive use of energy. | *(not set or not applicable)* |
| **The progress of the objective can be described as:** | | **Achieved** | | | | |
| **Outcome 3**  **Investment in Installed capacity of mini-grid schemes established, replicating the MEGA model and using a Build-Own-Operate (BOO) Public Private Partnership (PPP) model** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Cumulative installed renewable energy mini-grid capacity (kWp) | 0 | *(not set or not applicable)* | 84 kWp greenfield mini-grid(s)established | Design of two greenfield mini-grids one 80 kWp Solar PV and another 300kW Hydro mini grid have been completed during the period under review and procurement of equipment and services were in progress. Therefore, the cumulative installed capacity of renewable energy mini grids is projected to be at-least 380 kWp by the end of the project.    The proposal for the first greenfield Operator (Community Energy Malawi) intended to install a 45 kWp Solar PV mini grid connecting 100 Households, a primary school, health post, an irrigation scheme and small cottage industries. However, during the detailed design processes and through consultation with the beneficiary communities, they had expressed that their primary productive use need for energy was a maize mill which they had to cycle 20km away in the neighbouring country of Zambia or 28 Km away to the nearest district centre of Mchinji. To accommodate energy demand for a small maize mill and 50 more households, the minimum design plant capacity option recommended was therefore an 80KWp. The Technical Advisory Committee (TAC) reviewed the designs and recommendations and agreed with the communities. The success factor of the mini grid business model was also hinging on anchor customers of which a maize mill would represent a higher energy demand from the system. However, this was larger than was originally envisaged and consequently more financial resources were required. TAC therefore recommended to the Steering Committee to approve the higher capacity mini grid and solicit more co-financing resources from UNDP and Government. The Steering Committee approved the 80kWp Solar PV Plant installation at Sitolo Village in Mchinji and UNDP allocated extra financing for the procurement of the power generation facility whilst the Government had committed to providing transmission, distribution and connection materials.    Procurement of the Solar PV plant supplier and installer have been concluded and the plant is scheduled to be commissioned in the following reporting period    The second mini grid operator (Practical Action) had proposed the design and installation of 100kW hydro scheme on Lizunkhuni River , Usingini area in Nkhatabay district. The proposal planned to connect 500 households, 2 schools a health post, 3 maize mills and coffee processing plants from 5 coffee estates in the area who were to be anchor loads. However, after detailed feasibility studies, the site was found to have a much higher potential than 100kW and in addition to that it was found that due to the terrain of the area and other factors, the costs for installing a higher capacity hydro plant of 300kW was only 25% higher than a 150kW scheme. Compounding the problem was the fact that 150kW was costing 300% more than originally planned in the operator`s proposal.    The Technical Advisory Committee reviewed the Feasibility Studies and Designs, visited the site and interacted with the potential customers and reached the same conclusion that the project would acquire more dividends through the development of a higher capacity hydro generating plant despite the huge budgetary outlay that entailed. TAC recommended to the Steering Committee to approve the installation of a 300kW mini hydro scheme at Usingini and further requested support for co-financial resources from UNDP, Government and the mini grid operator. The Steering Committee approved after commitment from UNDP to increase the co-financing with GEF to procure power generation equipment and accessories and Government committed to providing the transmission, distribution and household connection materials with the Mini Grid Operator and Anchor load customers (Coffee Estates) committing to civil works financing.    Procurement of hydro mechanical equipment supplier was in progress during the reporting period. | 81 KWp greenfield solar PV mini-grid established at Sitolo Village in Mchinji district connecting 164 households with 940 kWh energy storage capacity |
| Cumulative renewable electricity generation (kWh/year) | Nil | *(not set or not applicable)* | 294,336 kWh/Year | Nil directly supported by the Project.    However, the Malawi regulatory Authority (MERA) and Department of Energy Affairs requested assistance from UNDP through the Project to assist in upgrading pico hydro schemes that had mushroomed in an area called Kavuzi in Nkhatabay District. The area through the work of 4 local artisans were installing small hydro power turbines and generators for households (each system was connecting one to 4 households). The turbines and generators were locally manufactured from metal junkyard materials and they use galvanised wire between 1.25 to 3mm in diameter ordinarily used as drying lines as conductor cables for distances ranging from 200m to 2,000m. MERA after visiting the numerous already installed schemes noted serious safety and standardisation deficiencies but opted to support the artisans and their customers to meet the minimum regulatory compliance regime as opposed to ordering decommissioning of the systems.    The Steering Committee approved the assistance of the pico mini grids as they represented a different business model whereby each connected household was funding the labour and equipment through the artisans. It was therefore agreed to support building the capacity of the local artisans in standards, safety, and power quality measurements.    The artisans claim to have installed over 100 pico systems connecting over 200 households in the area with each scheme generating between 300W to 2kW representing energy production in excess of 120,000kWh/year indirectly being supported by the Project. | 283,824 kWh/year of renewable electricity generation from solar PV has been achieved at Sitolo Village in Mchinji District connecting 164 households, 1 primary school, 2 churches, 1 health facility and 1 maize mill. |
| No. of new mini-grid operators replicating MEGA model | 0 | *(not set or not applicable)* | 2 mini-grid operations established through a BOO mode. | 2 mini grid Operators established plus 1 under development | 1 mini-grid operation fully established with 1 more in development through a build, own and operate model. |
| **The progress of the objective can be described as:** | | **Achieved** | | | | |
| **Outcome 4**  **Increased the aggregate household energy savings among the customer base** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Household energy expenditure savings among customer base (US$) | 0 | *(not set or not applicable)* | $55,711/Year | The household savings will accrue after the commissioning of the new mini grids being planned at Sitolo Village in Mchinji and Usingini Village in Nkhatabay.    The communities that are connected to the pico grids have reported savings emanating from household lighting, phone charging and entertainment which have not yet been quantified. | US$ 53,721 of savings per year expected from the 164 households that have been connected. |
| **The progress of the objective can be described as:** | | **Achieved** | | | | |
| **Outcome 5**  **Increased capacity of key stakeholders, especially at the sub-national levels to effectively plan and implement clean energy mini-grids** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Number of districts where sub-national training and capacity building programmes on clean energy mini-grids conducted | 0 | *(not set or not applicable)* | 28 districts covered by clean energy mini-grid training programmes. | All 28 districts had been covered by clean energy mini-grid training programmes. This target was achieved in the previous reporting period. However, during the period under review new training areas were identified. The following short courses were conducted in the period under review Renewable Energy Design and Performance Modelling Tools, modelling with AutoCAD for Electrical Installers, High Voltage line Installation Construction Standards and Procedures for mini grids, GIS modelling for Rural Electrification and Local Mini Grid Artisan mentorship programme. | 28 districts have been covered with clean energy mini-grid training programmes including incorporation of mini-grids as a rural electricity option in the social economic profile as well as District Development Planning documentations. |
| Number of people trained on planning and implementing clean energy mini-grids. | 0 | *(not set or not applicable)* | At least 300 people | Cumulatively, over 400 people have been trained in various aspects of clean energy mini grid planning, design, regulations, standards and construction methods. Of which under the period under review, 100 participants, of which 31 were females, drawn from stakeholders that included policy makers, regulators, academicians, local authorities at district level, mini grid operators, non governmental organisations and private players participated. The following short courses were conducted in the period under review Renewable Energy Design and Performance Modelling Tools (26), modelling with AutoCAD for Electrical Installers (38), High Voltage line Installation Construction Standards and Procedures for mini grids (26), GIS modelling for Rural Electrification and Local Mini Grid Artisan mentorship programme (10) | 405 people have received both local and international trainings and exposure to clean energy mini-grid planning, design, installation and operation. |
| % share of women recipients of the capacity building | 0 | *(not set or not applicable)* | At least 30% female representation in all trainings | With a cumulative total of 404 people attending the project capacity building programmes 96 have been females representing 24% female participation in the trainings so far. However, in the period under review, the participation was 31% females in the training programmes that were conducted. The female participation has improved through involvement of collaborating partners involved in technical trainings such as National Construction Industry Council. It is planned to further involve other vocational training providers in the next period to increase the participation rate in these considered to be male dominated industries. The Project Team will continue offering incentives to encourage more female participation such as flexible delivery modes, offering female scholarships for females participating in renewable energy related short courses. | 32% of the capacity building participants were women. |
| **The progress of the objective can be described as:** | | **Achieved** | | | | |
| **Outcome 6**  **Increased awareness about relevant business models, policy/ regulatory issues, and financing of mini-grids in the Malawian context** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Number of web-sites in Malawi which stakeholders could use to plan and implement clean energy mini-grids. | Web-sites on renewable energy and rural electrifications do not provide much information on mini-grid options. | *(not set or not applicable)* | Information Clearing house on clean energy mini-grids with a GIS interface available to all stakeholders. | The Project team has worked with the Rural Electrification Programme in collection and analysis of data for all un electrified sites in the country (from 27 districts) submitted by the respective district councils in order to produce the next Rural Electrification Master Plan for the next 5 years. All the sites were geo- referenced. The work of finalising the Master Plan was in progress. Once completed, the sites will be shown on a map classified as those that will be electrified through utility grid extension, those that will show potential for mini grids and sites that would better be served through solar home systems or portable systems. Each site has its social economic parameters captured in the data base providing data to determine electricity demand as well as willingness to pay. Prioritisation criteria for rural electrification grid extension and mini grid potential is demand, distance from utility grid, location (potential renewable energy resources in the area), costs of extension/development.    The information clearing house is under development had not been completed awaiting completion of the database development for sites for rural electrification. The portal however, will be an information depository for matters on energy in Malawi including policy, legal, regulatory, social and economic documents. | Information clearinghouse https://mini-grids.firebaseapp.com/ has been established in collaboration with the University of Malawi and Malawi Rural Electrification Programme (MAREP). The information clearinghouse contains information about the existing electricity network operated by the utility company, sites earmarked for grid extension connectivity through MAREP within the next 5 to 10 years as well as sites that have potential for mini-grids. The information is designed to assist policymakers, planners and investors on the role that mini-grids can play in rural electrification as a medium-term solution for isolated communities. |
| Number of case studies and toolkits on Malawi on clean energy mini-grids | Toolkits focus on community energy, energy kiosks etc. or are not specific to Malawi. No case study on mini-grids in Malawi. | *(not set or not applicable)* | Malawi mini-grids toolkit with case studies published and presented in a national workshop and available to all stakeholders. | 5 Mini Grid Case Studies completed. The mini grid case studies are for the stand alone Likoma Island Diesel operated mini grid, MEGA mini grid, Government initiated Solar PV Wind hybrid mini grids (2 out of 6 visited), Kavuzi pico mini grids and Sitolo Village Solar PV Mini Grid with references to Chikwawa Solar PV irrigation anchored mini grids.  The case studies were completed awaiting publication. | Malawi based toolkit and 5 case studies developed for Malawi and circulated on the energy website as well as the information clearing house. |
| **The progress of the objective can be described as:** | | **Achieved** | | | | |
| **Outcome 7**  **Improved policy and regulatory environment to facilitate the sustainable development of mini-grids in Malawi** | | | | | | |
| **Description of Indicator** | **Baseline Level** | **Midterm target level** | **End of project target level** | **Level at 30 June 2018** | **Cumulative progress since project start** |
| Extent to which current energy policies and regulations consider or promote clean energy mini-grids for rural electrification i | Policies do not consider or recognize mini-grids as a viable electrification option nor allow for funding under the REF | *(not set or not applicable)* | Recommendations put forth to government for the Rural Electrification Act, 2004 and Energy Regulation Act 2004 to be amended to include clauses promoting clean energy mini-grids | The revised energy policy that incorporates the recognition of mini-grids as a Rural Electrification alternative approach to grid extension has been approved by the Cabinet Sub Committee. The remaining stages include full cabinet approval, printing, launch and dissemination of the new policy.    During the period under review, the mini-grid regulatory framework was developed and approved by the MERA board supported by the Project. For the first time, Malawi has a mini-grid specific regulatory framework. This now sets the stage to provide clarity in the licencing requirements for mini grid investors. The framework further classifies mini-grids that require only registration and those that require licencing under the Rural Electrification Act as opposed to the Electricity Act that principally addresses utility grid power generation and distribution licences. Furthermore, the issue of tariffs for the mini-grids have been delineated from that of the utility grid dependent on the business model proposition of the Operator. | In the year under review, the new Energy Policy was approved by cabinet. In the new Energy Policy, mini-grids are recognised as an option for rural electrification of isolated communities in the medium-term. Furthermore, the new mini-grid regulatory framework was adopted by the Malawi Energy Regulatory Authority (MERA) that sets out clear guidelines on the development of mini-grids in Malawi. |
| Number of local (government supported) financing mechanisms for clean-energy mini-grids | REF is not presently funding mini-grids | *(not set or not applicable)* | Rural Electrification Fund able to finance clean energy mini-grids as a rural electrification option, through policy and regulatory changes. | During the year, the project obtained government commitment in writing to support mini-grids. | Through the project, the Rural Electrification Management Committee undertook to finance the new mini-grids under development after presentation of a business plan. |
| - | - | *(not set or not applicable)* | - | The new Energy Policy is expected to be approved by full Cabinet by the end of the first quarter of the next reporting period. | Since the project launch in May 2015, the project has achieved its intended objectives and in some cases exceeded the targets. |
| **The progress of the objective can be described as:** | | **Achieved** | | | | |

# Implementation Progress



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| Cumulative GL delivery against total approved amount (in prodoc): | 87.72% |
| Cumulative GL delivery against expected delivery as of this year: | 87.72% |
| Cumulative disbursement as of 30 June (note: amount to be updated in late August): | 1,513,117 |

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| **Key Financing Amounts** | |
| PPG Amount | 100,000 |
| GEF Grant Amount | 1,725,000 |
| Co-financing | 22,785,000 |

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| **Key Project Dates** | |
| PIF Approval Date | Oct 25, 2013 |
| CEO Endorsement Date | Dec 29, 2014 |
| Project Document Signature Date (project start date): | May 26, 2015 |
| Date of Inception Workshop | *(not set or not applicable)* |
| Expected Date of Mid-term Review | May 26, 2018 |
| Actual Date of Mid-term Review | Jul 16, 2018 |
| Expected Date of Terminal Evaluation | Sep 30, 2019 |
| Original Planned Closing Date | Dec 31, 2019 |
| Revised Planned Closing Date | Dec 31, 2019 |

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| **Dates of Project Steering Committee/Board Meetings during reporting period (30 June 2018 to 1 July 2019)** |
| 2019-07-02 |

# Critical Risk Management

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| Current Types of Critical Risks | Critical risk management measures undertaken this reporting period |
| Operational | Risk: Development of an exit strategy for the project was reliant on the availability of financial resources.    Management measures  UNDP allocated TRAC resources for hiring consultants who worked with the mini-grid operators to come up with exit strategies.    During the reporting period, The project team engaged with government and and presented a proposal to the Steering Committee for the Malawi Rural Electrification Program requesting government to provide support to the 3 mini-grids: at MEGA in Mulanje, at Usingini in Nkhata-Bay and and at Sitolo in Mchinji. Government agreed in principal but indicated that the applications should be accompanied by the business plans from the mini-grid operators. The project team facilitated the process of development of business plans by funding the exercise and working with the operators on the scope of the plan. |
| Environmental | Risk: Stakeholder engagement: inadequate stakeholder engagement could lead to delayed implementation due to lack of knowledge on compliance with environmental standards for mini-grids.    Management measures  Every mini-grid operator was required to submit a project brief which should have been approved by government prior to requesting for funding from the project.    During the year under review the UNDP/GEF project supported the stakeholder consultations on the new mini-grid framework. The frame work will streamline the process for registration of new mini-grids. Through the consultations stakeholders were appraised on the framework and this will result in reduction in processing time. The project team was also tasked to work with the new mini-grid operators as they processed their registrations and or applications for licenses. |

# Adjustments

**Comments on delays in key project milestones**

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| **Project Manager: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.** |
| The terminal evaluation was originally planned to be undertaken in April/May 2019 but a request for a six months project extension was submitted and approved to accommodate the completion of the 80KWp Sitolo Solar PV Scheme and its commissioning. It was adjudged that the delay by 6 months would provide ample time to assess the system performance as well as its impact on the intended beneficiaries. This therefore necessitated rescheduling of the terminal evaluation to September/October 2019 prior to the project closure on December 31, 2019. |

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| **Country Office: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.** |
| Project closure was delayed from May 26, 2019 to December 31, 2019 in order to complete the committed and contracted activities. Subsequently, the project terminal evaluation was also pushed to September/October 2019 in order to allow for conclusion of the activities. |

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| **UNDP-GEF Technical Adviser: please provide comments on delays this reporting period in achieving any of the following key project milestones: inception workshop, mid-term review, terminal evaluation and/or project closure. If there are no delays please indicate not applicable.** |
| The implementing partner had requested an extension due to the following reasons:  - delays in project start (There was a three-month delay in setting up the PMU and hiring the Project Manager)  - delays in project implementation due to:  ▪ increased scope of work and costs that necessitated resource mobilization;  ▪ need to monitor the power generation and revenue management of one new mini-grid operator; and  ▪ need to complete design and procurement processes for the installation of the new 300 kW mini-grid scheme.  - delays in project closure (TE) - need to allow sufficient time to conduct the terminal evaluation of the project  UNDP-GEF management approved the extension request and the revised project closing date is 31 December 2019. |

# Ratings and Overall Assessments

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| --- | --- | --- |
| **Role** | **2019 Development Objective Progress Rating** | **2019 Implementation Progress Rating** |
| **Project Manager/Coordinator** | Highly Satisfactory | *- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -* |
| Overall Assessment | The Project had 3 main outcomes which have all been exceeded quantitatively. The first outcome was to replicate MEGA mini grid to improve its business sustainability by (1) Increasing its generation capacity wit an additional 80KWp micro hydro plant instead 100KWp plant has been installed with co-financing from the project. (2) Increase household connections and hence enhance household expenditure savings on energy instead of a targeted cumulative 579 Households , the project has connected 810 Households, 4 Maizemills, 1 Health Centre, 4 Schools in seven communities. The second aspect of the Project was to replicate the mini grid model to two other pilot sites, instead a cumulative new generation capacity of greenfield mini grids being 80KWp, the Project has supported installation and commissioning of 82.5 KWp Sitolo Mini Grid connecting 164 Households, 1 Maize Mill and expected to extend to 2 more communities and 600 households. Another Micro hydro scheme at Mantchewe is completed with 50KW with part funding from the Project. Two new mini grids 300KW mini hydro at Usingini and 50KW micro hydro at Kavuzi have been initiated under the project and are undergoing designs. This has a cumulative projected installation capacity of 482.5KW from greenfield mini grids supported directly by the project to connected atleast 3000 Households.    The third outcome had 4 aspects which have been successfully completed and most of them exceeded expectations. (1)Instead of building capacity for 300 participants through trainings over 450 participants, (2) The Information Clearing House have been completed (3) Instead of 4 case Studies 5 Case studies and a toolkit on mini grids were developed (4) Not only did the project support mini grid friendly provisions in the new energy policy but also supported development of Renewable Energy Strategy, Mini Grid Regulatory Framework and Mini Grid Standards. | |
| **Role** | **2019 Development Objective Progress Rating** | **2019 Implementation Progress Rating** |
| **UNDP Country Office Programme Officer** | Highly Satisfactory | Highly Satisfactory |
| Overall Assessment | The overall assessment of the project is that it has been highly satisfactory. The project on increasing access to renewable energy services’ main objective was to provide modern and affordable energy services to vulnerable communities in Malawi. The project is being implemented in 4 districts; Mchinji, Mulanje, Nkhata-Bay and Rumphi.    Under Component 1: Expansion of the Mulanje Electricity Generation Agency (MEGA) Micro Hydro Power Plant (MHPP) and mini-grid scheme: the project has supported the construction of two new MHPPs (100Kw and 60 Kw) operated by MEGA on the Luchenya river, giving a total of 224 which is higher than the targeted 216Kw. A total of 964 house-holds now have electricity, 4 maize mills, 17 businesses, 2 health facilities are all now connected to the MHPPs. In total the project has surpassed the project target and is almost at the stage of being self-sustaining.    Under component 2 - Replication of MEGA model via piloting of new mini-grid schemes in other areas of Malawi; two new mini-grid operators, Practical Action (PA) and Community Energy Malawi (CEM) were identified through an open competitive process. This started with an expression of interest where 13 applications were reviewed but only two were selected. The two were the only ones who showed that they would be able to mobilize additional resources and they managed to mobilize the additional resources.    As at 30th June 2019 only the CEM supported mini-grid at Sitolo had been constructed and was only awaiting testing and commissioning. It is an 81 Kw solar mini-grid, currently with 150 household connections ( and with provision for connecting Maize mills and pumping for irrigation). 12 of the households connected are female-headed.    The second mini grid operator did not fully execute the project as at 30th June. This is attributed to several factors, including capacity constraints within the institution and the change from the original site. The initial site was disqualified by the government as it was earmarked for connection to the main grid. A new site in Nkhata-Bay was selected whose potential was greater than the 100 Kw anticipated. Through the project’s advisory committee, the mini grid operator was advised to come with designs for a 300 KW as this made economic sense. By June 30th community sensitization and partnership with the Mzuzu Coffee authority had been done. New designs were yet to be done, but actual construction was unlikely due to the limited time before closure. Despite this the mini grid operator can still benefit from USAID technical assistance if the operators shows commitment and government.    Two more communities were reached for possible support at Mantchewe in Rumphi and Kavuzi in Nkhata-bay. These are the outstanding mini-grids which were initiated mid-way through project implementation but were not necessarily part of the activities to be implemented as at project inception. For the former by December 2019 an additional 53Kw from micro-hydro powered plants will be added.    The one outstanding mini-grid at Usingini, will not be fully implemented by the time of project closure in December 2019. The fact that the mini-grid operator managed to source additional funding, identified a site with greater hydro power potential than the 100Kw envisaged and that the project is likely to get further technical support from other donors is still a plus.    Under the component 3 institutional strengthening and capacity building for promotion of decentralized mini-grid applications across the country covered training of all 28 districts, and of over 405 people in various operational, management and technical aspects. Training included south -south exchange and experiences have influenced the work of the Malawi Energy Regulatory Authority(MERA) as evidenced by the mini-grid framework. Both men and women.    The fact that the project managed to source additional funding from UNDP, that the Scottish government and the Energy and Environment Partnership (EEP) co-financed the two mini-grid operators, plus the fact that total generative capacity was exceeded and energy savings targets met, has led to an overall project rating of highly satisfactory. | |
| **Role** | **2019 Development Objective Progress Rating** | **2019 Implementation Progress Rating** |
| **GEF Operational Focal point** | Highly Satisfactory | *- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -* |
| Overall Assessment | The project has achieved commendable results and has contributed to the achievement of provision of renewable energy to rural communities thereby improving their livelihood. ultimately the project contributes to the goals of the Energy Policy, Climate Change Management Policy, Malawi's NDCs and goals of the NAP. | |
| **Role** | **2019 Development Objective Progress Rating** | **2019 Implementation Progress Rating** |
| **Project Implementing Partner** | Satisfactory | *- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -* |
| Overall Assessment | *(not set or not applicable)* | |
| **Role** | **2019 Development Objective Progress Rating** | **2019 Implementation Progress Rating** |
| **Other Partners** | *(not set or not applicable)* | *- IP Rating provided by UNDP-GEF Technical Adviser and UNDP Country Office only -* |
| Overall Assessment | *(not set or not applicable)* | |
| **Role** | **2019 Development Objective Progress Rating** | **2019 Implementation Progress Rating** |
| **UNDP-GEF Technical Adviser** | Highly Satisfactory | Highly Satisfactory |
| Overall Assessment | As the terminal evaluation will be commissioned in September 2019 and as the revised closing date is 31 December 2019, this PIR also serves as the final project report. It is fair to say that this project, which was designed as a four-year project with a GEF grant of $1,725,000, has achieved its objective of increasing access to energy in selected remote, rural areas in Malawi by promoting innovative, community-based mini-grid applications in cooperation with the private sector. Notably, the project has exceeded almost all of its key end of project targets and has achieved transformational change in the communities where it has operated. Importantly, the positive environmental and development benefits that have been achieved are likely to be sustained well beyond project completion. For these reasons, development objective progress is assessed as Highly Satisfactory.    At the objective level, thanks to the solar PV and hydro mini-grid investments facilitated by the project, it is estimated that a total of 46,885 tonnes of CO2 will be avoided cumulatively over the lifetime of the mini-grids, exceeding the target by more than 140%. Against an installed capacity target of 164 kWp for mini-grids directly supported by the project, a total of 182 kWp has been installed. It is worth noting that the renewable energy plants commissioned under the project have connected 964 households, four maize mills, one huller, two health facilities, four schools and 17 businesses. A very favorable outcome is that the government, which had initially been reluctant to promote mini-grids, is now engaged in discussions on regulations to integrate mini-grids with the main electricity grid. Whereas at the start of the project, the Rural Electrification Fund was not providing funding for mini-grids, the Rural Electrification Management Committee now finances mini-grids, which bodes well for scaling up the project results.    The project has fully achieved Component 1, which relates to the expansion of the Mulanje Electricity Generation Agency (MEGA) micro hydro power plant. Cumulative installed capacity for MEGA operated mini-grids stands at 225 kWp, which includes 160 kWp of installed capacity that came on line during the reporting period. Importantly, the three power plants are synchronized and feed into the same mini-grid distribution network, which means that even if one of the power plants is off line for maintenance, there is still a continuous supply of power to all customers. The project has also taken steps to avoid potential disruptions from river siltation by training farmers in catchment containment techniques. Significant energy cost savings have accrued to households served by the MEGA mini-grids compared to their business-as-usual energy expenditure on kerosene, torches and candles for lighting.    Component 2 centers on replicating the MEGA model via piloting of new mini-grid schemes in other areas of Malawi. Here again, the project has achieved noteworthy results. An 81 kWp greenfield solar PV mini-grid has been established at Sitolo village, connecting 164 households, one primary school, two churches, one health facility and one maize mill. It is notable that the maize mill used to run on diesel. There is another mini-grid in the pipeline that will also employ the build, own and operate model. The project has paid due attention to the financial sustainability of the systems, with the mini-grid schemes operated as a business and productive use of energy actively encouraged. At the time of the mid-term review, the tariff was set at $0.09/kWh, nearly twice the level charged by the national utility.    Similarly, the project has fully achieved and even exceeded several targets under Component 3 on institutional strengthening and capacity building for the promotion of decentralized mini-grid applications across the country. All 28 districts of Malawi have benefited from mini-grid training programs facilitated by the project. A total of 405 people have been trained on clean energy mini-grid planning, design, installation and operation. Notably, 32% of those participants were women. An information clearinghouse has been set up in collaboration with the University of Malawi and the Malawi Rural Electrification Programme. Among other things, the clearinghouse provides information about potential mini-grid sites in the country. Crucially, the Malawi Energy Regulatory Authority has adopted a mini-grid regulatory framework that sets out clear guidelines on the development of mini-grids in Malawi. This framework represents an important step in outlining the conditions for licensing mini-grid developers and for ensuring that any mini-grids that are established in the country comply with quality and safety standards.    This project has been managed in an exemplary manner and can be considered as outstanding practice. Implementation progress can be considered Highly Satisfactory. Cumulative financial delivery is on track as the project has disbursed 88% of the GEF grant, with approximately four months remaining in its implementation period. More importantly, the quality of project outcomes has been exceptional as described above. In addition, critical risks have been managed very well and the timing of key milestones is on track. UNDP has made effective use of the Project Board to draw attention to the mid-term review recommendations. It is particularly noteworthy that the project was able to mobilize additional funding from UNDP, the Scottish government and the EU.    Key 2018 targets included:  1. 500 tonnes of CO2 equivalent avoided  2. 190 kW cumulative RE capacity installed and operational (target 164 kWp from project-supported RE mini-grids by 2018)  3. 350,000 kWh/year cumulative renewable electricity generation  4. $180,000 household energy expenditure savings among customer base  5. 4 case studies on mini-grids in Malawi  6. 40 additional people trained on planning and implementing clean energy mini-grids.  7. 25% share of women participating in the capacity building  8. 28 area-based electrification plans that include mini-grids developed and adopted    The project met or exceeded almost all of its targets in the previous year’s annual work plan. In the remaining months, it is recommended that the Country Office engage the government on the eventual recommendations of the terminal evaluation. The project should also ensure the implementation of the exit strategy to ensure a smooth transition and sustained impacts in the post-project period. Finally, given the project’s success, it would be useful to prepare a summary overview report or a similar type of knowledge product outlining best practices and lessons learned that could inform the design of subsequent mini-grid projects. This would be particularly relevant considering that there is a regional GEF-7 Africa mini-grids program that is currently under development. | |

# Gender

**Progress in Advancing Gender Equality and Women's Empowerment**

This information is used in the UNDP-GEF Annual Performance Report, UNDP-GEF Annual Gender Report, reporting to the UNDP Gender Steering and Implementation Committee and for other internal and external communications and learning.  The Project Manager and/or Project Gender Officer should complete this section with support from the UNDP Country Office.

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| **Gender Analysis and Action Plan:** *not available* |
| **Please review the project's Gender Analysis and Action Plan. If the document is not attached or an updated Gender Analysis and/or Gender Action Plan is available please upload the document below or send to the Regional Programme Associate to upload in PIMS+. Please note that all projects approved since 1 July 2014 are required to carry out a gender analysis and all projects approved since 1 July 2018 are required to have a gender analysis and action plan.** |
| *(not set or not applicable)* |

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| **Please indicate in which results areas the project is contributing to gender equality (you may select more than one results area, or select not applicable):** |
| Contributing to closing gender gaps in access to and control over resources: No |
| Improving the participation and decision-making of women in natural resource governance: Yes |
| Targeting socio-economic benefits and services for women: Yes |
| Not applicable: No |

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| **Atlas Gender Marker Rating** |
| **GEN1:** some contribution to gender equality |

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| **Please describe any experiences or linkages (direct or indirect) between project activities and gender-based violence (GBV). This information is for UNDP use only and will not be shared with GEF Secretariat.** |
| The project did not experience any GBV during the reporting period.  Through the project, issues of gender were mainly addressed by ensuring that there is equal representation of men and women in the committees created to manage the mini-grids. All training programs included a line indicating that women are encouraged to attend. In one training session, there were more women that men. However, other programs were not so lucky; for example, the high voltage wiring and the artisans training had no females at all. To address this gender gap, the project intends to hold training programs for the wives of the artisans. A field trip established that the wives do get involved in managing the mini-grid schemes when the husbands travel. |

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| **Please specify results achieved this reporting period that focus on increasing gender equality and the empowerment of women.**    **Please explain how the results reported addressed the different needs of men or women, changed norms, values, and power structures, and/or contributed to transforming or challenging gender inequalities and discrimination.** |
| The project worked directly with women as evidenced by the equal representation in the community body overseeing management of the mini hydro at Bondo village and the solar PV mini-grid at Sitolo. All of the women on the committee for the Sitolo mini-grid received training alongside their male counterparts. Special training on productive uses targeted both women and men. The invitations to training programs run by the project encourage female participation and in one instance the training session had more women than men. The project also noted that women do take part in maintaining the micro-grids, which their husbands constructed; when the men travel, the women provide an oversight role which in some cases involves going to the intake making corrective measures. Plans are under way to offer similar artisans training to that which their husbands benefited from under the project. |

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| **Please describe how work to advance gender equality and women's empowerment enhanced the project's environmental and/or resilience outcomes.** |
| Through provision of electricity to schools, clinics and a maize mill at Bondo village, there has been a positive contribution to gender equality. Previously, giving birth in poor lighting was a risk to women. Lighting in schools has enabled boys and girls to study in the evenings and records elsewhere have shown that this contributes to an increased passing rate. Access to electricity has made it possible for communities to listen to programs which has enabled them to improve their farming practices and to learn about climate change. |

# Social and Environmental Standards

**Social and Environmental Standards (Safeguards)**

The Project Manager and/or the project’s Safeguards Officer should complete this section of the PIR with support from the UNDP Country Office. The UNDP-GEF RTA should review to ensure it is complete and accurate.

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| **1) Have any new social and/or environmental risks been identified during project implementation?** |
| No |

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| **If any new social and/or environmental risks have been identified during project implementation please describe the new risk(s) and the response to it.** |
| No new risks were identified during implementation. |

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| **2) Have any existing social and/or environmental risks been escalated during the reporting period? For example, when a low risk increased to moderate, or a moderate risk increased to high.** |
| No |

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| **If any existing social and/or environmental risks have been escalated during implementation please describe the change(s) and the response to it.** |
| None of the risks escalated during the reporting period. |

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| **SESP:** [PIMS 5270\_Malawi Clean Energy Minigrids ESSP Checklist and Summary\_Annex 4 of Prodoc.docx](https://undpgefpims.org/attachments/5270/213998/1707686/1708778/PIMS%205270_Malawi%20Clean%20Energy%20Minigrids%20ESSP%20Checklist%20and%20Summary_Annex%204%20of%20Prodoc.docx)  **Environmental and Social Management Plan/Framework:** [PIMS 5270\_Malawi Clean Energy Minigrids ESSP Checklist and Summary\_Annex 4 of Prodoc.docx](https://undpgefpims.org/attachments/5270/213998/1686864/1687156/PIMS%205270_Malawi%20Clean%20Energy%20Minigrids%20ESSP%20Checklist%20and%20Summary_Annex%204%20of%20Prodoc.docx) |
| **For reference, please find below the project's safeguards screening (Social and Environmental Screening Procedure (SESP) or the old ESSP tool); management plans (if any); and its SESP categorization above. Please note that the SESP categorization might have been corrected during a centralized review.** |
| *(not set or not applicable)* |

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| **3) Have any required social and environmental assessments and/or management plans been prepared in the reporting period? For example, an updated Stakeholder Engagement Plan, Environmental and Social Impact Assessment (ESIA) or Indigenous Peoples Plan.** |
| No |

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| **If yes, please upload the document(s) above. If no, please explain when the required documents will be prepared.** |
| n/a |

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| **4) Has the project received complaints related to social and/or environmental impacts (actual or potential )?** |
| No |

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| **If yes, please describe the complaint(s) or grievance(s) in detail including the status, significance, who was involved and what action was taken.** |
| n/a |

# Communicating Impact

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| **Tell us the story of the project focusing on how the project has helped to improve people’s lives.**  **(This text will be used for UNDP corporate communications, the UNDP-GEF website, and/or other internal and external knowledge and learning efforts.)** |
| The project aimed to increase access to modern energy services for the rural poor through support to mini-grid developments and improvements in the legal framework to include mini-grids. The project focused on increasing the electricity generating capacity by replicating the mini hydro at MEGA, by providing technical and financial support to construction of additional mini-grids through a build, operate and own (BOO) model and through various energy related capacity building initiatives. An additional 182kW has been installed from the mini-grid at MEGA (100kW) and at Sitolo (82kW). The third mini-grid is still at design stage and two additional ones which were identified, received technical and financial support. Cumulatively 964 households, 4 maize meals, 2 health facilities, schools and 17 business have been connected at MEGA. At Sitolo, 164 households of which 37% are female headed were connected .    Up until now, more than 405 people have been trained on various aspects of capacity building which included mini-grid management and productive energy use. An assessment of how increased access to energy has impacted people's livelihoods will be carried out in the last part of the year. However, from the field trips, it has been established that the cost of lighting is lower and people are making savings which they can use for other projects, the health facilities have also realized savings, staff turnover has reduced and retention increased, pregnant women no longer have to carry candles to the health facility when going for delivery. |

**Knowledge Management, Project Links and Social Media**

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| **Please describe knowledge activities / products as outlined in knowledge management approved at CEO Endorsement /Approval.**    **Please also include: project's website, project page on the UNDP website, blogs, photos stories (e.g. Exposure), Facebook, Twitter, Flickr, YouTube, as well as hyperlinks to any media coverage of the project, for example, stories written by an outside source. Please upload any supporting files, including photos, videos, stories, and other documents using the 'file lirbary' button in the top right of the PIR.** |
| Sitolo Solar Mini Grid Project  https://www.energy.gov.mw/index.php/projects/mini-grids-projects/sitolo    Community Energy Malawi:  https://www.facebook.com/communityenergymalawi/  https://twitter.com/comenergymw    A story of hope in clean and renewable energy in Mulanje District  https://youtu.be/0bMPG56pFLw    Project page on UNDP website  http://www.mw.undp.org/content/malawi/en/home/projects/increasing-access-to-clean-and-affordable-decentralised-energy-s.html |

# Partnerships

**Partnerships & Stakeholder Engagment**

Please select yes or no whether the project is working with any of the following partners. Please also provide an update on stakeholder engagement. This information is used by the GEF and UNDP for reporting and is therefore very important!  All sections must be completed by the Project Manager and reviewed by the CO and RTA.

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| **Does the project work with any Civil Society Organisations and/or NGOs?** |
| Yes |

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| **Does the project work with any Indigenous Peoples?** |
| No |

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| **Does the project work with the Private Sector?** |
| Yes |
| No |

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| **Does the project work with the GEF Small Grants Programme?** |
| No |

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| **Does the project work with UN Volunteers?** |
| No |

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| **Did the project support South-South Cooperation and/or Triangular Cooperation efforts in the reporting year?** |
| No |

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| **Request for MSP Approval:** [ID5587 MSP Approval Letter Copy.pdf](https://undpgefpims.org/attachments/5270/213998/1707685/1708777/ID5587%20%20MSP%20Approval%20Letter%20Copy.pdf) |
| **Provide an update on progress, challenges and outcomes related to stakeholder engagement based on the description of the Stakeholder Engagement Plan as documented at CEO endorsement/approval (see document below). If any surveys have been conducted please upload all survey documents to the PIR file library.** |
| The Project developed very strategic partnerships with academia such as Lilongwe University of Agriculture and Natural Resources (LUANAR) on issues of geographic information system (GIS) training and database development, University of Malawi - Chancellor College on the development of an Information Clearing House and Mzuzu University (MZUNI) on the capacity building programmes on renewable energy mini-grids. Furthermore, partnership working arrangements with the Malawi Energy Regulatory Authority (MERA) enabled the development of the mini-grids regulatory framework to be owned and be implemented. |

# Annex - Ratings Definitions

**Development Objective Progress Ratings Definitions**

(HS) Highly Satisfactory: Project is on track to exceed its end-of-project targets, and is likely to achieve transformational change by project closure. The project can be presented as 'outstanding practice'.

(S) Satisfactory: Project is on track to fully achieve its end-of-project targets by project closure. The project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Project is on track to achieve its end-of-project targets by project closure with minor shortcomings only.

(MU) Moderately Unsatisfactory: Project is off track and is expected to partially achieve its end-of-project targets by project closure with significant shortcomings. Project results might be fully achieved by project closure if adaptive management is undertaken immediately.

(U) Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets by project closure. Project results might be partially achieved by project closure if major adaptive management is undertaken immediately.

(HU) Highly Unsatisfactory: Project is off track and is not expected to achieve its end-of-project targets without major restructuring.

**Implementation Progress Ratings Definitions**

(HS) Highly Satisfactory: Implementation is exceeding expectations. Cumulative financial delivery, timing of key implementation milestones, and risk management are fully on track. The project is managed extremely efficiently and effectively. The implementation of the project can be presented as 'outstanding practice'.

(S) Satisfactory: Implementation is proceeding as planned. Cumulative financial delivery, timing of key implementation milestones, and risk management are on track. The project is managed efficiently and effectively. The implementation of the project can be presented as 'good practice'.

(MS) Moderately Satisfactory: Implementation is proceeding as planned with minor deviations. Cumulative financial delivery and management of risks are mostly on track, with minor delays. The project is managed well.

(MU) Moderately Unsatisfactory: Implementation is not proceeding as planned and faces significant implementation issues. Implementation progress could be improved if adaptive management is undertaken immediately. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are significantly off track. The project is not fully or well supported.

(U) Unsatisfactory: Implementation is not proceeding as planned and faces major implementation issues and restructuring may be necessary. Cumulative financial delivery, timing of key implementation milestones, and/or management of critical risks are off track with major issues and/or concerns. The project is not fully or well supported.

(HU) Highly Unsatisfactory: Implementation is seriously under performing and major restructuring is required. Cumulative financial delivery, timing of key implementation milestones (e.g. start of activities), and management of critical risks are severely off track with severe issues and/or concerns. The project is not effectively or efficiently supported.