



Empowered lives.  
Resilient nations.

**2015 Annual Work Plan**  
**for**  
**Increasing Access to Clean and Affordable Decentralised Energy**  
**Services in Selected Vulnerable Areas of Malawi**

Country: **Malawi**

<b>UNDAF Outcome(s):</b>	Theme 1, Outcome 1.3: Targeted Population in Selected Districts benefit from effective management of environmental, natural resources, climate change and disaster risk by 2016
<b>UNDP Strategic Plan Primary Outcome</b>	Outcome 1: Growth and development are inclusive and sustainable, incorporating productive capacities that create employment and livelihoods for the poor and excluded. Specifically Output 1.5 of Outcome 1 - Inclusive and sustainable solutions adopted to achieve increased energy efficiency and universal modern energy access (especially off-grid sources of renewable energy)
<b>UNDP Strategic Plan Secondary Outcome</b>	Outcome 2: Countries have strengthened institutions to progressively deliver universal access to basic services;
<b>Expected Country Programme Outcome</b>	National policies, local and national institutions effectively support equitable and sustainable economic growth and food security by 2016
<b>Expected UNDAF/CPAP Outputs</b>	Output 1.3.4: Innovative renewable and energy saving technologies piloted in targeted locations in rural and peri-urban areas enabling the development of a national programme.
<b>Implementing Partner</b>	Ministry of Natural Resources, Energy and Mining – Department of Energy Affairs
<b>Responsible Party</b>	Department of Energy Affairs, Mulanje Energy Generation Agency.

### Brief 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.

Program Period	: 2012-2016
Atlas Award ID	: 00086833
Project ID	: 00094026
PIMS No.	: 5270
Start date	: January 2015
End date	: December 2018
Management Arrangements	: NIM
PAC Meeting Date	: 29 <sup>th</sup> January 2015

	USD
Estimated annualized budget	: 180,147.00
Allocated resources	
GEF	180,147.00

Agreed by Implementing Partner:

Principal Secretary for Energy:

K.E. KAPHAZI

Date: 16/09/2015

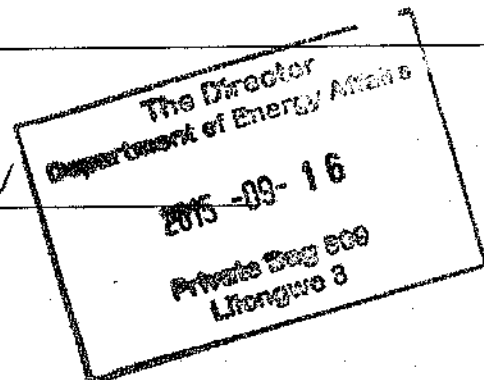
Place: Lilongwe, Malawi

Approved by:

UNDP: [Signature]

Date: 16/9/15

Place: Lilongwe, Malawi



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Date: \_\_\_\_\_

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Approved by:

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**ANNUAL WORKPLAN**

**YEAR: 2015**

Expected output and indicators including annual targets	Planned Activities	Time Frame				Responsible party	Planned Budget								
		Q 1	Q 2	Q 3	Q 4		Source of Funds	ATLAS Budget Description	Budget Acc Code	Amount in USD	Amount MWK				
<p><b>PROJECT OUTCOME:</b> Targeted populations in selected districts benefit from effective management of environment , natural resources, climate change and disaster risk by 2016</p> <p><u>Outcome Indicators:</u></p> <ol style="list-style-type: none"> <li>Contribution of renewable energy in the national energy mix (Baseline: 0.2% (2010); Target: 2016: 6%).</li> <li>Percentage of the vulnerable population in the target districts and peri-urban areas using renewable energy services (Baseline: 2% (2010); Target: 2016: 20%).</li> <li>Percentage of the vulnerable population in the target districts and peri-urban areas using energy efficient measures (Baseline: 1% (2010); 2016 20%).</li> </ol>															
<p><u>Component 1:</u> Expansion of the Mulanje Electricity Generation Agency (MEGA) Micro Hydro Power Plant</p> <p><u>Outputs:</u></p> <ul style="list-style-type: none"> <li>Commissioning of Clean Energy Mini-grid</li> <li>Operation of the Clean Energy Mini-grid</li> <li>Institutional Support to MEGA</li> <li>Strategies to improve business model viability</li> </ul>	1.1	Provide a grant to finance 38% of estimated costs for the proposed Lujeri Mini-Grid System							X		Grants (micro-capital)	72600	75,300	42,017,400	
		1.2:	Support MEGA in increasing in-house skills by hiring an experienced engineer & a business & finance manager						X		MEGA	Contractual Services-Companies	72100	59,100	32,977,800
		1.3:	Engage an external technical advisor for the Lujeri Mini-Grid Project						X			International Consultants	71200	10,000	5,580,000
		<b>Sub-total Output 1</b>										<b>TOTAL GEF</b>		<b>144,400</b>	<b>80,575,200</b>

<p><b>Component 2:</b></p> <p>Replication of MEGA model via piloting of new Mini-grid schemes in other areas of Malawi</p> <p><b>Outputs:</b></p> <ul style="list-style-type: none"> <li>- Implement Pilot BOO Clean Energy Micro-Grid(s)</li> <li>- Operation and Energy Generation from the mini-grids</li> <li>- Institutional Support to Mini-grid Operators</li> <li>- Independent Review Mechanism</li> </ul>	2.1 Finance a clean energy mini-grid on a PPP mode to cover 50% of either mini-grid system or micro-capital grant budgetary cap, whichever is smaller							Grants (micro-capital)	72600	0.0	0.0	
	2.2 Finance a second clean energy mini-grid on a PPP mode to cover 50% of either mini-grid system or micro-capital grant budgetary cap, whichever is smaller							Grants (micro-capital)	72600	0.0	0.0	
	2.3 Provide financial support to 1 <sup>st</sup> mini-grid operator to develop & implement EMPs, training staff and communities on O&M, develop and implement innovative payment system and provide information on case study and tool kit							MNREM /UNDP	Contractual Services Companies	72600	0.0	0.0
	2.4 Provide financial support to 2 <sup>nd</sup> mini-grid operator to develop & implement EMPs, training staff and communities on O&M, develop and implement innovative payment system and provide information on case study and tool kit.								Contractual Services Companies	72100	0.0	0.0
	<b>Sub-total Output 2</b>											
<p><b>Component 3:</b></p> <p>Institutional Strengthening and Capacity Building for promotion of decentralised mini-grid applications across the country</p> <p><b>Outputs:</b></p>	3.1 Conduct National, district, Area & village training programs							GEF	75700	5,500	3,069,000	
	3.2 Develop policy and regulatory changes to existing rural electrification policies & regulations							MNREM	Contractual Services Companies	72100	0.0	0.0
	<b>TOTAL GEF</b>											
										<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

- Information Clearing House for Mini-grids - Training and Capacity Building - Policy and regulatory changes - Knowledge Management and Case studies/Toolkit development and promotion	3.3 Engage an International Consultant to develop case studies and toolkit on mini-grids						International Consultants	71200	0.0	0.0	
	3.4 Engage a Local Consultant to develop case studies and toolkit on mini-grids						Local Consultants	71300	0.0	0.0	
	3.5 Develop an information clearing house with GIS interface						Contractual Services - Companies	72100	0.0	0.0	
	3.6 Hold a national workshop to show-case mini-grid cases in Malawi and disseminate tool kit						Training & conferences	75700	0.0	0.0	
	3.7 Monitoring of project activities				X		Travel	71600	1,500	837,000	
	3.8 Procurement of stationery & other office supplies				X		Supplies	72500	500	279,000	
	3.9 Miscellaneous				X		Miscellaneous	74598	1,000	558,000	
	<b>Sub-total Output 3</b>							<b>TOTAL GEF</b>		<b>8,500</b>	<b>4,743,000</b>
	<b>Output 4:</b> Monitoring, learning, adaptive feedback & evaluation	4.1: Engage an International Consultant to carry Mid-term & terminal evaluation of Project						International Consultants	71200	0.0	0.0
		4.2: Engage a Local Consultant to carry Mid-term & terminal evaluation of Project						Local Consultants	71300	0.0	0.0
4.3: Conduct annual audit the Project					X		Professional Services	74100	0.0	0.0	
4.4: Hold an Inception Workshop					X		Training & conferences	75700	0.0	0.0	
<b>Sub total Output 2</b>							<b>TOTAL GEF</b>		<b>0.00</b>	<b>0.00</b>	
<b>PROJECT MANAGEMENT</b>	5.1 Remuneration for Project Manager and Project Accountant				X		Contractual Services - Individual	71400	12,000	6,696,000	
	5.2 Travel by Project Manager, Coordinator & other members for monitoring visits attending project related meetings				X		Travel	71600	5,000	2,790,000	

5.3 Procurement of office vehicle, equipment, furniture & supplies for Project Manager						X			Office Supplies	72,500	5,000	2,790,000
									Direct Project Cost	74,598	5,247	2,927,826
<b>Sub-total Project Management</b>									<b>TOTAL GEF</b>		<b>27,247</b>	<b>15,203,826</b>
<b>GRAND TOTAL GEF</b>										<b>180,147</b>	<b>100,522,026</b>	

NOTE: Exchange rate: 1USD = MWK 558.00