



MEGA is a social enterprise with a vision to provide a widely available, affordable and reliable electricity supply through an environmentally and financially sustainable business model.

MEGA is the first licensed Independent Power Producer in Malawi and a pioneer of mini-grids for development in Africa. It registered as a business in 2014 and sold the first units of electricity in January 2016. It is guided by a model of operational sustainability; the micro-hydro mini-grid infrastructure is funded by international donor agencies, whilst revenue from electricity sales contributes to the cost of operation and maintenance. Access to electricity has a long-term transformative effect on the social and economic well-being in the communities.

Only 1 in 10 people in Malawi have access to grid electricity. The situation is particularly bad in rural areas where only 1 in 100 have access. Most people live without hope of having electricity in their homes.

MEGA supplies electricity to a community in the southern district of Mulanje. Renewable electricity is generated from the rivers flowing from Mount Mulanje – the highest mountain in Central Africa and a rich and unique environment. Using power to diversify livelihoods away from the natural resource base is part of a strategy for conservation and climate change adaptation.

PARTNERS



MEGA was forged through the partnership between Mulanje Mountain Conservation Trust and Practical Action (www.practicalaction.org/mega-malawi). It believes in strong partnerships that leverage the capacities of diverse organisations to achieve a shared vision. Sgurr Energy (www.sgurrenergy.com) is a professional engineering consultancy partner supporting on the deployment of infrastructure.

BROCHURE

⚡ MICRO-HYDRO MINI-GRID TECHNOLOGY

MEGA currently has an installed 60kW micro-hydro generator and more than 280 customers connected with some 20km of mini-grid distribution. The micro-hydro generator uses water from the Lichenya river, and the mini-grid is centred in GVH Bondo on the southern side of Mount Mulanje.

The mini-grid network consists of medium voltage (11 kV) transmission and four substations distributing three-phase power at 400 V. The powerhouse is 8 km from the National Grid, though the mini-grid extends to within 3km at the closest point.

Each customer has a pre-payment meter and top-ups up with tokens from MEGA's vending system. The tariff is higher than from ESCOM, the National Utility, to reflect the high cost of doing business and relatively low demand of rural customers.

⚡ POWERING DEVELOPMENT IN MULANJE



The Powering Development in Mulanje (PDM) project will increase access to sustainable electricity to catalyse social and economic development for people living in poverty. The project will install a 100 kW micro-hydro generator and extend the mini-grid to 400 new customers.

Access to electricity will enable enterprises to offer new and improved products and services, and increase incomes. PDM will provide business and skills training and improve access to finance for entrepreneurs. Households will access modern lighting and communications, whilst the school offers night classes and the clinic better services. A watershed management component targets protection and improvement of the hydro system's catchment area and the generation infrastructure.

As Malawi's first community-based mini-grid enterprise, MEGA is a pioneer for future project developers and government stakeholders working to achieve universal access to sustainable energy. The project aims to inspire and inform the development of a vibrant mini-grid market in Malawi and beyond.

PDM is co-financed by the Scottish Government and Global Environment Facility. It is a three-year project running from 2015 – 2018. Sgurr Energy is the lead implementing partner. MEGA is the lead organisation in Malawi, alongside partners MuREA and Practical Action.

⚡ IMPACT

Electricity is an enabler of social and economic development. So many activities and opportunities are created when people gain access to electricity. MEGA targets four main impact areas:

- Poverty and wellbeing
- Livelihoods and economic development
- Health
- Education



Project partners support business customers use electricity with skills trainings and access to finance. Diversifying livelihoods away from the natural resource base is part of a strategy for conservation and climate change adaptation. The schools and clinic in the community are being assisted with co-financing of electrical equipment; with principal benefits for women and children.

Close coordination with the purpose-organised Village Electricity Committee and tribal chiefs helps guide and prioritise investments, and promotes a sense of ownership amongst the community. Electricity is generated from the river passing through the heart of the community, giving people a profound connection with their power supply.

A robust Monitoring, Evaluation and Learning Framework is in use to define and measure the impact of electricity and guide policies and practice.

www.mega.mw