

Malawi

Malawi: Energy Profile

Population:	14.9 million (Rural 81%, Urban 19%) ¹
GDP per capita:	343 USD
GDP:	5.1 billion USD

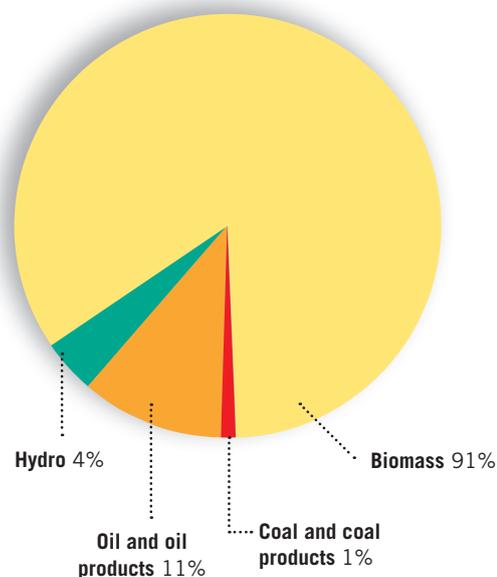
At **9%**, Malawi currently has a remarkable low national electrification rate. While electricity has reached almost **25%** of urban households, rural electrification lies only at **5%**. Only **7%** of the population has access to modern cooking fuel and more than **98%** from rural areas (roughly **85%** of country's total population) still use fuel wood for cooking.

Current Energy Access Situation²

		National	Rural	Urban
% of population with access to electricity		9	5.3	25
Fuel used for cooking	% of population with access to modern fuel for cooking (Electricity, Gas or Kerosene)	1.2	0.2	7.3
	% of population using wood for cooking	91.4	98.3	51.2
	% of population using charcoal for cooking	7.2	1.3	41.4
	% of population relying on solid fuel for cooking that use Improved Cook Stoves	8.1	8.5	5.4

Current Energy Supply Situation³

- Malawi's energy supply is dominated by biomass (firewood, charcoal, agricultural and industrial wastes) accounting for 84% of the total primary energy supply.
- The total installed electricity capacity (2010) is 515 MW (Hydro 94% and Thermal 6%)
- The national power utility Electricity Supply Corporation of Malawi (ESCOM) is stretched with regular day-to-day occurrence of load shedding (power interruptions).
- Dependency on hydro power stations on the Shire River is now considered as a risk due to declining levels of water flow.
- Wood and charcoal use for cooking is highly unsustainable and is estimated to destroy around 75,000 hectares of natural forests across Malawi annually.
- Malawi has great solar potential with an average of 3,000 hours of sunshine per year.
- Wind pumping has potential especially for water pumping for agriculture and livestock farming.



Energy Targets³

- 7% of primary energy from renewables by 2020

¹ World Bank Data

² Energy Access Situation in Developing Countries (WHO, UNDP 2009) and World Energy Outlook (IEA 2009)

³ Renewable Energy Country Profiles (IRENA 2010), Policy and regulation review (REEEP), Rwanda NEP 2008

Malawi

Relevant Policies and Key Players³

The **National Energy Policy (NEP)** was approved in 2003 under the remit of Department of Energy Affairs (DoEA). The NEP was followed by the formation of the **Malawi Energy Regulatory Authority (MERA)** and the restructuring of the **Electricity Supply Corporation of Malawi (ESCOM)**.

As part of the NEP, a **Renewable Energy Framework was launched**, to bring more coherence to renewable energy developments. The **Power Sector Reform Strategy (PSRS)** was approved in 2003 supporting private sector participation and competition as a driver of the overall NEP and highlighting the strategies for Energy Supply Industries.

At the international level, Malawi is a signatory to the **United Nations Framework Convention on Climate Change (UNFCCC)**, which requires the government to report on greenhouse gas emissions and other vulnerabilities. As part of their involvement with the UNFCCC, the Malawian Government developed a **Technology Needs Assessment** report in 2003 to provide an overview of the government's strategies and requirements with regards to renewables.

The **Malawi Energy Regulatory Authority (MERA)** was established in December 2007 to regulate all energy players (production and supply) in the country in collaboration with the Department of Energy and both entities reports to the Ministry of Energy and Mines. MERA's vision is "Sustainable Demand Driven Energy Supplies".

The **Malawi Growth Development Strategy (MGDS) 2006-2011** set out the government's economic growth and development priorities for five years. The MGDS identified energy, along with five other key areas (agriculture and food security; irrigation and water development; transport infrastructure development; integrated rural development; and prevention and management of nutrition disorders, HIV and AIDS). The government recognizes that the power sector is a key constraint to Malawi's economic growth. The objective of the MGDS was to reduce the number and duration of blackouts, increase access to reliable and affordable electricity in rural areas and other targeted areas, and improve coordination between the needs for energy for households and those of other high growth sectors such as tourism and mining. The second MGDS II for the period 2011- 2016 were announced in 2011.

In an attempt to minimize the use of biomass fuels the government undertook a number of initiatives: the **Program for Biomass Energy Conservation (ProBEC)** which promoted the use of clay stoves to save fuel; the **Promotion of Alternative Energy Sources Project (PAESP)** in 2007 to promote non-traditional fuels for cooking and heating to reduce environmental degradation; and a **National Sustainable and Renewable Energy Programme (NSREP)** which promoted renewable energy technologies in Malawi.

The **Malawi Rural Electrification Project (MAREP)** has also been established with the primary aims of reducing the large unsustainable wood consumption and improving the dependability of imported oil and coal. The **Rural Electrification Bill (2004)** deals with all aspects of renewable energy systems.

¹ World Bank Data

² Energy Access Situation in Developing Countries (WHO, UNDP 2009) and World Energy Outlook (IEA 2009)

³ Renewable Energy Country Profiles (IRENA 2010), Policy and regulation review (REEEP), Rwanda NEP 2008