ISONECC
Civil Society Network on Climate Change
in solidarity for a climate resilient Malawi

OXFAM

CIVIL SOCIETY POSITION PAPER ON ACCESS TO RENEWABLE ENERGY IN MALAWI

Background

More than a billion people globally do not have access to electricity, let alone affordable, renewable energy. The extensive use of fossil fuels has thus exacerbated adverse environmental problems such as deforestation that leads to climate change. As such, securing access to sustainable and renewable energy products and adapting them to our daily lives is key to tackling poverty and climate change.

On 25th September, 2015 Malawi and the entire world adopted seventeen UN Sustainable Development Goals (SDGs) to end poverty, protect the planet, and ensure prosperity for all. Of particular importance is Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all and Goal 13: Take urgent action to combat climate change and its impacts.

To align to SDG's and UN Framework Convention on Climate Change (UNFCCC), the revised Malawi National Energy Policy (NEP) 2018 set an overall goal of providing, *"access to affordable, reliable, sustainable, efficient and modern energy for all Malawians by 2030"* and sets out policy outcomes which Government of Malawi hopes to achieve in reaching this goal.

In the same vein, Malawian civil society organizations have not sat idle. They have championed the Big Shift campaign, whose main aim is to influence a shift of investments away from fossil fuel to renewable energy, while simultaneously demanding for the delivery of clean, sustainable, affordable and reliable energy to the millions of energy poor populations.

In Malawi the Big Shift has been spearheaded by Civil Society Network on Climate Change (CISONECC) in collaboration with Christian Aid, Oxfam, Youth Network and Counseling, Centre for Environmental Policy and Advocacy, Association of Environmental Journalists and National Association of Business Women.

Access to Renewable Energy in Malawi

The Malawi Growth and Development Strategy (MGDS) recognizes that strong and sustainable economic growth is a key to poverty reduction and energy generation and supply was one of the key priority areas.

After the phase out of Vision 2020, the country has developed Malawi 2063. The National Planning Commission is currently coordinating the task, a major shift from how the other plans were executed. NPC is currently drafting the first 10 years implementation of MW2063.

However, one challenge crippling the country efforts in all these brilliant plans is the inability to meet clean energy needs and demands of various sectors. Energy supply deficiencies are common which result in interruptions to processes that require energy as an input. A prominent example is the national electrical energy system which is accessible to less than 1% of the rural population and is unreliable. From 2008 statistics, about 90% of Malawi's population use wood for fuel and charcoal production, accounting for about 88.5% of the country's energy requirements, 6.4% comes from petroleum, 2.8% from electricity and 2.4% from coal.

One area that needs exploring a lot in terms of efficient and accessible available source of energy is the country's urban cooking landscape. This is a complex landscape and requires increased efforts to better energy supply and need (Simon 2010). The landscape is further complicated by the variations between urban and rural cooking as well the rapid changes in urban cooking and migration influx. Increase in demand for cooking fuel is due to population growth and continued dependency on wood fuels as the primary energy source for cooking. National demand for fuelwood, charcoal and small construction material is projected to increase from 11.2megaton of dry matter to 13.3 megatons in 2021 (Drigo 2019)
Although there have been efforts championed to lobby the public to adopt renewable sources of energy such as Liquified Petroleum Gas (LPG), Biogas including use of technologies that are environmentally friendly, the initial capital investments to enable average Malawians have the capacity to acquire such alternative sources has been a challenge.

Malawi National Charcoal Strategy acknowledges LPG as one of the most promising alternatives to urban charcoal use in the medium to long term. However, affordability, accessibility and acceptability of LPG are key variables that determines adoption. All the three variables must be clear to the potential customer otherwise adoption will remain limited.

Below are graphs showing fuel prices in two consecutive years:

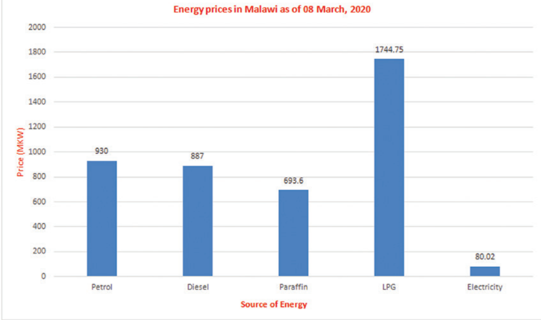

Figure 1: Fuel prices 2020

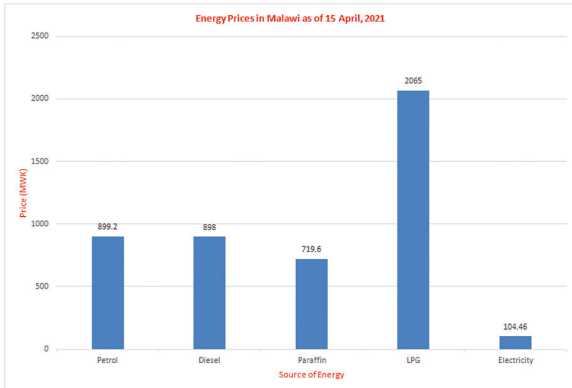

Figure 2: Fuel prices 2021

Source: Malawi Energy Regulatory Authority, 2021

If we go by market prices as of 08th March, 2020 LPG price was MK1,744.75 per kg by April 15, 2021 the price changed from MK1,952.00 to MK2,065.00 per kg representing a 5.79 percent increase. Malawi Energy Regulatory Authority (MERA) cited impact of changes in the FOB prices and exchange rates of the Kwacha to the South African Rand.

While LPG is smart and fast when it comes to cooking and addressing quick households needs, the blockage to adoption amongst most consumers is the initial capital investment required.

Success stories on Renewable Energy
Malawi rural electrification programme (MAREP)

According to Ministry of Energy advert in the Nation Newspaper dated 17th May, 2021. The Malawi Rural Electrification Programme (MAREP) has been under implementation from the 80's. Its main objective is to increase access to electricity for people in peri-urban and rural areas as part of Government's effort to reduce poverty, transform rural economies, and improve productivity and quality of social services. Implementation of MAREP is through extension of the electricity distribution grid to rural and remote areas and construction of off-grid systems (e.g. solar home systems and mini-grids with power generation from various sources).

The programme is financed through a Rural Electrification Fund which was established by the Rural Electrification Act of 2004. Resources in the Fund come from the following sources:

(a) appropriation by Parliament for the purposes of the Fund;
(b) rural electrification levies on energy sales as may, from time to time, be imposed by the Malawi Energy Regulatory Authority under the Energy Regulation Act; Cap. 73:02
(c) grants, subsidies, bequests, donations, gifts and subscriptions from the Government or any person;
(d) donations by any foreign Government, international agency or other external sources;
(e) 50 per cent of penalties and fines payable or imposed under the Rural Electrification Act;
(f) the proceeds from sale of rural electrification lines and equipment funded by the Fund; and
(g) any other income authorized under the Rural Electrification Act or income recognized as such by accounting standards and practices.

Presently, the main source of funding is levy on energy sales which is at 4.5%.

Malawi cleaner cooking fund

The US$1.1 million Malawi Clean Cooking Fund, an initiative co-funded by USAID and UKAid under the Modern Cooking for Healthy Forests (MCHF) accelerator programme to cushion mounting pressure on biomass.

To date 18 entrepreneurs have been shortlisted and will be supported to scale up their business in alternative cooking and heating energy including legal and sustainable charcoal production and fuel-efficient cooking technologies.

We have not yet heard of any challenges from MCHF yet, but likely as the project proceeds, we hope to receive feedback on the same.

Two million cleaner cooking stoves

This was a cleaner cookstove campaign which commenced in 2013 to disseminate 2 million cleaner cookstoves to households by the year 2020. The National Cookstove Steering Committee describes a cleaner cookstove as a device which burns cooking fuels such as firewood, sustainably produced charcoal, or liquefied petroleum gas more efficiently and produces less smoke.

Technically, cleaner cookstoves have a thermal efficiency above 20% which results in lower greenhouse gas emissions and reduced indoor air pollution. The use of Chitetezo and rocket stoves as fuel efficient stoves has been embraced by both rural and urban households. Other than the locally made stoves, many farmers in Malawi have been trained to embrace the rocket stoves. This has been done with the view to contain the pressure on biomass resources in the long term.

Briquettes

Government of Malawi launched a programme called Promotion of Alternative Energy Sources Programme (PAESP) in the late 1990's with the aim to reduce the use of firewood and charcoal. One of the fuels included in the programme is the biomass briquette.

Over the years, briquettes have changed their sizes and moulding devices to fit the technologies they are supposed to serve in an efficient and effective manner using different raw materials.

Sustainable legal charcoal with license from forestry department

Kawandama Hills Plantation was the first private operator that is producing legal charcoal from sustainable sources after being issued with a license by the Department of Forestry. The department realises the challenges of household cooking and acknowledges charcoal will continue to be in use until in the near future according to the charcoal strategy of 2017. The department is, however, encouraging charcoal production from sustainable sources and Kawandama Hills is the first recipient of this license. Other institutions that have been offered the license by Forestry department to produce sustainable charcoal include the following; Forest and Garden Services in Mchinji, COSMA-DFR JICA Project at Dzalanyama, Phata Sugarcane Outgrowers Cooperative (Phata) in Chikwawa, Pyxus Agriculture Limited in Lilongwe.

According to the National Charcoal Strategy, anyone who grows fast-growing trees that can be harvested on a sustainable basis, is eligible for a charcoal license production licence from the Deprtment of Forestry.

Individual mini grids

The Kavuzi electricity generation is an example of the power initiatives which the first-ever Malawi Renewable Energy Strategy (MRES) seeks to guide.

The strategy is informed by Sustainable Development Goal 7 on access to modern, affordable and sustainable energy for all.

Solar off-grid

Government of Malawi's Department of Energy Affairs in partnership with the United Nations Development Programme and Community Energy Malawi (CEM) have stepped in to provide a rural community with an 80-Kilowatt solar power mini- grid project at Sitolo community in Mchinji.

The area comprises four villages of Sitolo, Molosiyo, Chisenga and Ndawambe. After many years in the dark, people in these villages are stepping into a bright future. Business is booming and there are hopes for improved livelihoods.

Under the 80-kilowatt mini-grid project, over 150 houses in Sitolo village alone are now connected to new source of clean and renewable energy powered by solar.

Bondo community micro hydro scheme

Mulanje Energy Generation Agency (Mega) is Malawi's first licensed independent power producer and currently generates 60kW hydro generation and connects 280 customers.

This off grid plant is jointly supported by the Global Environment Facility, Scottish Government, Practical Action and Fair-Trade Foundation –an example of how several players can partner in renewable energy initiatives.

Other Potential Sites
Matchewe falls

Mantchewe community in Rumphi is using John Sailesi, one of its members to amass resources to run their own hydro-electric power plant.

This site for power generation is located at a very steep slope that imposes itself in front of Mantchewe power generation intake and the rock fall.

Usingini

Usingini is located along the Mzuzu – Usisya road. Practical Action Malawi intends to install an electricity generation powerhouse at this location. The plant is expected to benefit the surrounding communities, coffee planters' cooperatives as well as the trading centre at Usingini turn-off.

Policy recommendations

Further stakeholder consultations conducted by CISONECC have revealed that Malawi has identified energy as a priority sector in the various development planning instruments in order to spur socio - economic development. One of such instruments is the MGDS and the recently unveiled National Transformation Agenda 2063, the country's 50 years development blueprint. Improvements in the energy sector must therefore positively impact on other sectors, through well-defined policies and institutional frameworks, international assistance from development partners, and partnerships with the private sector.

The following are the suggested policy recommendations that need to be looked into;

- There is a need to ensure that various policies and strategies linked to energy sector speak to each other when it comes to popularizing technologies that are renewable and friendly to the environment
- There is a need for government to reduce huge investments in fossils fuel and shift towards use of renewable sources. This is in line with recent agreements to which Malawi is a party to, Paris Agreement for instance and SDG Goal 7 on access to clean energy
- Government should consider to channel carbon levy resources to address critical challenges facing the energy sector as subsidies
- Utilise carbon levy revenue to subsidize cost of LPG which is considered expensive meantime for average Malawians
- Intensify screening of renewable energy accessories being imported into the country to contain the spread of counterfeits
- Scale up awareness about renewable energy technologies to the public
- Consider taxes waiver which prohibit most companies to venture into the sector
- Ensure harmonisation in terms of policy implementation
- Remove political interference in decision making like procuring of bulk fuel at NOCMA
- Root out Corruption within the energy sector which result in innocent Malawians suffering as energy is a key determinant of prices of goods on the market
- Inclusion of sustainable energy issues into the academic curriculum
- Increase energy officers at district level as part of decentralization
- Ensure improved budget consideration on renewable energy as a way of cushioning pressure on biomass resources
- Support to forestry management and increase funding to ensure operations are effective. The carbon levy can be utilised for operations of this nature