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SMARTER, CLEANER COOKING; HEALTHIER FORESTS

Energy is essential for cooking/heating, lighting and powering industry.

- Malawi is one of the least electrified countries globally and hence relies on wood fuel (charcoal and firewood) as a source of energy.
- Illegal and unsustainably produced charcoal is the main driver of deforestation and forest degradation in Malawi.
- Deforestation has led to significant soil erosion and land degradation which have affected food production and livelihoods.
- Deforestation has also increased the cost of electricity generation due to siltation of the Shire River, the main source of Malawi's electricity, resulting in increased costs to consumers.
- We now have alternatives to illegal and unsustainably produced charcoal. We have to use the alternatives including Liquified Petroleum Gas (LPG) as well as legal licensed charcoal in order to limit the rate of deforestation and its negative effects on food security, agriculture productivity and energy security.

What Powers Your Home?

Energy is both a basic need and a key driver of the economy. When energy is reliable, efficient, and sustainable, industries thrive, people's well-being improve, and nature is conserved. Every household requires energy for cooking/heating. In Malawi, more than 96 percent of households rely on wood fuels as their primary source of cooking/heating fuel, and more than three-quarters (76 percent) of urban households use charcoal (up from 42 percent in 2011). Charcoal is currently the main driver of deforestation and forest degradation. However, within Malawi's development context, charcoal and firewood will continue to be significant sources of cooking/heating energy for the foreseeable future.

While 42 percent of urban households in Lilongwe, Blantyre, Zomba and Mzuzu have access to electricity, less than 11 percent use electricity for cooking/heating. This is largely due to the perception that electricity is expensive as well as limited understanding of efficient cooking techniques and the disconnection between those who use cooking appliances (mainly women) and those who control household finances. Worse still, some urban dwellers use charcoal due to the unreliable supply of grid electricity.

The Energy Threat To Forest Resources

The increasing demand for energy due to population growth and urbanization has been satisfied by illegal and unsustainable charcoal produced in our remaining forests and water catchments which provide the much-needed ecosystem services including water, nutrient cycling and climate regulation. As a result, over 30 thousand hectares of forest areas are being cleared every year, primarily for illegal and unsustainable production of charcoal to meet the growing urban demand for cooking/heating energy.

At this rate of deforestation, it is feared that we will lose most of our forests by 2050. This cooking/heating energy driven forest loss has led to serious consequences for the environment, social and economic well-being of Malawians. Furthermore, the impacts on our agricultural productivity, food security and energy security will only worsen, putting households and our country's development in jeopardy.

Effects Of Unsustainble Use Of Wood For Cooking/Heating Energy

When people produce illegal and unsustainable charcoal, they cut the whole tree, using the trunk and larger limbs, leaving the many smaller branches. In addition, they clear a large area, generally leaving the land without any larger trees. The following are some of the consequences of illegal and unsustainable charcoal production and consumption:

- **Land degradation and soil erosion:** Clearing forests for charcoal production directly results in land degradation which affects food production and livelihoods, making our households and communities more vulnerable to climate change, and deepening poverty.
- **Power-less economy:** Increased forest cover loss affects hydro power generation, leading to lower hydroelectric generation, and higher production costs due to widespread soil erosion which leads to siltation and accumulation of debris. The lack of reliable and affordable electricity affects every user, and at the same time, limits the production capacity of our commercial and industrial sectors, and constrains our efforts to attract investment, leading to slow economic growth and national development.

As a result, the lack of reliable electric power to sustain and grow operations has often been cited as a challenge for many investors leading to loss of jobs and limited job creation opportunities.

The Energy/ Forestry Nexus

Less trees means less hydropower for electricity generation. Insufficient electricity generation leads to more deforestation to meet the increasing energy demand.

- **Increased exposure to climate change related disasters:** Deforestation has opened up forests leaving bare land which is prone to run-off that leads to flooding during the rainy season. Because of this, flooding incidents with terrible effects continue to increase in our townships and in urban areas. This leads to loss of lives, productive assets and other property.

If You Are Cooking With Illegal And Unsustainably Produced Charcoal, Know That Cleaner Alternatives Are Now Available

The unsustainable energy pathway is often attributed to lack of alternative sources of cooking/ heating energy. Today, alternatives to illegal and unsustainable charcoal exist, and are available on the market. The Government has licensed five producers of legal, licensed and sustainable charcoal. Legal licensed charcoal options are readily available from select outlets in each city. Government is working to scale-up production of licensed charcoal. Furthermore, while electricity is in short supply compared to demand nationally, it is accessible and available for connected household use in all urban areas. Likewise, LPG is available in all cities and urban areas.

Did You Know?

- Silt increases cost of electricity production, which is passed on to customers through increased electricity bills.
- Between 2016 and 2019, EGENCO has harvested up to 105,000 tonnes of silt due to increased deforestation and land degradation.
- Let us protect our forests from illegal charcoal producers.
- Be part of the energy solution. Say no to illegal charcoal.

Unlike charcoal, cooking with LPG and electricity is more convenient not least because of the speed of lighting, ease of temperature control and the absence of smoke and odour.

The Smart Energy Cost

It is often perceived that alternative sources of cooking/heating energy such as legal licensed charcoal, electricity and LPG cost more than illegal and unsustainable charcoal. This is not the case. Evidence suggest that while there are up-front costs to using LPG (e.g., to procure a cylinder and a cooker), using the gas on daily basis is less expensive than using illegal and unsustainable charcoal or even electricity. Similarly, recent studies have shown that cooking with electricity only, is cheaper than using electricity in combination with charcoal, or other sources of energy.

Become Energy Smart.

Turning the tide on Malawi's energy induced deforestation requires the participation of every household. It is possible to use LPG, electricity, and legal licensed charcoal instead of illegal and unsustainably produced charcoal.

It is time to become energy smart:

- **Shift** from illegally and unsustainably sourced charcoal for domestic cooking/heating.
- **Switch** to alternative cooking/heating energy sources such as electricity, LPG and legal licensed charcoal.
- **Engage** in alternative business initiatives rather than unsustainable and illegal charcoal.
- **Tell a friend to tell a friend:** People learn about new things from friends and neighbors. If you have used alternative cooking energy before and have had a good and lasting experience, tell your friends and neighbors, and encourage them to "make the switch" and "be part of the energy solution!"

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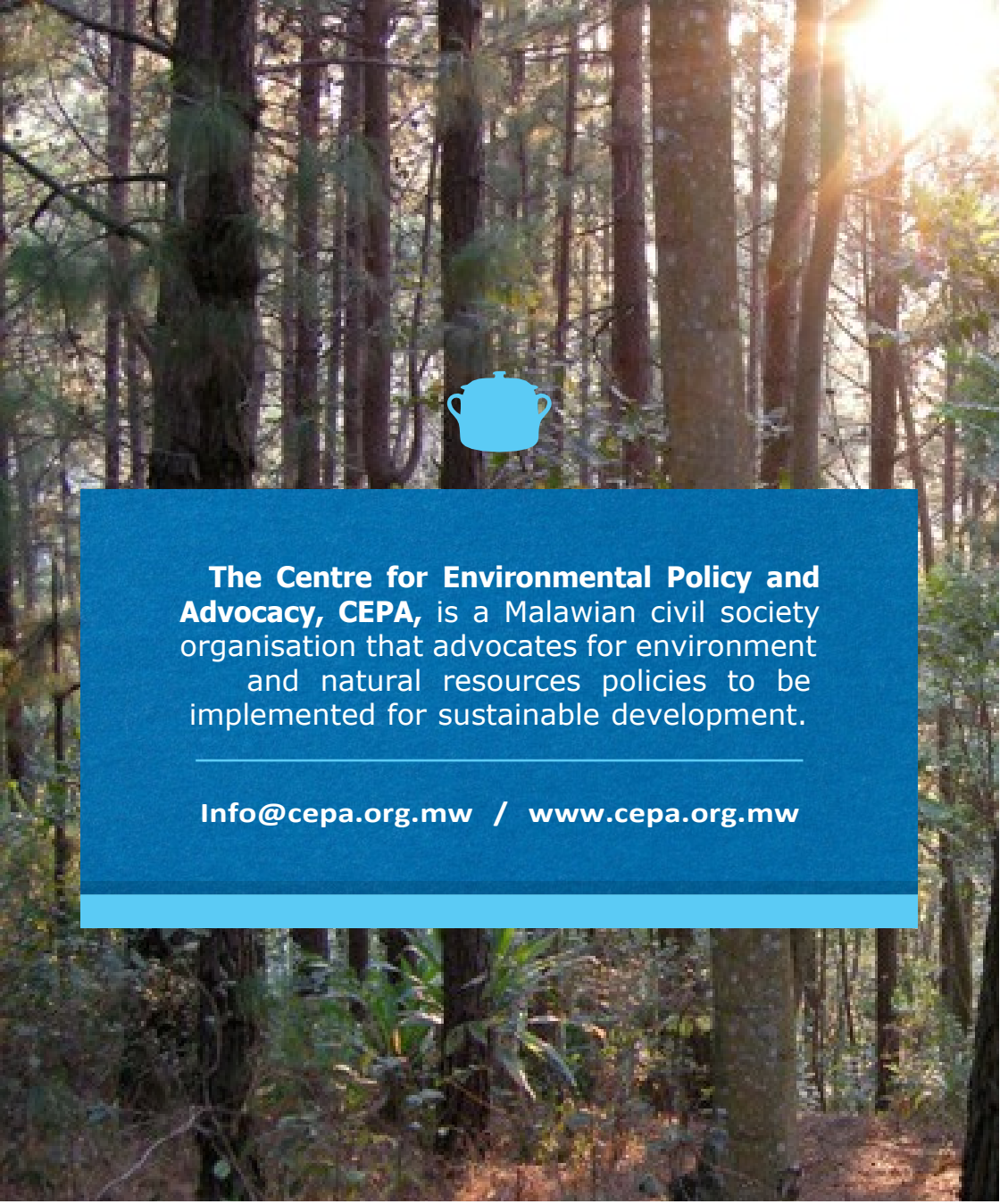

The Centre for Environmental Policy and Advocacy, CEPA, is a Malawian civil society organisation that advocates for environment and natural resources policies to be implemented for sustainable development.

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