Sourcing and production of waste into energy systems

# MAINTENANCE AND SAFETY CONSIDERATIONS WHEN USING CLEAN ENERGY SOLUTIONS

*Hopkins Mwanza, Research Assistant, Make it Green*

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# In this video you will learn:

- Background of clean energy solutions
- Maintenance and safety considerations when using clean technologies and significance
- Maintenance considerations when using the MIG bio-cooker
- Safety considerations when using the MIG bio-cooker

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# Background of clean cooking solutions

- Clean cooking solutions refer to the use of cleaner and more efficient cookstoves, fuels, and technologies that reduce indoor air pollution, improve health outcomes, and improve rural livelihoods.
- In Africa, the use of traditional cookstoves and fuels such as wood and charcoal are common, particularly in rural areas.
- These traditional cooking methods are inefficient and produce harmful smoke and emissions, leading to indoor air pollution that can cause respiratory diseases, particularly among children and women.
- According to the World Health Organization (WHO), over 700,000 people die each year in Africa due to exposure to indoor air pollution from cooking with traditional fuels.
- The adoption of clean cooking solutions in Africa has the potential to improve health outcomes and mitigate the adverse effects of indoor air pollution and climate change.

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**Examples of Clean cooking Solutions**

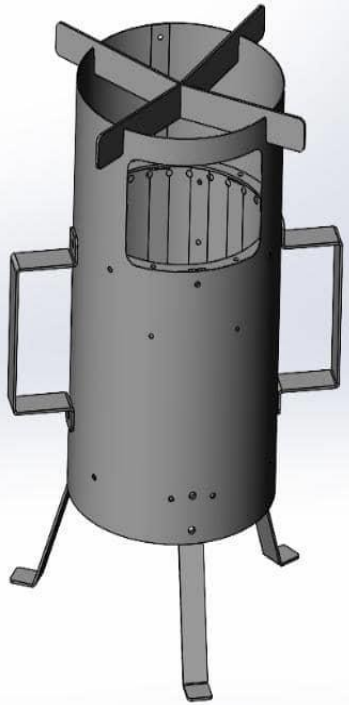







# Maintenance and Safety Considerations

- These are a set of recommendations to be followed when using clean cooking technologies.



The MIG Bio-cooker

- The significance of following these recommendations is to ensure optimal functioning of the cooking technology as well as safety of the end-users.

# Maintenance Considerations

- ❑ First clean the clean cooking technology i.e. The bio-cooker before use.
- ❑ Regularly inspect the clean cooking technology for any signs of damage, wear, or corrosion for timely repairs.
- ❑ Replace any damaged or worn-out parts immediately to prevent accidents.
- ❑ Have the equipment serviced regularly by a qualified technician.
- ❑ Closer attention should be paid to the solar panel place underneath the bio-cooker which can be used for lighting and charging electronic devices.
- ❑ Clean the ash tray after use to avoid build-up of biochar.
- ❑ Contact the distributor or manufacturer whenever the cookstove breaks down or poses health and safety risks.

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# Safety Considerations

- ❑ Familiarize house occupants with safe practices such as fire evacuation procedures, emergency switch breaks.
- ❑ Use the appropriate protective equipment such as gloves, aprons, and eye protection when handling hot surfaces or fuel.
- ❑ Always use the clean cooking solution in a well-ventilated area to prevent indoor air pollution and carbon monoxide poisoning.
- ❑ Install an ABC fire extinguisher, smoke detector and have a first-aid kit in the home in case of emergencies.
- ❑ Store any fuel used in the stove or flammable materials safely far from any heat sources.
- ❑ Keep children and the elderly far from the stove or fuel container to prevent accidents.

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# Summary

## In this presentation we have learnt about :

- Clean cooking solutions which are better than traditional cooking methods
- Maintenance and safety recommendations when using the MIG bio-cooker.
- Significance of following maintenance and safety considerations
- It is necessary to follow maintenance and safety recommendations to prevent accidents and ensure the longevity and optimal performance of the clean cooking technologies.

# Thank you for watching and listening to my presentation.

# I believe it was informative.

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