

# THE STORY OF THE ECOKILN MALAWI

PRESENTATION

By

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# MALAWI AT A GLANCE

- Human Development Index, 2022, 3<sup>rd</sup> Poorest Country ( but we are endowed with lots of opportunities
- Population estimated, 2022 according to CIA Factbook, 22 Million
- Urbanisation, 4.3% per annum, one of the highest in Africa
- Predominantly rural but urban population will outstrip rural in the next 28 years
- Housing deficit, as of 2011, the country needed at least 145,000 housing units per year



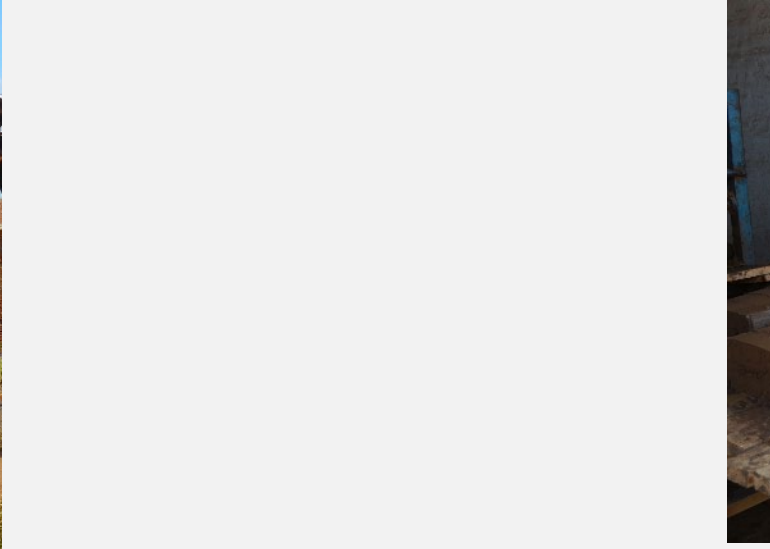
# MALAWI BUILT ENVIRONMENT

- Wood-fired brick is the dominant building material
- While standards exist, enforcement is weak
- Bricks exist in all forms and shapes
- Demand for housing and public infrastructure, means more bricks required
- This is coming at a huge environmental cost



# THE ECOKILN TRINITY IN MALAWI: CCODE, GIZ & TARA

- CCODE is a locally registered NGO involved in urban development and supporting the urban poor to address housing poverty
- Struggled with the quality of construction
- Engaged GIZ for technical expert
- The task was to find sustainable building materials appropriate to the Malawian Context
- Discovered the EcoKiln, linked to TARA as the promoter
- Explored the South to South Cooperation
- Exploring the possibilities of the EcoKiln in Malawi]
- 2015 First pilot established in Malawi through a collaborative framework



# ECOKILN RIPPLE EFFECTS

- Low carbon technology, drastically reducing carbon footprint from brick firing
- The EcoKiln reduces fuel consumption by 85% compared to the clamp
- 80% of the fuel we use is agricultural waste material (our internal fuel)
- Improved quality (garbage in garbage out)
- Green jobs (Over 90 young people, men and women are working at the factory)
- A viable business model : CCODE uses the income generated through the pilot plant to support community work





# THE ECOKILN-ROAD AHEAD

- Investing in Research and development to completely shift to briquettes
- Supporting entrepreneurs for wider adoption of the technology (Learning)
- Adaptation of existing standards (we have introduced new sizes for cost effectiveness)
- Working with traditional brick producers so they can benefit from the technology and shift from fuelwood
- Support is needed for a reliable technology for green brick making (the Chinese machines are breaking and pushing costs upwards—Maybe we can benefit from German engineering)
- The Werkbund Award will hopefully help up open new doors to stake this innovation forward and realise greater social impact

**THANK YOU, DANKE, ZIKOMO!**

