

Regional Technical Expert Meeting on Mitigation
“Climate smart cooling solutions for sustainable buildings in Africa”
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SUMMARY

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- 1. The Nubian Vault approach distinctively showed designs using Indigenous knowledge in cooling solutions**
 - a. Collective action in adoption of using local material that is widely present is required
 - b. For scalability, adoption, functional and verified uptake, they are looking for financial and training partners
 - c. Adoption so far has been for a wide variety of buildings in rural and some urban areas, including homes, schools and hospitals, storage buildings, coops, teachers' housing, institutional buildings, etc.
 - d. The methodology is transferable to local actors and whole of society.
 - e. Innovative financing models including micro finance will help in widespread implementation, the financing can either be green fund financing or carbon offset.
 - f. The main financial tool remains the incentives given to the rural clients who provided the materials (banco, adobes, mortar, etc.), labour and food of the building team. These incentives can be financed through carbon offset mechanisms.
 - g. The engagement of policy makers and donors is a major challenge. The international development sector plays a crucial role in connecting project owners and relevant authorities.

- 2. The 1st mandatory Rwanda green building code in Africa as presented by Global Green Growth Institute is a legislative and regulatory target for other countries in the region.**
 - a. The code has been technically verified with potential emission reductions of 3MtCO₂e by 2050
 - b. With 75% of the building stock yet to be built, such a code ensures adoption of measures that will reduce emissions by 50%
 - c. Collaborative approach from government and GGGI ensure continuous awareness and capacity building for implementation of the code requirements

- 3. The Cool Surfaces Project utilizes building materials that prevent solar heat gain**
 - a. The solution is inexpensive and low-tech
 - b. Awareness and capacity building include skills development and temporary job creation

- c. Selection of cool coating needs to ensure correct labelling of paint and quality awareness
- d. The solution used Energy Efficiency benchmarking and simulation modelling to confirm performance

4. Kenya Green Bond Program Case study was successful after 4-5years of inactivity in the market due to previous negative experiences

- a. The program used a collaborative approach and special purpose vehicle to ensure success
- b. \$43Million was raised but was not dispensed all at once, it was issued to ACORN in tranches based on meeting specific milestones
- c. Regulation and capacity building in the whole value chain will support scalability
- d. The Government of Kenya further provided tax incentives for green bonds earnings from withholding tax for the next 3years
- e. Awareness of green buildings in the region as carried out by Green Building Councils is required
- f. IFC EDGE rating tool was used to verify how green the development was

What came out collectively from the session was:

- a. Regional collaboration is feasible, is encouraged for quick uptake but requires policy support
- b. Innovation in financial tools and products to reach the people through micro finance will also shift to quick implementation of the strategies
- c. Wide implementation requires collective action
- d. Passive technologies that are feasible and also included in the Rwanda Mandatory Code include; Local Climate, Orientation, stipulated U Value of walls and roofs, stipulated Solar heat gain coefficient of glazing, natural ventilation especially cross ventilation, nature based solutions to conserve trees on the site, plant trees and add green roofs, greenery on Western facades, cool roofs were defined, use of local materials and use of indigenous knowledge.