

## RECYCLING PLASTIC AND GLASS WASTE INTO ROOFING TILES IN KENYA

The [Eco Blocks and Tiles company](#) has improved waste management in Kenya by recycling plastic and glass waste into eco-friendly, cost-effective, durable, mold-resistant and beautiful roofing tiles. These tiles are 100% recyclable at their end life.

The *Eco tiles* are more durable, lighter and easier to transport and install than concrete or clay ones. The *Eco Tiles* are available in different colours including brick red, brown, charcoal black and forest green.

The *Eco Blocks and Tiles* company was founded in 2016 by [Hope Mwanake](#), environmental scientist and entrepreneur, in collaboration with Kevin Mureithi. The company was born from the field experience of Hope Mwanake who ran a waste collection service in the town of Gilgil, facing mountains of plastic buckets, bottles and jerry cans discarded by residents, hotels, shops and schools. The prototype of the *EcoTiles* material was built by cooking fragments of plastic bottles and mixing the molten polymer with sand crushed from glass waste. Once placed this material in moulds and cooled, they found a very strong and durable product. Since set up, the company attracted grants from various organizations such as the United Kingdom packaging firm *Mondi* and the Netherlands-based *VIA Water*.

In Kenya, over 3,000,000 tonnes of waste is generated each year and only 8% is recycled. The rest ends up in landfills and in the environment causing pollution. Non-biodegradable waste such as plastics and glass worsen the situation as they do not rot.

The *Eco Blocks and Tiles* was the first company in Kenya to manufacture roof tiles and other construction materials from plastic and glass waste. Commercial production of the *EcoTiles* began in 2018 and so far, they have turned more than 56 tonnes of plastic waste into 75,000 tiles for 30 homes and businesses. The company is able to deliver the *EcoTiles* all over Kenya.

The tiles produced by the company are a high-quality product, which ensures an aesthetically appealing roof, able to address modern needs and the huge demand for affordable building materials in the real estate industry.



The main features of *EcoTiles*, mentioned in the company's web site, are the following:

- Lighter than traditional options leading to significant costs savings on timber purchase. Clients do not need to buy heavy timber reinforcements to fix the tiles allowing to reduce deforestation.
- Virtually hard to break. The company guarantees zero breakages on delivery and the tiles are very good also in hailstorm prone areas.
- Easy to work with and install, *EcoTiles* can be used on any residential and commercial building, responding to the needs of customers from different social classes.
- The non-porous material with zero water absorption inhibits mold growth, enhancing an aesthetically appealing roof for a long duration of time.
- The roofing tiles are designed for water harvesting for different purposes.
- The price of each *EcoTile* is equivalent to the price of concrete or clay ones. These tiles are 100% recyclable at their end life.

The factory of the company is based in the city of Gilgil, employs a permanent staff and provides indirect employment opportunities to informal waste pickers who are the key suppliers of the input material. Involving engineers, builders and environmentalist, the team is composed of people who invest in recycling as a means of improving environmental conditions and saving natural resources both in the country and globally.

The *Eco Blocks and Tiles* company makes a great contribution to a safe environment, converting waste into new useful products thus reducing air and water pollution. A typical three-bedroom house will consume at least 1.5 tons of plastics that would otherwise have ended up in the environment causing pollution.

Through promotions in fairs, events and social media posts, the start-up is attracting home owners and small businesses to expand demand and ensure an ever-increasing impact of this innovative method of ecological construction which also allows to reduce deforestation. The company is able to deliver the *EcoTiles* all over Kenya.

The company has also gained support from the Kenyan Government, which is promoting the use of sustainable greener materials as part of its efforts to reduce carbon emissions generated from the construction industry.

### To know more

[Ecoblocksandtiles website](#)

[Ecoblocks and Tiles in Facebook](#)

[Ecotiles in Twitter.com](#)

[Article in Aljazeera.com](#)

[Article in reuters.com](#)





[Article in herbusiness.co.ke website](http://herbusiness.co.ke)

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