

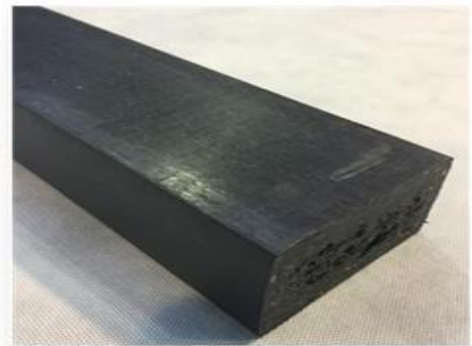
TRANSFORMING PLASTIC GARBAGE AND PACKAGING MATERIALS INTO PLASTIC TIMBERS USED FOR BUILDING, CONSTRUCTION AS WELL AS FURNITURE MAKING.

Introduction:

EcoAct Tanzania a social enterprise that uses a chemical free, energy conserving and innovative technology to recycle and transform post consumer plastic garbage and packaging materials into plastic timbers, Plastic timbers are durable, long lasting and affordable alternative to wood timbers used for building, construction and furniture making, this reduces the need for building materials from wood, helping to preserve forests, cut down on deforestation & climate change but also ensures clean environment and healthy oceans free from plastic garbage and packaging materials.



Plastic Garbage around the oceans



Durable Plastic Timber

The Problem:

10 million tons of plastic waste end up in our oceans each year, because waste management is one of the environmental problems that most cities are struggling to manage. As the number of residents in most cities is increasing so is the production of solid waste. Very unfortunate, effective environmental and sustainable measures to manage the waste are lacking. Our country generates about 4,800 tones waste every day of which 38% is plastic waste, which ends up in landfills and oceans. On the other hand, Deforestation is a big problem; a 2017 report by the UNEP estimated that Earth's total forest area continues to decrease at about 13 million hectares per year. The growing demand for timber in building and construction activities in our country was putting a lot of pressure on the country's forests reserves and natural forests around Mount Kilimanjaro (Our country loses about 400,000 hectares of forest every year). However, we realized that If only we could produce an alternative product to timber that was strong, longer lasting, cheaper and environmentally sustainable, we could definitely profit from the profitable timber market while helping to save forests and preventing plastic waste and packaging materials ending into oceans.

The Solution:

We are using our innovative plastic extrusion technology called “waxy 2 technology”, to recycle these unwanted plastic waste that are dumped and disposed everywhere littering the streets and clogging sewers and encroaching people’s homes into a less expensive, durable, good looking and environmentally friendly plastic timbers. Plastic timbers are normally made in 10ft on average and shaped either round or square that are used for fencing, building and construction activities. Our technology ensures our manufactured plastic timbers lasts more than 40 years without replacement whether used in sunny areas, marine or in water applications. Unlike normal timber, our plastic timbers are cheaper by 32%; they do not rot, are termite resistant, are waterproof and last longer than timber. The business strategy is to create economic value on plastic at the points of generation to enable the households, individuals and companies to sort and sell plastics in order to earn income. In this way, no plastic will find its way on the street, landfills and to the oceans.



Production Team – Manufacturing Plastic timbers



Manufactured Unpolished – Plastic Timbers

Our Goal:

Our Annual strategic plan ensures withdrawal of over 14.5 million kilograms of plastic garbage and prevent them from ending up into oceans, and use those plastic garbage to manufacture plastic timbers, hence save an estimated 850 acres of forest that would have been cut and same time preventing 9,500,000 kg of CO2 emissions further mitigating climate change. Trees absorb carbon dioxide from the atmosphere and store it in wood, in a process called “carbon sequestration.” Waste prevention and recycling to manufacture an alternative product to timber allow more trees to remain standing in the forest, where they can continue to remove carbon dioxide from the atmosphere.

Our Target Customers:

Plastic timbers manufactured from recycled plastic garbage are ideal for building, construction and furniture making, fencing on farms, real estates, national parks, forest reserve areas, commercial places and construction purposes. The plastic timbers are sold directly to our customers through the sales team or indirectly through appointed hardware shops, building expo exhibitions and stockiest. On the other hand, we promote our products by branding of the hardware shops, Print Advertising and marketing materials, sending of direct mails on potential clients as well as Social Network marketing.

Competition:

Our main competitor is timber manufactured from wood, but our innovative technology has enables us to manufacture affordable and best products compared to timber, our plastic timbers, do not rot or absorb water are highly resistant to insect damage, making them perfect also for marine and other water applications, uniquely our plastic timbers are preferred by their ability to resist shock. They also eliminate the need to treat the timbers, unlike treated wood, which uses toxic chemicals to impart the same qualities that plastic naturally has, more over they are 32% less compared to price of timber.

Revenue Model / Market Analysis:

Our Business Model: Our Business Model involves designing, manufacturing and direct selling of building materials (plastic timbers) made from 100% plastic garbage to real estate developers, advertising agencies, domestic home developers, telecommunication infrastructure contractors, road contractors, wildlife conservation agencies, farmers and the government institutions. We are currently have secured 1067 customers (90% in Tanzania and 7% in Kenya and 3% in Congo).

Project Finance and Planning:

- Currently we are seeking financing to acquire high capacity technology extrude machine, which is locally fabricated, if we win the prize money we will use that money and our small savings we have to invest in that machine so as to increase our production capacity to meet the current growing demand.

Our Social Impact:

On social Impacts: we employ locals in the sourcing and production of our products, providing training opportunities and skills for vulnerable women and youths, educating the public on recycling practices and alternative, sustainable energy sources. Furthermore, we have launched, “Garbage Medical Insurance” which is a micro health insurance program, which uses garbage as a financial resource. With this program, the community and uninsured poor slum dwellers are able to pay for health cover, drugs and other clinical services by using garbage as payment to an insurance scheme.



Local Families in Ward Tegeta and Wazo Ward, Being registered for Garbage Medical Insurance.



Our Team Measuring Garbage from poor families



Training Meeting for people joining the program