## PRODUCING PAVEMENT BLOCKS RECYCLING PLASTIC WASTE IN GHANA

In Ghana the <u>Nelplast Ghana Limited</u> <u>company</u> is turning plastic waste into stonelike pavement blocks which can be used to build new roads.

The company has been created in 2017 in the Ghanaian city of Ashaiman by the engineer Nelson Boateng who built an innovative recycling machine capable of processing any type of plastic waste, except PVCs. The company started its operations collecting and recycling almost 2000 kg of plastic waste from Ashaiman areas, laying plastic pavement blocks in its community.

The pavement blocks are made of 70% plastic waste and 30% sand. Thanks to the

plastic material, compared with traditional asphalt these pavement blocks are hard to rot and last longer than cement.

Nelplast's work brings significant advantages:

- allows to collect and recycle the large amount of plastic waste that is abandoned in the territory generating problems for the environment and for the health of citizens;
- generates a product of great resistance that allows paving roads, towns and villages at costs lower than those incurred with traditional asphalt and reducing maintenance costs;
- allows to generate jobs for the entire production chain (collection, production, installation of blocks).

At the Nelplast factory in Ashaiman, discarded plastic bags and other plastic detritus is shredded down to fine threads before being mixed with ordinary sand, creating a new alternative material to traditional asphalt. This kind of material needs only small quantities of binding agents and adopts the physical resilience of its plastic origins.

Nelplast currently produces close to 200 blocks a day using 800 kilos of plastic waste and employs 60 workers directly. The production chain as a whole has managed to create work for 230 people. This productive capacity is too low for the demand of the national market, which expresses an interest in using these innovative blocks. The company is carrying out numerous initiatives to upgrade the plant, through new machinery, equipment and spaces, in order to expand the production of plastic blocks, to deal with the national market.

The production process is described in the different <u>videos</u> <u>published on the Nelplast Company web page</u>.

The objective of the Company is to recycle about 70% of plastics waste generated daily by the country into useful and durable products. Although the focus of the company is to recycle plastic bags, easy to be collected in the territory where they are











abandoned, Nelplast encourages people to collect any form of plastic waste to create the asphalt-like material. In addition to build new road networks with plastic, the company also manufactures durable roof tiles made from the same waste. They also offer technical support to other businesses in order to strengthen their recycling activities.

The Ministry of Environment, Science, Technology and Innovation (MESTI) of Ghana supports the work of the Nelplast Company in manufacturing products, which uses plastic waste to produce pavement blocks and other building materials. The Ministry is in the process of launching a *National Plastic Waste Management Policy* to deal with the current nation-wide challenge of disposing these non-bio degradable products.

The urgent need to provide global solutions to the problem of the large amount of plastic waste that pollutes land, water and the oceans is highlighted by countless international initiatives. The <u>Earth Day 2018</u> was celebrate on 22 April 2018 with the theme *End Plastic Pollution.* The <u>World Environmental Day initiative</u>, coordinated by UN Environment will also be celebrated in 2018 with the theme *Beat Plastic Pollution.* 

In this context, the work carried out by Nelplast in Ghana has been widely valued by the international press. It is an example of how even small, innovative and qualified companies can make a big contribution to solve global problems of the world.

From the point of view of the companies, public administrations and environmental associations engaged in territorial development processes, the Nelplast's work could be an incentive to build circular economy initiatives that help create new products and new innovative jobs improving the environment and people's quality of life.

## To know more

Nelplast Ghana Limited company website

Nelplast in Facebook

Videos in Nelplast website

Video in Facebook

Video in Youtube

Video in africanews.com

Video in uk.reuters.com

Article in ouestfrance.fr

Article in geopolis.francetvinfo.fr

Article in fr.africanews.com

Article in crtv.cm

Article in inhabitat.com

Article in designindaba.com



Article in thenerveafrica.com Article in nangalama.blogspot.com Article in kombini.com

