

National Observance of World Habitat Day

UN HABITAT
FOR A BETTER URBAN FUTURE



Frontier Technologies as an Innovative Tool to Transform Waste to Wealth

Date: 7 October 2019 • Venue: Nawasscoal briquettes Plant at Kaloleni, Nakuru County

Nakuru hosts World Habitat Day



Cabinet Secretary James Macharia, E.G.H speaking on Park Road Affordable Housing flagship project

The United Nations designated the first Monday of October of every year as World Habitat Day, which is being celebrated in Nakuru County. Cabinet Secretary for Transport, Infrastructure, Housing, Urban Development and Public Works says the day accords United Nations Member States an opportunity to share and reflect on their experiences, successful initiatives, and challenges encountered in their efforts to provide shelter and related basic services in a sustainable manner. "It also reminds the world of its collective responsibility for the future of the human habitat and provides a forum for governments and stakeholders to take stock of achievements and actions aimed at improving housing and human settlements."

Where are we on affordable housing?

Efforts towards achievement of Vision 2030, the Sustainable Development Goals and the implementation of the New Urban Agenda, saw the National Government adopt the Big Four Agenda for which delivery of affordable housing is a key pillar. The programme will result in improved quality of life, health and ecosystems as well as creation of wealth and employment opportunities. One of the flagship projects is the Park Road Housing Project consisting of 1370 housing units and is at advanced stage with 228 units nearing completion.

Affordable Housing and Environmental Conservation

The Affordable Housing Programme embraces green building technologies that conserve the environment through the design work and promotion of clean energy. The programme provides for waste chambers that allow for segregation of waste for ease of separation and recycling.

Appropriate Building Materials and Technologies

The Ministry of Transport, Infrastructure, Housing, Urban Development and Public Works promotes the use of Appropriate Building Materials and Technologies through establishment of Appropriate Building Materials and Technologies Centres countrywide. The technologies promote use of cost-effective, safe, innovative, environmentally friendly and locally available building processes, materials and tools that emanate from natural resources. To date, a total of ninety two Appropriate Building Materials and Technologies Centres have been established.



Principal Secretary State Department for Housing and Urban Development during affordable Housing conference at Kenya School of Government

Ongoing construction works of Park Road Affordable Housing flagship project

Proper solid waste management critical to health, Housing and Urban Development

The Principal Secretary for the State Department of Housing and Urban development Mr. Charles Hinga states that the National Government has put in place measures to improve solid waste management. Under the Kenya informal settlement improvement programme (KISIP), Kenya Urban Support programme, and Kenya slum upgrading programme, the Government has collaborated with donors and partners to improve the livelihoods of people living and working in slums and informal settlements. We are promoting installation of social and basic infrastructure such as roads, storm water drains, sewer line, flood lights and sanitation facilities, which include ablution blocks, bio-digesters and solid waste stations. KISIP has been working with communities in Machakos, Naivasha and KCC Embakasi (Nairobi) to install community waste bio-digesters with an aim of turning waste to wealth.

Construction of 12km of storm water drainage within Nairobi Metropolitan Region, construction of Sewerage Treatment Plant and 56km Trunk sewer line in Ruiru.



Nakuru Governor H.E Lee Kinyanjui during the launch of briquettes at Nawasscoal Ltd on 29th August 2018

Nakuru County innovative briquettes sets pace for solid waste management

As hosts of World Habitat Day this year, Nakuru boasts of a very unique innovation that is transforming present and future generations in terms of solid waste management. In 2018, Governor Lee Kinyanjui launched briquettes made from human waste. NAWASSCOAL briquettes known as Makaa Dotcom are made out of 50% treated faecal matter and 50% sawdust combined with molasses as the binding agent. The production and use of MakaaDotcom helps to conserve the environment by providing an alternative to charcoal saving 88 trees per tonne of briquettes used. The production and use of MakaaDotcom helps to conserve the environment by saving 88 trees per tonne of briquettes used.

The briquettes provide an environmentally sustainable and affordable fuel for both domestic and industrial usage while encouraging the proper collection and transportation of human waste. The briquettes were developed with the research support of Egerton University and piloted in the market. NAWASSCOAL acquired a licence from the National Environmental Management Authority and secured the Kenya Bureau of Standard (KEBS) standard mark of quality to certify the product as safe for use by the public.

NAWASSCOAL has been in the forefront in the provision of Biomass briquettes (MakaaDotcom) to local institutions, hotels, eateries, and householders that use them for heat energy generation. The County envisioned a world where sanitation challenges can be addressed by the commercialization of faecal based products like MakaaDotcom. In this way, access to adequate sanitation will be guaranteed and economic activities around the sanitation value chain will thrive.

Gioto disposal site no longer an eyesore

In the year 2018 the County Government of Nakuru, using its equipment, started clearing all accumulated waste from the Gioto disposal site frontage, which after heavy downpour, would be washed away to the Nakuru-Kiamunyi road making it impassable and an eyesore.

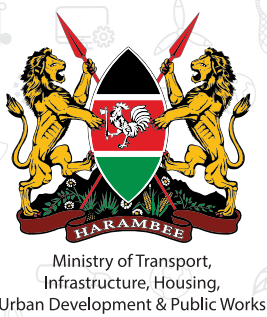
An embankment, covering the whole frontage to enhance aesthetic value of this important site was put up and grass and trees planted. This embankment has created space for greening and tree growing



ABT centre in Sabatia, Vihiga county



Youth preparing use tyres for recycling under KISIP



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which acts as a carbon sink mechanism. It also acts as a buffer to curb waste from spilling on the road, surface runoff and eventually improving the site to meet standards. Natural regeneration provided thus acts as an odour depressant.

Roads accessing the Gioto dumpsite have been rehabilitated to facilitate ease of proper hauling and disposal. Construction of drainage system and installation of culverts has been done thus water flowing through the drain.

The cleared areas have increased space for resource recovery (waste sorting for recycling hence improving the livelihood of the people living around the dumpsite. Waste is spread on a daily basis to avoid formation of garbage heaps. Sorting of the waste has created wealth with some institutions turning waste into tiles and poles.



Role of the Kenya Permanent Mission to UN-Habitat towards “Frontier Technologies as an innovative tool to transform waste to wealth”

Kenya Permanent Mission to UN-Habitat works closely with the United Nations Human Settlements Programme (UN-Habitat) through different frameworks including the Kenya-Habitat Country Programme Document 2018-2023. Our overall strategy is geared towards supporting a fit for purpose UN-Habitat headquartered in Nairobi, capable of effectively assisting Member States in: (i) Matters of urbanization and human settlements; (ii) Support for the Sustainable Development Goal 11 (SDG11: Making cities and human settlements inclusive, safe, resilient and sustainable); (iii) Follow up on and review of the New Urban Agenda, adopted at Habitat III in Quito, October 2016.

The 2019 World Habitat Day theme seeks to change the mindset on the production, use and treatment of waste. Appropriate use of technology will promote sustainable waste management and contribute in the realization of the nation's dream of attaining the Sustainable Development Goals as well as contribute towards better housing and universal healthcare.

Luthuli Avenue Regeneration Towards zero carbon, safe, inclusive and sustainable streets and public spaces in Kenya

In Nairobi, forty one (41) per cent of residents make their daily trips on foot, forty three (43) per cent by public transport and fifteen (15) per cent by private cars (NIUPLAN modal split forecast for 2018). This represents one of the greatest potentials for the city to revolutionize mobility and transform downtown area into a place where people feel safe to walk, stay, and a magnet of investment.

The regeneration of Luthuli Avenue has transformed a street that was once synonymous with congestion, pollution, a contested space between pedestrians, vendors, matatus, trolley pushers and motorbike riders into a safe, inclusive and vibrant retail frontier. As a result of the transformation, businesses are now thriving, new businesses are opening, restaurants and commercial banks are scouting for space along the street. This is mainly attributed to high pedestrians' volumes and improved perceived safety, which has changed the image and identity of the street. It has become a popular Non-Motorized Transport corridor that connects the Inner City to the peripheries of the Central Business District.

Ministry of Environment and Forestry/NEMA

In Kenya we are marking two years since the ban on single use plastics was affected by the ministry. It therefore gives us a great opportunity to celebrate milestones, recognize challenges and reevaluate our implementation strategies to make the ban 100% successful.

NEMA has developed The National Solid Waste Management Strategy to be implemented by counties. The strategy advocates for a collective approach to waste management challenges, seeks to establish a common platform for action between stakeholders to systematically improve waste management in Kenya. The main guiding principle on the National Waste Management Strategy is ZERO WASTE PRINCIPLE whereby waste is a resource that can be harnessed to create wealth, employment and reduce pollution of the environment.

Kenya Association of Manufacturers (KAM) in partnership with Ministry of Environment and Forestry and NEMA has rolled out a take back scheme which involves collecting the waste bottles and selling them for recycling.

In the last few months, the government through NEMA has stepped up enforcement actions on entities found to be polluting the environment either by untreated effluent discharge or by lacking proper waste management systems.

Under-Secretary-General and Executive Director of UN-Habitat Maimunah Mohd Shariff,



The United Nations has designated the first Monday of every October as World Habitat Day. This year UN-Habitat, the United Nations responsible for promoting sustainable urbanization and human settlements development, is focusing on the challenges and opportunities created by the ever increasing amounts of waste from our homes, offices, markets and factories under the theme Frontier technologies as an innovative tool to transform waste to wealth

This year's Global Observance of World Habitat Day, will be held in Mexico City with celebrations held around the globe including the main celebrations in Kenya in Nakuru County. Last year's Global Observance was held in Nairobi and looked at the collection and treatment of solid waste under the theme Municipal Solid Waste Management.

UN-Habitat which promotes integrated sustainable waste management approaches that focus on areas such as collection, recycling and disposal as well as the governance aspects including financial sustainability and institutional frameworks, has launched a global Waste Wise Cities Campaign. This promotes 12 principles of sustainable waste management with Kajiado, Kiambu, Kirinyaga, Kisii, Mombasa, Nairobi and Nyeri Counties having committed to the campaign.

Kenya's Ministry of Environment and Forestry along with Kiambu and Nairobi Counties are members of African Clean Cities Platform (ACCP) established during Sixth Tokyo International Conference on African Development (TICAD-VI) Conference held in Nairobi in 2016. This Platform supports effective waste management in Africa's intermediary cities.



Luthuli Avenue before and after regeneration