BASEL WASTE NEWS

JUNE, 2014

BASEL CONVENTION COORDINATING CENTRE FOR THE AFRICAN REGION

IS E-WASTE TAKING OVER AFRICA?

Fig: A map of Africa made with components of WEEE

Sculptor: Chukwuocha Rolland

Basel Convention Co-ordinating Centre for Africa (BCCC-Africa) have developed a sculptural model made with de-soldered components from Waste Electrical and Electronic Equipment.

The E-waste sculptural model was made by Mr. Chukwocha Rolland and supervised by the Director of BCCC-Africa, Professor Oladele Osibanjo.

This E-waste Sculptural model was developed to bring to awareness the electronic waste problem in the African region. This was also done to create awareness about the technical, economical, social, human health and environmental impacts of indiscriminate duping and crude electronic waste recycling technology in the African region.

WASTE NOT THE SMALLEST THING CREATED, FOR GRAINS OF SAND MAKE MOUNTAINS, AND ATOMIES INFINITY." - E. Knight

MAN JAILED FOR ILLEGALLY EXPORTING ELECTRICAL WASTE TO AFRICA

A waste dealer has been sentenced to 16 months in prison for illegally exporting tonnes of hazardous electrical waste to Africa, the Environment Agency said.

The agency's investigators found broken cathode ray tube televisions and ozone-depleting fridge freezers in four containers intercepted at ports between September 2012 and April 2013.

Joe Benson, 54, of Broad Street, Loughton, Essex, was sentenced to 16 months in prison at Snaresbrook Crown Court for illegally exporting 46 tonnes of hazardous waste to Nigeria, Ghana, the Ivory Coast and the Congo. He had earlier pleaded guilty.

See more: http://www.theguardian.com/environment/2014/jun/20/man-jailed-illegal-exporting-electrical-waste-africa

Culled from: The Guardian

BATTERY TECHNOLOGY CAPTURES WASTE HEAT AND CONVERTS IT INTO ELECTRICITY

Researchers have developed a new battery technology that captures waste heat and converts it into electricity.

Vast amounts of excess heat are generated by industrial processes and by electric power plants. Researchers around the world have spent decades seeking ways to harness some of this wasted energy

Most such efforts have focused on thermoelectric devices – solid-state materials that can produce electricity from a temperature gradient – but the efficiency of such devices is limited by the availability of materials.

Now researchers at Stanford University and the Massachusetts Institute of Technology have found a new alternative for low-temperature waste-heat conversion into electricity – that is, in cases where temperature differences are less than 100 degrees Celsius.

The new approach is described in a study, published in the May 21 issue of the journal Nature Communications, by Seok Woo Lee and Yi Cui at Stanford and Yuan Yang and Gang Chen at MIT.

See more: http://www.electronicsnews.com.au/news/battery-technology-captures-waste-heat-and-convert

Culled from: Electronics News

EXPOSURE TO SOLVENTS PRIOR TO FIRST CHILDBIRTH 'LINKED TO BREAST CANCER RISK'

In a study published in *Cancer Research*, women with a family history of breast cancer who worked with organic solvents prior to having their first child had an increased risk for hormone receptor-positive breast cancer.

"Our study is an important first step toward understanding how the timing of chemical exposures may impact breast cancer risk," says lead researcher Christine C. Ekenga, PhD, a postdoctoral fellow in the epidemiology branch of the National Institute of Environmental Health Sciences at the National Institutes of Health.

"We hope that our findings will generate additional interest in the possible role of solvents and other chemicals in the etiology of breast cancer.

http://www.medicalnewstoday.com/articles/277576.php

medical news today

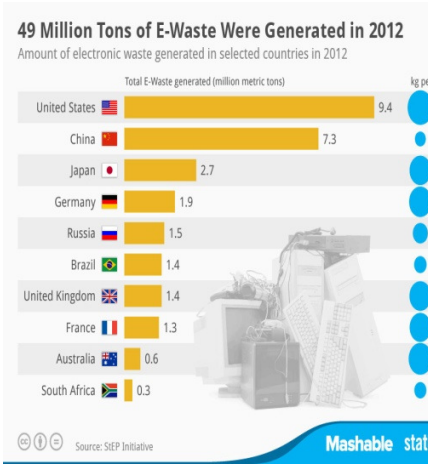
49 MILLION TONS OF ELECTRONIC WASTE GENERATED IN 2012

Researchers at StEP, an initiative for the reduction and proper disposal of electronic waste, have been tracking the amounts of e-waste generated by developed countries worldwide.

It's not just your smartphones, computers and television sets that are considered e-waste. Following definitions set by the European Union, StEP also includes large and small household appliances from microwaves to washing machines, as well as other personal consumer equipment like cameras, printers and Internet routers.

In addition, other elec.trical and some commercial items such as lighting equipment, certain electrical tools, electronic toys, leisure and sports equipment, monitoring and control instruments, automatic dispensers, and even some medical devices, are classified as e-waste.

Statistics company Statista visualized the StEP initiative's staggering findings in the following chart.



These appliances are gradually taking over the world's landfills, leading to a global environmental problem that has so far gone largely unnoticed. The United States is the the greatest perpetrator, generating 9.4 million metric tons of waste per year in 2012 — around 29.8 kilograms per person.

See more: http://mashable.com/2014/05/22/electronic-waste/#:eyJzIjoiZiIsImkiOiJfeXRlcmZ4emU4cjlsOWRmMCJ9

Culled from: Mashable.com

DON'T WASTE YOUR WASTE

Solid wastes have long been established as an eco-friendly electricity generation source. This is particularly important in Nigeria as 3-4GW is currently being generated annually, a tenth of South Africa's output, for a population triple the size of South Africa. Although there are projects that focus on converting solid waste to electricity, only few of them have been embarked on in Nigeria. Examples of the waste-to-energy projects are the Ikoyi market plant that generates biogas for powering a 2kVA generator and the proposed 25MW Olushosun landfill power plant which is based on generating energy from rotten waste through anaerobic digestion.

In addition to the electricity generation capability of solid wastes, they can provide huge energy and economic savings through re-use and recycling. For instance, recycling a glass bottle can save energy equivalent to the amount required to run a 100W light bulb for four hours and recycling a plastic bottle can conserve enough energy to light a 60W bulb for up to six hours.

Moreover, recycling an aluminum can requires 5% of the energy for producing a new can, saving an amount of energy for watching TV for three hours. Recycling a ton of paper saves 17 trees, 7000 gallons of water, 2 barrels of oil and 4100kWh- enough to power the average American home for six months. And as expected, Nigerian youths and government have contributed their quota in recycling solid wastes. For example, Wecyclers, a young recycling company, utilizes bicycles to collect recyclables from over 5000 households in the densely populated poor areas of Lagos that are neglected by waste disposal lorries, and there exist a plastic recycling plant at Olushosun for conversion of water sachet to garbage bags.

See more: http://www.thenigerianvoice.com/news/150572/1/dont-waste-your-waste.html

Culled from: The Nigerian Voice

SAMSUNG SOUTH AFRICA EMBARKS ON E-WASTE RECYCLING PROGRAM

Samsung Electronics South Africa announced a partnership with key industry stakeholders on a recycling initiative that will educate consumers on e-

recycling and the disposing of electronic goods in an environmentally responsible manner.

This partnership will ensure that customers can easily recycle their electronic products by visiting one of 18 Makro retail stores across South Africa and using the Desco/Samsung recycling bins located at the entrance of the stores.

Items that can be recycled include: mobile phones, IT equipment and household appliances. The reason for this is that there is a rise in volumes of electronic waste with a growing need to ensure these items do not end up in landfills. The recycling campaign aims to collect an estimated 3 tons per month, per bin, during the campaign period.

A significant part of this new recycling initiative is that it will ultimately lead towards job creation in the green economy – as the greater volumes of e-waste require processing the recycle plant at Desco, therefore leading to more employment at its e-waste management facility. Furthermore, as demand for e-waste recycling grows, more opportunities will be generated to support independent recycling companies.

See more: http://theinsidekorea.com/2014/06/samsung-south-africa-embarks-e-waste-recycling-program/

Culled from: Inside Korea

HP INTRODUCES LARGE-SCALE E-WASTE RECYCLING IN AFRICA

Hewlett Packard has had an e-waste management project in Kenya since 2010, but it had much bigger ambitions. While e-waste volumes continue to grow throughout the developing world, modern recycling facilities are still rare. The company wanted to extend its work in Kenya and develop a blueprint for a sustainable recycling system that could be replicated in other developing countries.

To develop such a blueprint, Hewlett Packard knew it needed a range of partners to break down traditional barriers between the private, public and academic sectors, between bottom-of-the-pyramid individuals and multinational corporations, and between local labour and global marketplaces.

In addition to Hewlett Packard's expertise, the company brought together a group of recycling experts, financiers, regulators and academics. For recycling knowledge it partnered with the East African Compliant Recycling (EACR). For developing the regulatory environment, the Kenyan authorities came on board, while the University of Northampton delivered recycling training and awareness. A German investment organisation Deutsche Investitions – und Entwicklungsgesellschaft has experience of funding and project management in developing countries.

See more: http://www.africatelecomit.com/hp-introduces-large-scale-e-waste-recycling-in-africa

Culled from: Africa Telecom & IT News

KENYAN ENTREPRENEUR TURNS E-WASTE TO JEWELLERY

In a bid to reduce environmental impacts caused by the overwhelming number of non-bio-degradable electronic wastes that are threatening Kenya's environment, two innovative young entrepreneurs have formed an electronic waste lab dubbed, 'E-Lab'

With research indicating 10-20 percent of all computers sent to Kenya from abroad are unusable, the amount of electronic waste being disposed

on a daily basis in the country is growing steadily fuelled by the technological advancement with mobile service providers in Kenya also responsible for over 3000 tons of e-waste generated annually.

According to Alex Mativo, E-Lab's CEO, "E-waste is a new environmental challenge due to Africa's fast growth in the number of mobile phone users and electronics." The problem demands for a more innovative way of curbing it hence the establishment of E-Lab to promote a culture of safe and responsible e-waste disposal among Kenyans.

Mativo and Mumo collect electronic waste like old computers, mobile phones and fridges, and turn them into pieces of art – like earrings, necklaces, and shoes.

"I came across a huge problem, nuisance, in society where people were dumping electronic waste, which is not biodegradable. So I was able to use art as a platform to initiate the campaign, I was able to transform what was once hazardous into something really amazing, to showcase to the world that we have the solutions to all our problems," Mativo explained to 'African Start-Up.'

See more: http://www.newsng.com/story-detail.php?title=Kenyan-entrepreneur-turns-e-waste-to-jewellery&story=e9994350fc

Culled from: Biztech Africa News

ABOUT BCCC-AFRICA

The Basel Convention Coordinating Center for Training and Technology Transfer for the African Region (BCCC-Africa) was established on 20th 0f September 1994 by the defunct FEPA (which has been absorbed into the Federal Ministry of Environment in June 1999). The Center has a dual mandate to serve as a National Institution as well as a Regional Institution. As a National Institution, it is to serve as a Federal Ministry of Environment linkage center with the University of Ibadan. This linkage center has a mandate for Cleaner Production Technology and Hazardous Waste Management. The Center also, as a Regional Institution, has the mandate to serve as the Basel Convention Regional Coordinating Center for Africa, to assist African Countries implement the 1989 Basel Convention on the Transboundary Movement of Hazardous Waste and their disposal. The Centre also coordinates the Basel Convention Regional Centre (BCRC) for Arabic-speaking African countries based in Egypt, French-speaking African countries based in Senegal and English-speaking African countries based in South-Africa respectively. This is the only Linkage Center of the Ministry that is a United Nations designated capacity building center with mandate to service Wastes and Chemicals Multilateral Environmental Agreements (MEAs), these are the Basel, Rotterdam and Stockholm Conventions.

A MONTHLY PUBLICATION OF BCCC-AFRICA

All correspondence to:
Omotayo Sindiku
Basel Convention Coordinating Centre for the African Region
1, Ijoma Road, University of Ibadan
Ibadan,
Nigeria
Website: www.baselnigeria.org.ng
E-mail: thayor@basel.org.ng, info@basel.org.ng