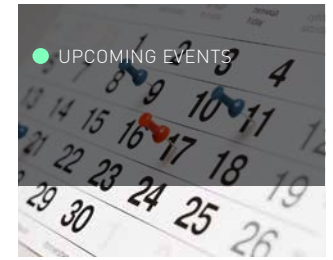
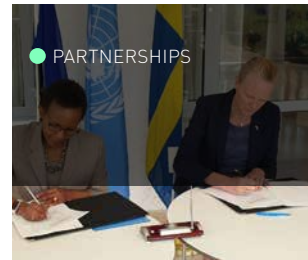




UN ENVIRONMENT NEWSLETTER

AFRICA OFFICE

NOV-DEC 2018



CALENDAR



CONTACT



AFRICA CALLS FOR MAINSTREAMING DIRECT USE APPLICATION IN GEOTHERMAL POWER DEVELOPMENT



Africa has a high potential of geothermal energy resources, estimated at more than 20,000 megawatts electric (MWe) for power generation in the East-African Rift System and huge resources for direct use application in the whole continent. Other than power generation, geothermal energy exploitation brings significant socio-economic benefits to the environment and climate mitigation efforts.

Geothermal energy is the energy that is stored in the form of heat below the surface of solid earth and has been considered inexhaustible and nearly emissions free. It has been used to a limited extent in Africa, with Kenya taking the lead as a top generator of geothermal energy at a capacity of 700 megawatts (MW).

Over 350 participants comprising decision makers, ambassadors, directors of national energy and mines institutions, and heads of delegations from all 13 East-African Rift countries convened for the Seventh African Rift Geothermal Conference (AGeo-C7) in Kigali, Rwanda, on 29 October – 2 November to establish guidelines aimed at overcoming challenges of geothermal energy exploitation in the region.

These guidelines are highlighted in the Kigali Statement of the Conference whose key areas of focus include leveraging political commitment at national strategic level, developing geothermal energy infrastructure and mainstreaming direct-use in geothermal development.

At the conference that lasted 5 days were also participants from over 25 countries from all continents of the world; representatives of the African Union Commission, Japan International Cooperation Agency, USAID, US Power Africa, and the African Development Bank, among other partners. The Kigali Statement of the Conference document urges African and the associated partner countries to intensify the support to research, development and innovation, and to address some of the key barriers to the development of geothermal energy technology.

To maximize the potential for geothermal energy deployment in the region, it is crucial to leverage political will in terms of policy development, to mobilize resources while at the same time enhancing synergies among East-African countries. National strategies must consider the specificities of geothermal energy technologies and adjust action plans for long-term perspectives and sustainability.



AFRICA OFFICE
NEWSLETTER

CLIMATE CHANGE



ENVIRONMENTAL FINANCING: SPEEDING UP AFRICA'S SOCIO-ECONOMIC DEVELOPMENT



With the rapidly increasing effects of climate change looming, Africa needs to build climate resilience to ensure that the future of the continent is protected. Investments need to be channeled to sustainable initiatives that have the objective of environmental conservation. This will not only build climate resilience but will also create job opportunities for the African people leading to an expansion of economies.

According to the Fifth Assessment Report of the United Nations Intergovernmental Panel on Climate Change, projections indicate that climate change will lead to an equivalent of 2 to 4 percent annual loss in GDP) in the region

by 2040. Assuming international efforts keep global warming below 2°C, the continent could face climate change adaptation costs of US\$ 50 billion per year by 2050.

Reliance on donor-funding to finance adaptation initiatives is not a sustainable way to increase Africa's socio-economic transformation and build climate resilience. Africa can create wealth through innovative financing of green businesses which include small and medium sized enterprises in diverse sectors such as clean energy, waste management and resource efficiency.

Africa is blessed with a vast array of resources including human resource, natural capital and renewable energy which can be utilized effectively to increase the continent's competitiveness in the global economy. Implementation of innovative financing in environmental conservation efforts maximizes the productivity of Africa's catalytic sectors that include but are not limited to its human resource, agriculture, ICT and clean energy.

The development of a framework of innovative financing systems can enable small and medium sized enterprises in the region to have access to affordable financing, clean energy, and access to markets and supply chains for their goods and services. Such a framework requires the complementary collaboration of diverse actors within a country including financial institutions, policy makers, private sector, energy and the ICT sector.

Policy harmonization across the related sectors should be implemented to create synergy of effort in supporting Africa's sustainable small and medium sized enterprises. Such businesses create job opportunities leading to a creation of wealth that can be reinvested in climate adaptation methods as well as development and growth of the country's economy.

ENERGY

CLIMATE CHANGE

INNOVATIVE
SOLUTIONS

CAMPAIGNS

PARTNERSHIPS

YOUNG
INNOVATORS



AFRICA OFFICE
NEWSLETTER

INNOVATIVE SOLUTIONS



TECH-SAVVY ENTREPRENEURS SOW SEEDS OF A FARMING REVOLUTION



From invaluable farming advice shared via text message to livestock vaccines delivered when and where they are needed, thanks to a mobile phone service, agri-tech and precision farming are changing the face of agriculture across Africa.

With global warming threatening harvests, and the world's population set to grow to around 10 billion by 2050, a sustainable agricultural revolution

is needed to secure food supplies and protect the resources that sustain humanity

Cereal yields are expected to decline as temperatures rise, and water scarcity will threaten crops and biodiversity, fruit and vegetable yields as well as soil quality. This will be critical in Africa, where agriculture is the largest contributor to economies and where population growth is placing ever more strain on the land.

For Ndubuisi Ekekwe, Nigerian founder of precision farming startup Zenvus, African farming must change as traditional practices keep many farmers trapped in a cycle of poverty.

Zenvus uses proprietary electronic sensors to collect soil data, like moisture levels and nutrients, and sends them to a cloud server for analysis. The company can then advise farmers on what fertilizer to use and how best to irrigate the crops. The system also uses special spectral cameras to build crop health indices to help detect drought stress, pests and diseases.

Advocates, like Ekekwe, argue that precision farming is better for the environment because it uses sensors, GPS mapping tools, data-analytics software and robots to customize the care given to crops to make all inputs more efficient and increase yields.

These large-scale innovations are often not suited to African smallholders whose farms are generally less than two hectares. Illiteracy and lack of connectivity in some remote areas as well as poor roads and lack of electricity are impediments to progress. For African farmers, the most successful innovations often center around the delivery of up-to-date, useful information.

UN Environment has set up the TEEBAgriFood initiative to provide a comprehensive economic evaluation of the "eco-agri-food systems" complex. This framework is the first to present all the wider benefits and costs associated with the eco-agri-food chain, allowing a more informed assessment by decision-makers such as governments and institutions.

These kinds of pioneering solutions to address environmental challenges will be at the heart of the fourth UN Environment Assembly in March 2019.

ENERGY

CLIMATE CHANGE

INNOVATIVE
SOLUTIONS

CAMPAIGNS

PARTNERSHIPS

YOUNG
INNOVATORS

UN ENVIRONMENT JOINS CAMPAIGN TO GREEN KENYA



On 19th December 2018, UN Environment joined the government of Kenya for the launch of 'Greening Kenya Campaign', which focuses on growing trees in schools, universities, other educational institutions, farmlands and dryland.

The initiative is part of Kenya's plan to plant 1.8 billion trees and achieve more than 10% forest cover in the country by 2022.

"With this campaign, Kenya lives up to the aspirations of its citizens to uphold a bond of unity between the forests and the people," said Jorge Laguna-Celis UN Environment Director of Governance Affairs. "These actions, partnerships and joint coordination efforts of various ministries and national organs will definitely lead to reversing the adverse effects on our environment which we see manifested in drought, desertification and flooding, among other consequences."

The Kenyan government has stated that more than 200,000 acres of forest cover has been destroyed in recent years, and called for the enforcement of a moratorium on logging in public and community forests.

Some of the world's foremost environmental assessments, including UN Environment's Emissions Gap and Adaptation Gap Reports have shown an increasing gap between countries' ambitions and actions against the reality of climate change, as the world prepares for a future with increasing climate risks.

The Adaptation Gap Report cited that less than half of countries assessed provide integrated frameworks to address climate change adaptation in a holistic way. It revealed that most address adaptation through development plans or sectoral policies alone, while a handful have been specifically designed to create financial instruments or to focus on disaster risk management.

Approximately 12 million seedlings – both indigenous and exotic – are being grown at Kenya's Ruiru Prison farm using the resources available to the institution. Similar nurseries have been set up in 27 other centres in all the regions and ecological zones across Kenya where 38 million more seedlings will be developed and distributed from.

PARTNERSHIPS AND NETWORKING: BOOSTING BUSINESSES IN AFRICA



Partnerships and networks are a great platform to foster an environment conducive for business start-ups and growth in Africa. The public sector needs to establish supportive policy frameworks that can allow the private sector opportunities to flourish. Micro, small and medium enterprises are a key engine for growth and creating jobs which are direly needed in Africa.

Partnerships can provide capital and create networks to highlight good practices, bringing to the fore sustainable business champions whose efforts can be compounded through replication of successful efforts. UN Environment recognizes the importance of forging partnerships which is encompassed in Sustainable Development Goal 17. Partnerships are also an avenue that can be used to bridge implementation gaps.

UN Environment is engaged in several collaborative efforts such as the European Union-funded SWITCH Africa Green programme which is providing opportunities for partnerships and networking among small and medium size enterprises, development partners, policy makers and financial institutions.

A recent partnership has been strengthened between Sweden and UN Environment. The Swedish International Development Cooperation Agency is contributing roughly US\$31 million over four years to support critical environmental issues including climate action, resilience to disasters and conflicts, healthy ecosystems, waste and air quality, and sustainable consumption and production. This funding can be used as fuel to drive Africa's socio-economic transformation by investing in green businesses.

In most modern economies, entrepreneurs form one of the main engines of growth. According to the Global Entrepreneurship Monitor 2017/2018 Global Report, Africa lags behind other regions in terms of creating a favorable entrepreneurship environment. African businesses face the challenge of limited access to finance and markets within the region mainly due to lack of coherence across macroeconomic, trade, investment and technology policies. Financing for sustainable development is needed for implementation as plans and budgets that are not financed will not catalyze the much-needed change.

African governments need to be mindful of maintaining policy and regulatory spaces that will encourage investments to flow into the continent. Such a space will attract partnerships and networking opportunities that can enable sustainable businesses to flourish, boosting Africa's economy and development as well as building climate resilience.

AFRICAN YOUTH ARE UNVEILING GREEN JOBS OPPORTUNITIES THAT CAN BENEFIT MILLIONS



19% of the global youth population resides in Africa, with the region's youth unemployment rate at 10.9 percent - the second highest in the world. Millions of working youth are grossly underpaid. The International Labour Organization reported that in 2016, the working poverty rates among youth in Sub-Saharan Africa was approximately 70 per cent, translating to 64.4 million working youth in that region living in extreme or moderate poverty.

It is time that Africa starts investing and empowering its youth as they have the potential to engage in environmental conservation actions, coming up with innovative ideas and green businesses to tackle environmental challenges such as urbanization, mining, deforestation, agricultural expansion and infrastructure development.

UN Environment recognizes the need for linking youth with sustainable environmental management. Youth empowerment begins with providing them with information on environmental issues and the potential in business that exists in this area. UN Environment is working jointly with youth to prepare a Global Environment Outlook (GEO) for Youth in which innovative solutions to tackle environmental degradation are discussed from their perspective.

"This nexus of environmental sustainability and economic empowerment is the primary message of GEO-6 for Youth, Africa," said Damaris Mungai - Coordinator of the Gender and Youth portfolio at UN Environment, at the Lead Authors meeting. "If we can show African youth how they can create green jobs for themselves, they will seize the opportunity and, in the process, engage in consistent environmental management."

The lead authors are drawn from all the six sub-regions of Africa. Since the first quarter of 2018, they have been editing articles written by nearly one hundred young contributing authors from thirty African countries. A second Lead Authors meeting was recently held at the UN Environment's Headquarters in Nairobi bringing together young authors to present and discuss the different chapters of the outlook. The environmental issues covered in the youth-led assessment report mirror those highlighted in the GEO-6 Regional Assessment for Africa. For example, one of the Nigerian contributors for the Air Chapter is Adeolu Timothy, a PhD student from Kwara State University in Nigeria. His article focuses on indoor air pollution and how youth can combat it in ways that will create green jobs. In the same chapter, Buntu Fanteso from South Africa contributes a perceptive article that vividly explains to African youth how they can tap into the economic rewards of off-grid electricity.



UPCOMING EVENTS



12-13
Feb

Multi-actor Dialogue on Turning Universities into Innovative Platforms, [Marrakech, Morocco](#)

17-20
Feb

Second Global Inter-Regional and Parallel Network Meetings for National Ozone Officers, [Paris, France](#)

11-15
March

The fourth UN Environment Assembly, [Nairobi, Kenya](#)



FEEDBACK



PUBLISHED BY:

UN ENVIRONMENT

AFRICA OFFICE

NOF Block 2, Level 1, South-Wing
P.O. Box 30552, 00100
Nairobi, KENYA
Email: mohamed.atani@un.org

<https://www.unenvironment.org/regions/africa>