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## Smart Public Policies Key to Powering Up Africa's Clean Energy Potential

### Africa Launch of 'UN International Year of Sustainable Energy for All' Held in Nairobi

**Nairobi, 21 February 2012** – Opening up energy markets to private sector investment through the introduction of smart government policies will be the key to unlocking Africa's massive renewable energy potential, according to a new report from the United Nations Environment Programme Finance Initiative (UNEP FI).

In doing so, millions can be lifted out of poverty and the sustainable development potential of the continent far sooner realized, says the report, which was released at UNEP headquarters in Nairobi, Kenya, to mark the Africa launch of the United Nations 2012 International Year of Sustainable Energy for All.

This UN-system-wide initiative aims to bring about concrete action to achieve universal access to modern energy services and double both the rate of improvement in energy efficiency and the share of renewable energy in the global mix by 2030.

Experts estimate that unless stronger commitments are made to reverse current trends, half the population in sub-Saharan Africa will still be without electricity by 2030, and the proportion of the population relying on traditional fuels for household energy needs will remain the highest among all world regions. Such a scenario would severely hamper efforts to achieve the Millennium Development Goals.

The report from UNEP Finance Initiative, entitled *Financing Renewable Energy in Developing Countries: Drivers and Barriers for Private Finance in sub-Saharan Africa*, outlines how current obstacles to the scaling-up of sustainable energy solutions in Africa – such as the cost of electricity generation or difficult grid access - can be tackled.

To meet the continent's growing energy demands, the power sector in Africa needs to install an estimated 7,000 megawatts (MW) of new generation capacity each year.

The UNEP report argues that much of this can come from Africa's wealth of untapped, domestic renewable resources.

Cape Verde, Kenya, Madagascar, Sudan and Chad have particularly significant potential, says the study. According to the African Development Bank Group, Mauritania's wind energy potential is almost four times its annual energy need, while Sudan's is equivalent to 90 per cent of its annual energy needs. This offers both opportunities to improve energy security and create regional markets.

“Accelerating and scaling-up sustainable energy for all will be key to realizing a transition to a low carbon, resource efficient ‘inclusive’ Green Economy”, said UN Under-Secretary-General and UNEP Executive Director Achim Steiner.

“Some 1.3 billion people worldwide have no access to electricity and 95 per cent of those live in Africa. Yet the Continent has abundant renewable resources that, with the right kind of public policies in place, can unlock a new development future and light up the lives and the livelihoods of millions of people,” he said.

“In four short months, world leaders meet at the Rio+20 summit in Brazil. Access to sustainable energy should be upper most in delegates minds as should the current barriers—ranging from fossil fuel subsidies to the need for up front financing—that to date have held back this massive potential in Africa and elsewhere,” said Mr Steiner.

The UNEP report is based on a survey of 38 institutions, mostly from the private sector, which are all involved in energy infrastructure finance in developing countries.

### **Overcoming Three Barriers: Cost, Structure and Risk**

The study shows how policy incentives can help reduce the higher costs associated with electricity generation from renewables and improve the competitiveness of investments in the sector, versus traditional energy sources.

It gives examples of how such incentives at national and international levels are already making a positive impact in Africa.

In Kenya, a government feed-in tariff introduced in 2008 to expand renewable energy power generation in the country, will incentivize an estimated additional energy generation capacity of 1300 Megawatts (MW) - more than double Kenya's present capacity. The increased investment in renewables is also expected to trigger significant job creation through construction of power plants, grid connection and maintenance.

Uganda's dedicated renewable energy policy, meanwhile, has been praised for developing an institutional infrastructure for management of the Clean Development Mechanism (CDM) that has successfully led to a spurt in renewable energy activity. In 2008, Uganda had 550 MW of total installed capacity, of which 315 MW were hydro-based. By 2010 there were 300 MW of renewable energy in the CDM pipeline, including new terrain for Uganda in the area of biomass.

Among rural communities in sub-Saharan Africa, where only 2-5 percent of people are connected to the electricity grid, using renewable energy in the form of mini-wind, bio-energy or solar household systems to improve energy access can be more cost-effective than expanding existing grids.

To tackle a second major energy barrier, namely the structural inadequacies of sub-Saharan African energy markets, such as monopolistic ownerships with difficult market and grid access for new actors and innovation, the UNEP report says governments should reform the energy sector with policies leading to a higher level of decentralization and easier market access for new energy producers.

These reforms would encourage third parties and private sector independent power producers (IPPs) to enter the renewable energy market and contribute much needed specialized technical skills.

A third major roadblock to the development of renewable energy utilities, says the study, are the risks – political, regulatory and commercial – present in many sub-Saharan countries. While complex, these risks can be abated and their impact lessened by the use of risk-mitigation instruments already available, albeit insufficiently, today

The international community should, therefore, put in place international risk mitigation instruments with an explicit climate change mandate, recommends the report.

“Reaching the goal of sustainable energy for all in Africa - and beyond - will require action by all countries and all sectors to shape the policy and investment decisions needed for a brighter energy future,” said Kandeh Yumkella, Director-General of the United Nations Industrial Development Organization (UNIDO) and Chair of UN-Energy.

“Industrialized countries must accelerate the transition to low-emission technologies. Developing countries, many of them growing rapidly and at large scale, have the opportunity to leapfrog conventional energy options and move directly to cleaner energy alternatives that will enhance economic and social development,” he added.

“Private sector development is essential to create more growth and less poverty. It will contribute to the huge need for investments in Africa. We must mobilise access to modern energy services, women’s participation in working life and economic growth,” said Erik Solheim, Norwegian Minister of the Environment and International Development, at the launch in Nairobi.

Today, eight African countries already have national renewable energy targets in place, including Mauritius (65 per cent by 2028), Cape Verde (50 per cent by 2020) and Cameroon (50 per cent by 2015). The UNEP report says such goals are a “critical component” of any renewable energy policy package as they provide clarity to private sector actors and can support the mobilization of investment.

UNEP's Green Economy report shows how the cost of renewable energy services would be even more competitive if the negative, indirect impacts associated with fossil fuel technologies were taken into account.

Some African countries, including Kenya and Senegal, are currently devoting more than half of their export earnings to energy imports. Scaling-up renewable resources that are available domestically, says the Green Economy report, could enhance national energy security, while mitigating the public health risks caused by the mining, production and combustion of fossil fuels.

Such risks include the inhalation of smoke from traditional cookstoves used in households across Africa. These indoor emissions are responsible for an estimated 1.9 million deaths worldwide each year, while 'black carbon' produced by the stoves is also a major contributor to climate change.

### **UN International Year of Sustainable Energy for All**

Throughout 2012, the United Nations Secretary-General, in partnership with the inter-agency group UN Energy, will be coordinating activities to increase awareness of the importance of addressing energy issues, including modern energy services for all, access to affordable energy, energy efficiency and the sustainability of energy sources at local, national, regional and international levels.

As part of these efforts, the UN Secretary-General, UN Energy and the United Nations Foundation are leading a new global initiative – *Sustainable Energy for All*. The initiative will engage governments, the private sector and civil society partners worldwide, to achieve three major objectives by 2030:

- Ensuring universal access to modern energy services
- Doubling the rate of improvement in energy efficiency
- Doubling the share of renewable energy in the global energy mix

The UN Secretary-General has convened representatives from the private sector, government, UN/intergovernmental organizations and civil society to develop a global strategy and concrete agenda for action to reach the three objectives.

The roadmap, which will build on the work of the Secretary-General's Advisory Group on Energy and Climate Change, will be offered for consideration at the Rio+20 Conference in June 2012. The high-level group is co-chaired by Charles Holliday, Chairman of Bank of America, and Kandeh Yumkellah, Chair of UN Energy and Director-General of the UN Industrial Development Organization (UNIDO).

### **Notes to Editors**

The UNEP Finance Initiative Report, *Financing Renewable Energy in Developing Countries: Driver and Barriers for Private Finance in sub-Saharan Africa*, is available

at:

[http://www.unepfi.org/fileadmin/documents/Financing\\_Renewable\\_Energy\\_in\\_subSaharan\\_Africa.pdf](http://www.unepfi.org/fileadmin/documents/Financing_Renewable_Energy_in_subSaharan_Africa.pdf)

More information on the UN International Year of Sustainable Energy for All is available at: <http://sustainableenergyforall.org>

### **Additional quotes**

#### **Additional Quotes**

**Victor Williams, Regional Head (East Africa) of Corporate and Investment Banking at Standard Bank**, which contributed to the UNEP survey, said: “Our experience is that in the Africa context, policy certainty is indeed essential to commit financial institutions to funding renewable energy projects. We hope that African governments do realize the significant potential of renewable energy sources and will put in place appropriate regulatory frameworks discussed in this report to encourage their use.”

#### **UNEP’s sustainable energy initiatives in Africa include:**

**The African Rural Energy Enterprise Development Programme (AREED)** operates in Africa to develop new sustainable energy enterprises that use clean, efficient, and renewable energy technologies. These new enterprises can meet the energy needs of under-served populations while reducing the damaging environmental and health consequences of existing energy practices, particularly from low quality biomass fuels such as wood and dung.

<http://www.ared.org/>

The **en.Lighten Initiative**, founded by UNEP and partners in 2009, aims to reduce energy use through a global market transformation towards energy-efficient lighting. Eliminating inefficient lighting (incandescent lamps) on the African continent would save nearly 20.5 terawatt hours (Twh) of electricity and cut almost 13 metric tonnes (Mt) of CO<sub>2</sub>; equivalent to taking 3 million cars off the road. The electricity saved would allow connecting 14.5 million African homes to the grid. The cost for Africa to transition to efficient lighting is around US\$1.8 billion, with a simple payback of 2.2 years. At the 2011 UN Climate Change Conference in Durban, South Africa committed to a 2016 phase-out of incandescent lighting, becoming the first African nation so to do.

<http://www.enlighten-initiative.org>

**The Global Network on Energy for Sustainable Development (GNESD)** is a UNEP facilitated knowledge network of Member Centres of Excellence and Associates, and network partners worldwide. Its main objective is to carry out policy analysis on thematic energy issues which can facilitate in reaching the Millennium Development Goals (MDG). It comprises 9 institutions in Africa, Asia and Latin America.

<http://www.gnesd.org/>

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