

Financing African Energy

Energy Services and Poverty Reduction

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Financing African Energy

- The UN Foundation
 - 1998 - Established to support UN Causes - \$1 billion commitment from Ted Turner
 - Energy and Climate Change - a priority
 - Work with UN agencies in support of Millennium Development Goals
 - Energy access is essential to economic growth
 - Market Based Energy Services: Pilot Projects

Partnering to solve problems

- Major UN Partners – UNDP, UNEP and UNIDO
- Early Supporter of African Rural Energy Enterprise Development
- Partner with Austria, UNIDO and others on Global Sustainable Islands Initiative
- Experience led to investments in Sustainable Energy Finance Initiative
- Carbon market initiatives

Rationale for Action

- In rural Africa, 9 out of 10 people have no access to electricity
- Traditional fuel supplies are scarce
- Large, centralized grid/power systems are expensive – hard to maintain
- Current investment trends show that in 2030 9 out of 10 Africans will still lack energy access!

Key challenges in Africa

- Climate cycle changes are already compromising fragile ecosystems.
- Lack of investment in infrastructure and agricultural development hamper growth
- Political Instability contributes to migration and lost productivity
- Human and financial capacity limits governments ability to manage resources

Rural Energy Enterprise Development

- Map Community Energy Use
- Develop household energy expenditure baselines
- Determine how local service providers could provide more energy service at the same or lower prices
- Service options – cooking fuel, stoves, solar panels, biomass management

African Rural Energy Enterprise Development

- \$5 million invested in model
- 5 countries – Senegal, Mali, Ghana, Zambia, Tanzania
- 36 projects received support
- Model showed promise, but capacity of both financial institutions and businesses limited large scale replication

Financing Energy Services

- Identify local financial institutions
- Use targeted grant funding to reduce risk for financing
- Provide technical assistance to energy enterprises – market assessment, business planning
- Develop guidelines for financial appraisal

What we learned

- Africa does not have to follow the current energy paradigm
- New mechanisms and institutions must be developed to change the paradigm
- Broad policy changes and more finance are needed to impact development
- Shift must take place now

More Lessons

- Pilot programs are insufficient to the need
- UN Agencies need to consolidate efforts
- Innovative financing tools are needed to drive change
- Governments have to adopt new policies
- UN Biofuels Initiative – one possible example of change in UN approach

Why Change the Energy Paradigm?

- Current system is flawed; dependence on fossil fuels in Africa ensures poverty
- Africa is highly vulnerable to climate change
- Using the energy as the entry point to restructure subsistence agricultural economies may be best option.

African Assets and Challenges

- Infrastructure stock is poor – but offers opportunity to invest differently
- Investing in centralized, grid-connected energy will not reach enough people
- Energy is central to improving livelihoods; reducing poverty
- Local community investment is one place to start.

Policies are key

- African policies have subsidized the consumer at the expense of the farmer.
- Farm income and production is declining; migration to urban areas feeds poverty cycle
- Farmers grow non-food, export crops to raise incomes
- Farmers access to finance for other crops is limited

New opportunities?

- Rethink energy and ag sectors
- Manage biomass strategically
- Invest in soil, watershed maintenance
- Develop new financing practices
- Expand research and extension services
- Provide access to cost-effective technology

Finance

- World Bank projects need for \$165 billion in new energy finance annually through 2020
- Half that is unfilled -- \$80 billion gap
- Much of gap is in Africa
- Private Sector investment must fill most of this gap in partnership with MDBs.

Encouraging Signs?

- Commitments by India and China to help Africans develop both conventional and renewable sources of energy are important
- Early investments in jatropha are important, but risky – not a proven commercial option
- On the plus side, if these investments bring marginal land into productive use, it's a step

UN Biofuels Initiative

- A partnership with 5 UN agencies, the Italian Ministry of Environment, the UN Foundation and a range of experts
- Seeks to organize UN agencies to work within their unique mandates to help countries assess potential for bioenergy
- Early analyses indicate Africa has significant potential – if water and soil quality can be maintained.

Financing for Bioenergy

- Building on baseline information, the Initiative seeks to engage the World Bank, the MDBs and the private sector in filling the \$80 billion annual energy financing gap.
- Initial contribution likely to be small, but using new financial options – government guarantees, energy bonds, or venture capital funds we hope to interest a range of stakeholders in financing bioenergy initiatives.

Reality Check

- An \$80 billion annual investment gap is only a problem if it continues.
- Global capital markets can provide much of this in combination with strategic use of ODA technical assistance, grants, local capital, etc.
- Stakeholders committed to addressing the energy poverty equation must work together on these solutions.