Sharing the experience of bioeconomy opportunities in Africa

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Modern bioenergy technologies (liquid, gaseous and solid) have tough time in the energy market (in terms of policies, plans, financing, acceptance) despite the huge advantage and comparative advantages they hold in terms of addressing the core energy poverty and others SDGs.
Bioenergy Framework & Policy Guidelines
- Validation workshop of “Framework”
- Endorsement by CEMA
- Modern bioenergy development resolution

ECA/AUC Studies on bioenergy
- Technical/economic viability
- Policy development

Adoption of Bioenergy Resolution by AU Assembly (Addis Ababa)
- Endorsement by AY heads of state & governments

Africa & International Expert Group Meeting (Addis Ababa,)
- Data validation
- Recommendations

Mainstreaming “Framework” in policy making
- Workshop in Nairobi, Kenya

Gender mainstreaming in the Framework
- Validation, Kigali (Rwanda)

Project Packaging Workshop (Addis Ababa 10/16)

Biofuels for Household & Transport Sectors
- Bioenergy Case Studies
- Capacity Development (Zulwini, Arusha & Accra)
- Biofuels Training (Port Louis, Cairo & Dakar)
- Technical visits (Gaborone, Mbabane, Dar es Salaam, Lilongwe, Kampala, Antananarivo)

Dialogue on Bioenergy (Nairobi, Kenya 12/16)
1. It is business-as-usual in many African countries in terms of biomass energy use in both urban and rural areas DESPITE increase in electrification

- 2000 and 2017 shows very little changes in countries biomass use
- Is the strategy to combat biomass use (charcoal and woodfuel) succeeding?

How can bio-economy in quantifiable manner leads to the decrease of traditional biomass use in countries?
2. ALMOST all African countries and regional bodies have policies and even TARGETS on renewable energy

- All Regional Economic Communities have policies and strategies targeting the increase of RE in energy portfolio
- Over the years set up special institutions to support MS in implementation
  - RE&EE centres an example
- Donor support is conspicuous in RE (figure)
- Billions of $ invested in programs at country & regional levels

*The percentages presented in this graph have been calculated on the basis of the total of 58 initiatives and programs

How many of these big initiatives are targeting modern bioenergy and who is leading them, etc., etc., ...
3. African countries have generally FAILED in introducing clean cooking technologies for their populations

- Price competitiveness of fuel – Cost the HH vis-à-vis traditional (e.g. spot price ethanol & gelfuel vs price of charcoal)
- Capital costs associated with fuel switching, as HHs must make significant investments in stoves compatible with modern fuels
- Underdeveloped distribution infrastructure of clean cooking fuels
- Poor information flow between producers, consumers and intermediary organizations
- Gender issues – Who’s priority is cooking

How will the strategy contribute to increasing clean cooking in the countries?
What innovative strategy to address the above realities?
4. COMPETITION is high even within the renewables space – we leave in the world of “least cost plans sell faster”

- The concept of “Energy Services” vs the “Energy Source – which is NB or matters to the end-users?
- Renewables prices have been going down over the years…. What about modern bioenergy technologies?
- What are the priorities of the countries? Is it electricity access or energy?
- Bioenergy plays a role in distributed energy generation space (mainly) ... how does it compare with its peers
- Scale of operations determines impacts expected or perceived

How does the strategy articulates comparable advantages of bioenergy technologies vis-à-vis other RETs or even non RETs?
5. Do have countries have specific targets for bioenergy? If not it treated as a “by the way” to pacify activists

- Analysis needs to be done i.t.o of how countries treat bioenergy and quantify actions – otherwise nothing can be done
- Specific country plans has to be clear on targets and countries approach
- How much of the overall RE or energy budget goes to the bioenergy
- What are the institutional mechanisms at country level to promote bioenergy?

How can this strategy and plan galvanise country and regional support to the promotion of bioenergy technologies (e.g. solar strategies, geothermal, etc.)?
6. Amongst a myriad of international programmes and financing mechanisms, which ones are focussing on promotion of bioenergy in Africa? How can they be accessed?

- Dedicated financial systems for different risks and technology specific
- Different modalities and means of engagements with partners
- Different level of engagements – mostly support countries (so the government engagement is key especially strategic role a project plays is NB)
- An expected commitment from the country (including the RoI).

What is the plan to (a) identify and (b) engage international programmes and financing mechanism to support bioenergy projects? What institutional mechanism will be used?
7. Do countries have technical capacity to develop a range of bioenergy projects? Have the programme identified the “right” project developers for support? Are the Project Developers representatives of country’s or regions’?

Since inception the project has worked mainly in the following countries:

- South Africa
- Lesotho
- Swaziland
- Botswana
- Zimbabwe
- Malawi
- Madagascar
- Mauritius
- Madagascar
- Tanzania
- Ghana
- Senegal
- Nigeria
- Sierra Leone
- Kenya
- Ethiopia
- Sudan
- Egypt
- Rwanda
- Burundi

Projects Analysis (27 Project Ideas)

- 2 projects from private sector on-going and generating profit and requests were for scaling up, financing, partnerships and network
- 10 projects – ideas but no project infrastructure in place (good ideas) but not evidence of support
- 7 projects – more enabling environment (policy support)
- 5 projects for NGO type capacity building and/or marketing
- 6 projects not really identifiable in terms of scope - Idea
8. A majority of project sponsors/project developers lack financial means to fund some of the early project activities, such as a pre-feasibility, project structuring packaging. Some never had direct experience of projects proposed.

- Most projects were/are not operational and they did not have seed funding/finance to begin operations – proof of concept
- Many could not fill the template of the IRENA Sustainable Energy Market Place because focussed on support of existing projects.
- Support required is beyond the scope of this initiative – as support is much more at technical level
- Assistance is needed beyond the project development phase
Consequently the business case for bioenergy is not very strong because of lack of built networks to assist in incubating ideas as well as lack of institutional support (in organisational development or support at country level).
10. The agenda of bioenergy cannot be on the table for ever. There has to be a dynamism otherwise it will be overtaken by other technologies that perform similar function – it had stayed this long because of political support – and if not progress it can’t survive beyond the next STC
THANK YOU!