Stakeholder Forum for Our Common Future
Implementation Conference
Energy

Proposal/Action Plan for discussion and consideration

- ***Energy for two billion people who currently do not have access***

- ***Changing current Energy patterns and making them conducive to sustainable development***

Community Level Mini- hydro/ Biomass projects (ITDG)

Background

The Intermediate Technology Development Group (ITDG) specialises in helping people to use technology to reduce poverty in developing countries.
ITDG has a number of community level renewable energy projects underway in the developing world. It is proposed that Stakeholder Forum and the Implementation Conference strengthen, broaden, replicate or create new ITDG projects.

It was decided to keep this action plan focused on two projects: biomass and micro hydro projects. It was also decided to focus on a limited geographical area: East Africa. Biomass has been deemed a priority due to the associated adverse effects on health. Micro hydro is being focused upon where communities seek additional options for energy supply. Micro hydro is sustainable, not only because it is a renewable energy source, but also because the community can participate in designing, building and maintaining the project.

ITDG projects are a long-term process. They take around three years to establish the minimum skills in a country. The necessary project steps are as follows:

1. Establishing funding.
2. Identifying technology that has proven to be successful.
3. Create / find sufficient market. (Through the use of self help groups, cooperative/ community banks, micro-credits/ local grants and the effective use of media to disseminate proven info and knowledge).
4. Ascertain / train local production capacity and coordinate use with local stakeholders (i.e. for mini hydro farmers are especially important). Capacity building through training of trainers is particularly important. Community groups and centres of excellence are focused on.
5. Existence of market for energy use (local grid or batteries).

Major Stakeholders

1. Intermediate Technology Development Group (ITDG)
2. Communities without energy, perhaps identified through networks like Networks such as ICLEI, Energia and the Global Eco-village Network
3. Local and national authorities
4. Intergovernmental organisations

5. Micro financiers
6. Funders: governments, intergovernmental organisations, businesses
7. Manufacturers
8. Local NGO's
9. Academia

Objective
To provide affordable, accessible and appropriate sustainable energy to communities in need of energy, so as to reduce poverty.
By
1. Exchanging information with regard to micro hydro and biomass ITDG programs in East Africa.
2. Exploring, through a multi-stakeholder process, scaling up opportunities for ITDG biomass and mini-hydro programs in East Africa.
3. Finding funding to do this.
4. Producing a clear plan of action to achieve these aims.

Scope
Small scale community level biomass and micro hydro projects in East Africa.

Target Area
East Africa

Why biomass/ micro-hydro?
1. It provides reliable energy.
2. The energy is renewable and without adverse effects on the environment
3. Once people within the community have been trained the hardware can be produced and maintained by the communities themselves.
4. For three billion people, the main energy usage is 'biomass' – wood, charcoal, and organic waste – for cooking. This biomass is associated with adverse health effects through indoor air pollution. Improved biomass technology can reduce these adverse health effects.

What biomass/ mini-hydro power do?
1. Provide reliable sustainable power for:
   Health centres (in particular for vaccine refrigeration)
   Potable water supply
   Communal lighting
   Household lighting, which allows study time for children after dark.
   Rural communications (TV, radio and cb radio to keep in contact outside rural area).
2. Provide enterprise and jobs through the production and maintenance of the hardware.
3. Provide opportunities for income generation through selling excess power
4. It will also facilitate existing work such as carpentry the milling of crops and milking.
5. Improved biomass technology will reduce adverse health effects of indoor air pollution

Implementation

1. Identifying relevant stakeholders and inviting them to the IC
2. Producing draft plan of action for the Implementation Conference
3. Working through the objectives outlined above while at the IC
4. Establishing possible funding
5. Producing a clear plan of action for the future

Selection Criteria for Action Plans/ Energy

Framework	*Yes/ No*
IC Team side • The AP is **manageable** in terms of staff and time	Yes we have the staff and time, although time is short.
Possible partners side • The AP involves **2 or more stakeholder groups** organisations • There are **interested parties** or even **champions** who we know want to work on the AP; preferably those with influence / 'pulling power' • It is possible to get the appropriate **governments, intergovernmental bodies, local authorities** involved	Yes the project will involve around 8 or 9 stakeholder groups Yes ITDG are the leading stakeholder Yes, ITDG can get the Kenyan environment ministry and local authorities and SF have invited UNEP/ UNDP/ GEF/ World Bank
Finance • The AP seems **fundable** (our assessment at this point) • The AP is **building on what's already happening** – are there pilots? Experiences? Best practices?	Similar ITDG have gained funding in the past Yes ITDG has conducted these
A (brief) assessment of feasibility would cover • The AP is **meeting local needs** • It involves the **participation of local communities** • It fits into **national policy frameworks** • It promotes **appropriate technology transfer** • It includes an assessment of its **impact at the macro & micro level**	Yes, it provides them with a energy that is sustainable, income generating and healthy Yes, local communities can build the hardware themselves Yes Yes, the technology is cheap and sustainable ITDG, may have previously conducted an impact assessment
Content	
The AP represents a **clear strategy** that will lead to action	Yes

Overall Objectives: • The AP contributes towards **access to energy** for the 2 billion people without access • It contributes to **changing the current energy patterns** towards sustainable practices	 Yes Yes
The AP contributes towards Poverty Alleviation through: • **Employment** • **Education** • **Health** • **Increasing gender equity**; decreasing women's workload in developing countries	 Yes Yes Yes Yes
The AP has potential to be **replicated**	Yes
The AP includes **monitoring and evaluation mechanisms**	These will be maintained by ITDG

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