



UNDP Energy Projects in Kenya

***UNCTAD-KenInvest Workshop
Promoting FDI in the Solar Energy Sector***

***27 October 2015
Nairobi, Kenya***



UNDP and Sustainable Energy



- Sustainable Development Goals-goal no. 7
 - Ensure access to affordable, reliable and sustainable modern energy for all
- UNDP supports energy sector transformation through interventions on:
 - Policy, finance, capacity development and awareness creation
- Encourage investments that help deliver sustainable energy products and services and derisking policy and financial environment
- Energy access, energy efficiency and renewable energy



Voluntary Solar PV Accreditation



- Market spoilage: poor quality of products, design and maintenance
- Only 48% met users expectations
- Only 36% and 10% properly installed and designed
- Reduce market governance, increase consumer confidence and improve access
- Mobile based tool which households can access information on products and technicians



Solar Technicians Training



- Catalyze institutionalization of solar training in public technical training institutions and standardization of private sector based solar training programs
 - Training curriculum and manual on PV and solar water heating
- Trained Technical Training Institutes (TTI) on Solar PV and thermal installation and repair
 - Training of trainers from TTIs

Low Cost Quality Solar Lanterns



- Technical and socio-economic baseline of existing solar lanterns
- Development of low cost solar lanterns with KIRDI
- Facilitate promotion and distribution of quality lanterns

Market Transformation of Highly Efficient Biomass Stoves for Institutions and MSEs



- Over 95% of about 20,000 institutions (schools, colleges, hospitals)
 - Use firewood as the main source for cooking and heating water
- 4 year GEF project (US\$ 1 million)
- Promote highly efficient improved stoves
- Establishment of woodlots owned and managed by the institutions and private sector



Results



- Over 2000 improved installed in over 1000 schools
- Over 500 household and over 100 SME stoves (such as hotels and restaurants)
- Schools and small and medium-size enterprises have planted about 600,000 trees, equivalent to about 34.2 ha of tree plantations.
- Revolving fund grown from the initial US\$50,000 to US\$750,000
- A draft national wood fuel development strategy and action plan produced



Piloting Bioethanol as an Alternative Cooking Fuel

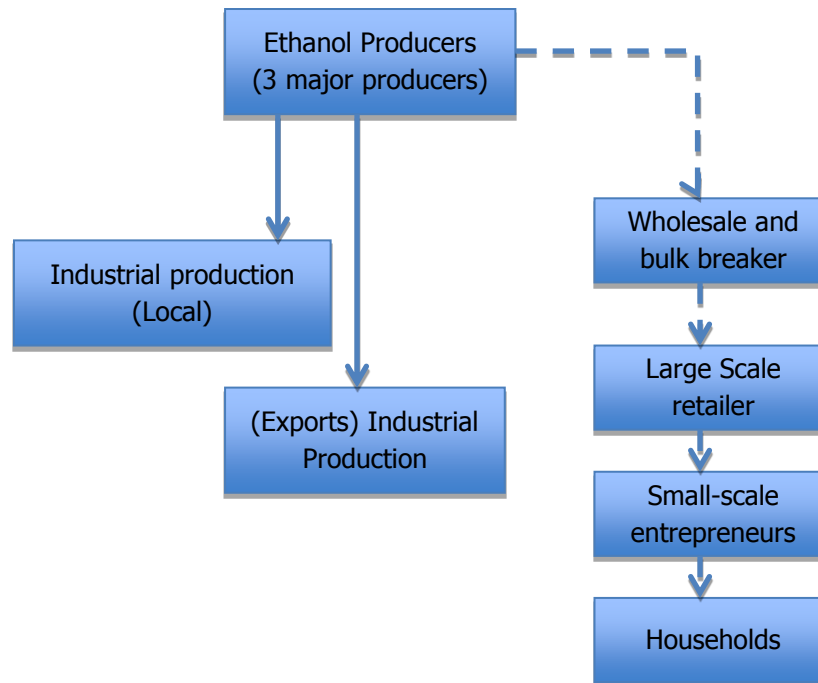


- Testing the viability of ethanol as a clean, affordable, and easily accessible household fuel and stimulate demand
- Structures for commercialization and policy action
 - Define the market
 - User preference
 - Jump start the stove market chain through financial support
- Feasibility studies for manufacture and distribution of stoves and other appliances throughout Kenya

Bio-ethanol promotion

- Discourage diversion of denatured Bioethanol fuel for household cooking to other uses.
- Focus on developing local markets as opposed to export market
- Encourage research and development on Bioethanol feedstock
- Provide incentives to support the growth of Bioethanol industry for instance subsidies, low-interest loans and tax waivers on Bioethanol production machineries, equipment and appliances
- Encourage sugar companies to diversify into production of denatured Bioethanol thus increasing their revenue and create more job opportunity
- Develop a standard denatured Bioethanol as an alternative household fuel for cooking and for a Bioethanol cook stove.
- Mediate price fluctuation to some extent, especially in the initial stages
- In the financial year 2015/2016, the Government removed excise duty from the denatured Bioethanol.

Bioethanol Distribution Model



GEF Small Grant Programme

Biogas as an Alternative Renewable Energy Project



- Promote the use of biogas in household (lighting and cooking) as an alternative to kerosene, LPG and firewood
- Biogas units (6m³ to 20m³) introduced in 72 households
- 50% financing from beneficiaries
- Each household able to save US\$60/month



End

Thank you!