CURRENT NATIONAL ENERGY POLICY OF TANZANIA AND CHALLENGES ON SUPPORTING RENEWABLE ENERGY SECTOR

“It is time for a sustainable energy policy which puts consumers, the environment, human health, and peace first.” DENNIS KUCINICH, speech, Sep. 27, 2005”
What is Energy Policy

- **Energy policy** is the manner in which a given entity (often governmental) has decided to address issues of energy development including energy production, distribution, and consumption. The attributes of energy policy may include legislation, international treaties, incentives to investment, guidelines for energy conservation, taxation, and other public policy techniques. - Wikipedia
Measures used to produce an energy policy

- A national energy policy comprises a set of measures involving the country's laws, treaties and directives.
- The energy policy of a sovereign nation may include one or more of the following measures:
statement of national policy regarding energy planning, energy generation, transmission and usage

Legislation on commercial energy activities

legislation affecting energy use, such as efficiency standards, emission standards

instructions for National-owned energy sector assets and organizations

active participation in, co-ordination of and incentives for mineral fuels exploration and other energy related research and development

Fiscal policies related to energy products and services (taxes, exemptions, subsidies ...)

energy security and international policy measures
Factors within an energy policy

- What is the extent of energy self-sufficiency for this nation
- Where future energy sources will derive
- How future energy will be consumed (e.g. among sectors)
- What fraction of the population will be acceptable to endure energy poverty
- What are the goals for future energy intensity
- What is the reliability standard for distribution reliability
- What environmental externalities are acceptable and are forecast
- What form of "portable energy" is forecast (e.g. sources of fuel for motor vehicles)
- How will energy efficient hardware (e.g. hybrid vehicles, household appliances) be encouraged
- How can the national policy drive province, state and municipal functions
- What specific mechanisms (e.g. taxes, incentives, manufacturing standards) are in place to implement the total policy
Tanzania Energy Policy

- The first National Energy Policy for Tanzania was formulated in April 1992.
- Since then, energy sub-sectors as well as the overall economy have gone through structural changes, where the role of the Government has changed, markets have been liberalised and private sector initiatives encouraged.
- The policy document has been revised in 2003 taking into account structural changes in the economy and political transformations at national and international levels.
- The revised (2003) national energy policy objective for the development of the energy sector remains to provide an input in the development process by establishing an efficient energy production, procurement, transportation, distribution, and end-user systems in a sustainable manner.
Vision and Mission

- The Vision of the energy sector is to effectively contribute to the growth of the national economy and thereby improve the standard of living for the entire nation in a sustainable and environmentally sound manner.

- The Mission for the energy sector is to create conditions for the provision of safe, reliable, efficient, cost-effective and environmentally appropriate energy services to all sectors on a sustainable basis.
Policy Objective

- The national energy policy objectives are to ensure availability of reliable and affordable energy supplies and their use in a rational and sustainable manner in order to support national development goals. The national energy policy, therefore, aims to establish an efficient energy production, procurement, transportation, distribution and end-use systems in an environmentally sound and sustainable manner.
The information collected from different sectors and individuals in 2010/2012 showed the results on the right.
Challenges to the Tanzania Energy Policy

- No clear goals for RE technologies as Interventions to the Energy Policy
- Lack of laws to guide R.E. technologies;
- Lack for specific policy for R.E;
- Lack of strategic implementation plan (short, midterm and long term plans);
- Lack of implementation support on monitoring and evaluation as well as measurable indicators on policy implementation;
- Lack of policy review and research;
- Some laws and regulations are still drafts (Lack of legal support);
- Lack of awareness at local level; and
Can this be a Major Challenge to the Energy Policy implementation and formulation of Renewable energy policy Until Recent? Or is it still a challenge?

“..........We have everything we need except political will, but political will is a renewable resource.”
Al Gore

- Lack of government commitment?
- Lack of Political will?
NEED FOR RENEWABLE ENERGY POLICY

"Our dependence on fossil fuels amounts to global pyromania, and the only fire extinguisher we have at our disposal is renewable energy." – Hermann Scheer, MP German Bundstag 1980-1993
In 2009, the world relied on renewable sources for around 13.1% of its primary energy supply, Renewables accounted for 19.5% of global electricity generation and 3% of global energy consumption for road transport in the same year.- IEA statistics

How much has the industry grown in recent years in Tanzania?

Can oil and Gas be enough?

What about unstable oil prices in the world market?

What about the supply of electricity?

Rural access to Electricity?

What about climate change and green house gas emissions?
“The use of renewable energy technologies such as solar systems has helped to facilitate sufficiently appropriate and cost effective energy supply in rural areas where there is no national grid and now people enjoy modern communication by charging their mobile phones with the aid of solar electricity.”

To truly transform our economy, protect our security, and save our planet from the ravages of climate change, we need to ultimately make clean, renewable energy the profitable kind of energy.

**BARACK OBAMA, Address to Joint Session of Congress, Feb. 24, 2009**

### Selected renewable energy indicators

<table>
<thead>
<tr>
<th>Selected global indicators</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
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<tbody>
<tr>
<td>Countries with policy targets for renewable energy use</td>
<td>79</td>
<td>89</td>
<td>98</td>
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<tr>
<td>States/provinces/countries with feed-in tariffs</td>
<td>71</td>
<td>82</td>
<td>87</td>
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<tr>
<td>Renewable portfolio standard policies</td>
<td>60</td>
<td>61</td>
<td>63</td>
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<tr>
<td>States/provinces/countries with biofuels mandates</td>
<td>55</td>
<td>57</td>
<td>60</td>
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<tr>
<td>Investment in new renewable capacity (annual)</td>
<td>130</td>
<td>160</td>
<td>211 billion USD</td>
</tr>
<tr>
<td>Existing renewables power capacity, including large-scale hydro</td>
<td>1,150</td>
<td>1,230</td>
<td>1,320 GWe</td>
</tr>
<tr>
<td>Existing renewables power capacity, excluding large hydro</td>
<td>200</td>
<td>250</td>
<td>312 GWe</td>
</tr>
<tr>
<td>Wind power capacity (existing)</td>
<td>121</td>
<td>159</td>
<td>198 GWe</td>
</tr>
<tr>
<td>Ethanol production (annual)</td>
<td>67</td>
<td>76</td>
<td>86 billion liters</td>
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Renewables 2011: Global status report
Renewable Energy Policy formulation

Renewable energy policy and politics (Mallon 2006)

Industry

- Fossil fuel and RE costs converge.
- Fossil fuel ‘taxed’ or capped.
- Fossil fuels ‘impeded’. RE costs declining.
- Fossil fuel investment uncertain. RE secure.
- RE Investment is credible.
- RE technology is credible.
- Fossil fuel is good. RE is uncertain.

Government

- Address market and system restructure.
- Enact carbon constraints.
- Commitments on carbon and markets for RE.
- Question role of fossil fuels.
- Enter international climate negotiations.
- Support some level of RE.
- Pro-fossil fuel and cheap energy.

(Civil) Society

- Stakeholders in major RE development.
- Seek action on carbon or compensation on carbon.
- Question cost of impact (present/future).
- Aware of causes and solutions (fossil fuel and RE).
- Aware of climate impacts.
- Aware of RE as possibility.
- Unaware of climate change issues.

Note: RE = renewable energy.
Policy Statements on RE on the Energy Policy

- 25. Tanzania shall conduct research within the country and take part in international research, development and application of commercially viable, large-scale technologies for renewable sources of electricity generation. The National Energy Policy 2003, page 21 (under Electricity section)

- 45. Promote entrepreneurship and private initiative in the production and marketing of products and services for rural and renewable energy. The National Energy Policy 2003, page 28 (under Rural Energy section)

- 56. Promote development of alternative energy sources including renewable energies and wood fuel end-use efficient technologies to protect woodlands. The National Energy Policy 2003, page 32 (Under Environment, Health and Safety)
36. Establish norms, codes of practice, guidelines and standards for renewable energy technologies, to facilitate the creation of an enabling environment for sustainable development of renewable energy sources.

37. Promote efficient biomass conversion and end-use technologies in order to save resources; reduce rate of deforestation and land degradation; and minimizing threats on climate change.

38. Ensure inclusion of environmental considerations in all renewable energy planning and implementation, and enhance co-operation with other relevant stakeholders.

Any comments on the Renewable Energy statements on the Energy Policy?

Their implementation?
Leveling the playing field

The IEA has identified three actions which will allow renewable energy and other clean energy technologies to "more effectively compete for private sector capital":

- "First, energy prices must appropriately reflect the “true cost” of energy (e.g. through carbon pricing) so that the positive and negative impacts of energy production and consumption are fully taken into account".
- "Second, inefficient fossil fuel subsidies must be removed, while ensuring that all citizens have access to affordable energy".
- "Third, governments must develop policy frameworks that encourage private sector investment in lower-carbon energy options".

IEA, 2012-Tracking Clean Energy progress
Examples of Renewable Energy Policies

RENEWABLE ENERGY POLICY FOR UGANDA-March 2007

- Government’s Policy Vision for Renewable Energy is:

To make modern renewable energy a substantial part of the national energy consumption.

- The Overall Policy Goal is:

To increase the use of modern renewable energy, from the current 4% to 61% of the total energy consumption by the year 2017.

- Mozambique draft Policy -2009

- South Africa Renewable energy white paper Policy 2004-10,000GWh by 2013
Some of the basics on RE policy Contents

- Need for renewable energy Policy
- Technology
- Investments
- Legal frame work
- Taxes
- Climate change (GHG)
- Research and Development
  - Accessibility and affordability
  - Standards and quality assurance of RET
  - Technical and Institutional Capacity
- Feed in Tariff
- Isolated Grids
“Mheshimiwa Spika, kazi zilizopangwa kutekelezwa kwa Mwaka 2012/13 katika Sekta ya Nishati ni pamoja na: …… kuendeleza nishati jadidifu (renewable energies); na kudurusu na kuandaa sera za nishati.”

Prof Sospeter Muhongo, hotuba ya bajeti ya wizara ya nishati na madini 2012/2013

“………We have everything we need except political will, but political will is a renewable resource.”

Al Gore
“We can’t have an energy strategy for the last century that traps us in the past. We need an energy strategy for the future — an all-of-the-above strategy for the 21st century that develops every source of Energy — Barack Obama — March 15, 2012
WORKSHOP DISCUSSION

Stakeholders Inputs to the National Renewable Energy Policy to be developed by the Ministry of Energy and Minerals (MEM)
Some few guidance's on discussion

- Need for renewable energy Policy
- Technology
- Investments (importation and local assembling/manufacturing)
- Legal frame work
- Taxes
- Climate change (GHG)
- Awareness rising
- Target (Vision and goals)
- Research and Development
- Accessibility and affordability
- Standards and quality assurance of RET
- Technical and Institutional Capacity
- Feed in tariff
- Isolated Grid