Overview, Challenges and Elements of Plan of Action

O. Davidson, Y. Sokona and N. Wamukonya
Stages of development and energy consumption

Reserves-to-Production Ratio for Fossil Sources
(Africa and World)

- **Coal**
- **Gas**
- **Oil**

- **World Average**
- **Africa**

Years:
- 0
- 50
- 100
- 150
- 200
- 250
- 300
The African Energy Vision
Africa's New Masterplan
To Develop Sustainably African Vast Energy Resources for Increased Productivity, Wealth Creation and Improved Quality of Life for Africans
How Can Africa Achieve this Vision? (1)

• Think Bigger Act Faster
• Scale up Both Local and External Energy Investments for Projects/Programs that Lead to Sustainable Development
• Revisit the Current Approach of Household Energy Issues i.e. Indicator of access to electricity, etc.
How Can Africa Achieve this Vision? (2)

• Shift the Focus to Industrial and Productive Energy Issues

• Develop and Organise Resources (Human, Infrastructure and Institution) to Increase Effectiveness

• Take Ownership of Externally Funded Projects/Programs

• Develop and Facilitate Implementation of Integrated Development Plans in Particular Incorporating Full Menu of Options (Energy)
Challenges Facing African Energy Sector
Financing Energy Investments

• Mobilizing of Sustainable Local Financing Opportunities
• Reducing High Dependency on External Financing Sources (ODA & Loans)
• Reducing Long Lead Times from Project Concept to Implementation Associated with Financing
• Improving Financial Management Needed to Achieve Optimization
• Developing Downstream Infrastructure
ODA Investments in African Energy Sector ('000 US$)
Energy and Environment Nexus

• Reconciling Global and/or Local Environmental Concerns with Africa’s Energy for Development Needs
• Articulating Sustainable Energy in African Context vis-a-vis Generic Approach
• Circumscribing Role of Energy Efficiency and Renewables in the African Energy Systems
Modern Fuels Production, Consumption and Exports, 1997

Shifting the Balance

More than two-thirds are exported

Production
Consumption
Exports
Changing the balance to address local growth needs

57% consumption
43% export
Curbing the NG Flaring

- S.S. Africa 73%
- S. America 12%
- North Africa 6%
- N. America 2%
- FSU & CEE 3%
- Europe 1%
- Asia 3%

Amount could generate electricity for the whole continent
Widening and Increasing the Use of NG

Natural Gas Production and Use in Africa

- Gas Flared: 71%
- Gas Marketed: 11%
- Gas Use: 7%
- Gas re-injected: 11%
Increasing and Widening Electricity Consumption for Development

annual growth rate of electricity consumption

AFRICA
NA
SSA
Where is the electricity in Africa?

- South Africa: 50%
- North African countries: 30%
- Other sub-Saharan Africa: 20%
Power Sector Reform

• Incorporating Socio-economic Issues into the Reform Programs
• Disseminating Lessons Learnt on Improving Ongoing Reforms
• Improving Negotiating Capacities with Private Sector, Bilateral, Multilateral and International Financing Institutions
• Defining, Clarifying and Implementing Various Institutions Roles
Increasing Regional Cooperation & Trade

- Procuring Oil and Gas Collectively
- Eliminating 3rd Party Financing in Oil and Gas Procurements
- Improving Compatibility Between Development of Oil and Gas with Local Needs
- Improving and Widening Refining Infrastructure
- Adapting and Harmonizing Standards and Policies
- Overcoming ‘Inconvertible’ Currencies Issues and Lack of Trust
Providing Energy for Improving Income Status at Various Levels

Number of People

Income Levels

Poor

$1/day

Wealthy

Rural Areas

Urban Areas

CBOs

SMEs

Utilities

$1/day

Wealthy

Poor
Elements of the Plan
General Guiding Principles in Considering Elements of Plans

Cost-effectiveness

Sustainability

Resource limitations in the continent

Ownership and self realisation
Structure of the Plan

- Cross Sector Issues
- Human Resource Development
- Oil and gas development and use
- Power sector development
- Regional co-operation
- Rural transformation
1. **Objective**: Elaborate on an African Energy Agenda

**HOW**:
- Establish an African Energy Minister Forum
- Develop Analytical Capacity to Integrate Contextual Issues into the Agenda
- Develop Institutional Capacity to Implement the Agenda
Cross sectoral (2)

2. **Objective**: Shorten Duration Between Project/Program Conception and Implementation

**HOW**:

- Assist Countries in Undertaking Reliable Analytical Work
- Assist in Maximising use of Human Resources
- Assist Countries in Accessing other Financing including Regional Finance (beyond multi-lending)
3. **Objective**: Continental Ownership and Control of Projects/Programs

**Why**: Integrate into Development Goals and Plans

**HOW**:
- Develop Strategies to Incorporate Projects/Programs into overall Development Plans
- Organize Policy Dialogues between Energy Analysts and Government Agencies
- Assist Countries to Utilise Regional Expertise
- Organize Policy Forums between Donors and Government Agencies to Discuss Implications and Approaches
Human Resource Development (1)

• **1. Objective**: Develop Technical and Negotiating Capacity

• **HOW**:
  - Design and Implement Targeted Regional Training Programs in Cooperation with Existing Training Institutions
  - Set up Coordinating Mechanism to Locate Regional Expertise
Human Resource Development (2)

• **2. Objective**: Mobilize existing Human Resources

• **HOW**:  
  – Develop a Roster of Experts  
  – Design and Implement Mechanisms that Enable use of this Roster e.g. make it mandatory that every project demonstrates the use of this roster
1. **Objective**: Stimulate Demand by Developing Downstream Infrastructure

2. **HOW**:
   - Develop cross country plans depicting economies of scale in this approach
   - Market approach to international lenders and donors
   - Sentitise local banking systems
2. **Objective:** Improve trade across Africa

**HOW:**
- Establish a fund fueled by exporters for development in importing countries (mirrors San Jose Accord: Mexico and Venezuela make 20% of the cost of oil purchased by a country available for development projects)
3. **Objective:** establish forums for raising awareness of policy makers on pertinent issues

**HOW:**
- Cooperate with international and local agencies in funding the forums
- Integrate such forums into existing meetings
- Develop the policy background papers for dialogue
Power Sector (1)

• **1. Objective:** facilitate dissemination of pertinent continental issues to international community

• **HOW:**
  – Implement policy forums between policy makers and donors and financial institutions
  – Expose the limitations to privatisation (*and hence enable shortening of path towards better reform*)
  – Package lessons into accessible format and present at policy forums
  – Disseminate lessons (beyond continent) on ability to change trend and the extent to which other external factors influence Power Sector Reform
Power Sector (2)

2. **Objective**: facilitate improved efficiencies

**HOW:**

- Assist formalisation of informal traders through
  - articulating disseminating lessons and opportunities
  - Establishing Legal Framework
- Conduct studies that disaggregate technical with non-technical losses as a mechanisms to highlight management effectiveness of monopoly gov-owned utilities
Regional Cooperation (1)

1. **Objective:** improve trade terms through joint procurement

**HOW:**
- Design joint procurement terms and mechanisms across countries
  - Undertake in-depth analysis of implications and feasibility of such procurement
  - Negotiate across Participating countries on implementation
  - Develop system-oriented rather than political relationships across countries
  - Disseminate lessons on joint procurement
Regional Cooperation (2)

• 2. **Objective**: Adapt and Harmonise Standards
• **HOW**:  
  – Develop Standards Taking into Account Prevailing Disparities and Realities  
  – Identify Barriers to Adoption of Harmonised Standards and Develop Strategies to Assist Countries
Rural Transformation

1. Objective: Facilitate Integration of Energy within Rural Integrated Development Planning Context and stimulating the productive sector in rural areas

HOW:

- Develop integrated Resource Plans Aimed at improving the incomes of Rural Areas
- Facilitate scale-up of mechanisation and expansion of agricultural system
- Assist in setting an energy system that ensures increased value added in rural products
Thank You