



Overview of the Role of Bioenergy in the African energy sector

8th Bioenergy Week and Study Tour for Capacity Building

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Introduction



- ❑ AFREC was created by a decision by African Heads of States and Governments in 2001 and was launched by the African Ministers of Energy in the meeting held in February 2008 in Algiers, Algeria
- ❑ AFREC is AUC specialized with broad mandate as per the convention which include:
 - Develop policies, strategies, researches and plans based on Member states, sub-regional, regional and continental development priorities and recommend their implementation;
 - Design, create and update an energy continental data base and facilitate rapid dissemination of information and exchange of information among Member States, sub-regional, regional and continental institution;
 - Provide technical support, mobilize financial support and capacity building to the Member States, sub-regional, regional and continental institution for the energy sector;

AFREC New Strategy

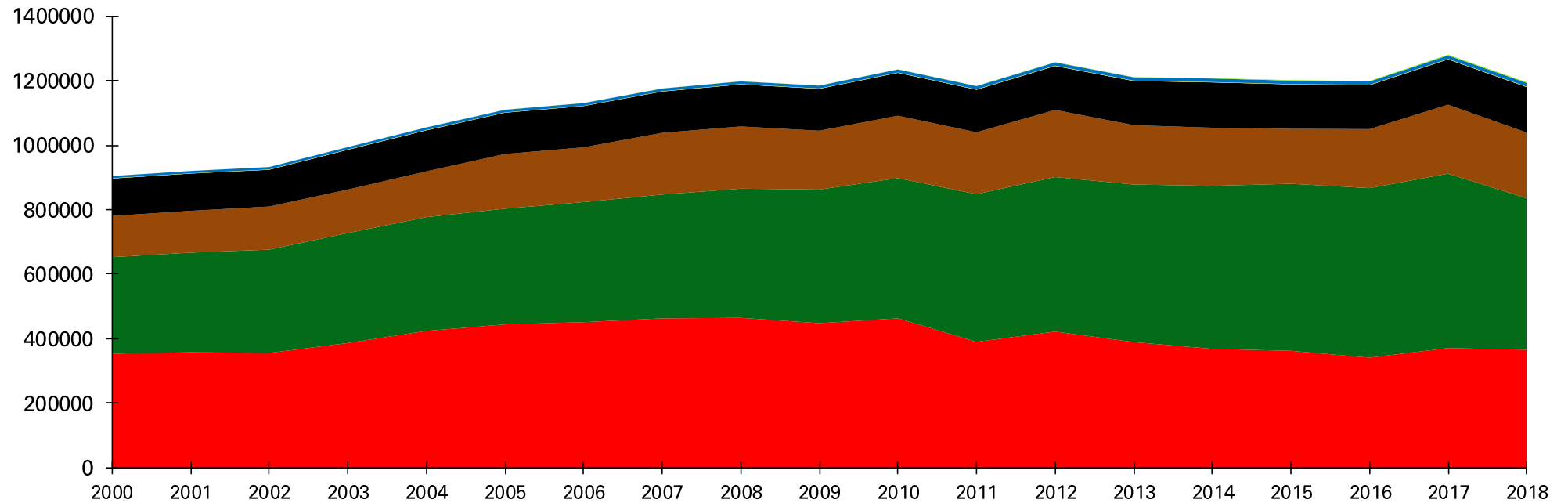


□ AFREC has developed a new strategy based on five main pillars that address the main challenges of the African Energy Sector, these pillars are:

- African Energy Information System (AEIS)
- Bioenergy Programme
- Oil and Gas Programme
- African Energy Efficiency Programme
- African Energy Sector Transition

Status of Bioenergy in Africa

Total Primary Energy Supply (TPES) from 2000 to 2018 by fuel (ktoe)



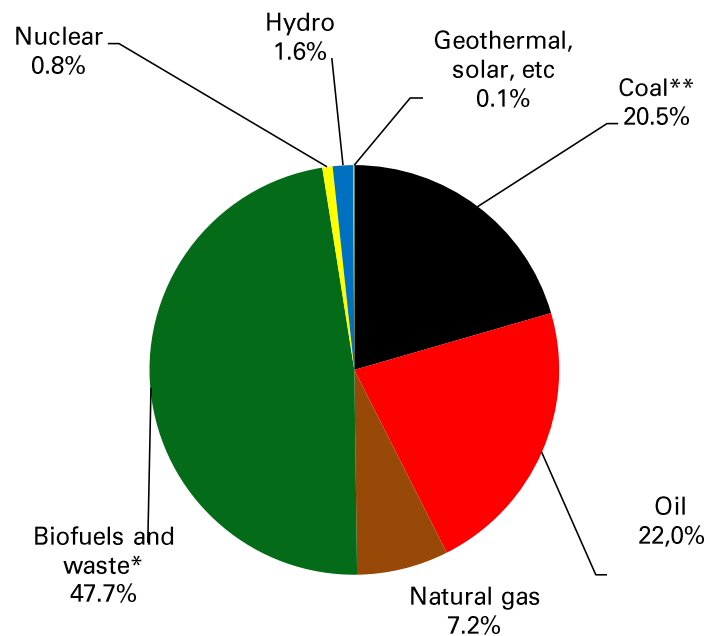
Oil Biofuels and waste* Natural gas Coal** Nuclear Hydro Geothermal, solar, etc

Status of Bioenergy in Africa

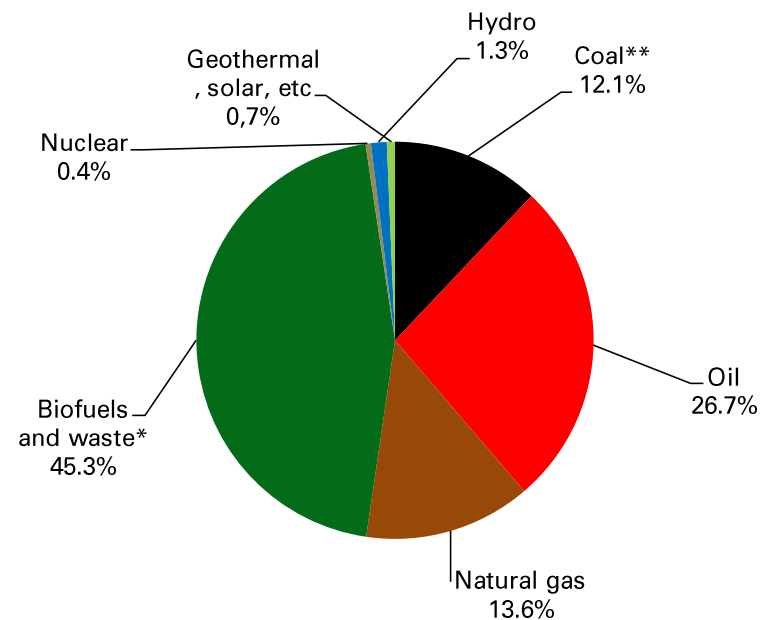
Total Primary Energy Supply (TPES) from 2000 to 2018 by fuel (ktoe)



2000 - (166 468 ktoe)

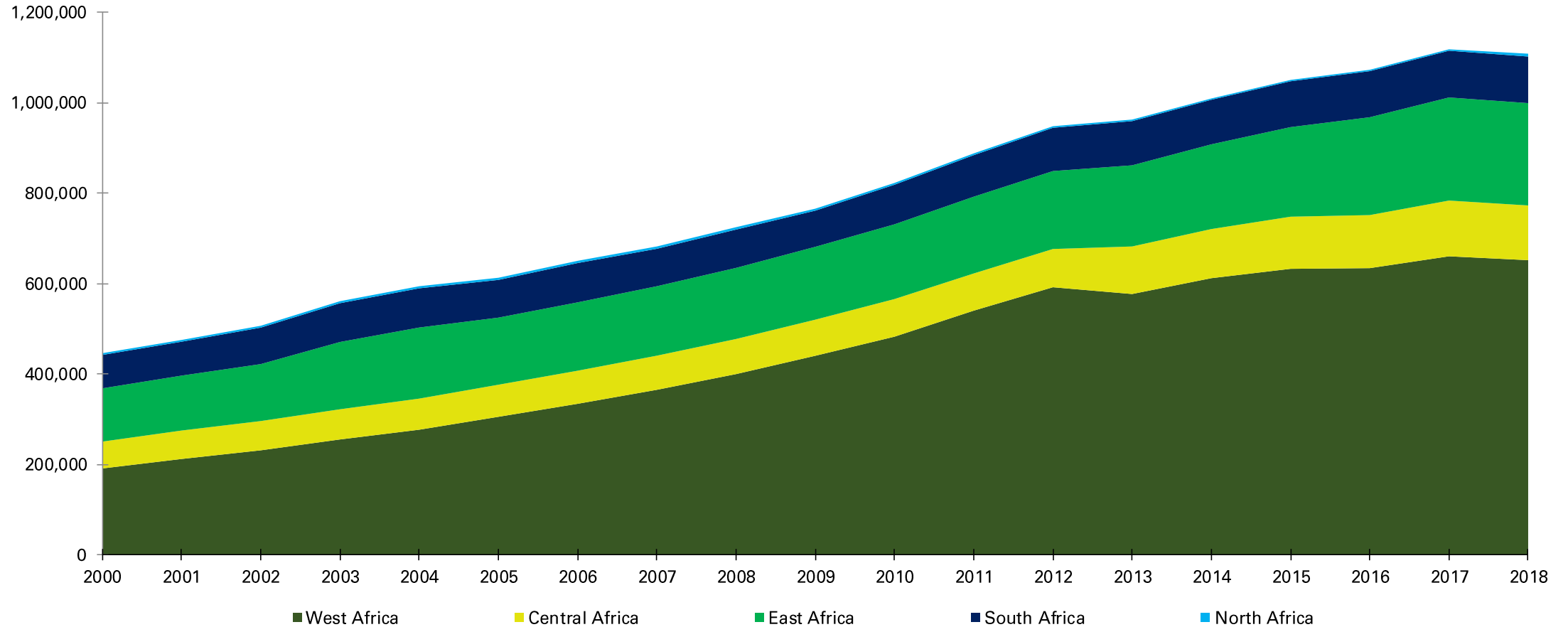


2018 - (414 291 ktoe)



Status of Bioenergy in Africa

Firewood Production from 2000 to 2018 by region (kt)

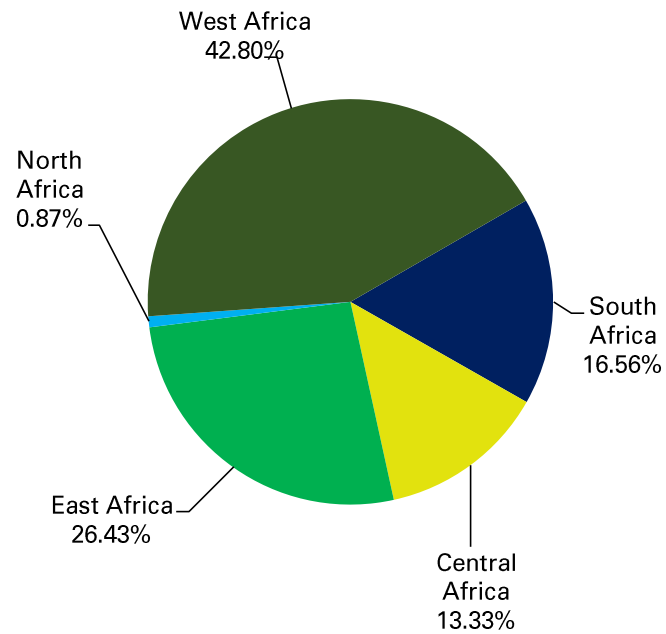


Status of Bioenergy in Africa

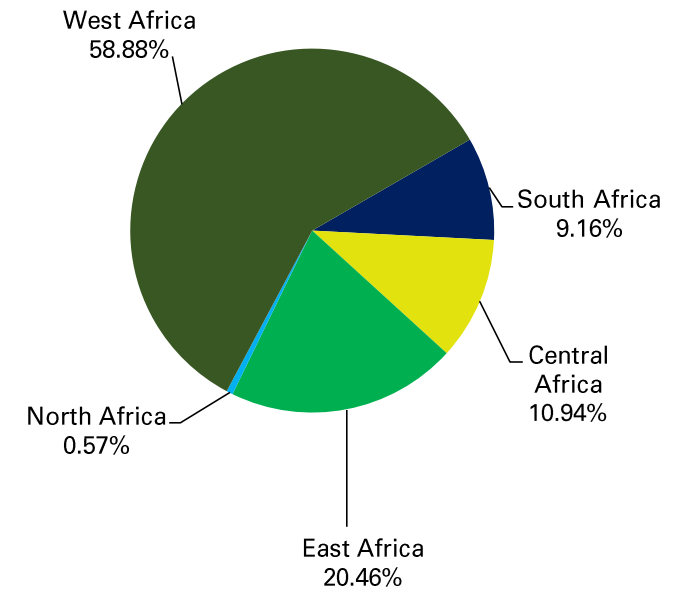
Regional Shares of Firewood Production 2000 - 2018 (kt)



2000 - (190 937 kt)



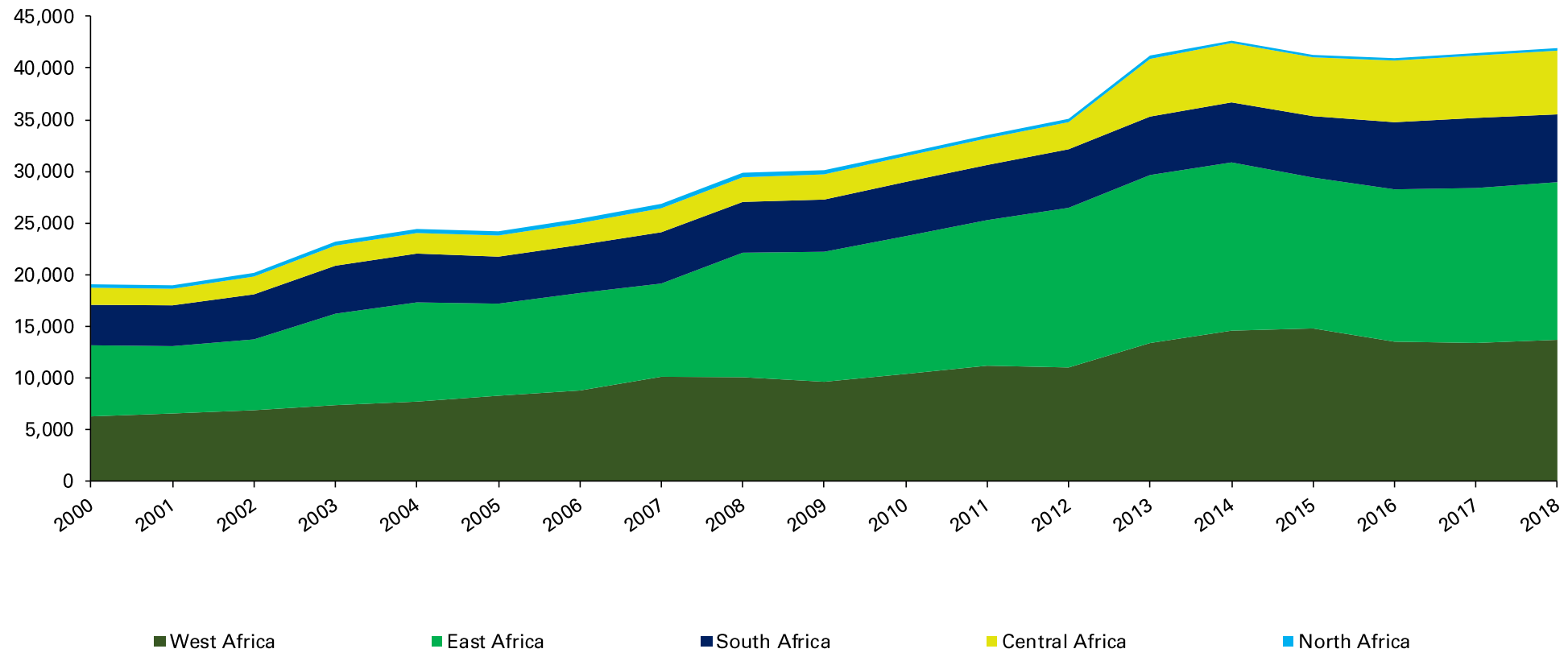
2018 - (651 928 kt)



Status of Bioenergy in Africa



Charcoal production from 2000 to 2018 by region (kt)

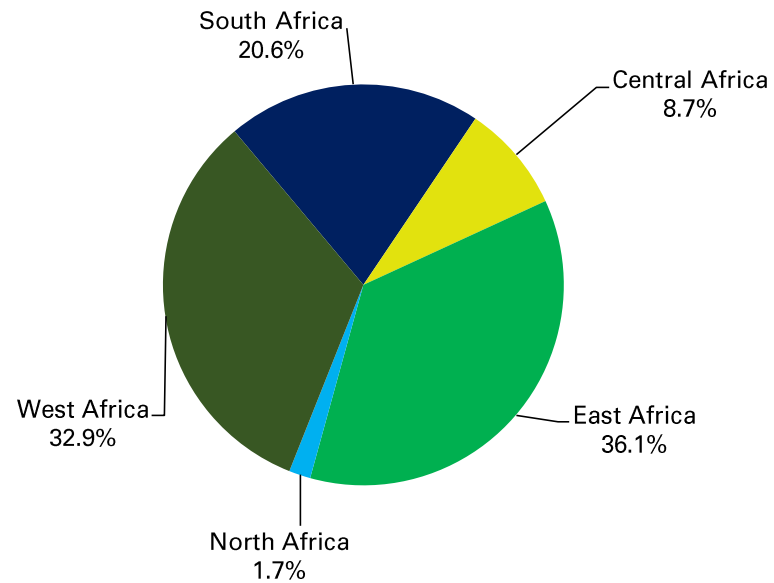


Status of Bioenergy in Africa

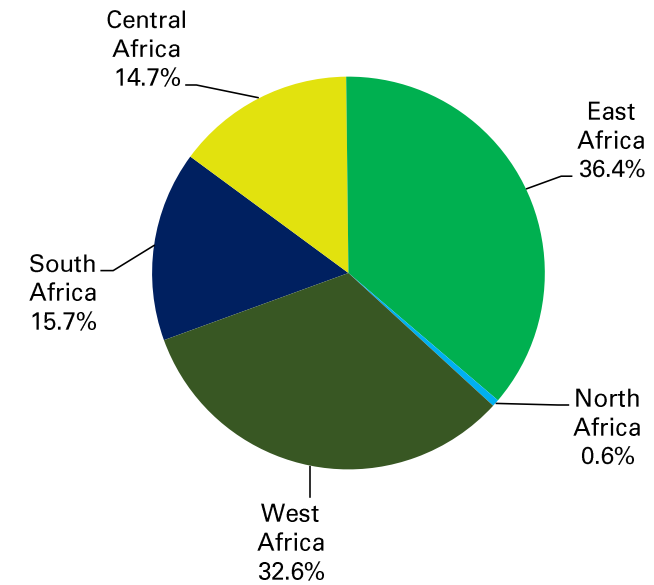
Regional Shares of Charcoal Production 2000 - 2018 (kt)



2000 - (6 889 kt)



2018 - (15 271 kt)

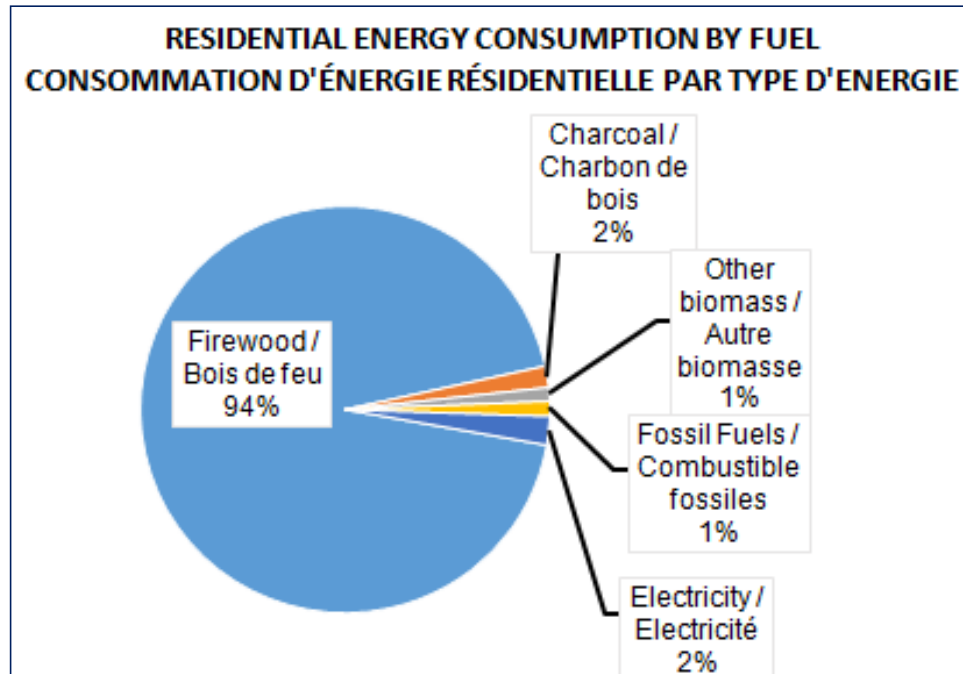


Status of Bioenergy in Africa

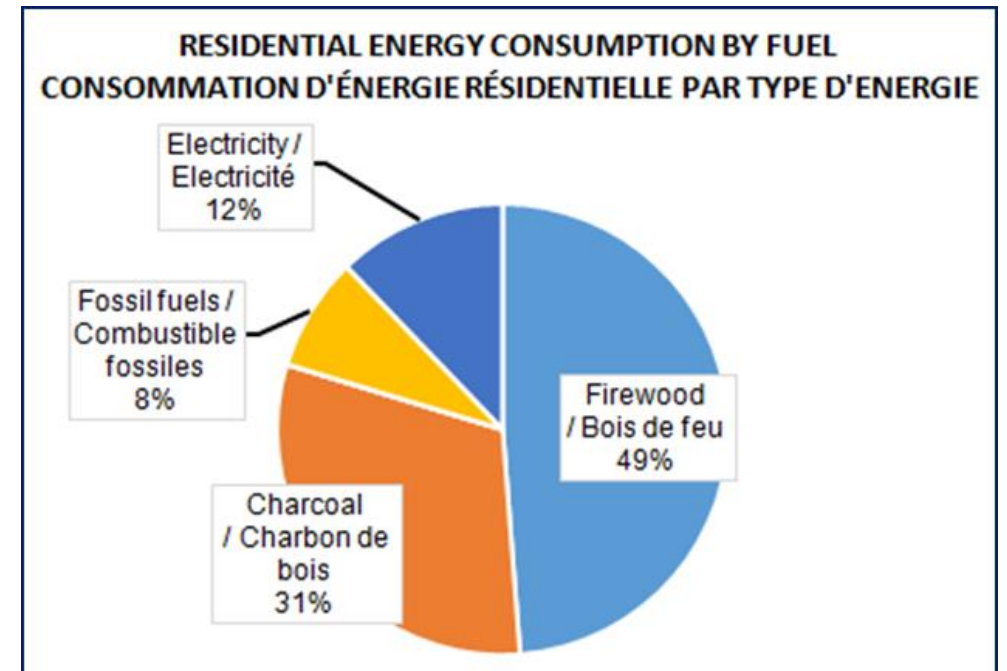
Samples of Household Energy Consumption 2017



Niger



Nigeria



Necessity to Modernize African Bioenergy Energy Sector



- ❑ Represent about 50% of total final energy consumption in Africa.
- ❑ Traditional use of biomass in African household inefficient.
- ❑ low efficiencies in entire value chain of bioenergy Sector.
- ❑ Weak institutions in order to ensure the sustainability of African Bioenergy Sector.
- ❑ The need to develop complementary national policies, strategies and regulatory frameworks based on Africa's vision.



Challenges for Bioenergy Sector Development in Africa



☐ Regulation

- A robust legal and institutional framework is necessary to scale up the sustainable use of bioenergy.
- **Some African countries without Regulation, Some with regulation without implementation, some with regulation with different level of implementation.**

☐ Bioenergy targets and timetables

- Guidelines should be enacted in national level and set targets on the share bioenergy in the household, transport, industry and power.
- **No target and timetables has been set to most African countries.**

☐ Guidelines and standards

- The International recognized **Sustainability Indicators for Bioenergy** to be applied (GBEP Indicators).
- **Most of African countries not applied such indicators.**

Challenges for Bioenergy Sector Development in Africa



❑ Awareness

- Bioenergy is not recognized widely in most African countries as source of energy.
- **Awareness creation campaigns are needed.**

❑ Mechanism for engaging stakeholders

- Strengthen the capacity of the private sector.
- Inform the policymakers on recommended policies.
- Train the finance and banking sectors on financing bioenergy projects.
- Coordinate the Development Partners' support.
- **No significant achievement has been reached so far.**



Prerequisite for Bioenergy Sector Development in Africa



❑ Removal of financial barriers for Bioenergy Investment

- Engage local financial institutions and micro-credit agencies (training & awareness).
- Establish risk mitigation facilities to spur local financing .
- Foster development of “bankable” project of bioenergy (offer assistance to entrepreneurs, seed capital funding, pre-feasibility, feasibility assistance, grants, etc).
- Engage the private sector in project identification and development.
- **Still persistent barriers to Bioenergy investment**



Prerequisite for Bioenergy Sector Development in Africa



□ Policy incentives to unlock the potentials

- Establish national/regional targets and timetables for bioenergy.
- Develop/ implement regional/ national regulatory frameworks.
- Establish lead organizations in national level to coordinate bioenergy activities (e.g., agriculture, energy, rural development, environment, etc.).
- Foster a regional market for sustainable bioenergy (cross-border trading).
- Engage the private sector in policy/regulatory development.
- Monitor and evaluate the impacts and performance of bioenergy activities at the national and regional levels.
- **No sufficient incentives are available.**

The Main Challenge of Bioenergy Sector in Africa



□ Bioenergy Reporting and Monitoring:

- Improve the capacity of the African countries to measure/collect and analyse bioenergy data and establish a strong system of continuous monitoring.

➤ Who produces/collects what



➤ Who transforms what (charcoal)



➤ Who distributes what



➤ Who consumes what



➤ Who sales/trades what



AFREC Efforts to Contribute in Improving Bioenergy Reporting and Monitoring



- ❑ Session on “ Bioenergy reporting and statistics in Africa” at 15:00 – 16:00
- ❑ An International workshop will be held in 2021 on Improving Reporting and Monitoring of Bioenergy in Africa.





Thank You !!!

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