



African Energy Commission (AFREC)

WORKSHOP ON THE STRATEGIC FRAMEWORK FOR THE AFRICAN BIOENERGY DATA MANAGEMENT

Bioenergy Consumption Data : What data are needed ?

24 to 26 Avril 2023 | Hotel SARAOKAWA

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SPO - EIS



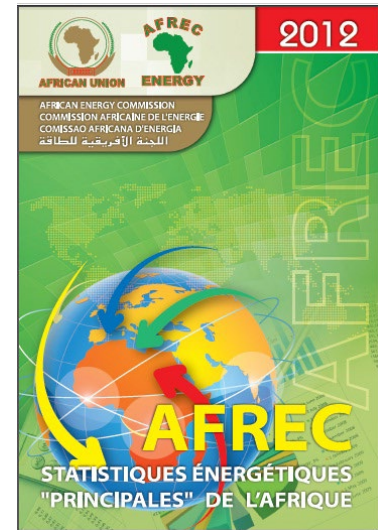
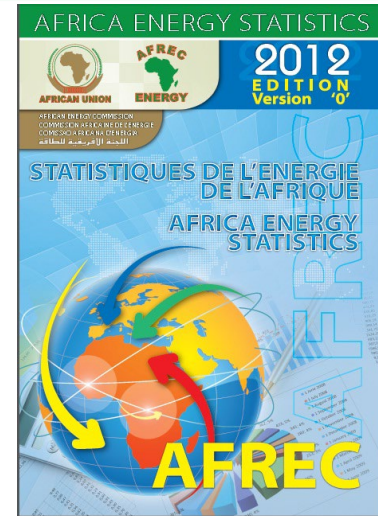
Introduction

AFREC is specialized agency of the AU in charge of developing and harmonizing energy policies, create and manage continental energy information system and statistics, mobilize technical and financial support to MS including capacity building among others.

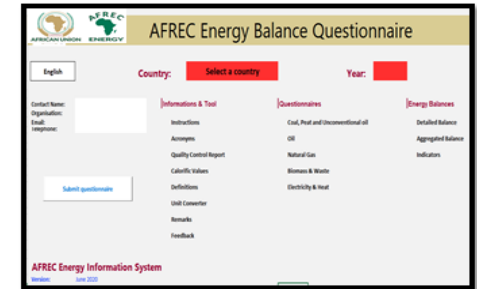


AFREC headquarters in Algiers, Algeria

Since 2012, AFREC has established the African Energy Information System (AEIS) as a continental energy information management system that aims at collecting energy statistics and facilitate rapid dissemination to AU Member States and all other relevant stakeholders



Modernization of the AEIS



From 2019 to 2020, AFREC with **AfDB** & **AEEP** support revamped AEIS based on comprehensive assessment with objectives to improve quality & accuracy of collected data, expand the coverage to include more energy indicators with aim to promote AFREC to become the main source of African energy statistics.

The AEIS Modernization included :

- Excel-based questionnaires
- Data submission mechanism (online data collection system)
- Data dissemination & reporting system (visualization tools)
- Capacity Building for Data collection (energy statistics, tools)
- Revamp AFREC webpage

New questionnaires developed :

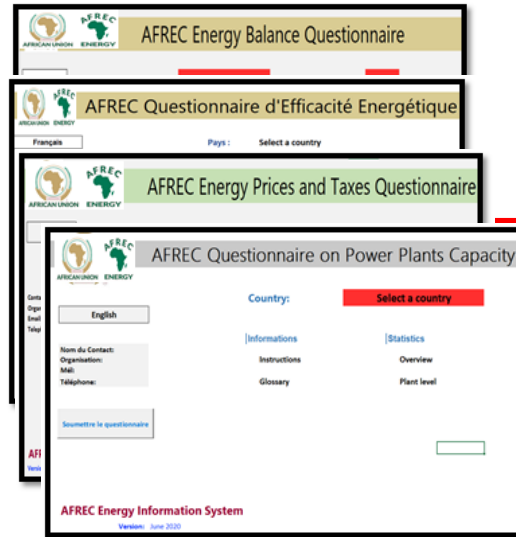
- Energy balance.
- Energy Efficiency for all sectors.
- Energy Prices & taxes.
- Power Plant Capacity Installed.
- Tool of data analysis and dissemination (User interface);
 - www.au-afrec.org

AFREC's Methodology on Data Collection, Validation and Dissemination

AFREC

AU Member States

Visualisation
Tools
au-afrec.org



1

Send The Questionnaires (Year n)

Filling in the questionnaires with the data collected (*Year (n-1) or (n-2)*)



National Focal Points nominated by Ministry in charge of energy

2

Queries for validation

Questionnaires sent back to AFREC with validated and reliable data

3

Data processed, disseminated and published (Year n)

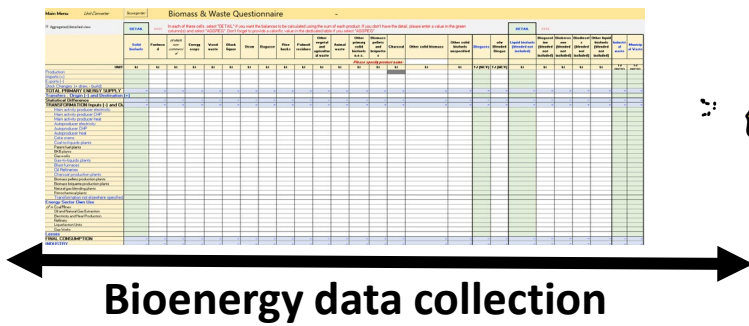


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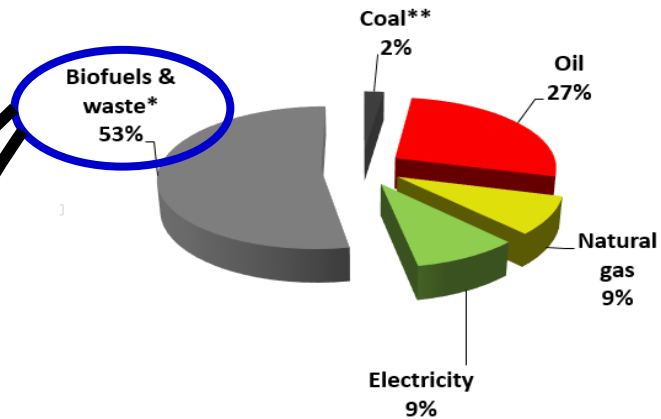
Data storage
aeis.au-afrec.org



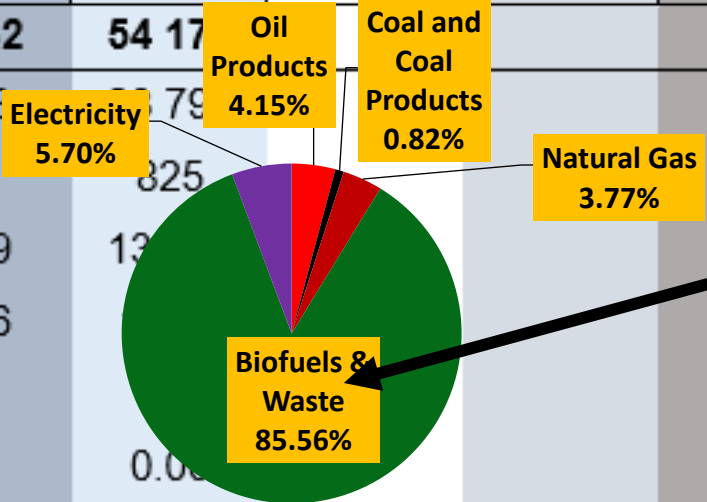
Overview on Bioenergy Consumption Data



Still dominated in the Total Final Consumption



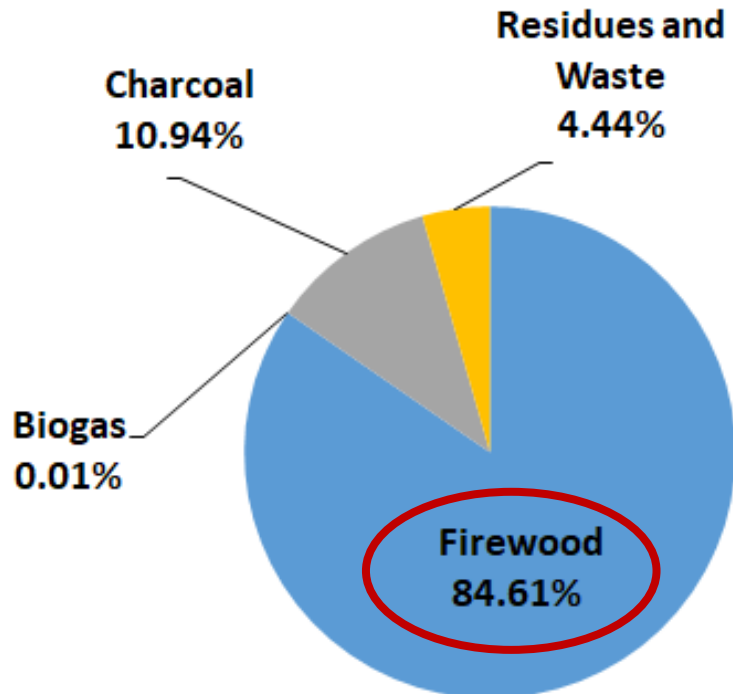
| Thousand Tonnes of Oil Equivalent (ktœ) | Crude Oil ¹ | Oil Products | Coal / peat ² | Natural Gas | Nuclear | Hydro | Wind & Geothermal & Solar PV | Biofuels and Waste | Electricity | Total |
|---|------------------------|--------------|--------------------------|-------------|---------|-------|------------------------------|--------------------|-------------|----------------|
| TFC ⁴ | 0.00 | 168 964 | 13 982 | 54 177 | | | | 331 557 | 57 558 | 626 232 |
| Industry | 0.00 | 17 541 | 9 265 | 1 790 | | | | 10 209 | 23 276 | 84 087 |
| Transport | | 127 108 | 4 | 825 | | | | 547 | 525 | 129 008 |
| Households | | 14 358 | 2 819 | 13 000 | | | | 295 920 | 19 723 | 345 852 |
| Com. & Public Service | 0.00 | 3 130 | 1 346 | | | | | 239 22 | 11 112 | 40 716 |
| Agriculture/Forestry | | 4 868 | 526 | | | | | 0.04 | 2 108 | 7 559 |
| Others (Non Specified) | 0.00 | 1 654 | 26 | 0.00 | | | | 959 | 815 | 3 453 |
| Non-Energy Use | 0.00 | 305 | 0.00 | 15 252 | | | | | | 15 557 |



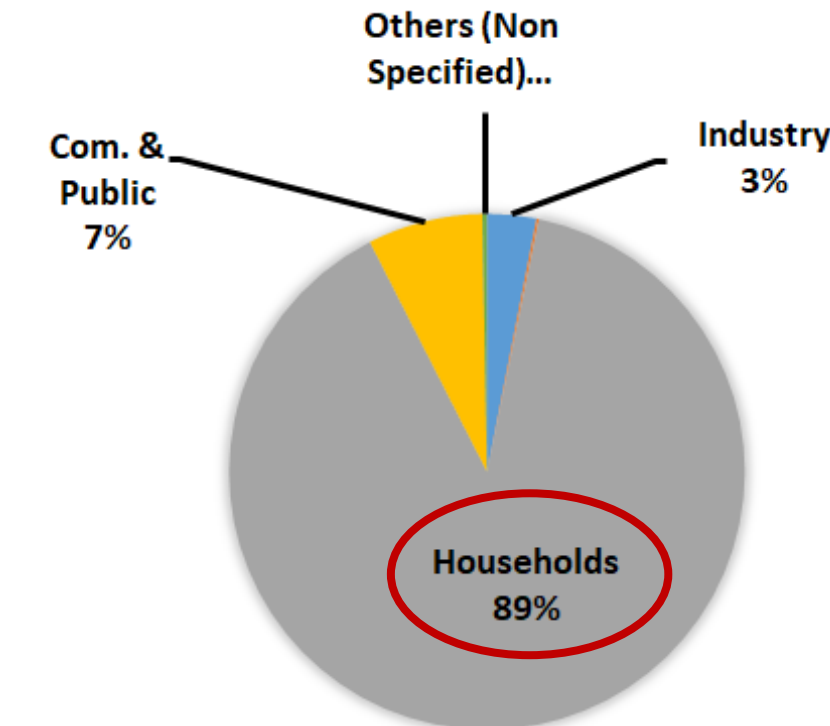
Natural Gas 3.77%

Overview on Bioenergy Consumption Data

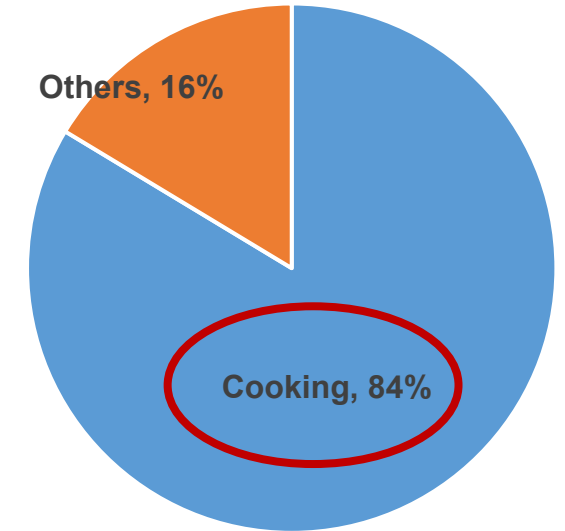
Shares of different types of bioenergy in TFC



Bioenergy Consumption by Sector



Share of biofuels solide in cooking

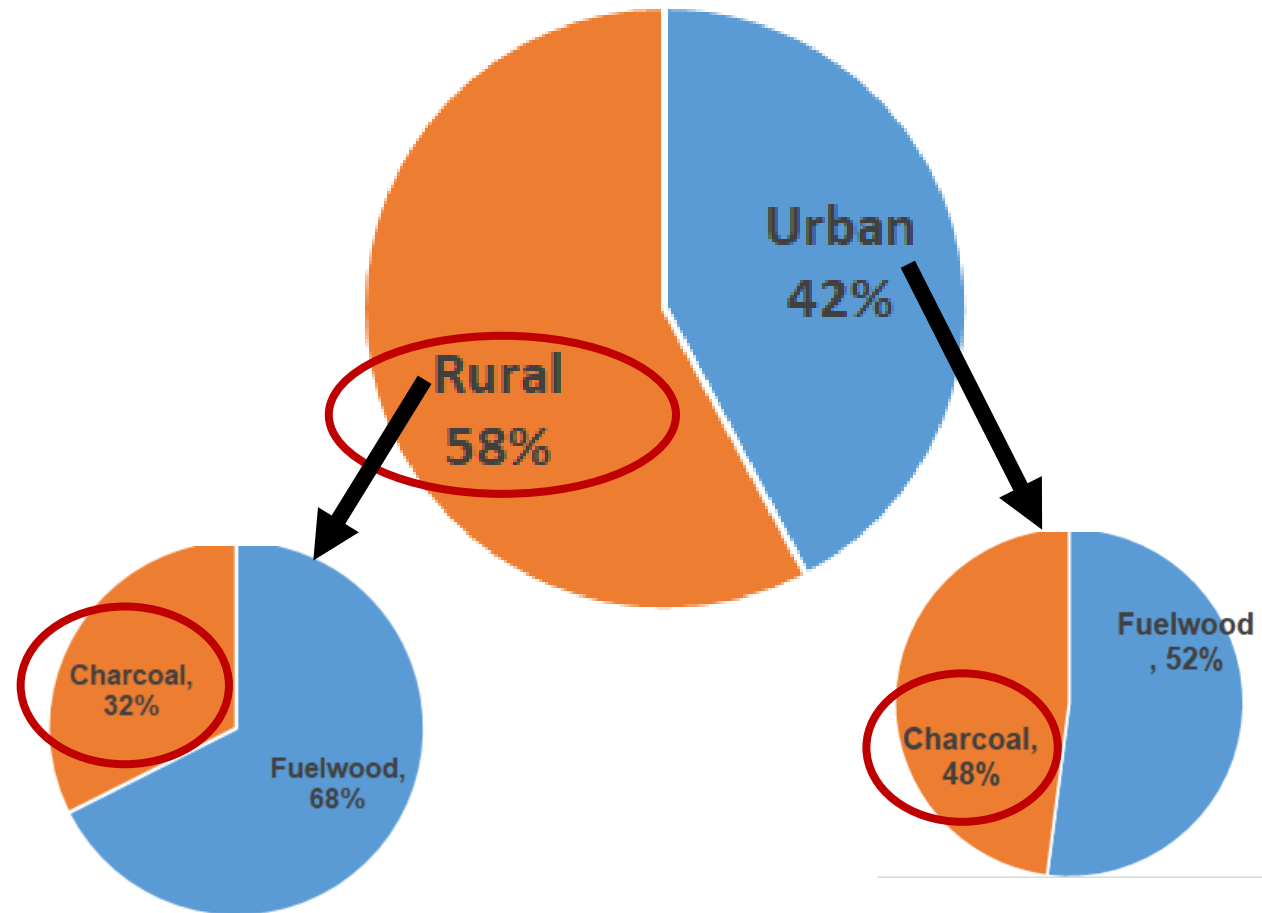
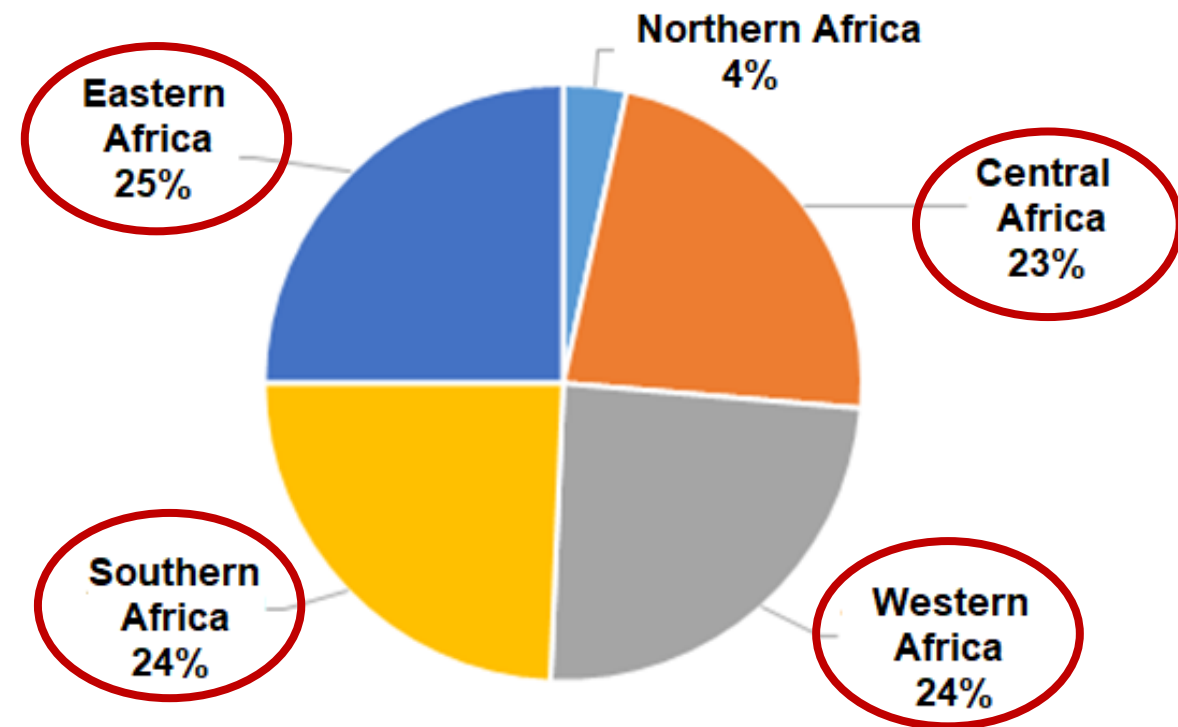


Others : - Space heating,
- Water heating
- Etc.

Overview on Bioenergy Consumption Data

Share of bioenergy in residential sector by Region

Share of bioenergy in residential in Rural & Urban



Challenges

- Lack of bioenergy data consumption (details) in almost African countries, whether those data exist in many of African countries, they are at least older than 10 years survey ;
- Policy makers need to know key information on the Bioenergy sector :

👉 Who consumes what ?



👉 Who sales/trades what ?



Challenges

👉 There is no specific devices to meter/measure consumption



👉 Households in cities use several types of energy for cooking



👉 Lack of human and financial resources in countries, which leads to delays in submissions, incomplete questionnaires or with errors, frequent revisions from year to year, etc.

Conclusion

AFREC's data collection from member countries is limited to purely energy data (production, processing, consumption).

AFREC does not currently collect data on bioenergy resources, nor on the impact of consumption on health and mortality, nor on employment, nor on sectoral Added Value, nor on other indicators. socio-economic. As much data that it is essential to obtain for a total vision of the bioenergy situation in a country.

AFREC's programme for supporting African MS :

- Support Member states to improve and/or establish National Energy Information system (NEIS);
- Support Member states to establish the Nationally Determined Contributions (NDCs);
- Supporting Mozambique on bioenergy survey : The overall objective of the survey is to assess household and small businesses bioenergy data situation

Thank you
Merci
شكرا
Obrigado

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