Energy Trade in Africa and Achievements of SDG7: An African Perspective

by

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.
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AN AFRICAN PERSPECTIVE

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NEPAD - TRANSFORMING AFRICA
NEPAD Agency

As an implementing agency of the AU, it has a mandate to:

- Facilitate and coordinate the implementation of continental and regional priority programmes and projects
- Mobilise resources and partners in support of the implementation of Africa’s priority programmes and projects
- Conduct and coordinate research and knowledge management
- Monitor and evaluate the implementation of programmes
- Advocate on the AU and NEPAD vision, mission and core principles/values
SDG7 aims at achieving access to affordable, reliable, sustainable and modern energy for all by 2030.

It goes without saying that Energy is one of the main prerequisites for socioeconomic development. In fact Energy is solidly connected with achieving all the SDGs.
Africa Forecast up to 2040

Africa’s population will double

- Increased urbanisation
- Tripling of middle class
- Power supply to meet population growth and to achieve energy access of 60% will be six times current generation
- Substantial Investment in Power Generation and transmission needed to meet projected demand
WHAT IS AFRICA DOING TO MAKE ENERGY AVAILABLE?

SUFFICIENT ENERGY GENERATION

HYDRO AND RENEWABLES

PIDA PROGRAMME
<table>
<thead>
<tr>
<th>Project Name</th>
<th>Capacity</th>
<th>Region</th>
<th>Organisation</th>
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<tr>
<td>Inga Hydro Phase 3</td>
<td>10,000</td>
<td>Central</td>
<td>ECCAS</td>
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<tr>
<td>Central African Interconnection</td>
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<td>Central</td>
<td>ECCAS</td>
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<td>Great Millennium Renaissance Dam</td>
<td>8,000</td>
<td>COMESA/ IGAD</td>
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<tr>
<td>Batoka Dam</td>
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<td>COMESA EAC</td>
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<td>Ruzizi III Dam</td>
<td>450</td>
<td>COMESA EAC</td>
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<td>Rusumo Falls Dam</td>
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<td>North Africa Transmission</td>
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<td>AMU</td>
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<td>Nigeria-Algeria Pipeline</td>
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<td>Northern, Western</td>
<td>UMA ECOWAS</td>
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<td>North South Power Transmission Corridor</td>
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<td>COMESA EAC SADC IGAD</td>
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<td>Sambagalou Dam</td>
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<td>West African Power Transmission Corridor</td>
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<td>Kaleta Dam II</td>
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<td>ECOWAS</td>
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</table>
WHAT IS AFRICA DOING TO MAKE ENERGY ACCESSIBLE?

CREATION OF REGIONAL AND CONTINENTAL ENERGY TRADE MARKETS

HOW?
DEVELOPMENT OF REGIONAL MASTER PLANS FOR TRANSMISSION NETWORKS FOR SOUTHERN, EASTERN, CENTRAL, WEST AND NORTH AFRICA REGIONS.

THAT CONNECT ALL AFRICAN POWER UTILITIES IN EACH REGION AND THUS CREATION REGIONAL ENERGY TRADE MARKET.
1-Development and implementation of PIDA PAP Energy Projects

The energy infrastructure program focuses on major hydroelectric projects and interconnects the power pools to meet the forecast increase in demand. One regional petroleum products pipeline is also included.
Development of MASTER PLAN FOR CONTINENTAL TRANSMISSION NETWORK

LINKS ALL NATIONAL NETWORKS TOGETHERS WITHN EACH REGIONAL POWER POOL

LINKS ALL POWER POOLS TOGETHER IN AN INTEGRATED ACONTINENTAL NETWORK

LINKS AFRICA WITH EUROPE VIA MOROCCO, EGYPT, LIBYA, TUNISIA AND ALGERIA
LINKS AFRICA WITH ASIA AND GULF STATES VIA EGYPT TO JORDON AND EGYPT TO SAUDIA ARABIA

ENERGY TRADE BETWEEN COUNTRIES WITHIN A POOL OR BETWEEN POOLS TOGETHER WITHIN AFRICA AND BEYOND

CREATE RESILIENT ENERGY MARKET WHERE ENERGY CAN BE SOURCED FROM THE MOST COMPETITIVE SUPPLIER
1-Development and implementation of PIDA PAP Energy Projects

Energy
15 items
USD 47 bn

The energy infrastructure program focuses on major hydroelectric projects and interconnects the power pools to meet the forecast increase in demand. One regional petroleum products pipeline is also included.
STATUS OF REGIONAL ENERGY TRADE IN AFRICA

SADC ENERGY AUCTION TRADE MARKET

ECOWASE, EAC, ECCAS, COMELEC
Does the trade in energy contribute to achieving SD7?

Big Yes. How?

If Country A has an energy deficit, it can source it from country B. Energy is made available.
Regional and Continental Energy Trade provides sourcing energy at the most competitive price within Africa or beyond.

Direct contribution to **AFFORDABILITY** under SDG7.
With regional and continental energy trade market, diversified sources of energy are made available to each country.

Be it hydro or thermal, geothermal, nuclear, renewable, ---

Diversification is fundamental requirement for RELIABILITY.
What are the main challenges facing regional and continental energy trade markets?

Not all the countries within a region are fully connected with one grid

Existing links between countries are of limited capacity

Apart from SAPP, there is no well developed regional energy trade market with set clear trading rules
Limited Energy excess available for trade

Diversified and non-harmonized regulations

Agreeable wheeling charges and pricing formula

Regional Networks are of varied degrees of developments with different degree of resilience to instability problems
Recommendations for setting up vibrant regional energy trade market

Assist utilities to fully exploit the most competitive sources of energy generation

Assist power pools to develop and implement regional power system master plan where all utilities within a pool are fully connected
Set up Framework for clear, transparent and harmonised set of Commercial Rules of Practice between Power Utilities

Harmonize the diversified energy trade regulations

*Transmission Tariff Methodology and Pricing principle
*Oversight and settling of transactions
*Setting and enforcement of technical standard for metering and
*Settling disputes and Arbitration amongst power pools
Open the energy trade market for private sector participation for efficiency and competitiveness according to each country institutional capabilities.

Facilitate movement of manpower and capital.

Assist Power pools to set up coordination centre which coordinate and conclude the energy trade volumes among its trading members.
Thank you