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#### TRADE, SERVICES AND DEVELOPMENT

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Geneva, 7-8 May 2018

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

by

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New Partnership for Africa's Development



# ENERGY TRADE IN AFRICA AND ACHIEVEMNETS OF SDG7 AN AFRICAN PRESPECTIVE

- By
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- ► UNTAD Conference ,Geneva,7-8 May 2018



### **NEPAD Agency**

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



### 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



### PAP-Energy Investment Cost: \$47.1 bn

(plus Nigeria-Algeria Pipeline \$ 13 billion)

Inga Hydro Phase 3	10,000	ECCAS	Central
Central African Interconnection	10,500	ECCAS	
Great Millennium Renaissance Dam	8,000	COMESA/ IGAD	
Batoka Dam	2,900	COMESA EAC	
Ruzizi III Dam	450	COMESA EAC	Eastern
Rusumo Falls Dam	350	COMESA EAC	
Uganda-Kenya Petroleum Products Pipeline	250	COMESA EAC	
North Africa Transmission	1,200	AMU	Northern
Nigeria -Algeria Pipeline	13,00	UMA ECOWAS	Northern, Western
North South Power Transmission Corridor	8,000	COMESA EAC SADC IGAD	North.East.South
Nphanda -Nkuwa Dam	2,900	SADC	
Lesotho HWP Phase II -hydropower component	770	SADC	Southern
Sambagalou Dam	429	ECOWAS	
West African Power Transmission Corridor	350	ECOWAS	Western
Kaleta Dam II	1,012	ECOWAS	

### WHAT IS AFRICA DOING TO MAKE ENERGY ACCESSIBLE?

### CREATION OF REGIONAL AND CONTINEBTAL ENERGY TRADE MARKETS

HOW?



### DEVELOPMENT OF REGIONAL MASTER PLANS FOR TRANSMISSION NETWORKS FOR

SOUTHERN, EASTERN, CENTRAL, WEST AND NORTH AFRICA REGIONS.

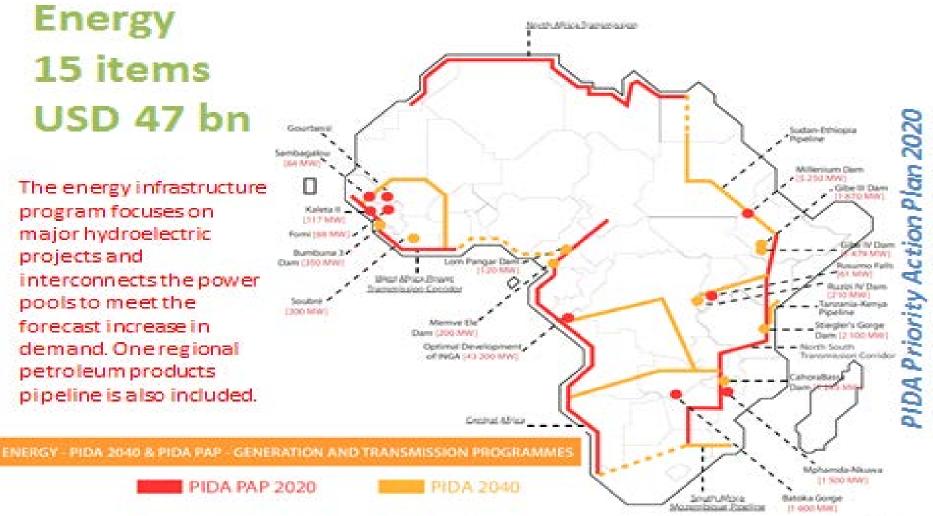
THAT CONNECT ALL AFRICAN POWER UTILITIES IN EACH REGION AND THUS CREATION REGIONAL ENERGY TRADE MARKET



#### 1-Development and implementation of PIDA PAP Energy Projects

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.



**NEPAD - TRANSFORMING AFRICA** 

## 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

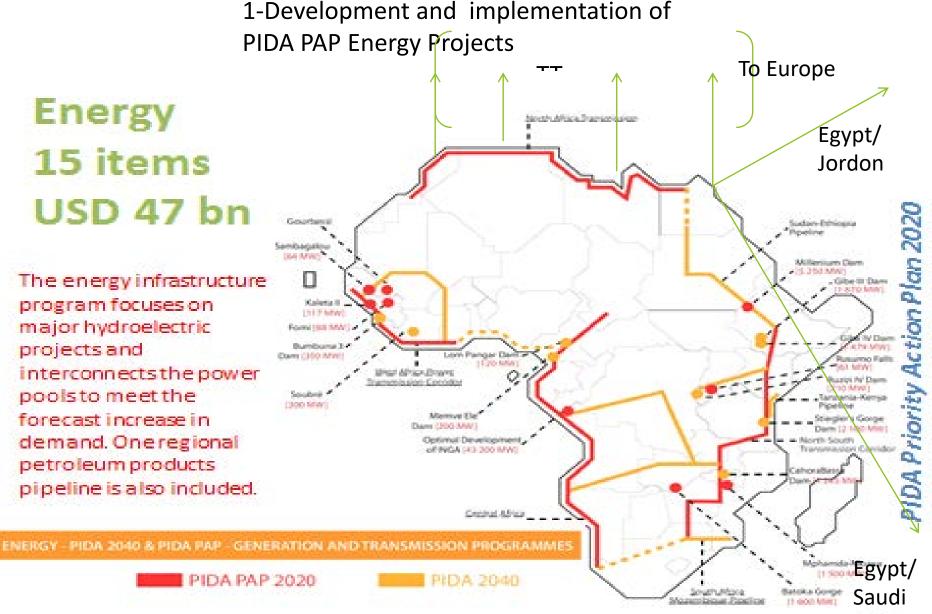
ENERGY TRADE BETWEEN COUNTRIES
WITHIN A POOL OR BETWEEN POOLS
TOGETHER WITHIN AFRICA AND BEYOND

CREAT RESILIENT ENERGYMARKET WHERE ENERGY CAN BE SOURCED FROM THE MOST COMPETETIVE SUPPLIER



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