



# AFRICAN UNION COMMISSION (AUC) ENERGY PROGRAMMES

**Presented by**

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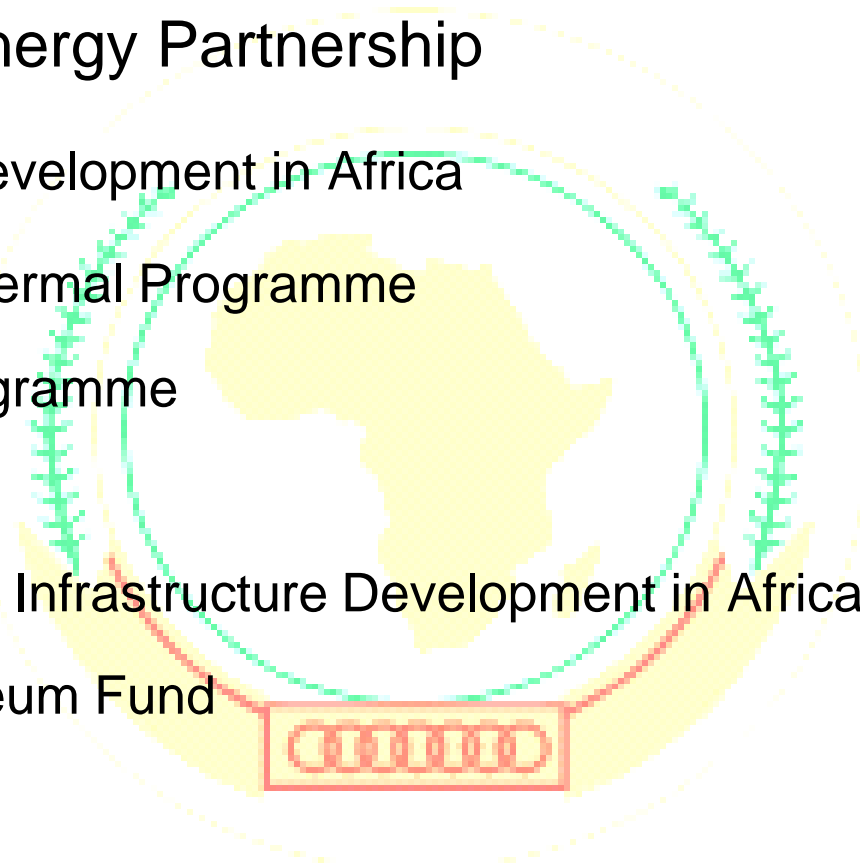
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# Africa-EU Energy Partnership

## 2020 Political Targets

### Energy access

Bring access to modern and sustainable energy services to at least an additional 100 million Africans



# 2020 Political Targets

## Energy Security

**Double the capacity of cross border electricity interconnections, both within Africa and between Africa and Europe**



**Double the use of natural gas in Africa, as well as doubling African gas exports to Europe**



**Bring the current flared gas to the market**

## 2020 Political Targets Renewable Energy

**Build 10,000  
MW  
of new hydro-  
power facilities**



# 2020 Political Targets

## Renewable Energy

**Build 5,000 MW  
of new capacity  
in wind farms**







# 2020 Political Targets Renewable Energy



**Build 500 MW of  
new capacity in  
solar energy**



# 2020 Political Targets

## Renewable Energy



**Triple the capacity of the other  
renewable energy resources**





# 2020 Political Targets

## Renewable Energy

**Improve energy efficiency in Africa in all sectors, starting with electricity sector**





# Renewable Energy Cooperation Programme (RECP)

## Objectives of the programme

- Accelerate the **use of renewable energy** in Africa
- Make Africa a **prime destination** for renewable energy
- Expand **renewable energy in energy mix**
- **Increase energy access** through renewable energy
- **Increase energy security**
- Foster **private sector cooperation** between Africa and Europe

## **RECP – Implementation and Institutional Set-up Timeframe 2010-2020**

### **Three-year Start-up Phase (2011-13)**

- **Implementation by EUEI PDF jointly with AFD**

### **Financing**

- **Financing for Start-up Phase (2011-13) provided by European Commission for 5 M euros**

### **Institutional Set-Up**

- **Joint Experts Group (JEG) of the AEEP**
- **Monitoring and Evaluation System**
  - Provide political guidance and tools for RECP implementation



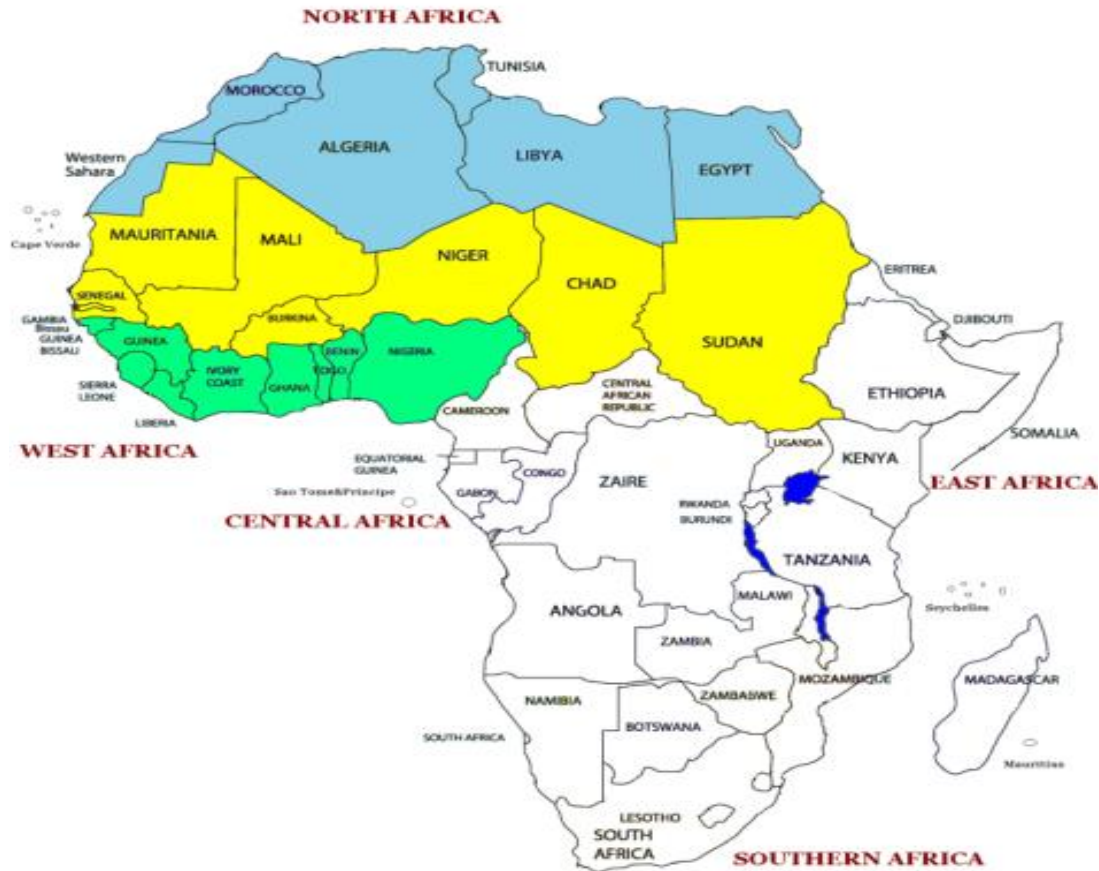
# **SOLAR ENERGY POTENTIAL DEVELOPMENT IN AFRICA**



- **The 14th AU Summit mandated the AU to prepare a study for exploitation of the solar energy potential in Sahara;**
- **The first phase of the study for Sahara and Sahel region was completed and validated;**
- **The outcomes of this study presented at the CEMA Ministerial Meeting in Maputo, November 2010;**
- **The executive summary of the study adopted at the AU January 2011, Summit;**
- **The second and third phases of study are on going for Kalahari and Ogden deserts ; to be completed end 2012;**



# SOLAR ENERGY STUDY, 1<sup>st</sup> Phase







# Main Findings

- The study estimated that the average cost of energy produced by CSP is expected to be in the range of 10 to 15 US¢/kWh by 2030 and reduced to 5 to 7 US¢/kWh by 2050 depending on the geographical location;
- All of the countries analyzed in this study could achieve a full electrification status as early as 2035 (by 2040 as latest) through the proposed plan of disseminating Concentrating Solar Power (CSP) and other renewable energy technologies;
- The countries of North Africa could achieve the vision of exporting electricity to Europe by 2030;
- The study estimated that the deployment of CSP and other renewable energy technologies will directly support the efforts of preserving the environment and contribute to abatement of millions of tons of CO<sub>2</sub> and other greenhouse emissions.
- The deployment of CSP and other renewable energy technologies in the region will accelerate the integration of electric systems among the countries in the region and between Africa, Europe and the Middle East.



# REGIONAL GEOTHERMAL PROGRAMME FOR EARS

- **The Ministers of Energy from the 11 countries of the EARS gave mandate to AUC by the Addis Ababa Declaration for Development Geothermal Regional Programme (June 2009);**
- **Action Plan and Road map Adopted to accelerate exploitation of geothermal energy resources in the Eastern Africa Countries;**
- **Published geothermal report on status, strategy, gaps and required support programmes.**
- **About 40 representatives of Eastern Africa countries trained on Geothermal Policy development and harmonization;**
- **Establishment of Geothermal Risk mitigation Facility, Dec. 2011.**



**MEETING AUC-KFW**

**AUGUST 9-11, 2010**

**A.A, ETHIOPIA**



**50 M GEOTHERMAL  
RISK MITIGATION  
FACILITY FOR  
EASTERN AFRICA  
COUNTRIES**





## GRMF OBJECTIVES

- To encourage public and private potential investors to develop geothermal power generation by providing grants;**
- To support initially 5 targeted countries of the EARS: Ethiopia, Kenya, Rwanda, Tanzania and Uganda;**
- To mobilize additional funds.**



## **SIZE AND TIME FRAME OF THE FACILITY**

- **The initial size of the FACILITY is € 50 M;**
- **KFW provided € 20M grant funding and 30 M from Africa-EU Infrastructure Trust Fund;**
- **AUC provides budget for the Coordination Unit (Secretariat of the GRMF and the Regional Program)**
- **Time frame of the fund is for 4 years starting from March 2012;**
- **First applications for grant for surface exploration and drilling launched on 17<sup>th</sup> October 2012.**





# BIOENERGY PROGRAMME

A joint AUC-UNECA study was carried out on Bioenergy Policy Framework and Technology Options in Africa.

A stakeholders' validation workshop took place from 21 to 23 November 2011 at the United Nations Conference Centre, UNCC, in Addis Ababa, Ethiopia.



# BIOENERGY PROGRAMME

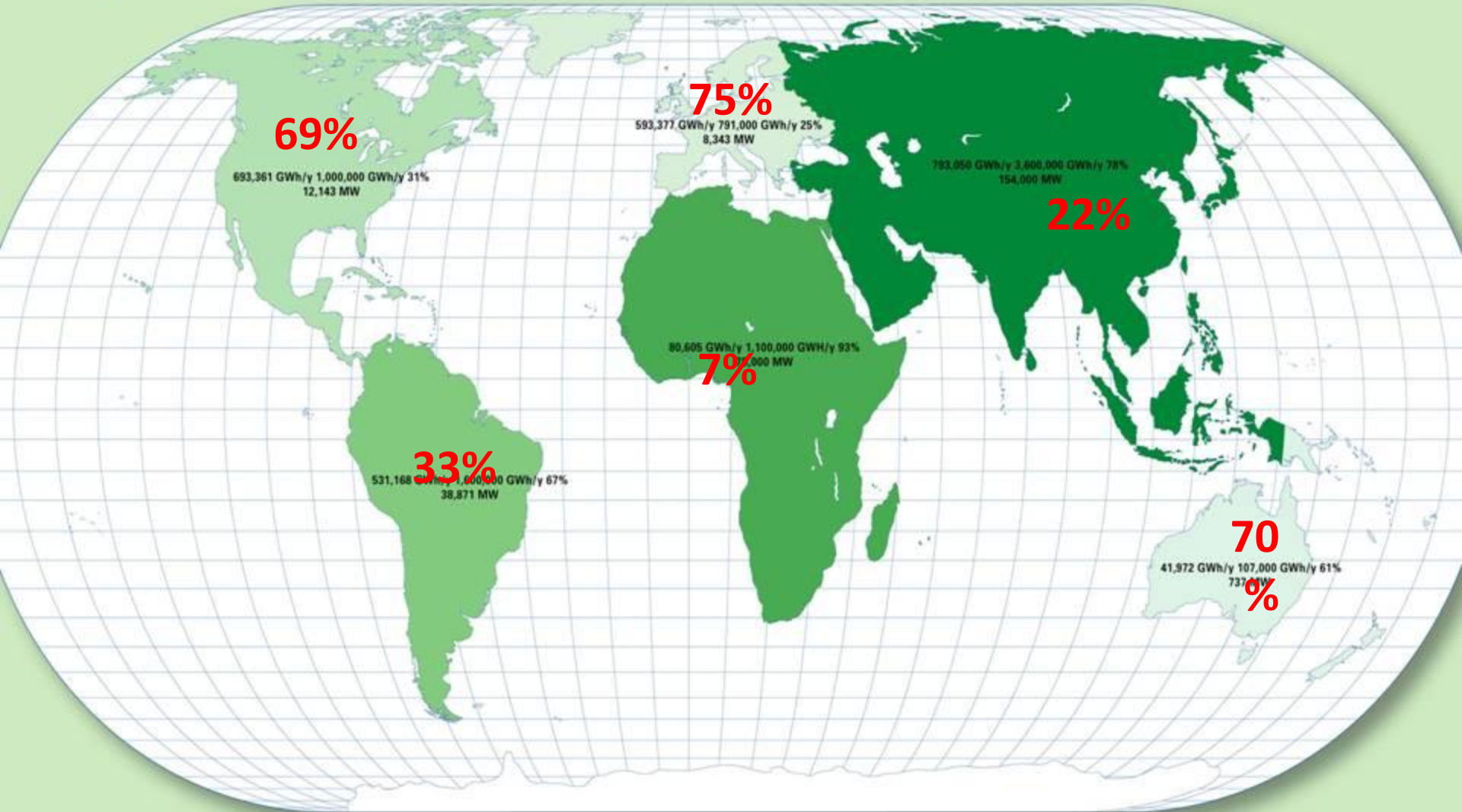


## The main outputs of the Experts Group Meeting:

- Modern bioenergy development can help enhance energy access particularly in rural Africa;
- The need to develop a continental policy and regulatory frame-work;
- Bioenergy policies and strategies need to be based on science and be developed through processes that engage stakeholders;
- The key outcome of the meeting will be a refined draft of Africa's Bioenergy Policy Framework and Guidelines.



# Hydropower potential, by continent





# Hydro 2020 Programme



Africa has huge hydropower potential estimated to 300 GW most of them concentrated at the four major rivers basin: Congo, Nile, Niger and Zambezi; only 5-7 % of hydropower potential of the continent have been exploited;

Continental Policy in Hydro and Strategy for the development of Major Hydropower projects developed by AUC and stakeholders validation workshop organized;

PPP Guide developed by AUC for Inga site projects.



# PROGRAMME FOR INFRASTRUCTURE DEVELOPMENT IN AFRICA (PIDA)

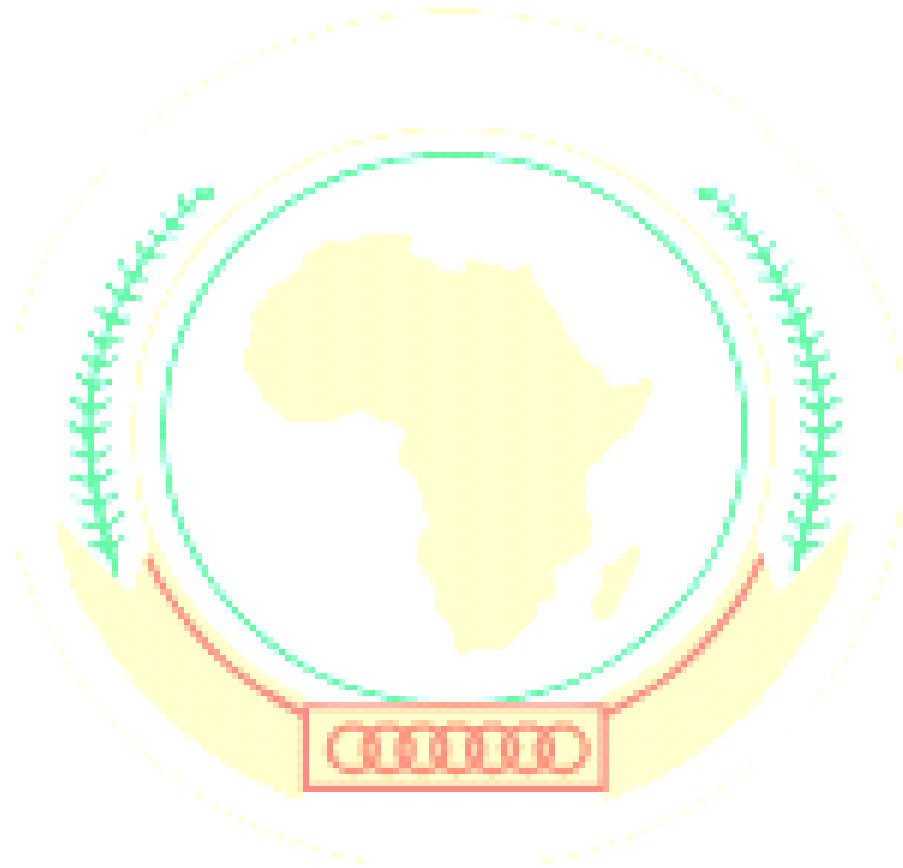


- **PIDA covers 4 sectors: Energy, Transport, Information & Communication Technology (ICT) and Water (Trans-boundary).**
- **To be implemented in two major steps: study step and implementing steps of the results of the study.**
- **PIDA is a programme dedicated to facilitating continental integration through improved regional infrastructure**





# AFRICAN PETROLEUM FUND





# African Petroleum Fund

Expected outputs	ACHIEVEMENTS	REMARKS
<p>*Organization of a roundtable for donor : 30,000 \$</p> <p>Campaign of funds mobilization : 30,000 \$</p> <p>Capacity Development</p>	<ul style="list-style-type: none"> <li>• Strategy developed</li> <li>• Lack of funds for Task Force set up and recruitment of experts team</li> <li>• No achievements</li> </ul>	<p>There is no fund available to organize training workshop to the member country on the Model of the APF, and regional Meetings of the JTF Group Supplementary budget was requested but not approved .</p>



# African Petroleum Fund

## 2011 PROGRAM/BUGGET

- Organization of a roundtable for donor
- Campaign of funds mobilization
- Participation to the organs meeting of the APF

## CHALLENGES

- Political will to contribute to APF resources
- Availability of funds



# *Thank you*

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