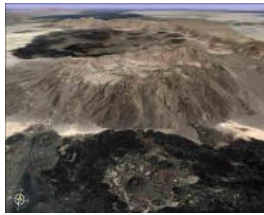


THE AFRICA GEOTHERMAL CENTER OF EXCELLENCE- AGCE



Status of establishment and operation of the Africa Geothermal center of Excellence-AGCE

AUC- GRMF WORKSHOP

10 October 2017
Hilton Hotel, Nairobi

1. Why an African-Based GCoE?

- Presently 600+ MW of installed geothermal capacity with **expected 1550+ MW increase by 2022**, requiring a substantial increase in **African geothermal expertise**.
- Over **US\$2.5 Billion in donor financing** allocated to East Africa geothermal development; **stakeholders need to collaborate efforts** with regard to build capacity in the region.
- **Need for not only more expertise, but also state-of-art lab facilities, equipment and hardware/software** to achieve African Sustainable geothermal development goals.

Regional Center of Excellence

Various "Local, regional and continental Geothermal Forums recognized" the "AGCE to be a Vehicle" to ensure the development of skilled manpower for sustainable Geothermal development in the continent.



Regional conferences



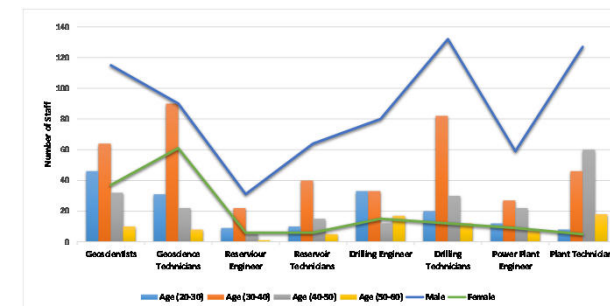
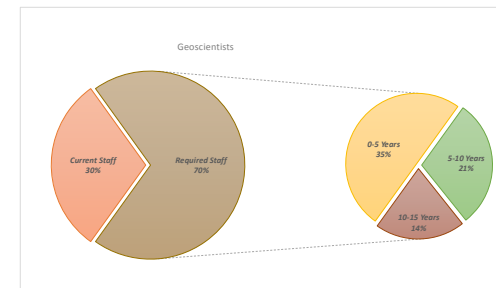
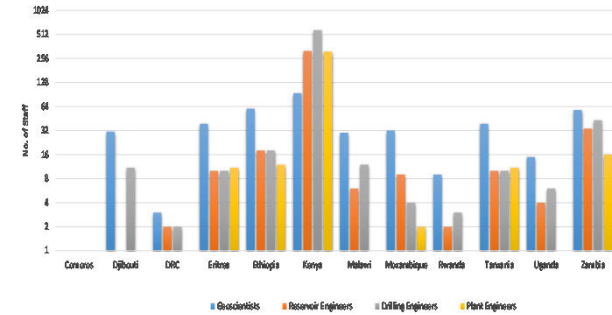
Northern Corridor Countries



2. Background Work

2.1 Skill gap Analysis- Objectives

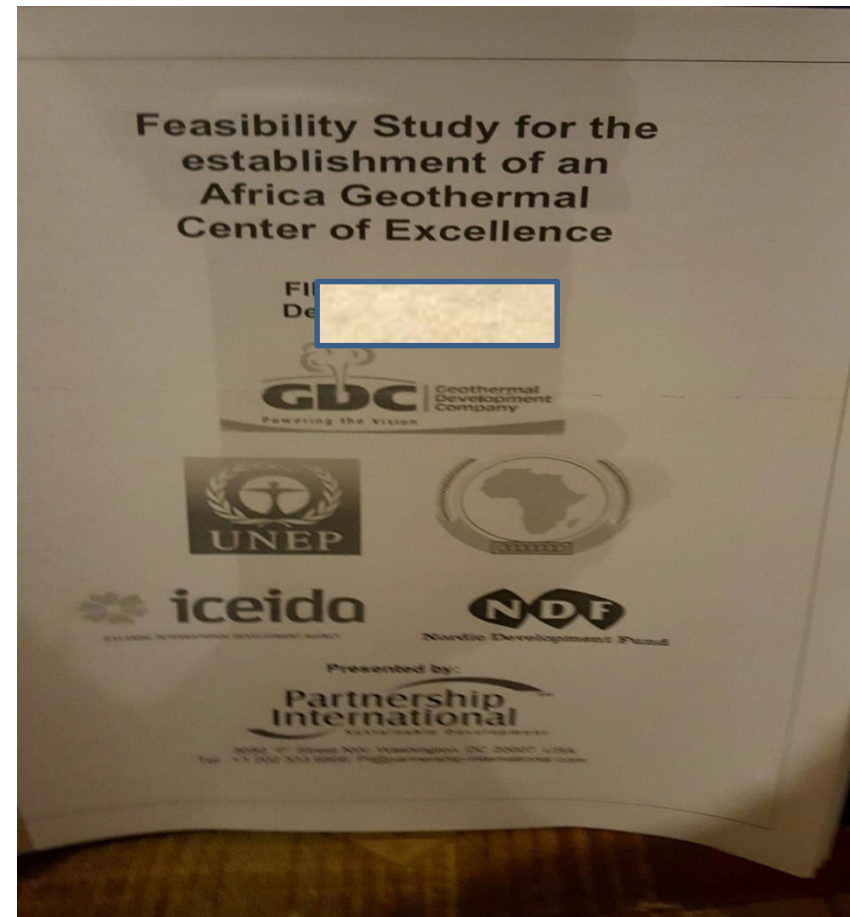
- Define the **needs and expectations of countries** in Capacity building
- Provide **background information to the Feasibility study** for setting up the AGCE
- Setting **the scientific and technological** development agenda.



Geoscientists, Drilling Engineers, Reservoir and Power Engineers

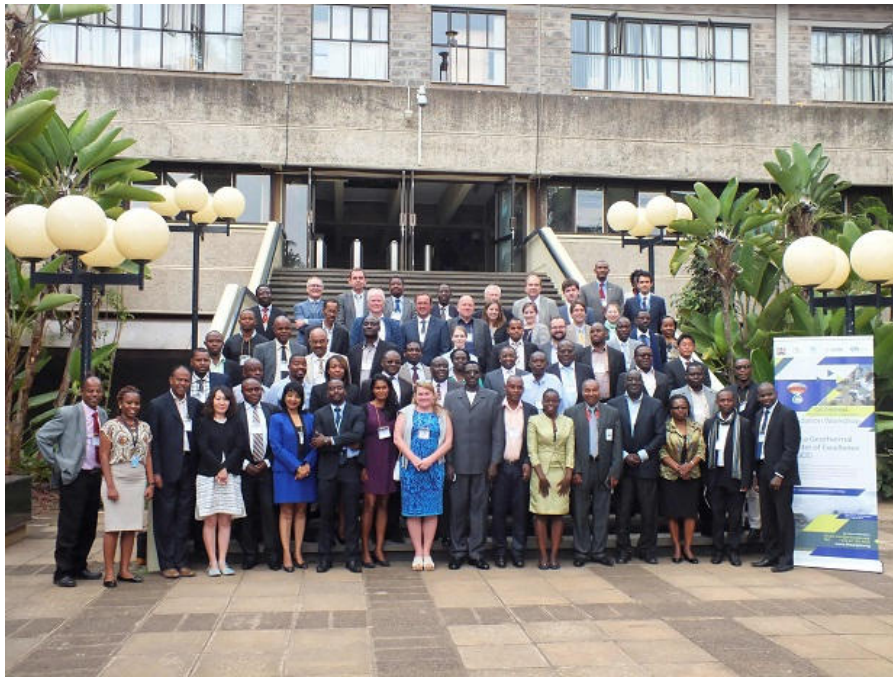
2.2 Feasibility study for establishment of the AGCE that defined:

- Rational for **setting up the Center of Excellence**
- Required Curriculum Framework
- Required Facility for the Center (e.g. **Laboratory and geo-scientific equipment**)
- Institutional **Structure and administration framework**
- Estimated budget

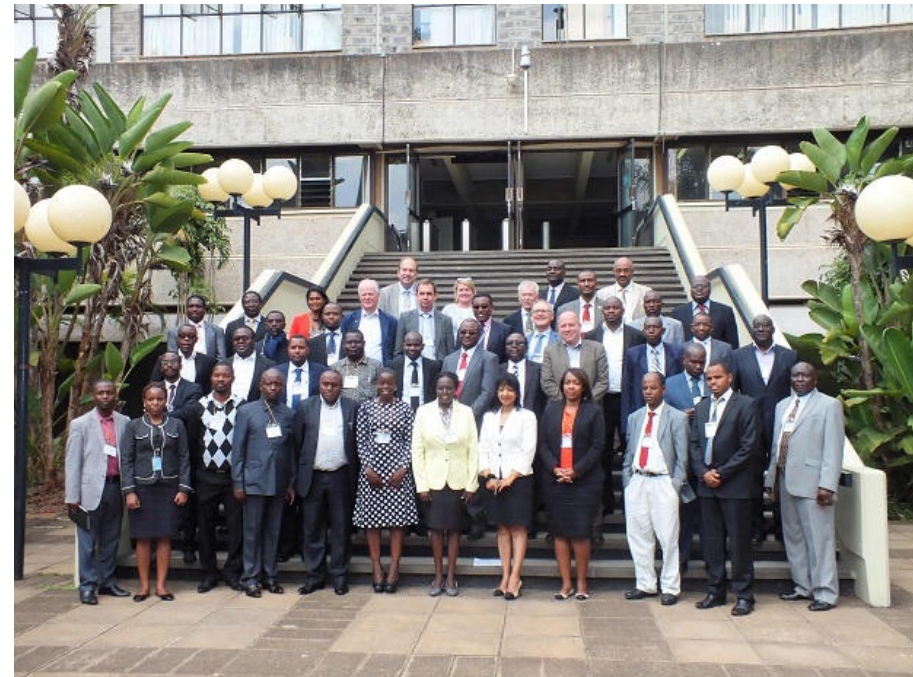


2.3 Organized the first Stakeholders Workshop in Nairobi Kenya on 12-13 August 2015

OBJECTIVE: To Validate the skill gap analysis report and feasibility study for establishment of AGCE



DONORS and DEVELOPMENT PARTNERS



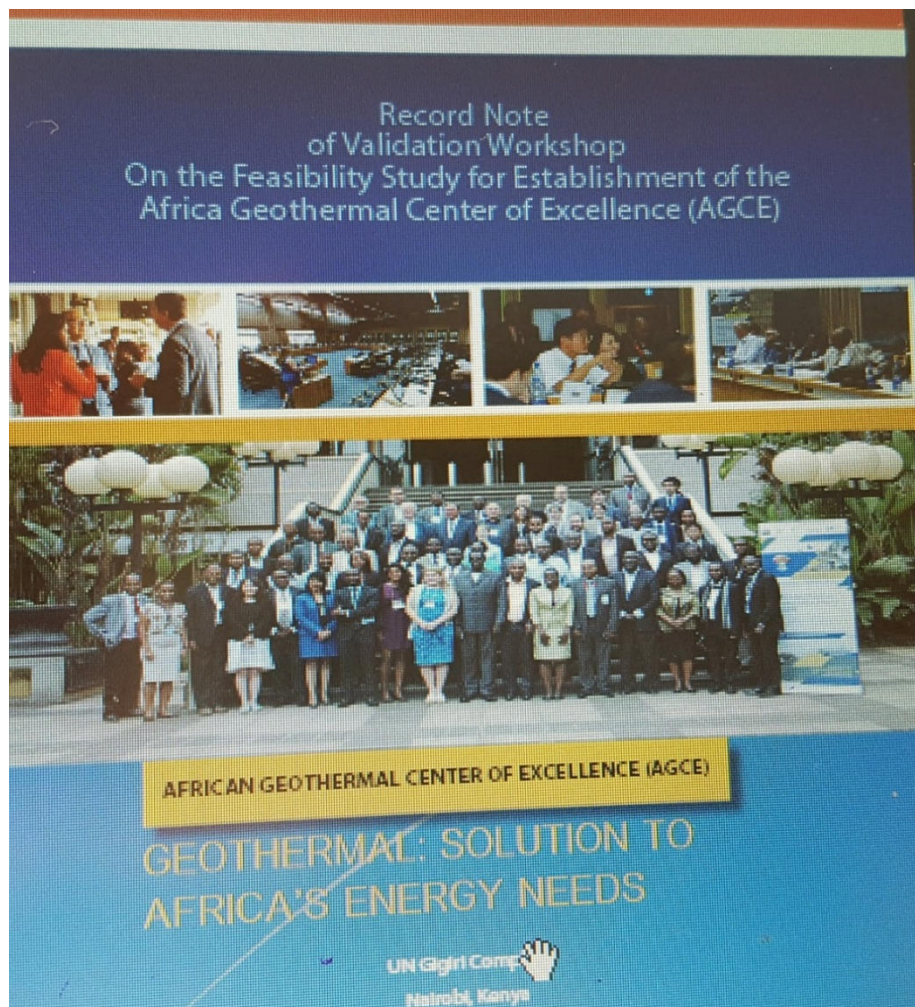
Representatives from 13 African Countries

Key consensus points from the Validation Workshop

- **Regional Relevance:** Align the Center with the regional needs and requirements
- **Regional Ownership:** The Center will have all African Players on Board
- **Build on Existing Initiatives :** Utilize the existing facilities and initiatives without re-inventing the wheel



OUTCOME OF THE Stakeholders WORKSHOP



- The Center to be hosted by the Government of Kenya, as it has a matured institutional and infrastructural capacities in geothermal exploration, development and utilization
- The Steering Committee (SC) to be established that comprises: AUC (Chair), UN Environment, two representatives from countries (Djibouti, Rwanda), GDC, KENGEN, MoEP, and UNU-GTP.
- AUC, UN Environment and other development partners to continue facilitating the institutional support to the realization of the AGCE.

3. Follow up from the First Stakeholders Workshop

- Setting up of the AGCE steering committee members as per the recommendation of the validation workshop
- Results and decisions of a series of Two **steering committee meetings held in Kigali (March 2016) and Addis Ababa (November 2016)**. These decisions include:
 - (i) setting up of the interim project coordination unit of AGCE till the full-fledged AGCE is established
 - (ii) legalization of AGCE as per Kenyan Law;
 - (iii) Use of existing GDC and KenGen training facilities during the training that will take place under the auspices of the IPCU-AGCE



Decisions of series of a series of four steering committee meetings held:

- Development of the Proposal for the **Interim Project Coordination Unit**
- Identification of **Kengen and GDC** training facilities including cost recovery of laboratory and equipment Facilities for use of trainings under the auspices of IPCU
- Development of training courses- Curriculum and setting up of Technical Advisory Team
- Start legalization process, **SC agreed to do desk studies** and benchmarking in relevant national and regional institutions
- Start operations **of IPCU-AGCE** by fourth quarter of 2017



March 2016



November 2016



February 2017



May 2017

The AGCE working Team composed of MoEP, GDC, KenGen and UN Environment :

The AGCE WT has:

- Developed the IPCU project proposal and approved by the SC
- Carried out a desk study and identified Local and regional institutions to benchmark and learn best practices.
- Identified KenGen and GDC training facilities in collaboration with SC members/ representatives of countries
- Developed AGCE LOGO for selection
- Developed website of AGCE for review
- Developed Detail Action Plan for the Launch of IPCU AGCE



AGCE Working Team



VISIT TO KENGEN AND GDC GEOTHERMAL TRAINING FACILITIES Naivasha and Nakuru (26-27 May 2017)





**TWO PARALLEL PILOT TRAININGS IN
NAIVASHA AND NAKURU**

**UNDER THE AUSPICES OF
INTERIM PROJECT COORDINATION UNIT**



**GEOHERMAL PROJECT
MANAGEMENT**



26-30 May 2017
Naivasha and
Nakuru

**GEOHERMAL LEAPFROG
SOFTWARE**

4. THE SECOND AFRICA GEOTHERMAL CENTER OF EXCELLENCE (AGCE) STAKEHOLDERS WORKSHOP

19-20 September 2017 at the Sheraton Hotel, Djibouti.

OBJECTIVE:

- This second AGCE Stakeholders' Workshop was organized in **recognition of the need to inform all stakeholders of the African Geothermal Center of Excellence (including representatives of African countries and geothermal support programmes as well as development partners)** of the progress that has been made so far in establishing and operationalizing AGCE.
- This was in pursuance of the decision of **First Stakeholders workshop in Nairobi (August 2015)**.



4. THE SECOND AFRICA GEOTHERMAL CENTER OF EXCELLENCE (AGCE) STAKEHOLDERS WORKSHOP 19-20 September 2017 at the Sheraton Hotel, Djibouti.

OUTPUT:

- IPCU-AGCE was **officially launched**
- Awareness created to AGCE stakeholders on the progress of establishing and operationalizing AGCE,
- Strategy to undertake training courses under the auspices of IPCU- AGCE was adopted,
- Status of **legalization process of establishing of AGCE was updated** and the next steps to be followed and implemented by Ministry of Energy and Petroleum and Africa Union Commission were identified. These will eventually lead to registration and hosting of AGCE in Kenya,
- The **application process** for acquiring training courses under the auspices of IPCU-AGCE was **shared and adopted**,



4. The Second Africa Geothermal Center Of Excellence (AGCE) Stakeholders Workshop

19-20 September 2017 at the Sheraton Hotel, Djibouti.

OUTPUT:

- The status report on the facilities at GDC and KenGen was acknowledged and its capacity to carry out training under IPCU-AGCE was recognized,
- Agreed to allow use of other countries (including other ARGEO countries) geothermal facilities for training purposes
- The role/efforts of the steering committee in spearheading the establishment and operationalization of the AGCE was lauded and composition of the Steering committee members were confirmed

The Fifth Africa Geothermal Center of Excellence (AGCE) Steering Committee 20 September 2017 at the Sheraton Hotel, Djibouti.

NEXT STEPS:

- IPCU is now operational and **recruitment of project coordinator is likely to be completed soon**
- IPCU to complete the **country's need assessment for geothermal trainings**
- A complete independent **Technical Advisory Team (TAT) from various geoscientific and engineering disciplines to be put in place.**
- Cost recovery plan of **KenGen and GDC training facilities to be compiled and distributed for review soon.**
- AGCE working team **to complete the training modules as per the comments and input of the Technical Advisory Team**



The Fifth Africa Geothermal Center of Excellence (AGCE) Steering Committee

20 September 2017 at the Sheraton Hotel, Djibouti.

NEXT STEPS:

- Recognizing the **language barriers for those coming from French speaking countries**, members agreed websites and promotional materials to be prepared in both French and English languages.
- The legal core team to continue **its benchmarking and finalize** the report for submission to the Kenyan Attorney General soon.
- AUC to provide **assistance and advice in legalization of this center** of Excellence under the Kenyan Law.

THANK YOU!