UN ENVIRONMENT HEAD QUARTER

Conference Room 8

25th May 2017
Nairobi, Kenya
This fourth African Geothermal center of Excellence Steering committee meeting (AGCE-SC4) was preceded by the signing ceremony of UN Environment and Ministry of Foreign Affairs-Iceland. The Ceremony was held on 25 May 2017 from 10-12 Pm. This signing agreement between the two organizations was to implement the second phase of the ARGeo project including the Interim Project Coordination Unit of the Africa Geothermal center of Excellence. Members of the Steering committee attended this signing ceremony.

Representatives of SC members attended the signing ceremony
List of participants (Present)

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<th>No</th>
<th>Name</th>
<th>Organisation/ Country</th>
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<tr>
<td>1</td>
<td>Uwera Rutagarama (Chair)</td>
<td>Rwanda and (delegated by AUC)</td>
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<td>2</td>
<td>Frank Turyatunga</td>
<td>UN Environment (co-Chair)</td>
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<td>3</td>
<td>Geordie Colville</td>
<td>UN Environment</td>
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<td>4</td>
<td>Meseret Zemedkun</td>
<td>UN Environment</td>
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<td>5</td>
<td>George Muia</td>
<td>GDC</td>
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<td>6</td>
<td>Robert Ogutu</td>
<td>GDC</td>
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<td>7</td>
<td>Peketsa Mangi</td>
<td>KenGen</td>
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<td>8</td>
<td>Joseph Ndogo</td>
<td>MoEP</td>
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<td>9</td>
<td>Kayad Ahmed</td>
<td>Djibouti</td>
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<td>10</td>
<td>David Bjarnasson</td>
<td>MFA-ICEIDA/UNU-GTP</td>
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<td>11</td>
<td>Maria</td>
<td>MFA-ICEIDA</td>
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<tr>
<td>12</td>
<td>Josephat Kebu</td>
<td>KenGen</td>
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<td>13</td>
<td>Ryan Ndombi</td>
<td>UN Environment</td>
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List of participants (Absent with Apologies)

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<th>No</th>
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<tr>
<td>1</td>
<td>Philippe Niyongabo</td>
<td>Africa Union Commission</td>
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<td>2</td>
<td>John Omenge</td>
<td>Ministry of Energy and Petroleum</td>
</tr>
<tr>
<td>3</td>
<td>Castro Ogutu</td>
<td>Ministry of Energy and Petroleum</td>
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<tr>
<td>4</td>
<td>Beatrice Kandie</td>
<td>KenGen</td>
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AGENDA

1. Introduction of participants
2. Progress of the Interim phase of African Geothermal Centre of excellence
3. Progress on legalization of the Center of Excellence
4. Presentation on AGCE Logo and AGCE website
5. Presentation on cost recovery of existing KenGen and GDC equipment and training facilities
6. Presentation on Pilot training activities under the framework of IPCU-AGCE
7. Presentation on Field visit to Naivasha and Nakuru for a visit of pilot trainings under IPCU-AGCE
1. Introduction and Welcome Remarks

The African Union Commission (AUC), which is the Chair of Steering Committee of the Africa Geothermal Center of Excellence (AGCE), delegated Ms. Uwera Rutagarama to Chair this Fourth Steering Committee Meeting on its behalf. Ms. Uwera Rutagarama informed the participants of her delegation by the African Union Commission and read the email message received from the AUC. She reiterated the commitment of the African Union Commission (AUC) of ensuring that the AGCE becomes a specialized institution of African Union with ownership by all the participating countries.

In this regard, the Chairperson welcomed all members to the meeting and asked the members to introduce themselves. As per the request of the Chair, each participant of the SC introduced her/himself.

Subsequently, the Chair presented the draft Agenda of the meeting and was adopted unanimously by all participants of the meeting with no further comments. As per the approved agenda, the Chair invited representatives from UN Environment and Ministry of Energy and Petroleum to provide brief welcome remarks.
Frank Turyatunga, Deputy Regional Director for UN Environment Africa office reiterated, in his welcome remarks, the commitment of the Africa office to support the establishment of AGCE and resolve any outstanding issues to start operation of the Interim Project Coordination Unit and full-fledged AGCE. He stressed the contribution of geothermal energy resource as the energy mix in Africa as part of sustainable development of the African Countries. He also indicated the importance of identifying training needs of various African countries to be addressed by the interim phase of AGCE.

Representative of the Ministry of Energy and Petroleum, Joseph Ndongo also re-affirmed the readiness and commitment of the Government of Kenya to host the Africa Geothermal Center of Excellence. He also described the commitment of the Ministry of Energy and Petroleum to set up the AGCE working team and lead the on-going work to start operation of the Interim Project Coordination Unit of AGCE (being hosted by the UN Environment) and the establishment of full-fledged AGCE in two years’ time.

2. Progress on setting up and operation of the IPCU-AGCE

This progress report was presented by the Program Manager (PM) of Africa Rift Geothermal Development Facility (ARGeo). Meseret thanked all the AGCE members of the Steering Committee for their participation in this meeting at a short notice. She informed the meeting that the work that is being presented by her now is the results of the members of the Africa Geothermal Center of Excellence working team being led by the Ministry of Energy and Petroleum (MoEP). In line with this she introduced the members of the working team that comprises representatives from GDC, KenGen, MOEP and UN Environment.

In her presentation, she reiterated that UN Environment wishes to see AGCE up and running in two years’ time i.e. AGCE owned by all Africans, independent legal entity with good curriculum, running management, long term training facilities, learning management system and supported by an independent Technical Advisory Team (TAT).
The Program Manager recalled the earlier three steering committee meetings that were held in Kigali-Rwanda (March 2016) and Addis Ababa (November 2016; February 2017) and the decision made in each of the SC meetings. She referred to the decision made during 3rd AGCE Steering Committee in February 2017 that included the approval of setting up of the IPCU as per the proposal submitted to the SC at that time and to work on the legalization of AGCE including the desk review of best practices of other relevant Centers of Excellences.

The PM also presented the work that has been done by the members of the AGCE working Team since March 2017 as per the decision made by the members of SC. These include:

- IPCU proposal finalized after incorporating comments from SC members
- Draft LOGO and website for AGCE prepared
- Draft report on Harmonized Cost recovery of GDC and KenGen training facilities prepared
- Desk study to benchmark best practices of other relevant Centers of Excellences carried out
- Action plan to implement training under the framework of IPCU developed
- Two parallel pilot trainings to see the feasibility of training facilities of GDC and KenGen organized

The steering committee members appreciated the work that have been already done by the working team and sought clarification in the following areas:

- How to determine the training needs of various African countries as they are at various levels of geothermal exploration and development?
- What is the drive of the training that will take place? Is it due to demand?
- What is the Application process to acquire training under the IPCU?
- Who qualifies for the training?
- What are the key priority courses to be given during the Interim phase?

After having a thorough discussion in the above areas, the members agreed the UN Environment Africa office in consultation with the Ministry and members of the working team to take the following steps:

- To start operation of IPCU immediately including recruitment of Project Coordinator
- An independent Technical Advisory Team (TAT) to be in place.
- IPCU to write immediately to member countries to identify specific training needs and prioritize the training accordingly. Trainings are demand driven.
- Identify the feasibility of KenGen and GDC training facilities for use during the interim phase
- UN Environment Africa office to send the harmonized cost recovery to members of steering committee, representatives of International Geothermal Association (IGA) and African Regional Branch (ARB) for review
- Representatives of AGCE Steering Committee to visit KenGen and GDC training facilities during the pilot training in Project Management and Leapfrog software
- Targets for this training are African member countries. However, private sectors interested in these training courses can participate provided that they cover the cost of trainings and accommodation.
3. Progress on legalization of the Centre of Excellence

Representatives of the Ministry of Energy and Petroleum, Mr. Ndogo, briefed the Steering committee the works that has been done so far through the Ministry and working team of the AGCE. Mr. Ndogo, explained that a core team is already set up out of the working team in order to follow up the legalization process of AGCE. He emphasized that the Ministry has sent a formal request to the Attorney general to legalize the AGCE under Kenyan Law. However, the Attorney general sought clarification on the objective, physical structure, funding, contribution from the member countries, Staff members, detail curriculum of the training etc. In that regard, the core team is now working on benchmarking of the best practices of other relevant Centers of Excellences to provide appropriate response to the Attorney General. It was also mentioned that AUC has shared information on some relevant center of excellences in Africa that could be used a s a reference in terms of structure, funding and other relevant issues.

In this context, the SC agreed that:

- Trainings will take place, as per the needs and expectations of countries, under the IPCU while legalization process is underway as it is a continuous progressive process.
- Certificates for this interim phase will be issued using the following LOGOS: AGCE, Convener and sponsor of that specific training programme.
- The legal core team to continue its benchmarking and finalize the report for submission to the Attorney General and proceed to its next steps.
- The AUC to provide assistance and advice in legalization of this center of Excellence under the Kenyan Law.

4. Presentation on AGCE Logo and Website

AGCE Logos: Representative of the UN Environment, Ryan Ndombi, presented to the SC members the different four logos of AGCE to choose one of the best that is relevant to the center of excellence. Ryan explained the concepts of the logos (i) Africa as a continent; (ii) Geothermal; and (iii) Center of excellence/training concepts are considered in the development of these logos.

Accordingly, the SC member chose one that shows relatively prominent parameters as indicated above. It was agreed that this Logo
will be circulated to member countries for their information. It will also be used for the interim phase of AGCE and will be subjected to change or improve during the full-fledged AGCE as needed.

**AGCE Website:** In the same vein, Ryan displayed the AGCE website that was developed by him and reviewed by the AGCE working team. He displayed in detail the content of the website: Home (about AGCE), Partners (AUC, ICEIDA etc...), Activities (SC meeting, Working team meetings etc...), Facilities (KenGen and GDC etc.).

The SC appreciated the efforts made so far and recommended the following to improve the website.

- Curriculum of the training, training courses, News about the training to be incorporated
- Establish a community of practice (e.g. discussion forum that will be moderated). It was mentioned that the UN Environment through GEO-6 has practiced this exercise and lessons can be learnt from this platform.
- E-learning mechanism to be created that could save time, cost and increase efficiency. It was recommended to communicate with some relevant institutions and request the type and duration of courses that they can provide online.
- A dedicated Domain to host only AGCE as it is currently hosted by the ARGeo website.
- The website: (i) to provide access to display all training materials of each course online, and (ii) to use the platform for E-learning mechanism.
- Recommended also to use “google tool” for automatic translation to various African working languages such as French, Spanish, Portugal etc. other than English. This tool, however, does not translate attachments.
- To also display photos of geothermal activities from other Africa participating countries in addition to the ones in Kenya.

5. **Presentation on cost recovery of existing KenGen and GDC equipment and training facilities**

Representatives of the Core team to develop harmonized cost recovery of GDC and KenGen facilities, Josephat Kebu, presented to the SC committee members the detail harmonized cost recovery for each kind of training courses to be conducted in both GDC and KenGen. However, the SC members requested for a summary that indicates the sum of cost of each module with an attachment of detail cost recovery (with a spreadsheet) for a reference. SC members also suggested to benchmark costs of other training facilities for a comparison purposes. Further the SC members requested for clarification as follows:
• What is the total cost of undertaking for example a Geochemistry course per student?
• What is the cost of just doing analysis of water samples collected from elsewhere?
• What is the cost of doing a tailored training course that is geared towards meeting the need and expectation of each specific country?
• What is the total cost of recovery that includes cost of accommodation?
• Could KenGen and GDC suggest the cost of rates of hotels nearby the training facilities?

SC members requested KENGEN and GDC to address the above recommendations when they review and circulate the harmonized cost recovery of the training facilities

6. Presentation on Pilot training activities under the framework of IPCU-AGCE

Representative of KenGen, Peketsa Mangi, informed the SC members about the two parallel geothermal pilot trainings that will be conducted under the auspices of Interim-Project coordination Unit of African Geothermal center of Excellence immediately after this fourth steering committee meeting. The two trainings are scheduled to be held in the next five days from 26-30 May 2017. These trainings are: (i) Geothermal Project planning and management; and (ii) Geothermal Leapfrog training which would take place at KenGen and GDC facilities respectively.

The SC member appreciated the effort and requested if these pilot trainings are also targeted other African countries. Mr. Mangi replied that these trainings are organized only for Kenyan trainees in order to showcase to the members of SC the feasibility of using KenGen and GDC facilities to conduct geothermal trainings under the auspices of IPCU in the coming two years.

7. Presentation on Field visit to Naivasha and Nakuru for a visit of pilot trainings under IPCU-AGCE

Representative of GDC, Robert Ogutu, informed the SC members about the field trip organized for the SC members to Naivasha and Nakuru in the coming two days on 26-27 May 2017. The purpose of this field visit is, for the Steering committee members, to identify the feasibility of using the KenGen and GDC training facilities to conduct the geothermal trainings under the framework of IPCU-AGCE.
The presentation indicated the itinerary of the field visit to the facilities of both KenGen and GDC. The first day visit was scheduled to be to Olkaria on 26th May 2017 and the second visit to GDC on the 27th of May.

The SC members delegated the two representatives of the African countries from Djibouti and Rwanda and representatives from the UN Environment to visit these facilities and report back the results of this two day visit to Naivasha and Nakuru to SC.

8. Closing Remarks

The Chair acknowledged and thanked all participants and presenters for their active participation and contribution to the meeting.

She also reminded to implement all the agreed next steps that cover the following:

(A) Setting up and operation of the IPCU-AGCE

- To start operation of IPCU immediately including recruitment of Project Coordinator
- An independent Technical Advisory Team (TAT) to be in place.
- IPCU to write immediately to member countries to identify specific training needs and prioritize the training accordingly. Trainings are demand driven.
- Identify the feasibility of KenGen and GDC training facilities for use during the interim phase
- UN Environment Africa office to send the harmonized cost recovery to members of steering committee, representatives of International Geothermal Association (IGA) and African Regional Branch (ARB) for review
- Representatives of AGCE Steering Committee to visit KenGen and GDC training facilities during the pilot training in Project Management and Leapfrog software
- Targets for this training are African member countries. However, private sectors interested in these training courses can participate provided that they cover the cost of trainings and accommodation.

(B) Legalization of the Centre of Excellence

- Trainings will take place, as per the needs and expectations of countries, under the IPCU while legalization process is underway as it is a continuous progressive process.
- Certificates for this interim phase will be issued using the following LOGOS: AGCE, Convener and sponsor of that specific training programme.
• The legal core team to continue its benchmarking and finalize the report for submission to the Attorney General and proceed to its next steps.
• The AUC to provide assistance and advice in legalization of this center of Excellence under the Kenyan Law.

(C) AGCE Logos and websites

• The above recommended changes on the logo to be made and comments on the website to be incorporated.

(D) Cost recovery of existing KenGen and GDC equipment and training facilities

• KENGEN and GDC to address the above recommendations when they review and circulate the harmonized cost recovery of the training facilities
• UN Environment to share the finalized cost recovery to relevant organizations (SC members, IGA representative and African Regional Branch) for their input and review
• KenGen and GDC to share the revised and finalized cost to their respective Boards for approval

(E) Results of Field visit to Naivasha and Nakuru

• The SC members delegated the two representatives of the African countries from Djibouti and Rwanda and representatives from the UN Environment to visit these facilities and report back the results of this two day visit to Naivasha and Nakuru to SC.

(F) Agreed next SC meeting to take place in 3 months.