

Geothermal Energy Capacity Building in Egypt

GEB NEWSLETTER**Issue 2: February 2022****About GEB:**

The GEB Project is supported by the Erasmus + Programme Key Action 2, Capacity Building in Higher Education, CBHE, to help reduce the lack of skilled engineers in geothermal engineering in Egypt, in order to unlock the potential of this clean and sustainable energy resource.

GEB Activities October 2021 to February 2022:

The past few months of our project have seen many strides in the progress of our project. During the past period, the team was busy with different administrative meetings, focussed mainly on the progress and development of the graduate diploma, one of the main deliverables of the project. However, the highlight of this period was the Egyptian staff training at the University of Bologna, one in a series of several trainings that cover the whole duration of the project.

National Erasmus Office's Preventive Monitoring Meeting

Eng. Karim Hamdy, National Erasmus+ Acting Coordinator and Ms. Dalia Shalabi, Projects' Officer, represented the National Erasmus+ Office in Egypt, during a preventative monitoring meeting that was held at the Egypt-Japan University of Science & Technology, on the 6th of December 2021.



The meeting included representatives from the partners of the project and was planned as part of the ongoing monitoring of the Agency's projects. The meeting saw updates from the partners on the status

and progress of different deliverables, as well as feedback and direction from the Agency on areas that required more focus.

**Consortium Coordination Meeting**

The coordinating consortium of the project had a meeting between the 13th and 15th of December, that was held at the University of Bologna. The meeting covered important points about management of the project.



These included topics such as the coordination between the participating European and Egyptian universities, in the mobility of the students of the graduate diploma, as well as the updated project plan of the coming year, addressing issues caused by COVID-19. Furthermore, updates in the status of the Pilot Plant being constructed at Cairo University were

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also presented and reviewed. Finally, the upcoming trainings' dates and locations were discussed, and decided with the partners.

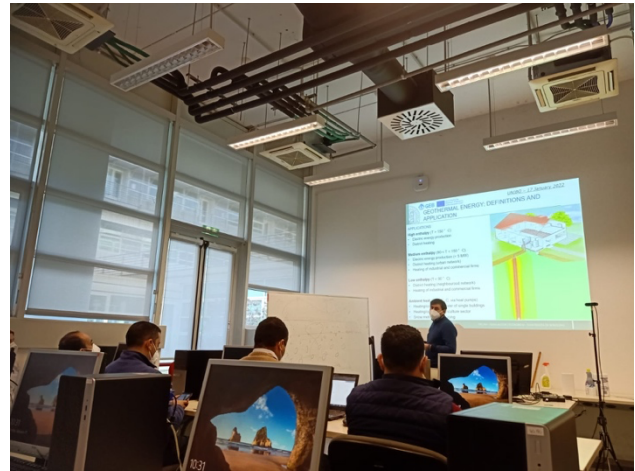


University of Bologna Training 17-19 January 2022

The training at the University of Bologna was the third in a series of trainings that form the core of our project and aim at building the capacity of the Egyptian Institutes of Higher Education's Staff to introduce Geothermal Engineering to Egypt. The training was held between the 17th and 19th of January and focused on Geothermal Reservoir Engineering. The training at University of Bologna featured several interesting lectures, as well as visits, delivered by the project partners at the university.



The training kicked off with an introduction and welcome from Professor Stefano Bonduà, the University of Bologna team coordinator for this project. The training comprised lectures about both low and high enthalpy geothermal reservoirs and followed with lectures introducing different uses of numerical modelling in geothermal reservoirs, and the means that could be used to maximize the output of a reservoir, presented by renowned professors from the university.



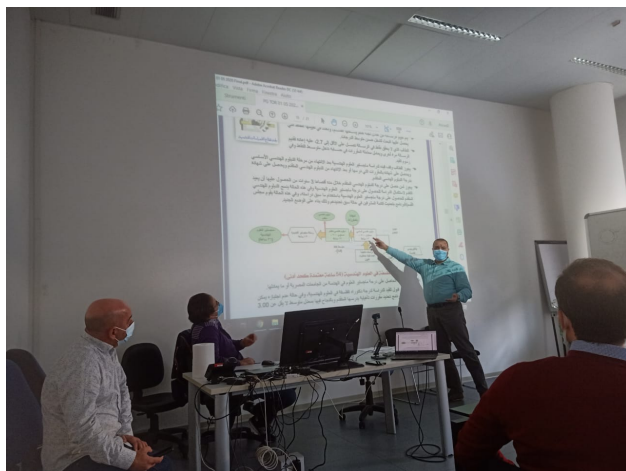
The training also included a guided visit to two pilot borehole heat exchanger systems at the university. The visit also demonstrated the monitoring systems of the borehole that show different statistics about the system conveying information about its performance. This all will also help and guide the design and construction of the pilot system at Cairo University.



Graduate Diploma of Geothermal Engineering

As one of the most important deliverables of the project, the Graduate Diploma in Geothermal Engineering aims to be the tool that helps develop the expertise necessary to the graduate students of Egypt to be able to bring by new innovations and breakthroughs in the field of Geothermal Engineering to Egypt. The consortium is glad to announce that the course structure for the diploma has been developed completely, according to the 2020 guidelines for preparation of postgraduate programs in the faculties of Engineering in Egypt.

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Advertising GEB

The project members have been keen on advertising the project to attract potential students, and to attract partners from the industry that are willing to adopt this technology and apply it commercially. This has been through the regular posts on the Facebook page (<https://www.facebook.com/gebproject>) that aim to increase people's knowledge and interest in Geothermal Energy and its potential as a clean and sustainable source of energy. Additionally, the participating institutions have mentioned the project and its potential on their respective websites, links to these websites can be found on the project website (<https://www.geb-project.info/pages/Partners>). The tools being developed for the project, such as the pilot plant and the lab-scale model, will also be a powerful tool in showing the potential stakeholders the power of Geothermal Energy.

The courses of the diploma are currently under construction with the close collaboration of all the participating partners, with coordination between the partners to support student mobility during their graduation projects to further enrich and equip the graduates of the diploma with the tools and expertise to be the pioneers of this technology in Egypt.

The Diploma has already gotten the formal approvals of the council of Mining, Metallurgical and Petroleum department and the council of the Faculty of Engineering at Cairo University.

Updates and announcements will be posted on the project's website, and Facebook page, as well as the project's page on the partners' websites, so stay tuned for more information to follow.

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