



TMGO

TULU MOYE GEOTHERMAL



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EthiopiaTMGO



Eric ABINAN KOFFI
CFO

Message

Eric ABINAN KOFFI, CFO

After the effectiveness of the project's agreements (the Power Purchase Agreement and the Implementation Agreement), TMGO is now at an important stage of project development in terms of drilling and the lenders due diligences to achieve financial close.

Financing geothermal energy projects usually requires tailored approaches in terms of support schemes and financial instruments since geothermal sector is far from being uniform in terms of maturity and technology readiness across the globe.

Talking about financial challenges of geothermal project is closely linked to technical and especially drilling activities and steam field development as it is the third phase after Resource exploration and Resource assessment, and before Power Plant Development and Start of Operations.

It is not always obvious and known by everyone, but geothermal energy projects are defined by their capital intensity. Indeed, compared to the other renewable energy technologies, it has the highest resource risk during exploration phase deriving from significant upfront cost for surface studies, exploration drilling and appraisal drilling required to confirm the existence of the geothermal resource.

In addition, for deep geothermal projects, the geological risk has a big impact on the overall cost of the project. Indeed, the geological risk only diminishes once a significant amount of capital has been invested (i.e., a first wells has been drilled, providing information on the parameters of the reservoir).

At TMGO, all the technical team is currently focused on finalizing the second well drilling and, in a couple of weeks, drilling of the third well will be started. These drilling works are benefiting of the advice of experts from TMGO's International Scientific and Technical Advisory Committee (ISTAC) and are followed up by lenders' technical advisors. After the testing of the first two wells, we would be able to assess the parameters of the reservoir which is crucial for the financial close process.

In the meantime, based on the successful results of the two previous phases mentioned above, the shareholders have invested more than \$55 million. This demonstrates their commitment to the Government of Ethiopia to carry out this project, as the first IPP in the country.

On another hand, we are honoured of the confidence of our group of potential lenders, co-coordinated by FMO and AfDB, and we hope to achieve in the coming months the financial close of this important project, which will open the road to additional geothermal energy capacities in Ethiopia (estimated potential of more than 10,000 MWe). We are working closely with them to set up adequate mitigation solutions to respond to the challenging financial risks inherent to geothermal energy and project finance in the energy sector.

We also want to thank the following institutions: GRMF (\$10m), USTDA (\$1,5m) and DFC (\$1,5m) for the grants approved in favour of TMGO, thus providing invaluable support for the development of geothermal energy in East-Africa and particularly in Ethiopia. Another major financial achievement, which demonstrates the good trajectory of the project, is the signing of Contract of Guarantee for Equity and Quasi-Equity Investments with MIGA (World Bank Group), rewarding shareholders' investment efforts.

In conclusion, we are on the right track and all thanks goes to the whole team and especially to its now former CEO, Darrell BOYD, who will leave us in a few weeks. Thank you, Darrell, for your leadership and management during these intensive three years! All the best in your future endeavours!

Warm Welcome to Mr. Maxence Mirabeau

We are excited to welcome our new CEO, Maxence Mirabeau, to our vibrant team! Mr. Maxence replaces the outgoing CEO,

Mr. Darrell Boyd, who is leaving at the end of May 2021. Mr. Maxence is a seasoned engineer with more than 29 years of experience.

His core competencies are related to infrastructure projects. He performed operational responsibilities in all the phases of a project : engineering, construction, commissioning, operation, financing and development.



He also managed BUs and had regional role as business developer in North, Central and West Africa including the support to investment opportunities and potential acquisitions in the region.

He has strong experience in different sectors such as Urban Transportation, Water utility, Renewable Energy and Buildings.

Happy to have you Mr. Maxence!

Site update

Various activities have been ongoing at site during the month of March. Geothermal drilling continues at well pad GA drilling exploration well GA-2.

The water supply system upgrades continued with start of pump installation in one of the water wells, upgrades of the water supply system and continue drilling of water wells.

The civil works were more or less completed, and the site is as good as ready for hand over to the EPC contractor.



Geothermal Drilling

During the month of March drilling has reached from 712 m down to just over 1145 m. In the beginning of the month directional drilling started from the kick-off point of 712 m. The angle of the well was built up to 22° and the direction to north-west was reached late March.

Based on interpretation of preliminary results from GA-1 and resistivity data from the area the direction of the directional part was modified from south-west to north-west, going more under the Gnarl lava field, closer to the expected heat source.



By the end of the month, after reaching below 1100 m, temperature and pressure logging were carried out. The results of these measurements showed that production casing must go deeper than initial estimated.

Next step for drilling of well GA-2 is to drill down to casing depth for production casing, install the casing and continue drilling for the production part of the well down to about 2500 m.

It is assumed that drilling of GA-2 will be completed in April and the rig will mobilize to next well pad, GB. As soon as the rig has mobilized flow tests for GA-1 and GA 2 will start.

Water Wells

TMGO's overall objective is to have a water supply system delivering continuous maximum flow of 60 L/s (with redundancy) or 216 m³/hr. In order to achieve that, 5 wells will be drilled.

Wells 3 and 4 are completed and delivering water to the water supply system. In March, fishing of the pump from water well 2 was successful.

It is expected that water well 2 will be connected to the water supply system in April. Drilling of Water well 5 continued through the month of March, reaching almost 200 m by the end of the month. The well will be completed in April.

Everything is ready for starting drilling of water well 6. When activities at water well 2 are finished and the well is operational the rig will move to water well 6 location and start drilling.



Drill Pad Construction

Extension of Well pad GA and GB have been ongoing. When finished, third well can be drilled from GA. The well pads will be ready in April.



GRMF Visit

The Geothermal Risk Mitigation Fund has been crucial for the progress made in the Tulu Moya project site. We had the pleasure to host the representative of GRMF, Ato Tsegaye Beyene in our site between 15 and 17 of March 2021. The main objective for Ato Tsegaye was to assess the status of the Infrastructure Upgrade Program led by TMGO and to validate the general progress of the project and the fulfilment of conditions stipulated on our grant contract. The feedback we received from the site team was warm after Ato Tsegaye left site and on behalf of all our team, we look forward to host him again or any members of the GRMF team. In brief, thank you.



EEP Transmission line: Mission activated.

The month of March has been very fruitful in terms with our engagement with our customer and especially with the transmission and substation team of EEP. It was a great pleasure to have met the transmission and substation field engineers, design team and survey team on site to discuss the preliminary location of the powerplant substation the detailed works expected to be conducted by EEP in accordance with the PPA. The general attention given by EEP has been great so far. Design works for the 11 km transmission line has advanced well. On the ground survey of the transmission line is currently being conducted and expected to be finalized on the 2nd of April. Detailed discussions with design lead of EEP and TMGO technical team is on-going with very good collaborative spirit. Following the preliminary designs and layout proposal, focus will be put on the environmental and social aspect of those works which expected to build with the same positive and collaborative spirit between both parties.



EEA Management site visit

On 6th of March 2021, a new record was broken. EEA management team and lead staff, 25 of team, visited the project site with all covid protocols applied in order to maintain the Island drilling concept that has been put in place since the beginning of the pandemic. The team was composed of the members of the Geothermal Resource Development Directorate and the Compliance and Monitoring team to state a few. A full site visit was conducted, and the questions were plenty. This was a great opportunity for the EEA team, especially those who have never been to site, to actually see what is happening on the ground and for TMGO to meet in person the full team that has been giving life to the TM Geothermal Project. On behalf of the whole team, እናመሰግናለን!



March Board meeting

Our quarterly board meeting was held on 25th of March 2021 in TMGO Addis office and VTC in presence of our board members that have joined from Kenya, Iceland, United states, England and Ethiopia. The meeting reviewed TMGO's last three-month performance and evaluated short and long term plans moving forward with the drilling campaign.

Lenders Environment and Social Advisor visited TMGO Project site

The lenders Environment and Social advisor Arup partnered with Kisasa's conducted a site due-diligence review. Kisasa's (EHSS) experts also supported by a local expert from MMA consultant. The five-day long project visit, focused on Environmental, Health, Safety and Social (EHSS) compliance of the project.

The team spent 3 days at site interviewing and observing the project site and practical application of the project EHSS management system and full day meeting with local community which are directly and indirectly impacted by the presence of the project. The team also visited the project water well drilling and the community water source and discussed with the project geoscientist about the hydrology and the monitoring plan. The team also spent two days at the head office of TMGO interviewing the management team to EHSS commitments, implementation, and monitoring processes.



TMGO COVID - 19 Training

TMGO engaged INNOVA Consultancy, our health advisors, in facilitating COVID- 19 training and audit in regard to Occupational Safety and Hazards in general and specifically concerning the COVID-19 at TMGO camp and site area.

This training and audit focus on identifying potential occupational hazards in the site area, how to implement basic protective measures in the workplace and how to implement Infection Prevention and Control (IPC) while assessing current status of the site area and identifying treats and finally certifying the camp area and clinic after qualification.

Additionally, the training will be according to the guidelines and directions of the federal ministry of health of Ethiopia and recommendations from international health organizations. The project activities will be monitored and evaluated after the end of each training session.



TMGO Celebrates International women's day.

TMGO celebrated International Women's Day on the 12th of March 2021 evening with its female staffs along with their male Colleagues. On this event TMGO showed that it is a company who has been walking its talk in regard to gender equality & equity.





MEET OUR TEAM

With eight years of experience, Ahlam Dechassa has acquired vast knowledge and experience in Office Administration and Management. She is also well-equipped on the duties and responsibilities of an Executive Assistance. Throughout the years of her experience, she has worked under pressure which enabled her to be a quick learner in a fast-paced environment. She does all her work with professionalism and is confident in her ability to undertake any task and is a firm believer in teamwork.

Ahlam graduated with a bachelor's degree in Business Administration from Addis Ababa University in 2014. She began her career as an Office Administrator and went on to be CEO Assistant. Ahlam is passionate about community service, volunteer, and charity works.

Ahlam Dechassa

Executive Assistant



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