Tulu Moye Geothermal Operations



NEWSLETTER

June 2021



Message from the CFO, Eric ABINAN KOFFI



Happy holidays! Dear all,

It is a pleasure for me to wish you a good vacation or a safe return from vacation. I hope that you are taking or have taken advantage of these moments to rest and recharge your batteries with your family and loved ones.

As you can imagine, a project of TMGO's type doesn't take any vacation. Of course, leaves have been planned to support the normal progress of the drilling activities as well as of the due diligence with the various parties to the project. In fact, the month of July was an intense month in terms of activities to list among others:

- the continuation of drilling activities for the third well which started on June 7, 2021
- the start of the testing of the first two
 wells,
- the first round of the discussions for
 the selection of an EPC contractor
- the launch of the discussions between TMGO, the lenders and the Government

of Ethiopia on the bankability of the project

Regarding the last bullet point, with the effective engagement of Clifford Chance, as legal advisor to the Government of Ethiopia, the list of the bankability points raised by the lenders was officially transmitted to the Government and the first interactions have taken place.

The objective is to agree on the treatment of this issues list during the coming weeks, to prepare the path to Financial Close of the project, awaiting the steam resource confirmation expected from the drilling program.

In this same perspective, we had the privilege and the honour to receive in our office two vice presidents of AfDB: Mr. Solomon Quaynor, the Vice President for the Private Sector, Infrastructure (including Energy and Transport) and Industrialization and Mr. Kevin Kariuki, Vice President for Power, Energy, Climate & Green Growth at The African Development Bank Group. They were visiting Ethiopia following the last trip of the president of the bank which took place in early June 2021:

The visit paid to TMGO by these high-level officials, despite their busy agenda, testify the interest of the AfDB on our project. We are very grateful for it, and we want to greet the quality of the discussions and the promising outlook that resulted from them.

As the first 100% private geotechnical project on the continent, TMGO relies on the lenders, with the support of the Government, to put in place a creative and a win-win financing scheme to boost the development of geothermal resource in the country.

Enjoy your holidays! We, at TMGO, are striving to deliver the first IPP of Ethiopia.

Site update



Geothermal Drilling and Testing

Exploration Wells GB-1 will be directed to west-south-west targeting area identified with geothermal manifestation on surface. The starting point was set at 650 m though despite a good drilling run up to 650m, where we successfully cased off at a depth of 594,5 m RT, the drilling team faced tremendous amount of challenge starting from 650 m. Formation below this depth has been very loose, creating hole cleaning problem with mixture of cuttings and rocks constantly collapsing. With no returns and continuously being stuck, led us to do a series of cement plug jobs in the attempt to clean the well, seal areas with loose formation, and tempt to gain

back returns. After several attempts and challenges, drilling is finally back on track (passed 900 m and building on an angle to reach target) with good returns.

Well Testing

Testing of GA-1 well is on-going with stable steam output in terms of pressure and temperature. The well was opened for flow on the 17th of July at 13:34 Ethiopian time. First the gas cap was blown vertically into air in safe weather conditions with the wind blowing to appropriate direction. H2S gas detectors in the neighbourhood of the well pad did not respond and continued to not respond to date. When steam arrived at well head and the flow was clean for debris the flow was directed towards the separator. Since then, the well has been blowing and data is being gathered and processed twice a day. Final results will be ready when testing is completed, which is expected to be in August 2021. The well testing team will be back to site in August where they will take samples for further chemical analysis in order to have more information on the chemical composition of the steam. The main take away of the results, thus far is that the geothermal resource is there and our key goal is to find the reservoir now.



Civil Works

The month of July has been a month focused on the Geothermal drilling, civil works and more improvements on water



on average above 30 l/s. Drilling of well 5 and 6 is completed; waiting for submersible pumps and panels to be delivered from Italy (should be completed next month). Community water connection works are in progress which started with a thorough investigation of existing infrastructure. It's important to note that Geothermal drilling has not been affected by lack of water during drilling of GB-1.



supply system.

Pad GA expansion works have continued in full force and are almost complete. We conducted a fast-track bidding process was conducted for the civil works related to the additional drill pads Pad GC and GD and selection has been finalized on Design Build principle. The contractor has started working on detailed design while Right of Way is being processed by the E&S team. Water wells fence works are completed. Additional civil works to improve water supply system have been ongoing in the leadership of TMGO new water project manager.

Water Supply for Geothermal Drilling

During the month of June, water wells 2, 3 and 4 have been in operation providing









Pump test preparation

EPC update

contractor selection is progressing well with second rounds of clarification with shortlisted bidders having taken place 3rd week of July. The TMGO team with the Owners Engineers has continued their evaluation, scrutinizing the offers in detail. The road to building the first IPP geothermal powerplant is well paved and the ribbon at the start line will be cut last quarter of 2021. The plan is maintained at having power to the national grid before the end of 2023.

Activities at well 6

FROM OUTSIDE SOURCES

This is a section we bring to you every month things we thought might be of interest to our readers, local cultural foods, activities, tourist attractions and many more. The section serves as a non-geothermal news and humorous pieces to give our foreign readers what the community we work with look like or others. In this issue of our newsletter, we bring to you, one of Ethiopia's beautiful places to be visited: The Bale Mountains National Park.

Reasons to Visit the Bale Mountains

1. The Ethiopian Wolf

The Bale Mountains are the best place in Ethiopia to spot the majestic and enigmatic Ethiopian Wolf, which is sadly an endangered species due to the expansion of agriculture in the country, with less than 400 surviving in the wild. It is the world's rare canid. The wolf is endemic to Ethiopia, so found nowhere else in the world.





African gold wolves, spotted hyenas, blackmaned lions, olive baboons, colobus and bale monkeys, honey badgers, warthogs, nyala... these are just some of the incredible - and often endangered - species that can be seen in what is one of Ethiopia's greatest wildlife destinations.

What's more, thanks to the large population of rodents, the Bale Mountains is host to 283 of Ethiopia's 860 species of bird, making it one of the best bird-watching spots in the world. Yellow-fronted parrots, black-winged lovebirds, Abyssinian catbirds, Rouget's rails and Spot-breasted plovers are among the beautiful birds that can be seen in the park.

3. Stunning Rock Formations

The Bale Mountains were formed by volcanic eruptions, and the area consists of six volcanic cones that are all more than 4,000 metres high. Erosion by ice, water and wind has created the fascinating geological formations that can be seen in the park today.

The most intriguing formations are located in the 'stone forest' near to Rafu camp, which consists of a surreal collection of basalt pipes and granite boulders. The landscape here is quite otherworldly and makes for some amazing photos!

4. Waterfalls and the Harenna Forest

The beautiful Harenna Forest has two waterfalls located very near to one another. They can be reached in around an hour from the park's sub-HQ just south of the Bale Mountains Lodge. If you're coming directly from the lodge, it is a 5–6hour trek, but gravel roads that run the park mean you can take sorties down to the forest and get out and hike from there.

One of the waterfalls has a pool at the bottom, whose cool, clean water is perfect for a dip! While in the Harenna Forest, keep your eyes peeled for Colobus and Bale monkeys, as well as the numerous colourful bird species found here.

Source: https://www.brilliant-ethiopia.com/reasons-to-visit-the-bale-mountains



Meet Our Team

Kassech Assefa Office Assistant

Kassech Assefa is our office assistant who supports TMGO in warmly welcoming the team and visitors at the head office. With over five years of experience under her belt, Kassech makes the work environment conducive and flavoured with coffee & more.

NEWS.

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