

NEWSLETTER

August 2020

HAPPY ETHIOPIAN NEW YEAR 2013

WATER RESERVOIR RECEIVES WATER FOR THE FIRST TIME THROUGH OUR 16 KM STRETCH PIPELINE

STAFF AT PROJECT SITE EXPRESS APPRECIATION TO SIGURGEIR GEIRSSON, CTO

HOYA HOYE HO! (KENGEN ETHIOPIAN BUHE CELEBRATION)

MEASURES TAKEN FOR COVID-19

TMGO ISSR STAFF TRAINING

TMGO AND SMALL PLOT OF LAND HAVE TRANSFORMED MY LIFE

CONGRADULATIONS TO WINNERS OF THE BUSINESS LEADERSHIP AND FINANCE MINISTER OF THE YEAR

GRATITUDE TO BUSINESS FOCUS MAGAZINE



Chief Financial Officer
Emmanuel Birba

MESSAGE FROM EMMANUEL BIRBA, CFO

Warm welcome Everyone to the August edition of TMGO's newsletter.

Warm indeed, as we are entering September filled with hope about the upcoming Ethiopian New Year (September 11th) which we are confident will bring material accomplishments to our project and Ethiopia.

Over the past month the entire team at TMGO has remained highly committed in progressing key workstreams despite the global sanitary context. This was made possible by the continuous support received from Ethiopian government.

First on drilling, after the impressive remobilization effort, we were pleased to receive rather encouraging signs from our drilling operations. Current depth reached by KenGen on our first well is approaching the 700m mark and we are excited about our preliminary observation on steam quality.

Coming up, the EPC tender process has reached an important milestone with the pre-qualification of 7 world-renowned bidders. September will therefore mark the starting of an engaging and competitive RFP

process which we hope will yield positive results for the project.

Despite a much-needed break, we have also kept pace on our engagement with our lenders group to progress essential due diligence aspects, notably on E&S and Legal. As indicated in previous editions, TMGO enjoys the support of world-class institutions such as AFDB, USD-FC, EIB, 91 (formerly EAIF) etc. in mobilizing long-term debt funding instruments. At its core, TMGO's ambition is to allow the Ethiopian economy to develop and thereby create massive employment opportunities for the Ethiopian people. We believe our choice of lenders supports that ambition as their respective funding (c. 190m\$ in total) will allow a bridge to be built for the development of vibrant industrial and services sectors in Ethiopia, all powered by clean and innovative energy. We have therefore set ambitious objectives in designing and delivering on the project's financing structure. Following the successful approval obtained by AFDB for the deployment of a 10m\$ blended tranche from Clean Technology Fund as well as the securing of VGF from 91, we are progressing discussion on key bankability aspects which would lead us to the approval of a term-sheet by end of 2020. TMGO is highly confident that this unwavering support from our DFIs partners will result in building this environment of economic opportunity we have vowed to achieve alongside the Government.

Until then, armed with resilience and commitment we continue our track to make this new Ethiopian Year one of great results for all our stakeholders.

Melkam Addis Amet | Happy Ethiopian New Year

SITE UPDATE

DRILLING

At the beginning of August drilling of geothermal exploration well GA-1 in Tulu Moye had already reached down to almost 650 meters. At that depth, the rig drilled into fractured over pressured zone resulting in a small steam kick up to the surface of the well. This is a known situation in the geothermal drilling industry and the drilling crew managed to quench the well.

After careful evaluation of the situation of this section the team at site in co-operation with TMGO's International Science and Technical Committee, ISTAC, next steps were decided. The first step in improving this section of the well was to close off around 80 meters of loss zones which were encountered at the beginning of this section, at 425 meters depth and down to 485 meters depth. Closing off a large water influx zone like this is done with cementing plugs in the well and drilling through them. Cementing plug jobs must be prepared carefully and depending on the situation multiple plug jobs can be required. Cementing of large loss zones or over pressurized fractures can require a great deal of patience. To complete sealing of this area the drilling crew had to cement 13 plugs and drill through them. In late August, the cementing work was completed, and the water influx zone was successfully closed off. Drilling continued and by the end of the month drilling reached again down to 650 m where the "kick" was experienced at the end of July 2020. Currently preparations are being made to close off this over pressured zone in similar manners as was done with the water influx zone higher in the well. The method of cementing off the water influx zone and over pressured zone which was mutually agreed upon between TMGO's drilling supervisors, KenGen crew and ISTAC, is considered to be best industry standard in these kind of situations and provides a safe and secure method of controlling the well and ensures continuous drilling of the well.



Drilling of exploration well GA-1 has already given valuable information. A kick in the well at this depth gives good indication of the geothermal resources TMGO is exploring in Tulu Moye. Next steps in drilling of the exploration well GA-1 is to finish this section of the well, install the production casing and start drilling for the production part of the well.

August has been a kinder month for our water supply system works as water flowed from the pioneer tank (Iteya) to the water reservoir (Tulu Moye).

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The completion of the connection works between the pioneer tank and the water reservoir puts a halt to the tedious water trucking works that were ongoing for months to the water reservoir next to drill pad. While proving the good condition the upgraded road is in, to sustain these water trucking activities and other heavy logistics during this rainy season, it is a great achievement to be able to stop delivery up to that distance.



WATER RESERVOIR RECEIVES WATER FOR THE FIRST TIME THROUGH OUR 16 KM STRETCH PIPELINE

Meanwhile, all trucks have been diverted to the pioneer tank (Iteya) until we are able to gather all the water coming from our water wells and pump it to the pipeline system. We are aiming to connect at least two productive wells in September 2020



Fishing out equipment on site

WATER DELIVERY TO PIONEER TANK

Fishing out stuck pump in well no. 2 and re-installation works are in progress which will allow well no2 delivering water to support geothermal drilling in Tulu Moyo as connection to the main pipeline is already completed. as water connection works to the pond will follow shortly.





SECURITY PERSONS GRADUATED

TMGO security contractor Fooll-ee Security Agency graduated 45 security guards in this August 2020. All the 45 security guards who have been trained for more than three months by the Oromia Police have been recruited from the local community around the TMGO drilling site. Total number of recruited security persons are 74 and the remaining 29 are currently on training at the site.

These security officers have been trained majorly, on roles and responsibilities of security officers, patrolling, access, and egress control, communicating security issues, reporting and record keeping, conflict management, resolving conflict, system in security environment and emergency procedures.



RASPBERRY PI SHAKE 3D SEISMIC MONITORING UNITS



Monitoring and understanding induced seismicity is critical in order to estimate and mitigate seismic risk related to numerous existing and

emerging techniques for natural resource exploitation in the shallow-crust. TMGO imported RS3D seismographs for recording seismic activity of all magnitudes, both vertically and laterally, incorporating three weak-motion geophone sensors. This month, our team of experts were busy making necessary preparations to install the seismic monitors at 8 key locations. The first 4 are expected to be live in September.

the Powerplant area giving valuable information for the prospected EPC contractors to prepare their proposal. Radice has a very good reputation in the industry of ground reconnaissance, soil investigation and profiling, foundation design and related services, working with top of the notch firms and organizations in the country. Their crew is currently on site to conduct plane survey by total station, centerline profile leveling survey, cross section survey and mapping of the Powerplant area.



We are pleased to announce Radice Engineering PLC are now on board to conduct geotechnical survey of



STAFF AT PROJECT SITE EXPRESS APPRECIATION TO SIGURGEIR GEIRSSON,CTO

TMGO's Chief Technical Officer, Sigurgeir Geirsson has been working very hard at the camp in Tulu Moye. He follows up the drilling process day and night based in the camp. The camp and site crew have expressed their appreciation of him by cutting cake at the site.



TMGO CARES! MEASURES TAKEN FOR COVID- 19 PREPAREDNESS BY TMGO

TMGO has implemented a range of measures to ensure continued safety of staff, contractors' staff, and local communities and in general, to ensure that we conduct all operations in a responsible, safe and prudent manner in these otherwise uncertain times. This includes engagement of expert advice from Control Risks, Response-Med and Innova (a specialist Ethiopian Health Consultancy Company) to receive guidance, recommendations and training on preventative and precautionary measures that should be taken.

This has resulted already in additional staff training and the appointment of a qualified medic stationed at site office to make sure all staff at site are attended to and to provide training and guidance measure on COVID- 19 to all site staff, contractors, and subcontractors.

In consultation with our experts and Ministry of Health here, further measures to increase the safety, health and welfare of drilling crew staff, camp support staff and office staff have also been implemented as below:



HOYA HOYE HO! (KENGEN ETHIOPIAN BUHE CELEBRATION)

A bon fire was set up at camp following the traditions of the "Buhe" yearly celebration held on August 19th in Ethiopia. A colorful evening animated with traditional chants, dances. KenGen do not only bring their elaborated drilling experience, they also bring the wonderful Kenyan traditions and customs. Excellent initiative from the camp crew!



- Introducing physical and operational medical and safety measures at our remote Project Camp & Well pad to create a self-isolation and quarantine area, including efforts to have this certified and gazette as such.
- Evacuation action plan for a confirmed case of Covid-19 at TM drilling project: The procedure outlines the process of making decision and action where a case of Covid-19 has been confirmed on site during the drilling operation at Tulu Moye.
- Updates on Testing Centres, Treatment centres, Suspected patient protocols
- Occupational Safety and Health Procedure for Covid-19 pandemic at Tulu Moye drilling Project: The procedure outlines the measures to prevent and control the spread of coronavirus and other infectious diseases during the drilling operation at Tulu Moye.
- Splitting TMGO Team into TEAM A and TEAM B to start working from home on weekly rotation and avoidance of any physical contact outside of their designated team with training guidelines on working from home and other clear guidelines. (to promote social distancing
- Site Visits from Addis are being restricted to essential movements only for authorised personnel and will be briefed on how to minimize the risk of infection.
- Site area is remote and therefore making sure to avoiding infection and transmission to site by sharing all advice with Mikada as our infrastructure, civils & water contractor and ensuring they have appropriate measures in place to reduce the risk of infection and transmission and clearing personnel before entering site area
- Take measures of routine temperature checks and clearance on camp entrance point
- Purchasing and distribution of PPE Items to TMGO Site and Camp personnel and taking total Disinfection protocols and measures on TMGO Site and Camp area on a biweekly basis.
- Following up on verified source publications of the Ethiopian Government and Ethiopian Ministry of Health and sharing up to date information to staff and taking relevant actions upon it.
- Providing all necessary PPE items needed for the prevention of COVID- 19 infection and dissemination to all staff members including site staff while providing training on how to use them
- Getting daily Advice and consultancy measures from or international consultants Control Risk and Response Med on measures we can take to reduce the infection & contamination risk and getting up to date information and monitoring reports
- Providing other precautionary measures & guidelines of travelling to staff also awareness creation sessions and Daily COVID - 19 updates.

Furthermore, as the COVID-19 pandemic situation is fluid and will require close monitoring. TMGO has been

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keeping close contact with the Ministry of Health and other relevant governmental offices as well as our advisor teams to make accurate decisions as matters develop here in Ethiopia.

Thus, TMGO has signed a contract agreement with INNOVA consultancy that operates with a vision of becoming the leading healthcare consulting firm in Ethiopia through the use of a human-centered design thinking approach to provide customized clever solutions in order for our clients to achieve their goals. Their team is composed of doctors, lawyers, economists, business consultants and financial consultants, which will enable us to have a 360-view over a particular health concern including the current COVID-19 issue.

This agreement was signed with INNOVA because it is the upmost interest of TMGO to get reliable and timely information in relations to health information, protocol updates, government-level decisions and policy updates made in a national and international level related to the COVID-19

In Addition, to develop a health education platform which will enable the employees to get an updated scientific based health information related to the disease and be able to take safety precautions for themselves and to their community and other TMGO stakeholders as well.

We have also given training programs to all staff members on Working from Home and Virtual Collaboration to equip employees with the knowledge and tools needed to work efficiently and effectively when either they or their colleagues are working from home and increase their productivity.

Psychosocial intervention sessions have been given to selected TMGO staffs to provide them the knowledge and techniques needed to cope up with the stressful conditions and anxiety which can be created by the COVID-19. COVID - 19 Testing is also going to be given to any personnel that will be stationed at site that will be hired by our contractors or subcontractors. This testing has already been given to KenGen staff that are already deployed at site and anyone who is going in and out of the site area.

In addition, we are pleased to announce that TMGO, as a company based in Ethiopia, have made contributions to the ongoing efforts of the government and Ethiopian society as a whole to fight this epidemic and overcome it in the best way possible. In this respect, we have made a bank transfer of 3,309,040 Birr to the dedicated Ethiopian COVID-19 Fund (United Bank). At a local and regional level TMGO has also purchased US\$179,000 equivalent of COVID-19 Personal Protective Equipment for distribution to our local Kebele & Woreda Authorities and donated US\$30,000 Birr equivalent to the Oromia Government COVID-19 Fund.





Tesfa Tedla (one of the interns) onsite training



Lidya Yadeta in office at TMGO Addis Ababa

TMGO EMPLOYMENT UPDATE

This month, TMGO has recruited Two local Technical and Admin Interns Tesfa Tedla and Lidya Yadeta , who are fresh Graduates in Geology with great distinction from Addis Ababa Science and Technology University in August 2020.They have previous experiences with mapping Sedimentary, Igneous and Metamorphic Terrains in field projects to different parts of Ethiopia.

While their stay on training, they will be working with our Senior Geologist on our site and also Admin and Finance Department in Addis Office for the next three months or more so that they could gain hands on experience working with our project and also enhance the soft skills that is helpful to for their future career development.



TMGO AND OUR SMALL PLOT OF LAND HAVE TRANSFORMED MY LIFE

My name is Feyisa Beshada and I am 25 years old. I live in Shaki Sherera Village of Hetossa District in Arsi Zone. I dropped school at grade 8 and I have depended on my family for living.

Then I heard about Tulu Moye Geothermal operations, a company that produces electricity from underground heat, coming to our village. They came with our village (Kebele) governors to discuss with my par-

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TMGO ISSR STAFF TRAINING

In a world where data has become more valuable than oil hence leading to the term “data economy” it is a matter of survival to Ramp up one’s information system & Security. Hence, in the month of August 2020, TMGO

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ents that about 400 square meters from our farmland is needed by the investment company TM Geothermal Operations to be used as water storage area for the project.

My parents did not hesitate to accept the opportunity of the investment at the backyard of our house and agreed to accept compensation as per the Ethiopian government guideline for compensating farmland. Me and my parents have been very happy about the opportunity of international investment that came to our small village and promised to offer any assistance we can.

Feyisa says that after short time TMGO started its project implementation in their village. He says “And that came with a life changing opportunity for me and my family”

Feyisa also told us “When the company started its activities, the first job opportunity was given to me and my father along with additional four others from our village. We have been hired by the TMGO permanently in the project”

Not only for us, but also a company called Foollee Security Agency, through which we were hired has been established because of this investment coming to our village.

Currently we are permanent employee of the Company; both of us get good salary, we do our farming activity as well beside our permanent job. That is life changing day for me who would otherwise always depend on my parents for living.

I would like to thank TMGO, our government and all who have been involved in bringing this opportunity to our district.¹

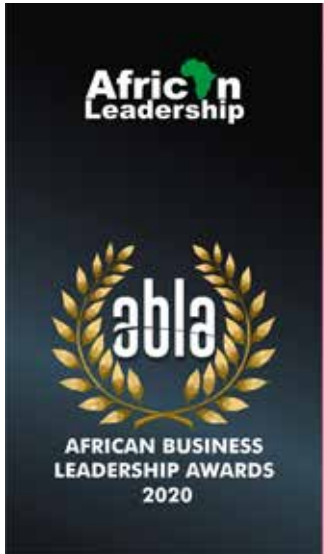


¹ TMGO Footnote: This farmer was compensated for his plot of land and it is KenGen (drilling contractor) who employed him for the position he is holding. This employment was not linked in any way to any land compensation or as a payment for his service. He was given priority a local community close by the project.

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has taken the initiative to do just that. TMGO ISSR Training is a two-phase project directed in securing TMGO’s data and equipping its employees with modern times work culture of Cloud collaboration. August 2020 has seen more than 80% of TMGO’s data migrated to a cloud-based storage – OneDrive. In doing so TMGO has taken major steps in ensuring the security & Integrity of its data while making it easier to collaborate for all users. It’s always better to assimilate earlier into the inevitable cloud-based future. TMGO outsourced IT consultant for this IT security initiative, thus, would like to thank Mr. Michael Kumera and Mr. Yibeltal Seyoum for their work dedication and support.





CONGRATULATIONS FROM TMGO

We congratulate both MD & CEO of KenGen, our drilling contractor, Rebecca Miano and H.E. Ahmed Shide, Minister of Finance of Ethiopia for winning the African Business Leadership of 2020 in the category of Business Leadership and Finance Minister of the Year categories respectively, at The African Business Leadership award.



GRATITUDE TO BUSINESS FOCUS MAGAZINE

Business Focus Magazine features TM Geothermal Operations in its August issue under a title “TM Geothermal – Bringing Geothermal Power to Ethiopia”

In this beautifully crafted article the Magazine interviewed Darrell Boyd, CEO of TMGO in detail in which the CEO talked about the activities, challenges, and future plans of the company.



Darrell told the Magazine, among other things, “We’re engaging with all the environmental and social matters linked to the project with high standards of community engagement,” He also added “Our project is in a very rural area with no access to electricity and limited access to water as well as poor road infrastructure and telecom coverage. So, we’ve either already helped to improve these issues or have very firm plans to do so over the next six to twelve months”.

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Darrell also told the Magazine that TMGO is the first project of its kind in Ethiopia and he pointed out that the Prime Minister of Ethiopia witnessed that in his tweet by saying “Prime Minister Abiy Ahmed actually tweeted that it’s the first project of its kind built around the public-private partnership model in Ethiopia,” Darrell tells us. He also witnessed “The Ethiopian government has done great work putting the legislative framework in place for PPPs, foreign direct investments, and in recognizing it wanted to attract investment to major infrastructure projects. We are very much at the vanguard of that and mindful of the responsibility that comes with it. We’re working collaboratively with our customer partners because that may well influence investors and lead to more money flowing to support Ethiopia’s continued economic growth.”

TMGO would like to appreciate the Magazine for taking the initiative to feature the company and its activities. Please follow the following link to read the full article : <https://www.businessfocusmagazine.com/2020/08/17/tm-geothermal-tmgo-bringing-geothermal-power-to-ethiopia/>

DID YOU KNOW THIS?

Weak Fumaroles as Steam baths

There are various types of surface thermal manifestations such as hot springs, mud pools, fumaroles, warm and steaming grounds, and geysers. In Tulu Moye people use weak fumaroles having low temperature for steam baths (photo...). Fumarole is a geological phenomenon which is opening in or near volcano and hot steaming grounds which steam, and gas emerge.



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