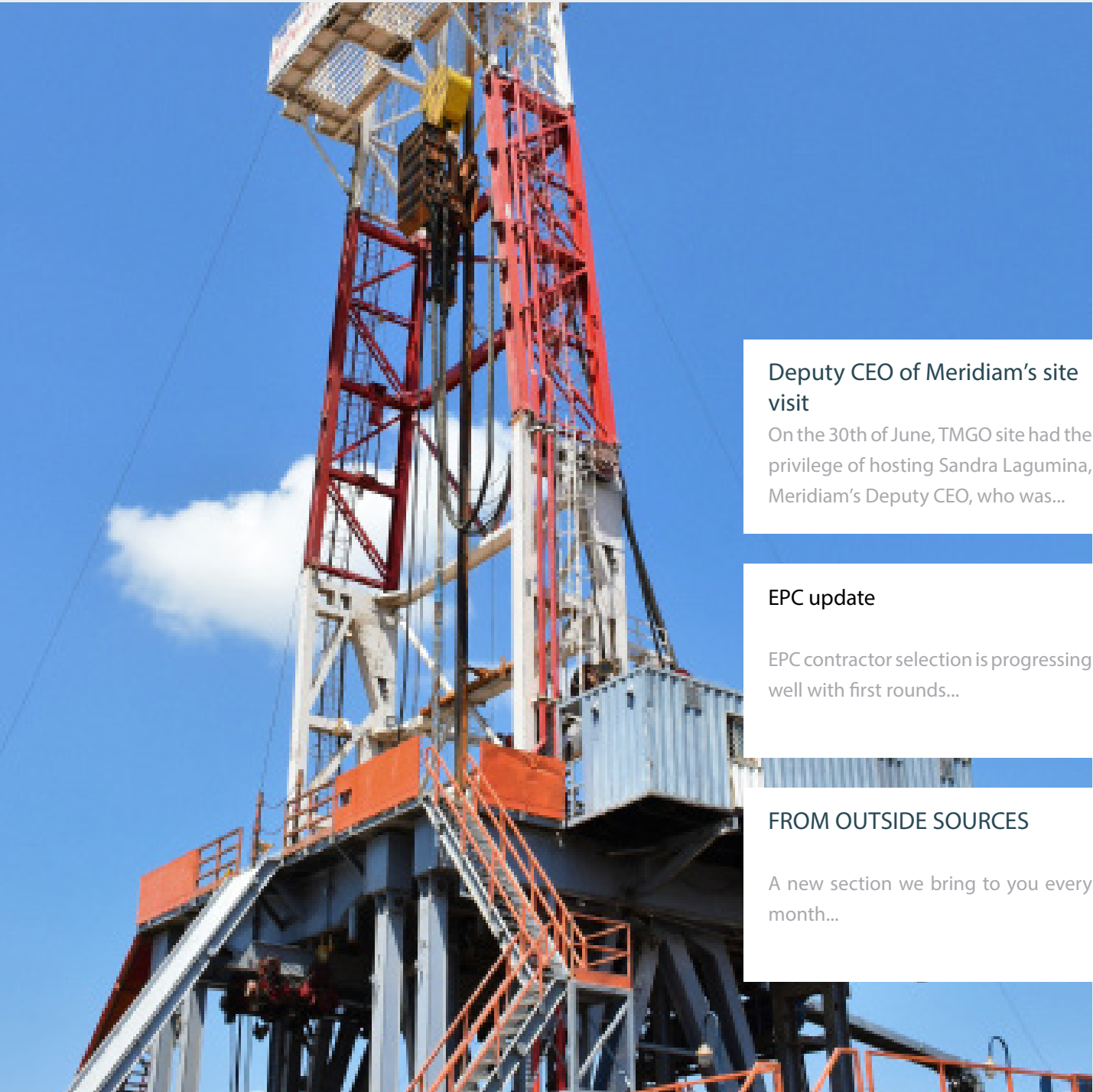


NEWSLETTER

July 2021



Deputy CEO of Meridiam's site visit

On the 30th of June, TMGO site had the privilege of hosting Sandra Lagumina, Meridiam's Deputy CEO, who was...

EPC update

EPC contractor selection is progressing well with first rounds...

FROM OUTSIDE SOURCES

A new section we bring to you every month...

Message from S&E Manager, Aynalem Getachew



For the last three years, Tulu Moya has actively been making the effort to reduce its impact on the natural environment by minimizing the Project footprint and ensuring a proper use of resources. Accordingly, we believe that we have made good progress.

We are currently implementing our biodiversity compensation plan and as part of the strategy, we are about to embark on a new chapter of making the Tulu Moya Mountain greener and the air cleaner. We designed this program with the aim to revegetate 12 hectares of degraded land by planting 30,000 local native species and natural regeneration. Alongside our efforts to reduce the Projects emissions, this project allows us to fulfil our commitment to sustainably running our Project.

Undoubtably, trees offer many environmental benefits as it helps offset/fight harmful CO₂ that contributes to climate change, the biggest problem the world is faced with right now. It is well known that trees do purify the air as they absorb CO₂ from the air and store it while releasing oxygen. They absorb pollutant gases such as nitrogen oxides, ozone, ammonia, and sulfur dioxide. Trees also absorb odours and act as a filter as little particulates get trapped in leaves. Trees thus

contribute to boosting biodiversity as they become a food source and natural habitat for wildlife. They are also very relevant as they help reduce the risk of flooding in flood prevalent areas such as Tulu Moya.

Furthermore, trees greatly benefit the people living around them by having a positive impact on mental health and wellbeing, reducing stress, and encouraging outdoor activities. This is in addition to the benefits received from the improved environmental quality and amenity, which comes with planted areas.

Our revegetation program is different from what is usually practiced here. Our program is well planned and take account of community participation and full engagement, biophysical analysis, optimal earthwork, proper and careful propagation of seedling, as well as optimal soil moisture for planting. Planting is the beginning and not the end in our project, we intend to water, care for, and monitor the trees until they reach full growth.

The Project is being implemented in partnership with the local community, particularly of local youth, the agriculture and environmental bureau of the Hitosa district, and a professional landscaping company called Green Ketema with the budget of 150,000USD.

The week-long planting program will kick start on the 13th of July and all TMGO's head office and site staff will take part along with the local community and stakeholders. The event not only facilitates TMGO staff and project community interaction, but it also designed in way that it can educate the participants on how to plant a tree and use tools correctly. In the week-long event, general conversations around the importance of biodiversity and how they can develop and protect a woodland environment, as well as the important role trees have played through the centuries and their relevance today will be held. The participants will learn about all aspects of tree maintenance and care, as well as the different species being planted, and even get further knowledge around pests and diseases, land management, and conservation.

Site update

Geothermal Drilling and Testing

Spudding for exploration well GB-1 took place on 7th of June 2021. The well's direction will be to west-south-west, targeting area identified with geothermal manifestation on surface. Drilling of the first section of the well was challenging because of fractured formation during first 100 m of drilling. To be able to have a proper surface casing it was decided to do cementing plug jobs. When reaching just below 100 m rate of drilling improved. Surface casing installation proved to be challenging due to collapsing in the well resulting in additional rimming of this first section. When casing installation of first section was finally

completed the Contractor had difficulties in preparing the rig for the second section. The drilling of the section was much smoother and was the anchor casing installation. Currently the well is at 599 m RT as of 5th of July 2021 and preparation for the drilling of the next section is underway.

Well Testing

Well testing equipment for well GA-1 is ready. Team from Owner's Engineers is expected on site early July to conduct the flow test for GA-1. Information from the flow test will provide valuable information for further drilling on the southern side of the Gnaro. The flow test is expected to take up to five weeks.



Well testing equipment installation at pad GA



PAD GC & GD site visit

Civil Works

The month of June has been a month focused on the Geothermal drilling, rig move and water supply system. Design works for new drill PADs, GC and GD is also being expedited with the hope of starting construction late August.

Pad GB first part of expansion has been finalized. Pad GA expansion works have continued in full force and are almost complete. Pad GC and GD and access road works under preparation.

Water wells fence works are almost completed. Additional civil works to improve water supply system have been ongoing in the leadership of TMGO new water project manager.

Water wells fence works are almost completed. Additional civil works to improve water supply system have been ongoing under the leadership of TMGO new water project.

Water Supply for Geothermal Drilling

During the month of June, water wells 2, 3 and 4 have been in operation providing on average of 30 l/s. Drilling of wells 5 and 6 is completed; well development is in progress followed by pump test, permanent pump installation and connection to the system. By end of next month, the aim is to have full water system up and running making up to 60 l/s available on the pipeline. Community water connection works are in progress which started with a thorough investigation of existing infrastructure.

A novel in the water supply is the establishment of a by-pass to allow flowing from the booster station to the geothermal drilling site by-passing the water reservoir when the reservoir is full.

Geothermal drilling has not been affected by lack of water during drilling of GB-1.



Well 2 connection works



Casing installation at well 5



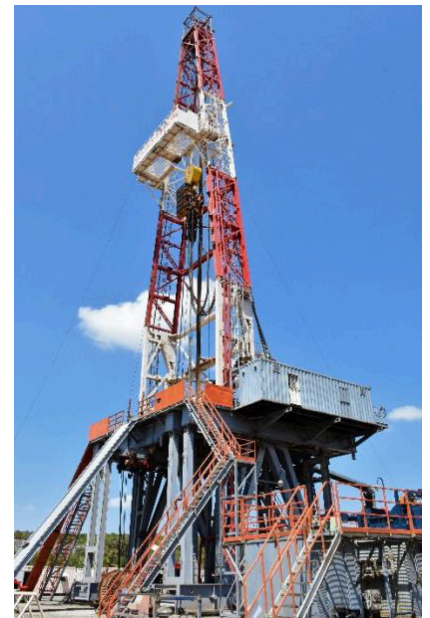
Activities at well 6

Rig Move from GA to GB on schedule

Spudding for exploration well GA-2 took place at the end of November 2020. Closing of the master valve took

place on 23rd of May 2021. Drilling of GA-2 took 177 days. Progress of drilling of GA-1 and GA-2 is being analysed with the purpose to be able to complete drilling of well on time. Bottom hole temperature after 22days of heating up is around 140°C and maximum temperature measured is just above 155°C. Formation temperature at the bottom of the well at this stage is assumed to be around 180°C. Well completion report for GA-2 is in progress and will be ready in August 2021.

Rig move between well pads GA and GB started as soon as master valve for GA-2 was closed. According to schedule rig move was expected to take 14 days. Rig move was on schedule and on 7th of June 2021 exploration well GB-1 was spudded.



Rig mobilized at GB-1

Deputy CEO of Meridiam's site visit

On the 30th of June, TMGO site had the privilege of hosting Sandra Lagumina, Meridiam's Deputy CEO, who was really impressed by the progress of TM Geothermal project. Sandra highlighted that this project is full of sense: gives sustainable and renewable energy for the growth of Ethiopia with side benefits: water, education, projects amongst others. Now, since Effectiveness, has come the time of building things: Steam wells, pipeline steam system, power plant, Construction and O&M team, trust with the community and a mature TMGO. This is an exciting period but very challenging that will require the best of TMGO team and TMGO team is up for that challenge.



EPC update

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



EPC contractors visiting Project site

TMGO to start Tree Planting program for greener Tero Moyo

TMGO is to start planting 30,000 native seedlings in Tero Moyo Mountain that covers 12 hectares of degraded land on the 14th of July 2021.



The land, seedling preparation, and community engagement and participation work completed. 30,000 hauls already dug, and soil moisture evaluation as well to kick start the planting on the 13th of July.

TMGO staff, government representatives, and local community members will take part in the week-long tree planting project. The Project is being implemented in partnership with the local community, particularly of local youth, the agriculture and environmental bureau of the Hitosa district, and a professional landscaping company called Green Ketema with a budget of 150,000USD.



Meet Our Team

Ananiya Amare
Driver/Liaison Officer

Ananiya Amare is serving at TMGO as a Driver/Liaison Officer for more than two years now. He is there to make sure for the safe movement of staff and company goods. Ananiya also provides support to the admin and finance team by facilitating payments and procurements. He came with more than eight years of working experience with the Japan International Cooperation Agency (JICA) as trusted driver.

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, things to know for your visit to Ethiopia.

Some facts about Ethiopia you may have not heard

Ethiopia may not be the first place you think of when booking your next holiday, but it should be. The country has been at peace for more than 15 years and its economy is one of the fastest growing in the world.

Thirteen months to the year

Sure, plenty of cultures have their own calendars that they prefer to follow over the Western Gregorian one, but most still abide by the unspoken '12 months to a year' rule. Not Ethiopia. Ever looking to buck a trend, several thousand years ago the Ethiopians cottoned on to Spinal Tap's belief that one more is always better – and have been counting 13 months to their year ever since. What does this mean? Well, that 2017 is still 2009 there. And that canny tourism boards can legitimately claim that the country really does boast '13 months of sunshine'.



Ethiopian time

Ethiopians also measure the hours of a day to a different schedule. In a piece of logic that's kind of hard to argue against, they believe it's less confusing if the clock starts when the day does. Thus, sunrise is 1 o'clock and sunset 12. Then the 12-hour night clock sets in. So, when buying bus tickets etc., make sure you ask whether departure time is in Ethiopian or Western time.





Independence

Ethiopia is the only African country never to have been brought under colonial control – a fact that locals will never tire of informing you. And fair enough too. The Italians did give colonisation a crack in 1935 – and succeeded in militarily occupying the country for six years – but Ethiopian forces were waging military opposition the entire time and the whole country was never brought under control. As some of the locals put it, “we waited until they had built us railways and nice buildings... and then kicked them out.”

A nation of festivals

Ethiopia is a country full of vibrant and colourful festivals. Timket, Irreechaa, Fitcha, Chmebelala, Ashenda and so on are some of them.



Irreechaa

Timket Celebration



The first cup of coffee

You know your morning caffeine shot? You've got some Ethiopian goats to thank for that. As the story goes, a goat herder way back when noticed his flock's fondness for a certain bush and decided to give one of the fruits a nibble himself. His day's herding was notably more efficient for it – and the coffee industry took off from there.

The oldest people in the world

Several archaeological findings in Ethiopia's Afar region go quite some way in suggesting that the country may be where we all started



out from. In 1972, Donald Johanson and Tim D. White discovered Lucy, a 3.2-million-year-old hominid skeleton. For years, Lucy was all the rage, embarking on a nine-year worldwide tour and enjoying widespread fame. Then Ardi, also from the Afar region but one million years her senior, rocked up and blew her out of the water. So, you arguably also have the Ethiopians to thank for, well... you.



Abebe Bikila

In 1960, an Ethiopian by the name of Abebe Bikila became the first black African to win gold medal in the Olympics. Only making the team selection at the last minute due to another athlete's injury, Bikila opted to run the marathon barefoot, piping hot favourite Moroccan Rhadi Ben Abdesselam by a full 25 seconds. Four years later, Bikila won the Tokyo Olympics, setting a world record and becoming the first ever person to win the Olympic marathon twice. When asked if he wasn't tired (he didn't look it), he answered that he could've done with another 10 kilometres!

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NEWS.

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