

African Development Bank Group upbeat
with Menengai project progress

GDC - JICA capacity building
agreement on course

GDC's Direct-Use technology wows
delegates at ARGeo conference

Steam



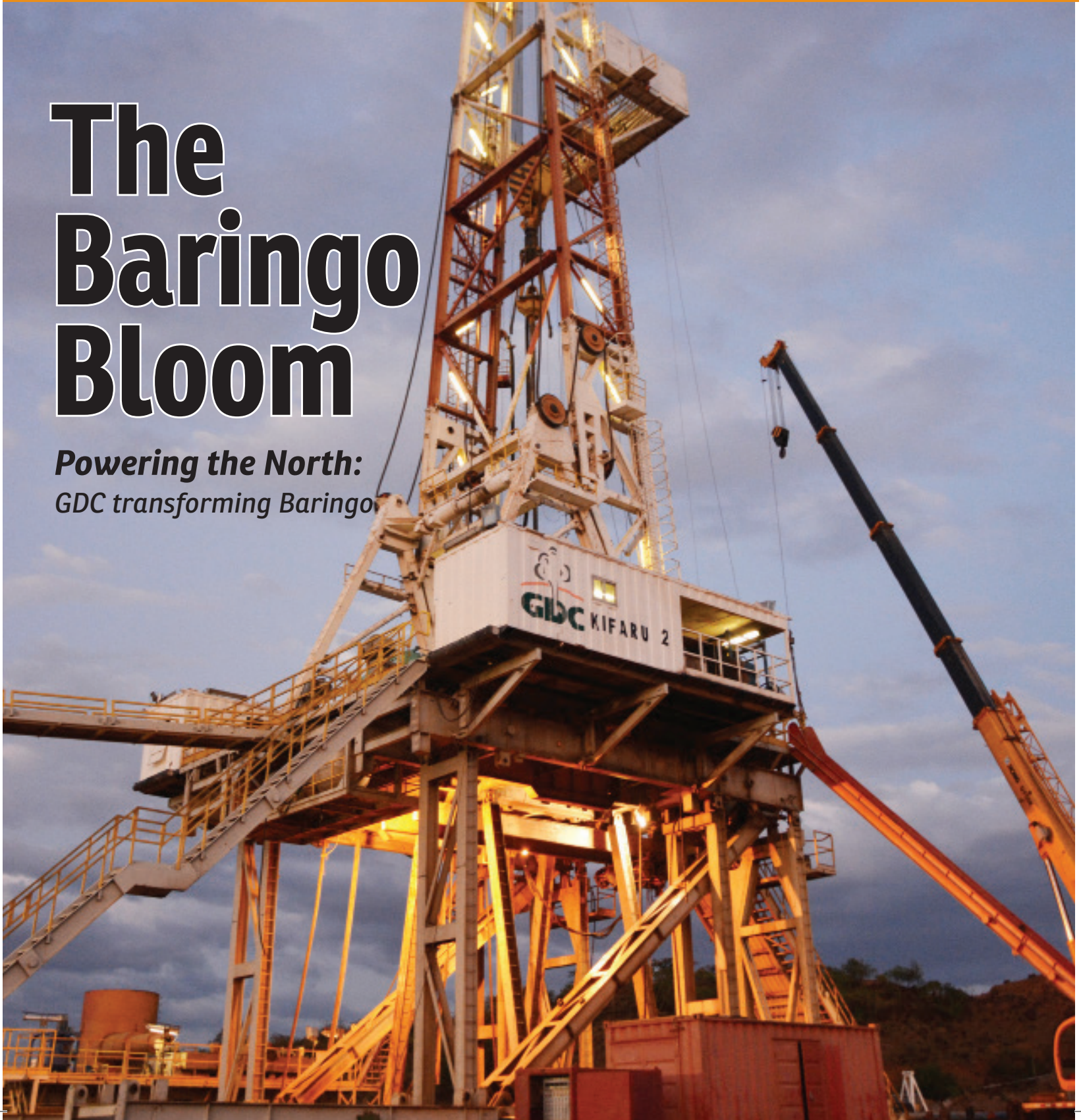
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The Baringo Bloom

*Powering the North:
GDC transforming Baringo*





**It is the noble duty of our staff
to be the champions of national
development through green energy
production**

Message from the Managing Director & CEO



As we welcome the year 2019, we look back at the strides we made last year with pride. The ongoing exploration drilling in Baringo-Silali geothermal block is progressing well after GDC moved its first rig to Paka geothermal prospect, in December 2018, thus commencing Phase I development of the project. The Baringo-Silali Block has an estimated potential of 3,000MW and will be developed in phases. Phase I will entail development of 300 MW with Paka, Korosi and Silali projects each contributing 100MW.

GDC's mandate is to develop geothermal resources, the least cost source of energy in Kenya and the company is striving to supply geothermal power to the national grid @7US Cents per kwh. This will go a long way in supporting the Big 4 Agenda which is focused on food security, affordable housing, manufacturing, and affordable healthcare.

Energy is an enabler of the Big 4 Agenda. Subsequently, lower tariffs will improve the quality of life of Kenyans, industries and Small Micro Enterprises will manufacture more, with more reliable energy at a cheaper cost than other alternative sources hence making Kenya competitive. We also envisage that the direct use of geothermal energy will contribute to attainment of food security.

GDC will continue to accelerate the development of geothermal resources in Kenya. We appreciate the continued support from the Ministry of Energy, our donors, Staff and all stakeholders.

*Eng. Johnson P. Ole Nchoe,
Managing Director & CEO*



Table of Contents

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Steam reports on geothermal development in Kenya. It gives readers insights into the great potential that exists in the country and how GDC is developing the resource for national good.

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Contents

03	Message from Managing Director/CEO
04	Contents
05	Editor's Note
06	Board Appointments
07	JICA strengthens capacity growth agenda for GDC
08	MD leads GDC team in strategy meeting
09	Quantum Gears for Menengai
11	African Development Bank Group Upbeat with Menengai Project
12	GDC banks on expertise to boost geothermal growth
13	GDC shines at the Nakuru and Kabarnet ASK Shows
14	The Baringo Bloom: GDC changing fortunes in North rift
17	The Africa Report: Argeo Delegates appreciate Direct Use Technology
18	Engage: Interview with GDC Head of Research and Innovation Section, Geothermal Centre of Excellence
20	GDC to empower Continent through capacity building initiative
23	Impact of Social Media in Organizations
24	Safeguarding staff retirement
25	Guest Relations / Work Place
26	Sports & Work
27	Sights & Sounds

The Baringo Bloom...

How GDC is changing fortunes in North Rift



GDC kick starts socio economic transformation in Baringo

The Baringo area is in the midst of a transformation which has been prompted by GDC's geothermal project. On December 27th 2018, the GDC Managing Director & CEO Eng. Johnson P. Ole Nchoe, led the GDC team in witnessing the spudding of the Kifaru II rig, which is stationed at the Paka prospect. This is a significant milestone for the company.



“The Baringo-Silali Block is the biggest geothermal project in Africa and it will be developed in phases.”

Exploration drilling is being conducted in the expansive area estimated to have a potential of around 3,000MW. The Baringo-Silali Block is the biggest geothermal project in Africa and it will be developed in phases. The first phase will develop 300MW with funding from the Government of Kenya and development partners who include KfW (German Development Bank).

The Baringo – Silali project journey began with detailed surface studies which were completed in early 2013. An Environmental and Social Impact Assessment (ESIA) License obtained from National Environment Management Authority (NEMA).

Accessibility to the project site was crucial and GDC had to develop the road network. The construction of access roads commenced in October 2014 and site clearance, gravelling and drainage works were done from Lake Baringo-Korosi - to Paka. The Government of Kenya (GoK) is funding the construction of access roads and community engagement initiatives.

Roads are an important element of development as they are a key prerequisite for social and economic development growth and competitiveness of an economy. In addition, road infrastructure development is correlated to the GDP development of an economy. It is envisaged that the road network which GDC has developed will spur Baringo's economy. So far, GDC has completed over one hundred (100) kilometres access road to enable accessibility to into the area.

The construction of well pads is underway and GDC plans to drill around 9 exploratory geothermal wells within the Baringo – Silali bloc. The construction of the water supply system is nearly complete. Besides providing water for drilling services, the system will also provide water to the community. GDC will construct 20 community water points, which will provide clean water for domestic use and for livestock as well at water trough points which the company has constructed. We also envision the development of industrial parks which will utilize the direct uses of geothermal energy. This will largely transform the economy of the region which now only depends on livestock.

The local leaders from the area continue to hail the project. The Energy Chief Administrative Secretary (CAS) Hon. Simon Kachapin who visited the project last year, agrees that the development of the Baringo-Silali Geothermal Project will have a huge impact in transforming the region into an economic hub.

With the development of the project, the lives of the residents have changed tremendously, for the better.

Wanjiru Kang'ara
Manager
Corporate Communications & Marketing

GDC Board Appointments

The President of the Republic of Kenya H.E Uhuru Kenyatta, recently re-appointed Mr. Gershom Otachi Bw'Omonwa to chair the GDC Board of Directors for another period of three years with effect from May 20, 2018. Meanwhile, The Cabinet Secretary for Energy Hon. Charles Keter, appointed new members to the GDC Board of Directors. They are Dr. Nelly Yatich, Mr. Kamau Kuria, Ms. Anne Too and Mr. Mwenda Nyagah. The CS also re-appointed Mr Namada Simoni to the GDC Board of Directors



Dr. Nelly Yatich

Dr. Nelly Yatich is a Monitoring, Learning and Evaluation Consultant. Dr. Yatich has extensive experience in epidemiology, monitoring & evaluation, clinical research, programme design & implementation, grant writing, budgeting as well as capacity building. She is a member of the American Public Health Association, International Society for Infectious Diseases, Global Health Council, Phi Beta Delta Honour Society for International Scholars and the Delta Omega Honorary Society in Public Health.

Mr. Mwenda Nyaga

Mr. Mwenda Nyaga is the founder and lead consultant at Oil and Energy Services Limited with 15 years' experience in the oil and gas industry. A petroleum and finance professional with experience advising the Government of Kenya on upstream matters, Mwenda has a deep appreciation of investor and government needs in this sector and specializes in assisting clients navigate this nascent sector.

Mwenda is a local content expert in Kenya having contributed significantly to the dialogue around sustainable local content development in East Africa.



Mr. Kamau Kuria

Mr. Kamau Kuria is a social entrepreneur and is currently the CEO of Africaqua Limited and Chairman of Ikotoilet limited. Mr. Kuria is currently pursuing a Doctorate at the Jomo Kenyatta University of Agriculture and Technology (JKUAT). He holds a Bachelor's degree in Architecture from Jomo Kenyatta University of Agriculture and Technology (JKUAT) and a Master's Degree in Business Administration from KCA University. Mr. Kuria is a recipient of numerous awards in social entrepreneurship. The awards include the 2009 Africa Social Entrepreneur of the Year (World Economic Forum Davos, Switzerland) Ashoka Fellowship, Aspen Fellowship and Schwab Fellowship.



Ms. Anne Too

Ms. Anne Too has worked as an advisor in the office of the Deputy Speaker of the National Assembly. Ms. Too also served as a personal advisor in the office of the Assistant Minister, Home Affairs.



Mr. Namada Simoni

Mr. Namada Simoni is an Independent Non -Executive Director. He is an advocate of the High Court of Kenya with over 20 years of vast experience in legal practice. He is currently the Senior Partner at Namada & Co. Advocates. He is a Member of the Law Society of Kenya (LSK) and the East African Law Society (EALS).

JICA strengthens capacity growth agenda for GDC



Capacity Development for growth... GDC Managing Director & CEO Eng. Johnson P. Ole Nchoe (right) with Mr. Eiji Wakamatsu, Senior Deputy Director, Team 2, Energy Mining Group, Industrial Development and Public Policy Department, JICA

By Godfrey Olali

GDC and Japan International Cooperation Agency (JICA) have continued implementing an ambitious capacity building agreement which has seen hundreds of GDC technical staff empowered. JICA has been on record saying that GDC's geothermal prospects have high potential which can give Kenyans an alternative source of reliable energy. This is why JICA has in several occasions indicated that it was considering assisting in capacity building initiatives like training and technical empowerment to GDC engineers and reservoir technicians.

Japan trainings

JICA and West Japan Engineering Corporation (West-JEC) have been key players in this cooperation which has improved geothermal development in GDC and Kenya. Already, a section of GDC staff have attended some trainings in Japan in areas of drilling technology, reservoir engineering, and health, safety and environment in order to improve drilling operations. Currently, JICA is supporting GDC in capacity strengthening project, short-term and long-term training programme. Close to 475 GDC staff have undergone these trainings in Kenya and Japan.

Enhance human capital capacity

"To contribute to this objective, we are training GDC internal trainers and developing training handbooks which

GDC can utilize to implement internal training programme even after the project completion," says Chiyoko Miyata, the JICA expert on geothermal training system enhancement at GDC. She adds that the project's purpose is to enhance human resource capacity of GDC which contribute to technical risk mitigation in geothermal development. "To achieve this, we set the expected outputs which include training programs, capacity in developing conceptual models of reservoirs and siting successful drilling targets," she says.

Activities

JICA is the implementing agency of official development assistance under the Government of Japan. JICA has entrusted West-JEC with this project activities under the contract. In the past, JICA team has engaged GDC management with the view of conducting a project formulation for

capacity strengthening for geothermal development in Kenya. The project, which run for 71 months, saw the enhancement of capacity development in the areas of conceptual reservoir models reservoirs and citing successful drilling locations, identifying and striking drilling targets, interpreting wellbore data, establishing calibrated reservoir models and evaluating geothermal resources, preparing economically and environmentally viable business plans and building capacity on multi-purpose use of geothermal energy.

The experts

"JICA team experts are world-class consultants and specialists who are working all over the world, not only in Japan, but other many countries in Asia, Africa and Latin America. The trainings in this project have been done and facilitated by these experienced experts," adds Miyata. Japan now plans to provide technical support to transform geothermal development in the region to a commercially viable sector, hoping to help create more projects.

According to JICA, plans are underway to provide support for geothermal power generation projects in Kenya and other parts of Eastern Africa. According to JICA, there is a great interest and lots of initial activities in Eastern Africa, predominantly in Kenya right now. GDC's technical capacity will be enhanced to a high level in another 10 years, to an extent that GDC could give a helping hand in training and consultancy services to neighboring countries in matters relating to geothermal development.



Discussion... The JICA Representative to GDC Ms. Chiyoko Miyata (left), discusses a point with the GDC Deputy Manager, Procurement and Supply Chain Mr. Patrick Kopto (middle) and Mr. Eiji Wakamatsu



MD leads Management team in strategy meeting

Strategy...*GDC Managing Director & CEO Eng. Johnson P. Ole Nchoe (left) with a section of Senior Management team at the sidelines of one of his meetings with the Management*

The Managing Director & CEO Eng. Johnson P. Ole Nchoe on Tuesday 22nd January 2019 shared a strategic action-plan for the year.

In a management meeting held at Kawi House auditorium where he met General and line managers, Eng. Ole Nchoe said that ground-breaking for the first power plant in Menengai is envisioned in the first three months of 2019.

“We expect this event to be done in the first three months of this year and the progress is well on course,” he said during the meeting which also saw brief presentations from a section of General Managers. The CEO thanked GDC staff for their commitment and hard work which has contributed to the success of the two projects – Menengai Geothermal Project and Baringo – Silali.

On Baringo – Silali, Eng. Ole Nchoe said that he was happy that all tanks are

operational, water reticulation system perfectly working and infrastructural work is good. “The country and the whole world is waiting to see the fruits of this project (Baringo - Silali). Let’s focus and work hard in the next one month and see if we can hit the largest Well in Africa,” he said while thanking the teams which have been working on this project.

While passing a goodwill message from Energy Cabinet Secretary Hon. Charles Keter, the CEO reiterated the need for GDC family to work under the “One Team” Philosophy adding that “we share a common purpose.”



“*The country and the whole world is waiting to see the fruits of this project (Baringo - Silali). Let’s focus and work hard in the next one month and see if we can hit the largest Well in Africa*”

On finances, the CEO said have been stable and solid for the last two years. This, he added, has enabled operations to run smoothly promising for more financial discipline and zero-tolerance to corruption. “Integrity and professionalism form the key pillars of our processes,” he said.

Quantum gears for Menengai

The construction of one of the three power plants in Menengai Menengai Geothermal Project is getting close to fruition. Recently, the Business Development Director at Quantum Power – Menengai Geothermal Project one of the three Independent Power Producers (IPPs) - Mr. David Carroll, paid a courtesy call on the Managing Director & CEO Eng. Johnson P. Ole Nchoe to brief him on the progress. The two companies; GDC and Quantum Power have already finalized Conditions Precedent which essentially allows the Independent Power Producer (IPP) to start the Menengai Plant construction. The move allows Quantum Power to reach Financial Closure and move to the ground to commence construction. Mid last year, the African Development Bank Group (AFDB) approved a Loan of USD 29.5 million and a Clean Technology Fund (CTF) Concessional loan of USD 20 million for Quantum Power – Menengai Geothermal Project.

Quantum Power-Menengai Geothermal Project, will be the second geothermal independent power project in Kenya, after Or Power III in Olkaria. The project is envisaged to substantially lower the cost of electricity and support the Government's industrialization objective under the Big Four Agenda.

MD roots for geothermal Direct Use during Icelandic conference

GDC will utilize geothermal energy to boost food security in Kenya, the Managing Director & CEO Eng. Johnson P. Ole Nchoe has reaffirmed.

The CEO has noted that GDC will strongly support the use of geothermal energy in food production and processing. He said this in Iceland during the 4th Icelandic Geothermal Conference. In his presentation, Direct Use of geothermal energy for food security, the CEO pointed out the



Inking the deal...*Business Development Director at Quantum Power Mr. David Carroll (right) and Managing Director & CEO Eng. Johnson P. Ole Nchoe when the two met recently at GDC offices to finalise on the deal*

Loita Plains, Nakuru and the Baringo-Silali Geothermal Block as having great potential for food production using geothermal technologies.

“Geothermal will be a key enabler for the BIG4 Pillars. Direct use of geothermal will support the pillar on food security,” the CEO explained.

Apart from heating green houses and using condensate for irrigation, GDC is also pursuing interests in grain drying using geothermal heat, which is far much cheaper than the use of fossil fuel. Affordable and appropriate drying will prevent massive post-harvest losses. Other potential ventures include milk pasteurization and heating of aquatic ponds.

Further, the CEO explained that GDC will support the establishment of industrial parks next to geothermal projects. This will open more opportunities for investment and jobs.

Top Baringo County Security team in praise of geothermal project, affirms support

The County Administration in Baringo County has praised GDC's efforts in developing the North Rift Region through construction of roads and provision of water and employment opportunities.

The County Commissioner – Baringo County, Mr. Henry Wafula and the entire County Security and Intelligence Committee (CSIC), toured the Baringo-Silali Geothermal Project later last year and assured GDC of support in the provision of security for equipment and personnel.

The team appreciated the geothermal project, the largest national project within the county. Mr. Wafula appreciated the massive investment by GDC in the county.

The County security team praised GDC for the community water distribution initiative and elaborate road network which will improve the quality of lives and security. The tour was coordinated by Mr. John Lagat, the Regional Manager, North Rift; Ms. Grace Mwai, the Manager Community Relations and Mr. Julius Karuri, the Deputy Manager, Security, among other staff drawn from different departments.

GDC participates in the Nakuru investment forum



Our vision... Nakuru County Governor H.E. Hon. Lee Kinyanjui (2nd right) and other dignitaries listen as Manager, Direct Use Ms. Martha Mburu (right) explains a point during the Nakuru International Investment Conference

GDC recently participated at the Nakuru International Investment Conference (NIICO).

The conference which was held at a Naivasha hotel, discussed among other issues, the importance of geothermal energy as a natural source of reliable power.

Panelists discussed the need to tap this natural resource in order to enhance Kenya's economic growth. Nakuru County is well endowed with vast geothermal resources from Olkaria to Menengai in Nakuru. GDC's Direct Use Manager Martha Mburu, was privileged to showcase the Direct Use of geothermal, at the conference.

Also discussed was the plans by GDC to use power from Menengai Geothermal Project to create industrial parks which will promote and market geothermal uses.

"The steam will be used to generate electricity while the water separated from the steam will be used for direct uses of geothermal for industrial applications and agricultural uses. It is envisaged that GDC will avail steam for the generation of low cost electricity, investors will build the park, Nakuru County will provide land and build access roads, while the local community will provide labour through employment. Development partners will give finances for the projects to be set up at the park, she said".

The conference was also informed that GDC will collect revenue, then investors will get reliable energy at a low cost and the county and national governments will obtain revenue from the park.

GDC sponsors Geothermal Inter-Schools debate, winners visit Menengai project

By Steam Correspondent

Bahati Girls High School won this year's Annual Geothermal Inter-Schools Debate the 2018 which was sponsored by GDC. The competition saw four schools from Nakuru County; St Joseph's Kirima, Nakuru Girls' High School, Ol Rongai Secondary and Bahati Girls' High School participate.

The schools debated on thematic areas including advantages and disadvantages of geothermal energy, role of geothermal energy in the Big Four Agenda among others.

Nakuru High School emerged first runners-up while St Joseph's Kirima took the second runners-up position. GDC staffs also have career talk to the students who were given the opportunity to interact and ask questions about their dream careers.

Speaking during the event held at Nakuru Girls' High School, Corporate Communications and Marketing Manager Wanjiru Kang'ara said that GDC will continue supporting the schools in its areas of operation as part of Corporate Social Responsibility (CSR) program.



The big debate... A student participates during the debate.

"GDC in the past has continued supporting schools in Nakuru County ranging from drilling of bore holes, building of classrooms etc.," she said.

The function was also attended by a section of GDC staff who were part of the organizing committee.

African Development Bank Group upbeat with Menengai project progress

By Charles Dola



Our progress... National Treasury Cabinet Secretary Hon. Henry Rotich (left), his Energy counterpart Hon. Charles Keter (2nd left), the African Development Bank (AfDB) President Dr. Akinwumi A. Adesina (2nd right) and the Managing Director & CEO Eng. Johnson P. Ole Nchoe during the tour

The African Development Bank Group (AfDB) President Dr. Akinwumi A. Adesina, toured the Menengai Geothermal Project on 21 July 2018 and was delighted with the project progress.

He noted that GDC has made major progress in the project which will uplift many livelihoods in the country. "Kenya is well endowed with geothermal.

It can use geothermal to light the rest of the region. Geothermal will turn Kenya into a power exporting country", he said.

Dr. Adesina, was accompanied by Energy and National Treasury Cabinet Secretaries Charles Keter and Henry Rotich respectively, said geothermal development was the pillar of Kenya's national development.

CS Keter commended GDC for the project, which has so far attained 165MW of steam. "Drilling is still ongoing here in Menengai for many other phases. GDC will also soon be moving to the Baringo Silali Project," he said. Energy Principal Secretary Joseph Njoroge also lauded the implementation of other direct uses of geothermal energy by GDC. "I'm glad to let you know that GDC is using heat from geothermal steam to pasteurise milk, heat greenhouses and fish ponds at the Menengai project demo site. That is critical for food security," said the PS. The GDC Board Chair Mr. Gershom Otachi and Managing Director & CEO Eng. Johnson P. Ole Nchoe, thanked the bank for their support.

Djibouti Energy Minister, CS Keter tour Menengai

GDC and Djibouti recently reaffirmed their bilateral co-operation in geothermal development even as the Horn of African nation's energy Minister visited Menengai Geothermal Project.

Mr. Yonis Ali Guedi, Djibouti's Minister for Energy in charge of Natural Resources, while on the visit, appreciated the partnership. He was flanked by Kenya's Energy Cabinet Minister Hon. Charles Keter, GDC Managing Director & CEO Eng. Johnson P. Ole Nchoe, Dr. Kayad Moussa, the Director General, Djibouti Office for Geothermal Development (ODDEG), Mr. Miyir Med Abdillahi, an advisor, the Managing Director & CEO, Kenya Electricity Generating Company (KenGen) Ms. Rebecca Miano and senior GDC managers.

The meeting also saw the two entities sign a contract. GDC will train 12 ODDEG staff in different aspects of geothermal development. The courses include Discharge fluid chemistry, Reservoir engineering (logging and testing), Drilling simulator, Cementing & Fluid engineering, Rig maintenance, Procurements (Logistics and transport) and Environment & Social Management of Geothermal Projects.

The GDC Managing Director welcomed the visitors and appreciated the good working relations between Kenya and Djibouti. He reiterated that GDC is ready to work with ODDEG so as to enable Africa to become a geothermal powerhouse. The delegation was taken through the general drilling operations by GDC staff led by General Manager, Geothermal Resource Development, Mr. Cornel Ofwona.

Mr. Yonis had an opportunity to engage some Djibouti trainees in Menengai. They are currently attending training courtesy of GDC Geothermal Centre of Excellence. He urged the students to take the training seriously, so as to execute that which they have learnt from Kenya back home.

Speaking during the event, CS Keter appreciated the progress GDC has made. "I am glad to see heat from geothermal steam can be used to pasteurize milk, heat greenhouses and fish ponds" he said.



This is where we are... Energy Cabinet Secretary Hon. Charles Keter (right), Djibouti's Minister for Energy in charge of Natural Resources Mr. Yonis Ali Guedi (2nd right), GDC Managing Director & CEO Eng. Johnson P. Ole Nchoe (left) listen as General Manager, Geothermal Resource Development, Mr. Cornel Ofwona briefs them at the Menengai Geothermal Project.

GDC banks on expertise to boost geothermal growth

By Godfrey Olali



This is how it's done...GDC staff member, with a section of students during one of the field trainings at the Menengai Geothermal Project.

African continent is at the tipping point of becoming a global giant in green energy development thanks to capacity building initiatives being pushed by GDC and other partners.

To date, the company has upped its momentum in ensuring African continent shines in the global map by churning out experienced and competent workforce capable of pushing the geothermal agenda to its fruition.

Skill gap analysis

Buoyed by a report on skill gap analysis of geothermal technical personnel done in 2015 by the Government of Kenya through GDC in partnership with United Nations Environment Programme (UNEP) and ARGeo, GDC and other partners have seen the need to empower local and regional youth in geothermal development.

This research confirmed an increasing need for geothermal scientists, engineers, and technicians across the region and GDC came in handy even after Countries within the African Rift System have identified GDC as a critical player in offering capacity building in the area of geothermal exploration even as the same scenario has been replicated locally.

The African geothermal story

Geothermal experts in the region reckon that the success of geothermal development in Africa is pegged on three key pillars: availability of the geothermal resource, finance

and expertise. Therefore, training is critical if the African dream of shining in the light is to succeed and GDC has its eyes on this initiative.

GDC has continued providing a platform where African nations can create a critical mass of experts who will drive this industry in the region. According to the GDC Managing Director & CEO Eng. Johnson P. Ole Nchoe, GDC takes capacity development as a key ingredient which will assist the continent in building home-grown experts.

“GDC will develop new concepts and improve its facilities to enhance future capacity building in geothermal technology in Africa. The move will ensure that every African interested in geothermal technology can get the best platform to learn from,” he reckons.

African students

Indeed as per his remarks, GDC has progressively inked capacity building MoUs with some of the best institutions in geothermal discourses. Just recently, a total of 22 students from 11 African countries were trained on various aspects of geothermal development in a training where GDC experts were the key trainers.

The training was being implemented with support from the African Union – AFREC, and United Nations Environmental Programme (UNEP) through GDC and KenGen, under the auspices of the Ministry of Energy.

The African Union Commission

A while back, the African Union Commission (AUC) identified GDC as a Center of Excellence in African geothermal development in the region. This was a critical step in ensuring that we use our skills and expertise to champion for geothermal development and uptake in Africa, through utmost cooperation.

“It is envisaged that with advanced research and innovative technologies, GDC processes and project delivery efficiency will be improved through partnerships both at local and international levels,” adds the MD.

Following this, the company has established a robust Strategy, Research & Innovation Division, headed by Dr. George Muia, which is mandated with the function of developing innovative initiatives to achieve sustainable capacity building both internally and externally. “GDC has an established Strategy, Research and Innovation Division that will act as the Think-Tank on emerging research and development strategies, tools and management processes in geothermal discourses. This initiative will ensure effective identification, evaluation and implementation of research projects and achievement of best practices and technology transfer in geothermal development, both locally and regionally,” says Eng. Ole Nchoe.

Indeed, regional trainings is at the core of GDC’s development.

The company’s aim is to equip youth with relevant skills in geothermal resource development in order to anchor them regionally in terms of job placement, increase number of geothermal experts in the country and region, accelerate the development of geothermal resources in the country and region, contribute to the reduction of youth unemployment rates in the county and reduce reliance on foreign expertise.

Through collaboration and support from our key partners, including National Industrial Training Agency (NITA) and the National Environmental Management Authority (NEMA), GDC has established a training institute based in Naivasha. With a curriculum in geothermal resource development that is competency based and approved by the relevant accreditation bodies, the GDC Institute will play a crucial role in training local and regional youth on renewable energy.



Smiles of winners...A section of staff celebrate at last year's Nakuru Regional Show after GDC won in many categories

GDC shines at Nakuru and Kabarnet ASK Shows

By Fouby Akinyi-Mwangi

The Managing Director & CEO Eng. Johnson P. Ole Nchoe graced the GDC stand at last year's Nakuru ASK Show. GDC set up an informative spectacular exhibition which resulted in a win for *Best Stand in Innovation and Invention*. The GDC stand highlighted the company's mandate in developing geothermal energy, milestones, projects progress, Corporate Social Responsibility (CSR), capacity building among others.

Other dignitaries who visited the stand included Nakuru County Governor H.E Lee Kinyanjui, top Management from the Agricultural Society of Kenya, GDC Board Member Mr. Kamau Kuria, GDC General Managers, Management and staff.

The stand was a beehive of activities throughout the entire exhibition as show goers flocked in to learn about geothermal resources.

The show was held between 4th to 8th July 2018.

Congratulations to the team for making GDC proud.

Leaders in Baringo County praised GDC for fostering peace in the region as the GDC Baringo-Silale Geothermal Project gains momentum. County Commissioner Mr. Henry Wafula said that engaging the locals in the ongoing infrastructural works has helped promote co-existence among the locals in the region. "We are happy GDC has opened up the roads in the

region and is engaging the locals to provide labour. This has ensured smooth co-existence and now cases of insecurity have majorly reduced. We are also extremely happy for the frequent meetings that GDC holds with the locals in the region. During the meetings, the locals are sensitized on the importance of the project to their community and the country at large," he said.

Mr. Wafula was speaking when he toured the GDC stand at the just concluded Kabarnet ASK Show. His sentiments were echoed by other leaders who visited the GDC stand during the show period. Among them was the Deputy Governor H.E Jacob Chepkwony, CEC Environment National Treasures Tourism and Wildlife Hon. Scholar Kimeli, Chief Officer Trade Industry Enterprises and Cooperatives Development Mr. David Cherop among others.



Endorsement...Baringo Deputy Governor H.E Jacob Chepkwony (center) awards a trophy to General Manager, Drilling & Infrastructure Mr. George Kinyanjui at the Kabarnet Show



During the show GDC won four awards, The Best Energy Services and Conservation Stand, The Best Non-Agricultural Based Statutory Board Stand, The Branch Chairman Commendation Trophy and The Stand that Best Interprets Current Show Theme.

The Kabarnet Show was held on 19th - 21st July 2018.

The theme was Promoting Innovation and Technology in Agriculture and Trade. GDC has been participating in the Kabarnet ASK Show since 2014.

“GDC won four awards, The Best Energy Services and Conservation Stand, The Best Non-Agricultural Based Statutory Board Stand, The Branch Chairman Commendation Trophy and The Stand that Best Interprets Current Show Theme.”



The Baringo Bloom

How GDC is changing fortunes in North Rift

By Godfrey Olali

Cheparsip Korkisim sluggishly bends below a dry overgrown noxious woody weed commonly referred by natives as Mathenge (*Prosopis juliflora*).

Overshadowed by scorching heat and sounds of little birds perched delicately on the branches, she places her three yellow 20-litre jerricans in a bid to draw water from a newly constructed tank.

The 51-year-old mother of eight could never imagine in her wildest dreams that one day she could easily draw fresh and treated water just a walking distance from her home in Chepungus village, Paka Location, Tiaty East, Baringo County.

Tedious journey

For several years, Korkisim would endure a tedious five-hour daily journey in search of water from the crocodile and hippopotamus infested Lake Baringo, tens of kilometers away.

“We thank GDC for this project. It’s a big relief for us. Children and women were particularly at risk; our children

often died from preventable water-borne diseases. Most primary schools in this area do not have adequate access to fresh water and hundreds lack facilities to go to the bathroom or wash hands, this will assist,” says Korkisim, while accompanied by other women who came to fetch water.

Drilling mission

Late last year, GDC moved its first rig, christened Kifaru II, on an exploration drilling mission in Paka prospect, in the fur-flung and expansive Baringo – Silali Block, a move expected to open up Kenya’s northern frontier.

3000 megawatts

The Baringo-Silali Block has an estimated potential of 3,000MW which will be developed in phases.

The first three phases will each develop 100MW with funding from the Government of Kenya (GoK) and German’s Kreditanstalt für Wiederaufbau (KfW) Bank.

Geothermal wells

The Government of Kenya (GoK) is funding the construction of access roads and community engagement initiatives while KfW has given GDC a concessional loan of 80 Million

Euros (KSH8 billion) for drilling 15-20 geothermal wells, undertaking several consultancies and installing water pipeline to supply water for drilling.

Three prospects

Already, GDC has developed 120 kilometers of road network from Lake Baringo traversing through the three prospects of Paka, Korosi and Silali.

According to the Managing Director & CEO Eng. Johnson P. Ole Nchoe, GDC’s Corporate Social Responsibility (CSR) programmes in Baringo – Silali Project will be anchored under three key pillars of health, water supply and distribution of relief services to benefit communities within the block which is pillared under the Presidential Delivery Unit.

“We are putting in place a key water pipeline which will provide water to the community. With this, GDC will solve rampant water problems in this region,” he says.

He adds that GDC has been well received by the Baringo – Silali communities, which will receive at least 20 community-based water



Water for community...Chairman of the GDC Board of Directors Mr. Gershom Otachi Bw'Omanwa (center) and Managing Director & CEO Eng. Johnson P. Ole Nchoe (left), with a contractor at one of the community water filtration points in North Rift

points aimed at easing the rampant water scarcity burden for the residents and their domestic animals.

“Projects have many challenges and we have weathered many, there are still more to come but our commitment to the success of this project is unwavering. We must succeed,” assures Eng. Ole Nchoe.

Community empowerment

Key State representatives and stakeholders have endorsed this project. During one of the visits recently, Energy Chief Administrative Secretary (CAS) Hon. Simon Kachapin said that the development of Baringo-Silali Geothermal Project will have a huge impact in transforming the region into an economic hub.

“*We thank GDC for the project. The pupils can now get clean drinking water nearby. Most of them are now in school*”

“This is a huge project not only in this area but also in the country. The lives of the local communities will never be the same again due to the impact of the project. We shall have industrial parks here which will utilize the direct uses of geothermal energy. This will largely change the economy of the region which solely depends on livestock,” he said.

GDC will have not only supported the communities living in this semi-arid area, but will also have buffered them against poverty and driven the economic development, hence achieving the United Nations initiated - 2030 Sustainable Development Goals (SDGs).

With all these fortunes, it’s clearly a tilting moment in history for the once neglected area and the Baringo – Silali residents are just about to cross the Rubicon.

According to the GDC Regional Manager, North Rift Mr. John Lagat, GDC will pump raw water from Lake Baringo, which will undergo carbon filter purification through reverse osmosis method, enabling thousands of area residents to access clean water. The project has an endorsement from Water Resource Management Authority (WARMA) and National Environmental Management Authority (NEMA).

“We thank our donors especially KfW of Germany because through this system, close to 10,000 households and their livestock will now access clean water,” says Mr Lagat, who was amongst the first team of geologists to explore the area in the early 80s. And the narrative is the same for the residents and teachers of neighbouring Meisori, Riong’o and Mount Paka primary schools.

“*With all these fortunes, it’s clearly a tilting moment in history for the vast area and the Baringo – Silali residents are just about to cross the Rubicon*”

According to them, there is a huge reduction in cases of school absenteeism and rampant attacks by hippos and crocodiles as it was before, when children went to fetch water in the nearby Lake Baringo. Teachers in the area also opine that through the Government of Kenya

– Free School Feeding Programme, GDC has enabled availability of water for cooking beans and posho, while children who used to move with their nomadic parents are now staying in school.

According to Mr Sammy Olesuno, the Head Teacher at Meisori Primary School, fortunes will soon clearly change for hundreds of residents of Chepungus village, in Paka Location, and other nearby villages like Rion’go, Tangulbei, Mukutani and Ng’inyang. Children from nearby primary schools, residents and livestock can now access clean drinking water and for domestic use.

“We thank GDC for the project. The pupils can now get clean drinking water nearby. Most of them are now in school and rampant cases of absenteeism is a thing of the past,” says Olesuno, who adds that enrolment rate has also increased since GDC moved

to the area. The school which was started in 1983, currently has a pupil population of 489 and 12 teachers.

Mr Collins Kasses, the Head Teacher at Rion’go Primary School, also registers his pleasure.

“Since GDC started this project, we have maintained a good number of pupils in our school. Initially during dry seasons like January, we used to have around 40 pupils but now we have more than 100 during same dry season. This means that nomadic parents no longer move with their livestock as before,” he says.

Another community leader, Mr. Amos Losute, 65, is a happy man. He says that the watering points can serve up to 4,000 livestock in a day minimizing the movement of animals from one place to another.

10,000
Number of area residents poised to access clean drinking water for domestic and livestock use

His sentiments are echoed by Mr. Kipchumba Kiwial, 29, a farmer from the area who adds that GDC’s move is huge game-changer and turning point for thousands of residents.





GDC in focus as ARGeo-C7 delegates resolve to champion Direct Use

By Christopher Ngolo



Direct use matters...*GDC General manager, Strategy, Research, and Innovation Dr. George Muia (centre) chairs the plenary session as GDC Direct Use Manager Ms. Martha Mburu (2nd right) gives a point while other members of the plenary listen*

GDC was once again placed on a global perspective as a key player which will champion the application of Direct-Use of geothermal energy at the recently concluded Seventh African Rift Geothermal Conference (ARGEO-C7), which was held in Kigali, Rwanda late last year. Direct use of geothermal energy refers to uses other than electricity generation. These uses include industrial processing, greenhouse and aquaculture ponds heating, drying and meat processing among others.

GDC delegates

A section of GDC staff, led by General Manager, Strategy, Research and Innovation Dr. George Muia and Direct Use Manager, Ms. Martha Mburu, attended the threeday conference which was hosted by the Government of the Republic of Rwanda in partnership with UN Environment.

Non-State actors

Other participants included Ministry for Foreign Affairs Iceland, Directorate for International Development Cooperation (MFA-ICEIDA), The Federal Institute for Geosciences and Natural Resources (BGR), Geothermal Training Programme of the United Nations University (UNU-GTP), African Union Commission (AUC) and the African Regional Branch (ARB) of the GDC's mission to

transform Kenya into an industrial geothermal belt through application of Direct-Use of geothermal recently wowed delegates at the Seventh African Rift Geothermal Conference (ARGEO-C7) which took place in Kigali, Rwanda. International Geothermal Association (IGA).

According to Dr Muia, the conference noted that GDC can play a critical role in championing the application of direct use in the region. "The enhanced direct use of geothermal resources is great for fighting hunger and poverty and ultimately enhance the livelihoods of communities living in geothermal rich localities," he said. The delegates also agreed that in the next two years, ARGeo countries will focus on tapping the immense opportunities that direct utilization of geothermal avails for the continent.

The conference noted that GDC can play a critical role in championing the application of direct use in the region

GDC has already implemented four direct use demonstration projects in Menengai Geothermal Project in Nakuru County, though a collaboration with United States Agency for International Development (USAID). Direct use of geothermal resources

has the potential to contribute to the socioeconomic development of the African continent.

Some of the Direct Use application which GDC will champion include containerized dairy production unit, heated aquaculture ponds, geothermally heated greenhouse and geothermally operated laundromat. The design concept for the demonstration units is that a low pressure geothermal well in Menengai, MW-03 is used to provide the heating fluid.

The heated clean water is then used as a source of heat to all the pilots. The GDC delegates at the conference informed the meeting how GDC has progressed in the area of direct use. Dr. Muia chaired the plenary which was also addressed by Ms. Mburu, Ms. Luca Angelino from International Renewable Energy Agency (IRENA), Arni Ragnarsson, Iceland GeoSurvey and Caitlin Smith – US Power Africa. The six previous biennial conferences were held in Ethiopia (2006), Uganda (2008), Djibouti (2010), Kenya (2012), Tanzania (2014) and Ethiopia (2016).

In order to expedite geothermal development in Africa, various innovative geothermal support programmes have been initiated in the East Africa region. The UN Environment-ARGeo Programme has the main objective is to catalyse investments in geothermal development in the region. This programme, through one of its project components, supports countries to host and organize the biennial regional geothermal conferences in coordination with other geothermal support programmes and partners. The aim of this biennial conference is to promote regional cooperation, as well as create an information exchange platform on the exploration, development, investment and utilization of the geothermal resources in the region.

Dr. Thecla Mutia, PhD, Head of Research and Innovation Section, Geothermal Center of Excellence (GCE)

By Fouby Akinyi-Mwangi

Q. Research & Innovation is a new section in the Strategy, Research and Innovation (SRI) Division. What is the mandate of the section?

A. To facilitate research and innovative technologies and approaches aimed at improving GDC processes and project delivery. This is done by focusing on emerging technical scientific and engineering challenges arising from geothermal exploration, development and production both within and outside GDC; this may be in partnership with local and international institutions/agencies.

Q. Why is Research & Innovation critical to GDC?

For innovation and continuous improvement. R&I will provide a platform for staff, partners and potential GDC partners to showcase innovative solutions geared towards creating sustainable value for the Company and its stakeholders as well as solutions that maintain the company's competitive edge in a fast evolving energy market.

Q. What are some of the activities you intend to carry out this Financial Year?

Activities shall mainly be project-oriented. As we start up, we aim to identify, fund and coordinate the implementation of at least two innovative technical research and development projects. We are also working on developing networks and collaborations with partners with the agenda of leveraging strategic R&I partnerships. Finally, we shall strive to source for additional R&I funding through proposal writing at local and international level.

Q. Why is GDC's role critical to Kenya?

This is mainly for two reasons:

(i) Environmental compliance ...

At the UNFCCC Conference of Parties - 21 in 2015 in Paris, Kenya committed to a 'nationally determined contribution' of reducing domestic greenhouse gas emissions (GHG) by 30% in 2030 in comparison to a business-as-usual projection. Kenya took the 30 % abatement from six sectors namely energy, transport, industry, wastes, agriculture, forestry (carbon sinks) and adaptation actions in several sectors. Geothermal power has by far the largest abatement potential of 14MtCO₂eq per year by 2030 equivalent to 5 GW; other technologies vary between 0.5 to 1.4 14MtCO₂eq per year.

RESEARCH & INNOVATION



Geothermal power is thus key and is expected to abate over 75% GHG in power generation/supply compared to other renewables. More abatement can even be realized through industrial applications from direct use.

(ii) For national economic development...

GDC through accelerated deployment of geothermal resources for power and other direct uses will spearhead the achievement of part of Kenya's big 4 agenda, mainly through industrial parks. The eventual result will be reduced tariffs, increased employment opportunities and improved infrastructure amongst other benefits, this will ultimately impact positively on the economy.

Q. Geothermal research and innovation is a technical sector which needs highly trained and competent staff. How do you intend to grow the R&I Section technical capacity?

GDC has well trained and qualified scientists and engineers in the technical domain who provide expertise within GDC projects, in the region and at global scale. For now, R & I will work hand in hand with the experts in different projects related to their fields as they shall be the project implementers. R & I shall mainly coordinate implementation of all staff research ideas. R&I will then provide a platform for presentation of the research ideas to the global geothermal community through conferences and publications, that way competency of the staff will be enhanced. R&I through networks and collaborations with partners will also source for training opportunities (exchange programs) where necessary for the staff.

Q. GDC is key player in geothermal research and technological innovation in the region, mention some new innovations the company has developed

Most of the ideas are on proposals and need funding for implementation. Forming this section was critical in the identification and implementation of these ideas. But with time, updates will be shared. However, there are notable innovative ideas on direct utilization of geothermal resources in the region that the company has proven feasible, they include:

- A heated greenhouse
- A 150 liters batch milk pasteurizer
- Two heated fishponds
- A cloth laundry and dryer units

7. How will Research and Innovation add value to GDC as the company strives to achieve its mandate?

Among the key mandate of GDC is reducing costs associated with infrastructural development, exploration and production drilling, through R&I feasible cost reducing ideas on our processes shall be evaluated, tested and implemented. Further, R & I will enhance capacity building by organizing and continuously hosting diverse

discussions and symposia on geothermal science and technology matters. Such forums will give our scientists and engineers opportunities to show case their ideas, share knowledge and get critiques for continuous improvement on GDCs mission.

8. What role does Technology and Innovation play in GDC's work?

Development of a geothermal resource to utilization is technology intensive, from exploration, to appraisal and production drilling and utilization of steam for energy and or heat. High level expertise is paramount in these process to avoid costly mistakes and delayed projects which may affect the development of an economy. Today know-how in these processes is continuously evolving for improved processes and reduced costs as development of a geothermal resources is capital intensive. As there are few players in the industry owing to the limited occurrence of geothermal resources, GDC strives to keep abreast to evolving technologies through investments in capacity building and use of modern equipment. Our scientists and engineers undergo high level international training at the top geothermal companies/

schools/institutes of the world and have been exposed to current modern technologies. For instance, at GDC we have been able to site and drill successful geothermal wells using modern rigs and with our own local capacity. ...

9. What motivates you to carry out research? Providing solutions to challenges and gaps that hinder or delay processes...

Research gives one an opportunity to question and answer the un-known in confidence which many times aids in providing solutions to problems.

10. Where do you envision GDC in 10 years' time?

I see improved processes, enhanced efficiency and timely implementation of geothermal projects, reduced costings in the project cycle and increased geothermal business operations/opportunities at regional and global level through implementation of innovative ideas. How? Through improved citing of wells or generally exploration methods, reduced drilling time to provision of good quality steam and added value to its utilization.

Impressive Credentials

Dr. Mutia, an Environment and Natural Resource Management specialist has also been a leading instructor of the African Geothermal Center of Excellence (AGCE). She holds BSc., MSc. degrees in Environmental Science from Egerton University and a PhD. in Environment and Natural Resources from the University of Iceland under a UNU-GTP Iceland fellowship.

She is a registered member of the Environmental Institute of Kenya (EIK), Geothermal Association of Iceland (GAI), the Geothermal Association of Kenya (GAK) and the Women in Geothermal (WING) Association – Africa.

Her recent awards include best geothermal energy research papers at

the European Geothermal PhD Day held in Bari Italy and at the polar ecology conference in Czech Republic. She is also a renowned local and international Environmental Science instructor in the field of geothermal science. Dr. Mutia is widely published in this area and is licensed as a Lead ESIA/EA Expert of the National Environmental Management Authority (NEMA).



GDC to empower continent through Capacity Building Initiative



Field work...Geothermal Resource Assessment (GRA) Laboratory Technician Ms. May Mumba trains AGCE students during a field work session at the Menengai Geothermal Project

By Godfrey Olali

The African continent is journeying to become a global giant in green energy development thanks to capacity building initiatives by Geothermal Development Company (GDC) and other partners.

The initiative was informed by a report on skills gap analysis of geothermal technical personnel done in 2015 by the Government of Kenya through GDC in partnership with United Nations Environment Programme (UNEP) and African Rift Geothermal Conference (ARGeo).

Research findings

This research findings indicated that there's an increasing need for geothermal scientists, engineers, and technicians across the region and GDC came in handy. GDC and other partners hence identified the need to empower local and regional youth in geothermal development. Key countries within the African Rift System identified GDC as a critical player in offering capacity building in geothermal exploration.

Geothermal experts

Geothermal experts in the region reckon that the success of geothermal development in Africa is pegged on three key pillars: availability of the geothermal resource, finance and expertise. Therefore, training is critical if the African geothermal sector dream is to succeed.

GDC continues to provide an opportunity through which African nations can create a critical mass of experts who will drive this industry in the region.

According to the GDC Managing Director & CEO Eng. Johnson P. Ole Nchoe, GDC takes capacity development as a key ingredient which will assist the continent in building home-grown experts. "GDC will develop new concepts and improve its facilities to enhance future capacity building in geothermal technology in Africa. The move will ensure that every African interested in geothermal technology can get the best platform to learn from," he reckons.

Indeed, GDC has progressively signed capacity building Memorandums of Understanding (MoUs) with some of the best institutions in geothermal discourses.

By May last year, a total of 22 students from 11 African countries were trained on various aspects of geothermal development in a training where GDC experts were the key trainers. The training was implemented by GDC and KenGen, under the auspices of the Ministry of Energy, with support from the African Union – The African Energy Commission (AFREC), and United Nations Environmental Programme (UNEP).

In 2014, the African Union Commission (AUC) identified GDC as a Center of Excellence in African geothermal development in the region. This was a critical step in ensuring that GDC will use skilled

“The Strategy, Research and Innovation Division will act as the Think-Tank on emerging research and development strategies, tools and management processes in geothermal discourses. This initiative will ensure effective identification, evaluation and implementation of research projects and achievement of best practices and technology transfer in geothermal development, both locally and regionally,” says Eng. Ole Nchoe.

expert within the company to champion for geothermal development and uptake in Africa, through utmost cooperation.

“It is envisaged that with advanced research and innovative technologies, GDC processes and project delivery efficiency will be enhanced through partnerships both at local and international levels,” adds the MD.

Subsequently, the company has established a robust Strategy, Research & Innovation Division, mandated with the function of developing innovative initiatives to achieve sustainable capacity building both internally and externally.

“The Strategy, Research and Innovation Division will act as the Think-Tank on emerging research and development strategies, tools and management processes in geothermal discourses. This initiative will ensure effective identification, evaluation and implementation of research projects and achievement of best practices and technology transfer in geothermal development, both locally and regionally,” says Eng. Ole Nchoe.

Indeed, regional trainings is at the core of GDC’s corporate strategy. The company’s aim is to equip trainees with relevant skills in geothermal resource development in order to anchor them regionally in terms of job placement, increase number of geothermal experts in the country and region, accelerate the development of geothermal

resources in the country and region, contribute to the reduction of youth unemployment rates in the county and reduce reliance on foreign expertise.

Through collaboration and support from key partners, including National Industrial Training Agency (NITA) and the National Environmental Management Authority (NEMA), GDC has established a training institute based in Naivasha, Nakuru County.

The GDC Institute has developed a curriculum that is broad based and covers all facets of geothermal resource development including Geosciences, Drilling Technology, Reservoir Engineering, Direct Use Technology, Project Management, Environment Management and Occupational Health, Safety Management and Strategic and Financial Planning in geothermal resource development. With a curriculum that is competency based and approved by the relevant accreditation bodies, the GDC Institute will play a crucial role in training local and regional youth on geothermal energy.

GDC’s capacity development objective is to build human resource capacity in geothermal resource development; equip trainees with relevant skills in geothermal resource development; increase the number of geothermal experts in the country and accelerate the development of geothermal resources in the country.



Impact of Social Media in organisations



By Debby Kalei

A few years back, social media platforms were by and large an avenue used for after-hours networking. They took an individualistic approach whereby most of the accounts were personal in nature. Organizations did not consider social media a 'corporate' way of communicating; journalists were still fully reliant on newspapers, TV and radio to relay their information.

Social media influence

Fast forward to today where social media has completely morphed into a giant. Most organizations in the World have adopted social media either by will or out of no choice because if an organization is not on social media, you basically do not exist. News breaks first on social media before it is even relayed on traditional media such as TV and radio, let alone print media which requires more time to be produced.

Double edged sword

Social media is a double edged sword for corporates. It provides a corporate an opportunity to share information and interact with a wide array of stakeholders. Due to the openness of social media, corporates can reach followers in far corners of the World in the same way it would reach stakeholders who are just next door. The good thing with social media is how interactive it is. It has opened the corporate-stakeholder engagement sphere from transmission of information by the corporate to two-way communication between both parties due to the aspect of feedback better known as commenting, replying, re-tweeting, reposting, liking or even disliking.

The aspect of open communication

is the other edge of the sword. Many times, corporates find themselves on the receiving end of the wrath of social media users. From legitimately aggrieved stakeholders to trolls, corporates are faced with actually having to respond to issues raised on social media. Many ill-advised corporates have chosen to ignore complaints that ended blowing up into a fully-fledged crisis. A re-tweet or repost by key social media followers has ended up giving something so small a lot of traction and corporates are left trying to undo their 'ignores'.

What then can corporates do to get the most of social media? The first thing is identify who your stakeholders are and what it is that they need. This will help you craft your messages in a way that they find useful, a way that addresses their concerns. This in itself is proactive social media communication in the sense that you are pre-empting what the stakeholders need and giving it to them before they even ask for it.

Once you have your content ready, there are two things to keep in mind – consistency and timing. For social media engagement to be effective, corporates cannot afford to make posts once every couple of months or days and expect to reach stakeholders. Social media is a packed wrestling



ring with the prize being keeping the interest and attention of users. Depending on the happenings in a day, you can find that in even five minutes, the home page of a social media user has at least twenty new posts. If a corporate does not consistently put content out there, the highest probability is that your post will not even make it to one of the twenty

that your target is supposed to see at a particular time. Corporates have to keep putting content out there to increase the chances of their posts being seen. Several social media outlets have provided an avenue where users can boost their posts so that they are seen by many people. This works well when there is an event or special function, but for every day social media usage, daily boosting may not be advisable.

Competition for attention

Since it is a competition for the attention of the users, the time which the corporate does makes its post is critical. It is a delicate balance for organizations to pick an appropriate time. On one hand, an organization can opt to post during peak hours when there are a lot of people online. The advantage of this strategy is exactly that – corporates can reach a lot of people at that time. There is a flipside to this however – there is also a lot of content that is put out at peak hours and thus your post's visibility time on users' homepages is limited. Corporates can also opt to post their content at off peak times and the advantages and disadvantages of the opposite of the peak time posts. Though a post will have longer visibility time on users' homepages, there are few users online at that time and the impact of the post may be minimal.

After the post is made, then comes the reaction. Sometime it is positive while other times it is negative. Corporates cannot afford to ignore social media reactions. We have seen many crises begin just from social media responses or lack thereof. It is therefore paramount to respond to social media queries or comments in a diplomatic yet informative manner. Social media is an interesting and still developing field with new things expected to keep coming up. It is no longer possible for corporates to ignore social media, and even if they do, social media will not ignore them.

Ms. Kalei is a Corporate Communications Officer at GDC

Safeguarding staff retirement

By Rose Muhia



Traditionally in the African Society set up, children and the general members of the society were tasked with the role of taking care and providing for the elderly. This position however, is increasingly changing in light of the growing cost of livelihood and significant changes in our social and economic lifestyle. Similarly, with age, we lose our potential to work and earn an income on regular basis. Living expenses such as food, health care, housing, electricity and water bills will not cease to accrue after an individual retires from active employment. It is in such circumstances that pension income proves to be of great benefit to enable one maintain the lifestyle he/she was living prior to retirement. Key to note is that the amount payable at retirement is dependent on the sums saved and invested by an individual in the active years of employment. Therefore, to get maximum benefits and to enjoy financial stability upon retirement, one needs to plan early for retirement by making considerable contributions in a registered pension scheme.

Staff benefits

The GDC Staff Retirement Benefit Scheme was established as a contributory scheme under irrevocable trust on 1st July 2010. The operation of the Scheme is governed by Trust Deed and Rules (as amended from time to time) which essentially governs the relationship between the scheme trustees and the employer (sponsor of scheme), the employer and the employees who are members of the scheme and the relationship between the scheme trustees and members of the scheme. It further outlines amongst others, the rules as to appointment of service providers of the scheme, the roles and responsibilities of the trustees and the sponsor of the scheme and general administrative aspects of the scheme. (A copy of the Deed and Rules may be obtained from the Trust Secretary with prior arrangements).

1014 registered members

The GDC Pension Scheme is currently comprised of a total of 1014 members (as of 30th June

2018). The Scheme is designed as a Defined Contribution (DC) scheme whereby the benefits that accrue to a member upon retirement will be the summation of the accumulated value of his/her contributions, employer's contribution and the returns on investment. The monthly contribution of a member towards the Scheme is at the rate of 7.5% of one's basic salary which is further supplemented by the employer's contribution at a rate of 14.5% of a member's basic salary. These rates however, are likely to increase in the near future in light of a proposal by scheme trustees to have

“ The GDC Staff Retirement Benefit Scheme was established as a contributory scheme under irrevocable trust on 1st July 2010 ”

the sponsor increase its percentage contributions for the benefit of scheme members which in turn will demand an increase of members' percentage rate.

In accordance with the Retirement Benefits Scheme Regulations, the GDC Staff Retirement Benefit Scheme organized and convened an Annual General Meeting, for its members for the year ended 31st December 2017, on the 12th and 14th of June 2018 in Nairobi and Nakuru offices respectively. The essence of an Annual General Meeting, commonly referred to as AGM, is to drive good governance by providing an opportunity for members of the scheme to receive reports of the scheme accounts and to review its performance for the past year.

Reports

These reports are presented to Scheme members by the contracted service providers including the Administrators, the Fund Manager, the Auditor and the Custodian of the scheme. Similarly, the AGM provides an opportunity for the scheme members to ask questions, receive answers, provide proposals regarding the administration and the direction the Scheme intends to pursue in order to ensure maximum benefits and returns for its members.

The agenda of the convened AGM comprised of reports on; changes to benefits and contributions to the scheme, investments made by the scheme, audited financial statements as of end of year 2017, custody report of the scheme and the confirmation of trustees' remuneration. The highlights of these presentations included; the fund performance in terms of the returns earned for the year ended 31st December 2017 being 16.19% while it was noted that the net assets of the scheme stood at Kshs.1,492,206,960 which was a positive growth by Kshs.365,533,160.00. Further, the scheme, through the Fund Manager, has invested the Scheme Funds in varied asset classes including Equities, Government Securities, Fixed Deposits, Off Shore Investment and Corporate Bonds, the highest investment being in Government Securities at 69.20% as of end of Quarter 4 in 2017. It was noted in this presentation that discussions with trustees regarding investment in property as an asset class, are underway. In respect to compliance with legal and regulatory requirements, it was reported that the Scheme is duly registered with the Commissioner of Income Tax as a tax-exempt fund and also with the Retirement Benefits Authority in accordance with the provisions of the Retirement Benefits Act and its Regulations.

It is imperative that members of a pension scheme attend and participate in the AGM in order to obtain firsthand knowledge of the administration, performance and prospects of the scheme and to ensure the scheme is being run prudently and in the best interest of members.

Ms. Muhia is an Officer, Legal Affairs at GDC



By **Jedidah Ojwang**

For a corporate, guest relations is key

Many organizations spend billions of their budget on guest relations matters. They come with lots of demands and expectations.

At GDC, we handle many guests in various ways on a daily basis. We have suppliers, contractors, consultants and donors to mention but a few.

Guest relations services ensures and provide flawless, upscale, professional and high class guest service experiences. Analyzing customer feedback and providing strategic direction to continuously improve overall rating. Responding to guests needs and anticipating their unstated ones.

How we treat these guests in our midst matters the most not only to the organization but to the general community at large.

GDC having to carry out its daily operations in various sites in the country, has no choice but to interact with people from all walks of life in a friendly, respectful and interactive manner.

What our guests take away from their customer experience in our organization is important. In many ways, it's what each facet of a company is working towards as a collective end goal. Our relationship with our guests is therefore of key as importance to us.

The organization has invested a lot in creating and improving a number of receptive members of staff to handle our guests in a proper and the most humane way. Every guest deserves to be treated with utmost respect and interest.

It's always important to give them undivided attention.

Guests can make or break an organization. With the modern world of internet use, various communication platforms maybe used for or against us. 'Tweets' and 'forwards' might spread overnight because of a disgruntled guest. Choose wisely the words you use on guests carefully. Avoid at all costs the most controversial topics that might leave you pinned on the wall anytime of the day.

Reminiscing back in the days, when some of us or our folks used to get the best seat covers, best dishes and best clothes for the kids whenever there was a hint of guests coming to visit our homes. Similarly we need to roll down our red carpets for our guests whether they come with body guards or they are coming to ask for jobs.

At the end of the day, we should remember that we do rely on our guests to motivate and inspire us to do our work better.

Ms. Ojwang is a Corporate Communication Assistant at GDC



Customer care...A section of GDC's Customer Care staff



By **Mariam Yunus**

GDC striving to be a learning hub

Organization culture is the collection of traditions, values, policies, beliefs, and attitudes that constitute a pervasive context for everything we do and think as an organization. It includes the Written and unwritten rules that have developed over time. In a nutshell, it is "how we do things here".

Culture can make or break an organization, as Armstrong (Armstrong's Handbook of Strategic Human Resource Management-2016) articulates. One of the primary objectives of Human Resource Management is the creation of conditions whereby the latent potential of employees will be realized and their commitment to the causes of the organization secured.

Senge in his book; The Fifth Discipline, 1992) defines a Learning Organization culture as an organization with an ideal learning environment, perfectly in tune with the organization's goals. Such an organization is a place "where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning to see the whole (reality) together.

Geothermal Development Company (GDC) is leading the way in ensuring that a culture of learning is inculcated within the organization. This culture will be achieved through objective and focused training and development programs. At GDC employees attend varied programs, thereafter, knowledge sharing sessions are often held, during which the newly trained employees share their skills and knowledge with colleagues.

Staff are encouraged to enhance their personal development and focus their energy on being in a constant state of learning. Team work is very key, as it is the team members who through learning, build a reservoir of knowledge.

A learning organization culture builds on shared vision founded upon the element of collaboration. GDC is leading the way. The organization has prioritized investing in its human resource in various areas including, technical, leadership, communication among other skills. This is aimed at enabling employees to contribute to the organization's growth and to increase productivity while inculcating a learning culture.

Ms. Yunus is the Manager, Human Resource Development at GDC



GDC FC beef up squad in promotion quest

By Enock Ngome



It is every sportsperson wish to play at the highest level of a sport. To achieve this in team sports, one should be in the strongest and well-balanced team which will always scare the opponents in every match.

Strengthening its unit

GDC Football Club has strengthened its playing unit as the team seeks promotion to the Division One League next season, with the aim of playing in top flight football.

Five new players joined the team during the July 2018 transfer window to add depth in the squad. “We have set our eyes on the ultimate prize which is promotion to the Division One League. The new signings bring in impetus and experience to the team. With the solid squad and support from the GDC management we are focused” says the Team Manager Martin Waswa.

Stephen Etyang and George Ouma – both from Zoo FC, Peter Mwangi and Moses Juma from Nakuru All Stars and Brian Eshih and a from Mumias East are the new oil that will lubricate the team’s engine as it gears for promotion.

“There is stiff competition at the level we are playing now hence the need to have a strong squad. Every team in the league wants to get promoted just like us,” says Chairman Nixon Osundwa. “Our target is to play in the Kenya Premier League (KPL) in two years. We are starting the journey by seeking promotion to the Division One League next season, then the National Super League there after” adds Mathew Mutua a senior team member.

Last season the team had a fairy tale spell, during which they won the Football Kenya Federation Central Rift League earning promotion to the current Nationwide Division 2 League. Captain Edwin Wenani who was last season’s top scorer has his eyes set on the golden boot again. “I’m striving to clinch the title again and I’m working very hard to achieve this” he quips.

The GDC team enjoys massive support in Nakuru where it plays home matches at the Nakuru ASK grounds. The team comprises GDC

staff members and friends of GDC within the Central Rift Region.

Massive support

The GDC team was formed during the company’s regional game. It later merged with Elim FC and changed the name to GDC FC upon receiving sponsorship from the company last year.

Socializing platform

Apart from tapping talent amongst staff, the team has also been a socializing platform for staff and Nakuru residents. Not only does the team receive support from the staff during match days, but the players also have a solid fan base that supports them beyond the pitch.

“Our target is to play in the Kenya Premier League (KPL) in two years. We are starting the journey by seeking promotion to the Division One League next season, then the National Super League there after



Sights & Sounds



Ministerial Visit...Energy Cabinet Secretary Hon. Charles Keter (center), who was accompanied by Energy Principal Secretary Eng. Dr. Joseph Njoroge and other dignitaries listen to the Managing Director & CEO Eng. Johnson P. Ole Nchoe. The CS had paid a courtesy call to GDC



Status update...Members of GDC Board; Ms. Anne Too (middle), Mr Kamau Kuria (second right and Dr Nelly Yatich (left) listen as Drilling Operations Deputy Manager Mr. Stephen Kangogo and Drilling Planning & Logistics Manager Ms. Yvonne Wanambiro updates them on drilling activities at Menengai Geothermal Project



Parliamentary visit...Managing Director & CEO Eng. Johnson P. Ole Nchoe (2nd left), accompanied by Members of Parliamentary Committee on Energy during a tour of Baringo-Silali Geothermal Project



Mission...Managing Director & CEO Eng. Johnson P. Ole Nchoe (center) poses with members of Canadian Energy Mission delegates who paid him a courtesy call at Kawi House offices. The delegation included representatives from University of Calgary, Southern Alberta Institute of Technology (SAIT) and Petrel Robertson Consulting Ltd.



KfW Mission...Energy Chief Administrative Secretary (CAS) Hon. Simon Kachapin (center), key officials from German's Kreditanstalt für Wiederaufbau (KfW) Bank listen as the Managing Director & CEO Eng. Johnson P. Ole Nchoe explains a point during a tour of Baringo-Silali Geothermal prospect recently.



The Simulator...Energy Cabinet Secretary Hon. Charles Keter (center), Djibouti's Minister for Energy in charge of Natural Resources Mr. Yonis Ali Guedi, GDC Managing Director & CEO Eng. Johnson P. Ole Nchoe, Managing Director, Kenya Electricity Generating Company (KenGen) Ms. Rebecca Miano, other guests and a section of GDC staff watch as GDC drilling staff operates the Drilling Simulator at the Menengai Geothermal Project



Service for the nation...*GDC drillers working at one of the rigs at the Menengai Geothermal Project recently*



ICT Matters...*Staff from Information, Communication & Technology department listen during a meeting on Service Charter*



Wells of power...*One of the geothermal wells at the Menengai Geothermal Project*



Customer is king...*General Manager, Legal Affairs & Company Secretary Ms. Beatrice Kosgei gives a cake to one of the customers recently during Global Customer Care Week. Looking on, left, is Deputy Manager, Administration Ms. Purity Gituma*



Cheers...*The General Manager, Strategy, Research and Innovation at GDC Dr. George Muia (left, seated) with Mr Farah Omar Farah, the Head of Engineering Department and Project Manager at Djiboutian Office for Geothermal Energy Development (ODDEG) (right, seated) during a graduation ceremony for a section of Djiboutian students at Kawi House, Nairobi.*



Blood donation...*GDC staff participate in a blood donation exercise in marking the World Blood Donor Day*



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