



ROBUST

SEPTEMBER 2016

MURRAY & ROBERTS GROUP MAGAZINE

NEW STRATEGIC FUTURE

The Group's vision for 2025

CORPORATE CITIZENSHIP AT MURRAY & ROBERTS

35 YEARS OF SPORTING IMPACT

TECHNOLOGY INSPIRED BY NATURE

Ground-breaking wastewater treatment
technology

ENGINEERED EXCELLENCE

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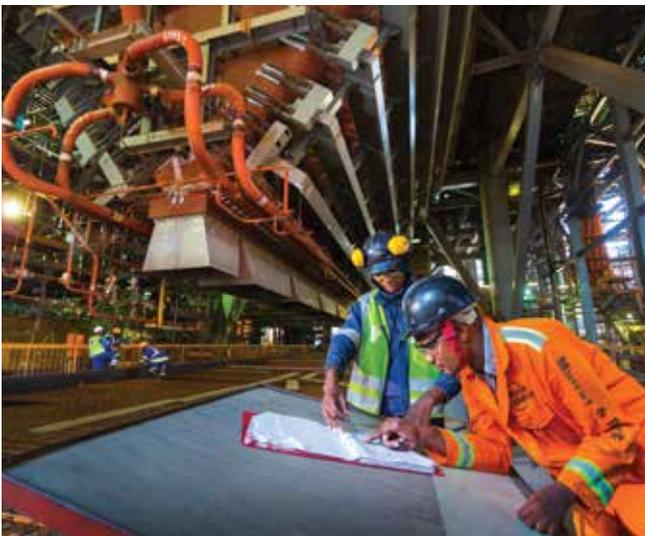
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Your chance to win a 16GB, 4.7 inch iPhone 6s, sponsored by Overend Outsourced.
Mrs DA Korpershoek was the lucky winner of the R15 000 Flight Centre voucher in the March 2016 Robust Magazine competition.



A

MESSAGE FROM

HENRY

This year has been a momentous one for the Murray & Roberts Group. Murray & Roberts has been in existence for more than a decade and during its history has had to consider many challenging decisions in order to remain a relevant and successful organisation. Its longevity is attributable to the spirit of the people in Murray & Roberts, as well as being responsive to the changes experienced in the environment in which the Group operates.

This year, after almost two years of careful planning, debate and consideration, the Group takes its next big step on the road to its *New Strategic Future*. The feature article on page four provides more detail about the Group's future plans and our revised vision for 2025.

Together, we look forward to working towards our vision of becoming a leading multinational group that applies its project lifecycle capabilities to optimise clients' fixed capital investments.

I hope that you will enjoy this edition of Robust and I'd like to take this opportunity to say thank you to the people of Murray & Roberts. The year ahead will no doubt be tough, however the future of the Murray & Roberts Group is promising.

HENRY LAAS
GROUP CHIEF EXECUTIVE

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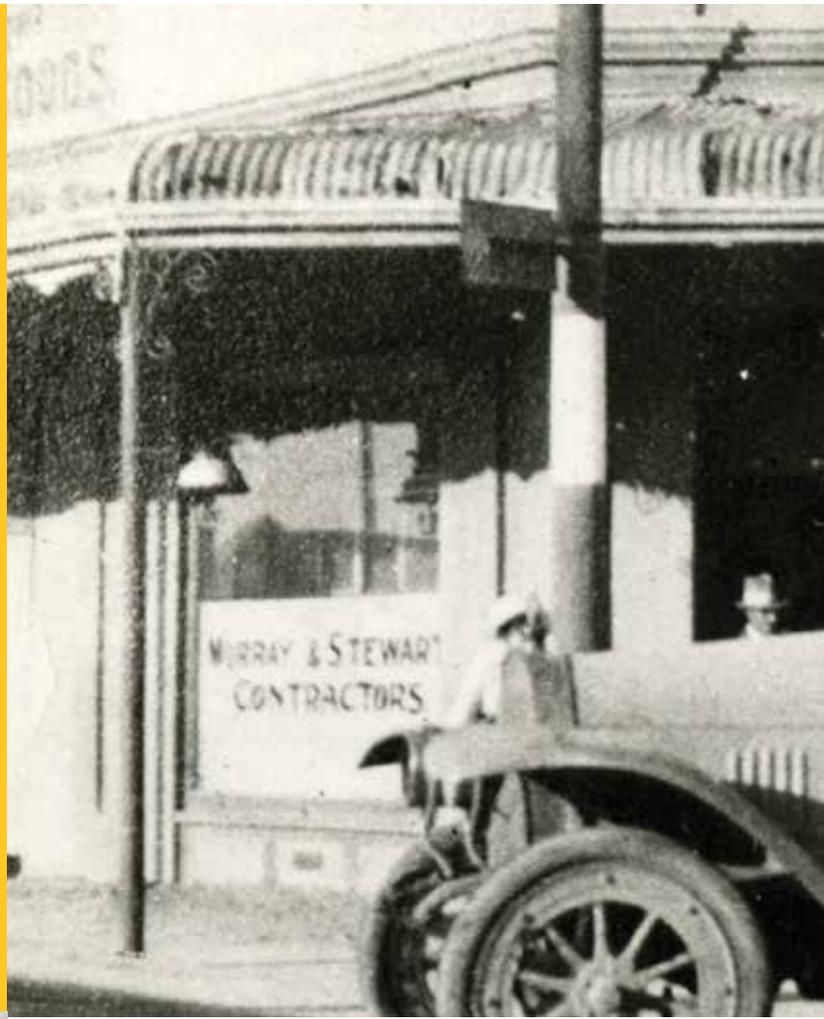
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NEW STRATEGIC FUTURE



A NEW STRATEGIC FUTURE

As we reach the end of the financial year and considering the strategic decisions the Board pursued, I wanted to reflect on our long and proud heritage of more than a century. I searched for points in time, which stood out as being momentous in the Group's history – and three specific events resonated.

WHEN 'MURRAY' MET 'ROBERTS'

Douglas Murray, the son of James Murray (one of the founders of Murray & Stewart), met the Roberts brothers – Andrew and Douglas (sons of John Roberts, the Town Engineer of Durban) – while studying civil engineering at Wits University. The Roberts brothers' entrepreneurial spirit had a profound influence on Douglas Murray, and the Murray & Stewart organisation. Unbeknown to them, their meeting would lead to the ultimate formation, of what we know today as Murray & Roberts.

THE MERGER OF GIANTS – THE FORMATION OF MURRAY & ROBERTS

Murray & Stewart was founded in 1902. Roberts Construction was formed in 1934 and listed on the JSE in 1951. After the chance meeting of Douglas Murray and the Roberts brothers at Wits University, Murray & Stewart and Roberts Construction finally merged in 1967 to form Murray & Roberts, with Dr J.D. Roberts being appointed as the first Chairman in 1968.



ff It's the Group's vision to, by 2025, be a leading multinational group that applies its project lifecycle capabilities to optimise client's fixed capital investment. The Group achieves this by focusing its expertise and capacity on delivering sustainable and fit-for-purpose project engineering, procurement, construction, commissioning, operations and maintenance solutions. The Group delivers its capabilities into three global market sectors: oil and gas; metals and minerals and power and water. **ff**

DECISION TO SELL THE INFRASTRUCTURE & BUILDING BUSINESSES AND GENREC

Today, headquartered in Johannesburg, the Group has a presence on five continents and employs 17 000 employees globally. Over the last two years, we have made meaningful progress towards implementing the Group's *New Strategic Future* plan, first shared with you in 2014 – and we have achieved our progress in the face of weak markets. This leads to the third point in time and probably the biggest strategic decision the Group ever had to make!

In the context of this *New Strategic Future* plan, and after thorough analysis and consideration, the Board decided that the Infrastructure & Building businesses no longer fit the Group's long term strategic objectives. This decision did not come easily, nor quickly. It was subject to debate at Board level for more than two years. It's the right decision for the Infrastructure & Building platform, as well as for the Group – and we are excited about this proposed transaction.

The Board has also decided to sell Genrec, the only remaining manufacturing business in the Group's portfolio of businesses. Negotiations with prospective buyers for these businesses are at an advanced stage and we will keep you updated on the progress.

The Infrastructure & Buildings businesses are synonymous with Murray & Roberts, as the Group was founded as a civil engineering and buildings business. It is for that reason that the decision to sell these businesses will in time to come be remembered as one of the true momentous occasions in the Group's history. Relative to other businesses in the heavy construction market sector, our Infrastructure & Buildings businesses have always been performing well. But time has come for Murray & Roberts to part with these businesses as the Group's strategy is pointing in a new direction. We also believe that the intended transactions will set the Infrastructure & Buildings businesses, as well as Genrec, up for great success in South Africa and the rest of the continent.



“ The emphasis is on *multinational, lifecycle capabilities, and the selected natural resources market sectors*. We believe that this new focus and strategic direction focusing have great potential to enhance shareholder value over the long term. ”

Henry Laas, Murray & Roberts Group Chief Executive Officer

OUR NEW STRATEGIC FUTURE

We have consequently revised our vision, and this is the first occasion for me to share the revised vision with you. *Our vision is to by 2025, be a leading multinational group, which applies its project lifecycle capabilities to optimise fixed capital investment.* This is to be achieved by directing the Group’s expertise and knowledge on implementing sustainable fit-for-purpose project solutions in the selected oil and gas, metals and minerals, as well as power and water market sectors. The emphasis is on *multinational, lifecycle capabilities, and the selected natural resources market sectors*. We believe that this new focus and strategic direction focusing have great potential to enhance shareholder value over the long term.

Through the proposed sale of the Infrastructure & Building platform, we expect that in the medium term, investor perception about Murray & Roberts will change and that market valuation will improve through recognition of the Group’s reduced risk profile and multinational earnings base. The Group has over the past three years already seen better quality earnings from the three natural resources-focused platforms. Our strategic focus is now firmly on the global natural resources markets.

In the past year we have continued to position the business platforms to provide a specialised and differentiated service offering across the project lifecycle to clients in its target market sectors, under the leadership of platform chief executive officers and platform chief financial officers. In line with this client

orientation, business platforms will be specialised with global focus in their target market sectors, as opposed to being general contractors in a specific geographic region.

We are strategically and systematically growing the presence of the three business platforms in chosen geographic regions and market sectors, aimed at positioning the businesses to increase the value they should return to our shareholders. This is the ultimate outcome of our *New Strategic Future* plan and will form the foundation from which we will grow the Group to realise the leading position contemplated in our vision by 2025.

As we look towards the coming year, our commitment to *Engineered Excellence*, the guiding principle which underpins our strategy, will inform the detailed planning and execution of everything we undertake. Given the difficulties we will no doubt face, this will be especially important in ensuring we continue to advance our strategy and improve our performance.

As our global markets continue to be depressed, the new financial year will be more difficult than the past year, but we have full confidence that our strategy will position us well for when the markets recover.

I want to thank each and every one of our employees for your continued hard work and your contribution to the progress we have made in what has been both a momentous and a difficult year for the Group, in pursuit of our *New Strategic Future*. **R**

INNOVATION

Nature-inspired technology

MURRAY & ROBERTS WATER PARTNERS WITH GROUND-BREAKING WASTEWATER TREATMENT TECHNOLOGY

Murray & Roberts Water has entered into a licence agreement with Organica Water for their ground-breaking wastewater treatment technology.

“We’re extremely proud of this partnership, which gives us a unique edge in the local wastewater treatment sector. The technology has been proved in countries like France, China, Indonesia and we see it having still more potential in Africa considering our rapidly growing cities as well as an increasing need to upgrade aging infrastructure as well as energy conservation.” Harry Singleton, Operations Executive for Murray & Roberts Water comments.

This nature-inspired technology uses natural root systems along with root-mimicking media in a process that can be used in urban settings with no bad odours.

Organica’s wastewater treatment works are called water reclamation gardens, because they look like botanical gardens rather than tradition works. Enclosed in glass houses or attractive, but simple shading structures to protect plants from extreme weather, the gardens offer a number of benefits including better treatment characteristics, a smaller physical footprint, lower operating costs and positive aesthetics. This ensures higher water quality; no reduction in value of nearby properties; reduced energy costs and an affordable upfront investment.

Since reclamation gardens are attractive and don’t generate unpleasant smells, they are ideal for construction in cities and urban areas. “Urbanisation is causing a massive growth in city populations, for example in Gauteng approximately 300 000 people move to the province each year and this requires almost a new city’s worth of infrastructure to be built, while existing water scarcity is further exacerbated” says Péter Varga, Business Development Manager for Organica Water.

“The latest in food-chain reactor technology integrates fixed-film activated sludge processes, these solutions have developed over the last decade to become very successful and sustainable. Our application of water reclamation gardens has the potential to change mind-sets about wastewater reuse and recycling as well as the location of this type of infrastructure, enabling placement in urban neighbourhoods, close to where the wastewater is generated” continues Varga.

Presenting a massive cost-saving, water reclamation gardens reduce the need for expensive underground piped infrastructure to



carry sewage out of cities. If the technology is then further applied to polish the water at the final stage of treatment, it can also reduce spend through water treatment bringing fresh water to the urban population.

Using Organica’s technology and plant roots, biomass is significantly increased in the water reclamation garden reaction chambers and provides a breeding ground capable of housing over 3 000 species of micro-organisms instead of the 300 species found in traditional wastewater treatment works.

“In a conventional wastewater treatment works reaction chamber, the activated sludge concentration is approximately 5kg per cubic metre. The plant root structures and Organica’s specialised media increase the surface areas for sludge attachment to take place, while also creating a better habitat for micro-organisms to live and multiply. This allows for greater biodiversity and facilitates biomass increase to up to 15kg per cubic metre” explains Varga.

A better biomass-to-volume ratio means the system can be up to 50% smaller in physical footprint than conventional treatment plants, which makes it more affordable, especially in an urban environment. The lower geographic footprint also makes the technology ideal for retrofitting existing works that may no longer be capable of servicing growing populations nearby.

“The timing of our partnership with Organica is opportune, as wastewater infrastructure in South Africa is in need of innovative and sustainable thinking and we believe our combined technology and experience can offer the domestic solutions required” concludes Singleton. **R**



PEOPLE

Robust Magazine chats to the Group's Human Resource Executives

LANA KING

HR EXECUTIVE AT CLOUGH



WHAT CAREER MILESTONES ARE YOU MOST PROUD OF HAVING ACHIEVED?

I was humbled when I was approached to consider taking on my current role (Head of HR) earlier this year. I have a young family which means that maintaining the flexibility I had in my previous role was important to me. Fortunately, the business was accepting of this and allowed me to take on the role in a part time capacity. As we continue to strive for greater diversity in our business, finding ways to accommodate the needs of our people is important. Hopefully I, along with others working and delivering in a part time capacity, can create the path for continued transformation.

WHAT ARE SOME OF THE CHALLENGES YOU FACE IN YOUR CURRENT ROLE?

In the current climate, a key challenge lies in identifying and embedding the initiatives that will add value to the business in the long term, whilst ensuring that the delivery of day to day HR services is maintained at efficient and effective levels. Increasing our global footprint also brings us challenges as we adapt our existing systems and processes to meet the needs of these businesses in a range of locations, whilst maintaining compliance with the 'Clough way'.

WHAT EXCITES YOU ABOUT THE FUTURE IN YOUR INDUSTRY?

The increasing sophistication of technology and innovation is always exciting and will appeal to a workforce that is agile and flexible. Graduates in the years to come will enter an industry which uses technology more than ever and deliver us solutions that today may seem unbelievable. The emergence of oil and gas energy alternatives will open up new markets and keep it interesting for all of us. Roles as they have existed in the past will change and roles that we haven't even entertained, will become more commonplace.

WHAT ARE SOME OF YOUR INTERESTS OUTSIDE OF THE OFFICE?

My family keeps me very busy, with spare time generally taken up with sports and other activities my children are involved in. On a personal level, I like to stay active and have a general interest in health and nutrition. Travelling is always fun, as is a good book and catching up with extended family and friends.

WHAT IS THE BEST PIECE OF CAREER ADVICE YOU'VE RECEIVED?

Be open to feedback, keep an open mind, be flexible, listen, learn and back yourself.

WHAT WOULD PEOPLE BE SURPRISED TO KNOW ABOUT YOU?

I grew up sailing and was fortunate enough to represent Australia twice – once at the Youth Worlds in Bermuda and then at the Laser Radial World Championships in South Africa. I have also finished the Rottneest Channel Swim (19.2kms) twice, competing in both a team of 4 and a duo, the latter being tougher but so rewarding.

WHAT WAS YOUR FIRST JOB?

I completed a Bachelor of Commerce from the University of Western Australia and then joined Clough as an HR Officer. This role was part of a small team who had a broad mandate to "manage HR". This provided a fabulous grounding in the general principals of providing HR services and gave me exposure to the industry and its operations in a way that university and formal studies cannot. Being a generalist and not specialising in one particular aspect of HR is really important in the early part of your career. It gives you the opportunity to find out what you have an interest in, paving the way for a role change when an opportunity arises. **R**



ZELIA SOARES

HR EXECUTIVE AT MURRAY & ROBERTS
POWER & ENERGY

WHAT CAREER MILESTONES ARE YOU MOST PROUD OF HAVING ACHIEVED?

I thoroughly enjoyed working at Murray & Roberts Corporate Office where I developed and implemented our Performance Management system. Another highlight was putting together the business case for transforming the then empty ninth floor into the current learning centre.

WHAT ARE SOME OF THE CHALLENGES YOU FACE IN YOUR CURRENT ROLE?

I am learning about a new industry and ensuring that HR is aligned to the business platform strategy. A particular challenge is mobilising fast-track projects especially those that are cross-border.

WHAT EXCITES YOU ABOUT THE FUTURE IN YOUR INDUSTRY?

To be part of a winning business platform that executes world-class projects.

WHAT ARE SOME OF YOUR INTERESTS OUTSIDE OF THE OFFICE?

I try to do my part within the community. I mentor girls at Jeppe High School and run the pre-marriage programme at my church.

WHAT IS THE BEST PIECE OF CAREER ADVICE YOU'VE RECEIVED?

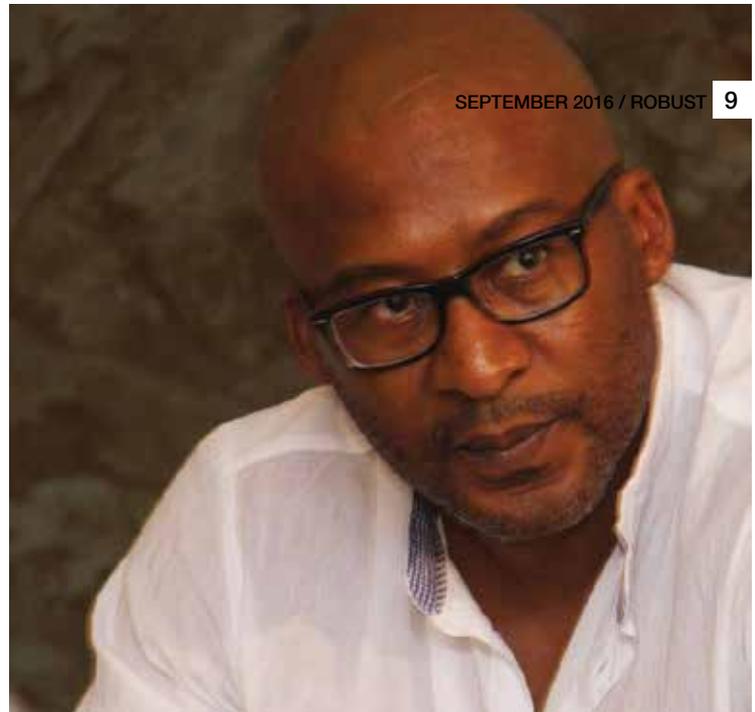
Always put up my hand and get involved.

WHAT WOULD PEOPLE BE SURPRISED TO KNOW ABOUT YOU?

I cannot ride a bicycle.

WHAT WAS YOUR FIRST JOB?

A customer liaison officer for VW. It taught me how to deal with people and the importance of resolving customer concerns. **R**



KARABO MOTHIBI

HR EXECUTIVE AT MURRAY & ROBERTS
CEMENTATION

WHAT CAREER MILESTONES ARE YOU MOST PROUD OF HAVING ACHIEVED?

Transforming the HR function from an administratively inclined frame of mind to being a strategic partner, aligned to business imperatives.

WHAT ARE SOME OF THE CHALLENGES YOU FACE IN YOUR CURRENT ROLE?

- Addressing legacy issues with unions
- Attracting the right talent into key and critical jobs
- Attracting and retaining diverse talent in terms of race, gender, age etc.

WHAT EXCITES YOU ABOUT THE FUTURE IN YOUR INDUSTRY?

Like any market, the industry is in a slump and still our business is performing relatively better compared to our competitors. I get excited when I think of the potential performance once the industry rebounds.

WHAT ARE SOME OF YOUR INTERESTS OUTSIDE OF THE OFFICE?

- Time with family
- Gym
- Travel
- Reading

WHAT IS THE BEST PIECE OF CAREER ADVICE YOU'VE RECEIVED?

"Never join a business where HR has to beg to have a seat at the table." HR is a key strategic partner and that is how I approach it.

WHAT WOULD PEOPLE BE SURPRISED TO KNOW ABOUT YOU?

I am shy and introverted.

WHAT WAS YOUR FIRST JOB?

Graduate trainee human resources. **R**

BUSINESS PLATFORMS



OIL & GAS

“ This contract award sees this investment come to fruition, and reinforces Clough’s capability to work across the asset life-cycle while building upon our established brownfields engineering credentials. ”

Peter Bennett, Clough’s Chief Executive Officer

CLOUGH MURRAY & ROBERTS MARINE AWARDED LANDMARK PROJECT

Clough Murray & Roberts Marine (CMR Marine) was recently awarded a contract by Sunrise Energy to construct marine facilities and a pipeline for the Saldanha Bay LPG Import Terminal at Saldanha Bay.

The terminal at Saldanha Bay is a new facility designed to import liquid petroleum gas (LPG) for distribution throughout South Africa. The contract includes fabrication, installation and commissioning of a five kilometre, 12 inch diameter pipeline. The marine facilities include the construction of mooring facilities and a subsea manifold which allows vessels to tie up and offload LPG via a three kilometre subsea pipeline. The overland pipeline includes a shore crossing and a two kilometre pipeline to connect with the Sunrise onshore plant infrastructure.

This contract award marks an important first win for the CMR Marine business and is a continuation of Clough’s international expansion strategy. **R**

CLOUGH SECURES ENGINEERING SERVICES CONTRACT

Clough has been selected to work as part of an engineering panel to provide multi-disciplinary engineering services for Woodside. The contract covers the full spectrum of engineering services including concept and feasibility studies, front-end engineering and design, engineering assessment and review, detailed engineering and production support across all of Woodside’s operated onshore and offshore producing assets.

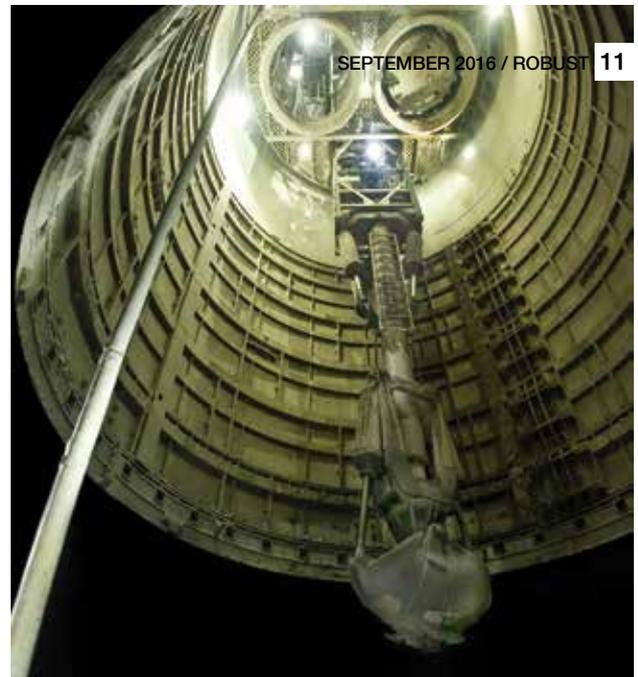
Peter Bennett, Clough’s Chief Executive Officer commented, “We are delighted to be selected as an engineering partner by our key client Woodside. Over the past two years, we have worked hard to lower our cost base and increase productivity by investing in our engineering and project management systems and talent development. This contract award sees this investment come to fruition, and reinforces Clough’s capability to work across the asset life-cycle while building upon our established brownfields engineering credentials.”

The Clough brownfields engineering team’s objective is to deliver fit-for-purpose engineering solutions that reduce capital and operating expenditure costs while increasing safety, productivity and schedule certainty. **R**

ABOUT THE SALDANHA BAY LPG PROJECT

The Saldanha LPG Import and Storage Terminal Project is a greenfield project located at Saldanha Bay, 130 kilometres north of Cape Town. The development of Saldanha Bay is critical to meeting significant energy shortages in South Africa. The facility will feed the country’s existing and planned gas-to-power projects. The terminal will import and store LPG which will be offloaded from tankers using a multi-bouy mooring system. **R**





UNDERGROUND MINING

DEEPEST MINE SHAFT IN THE USA COMPLETE

Cementation USA has completed sinking the deepest shaft in the United States at the Lucky Friday Mine in Mullan, Idaho. With a finished diameter of 5.5 meters, the Lucky Friday #4 Shaft was sunk to a final depth of 2 922 meters below surface. The project is moving into the furnishing construction phase where shaft steel and the final conveyances will be installed. Project completion is scheduled for late 2016.

“The sinking of the Lucky Friday #4 Shaft is truly a world-class achievement. Each of the many Hecla and Cementation employees, suppliers, and subcontractors that worked toward this moment should be very proud of what has been accomplished. Special thanks go to our client, Hecla Limited, for the tremendous safety and project support we’ve received. This support was integral to the incredible safety and shaft sinking records that have been achieved,” said Justin Oleson, President of Cementation USA.

The Underground Mining platform, which is currently sinking 15 shafts worldwide, has sunk the deepest single lift shaft in the world at South Deep Mine in South Africa, the deepest shaft in Canada at Kidd Mine D No.4 Shaft, the deepest single lift shaft in the United States at the Resolution Copper Project, and now the deepest shaft in the United States.

“Reaching the bottom of #4 Shaft is an accomplishment that the Hecla and Cementation project team should be very proud of,” said Eric Smith, General Manager of Operations of Cementation USA. “The project team not only overcame many technical and logistical challenges, but also maintained an ethos of continuously identifying ways to enhance safety and project performance.”

Completion of this shaft is a major milestone for the historic Lucky Friday Mine which has been in operation for over 74 years. The shaft provides access to lower mining levels which increases operational flexibility and extends the life of the mine by 23 years. This milestone occurs in the same year that Hecla Mining Company is celebrating its 125th Anniversary.

The Lucky Friday #4 Shaft is a vertical shaft that begins underground, which makes it a Winze in mining terminology. A Winze is an internal shaft which requires the equivalent of a shaft headframe and hoisting system to be installed underground before the excavation activities can occur.

Hecla selected Cementation USA to sink the shaft, excavate accesses, stations and pockets, and install the related infrastructure, which include a state-of-the-art fully automated 200 tonne per hour material handling system, a 1 892 liters per minute water pumping system, a centralised refrigeration system with 977 tonnes of cooling capacity and a batch plant. **R**



POWER & WATER

MURRAY & ROBERTS POWER & ENERGY AWARDED MBR TECHNOLOGY PROJECT

Murray & Roberts Power & Energy has been awarded a wastewater treatment project at Bakubung Platinum Mine.

The project scope includes basic and detailed engineering, procurement as well as mechanical and electrical, control and instrumentation works; civil construction, commissioning and hand over.

The project is significant for Murray & Roberts Power & Energy in that it has identified wastewater treatment as a growth opportunity for the business. The project also uses a relatively new technology called Membrane Bio Reactor (MBR) technology.

MBR technology is a wastewater treatment method utilising a selectively permeable membrane integrated with a biological process and is used extensively in wastewater treatment plants on an industrial and municipal scale. **R**

MEDUPI PASSES BOILER FOUR HYDROSTATIC PRESSURE TEST

Pressure testing is conducted to check the integrity of the weld seams and screwed connections and includes three types of pressure tests. Hydrostatic testing using demineralised water; pneumatic testing using compressed nitrogen gas and compressed air testing using air compressors.

To pass the hydrostatic test, the re-heater and super heater systems are tested. The super heater hydro test is the largest pressure test conducted at Medupi with test pressure reaching 445 bar!

During the test, the boiler is filled with water and is circulated through the system. Pressure is then gradually raised over a few hours until test pressure is reached which must then be held for 30 minutes. For the first 20 minutes, the pressure is held with a pressure pump, however for the last 10 minutes once the valves are closed, the same pressure must held throughout the system without the use of a pump and with no less than 1% of total test pressure lost. **R**

HUSAB PROJECT SWAKOPMUND

The Husab project is a Uranium Mine owned by Swakop Uranium. It is situated 60 km east of Swakopmund in the Namib-Naukluft National park.

The project is an opencast mining establishment that will undertake the full process for extracting uranium to a yellow cake form. Murray & Roberts Power & Energy has been awarded the electrical and instrumentation supply and install contract, forming part of the final processing system.

To date the project has installed 140 000 metres of electrical cable, 150 000 metres of instrumentation cable, 100 000 metres of network cable and 1 900 lighting units. **R**



CORPORATE CITIZENSHIP

JACK CHEETHAM AND LETSEMA AWARDS, A PROUD 35 YEARS OF SPORTING IMPACT

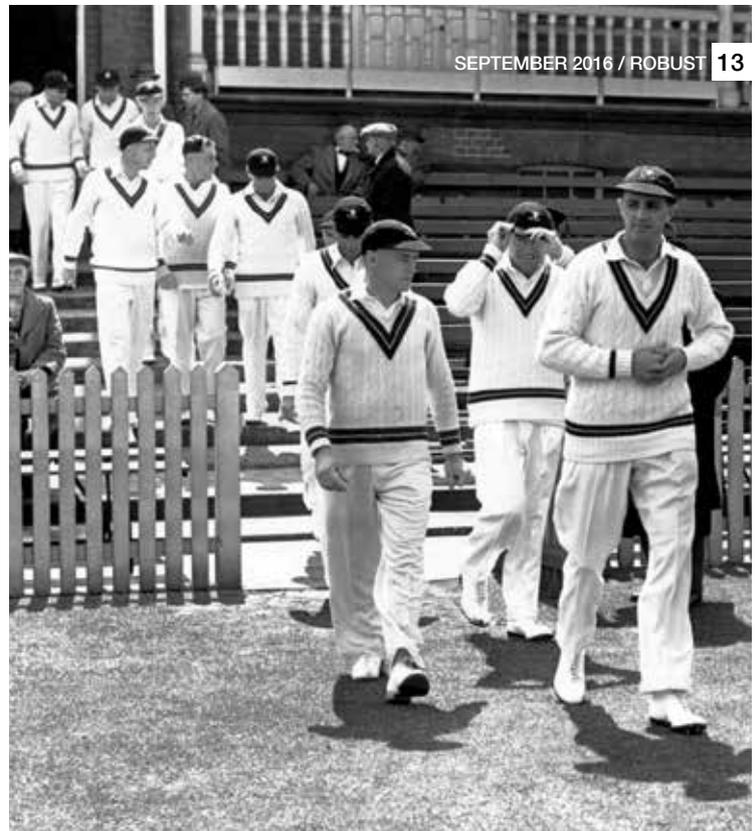
The Jack Cheetham and Letsema Awards will this year commemorate 35 years of making a difference to sports development projects.

The Jack Cheetham memorial award was instituted in 1981, in recognition of Jack Cheetham, a Murray & Roberts director who played on the South African cricket team from 1949 to 1955, and was captain for 15 of his 24 test matches. During his first-class career Jack scored 5 697 runs and after his retirement from the game, worked tirelessly to promote cricket in disadvantaged communities.

Author and journalist Rodney Hartman was quoted as saying, "Cheetham, the archetype gentleman, embodied the best virtues of sportsmanship and human endeavour, and was always held up as the ideal kind of man to captain his country." It is this spirit that the award embodies.

Dr J.D. Roberts, non-executive director at Murray & Roberts at the time, proposed to Bill Emmett, President of the Johannesburg Sportsman's Club that an annual award be made to an individual who had made a difference in promoting non-racial sport in South Africa. A cash prize of R5 000 was proposed, to be divided between the winner and their particular sporting project. A floating trophy, "at a cost of no more than R250" was also suggested. This same trophy is still presented at the awards evening 35 years later.

Some of the early winners included Danie Craven, Ali Bacher and Steve Tshwete.



In 2002, the award evolved with a new partnership between Murray & Roberts and the South African Sports Confederation and Olympic Committee (SASCOC). SASCOC is South Africa's national multi-code sporting body which administers South Africa's national sporting federations as well as facilitates the preparation of teams to major multi-code sporting events such as the Olympic Games, Paralympic Games and Commonwealth Games. The Jack Cheetham Award now targeted sports development projects that could develop individuals and teams that had potential to compete at a high-performance level.

That year, Rowing South Africa won the Jack Cheetham Award. Their schools transformation programme had a number of success stories including Sizwe Ndlovu. Sizwe, James Thompson, John Smith and Matthew Brittain were the members of the South African lightweight fours Olympic rowing team that won a gold medal in the 2012 Summer Olympics. It was South Africa's first Olympic gold medal for rowing and evidence of the impact that the award had on development projects and athletes.

In 2009 the award evolved again. Inspired by the performance of Hilton Langenhoven at the 2008 Beijing Olympics, Murray & Roberts established the Letsema Award. The Letsema Award recognised sports development projects for people with disability. The first official recipient of the award was Judo for the Blind and Visually Impaired and was followed in 2010 by Boccia for the Severely Physically Disabled.

The recipients of the awards have inspired us with their stories of determination and perseverance. Recent highlights include Chaeli Mycroft from the Chaeli Campaign, winners of the 2011 Letsema Award, who summited Kilimanjaro with the Chaeli Kili Climbers and became the first female quadriplegic to summit the mountain.

Four players from Wheelchair Tennis South Africa, winners of the 2015 Letsema Award, have qualified for the 2016 Rio Paralympic Games tennis event. They are Lucas Sithole, Kgothatso Montjane, Evans Maripa and Leon Els. South African wheelchair tennis junior, Nokwanda Hlongwane was named the LSEN School Female Athlete of the Year at the Gauteng School Sport Awards.





“Waves 4 Change taught me to be independent and I have hope for tomorrow. If I fall, I know that I can rise again. Life is full of challenges but I should not give up.”
 Noncedo Mabhuna, W4C Coach

Waves 4 Change, winners of the 2015 Jack Cheetham Award, has 250 development surfers from the Khayelitsha and Masiphumelele Townships. The Khayelitsha chapter has since become the largest surf therapy programme since its inception.

Fulton School for the Deaf Triathlon Club, runners up of the 2015 Letsema Award, have three learners who were selected to be part of the South Africa team taking part in the 2017 Deaf Sports Federation Games. They are Fezeka Zeka, Wongi Mlambo and Latifah Jooma.

Murray & Roberts is proud to have had the opportunity to be part of 35 years of sporting achievement. For Henry Laas, Group Chief Executive, the awards are a way for Murray & Roberts to help transform lives and says, “Sport is an opportunity to positively affect the lives of young South Africans and with the additional financial support provided through the awards, we look forward to seeing these projects nurture and develop our youth and sporting talent into the future.” **R**



DID YOU KNOW? South Africa has three wheelchair tennis players ranked in the top 16 in the world?
LUCAS SITHOLE (3) KGOATHATSO MONTJANE (8) EVANS MARIPA (16)





GOLF DAY SCORES A HOLE-IN-ONE FOR THE MURRAY & ROBERTS CHILD WELFARE FUND

The annual Murray & Roberts Child Welfare Golf Day was hosted at the magnificent Glendower Golf Course during May.

This annual event is the Child Welfare committee's main fundraising activity and along with employee payroll donations, makes an enormous difference to vulnerable and orphaned children in South Africa.

With a sold-out field and a beautiful sunny Johannesburg sky, the shot-gun start kicked off a day that saw 132 golfers make their way across 18 of the best holes in South Africa. Glendower offers a challenging course and is said to be a test for even the best golfers. Set in gorgeous surroundings, the kikuyu fairway has 64 bunkers and water hazards on most holes, so accuracy is key.

Cobus Bester, Murray & Roberts Group Financial Director says, "The Child Welfare Golf Day is always a highlight and as usual it was a well organised event on one of the top courses in the country and we are certainly looking forward to playing at Glendower again next year." Cobus is a regular supporter of the golf day and his four ball often places in the top ten at the event.

"What makes the day truly special is not only that you are playing on a championship course, but that you are making a difference to children in need," concludes Cobus.

Of course, the day would not be a success without the players and sponsors. Says Ed Jardim, Chairman of the Murray & Roberts Child Welfare Committee, "Every year we are humbled by the generosity of our players and sponsors. The golf day is our flagship fundraising event and we are set to raise in excess of R100 000 from the 2016 golf day, which will go a long way in helping us, help so many others."

One of the fund's beneficiaries is the New Jerusalem Children's Home (NJCH). The fund donated R30 000 which helped to relaunch the home's academic after-care programme. The programme aims to improve academic results and pass rates among the children of the home.

"We are happy to say that the children have benefited positively through the extra academic support made possible by the funding received from the Murray & Roberts Child Welfare Fund," says Patrick Emorhokpor, Public Relations Manager at NJCH. "The benefits of this funding are not limited to academics alone, but also served as a platform to launch other initiatives such as a structured after-care sports programme," concludes Emorhokpor. **R**



CREATING PATHWAYS FOR THE FUTURE. MURRAY & ROBERTS WOMEN'S FORUM LAUNCHES THE SMARTGIRLS PROJECT IN PARTNERSHIP WITH BOYS & GIRLS CLUB

Launched in September 2014, the Murray & Roberts Women's Forum seeks to support opportunities for the ongoing professional development of women within the Group. The Women's Forum for Professional Development has positioned itself as the vehicle through which Murray & Roberts promotes mentorship, identifies issues affecting women and advocates for programmes and policies that will advance professional development of women in the workplace. The Forum has also extended its mandate to include a focus on young girls and women in society, focusing specifically on career guidance, skills development and exposure to the world of work.

While core membership of the Forum is limited to representatives from each of the business platforms within the Group, participation of a broader constituency of women in the business is facilitated through a cascading model. Through the concept of "each one teach one" Forum members are tasked with disseminating critical information, skills transfer and mentorship aimed at promoting greater efficiency and professionalism among female employees. Against this backdrop and within the context of limited opportunities for exposure to the workplace for young women from disadvantaged communities, the Women's Forum initiated the SmartGirls Project.

The SmartGirls Project kicked off in July 2015 as a partnership between Murray & Roberts and Boys & Girls Club located in Pimville, Soweto. The objective of this project was to support and empower young women at risk, through a series of information sessions, basic skills training and job shadowing opportunities. Forum members, supported by several business units, hosted 10 Smart Girls for two days per school holiday, for a period of one year. Through the programme these young women were exposed to vocational guidance, diverse professions within the Group, job shadowing and mentorship. Some of the programme highlights included:

- Brainwave psychometric testing and career guidance
- "A day in the life of..." presentations
- Job shadowing, e.g. facilities management, document control, group shared services, payroll and human resources
- Visits to the Gautrain Control Centre and the Menlyn Shopping Centre building project
- Skills sessions e.g. CV writing, communication and professional etiquette. **R**



"Thank you Murray & Roberts and Boys & Girls Club South Africa for organising this for us. I learnt so much from you. You have taught me things that my mother has been unable to teach me. You taught me that the way to get started is to quit talking and begin doing. I realize that taking the first step is the beginning of my journey. We meet people for a purpose and meeting all of you has changed my life. Thank you for this opportunity, your support and your time."

– KHANYISILE KEKANA, 15 YEARS OLD

"Choosing a career as an individual is sometimes a challenge in life, especially at high school level, but because of your help, you boosted us with career prospects. The information that you gave us was more complex to what we learn at school and the session with Brainwave was awesome."

– NEO TLHOTLHOLE, 14 YEARS OLD

"After meeting the Women's Forum I believe that confident women can change the world and that changes begins with me."

– LINDIWE MABESA, 17 YEARS OLD

ABOUT BOYS & GIRLS CLUBS

Boys & Girls Clubs are facility based after-school programmes, for young people between the ages of 6 – 19, supervised by trained professional staff providing daily structured programmes and activities.

Clubs are a positive place for kids where members can explore their talents and abilities in a supportive environment with the potential to transform a young person's view on life creating a culture of opportunity and success.

Our mission is:

To inspire and enable young people, especially those who need us most, to reach their full potential as healthy, responsible, and productive citizens.



Boys & Girls Clubs of South Africa

NEWS



Georges Mturi, senior researcher at the CSIR was presented with the JD Roberts Award for his research in developing innovative solutions for bitumen specifications and testing.

Safety News Flash

2016 SAFETY AWARDS BEST SAFETY PERFORMANCE AT PROJECT LEVEL

Congratulations to the following projects:

- Freeport, Underground Mining Platform
- Wheatstone Jetty Project, Oil & Gas Platform
- Kusile Power Project, Power & Water Platform

SAFETY MILESTONES ACROSS THE GROUP:

Murray & Roberts Cementation at Booyensdal
1 200 404 million fatality-free shifts as at end July 2016

Murray & Roberts Cementation at Eastern Plats 2 Shaft
1 006 755m fatality-free shifts as at end July 2016

Oil & Gas Platform
224 consecutive LTI-free days as at year end

Murray & Roberts Power & Energy at Husab
719 226 LTI-free hours on 22 July 2016

Murray & Roberts Power & Energy at Medupi
4 million LTI-free hours on 22 July 2016

Murray & Roberts Power & Energy at Kusile
10 million LTI-free hours at 30 March 2016



CSIR Transport Infrastructure Engineering Expert wins 2016 JD Roberts Award

Georges Mturi, senior researcher at the CSIR was presented with the JD Roberts Award for his research in developing innovative solutions for bitumen specifications and testing.

Mturi leads a CSIR research project which investigates changing the current bitumen specifications from empirical-based to a more advanced performance-based method. Current specification tests have proven inadequate in differentiating between bitumen types as well as the various additives used to modify bitumen, leading to more frequent road failures.

Climate, traffic levels and traffic loads all contribute to road failure and the type of bitumen selected can improve the performance and longevity of a road. To consider the impact of climate change on bitumen performance, Mturi and his colleagues calculated road surface temperatures across South Africa over a 20-year period. The results identified diverse bitumen requirements were needed in the different temperature zones, allowing engineers to link the expected traffic loads to specific bitumen performance.

This advanced testing is currently being implemented in South Africa and performance-based specifications are in the process of being developed for other parts of the continent.

Paul Nordengen and Jeremy Gibberd were awarded as runners up. Nordengen was recognised for his work in the development of bridge, overload control and abnormal load management systems across Africa as well as the implementation of performance-based specifications for heavy vehicles which result in significant savings on transport costs and reduced damage done to roads.

Gibberd's contribution to environmental sustainability through the development of several innovative design tools that promote the design of energy and cost-effective buildings was also recognised. Gibberd is currently working on sustainable city projects with the United Nations Environmental Programme, the Global Environment Facility and the City of Johannesburg.

The JD Roberts Award encourages scientific research into technology that will enhance the quality of life for all South Africans and is hosted in partnership with the CSIR. **R**

Murray & Roberts Pensioner Celebrates 100 Years

Mrs Laura Hetherington was born on the 16th of July 1916 in the United Kingdom and is currently a resident of Port Elizabeth.

Mrs Hetherington's husband, Douglas Hetherington, joined Murray & Roberts in 1970 and retired in 1978.

She celebrated her 100th birthday with a high tea that was well attended by friends and family as well as the Executive Mayor of Port Elizabeth who was also the guest speaker. **R**



Stefano Stefani, Project Controls Manager at Murray & Roberts Power & Energy Concludes 45 Years of Service to the Group

WHAT WAS YOUR FIRST JOB AT MURRAY & ROBERTS?

It was at Pelindaba, the Uranium Enrichment Plant project, back in 1971. I was then employed by Roberts Construction, Projects Division.

WHAT IS ONE OF YOUR FONDEST MEMORIES AT MURRAY & ROBERTS?

Throughout my 45 year career at Murray & Roberts, I have been a team member on numerous projects where each one has left me with some fond memories, but what has been the overriding memories for me are the professional relationships that were fostered with my work colleagues at Murray & Roberts – from Roberts Construction, Engineering Management Services, Murray & Roberts Engineering Services, Bombela TKC, Murray & Roberts Power & Energy.

Each project has a limited life-cycle, but the memories – some good and some sad that were shared with my colleagues will stay with me forever.

WHAT IS THE BEST PIECE OF ADVICE YOU'VE EVER RECEIVED?

A good piece of advice which has stood me in good stead throughout my career was given to me by Peter McMurray, my manager at the time, when we had just completed a successful project and were accepting the accolades. He advised me that "one must not rest on ones laurels" as there will be other projects with similar challenges and hardships which would require the same dedication, teamwork and drive for success. **R**



COMPETITION

Win an iPhone 6s valued at R13 999.00

With 3D Touch, Live Photos, 7000 series aluminum, A9 chip, advanced cameras, Retina HD display and so much more; you'll see how with iPhone 6s the only thing that's changed is everything.

iPhone 6 isn't simply bigger – it's better in every way.

Larger, yet dramatically thinner.

More powerful, but remarkably power efficient.

With a smooth metal surface that seamlessly meets our most advanced Multi-Touch display.

It's a new generation of iPhone that's better by any measure.



iPhone 6s: 16GB, 4.7 inch display (colours and display may vary to the images shown)

TO STAND A CHANCE TO WIN, COMPLETE THE ENTRY FORM BELOW AND ANSWER THE EASY QUESTION. POST OR EMAIL YOUR ENTRY FORM TO REACH US BEFORE 01 DECEMBER 2016 TO:

EMAIL: competitions@overend.co.za
 Murray & Roberts Competition – SEPTEMBER 2016
 P.O. Box 652464, Benmore, 2010
 Sandton, Gauteng, South Africa

RULES:

1. The prize will be awarded to the first correct entry drawn.
2. The judges decision is final and no correspondence will be entered into.
3. The prize is not transferable and cannot be exchanged for cash.

Remember to include:
 "Murray & Roberts Competition – SEPTEMBER 2016" in the subject line.

Mrs DA Korpershoek, winner of the March 2016 Murray & Roberts Robust Magazine competition



ENTRY FORM: ROBUST SEPTEMBER 2016 COMPETITION

Name: _____

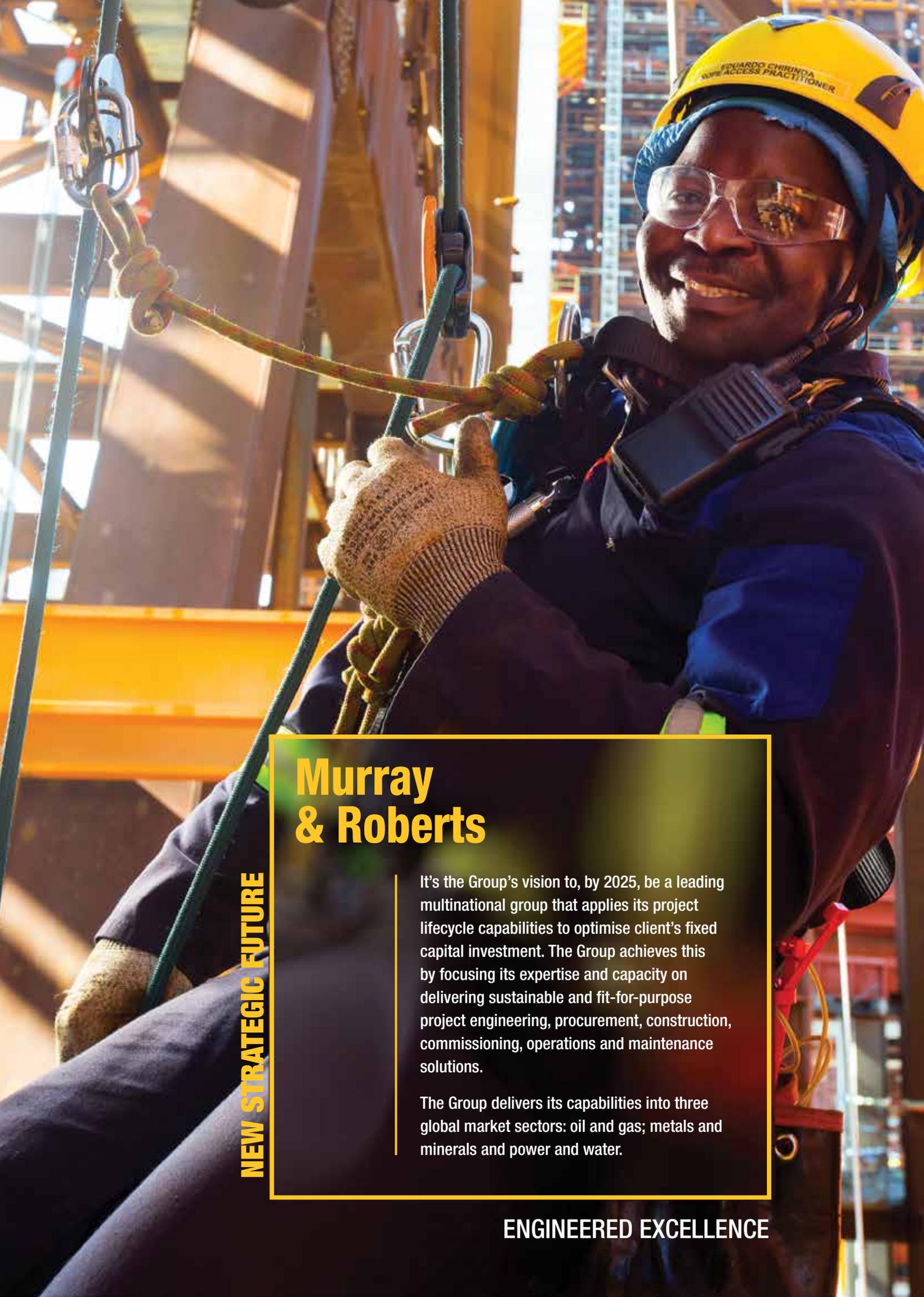
Phone number: _____

Address: _____

Question: What global natural resources market sectors does the Murray & Roberts Group focus its expertise and capacity on?

* Strictly one entry per person

Terms and conditions apply.



NEW STRATEGIC FUTURE

Murray & Roberts

It's the Group's vision to, by 2025, be a leading multinational group that applies its project lifecycle capabilities to optimise client's fixed capital investment. The Group achieves this by focusing its expertise and capacity on delivering sustainable and fit-for-purpose project engineering, procurement, construction, commissioning, operations and maintenance solutions.

The Group delivers its capabilities into three global market sectors: oil and gas; metals and minerals and power and water.

ENGINEERED EXCELLENCE