

Trunkline

The magazine for Woodside people | Q2 2018



Woodside

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On the cover

Free play: Four-year-old Luca Gibellini explores the new Kaartadjin Koorliny gallery, at Scitech. Funded by Woodside, the gallery aims to stimulate young minds while they're having fun.

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Mia Yellagonga, our new campus-style headquarters in Perth, has been designed and equipped in line with Woodside's drive to innovate, collaborate and accelerate.

When staff move in later this year, it will mark a step-change in the way our operating assets connect with our offices both in Australia and overseas.

In fact, all our new offices, from Senegal to Myanmar, China to Karratha, have been established with new ways of working in mind.

Inside this edition, we look at how we strive to ensure all Woodsiders, regardless of where they work, are well supported to deliver on our ambitious growth strategy.

You can also read why that strategy was warmly welcomed by investors and analysts when they were updated by the company's senior management team at our annual Investor Briefing Day.

And you can gain insight into how our base business has been strengthened by such diverse efforts as a highly successful turnaround in Karratha and offshore; improved tropical cyclone forecasting to protect people and production; reduced procurement costs through industry-wide co-operation; and cutting edge work in 4D seismic surveying.

That's only part of Woodside's story in Q2. Flick through the following pages to understand why we're a company on the move.

Notes on Petroleum Resource Estimates: All petroleum resource estimates in this publication are to be read in conjunction with the Reserves Statement in Woodside's most recent annual report, as updated by subsequent ASX announcements available at <http://www.woodside.com.au/Investors-Media/Announcements>. This publication may contain forward-looking statements that are subject to risk factors associated with oil and gas businesses.

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Turnaround triumph for GWA and KGP

After two years of planning and preparation, Woodside and its contractors executed a triumph in safely delivering the Goodwyn A (GWA) and Karratha Gas Plant (KGP) integrated turnaround in Q2.

As turnaround manager Russell Probert puts it: “The scope was important, the schedule ambitious and success was critical.

“Success for us means safely executing quality work and returning the business to normal operations when planned.”

It was no simple task.

Across the two assets, the turnaround scope included a huge range of work fronts and technical disciplines.

“I’ve been involved in turnarounds for 15 years and this was probably the most complex scope I’ve known,” Russell says.

In 34 days, Maintenance, Operations, Projects (brownfields), Engineering, Subsea, Logistics, Contracting and Procurement and many more teams safely delivered some 100,000 hours of scope within range of the schedule target.

At Goodwyn, around 50,000 hours were required for all tasks. This work will help

extend the life of Goodwyn, supporting the facility to keep producing into 2040.

Principal project engineer Eric Kumar explains Goodwyn’s brownfields scopes included upgrading the digital control system (DCS), which itself required more than 3300 points cut over.

Russell adds: “It’s like performing open heart surgery and it’s critical because the plant relies on DCS.”

Other important scopes included replacing the flare tip and the interfield line riser emergency shutdown valve (RESDV) line connecting GWA to the second trunkline and North Rankin.

The RESDV was installed during Goodwyn construction in the early 1990s. The complexity of this job was not limited to replacing the valve, but enabling it with the right isolations.

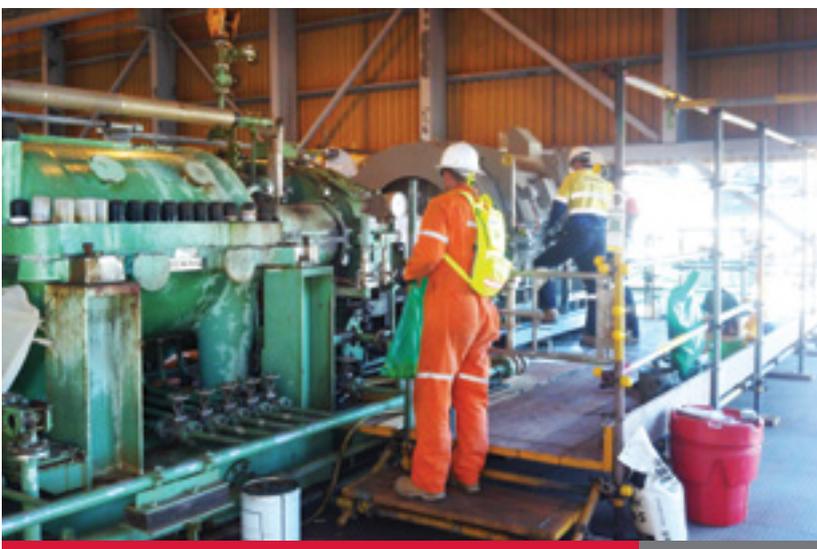
“This scope had never been done before at Woodside, and it was made possible by a new isolation strategy which used a high differential pressure plug,” explains Russell.

Vanessa Bullock, pigging engineer for the isolation, also shared some facts about the project.

“The isolation, a first in many ways, avoided flaring significant quantities of gas, and enabled North West Shelf production to continue from North Rankin,” she notes.

Not only did these tasks all require a complete platform outage, they demanded a diverse range of technical disciplines and high level of execution competency – all within the constraint of numbers of people that can be accommodated on GWA.

But the clever turnaround team didn’t allow the accommodation constraints to limit them. For the first time in a turnaround, one-day shuttle helicopter flights were performed to enable additional people on the facility up to the limit prescribed by the safety case.





Turnaround Success: After two years of meticulous planning, our teams were ready to complete approximately 100,000 hours of turnaround work. This turnaround included many complex tasks, such as replacing the Goodwyn flare tip (above), launching and removing a plug to enable the RESDV replacement as well as replacing the boil off gas compressor motor (opposite page).

In another first for the turnaround team, new ocean forecasting provided by the metocean team improved execution.

Previously, Indian Ocean forecasts have been used to inform periods of unsafe conditions – when lifting activities on the deck and ocean are constrained.

As these regional forecasts have lower accuracy, unnecessary stand-down time eventuates.

For this turnaround, our metocean team was able to provide a more accurate 48 hour look ahead local to GWA ocean conditions with three-hour accuracy of predicted conditions. This increased accuracy of conditions reduced stand-down time.

At KGP, an equivalent magnitude of hours were executed.

“The main work scopes at KGP involved leak repairs to two main cryogenic heat exchangers, as well as vessel

replacements and upgrades of control systems,” notes Russell.

As part of the quality checks for the work, a leak-testing program is executed. In another first, no leaks were identified. This demonstrates the team’s right first time approach to quality.

The variety of work scopes meant collaboration and agility would be even more important, and so it proved. As issues were identified and flagged, quick resolution was made possible with access to leadership and support for prioritisation and scheduling.

Jeroen Buren, senior vice president Production, points out the time and effort put into the turnaround before it started was crucial to its success.

“In the months leading into the campaign, there was a lot of work to be done and by collaborating the teams got there,” says Jeroen.

“It was an amazing outcome,” he says. “And to achieve this outcome, many teams were involved – each of which worked smarter to do better and do more.”

Focus is now switching to the next integrated major turnaround in September 2018, and beyond into 2019.

As Russell says: “We’ll take the learnings and improve both the planning and the execution.”

A major turnaround of Pluto, which has never been done before, is scheduled for Q2 2019. Jeroen says successful execution will follow from the best practice learnings of this year’s activities and past major turnarounds on KGP Trains 4 and 5.

“In 2015 our teams executed the world’s fastest turnaround of a Frame 7 LNG driven turbine in KGP (Train 5). I am sure the Pluto 2019 turnaround team will aim to match or beat this achievement,” Jeroen says.

Investors impressed by growth strategy

Woodside's strategy and growth plans received strong support when they were outlined at this year's Investor Briefing Day (IBD), held in Sydney in May.

About 120 investors, analysts and media representatives were shown Woodside's road map by the company's senior leaders, led by chief executive officer Peter Coleman.

The IBD also gave attendees the chance to hear the views of our new chief financial officer, Sherry Duhe, and chief operations officer Meg O'Neill, who were jointly interviewed by CommSec market analyst Tom Piotrowski.

In fact, the entire executive committee (ExComm), plus senior vice presidents for Scarborough, Daniel Kalms, Browse, Richard van Lent and Projects, Mike Robinson, attended the event.

This year's presentation was streamlined compared with previous years, and focused on how the company was progressing the three Horizons strategy outlined last year and further detailed through the equity raising in February this year.

It was structured around the strength of our strategy and how market dynamics are aligning with that. Further detail was provided on our material growth projects, particularly Scarborough and Browse, and how we have the capability to deliver these.

The CEO's review of the past 12 months explained how Woodside's strategy has progressed compared to the same time last year.

This included better joint venture alignment to match our upstream resources with downstream infrastructure and our increased equity in Scarborough.

Market dynamics – both from the perspective of higher LNG demand and lower development costs – support rapid progression of our developments. It demonstrates that we need to move quickly to make the most of this opportunity.

Meg and Sherry stressed cost performance, technology and capital discipline as three keys to Woodside's future.

Feedback after the IBD demonstrated

that not only were the attendees pleased with the presentation's style and content but they were impressed by the company's message, including Horizon II's growth platforms of Scarborough, Senegal and Browse.

Investor Relations manager Jack Hennessy has surveyed the analysts' IBD summaries and says there are several common themes in their messaging:

- Recognition of the opportunity to lock in "bottom-of-the-cycle" costs with contractors for the development of Scarborough;
- Appreciation of the further detail provided on developments, which allowed some analysts to de-risk value contributions from Browse and Scarborough;
- Acknowledgement that Woodside is aligned to the long-term expansion of Asian LNG demand underpinning our developments.

One attendee described the presentation as "a good balance between strategy, market dynamics and details of staged execution strategy . . . clearly a new phase of development activity emerges with the opportunity driven by fundamental shift in Asia's growing LNG demand."

Jack says this sentiment was a good summary of the feedback generally heard.

"The analysts and investors understood that a growing market for LNG coupled with the current favourable market for engaging contractors provides a great opportunity for the development of our significant resource base," he notes.

Our CEO concluded the IBD by declaring Woodside was "uniquely positioned".

"We've got the resources, we've got the people, we've got the market and we've got the finances," Peter said.

"There are very few companies that have all four of those as they move forward, and of course, we're building momentum on a daily basis."



On course: Chief executive officer Peter Coleman details the company's progress on our three Horizons strategy to investors and analysts in Sydney.



Moving out: Left, digital service specialist Kylie Hassan prepares for the move to Mia Yellagonga – and for a change of name from Library to the Knowledge Zone. Right, cost control team leader Liz Barker took this stunning shot of our new Perth headquarters one evening in late May.

New era just around the corner

Woodside's imminent move to Mia Yellagonga means not only a new physical space but a new way of working – and in some cases new names for that work.

Take the library, for example.

Our move to Mia Yellagonga brings with it the opportunity to expand how we interact with the library and its services. The new name Knowledge Zone reflects this change.

“It’s a name that broadens the definition of what will be available in the space,” explains Kendra Mulatz, IT operations manager, Digital.

“It also better reflects who we are and what we can offer the business.”

The Knowledge Zone will provide access to digital resources and Woodside’s extensive library collection.

“It’s all about enabling the staff and adding value to the business,” she says.

“It can be regarded as the place where you can innovate, learn something new and share knowledge.”

Those Woodside’s catering for our office safety and wellbeing will also enjoy a name change.

The Perth Office Health, Safety, Environment and Security (POHSES) committee will be rebranded 4W –

Woodside’s Workplaces, Wellness and Wellbeing.

4W members are drawn from across the business (including Karratha) and they are currently evolving a program of work for every Woodside workplace in Australia and across the globe.

Global property manager Chris Bourne explains: “The idea is to widen the focus from HSSE in order to provide all employees with a shared understanding of wellbeing best practice.

“At the same time, we also want to encourage and support maximum usage of wellness facilities which will be made easier with our new intranet site, which will launch in Q3.”

Level 14 also will be home to the main components of our security and emergency response infrastructure – including a world-class Corporate Incident Coordination Centre (CICC) – and it’s no accident that the two are housed on the same level.

“During any incident response people operate in a fast-paced and extremely dynamic environment,” says Ray Butler, general manager Security and Emergency Management.

“So we need to make sure the energy levels of our responders are maintained and they are provided with the best support possible.”

Reservoir Management is eagerly anticipating Mia Yellagonga’s new technology environment, which will tackle many existing obstacles.

“We deal with very complex numerical models which require huge computing power,” says chief reservoir engineer Lupo Guerrero.

“This has meant engineers and geoscientists tied to large machines in fixed locations – a significant cost as well as a collaboration hurdle for the many functions with which we interact.”

But the remote computing environment available at Mia Yellagonga means processing power can be accessed by portable devices and available anywhere on campus.

“We can spend less waiting for calculations to be completed and more time communicating and aligning our insights,” Lupo points out.

Debbie Morrow, general manager global property and workplace, is keenly anticipating the move.

“We are excited to open the campus for employees and their families at two upcoming events in July and September and then to relocate everyone by early Q4,” Debbie says.

Improved productivity, enablement and capabilities – that’s Woodside’s exciting future and it’s just around the corner.



Offices support business growth

As Woodside expands its global footprint, corporate offices have been established or enhanced to provide the capabilities necessary to deliver our ambitious growth targets.

“These offices are important for our growth strategy and we are excited to be able to support our global teams create better workplaces,” says Debbie Morrow, general manager global property and workplace.

So while the company’s new headquarters, Mia Yellagonga, has been grabbing lots of attention, there’s plenty more happening elsewhere, too. Read on to see how we have built value into our offices around the globe.

Karratha Town Office

The Karratha-based Corporate Affairs team has moved from its office on Balmoral Road in the city’s western end to the new commercial centre of Karratha known as The Quarter.

“By opening this office in Karratha’s new commercial hub, we are letting our community know that we are here for the long term and are committed to the region’s growth,” says Kate Gauntlett, Karratha corporate affairs manager.

Kate and her team represent the interests of the North West Shelf Project, Pluto LNG and Woodside

in the communities of Karratha and Roebourne.

The new 240 sq m office hosts a range of internal and external meetings. Since its opening in December there has been a wide range of visitors, including community liaison and community heritage groups, as well as site-based staff on away days.

“The Quarter office is a great collaborative space in the heart of Karratha – a perfect location with so many of our key external stakeholders close by,” Kate explains.

A variety of spaces accommodate both collaborative and independent work, with the office fitted out with eight work stations and three meeting rooms, which can be opened into a 20-person meeting space or workshop.

This new office has also been important in testing the concepts and elements ahead of the opening of Mia Yellagonga in Q3 this year. This includes technology which, when aligned with Mia Yellagonga, will allow staff to enjoy a seamless transition when switching between the two offices.

Further cultural recognition fit-out opportunities are being explored through engagement with local Ngarluma elders.

Senegal Office, Dakar

Woodside’s expansion into the West African market has prompted an office relocation in the capital of Senegal, Dakar.

“Dakar is a noisy and vibrant city – a place where cars can share the busy roads with horses and carts,” says Alastair Bruce, general manager West Africa.

Alastair and his team of six represent the company in the region and the main function of the Dakar office is to build and maintain engagement with our stakeholders in Senegal.

“We regularly engage with our stakeholders to demonstrate our credentials and to represent our interests in the region,” Alastair says.

“The local team is motivated to establish the Woodside brand in a continent where oil and gas has not always had a positive reputation.”

Located near the southern point of Cape Verde Peninsula, the new 465 sq m office has been designed using Right Space concepts.

Fit-out of this office was done locally, though much of the artwork and furniture were sourced from Woodside Plaza thanks to cross-functional collaboration.



Woodside is worldwide: (opposite page, far left) Vanessa Tran and Mandy Alexander in the Karratha Town Office, and Kris Leo and Christine Wang inside our Beijing office (left); above members of the Senegal team hard at work. Below, the Myanmar office receiving a traditional blessing.

But the new office also has features that enhance cross-cultural sharing within the team.

“For example, all the rooms have Senegalese names to help familiarise us with the country and to show our respect,” Alastair notes.

“It’s like how the Mia Yellagonga campus uses Wadjuk Noongar names.”

Yangon Office, Myanmar

The capital of Myanmar is Naypyidaw. But the country’s largest city is Yangon – the former capital located 367 km to the south. This is where Woodside’s office is located.

“Since Woodside opened our Yangon Office in 2014, the country has undergone significant change,” says Dan Clery, country manager Myanmar.

“It’s been a great experience for our team to witness this transformation first-hand.”

From Yangon, Dan leads a 12-strong team which provides in-country support for our exploration and drilling operations in Myanmar.

“You can’t get things done in Myanmar unless you build strong relationships and earn the trust of local communities, so having an office here is crucial,” he points out.

Previously located in a three-storey house in one of Yangon’s residential areas, the office has recently moved to Vantage Tower in the city centre. Fit-out was achieved locally, incorporating local ways of working in the office design.

Dan says this office has an ideal location and enjoys the kind of facilities needed for the team to work efficiently and comfortably on a single floor layout, as well as remaining close to stakeholders.

“We have to manage a broad range of relationships with local governments and communities to ensure our activities are conducted to high standards and are supported by local stakeholders,” Dan notes.

Beijing Office, China

Moving from Perth to a city at the centre of worldwide attention has Kris Leo excited.

“The scale of the country and the pace at which development is progressing is jaw dropping,” says Kris, the new country manager China.

Our China office, in the country’s capital Beijing, was first established in 2006 to support long-term sales contracts.

Beijing is at the heart of the country’s political, economic and cultural life and our office is located in the city’s CBD. From there, Kris and her team support potential LNG and liquids sales in the region.

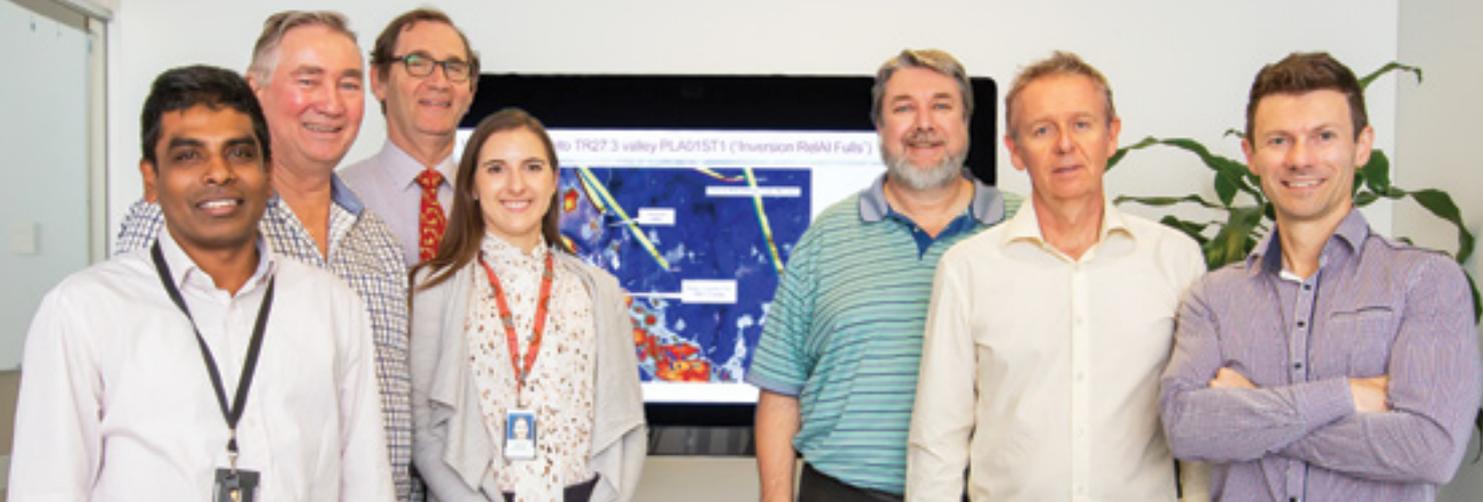
“China continues to shift away from coal to cleaner sources of energy and increasing LNG imports are a key component of China’s natural gas energy mix,” Kris explains. “It’s the perfect market for new and existing energy sources such as LNG.”

The office will also support activity for Woodside’s new developments, and act as a coordination point for all staff entering China.

In her spare time, Kris has been renewing her family connections and local language skills.

“My father is originally from China, so it has been great coming back and experiencing living here,” she says.





Talented teams: Both external and internal collaboration across functions were crucial to the success of the ground-breaking 4D seismic survey over the Pluto gas field.

Seismic shift in reservoir understanding

Woodside's 4D seismic survey over the Pluto gas field – Australia's first-ever such survey over a gas field – has proved a great success, generating invaluable data for the management of the reservoir.

Chief reservoir engineer Lupo Guerrero says it's given Woodside a comprehensive view of the current state of the reservoir across its whole volume.

"When we know better what we don't know, we can plan our future operations around those uncertainties," Lupo says.

A 4D survey adds the dimension of time to 3D surveys by repeating the survey at the same place at a different time.

"It shows how the area of the reservoir has changed in the time it's been producing," explains principal geophysicist Jeremy Fitzpatrick.

Chief science and technology manager Neil Kavanagh adds: "It's especially useful when we want to accelerate studies because 4D allows us to work in an agile style and fine tune a reservoir's potential as we go."

Neil notes Woodside has been an early adopter of 4D seismic over oil fields but the method has never been used in Australia over gas fields because of the interpretation difficulty in identifying water encroachment into gas fields.

The Pluto 4D data was acquired by seismic specialist PGS and processed by geophysical company CGG over 12 months.

"The Woodside planning was characteristically thorough, and communication with PGS throughout the project execution was very good," says Andrew Long, chief scientist and technology analyst at PGS.

Myuran Pathmanathan, studies and integrated modelling manager, adds: "It also took significant interaction between our geoscientists and CGG to incorporate insights into ongoing interpretation before the processing was finished."

Principal geophysicist Larry Tilbury says internal collaboration has been vital with geotechnical operations, geoscience technology, development geoscience and reservoir engineering being some of the teams involved.

"It's been a great example of how several departments across the business have come together to create incredible value for the company," Larry says.

Larry has been advocating for a 4D survey for several years, arguing it would better map water encroachment while also highlighting where wells could maximise gas recovery and identify bypassed reserves.

Lupo says an integrated way of working cut the time to interpret what was probably the largest data set Woodside has ever had on an asset.

"Collaborative work enabled us to accelerate studies by about six months," he says.



Fond farewell

For Larry Tilbury, collecting the award for best paper at the Australian Petroleum Production and Exploration Association (APPEA) in May was a fitting end to a stellar career at Woodside that spanned 37 years.

Larry collected the Alan Prince Award for a paper on the Pluto 4D seismic survey, authored by himself and technology manager Andre Gerhardt.

Larry has been associated with Pluto since the gas field's discovery in 2005 and has worked on every appraisal and development well. So there were few better people to deliver a paper on the ground-breaking seismic survey.

In fact, Larry was so keen to deliver it that he pushed back his retirement by 12 months after plans to deliver it last year were put on hold.

Myuran Pathmanathan has used that breathing space to work with Larry to ensure his 37 years' knowledge is not being lost but easily accessible to the next generation of geoscientists.

Saving billions a standard practice

Woodside is partnering with oil and gas majors in a worldwide bid to eliminate billions of dollars in facility development and operating costs through the adoption of best practice international technical standards.

The collaboration is aimed at the adoption of a more standardised approach to procurement.

As economic conditions dramatically challenge our industry, standardisation is recognised as a key business driver to tackle escalating project costs and schedule challenges.

Such are the estimated benefits of standardisation across the industry that it's been labelled "the \$60 billion challenge".

Woodside is leading the way with very positive feedback from other operators about the leadership, energy and effort our subject matter experts are contributing to the initiatives.

"The benefits of a standardised approach have been recognised and delivered in other industries such as aviation for a number of years," notes Menno Weustink, vice president Engineering.

"The oil and gas industry is no different and we can see benefits to safety, cost, schedule, quality and reliability outcomes.

"Clearly, there is significant benefit to Woodside and we must leverage the opportunity of collaborating with our peers both locally and internationally."

Standardisation is a key priority for the oil and gas industry, he adds, because it enables and enhances safety, reliability and integrity of operations.

Ted Fletcher, principal adviser quality, notes: "While costs in other industries are coming down, in oil and gas they are going up.

"One of the reasons for increasing costs is that we are traditionally a bespoke

industry and as a consequence fail to realise cost benefits associated with proven, industrialised equipment.

"For instance, air compressor packages are sold off the shelf to other industries while packages bought by the oil and gas industry are reconfigured to meet our industry's requirements, and their cost doubles without necessarily improving safety or performance."

Menno is at the forefront of the standardisation push.

He is Woodside's representative on the International Association of Oil and Gas Producers (IOGP) Engineering Leadership Council (ELC) and also chairs the Australian Oil and Gas Standards Committee.

Ted also represents Woodside on the IOGP Standards Committee.

The benefits of the early application of a standardised approach are already being realised, with one example a low-voltage switchboard Woodside bought recently for Ngujima-Yin.

It will save 13% on installed costs

through use of the IOGP harmonised specification to purchase an industrialised switchboard rather than a bespoke one-off Woodside design.

So where does Australia fit?

The IOGP standardisation vision is "international standards used locally worldwide".

Woodside has networked widely within the Australian oil and gas sector to engage Australia in global standardisation initiatives.

Recognising the potential, National Energy Resources Australia (NERA) has sponsored the establishment of an Australian Standards Committee to provide a forum for Australian operators, suppliers and regulators to collaborate to align, leverage and influence international standards development.

In Q2, Menno and Ted, together with Miranda Taylor and Andrew Woodhams from NERA, co-authored a presentation at the APPEA conference in Adelaide on Australia's role in the global oil and gas standardisation initiative.



Comparing notes: Stuart Panton, Menno Weustink and Ted Fletcher discuss the savings that the adoption of best practice technical standards can produce for the oil and gas industry.



Steer clear: Martin Anderson and Peter Dann are working to raise awareness of the dangers of fatigue for ship pilots.

Steering a **safe** passage

Public awareness of the dangers of driving a car while tired has risen in recent years as road safety authorities have pushed the message in various campaigns.

But one Woodsider is on a mission to raise awareness in the marine industry of the dangers of driving a ship while fatigued.

Peter Dann reasons: "It's calculated that 17 hours without sleep is equivalent to having a blood alcohol level of 0.05 when it comes to concentration and you can't drive a car at that level – so why should you drive a ship?"

Why indeed, considering the ship might be a 300m long vessel carrying thousands of tonnes of hydrocarbons?

Peter, senior pilot/loadmaster, has been instrumental in putting together and helping drive the pilot fatigue management program in Woodside's Dampier pilot services operation within the Pilbara Port Authority.

He first became interested in fatigue management in 2006 and it stirred him to undertake a masters degree in human factors and safety management systems.

"I'm using my degree to try to raise human factor awareness amongst pilots," explains Peter.

"When I joined Woodside in 2007 people knew of my interest and they were in the infant stages of setting up a fatigue management system, so I helped out.

"It's an interest that has led me to contribute articles, research and presentations on subjects such as fatigue, situation awareness, communication with bridge teams and simulation usage in initial marine pilot training, as well as formulating behavioural markers for the Woodside pilot group's simulation training."

Last year he undertook further study to become a fully qualified workplace assessor to enable a greater degree of rigour to be applied in competency assurance systems.

Peter's work on pilot fatigue management has led to him being nominated last year for two categories at the Australian Shipping Awards.

It also prompted his involvement in helping develop a smartphone App for Woodside's pilots which tracks their sleep records so flags can be raised on fatigue.

"The idea is to ensure you have enough sleep before you do the job," he says.

"The purpose of the App is to catch the fact somebody might not have had

enough rest. This information is sent to the senior pilot and if you haven't had enough sleep you can't start work.

"At the end of the day, it's all about sleep".

Peter says it's easy for pilots to slip into working long hours as they get involved in supervising loading of hydrocarbons after piloting a vessel into port.

The App helps pinpoint situations before they become an issue.

The information from the App can be accessed by Woodside to generate reports for audit/review on both a weekly and monthly basis.

Principal adviser human factors Martin Anderson believes Peter is right to focus on sleep in his work on fatigue management.

"The quantity and quality of sleep that we receive is absolutely key to managing fatigue," Martin emphasises.

"And the only remedy for fatigue is sleep.

"It's not just about hours of work and sleep is not like money – you can't save it up and borrow from it when you need it."

Martin says fatigue can increase the risk of incidents and needs to be actively managed – just like any other hazard.

Safety leadership shines brightly

Woodside has won the 2017 Australian Petroleum Production and Exploration Association (APPEA) Safety Excellence Award.

This achievement was in recognition of our outstanding contribution to safety leadership and performance in the Australian oil and gas industry, and follows similar success in the same award category last year.

The company also won the Alan Prince Award for the best peer-reviewed paper for Australia's first 4D seismic survey over a gas field in the Geophysical Innovation Session (see page 10).

The awards were announced at the annual APPEA conference in May.

Fiona Hick, VP health, safety, environment and quality (HSEQ) says: "The award celebrates the contribution of everyone in Woodside. Our performance and a number of examples of our contribution were cited by APPEA."

One example was Perfect HSE Day to promote care in health, safety and environment.

"Launched in early 2017, Perfect HSE Day is a simple but powerful engagement tool empowering teams to identify their own leading indicators to proactively prevent HSE incidents and identify early warning signs," says Deborah Peach, general manager HSEQ for Woodside's operations.

"The introduction of the Perfect HSE Day is driving engagement and raising situational awareness. It has created a simple and consistent HSE language wherever we operate globally."

Other 2017 highlights recognised by APPEA included our focus on collaboration with contractors and our line-led risk-based approach to process safety management.

"Maintaining a focus on visible leadership and embedding a strong safety culture across all areas of our business has helped us achieve year

on year improvements" says Gavin Ramsden, who was a senior manager safety last year and is now an operations adviser.

In 2017, the company made many improvements to how we manage health and safety including the use of leading indicators to better monitor our health risks and controls, improvements to our incident investigation processes and the introduction of an integrated travel management system to better support and enable our global workforce.

Woodside's use of data analytics was also celebrated with this award. Our increasing use of data to identify issues allows us to manage risks and resources more effectively and efficiently.

Re-invigorating the HSE Representative network was another example of how we are driving improved engagement, capability and integration across our production assets.

The award, however, does not just recognise improvement initiatives. It also recognises our challenges – that we operate a range of assets at varying life cycles, and undertake a wide spectrum of activities through all stages of the value chain.

Most importantly, it celebrates our record-breaking year in personal and process safety performance.

"The real win is that our people go home healthy every day," says Fiona Hick.

Gavin notes that last year, our performance in HSEQ was the best in the company's history.

"It is something to be proud of and reflects the importance of looking out for each other, working together and continually improving to ensure we keep each other safe," he says.

Deborah points out: "The award recognises not only the HSEQ team but the frontline teams, the leaders, projects and HSE Representatives who lead by example and champion our HSEQ performance every day."

Fiona notes: "While our performance in 2018 to date does not reflect where we want to be, we have the right people and right processes in place. We can use this to deliver outstanding performance again, year on year.

"We can take pride in this achievement and use it to launch ourselves forward."



Winners are gridders: Chief executive officer Peter Coleman, and vice president health, safety, environment and quality Fiona Hick receive the Safety Excellence Award from Zoe Ujnovich, Shell Australia Country Chair.

Fantastic fin fans

It's a fact that summers in Karratha are long, hot and humid.

And at the Karratha Gas Plant, our ability to cool our process directly impacts our ability to produce LNG. This production-critical cooling power is delivered by some 800 fin fans.

Cooling is achieved by forcing or fanning air over tubes which contain hot process fluids. The tubes have small fins on the outside surface to support more efficient heat exchange.

“When ambient temperatures rise in summer, we need as much cooling power as we can get because achieving 100% production relies on 100% fin fan reliability,” says Aaron Bruce, maintenance superintendent LNG.

Since 2016, significant improvement in the reliability of fin fans has been achieved, reducing summer production losses.

During the 2017/18 summer, fin fan production losses were 2.53 kilotons (kT). This is a whopping improvement

from 36.42kT in the summer of 2015/16, and 18.82 kT in the summer of 2016/17.

“This is a great outcome – I’ve never seen this level of summer performance from our fin fans,” says Phil Reid, vice president Australia Operations.

Across LNG Trains 1-5, located 30m above the ground, are 800 fin fans – each with six blades. That adds up to a lot of moving parts and due to exposure and wear, a bearing can fail and the fin fan will trip.

Fixing the right fans at the right time is a big job and it’s the key to the new approach.

“All fans are not created equal,” Aaron notes. “Some have a bigger impact on production and knowing this allows us to prioritise our work.”

To understand this and execute a new approach, Maintenance collaborated with Operations and Engineering.

From Operations, panel operators helped identify priorities, supported

safe execution of works with optimised permit structures and further enabled maintenance productivity with fan grouping.

Engineering conducted failure mode analysis that confirmed the bearings were the number one cause of failure, and recommended the maintenance strategies and supported critical spares analysis.

A core team of 12 from Maintenance, including personnel from our main maintenance services contractor Monadelphous, then got to work.

During the winter months, when ambient temperatures were less extreme, an eight-week nightshift campaign executed large, complex repairs on the priority fans. This was called the summer readiness campaign.

This work is largely informed by the condition monitoring program, which is performed by a small team moving across the fin fan decks. This team inspects the fans for early signs of wear and tear to help prioritise maintenance work.

During the critical summer months, there is an agile front line fin fan response or “SWAT” team which rapidly responds to repair production critical fans and keep the cooling power at a maximum.

Ragan Stonier, general manager Maintenance, noted: “There is a growing culture of our people at KGP with an underlying determination to solve problems and continuously improve our plant and equipment.”

The SWAT team’s impressive reduction in production losses hasn’t stopped its members from continuing to look at new ways to improve performance.

“We have line of sight to our next wave of improvements,” says Aaron.

“We like it when no one talks about fin fans and the impact they are having.

“This summer, no one was talking about fin fans.”

Now that’s something worth talking about.



Cooling down: The fin fans at our Karratha Gas Plant are integral to keeping process fluids at a cool temperature.



Hunting hydrocarbons: like many other teams across operating assets, at KGP individuals from different functions like engineering and operations work together to optimise our production.

Molecule chasers among us

Chasing every molecule and making every hydrocarbon count every day adds up.

Many Woodsiders are tackling these “one percenters” across our operating assets, and their combined efforts are having a real impact on our competitiveness and profitability.

“Lots of people and teams are involved,” says Ryan Conway, Australia optimisation manager, as he rattles off a list.

“Engineering response, engineering surveillance, integrated activity planning, marine, Reservoir Management, Maintenance, Operations, Development Planning and well services to name only a few.

“Everywhere people are identifying constraints and using their intelligence and experience to make them disappear.”

Optimisation teams embedded in each of the assets assist to collate and prioritise opportunities, identified through continuous improvement programs and other workshops, like Produce the Limit.

The opportunities present in two main forms: ideas to enhance production and ways to reduce wastage and inefficiencies. Some of these opportunities take little effort, while some demand a deal of teamwork to solve thorny issues which have burdened us for years.

And the real achievement is by the teams on the assets and in the functions which work together to deliver the improvements.

Across the Australia Operating Unit (AOU), an internal target was set at the start of 2017 to deliver more than \$300 million of additional value through opportunity execution.

Production planning and market liaison manager Reece Tonkin has analysed the results.

“In 2017, at least 72 individual initiatives were delivered to meet the target, adding more than a million barrels of Woodside share to production,” Reece reports.

A few examples highlighted included the revised operating strategy of the Goodwyn A Tidepole 2 well, which added value with a simple no cost solution using data from the reservoir engineering team.

Another example was at North Rankin, where the team raised the firing temperature of the gas turbines to supply more power, more pressure and therefore produce more gas.

Reece notes there were challenges to delivering these additional molecules, including the need to maintain focus and priority.

“There was a lot going on in 2017, and it was an incredible effort to achieve targets involving a lot of discretionary effort,” he says.

In 2018, another ambitious target has been set for value creation. This year, the AOU has a stretch target to create an additional \$250 million through optimisation of our operated assets.

To date, about \$35 million in value has been created. A real highlight has been the update of our tropical cyclone response procedures to minimise shipping losses associated with weather avoidance (see page 24 of this issue of Trunkline).

This year, our efforts are also focusing on asset optimisation to deliver our emissions reduction targets.

We have committed to reduce the fuel intensity of our production by 5% over five years. Optimisation of our assets and improvements in the way we operate is fully aligned with this imperative.

The close collaboration across functions and sharing of learnings between assets is our key to delivering record annual volumes of hydrocarbons, as we look to produce the limit from reservoir to off take.

Senior vice president AOU Niall Myles says the revenue we get from optimising the last 1% of our facilities has the highest value.

“The first barrels pay the mortgage and the wages – so these are the barrels we return in value to our shareholders – and that funds our growth, so every barrel counts,” Niall says.



Teaming up

to meet growth goals

While discussing sports, Meg O'Neill states simply: "I find I work harder as part of a team than competing as an individual. It's very motivating to be striving together towards a shared goal."

She could just as well be speaking about her approach to her job.

Woodside's new chief operations officer (COO) is very much a team player... as well as something of a coach and captain.

"I learned a lot of leadership lessons on the basketball court and the soccer field," says the self-confessed outdoorsy type who participated in intercollegiate sport while studying at the Massachusetts Institute of Technology.

She has also learned a lot over 23 years in the oil and gas industry, working around the world in a wide variety of roles.

Meg, who grew up in the US state of Colorado, began her career as an engineer, following in her father's footsteps.

But unlike her dad, who was an electrical engineer, she wanted to work on big things so chose ocean engineering.

"It was a fluke that I ended up in oil and gas," she says. "I had imagined that I would work in a ship yard."

It wasn't until she got talking to an ExxonMobil representative at a career fair that Meg decided to pursue a role with the world's largest publicly traded international petroleum company.

It was the first step in a career built on seizing opportunities.

"I have been very fortunate to have been offered some wonderful job assignments," Meg says. "Not all of them were expected but I am grateful that I said yes to each and every one of them."

"They have exposed me to the breadth of the business and made me a more well-rounded contributor."

Meg has worked as far afield as Norway, Indonesia, Canada, the US and now Australia, in roles covering cutting-edge technical work and field operations through to broader business and management activity.

Her willingness to tackle fresh challenges has been key, with her experience in Indonesia a case in point.

While admitting to some trepidation when first offered the role, Meg decided

to make the leap, pack her bags and set off for work in a country she had never even visited before.

"It was difficult at times but always interesting, challenging and rewarding," she says.

Working to improve operations and bring down costs, Meg quickly came to appreciate not only the importance of clear direction but also of culture and morale.

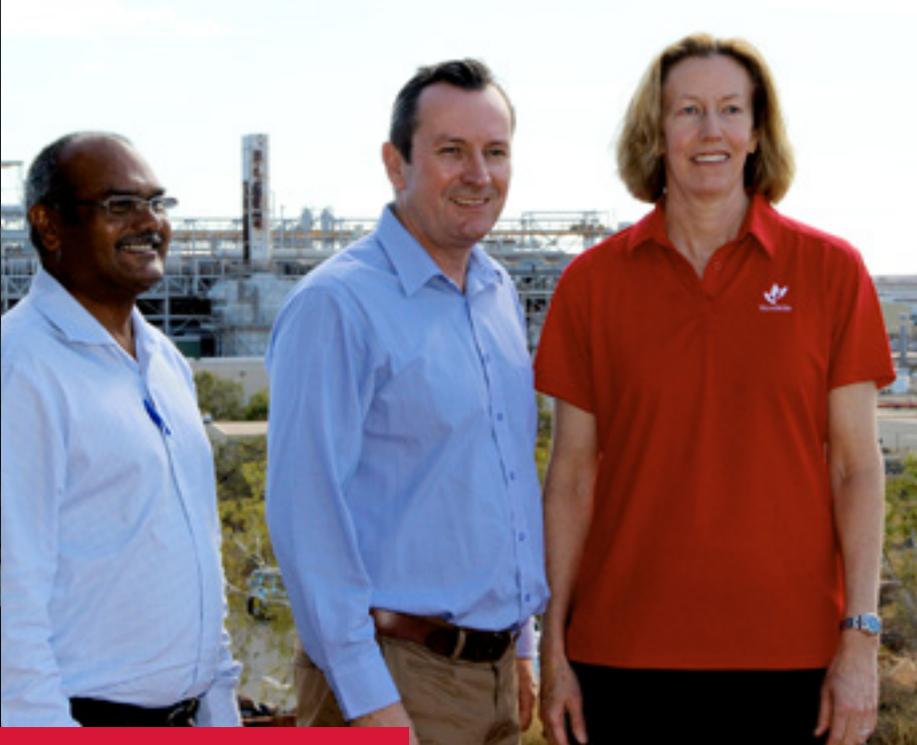
That appreciation was reflected in her first message to Woodside staff, where she described her COO role as one of enablement, helping people to do their jobs more effectively and efficiently.

Meg is focused on empowering, motivating and spurring on the team to achieve results in line with the company's growth goals.

After all, those goals were an important part of the reason she chose to join us.

"Woodside is a tremendous company poised for tremendous growth," she says. "And it is exciting to play a part in that."

"We have great foundation assets that are performing to a high standard and a suite of opportunities that have us well placed to vault forward."



Busy start: Meg O'Neill joined Reconciliation WA Chair Carol Innes, CEO Peter Coleman, general manager Global Property and Workplace Deb Morrow and CFO Sherry Duhe at a networking event for West Australian businesswomen; she launched a new jobs portal for Karratha with Premier Mark Mc Gowan; is getting to know Perth with her family; and learning more about Indigenous culture, both in Perth and the North West, visiting Roebourne with senior Indigenous affairs adviser Shanine Ryan.

"I am really looking forward to contributing to this period of advancement and transformation."

In her first two months with the company, Meg has been keen to get to know the people and the facilities. This has included several visits to our operational heartland in Karratha as well as a trip offshore.

She has been an active participant in important internal initiatives such as Stand Together For Safety and the refresh of our Leadership Expectations framework.

And she has embraced the role of executive sponsor of the Woodside Reconciliation Community (WRC), keen to build her knowledge of – and demonstrate respect for – Indigenous culture.

"I have always taken keen interest in the cultures of the countries where I have worked," Meg says.

"Building this knowledge and appreciation has been one of the highlights of taking on international assignments, so I am really looking forward to working more with the WRC."

Another highlight of her move to Australia is sharing the experience with her family.

"This is the first international move for my partner Vicky and our 15-year old

daughter, and we're having fun as a family exploring Perth and WA," she says.

As mentioned at the start, this sports enthusiast thrives on team success.

Meg is still very much solutions focused,

always working to find better ways to get the job done; to motivate, inspire and support the team to reach its goals and set new ones.

And she can't wait to join Woodsiders in progressing the opportunities within our current growth horizon.





A day in the life of ... a marine superintendent

James Barton is relishing the opportunities working overseas for Woodside has provided – both professionally and personally.

James is marine superintendent on the Greater Enfield Project and has been based in Singapore since April last year.

Greater Enfield (GE) comprises a subsea tie back to the Ngujima-Yin floating production storage and offloading (FPSO) facility at the Vincent field. The project will aggregate production from the Norton over Laverda, Laverda Canyon and Cimatti hydrocarbon accumulations.

And though he's Perth born and bred, the "Lion City" has quickly become James' second home.

His wife, Chanietta Chan, was born in Singapore and the move has enabled the couple and their two-year-old son Blake to spend extended quality time with Chanietta's family.

"They've been able to participate in Blake's second birthday party, watch him grow up and get to know him during these early development years which would have been impossible if we were still in Perth," says James.

"Likewise, my wife has enjoyed quality time with her family and friends."

Workwise, his Singapore role has brought interesting challenges.

Besides the project objective of equipping the vessel to support the new wells, the Ngujima-Yin is now 20 years old. Its marine hull and equipment require significant maintenance and rectification works to ensure the vessel can safely meet all licence to operate requirements to end of field life.

"The challenges lie with looking ahead to ensure the scope is correct to meet the business objectives and that it is understood and appropriately planned for with the construction contractor," James explains.

He's also responsible for ensuring Woodside's marine team is sufficiently resourced; and for coordinating the team's various skills to manage the execution and ensure a safe and quality outcome on schedule.

James' career began following his studies at the Australian Maritime College in Tasmania, where he

graduated with a degree in naval architecture. His working life began with BAE Systems on defence projects and he's had roles as a field engineer and dockmaster in Melbourne, New Zealand and Perth, and as a surveyor for the American Bureau of Shipping.

In October 2014 James joined Woodside as a senior naval architect in Engineering's floating structures group.

A 12-month spell as marine lead in the Okha shipyard campaign then followed before he returned to floating structures in March 2016 and then moved to Greater Enfield four months later as marine superintendent.

The Ngujima-Yin arrived on 1 June at Keppel Shipyard in Singapore, where it is expected to remain until it returns to the Vincent field in the first half of 2019.

James is scheduled to remain in Singapore until the shipyard execution aspect of the Greater Enfield project is complete. He anticipates then returning both to his naval architect role in Engineering and to his hobby of racing his S80 sailing yacht.



On the move: As marine superintendent on the Greater Enfield Project, James Barton is based in Singapore to supervise maintenance and rectification work on the Ngujima-Yin FPSO but he regularly returns to Perth to brief and consult with colleagues (left and top). Above and right, in Singapore with fellow Woodsiders and contractors. James (standing, fifth from the left) in front of the Ngujima-Yin in its shipyard and, right, taking in the sights of the Lion City with wife Chanietta and their son Blake.



Below is a typical day in his life.

6.30am: I'm up about 5.30 am and leave home for the Keppel Shipyard which is about 30 minutes away on the western part of the island. I drive there with a couple of other Woodside personnel. At the shipyard's Woodside site office I'll start the day with a strong coffee and consolidate progress of construction activities and any issues/concerns provided by the marine team on the previous day to report at the leads' team meeting.

7.00am: At the leads' team meeting, we run through the visual management boards and share progress and activities. I provide an update on the current status of the marine construction activities. This is one of the most important internal meetings we hold as it covers all the high priority activities and keeps the site team leads up to date and aligned.

Afterwards, I respond to emails and do a desktop review which typically comprises a two-week look ahead of the planned construction activities. I ensure there are no conflicting activities and plan for the necessary resources.

8.00am: It's now time to get out of the Woodside site office and make the 900m walk over to the Ngujima-Yin, berthed at West Quay. The shipyard execution has

just begun so the project is now well into the stage of removing obsolete/damaged parts of the vessel and inspecting the hull structure as a precursor to beginning the construction and installation works.

On the way I'll stop off at the hull shop or piping shop to check on progress of fabrication or maintenance works. Woodside site manager Jamie Patten has played an important role in boosting safety awareness, and Keppel has recently adopted positive observations as part of their HAZREP (Hazard Reporting) program. During this walk I'll collect feedback on any HAZREP items I observe.

8.30am: Throughout the shipyard campaign, a daily VSCC (Vessel Safety Coordination Committee) meeting is held on board the vessel. It's run by the Keppel project manager and all construction contractors attend to review and plan construction activity and complete permit sign-offs. After the meeting finishes I'll take the chance to walk the vessel to monitor and discuss progress on the key construction activities with the Woodside team and Keppel workforce.

12.00pm: For lunch I generally head back to the office to grab a quick bite to eat and then respond to emails and incorporate any new information picked up from the VSCC into the forward plan for the next 14 days.

1pm: I walk off lunch by again calling into the workshops to check fabrication progress on my way back to the vessel, where I visit the key marine construction activities. I typically start with the engine room where a huge amount of piping is being replaced, rotating equipment is being removed for overhaul/replacement and vendors are doing inspections servicing. This is followed by a walk through the accommodation to check on progress to habitability modifications and then out on to the main deck where a lot of structural, piping and equipment installation is taking place.

4pm: At the end of the day we hold the Marine team meeting on board the vessel where I provide an update from the VSCC and the leads meeting and the team provides progress updates on the day's activities and the plan for the next day. We finish with a discussion on any HSE or quality issues experienced for that day and the plan for managing them.

6pm: By 6pm, I've typically left Keppel for home to enjoy some time with my family and play with Blake. There's a hawker centre down the road which sells some of my wife's favourite local food, so we often go there. Then it's home to prepare for the next day's work.



Changing of the guard: Michael Chaney stepped down as Woodside Chairman after the annual general meeting in May, handing the mantle to Richard Goyder.

Highlights at the helm

Michael Chaney once predicted that fast food and dishwashers would never take off in Australia.

It was the mid-1970s, he was in the early stages of his career, working in Houston Texas and being quoted in a staff magazine article about forecasting.

He laughs about his off-the-mark view now but it underlines one of life's universal truths: you never quite know what the future holds.

For example, when Michael joined Woodside as a geology graduate in 1972, he could not have predicted that the company would go on to become Australia's largest independent oil and gas firm.

He also could not have foreseen that he would one day become a member of its Board of Directors and serve more than 10 years as its Chairman.

However, he was quite confident that the job would make a lasting impression on him.

"I think it's natural to look back with fondness on your first employer," he says. "To me, Woodside has been a highlight of life."

He joined just after the discoveries of the North Rankin, Goodwyn, Angel and Browse fields.

"It was my first job as a geologist so I started to assume these sorts of

discoveries were common but I realised subsequently that they were gigantic discoveries that were pretty rare," he says.

He says the camaraderie of the crew led to lifelong friendships. Their resilience and optimism taught him not only about the importance of teamwork but also of dealing with disappointment.

"You know, every dry hole is a learning experience that helps you work out where to go next and where you might find some oil and gas. We'd call them a technical success and a commercial failure," he says. "We were always focused on what we could do better. It was an exciting time."

After eight years as a geologist, Michael completed a Master of Business Administration (MBA) and moved into commerce. This eventually brought him back to Woodside.

"It was a privilege to come back as Chairman," he says, emphasising his respect for the company's early Board of Directors, who oversaw our transition from a hopeful explorer to respected developer, producer and supplier of energy.

"It's quite a legacy.

"Now as I step down from the Board, I have cause to reflect on my own contribution and am satisfied that I leave Woodside with its prospects and balance sheet in good shape and the right management in place."

Maintaining a strong balance sheet hasn't always been easy. Michael's tenure as Chairman included a global financial crisis and, more recently, a prolonged downturn in the commodities market.

But the share price has remained robust with efforts to rationalise costs and efficiency playing a part.

Strengthening relationships with joint venturers and other key stakeholders has also been a highlight.

"The Burrup Hub concept, which is truly exciting, underscores this," Michael says.

Michael admits that there have been disappointments, specifically that James Price Point was not a viable option for Browse, that inert gas was discovered offshore Korea and that exploration did not support the building of Pluto train 2 as quickly originally hoped.

In all though, he is happy with the company's progress during his time at the helm.

"Woodside is very well placed for its next phase of growth," Michael says. "It is solutions-focused, innovative and financially disciplined. I will be following its fortunes with extreme interest."

He makes this prediction with much more confidence that his fast food assumption. That experience taught him another thing; forecasting is easier if you know your subject well.

Michael certainly knows Woodside well.

Diversity the winner

The number of apprentices and trainees at Woodside has soared, with this year's intake up 50% on the 2017 figure.

That means there will be more than 120 apprentices and trainees across our Karratha operations by the end of the year.

Also, Woodside is in the process of finalising candidates for the 12 positions on pre-apprenticeships and school leaver programs, which cater for Indigenous Australians.

Karratha Gas Plant (KGP) asset manager Andrew Lobb describes it as a win-win for Woodside, the workers and the local community.

"For the past two years, 100% of our intake has been recruited from within the City of Karratha," Andrew explains.

"We have been taking on apprentices and trainees at Woodside for more than 20 years and this history demonstrates our commitment to building capability and providing opportunities to work at our world-class facilities."

During their training, apprentices and trainees are hosted by Woodside and employed by Programmed.

Apprenticeships and traineeships create valuable routes to employment for Karratha people, and competition is fierce. This year there were about 2000 applicants for the programs.

This year's intake of 42 apprentices and trainees compares with 24 last year and

it's not just the number on the rise. So, too, is the diversity.

John Wells, lead operations trainer at the Production Academy, says the push for change has been well led from the top and has garnered momentum among the wider workforce.

"Some years ago females were few and far between in Operations and Maintenance," he recalls.

"But in recent times we've been looking to encourage diversity and today many, many females are coming into the jobs."

In storage and loading, there are 14 females across the trainees and permanent Operations staff.

Of 15 apprentices, four are Indigenous, two female; of 16 Operations trainees six are female, five Indigenous; and all four new business administration trainees are female, three Indigenous.

"Teaching a very quiet student in the classroom and then watching her become a very confident operator in the field gives us trainers real job satisfaction," says John.

Woodside also has a Pathways intake, which caters for Indigenous Australians and which leads to operations traineeships. Five of the six in this year's intake are females.

"I think Woodside's 2018 intake shows the company's commitment to local hiring and support for an inclusive, diverse workforce," says Indigenous employment adviser Marisa Bradshaw.



Life-changing Pathways

Naomi Beath firmly believes that Woodside's apprenticeship and trainee programs have the capability to be life-changing – and she should know.

The KGP operations technician won the WA Aboriginal and Torres Strait Islander Student of the Year Award in 2016.

Naomi, who grew up in the Pilbara, went through Woodside's Pathways program for Indigenous trainees.

She was chosen to attend a Business Council of Australia Showcase event in April alongside Prime Minister Malcolm Turnbull to explain her journey to her current role at Woodside.

"It's not every day an Aboriginal woman from the Pilbara has the opportunity to represent her company and speak to the person who leads the country," she says.

"From the moment I was asked I felt that it was my duty to show that Aboriginal people, especially Aboriginal women, can have successful careers in industries that are usually white-male dominated."

Naomi hopes her story can inspire other young Indigenous women to pursue an apprenticeship or traineeship.



Training time: Lead operations trainer John Wells, second right, foreground, next to operations trainer Don Muir, with some of this year's intake of trainees. Above, operations technician Naomi Beath with Prime Minister Malcolm Turnbull.

Where collaboration and innovation are Central

When Woodside works in tandem with universities and leading technology companies, the union can create a powerful engine for innovation.

Witness the establishment of Innovation Central Perth (ICP) — an alliance of Woodside, Cisco and Curtin University (since joined by CSIRO affiliate Data61).

The aim was to build a space where industry-university collaboration would be encouraged; and where small companies could address industry's desire for a faster, more agile mechanism to solve issues created by the rapid digitisation of industrial assets.

Importantly, it would also be an “encouraging incubator” which ultimately could produce benefits such as savings for Woodside, adds Neil Kavanagh, chief science and technology manager.

“Our involvement with ICP sits within that broad philosophy of wanting to go faster by collaborating with a community of excellent leading players,” Neil explains.

“Our model was to work together with Cisco and Curtin and open our doors to small companies with a bright idea that wanted to rapidly prototype that idea, with Woodside playing the role of customer, Cisco the role of technology adviser and Curtin putting its staff, students and researchers into digitisation.”

Since its inception in 2016, ICP has liaised with more than 250 companies, and student interns have been enrolled to tackle more than 100 industry projects.

“These interactions help to break down some of the barriers between industry and the university that include the focus, speed and agility of the different organisations,” says Paul Nicholls, Curtin’s director, Research Partnerships.

Cisco’s Innovation Central director, Tom Goerke says: “Working with Woodside and other resources and energy companies, Cisco is able to explore in depth how its technology can be used to solve problems in the operational technology world in addition to the existing IT market.”

Last summer six of the centre’s 11 interns worked on challenges set by Woodside.

Subsea and Pipeline (SS&PL) and Engineering supported ICP to enable a robust pragmatic solution to be developed to tackle the issue of integrity assessments for pipeline systems that are difficult to inspect.

Pipeline technical authority Brian Purvis developed a project brief for ICP students.

“Access was easy,” Brian notes.

“That helped me feel empowered to add value to the business proactively by developing an efficient solution to an ongoing pipeline operational issue.”

As the work progressed throughout 2017 it became evident further phases were required.

Brian reports SS&PL’s engineering support is now examining progressing the next phase of the project while concurrently developing specific pipeline inspection requirements with Engineering’s capability teams.

He adds that a key take-away was a reinforcement that collaboration succeeds better than sponsorship.

Paul says ICP creates a new way of doing things for researchers and industry.

“Hackathons, design thinking workshops and ‘proof of concept’ projects are a great way to get staff and students involved in low-risk and low-cost engagements to determine if something is possible and can be scaled — or, alternatively, try, fail fast and move on.”

Says Neil: “Innovation Central is open for business and available for all Woodside employees who would like to see a challenge addressed by a rapid prototype supported by Cisco and Curtin.”

Those interested in collaborating with ICP should contact technology manager Voula Terzoudi.



Collaboration at work: From left, Innovation Centre Perth strategic project officer Jim Wyatt with Brian Purvis, Wendy Gibbons, student Siew Hong Chai and Voula Terzoudi.



Learning experience: Students from MIT's Chemical Engineering Practice School get some on-site experience in Karratha. MIT station director Brian Stutts is back row, far right.

Top students forge links

Some of the top PhD students at America's prestigious Massachusetts Institute of Technology (MIT) spent two months at Woodside in Q2 tackling real problems set by Technology and Operations.

Nine MIT students spent time in Perth and Karratha after spending two months earlier this year at a pharmaceutical company in Ireland.

It was the third consecutive year Woodside has played host to students from MIT's Chemical Engineering Practice School, established more than 100 years ago with the mission of forging links with industry.

Process control engineer Daniel Murphy coordinated their visit, which was hosted by Engineering in 2018.

"A big opportunity this year was the collaboration between Operations and MIT to resolve real front-line issues," says Daniel.

Senior system engineer Lukas Bulinski says one of the issues the students examined was how to better predict the trips in KGP's isolated power system as maximum LNG production is balanced with maintaining security of energy supply.

"The students developed a risk assessment tool utilising a number of insights that were discovered, such as the correlation between a trip and

ambient temperature, engine mapping, and time since last trip," Lukas says.

The KGP team is planning to test the developed reliability model on real trip cases later this year.

Senior development engineer Mark Mulloy oversaw the students' project on GWA-produced water system debottlenecking.

"The goal was to perform an independent study on the current GWA produced water constraints and provide sound recommendations from both a technical and business perspective to debottleneck the system," Mark explains.

"Their visit provided a project for the students to complete and it provided Woodside with the opportunity to have a long-standing problem resolved."

Mark says the students compiled six recommendations that are now being examined.

Other projects involved power generation, heat exchanger design, hydrogen production and CO² conversion.

MIT station director Brian Stutts believes the Woodside program once again demonstrated the value of getting a fresh-focused perspective on problems.

"There are some very real things the students have accomplished that could be implemented tomorrow," Brian noted.

"But just as important is the view into the future and looking at what might be done to help Woodside succeed in five, 10 years time with regards to such issues as climate change and new-generation technology.

"For the students, it's of great value to see the wide breadth of projects they've tackled all coming together, helping make them well-rounded chemical engineers."

At the end of their visit, the students presented their findings to sponsors, stakeholders and to chief operations officer Meg O'Neill (herself a former MIT student) and executive vice president Exploration and Technology Shaun Gregory.

"It's been a great learning experience because I had no previous experience in this industry," said Cynthia Ni.

Katharine Greco was amazed at the huge scale of the gas production.

"I think it was useful to work in Perth and then go to Karratha to actually see what you were working on," Katharine said.

School program director Alan Hatton said he was really impressed with the breadth of the projects the students had been given.

"It seems like they've been making a good contribution to understanding and furthering Woodside's mission," Professor Hatton said.



Be prepared: Left, offtake coordinator North West Shelf LNG Geoff Wake and Karratha Gas Plant operations manager Breyden Lonnie are ready for sun and rain. Right, senior metocean meteorologist Grant Elliott was closely involved in developing the upgraded tropical cyclone forecasting system.

Good forecasting pays off

For oil and gas companies with assets in Australia's north west, tropical cyclones constitute the biggest issue facing metocean – the discipline which unites meteorology and oceanography.

"It's generally agreed this region has the least line of sight into the formation and track of tropical cyclones of anywhere in the world," explains Geoff Wake, offtake coordinator North West Shelf LNG

Of course, precautions to safeguard lives and assets from cyclones are of paramount importance, and lost production, postponing cargo shipments and re-scheduling work are just some of the casualties of cyclone preparedness.

Now, thanks to collaboration between oil and gas companies and the Bureau of Meteorology (BOM), an enhanced cyclone forecasting system has been developed for north western Australia.

The benefits have been illustrated in the first full cyclone season it's been operational.

"We've had six cyclones this season and three events which would have lost us production in previous seasons, but we were able to manage all events safely and without any losses," Geoff notes.

"The difference has been the increased level of certainty in our forecasting that the cyclone would not create the weather conditions that would require

us to reduce our production or miss cargoes."

Moreover, the new forecasting system also allowed critical completions work in the Greater Western Flank Phase 2 (GWF-2) development, which is targeting ready for start up (RFSU) in Q4 2018, to be undertaken during cyclone season.

"Our new system allowed us to provide certainty that there was no risk to operations at critical periods during the completions phase," says Grant Elliott, senior metocean meteorologist.

Grant says key to the new system is running multiple (51) weather computer model forecasts, called ensembles, which enable a comprehensive understanding of the spread of risk.

This means that extended weather windows that are clear of cyclones can be clearly identified. So too are the onset and cessation times of above-threshold condition during actual cyclone events.

An upgraded cyclone forecasting system was first mooted six years ago as a Joint Industry Project, led by the BOM and including as its sponsors both operators and prospective operators within the NWS region.

When the proposal caught the attention of Woodside's senior management in 2014, it was quickly adopted and a more

ambitious deadline set – halving the time scheduled from four to two years.

In 2017, a summer vacation student intern was set the task of coordinating with end-users to devise the optimum way to deliver the new program.

"Having high quality forecasts is important," notes Grant.

"But having the guidance presented in a consumable and easily understood manner, with the end user comfortable with the consequential decisions that follow, is paramount for success.

"RFSU for GWF-2 is now targeted for this year and not next year, in part thanks to the ability to finish completions carried out during the cyclone season because we could give absolute certainty there was no risk to the work."

Final word to KGP's operations manager Breyden Lonnie – a user of tropical cyclone forecasting.

"Our job is to minimise risk and we maximise value while protecting our people, the environment and the asset," Breyden says.

"The better the information, the better we can do that.

"What the team has done for us is given us the best tools and information available."

Show of support

When storms threatened to disrupt this year's WA Day Festival in Perth, one of the biggest days on the State's calendar, organisers reached out to Woodside for assistance.

The company promptly responded and a small team from our Corporate Incident Coordination Centre (CICC) roster was formed to help.

This year's WA Day Festival was held over two days at Elizabeth Quay, Perth, on the first Sunday and Monday of June.

With the Quay bathed in sunshine, Sunday's family day was attended by more than 55,000 people.

But clouds were gathering and organisers were understandably anxious about the severe weather warnings as a large crowd was expected for Monday's SOTA (State Of The Art) music festival.

Organisers of the not-for-profit event needed advice on emergency management decision-making so an offer of the support of Woodside's Critical Response Team was made and gratefully accepted.

As part of its commitment to supporting local communities, Woodside has been a sponsor since 2012 of Celebrate WA through the Arts and Culture Award category in the West Australian of the Year.

"Foremost in the organisers' minds was the safety of the crowd and event workers if the storms came through during the festival or when the infrastructure was being dismantled," explains Ray Butler, general manager Security and Emergency Management.

So on Sunday night, Ray mobilised a team comprising senior meteorologist Grant Elliott, subsea tree systems engineer Ivan Yip, reservoir engineer Brodie Wilkes, emergency management adviser Anthony Thorpe and operations manager NWS gas Ryan Beccarelli.

"Utilising Woodside's emergency and crisis management framework, processes and capability, the team was able to provide situational awareness of the weather system and interpret the complex weather forecasting data, sourced from the Bureau of Meteorology, through the expertise of Grant Elliott," relates Ray.

"We mapped out the escalation potential and key mitigation and an action plan.

"From that we were able to work through key decision points where they needed to consider the weather and gauge the risk of increased winds.

"This gave them peace of mind and greater certainty."

In fact, Grant took his support to a new level by personally attending the music festival and giving regular live weather updates to the Celebrate WA team.

The team's guidance identified that the risk period (after midnight) was going to fall outside the event's timing (between lunchtime and early evening) so the concert went ahead.

Michael Anghie, chair of Celebrate WA, says he was extremely appreciative of the assistance.

"The advice, guidance and detailed information provided by the Woodside team gave us the confidence to continue with the Festival and ensured our decision making was appropriate to ensure the safety of the public," Michael relates.

"The Woodside team's weather information was extremely accurate and it was information we would not have otherwise been able to access in a timely manner.

"In the end, more than 60,000 enjoyed a great day and the little rain that fell added to the music festival experience."

Ray says he was happy the CICC team could help.

"This is the way Woodside operates all the time and it was very pleasing that on this occasion we were able to assist a not-for-profit organisation," he says.



Wet weather gear: Top, the WA Day's music festival was under threat from bad weather, but a team from Woodside's Corporate Incident Coordination Centre roster helped ensure the show went on safely.

Power of people

“Everyone should get a fair go at work.”

It’s a sentiment few today would argue with: everyone should feel comfortable at work knowing they are accepted for who they are and valued for the role they play.

That’s why Woodside is now highlighting the “inclusion” aspect of its 2018-20 Inclusion and Gender Diversity Strategy.

“Our data shows Woodside is becoming an increasingly diverse place to work on a number of dimensions,” says Emma Majstrovich, inclusion and diversity manager in People and Global Capability (P&GC).

But a diverse workforce is not an end in itself.

“We need to unlock the value of our diversity and we do this by focusing on inclusion, without dropping accountability for improving our metrics,” Emma explains.

Metrics result from people decisions made by leaders, such as recruitment,

assigning key work and development opportunities and promotion.

Inclusion, on the other hand, is built by everyone taking small, consistent steps.

“We shared the ‘Inclusion starts with I’ video at our divisional briefing earlier in the year and the leadership team encouraged all employees to set a 2018 performance objective,” says Kerry Smith strategy and planning manager Exploration.

“I was touched by the number of people who reached out afterwards. I could see first-hand the positive impact these small, easy actions had on so many people.”

James Deeks, graduate data scientist, says: “I’m not part of a minority group, but I benefit from greater inclusion and diversity (I&D) all the same.

“I find that working in an inclusive team not only maximises productivity, but enables everyone to go home feeling positive despite whatever challenges they might face.”

Kerry and James are members of

inclusion and diversity in Geoscience (IDIG), formed last year. IDIG is part of Woodside’s network of functional I&D focal points.

Another member of IDIG, graduate geologist Mary Munroe, also supports inclusion and diversity through her role on Spectrum, Woodside’s employee community group for LGBTI+ employees and allies.

The finding that more than half of LGBTI+ employees in Australia have not come out to their colleagues was a key motivator.

“That’s an enormous burden for 10% of the Australian workforce to bear,” Mary says.

“I want to contribute to an environment that makes that decision easier for Woodsiders.

“Spectrum challenges me to be open to different perspectives, and IDIG challenges me to communicate and implement Spectrum messages and activities in a way that will resonate with Geoscience.”

P&GC vice president and executive sponsor of Spectrum Jacky Connolly is a firm believer in people bringing their whole selves to work.

“The place I would like to see us get to is one where where I&D is just the way we operate in every function across Woodside,” Jacky adds.

“It would be a place where we would continue gathering data and telling stories but otherwise no longer need stand-alone interventions or metric targets.”

Emma remains focused.

“Fairness and equality happens when you have an inclusive culture,” she says.

“We need to foster this while maintaining accountability for improving our measurable objectives.

“Woodside has an ambitious business plan and must minimise or remove barriers – even unintended ones – that hold our employees back from feeling enabled and engaged.”



Fair go: Corporate Affairs adviser Katy Garcia, second left, discusses the work of Geoscience’s inclusion and diversity group with IDIG members.



Family time: Matthew Zed, Evan Faris and Alex Hyndman are leading the way for males to access flexible working options.

Making it **work** for families

Flexible working arrangements are being embraced by Woodside families.

The company strives to be inclusive in its thinking and working – and that means facilitating part-time work where appropriate and ensuring male employees are comfortable to take primary parental leave.

“The value proposition for increased male uptake in paid parental leave and part-time work is compelling,” says Rebecca Logan, global remuneration and policy manager.

“It embodies inclusion and ensures equal opportunity regardless of gender.”

Although Woodside’s flexible working and parental leave policies are gender-neutral, there’s a perception that accessing these types of policies is more “acceptable” for female employees.

“Normalising these practices regardless of gender helps challenge the unconscious bias that can be a barrier in any workplace,” Rebecca says.

Woodside’s commitment to inclusion means examining options that suit both the business and employee, even if it challenges a few stereotypes.

That was what Matthew Zed, senior metocean engineer and father of three, discovered when he sounded out the prospect of taking primary paid parental leave in 2017.

“Being a relatively young engineer, I was nervous about the connotations around my request to take this time off work,” Matthew says.

“But I felt it was important to seize this opportunity – for myself to spend time with my children, for my wife to re-join the workforce and for the general health and well-being of the family.”

Matthew says he was pleasantly surprised with the positive response to his inquiries.

“There was just overwhelming support from my manager and from our business,” he says.

“I was also able to see so many benefits, not only for myself in becoming interchangeable with my partner in caring for the kids, but also for the business in my improved ability to coordinate and multi-task.”

Thrym Kristoffersen, civil and structural engineering manager and Matthew’s manager, says he was completely comfortable with Matthew taking primary paid parental leave.

“Reducing the perception that males can’t access flexible working options or parental leave is very important,” he explains

“In my home country, Norway, it is common practice for fathers to take parental leave.”

Evan Faris, senior geophysicist, found that taking primary paid parental leave worked best for his family.

“Having spent the past eight years on expat postings and travelling, my wife and I put having a family on hold,” Evan explains.

“After moving to Perth and seeing how family oriented the lifestyle is here, we decided to have a family of our own.”

Taking primary paid parental leave meant his wife Jess could continue her dentistry studies at the University of Western Australia.

Part-time work is another area considered designed for women but currently, there are about 37 males working part time at Woodside.

Senior climate change adviser Alex Hyndman is one. He works a “short” Thursday and does not work Fridays.

“My manager has always seen that I care about my job and that I am passionate about what I do. Working part-time isn’t a reflection of disinterest in my work,” Alex says.

“I have two kids now and I want to be someone who takes them to school, sees them get upset. I want to see the boring stuff, not just the fun stuff.”

It’s a life-work balance which works for Alex and his family and other Woodsiders are taking note.

Getting a good RAP

An outstanding increase in the number of contracts awarded to Indigenous businesses and a big increase in the cultural competency of our staff are two of the highlights of Woodside's 2017 Reconciliation Action Plan (RAP) Report.

The report, released during National Reconciliation Week in the last week of May, shows how the company is achieving real outcomes towards reconciliation measured against the baseline set in 2016.

Woodside's third RAP, launched in 2016, is a five-year plan which aims to achieve outstanding improvements to reconciliation outcomes to 2020.

Karen Mundine, the chief executive officer of Reconciliation Australia, recently congratulated the company on its "excellent track record" in following through on its RAP commitments.

"Woodside continues to go above and beyond to embed reconciliation into its core business practices," she said.

At its launch in 2016, Woodside's current RAP was awarded the highest possible rating of Elevate, a first for an Australian oil and gas company.

Karen says: "Reconciliation Australia congratulates Woodside on the implementation of its Elevate RAP."

Our 2017 RAP demonstrates significant progress in eight of the targeted outcomes across the four RAP pillars of respect, relationships, opportunities and national leadership.

For example, 811 employees experienced cultural training in 2017 – almost three times more than in the previous year, and membership of the Woodside reconciliation community grew to more than 500.

The number of contracts awarded last year to Indigenous business grew by 34% since 2016.

Chief procurement officer Paul Sullivan explains: "In 2017 we took the opportunity to communicate our vision for Indigenous engagement to our suppliers in a series of information forums, representing all the major segments of our industry.

"The result was a large increase in contract awards and spend with Indigenous businesses.

"We expect our suppliers will continue

these discussions with their vendors, delivering value far beyond our initial expectations."

The company also experienced a record number of Indigenous trainees and apprentices participating in our programs in 2017 – almost double the previous year.

Michael Abbott, senior vice president Corporate and Legal, describes why Woodside has made the change to measure outcomes rather than activities in its current RAP.

"In our third RAP Woodside wants to ensure that we make positive differences to the communities in which we operate rather than focusing on our own targets," Michael says.

"The outcomes we can achieve within communities are more meaningful than tracking activities alone."

The switch to outcomes-based measurement was a first for Reconciliation Australia's RAP program and Reconciliation Australia has applauded the development of Woodside's outcomes framework. They hope that other organisations will adopt a similar method.

Woodside's current RAP has three reporting years left, and in addition to our great progress so far we have identified areas where we can make improvements.

In 2018 we will be focusing on improving our social contribution outcomes by working with our community partners to strengthen their capacity and capability to deliver Indigenous programs. Woodside will also offer greater support for the growth and development of its Indigenous employees.

Michael notes: "It is important to continually raise the bar on our reconciliation outcomes.

"We need to strive for greater and greater outcomes if we hope to contribute towards closing the gap between Indigenous and non-Indigenous Australians."



Champion line-up: Des Headland, Michael Abbott, Adam Lees, Nicky Winmar and Meg O'Neill attend the Team of Champions panel discussion organised by the Woodside Reconciliation Community during National Reconciliation Week.



Local language: Merinda Hansen teaching the traditional language of the Wadjuk Noongar people to Woodside staff.

Moorditj waangkaniny*

Noongar language lessons have become so popular at Woodside Plaza that they're now held twice weekly.

Nicole Crnko, diversity and inclusion adviser and proud Noongar woman, organised the first language sessions in 2017.

Nicole says that with various areas of our new headquarters given Noongar names, and last year's National Aboriginal and Islander Day Observance Committee (NAIDOC) Week theme being "Our Languages Matter", organising language lessons felt like a natural next step.

"We take the time to learn basic language skills when travelling to foreign countries, so we should learn the language of the country we are on too," she reasons.

Nicole contacted Merinda Hansen, a proud Noongar woman, to come in to the Plaza to teach the local language.

"When Nicole asked me to teach language at Woodside, it made me happy to know that a company like Woodside is taking active steps towards bringing people together and reconciliation," Merinda says.

"I love that the people I have taught at Woodside are so respectful and genuine

in wanting to learn Noongar language and in embracing our culture."

Senior leaders at Woodside are also embracing the language lessons, using their new skills to deliver Acknowledgement of Country in traditional language.

"I attended the classes and learned enough to have delivered my first acknowledgement in the Noongar language," says Niall Myles, senior vice president Australia Operating Unit.

"It is a mark of respect to make the effort to communicate with any people in their language."

It's a sentiment with which administration assistant Jasmine Rivers agrees.

Jasmine shared how she used the language skills she learned from Merinda when she invited senior Wadjuk Noongar man Barry McGuire into Woodside Plaza in his traditional language.

"He was just so happy, and I was so happy to be able to do that in my own language," she says.

"Knowing that I work in a company that values inclusion and my culture so much means the world to me."

*Awesome speaking



Learn Language

Here are some common Noongar words and phrases that you can start using today.

Kaya (*kai-uh*): hello or yes.

Nganyang kwerl baal (*nguh-nuhng kwerl barl*): my name is...

Boorda (*bawr-duh*): see you later

Wandju (*wuhn-joo*): welcome

Moorditj (*moor-ditch*): good/solid/awesome/strong

Koorda (*kawr-duh*): friend/s

Yorga (*your-guh*): woman

Maaman (*maar-muhn*): man



New gallery draws science fans

A new attraction funded by Woodside at Scitech is quickly proving a hit with its target audience – young children eager to discover more about the world.

While having fun playing with new exhibits and four “hero” pieces, they’re engaging in science, technology, engineering and mathematics (STEM) subjects – without even knowing it.

The gallery is Kaartadjin Koorliny – a 400 sq m space in the West Perth science learning centre.

It aims to encourage learning through collective discovery and open exploration which challenges critical thinking and emphasises the dynamic and collaborative aspects of knowledge.

Although Woodside has supported Scitech for around 20 years, Kaartadjin Koorliny represents our first physical presence at the centre.

Its opening in April attracted a large crowd.

More than 150 Woodsiders and their families attended, including Jacky Connolly, vice president People and Global Capability, who spoke at the event.

“Woodside and Scitech fit well together,” Jacky said.

“We both share a commitment to supporting young people as they grow to reach their full potential.

“And we both hope to inspire that same sense of passion for STEM in the hearts and minds of young people.”

Kaartadjin Koorliny is testament to this passion. In 2017, a group of Woodsiders keen to share their enthusiasm for STEM helped shape this new gallery.

It was one of them, reservoir engineer Luke Vlasich, who suggested that the Noongar word Kaartadjin (which means knowledge), be incorporated in its name.

The result is Kaartadjin Koorliny, which translates as “learning is always moving”.

Scitech’s chief executive officer Deb Hancock says Kaartadjin Koorliny encourages learning through collaborative discovery and open exploration.

“It’s where physical meets digital, the virtual meets the actual, and where the imagination can spring to life,” Deb says.

“The interactive spaces stimulate imagination, fuel critical thinking and inspire confidence to tackle complex challenges.

“Without the support of Woodside, this amazing gallery wouldn’t have been possible and we are grateful for the wonderful ongoing support and investment into our community.”

Woodside has supported Scitech to deliver many inspiring and engaging STEM programs, such as a free program that provides WA primary schools with an opportunity to encourage students to actively engage with science (Woodside Scitech Science Awards).



Fun and games: Youngsters enjoying the attractions at Scitech’s new gallery, Kaartadjin Koorliny, which is funded by Woodside and which aims to stimulate interest in science, technology, engineering and mathematics (STEM) subjects. Right, Samantha Rowe MLC, Parliamentary Secretary to the State Minister for Education and Training, with People and Global Capability vice president Jacky Connolly and Scitech chief executive officer Deb Hancock at Kaartadjin Koorliny’s opening in May.



Woodside also supports gifted and talented WA students to follow their interest in science into high school (the Gifted and Talented Program), as well as offering interactive science workshops beyond the classroom, during school holidays and after school (Science After School Program).

Jacky noted: “Through these partnerships, we are collectively working together to help give children the critical skills to become problem solvers, critical thinkers and leaders — traits which are useful throughout a person’s entire life.”

Senior corporate affairs adviser Cher Gibellini points to the company’s involvement with Scitech in establishing the gallery and the other programs creating a very positive influence.

Cher explains: “For example, our involvement has helped to encourage the establishment of a reconciliation action plan, while our desire to involve girls in STEM subjects has helped convince Scitech to develop a girls in STEM strategy and a gender diversity strategy.”



This is where Woodsiders discover a little bit more about their colleagues – and what they’ve been getting up to outside work hours. Think of it as Trunkline’s version of the water cooler.

Because whether it’s satisfying a passion for a sport, an unusual hobby or doing good deeds in the community, Woodside’s employees and contractors tend to live life to the full. As a result, they often have interesting stories or experiences to recount.

If that sounds like you or a colleague and you think it should be shared with the Woodside community, give us a call or drop us a line.

Crowned a **winner**

Stacey Loveridge visited Crown Resort one Saturday night in May and came away a winner.

But it had nothing to do with gambling. The digital solutions administration



assistant was one of the nine finalists in the Miss NAIDOC competition and she took home the title Miss Photogenic 2018.

Stacey says: “I didn’t really expect it and when the winner was announced, it took some time before I actually realised, ‘That’s my name!’”

Stacey was chosen Miss Photogenic by the program’s photographer whose criteria was a beautiful person inside as well as an individual who photographed beautifully.

She says she was thrilled and surprised to win, as were her mother Lee and sister Emily. Both were in the audience,

and so were a number of her friends and Woodside colleagues.

Originally from Moora and previously a childcare worker, Stacey joined Woodside late last year after completing the Indigenous Business Administration Traineeship program.

“It’s been amazing – very fast paced and no two days are the same,” she says.

As a NAIDOC winner, Stacey is expected to be a role model for other young Indigenous people and she’s already undertaken numerous public engagements, including Woodside-organised events.

Sailing marathon

Completing the 2018 Melbourne to Osaka yacht race was the culmination of a long journey for marine pilot/loading master David Kenny and his co-skipper Paul Schulz.

The duo’s yacht was not only the first WA boat to complete the Melbourne Osaka Cup non-stop, but also the smallest vessel in the race’s history to undertake the voyage.

“Three years of concerted effort following 20 years of dreaming,” is how Dave describes the effort.

“Similarly, the voyage itself really was an exercise in perseverance when dealing with onboard faults and damage as well as patience with the weather and each other.”

The Melbourne Osaka Cup is indeed a marathon, of about 5500 nautical miles (equivalent to nearly nine Sydney to Hobarts), and is known as a yachtsman’s Mt Everest.

During the course of its 30-year history, only 350 individuals have completed this

unique longitudinal transoceanic voyage.

Dave’s vessel of choice was a Jeanneau Sun Fast 3200, named The Edge. It is a yacht specifically designed for doublehanded ocean racing.

The Edge was further modified for this extreme endurance event, with Okha chief engineers Andrew Singleton and Jim Saint working hard to ensure The

Edge was mechanically fit to make the arduous journey.

In all, 16 yachts crossed the finish line in this year’s event with The Edge crossing in a very creditable sixth place.

“It was a marvellous experience and in no small part made possible by the port operations team who covered my absence so I could compete,” Dave says.



Play time



Shivas Lindsay switched from senior safety risk engineer to sword-fighting Scottish nobleman when he joined the cast of a recent Perth theatre production of Macbeth.

Scotsman Shivas (an old Scottish name) was approached by the director associated with the community theatre group GRADS to bring some vocal authenticity to the famous Shakespeare tragedy that's known in theatrical circles as "the Scottish play" because legend has it that it's bad luck to say the word "Macbeth".

He played Angus, a Scottish thane or nobleman, in what was his first acting role since a school play.

GRADS was started as an artistic outlet for graduates from the University of WA, and the company performed Macbeth in June at the university's 198-seat Dolphin Theatre.

"It was fascinating watching actors take words and have a discussion on how to deliver them and turn them into something else," Shivas says.

Indeed, the whole business of putting the play together was an eye opener.

"Everybody has a role to play and the director is like a project manager bringing all the parts together."

Macbeth ran for five shows and received glowing reviews including a mention for Shivas pulling in the first laugh in an otherwise bleak story.

A lot of Shivas' work colleagues took the opportunity to see him on stage.

The director adapted the script so Angus delivered more lines than Shakespeare had intended.

"I was telling my friends it wasn't a big role but in fact I ended up on stage a lot and had a decent-sized part," says Shivas, whose eight-year-old son Alexander (pictured with his dad) was in the audience.

He readily confesses to first night nerves and made a beginner's mistake of entering the stage a scene too early. Happily, no-one in the audience seemed to notice, he reports.

And now he's got the taste for acting, he's considering treading the boards again.

Woodsiders in WSJ

Two Woodsiders made a surprise appearance in the pages of one of the world's most prestigious newspapers, The Wall Street Journal (WSJ) in June. And in doing so, they helped promote the company internationally as an enthusiastic supporter of powerful new technologies.

Neil Maxfield, general manager project capability, and Caitlin Bushell, graduate process engineer, were featured in an IBM advertisement extolling the virtues of Watson in the WSJ.

The advertisement refers to the valuable experience of senior employees being passed to the next generation of Woodsiders.

It quotes Neil as saying: "When I retire, how do I make sure my knowledge is retained?"

Watson, of course, is the IBM-developed research assistant which uses Artificial Intelligence to answer Woodsiders' questions.

As a manager in Projects, Neil is both a user and custodian of Watson.

Caitlin spent six months in 2015 collecting data and working with IBM and experienced projects leaders and engineers across the business to "train" Watson to understand the language we use at Woodside.

She says she was happy to appear in IBM's marketing campaign when she was approached, and in the advertisement she states: "Watson retains expert knowledge and helps me find answers straight away."

"I think Watson is important because it changes the way we work, and enables us to be more productive in our jobs," she says.

"It means we can spend less time searching for information, and more time reviewing all the information available and making informed decisions."

Caitlin says she has been jokingly asked for her autograph by colleagues.



Record run

Stakeholder and engagement adviser Madeleine Long and husband Mark Cusworth raised a mammoth sum of more than \$20,000 for Muscular Dystrophy WA (MDWA) in this year's HBF Run for a Reason.

Maddy and Mark were awarded the top individual and top team fundraiser, which resulted in an extra \$2000 in prize money added to the amount they had raised themselves.

The fund-raising feat came almost 12 months to the day the couple's son, Koen, was born after a difficult final month of pregnancy.

Koen suffered myotubular myopathy – a very rare neuromuscular condition that presents once in every 50,000 births. It meant he had reduced muscle tone and suffered respiratory distress, and Koen died 12 days after he was born.

"It was utterly heartbreaking to lose our baby boy and on what would have been his first birthday (25 May) we wanted to raise some money for other kids with

rare genetic diseases, specifically for MDWA which supports families and individuals affected by neuromuscular conditions," says Maddy.

"We've been overwhelmed with the support we've received, and are so glad to know Koen's memory will support other kids with neuromuscular conditions."



Martin's a time watcher

When Martin Anderson proposed to his wife-to-be, he bought her an engagement ring and got a watch in return.

It was a pretty special watch, complete with a watch-winder box which keeps it perpetually wound up.

That was 15 years ago and his engagement present jump-started an emerging interest in collecting watches into what has become a full-blown hobby.

"I might not buy a watch for a year but the other Christmas I bought four in a week," says Martin, principal adviser human factors.

"So I try not to go shopping now."

Martin reckons he owns enough timepieces to put a different one on his wrist every week of the year.

Each is special, each has its own story.

Some are irreplaceable, some virtually

antiques that provide an illustration of how fashion in men's watches has changed over the years.

Some boast the latest technology like the Seiko with a bezel that doubles as a GPS satellite sensor.

It adjusts the time so it's always exactly right – wherever Martin might be in the world. Oh, and twice a day it checks to ensure its two hands line exactly with the markers. If not, they self-adjust.

But though they're very different, many watches he owns share the same birthplace: Switzerland.

Why Swiss? Indeed, why collect watches at all and not, say, coins or stamps or artwork?

"It's the history, the hand-made aspect and the tradition," is Martin's reply.

"Plus, Swiss manufacturers have good quality control so you know what you're getting.

"Also, it's like artwork that I can look at frequently and appreciate the fine details.

"I can take it out of the house with me. You can't do that with a painting."



“Every time I go to Hearson’s Cove, it looks different, and at this time of the year, clouds play a beautiful role in the photos,” says Claro Calingasan. Claro is a frequent visitor to the cove, situated

close to the Karratha Gas Plant where he’s an operations technician. A long-time photography enthusiast, he took this shot with a Canon EOS 5D Mk III on a manual setting.





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