



The Chamber is a proud supporter and member of the PNG Extractive Industry Transparency Initiative Multi-stakeholder Group

Vol 5 Issue 3 & 4
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Q&A with former Chamber Executive Director
Greg Anderson
P3



MPs briefed on the PNG resource industry
P5



Frieda River project prepares for development
P19

Greg Anderson

An industry stalwart farewelled



The founding Executive Director of the PNG Chamber of Mines and Petroleum Mr Greg Anderson was farewelled recently in Port Moresby after clocking over 28 years with the organisation.

Mr Anderson's retirement from active duty also brings to a close almost 42 years of dedication and contribution towards to the mining and petroleum industry of PNG since he first arrived in the country in 1975, few months prior to PNG gaining Independence.

Mr Anderson's illustrious career began as an Engineering Geologist when he moved to PNG to work with the then PNG Geological Survey. *More about his career on Page 2*

However it was not until 1989 when the Chamber was initially created that Mr Anderson, decided to join the organisation and develop it into a well-respected industry body.

Attending his farewell party were members of the Chamber Council including the President Mr Gereia Aopi, Se-

nior Vice President Mr Peter Aitsi and Vice President Mr Richard Kassman, Chamber members, representatives from the different resource companies, his colleagues, friends and family.

"His dedication to develop the Chamber into one that stands tall among other reputable organisations in the country must be commended," Mr Aopi said.

"Greg ranks highly in this category as someone who has dedicated almost his entire life to the Chamber, the resource industry and the country he so dearly loved, Papua New Guinea. Greg, I'm sure you have achieved quite a lot over those years but the Chamber and as a matter of fact, the country will always value your tremendous contributions, not only within the resource sectors, but also in areas you are passionate about such as education, health and community development. PNG's world-class resource industry is what it is today because of people like you," he added.

• Continued on page 2

- From page 1

Brief bio about Greg Anderson

He has had an illustrious career spanning more than three decades in the mining and petroleum industry. A significant part of his career was devoted to Papua New Guinea.

Before re-locating to PNG in 1975, Greg was employed as an Engineering Geologist with the Bureau of Mineral Resources, Geology and Geophysics in Canberra, Australia.

He later joined the PNG Geological Survey as Engineering Geologist in 1975, few months before PNG gained Independence.

In 1979, he later became PNG's Senior Geologist, a role he held until 1983. In this position, he was responsible for the supervision and direction of the Engineering Geology and Hydrogeology in Papua New Guinea. This section in the Geological Survey of PNG was the only organisation in PNG offering geo-technical services throughout PNG for other Government Departments, Provincial Governments, statutory bodies and the private sector.

Between 1983 and 1985, he served as the Principal Engineering Geologist with the Geological Survey of PNG and then from 1985 to 1989 he was appointed the Chief Government Geologist responsible for the overall administration, management and co-ordination of the Geological Survey Division of the Department of Minerals and Energy.

In 1989, Greg was appointed to the position of Executive Director of the newly established PNG Chamber of Mines and Petroleum, a position he occupied for over 28 years until his formal retirement in May 26th 2017. During this period, he was responsible for developing the Chamber into a peak industry body which has had a major input into legislation and policy formulation and changes that affects the industry in PNG.

During his years at the Chamber, he has passionately contributed to other areas as well such as in education where he has helped several tertiary institutions like UPNG and Unitech to foster academic growth and student learning.

He was also instrumental in the fight against HIV/AIDS when he championed the industry's response to HIV/AIDS by helping to establish the Private Sector HIV/AIDS Project which is now Business Coalition Against HIV/AIDS or BAHA.



Q&A with Greg Anderson

When you first arrived in PNG in 1975, did you think you were going to be in the country for 42 years?

It never occurred to me that I was going to be here for all these years as I originally came to PNG for a two-year term. But PNG was fascinating, the work I was doing here was exciting and the people were spectacular. All is now history.

What was your experience like working in rural areas of the PNG before you joined the Chamber in 1989?

I have worked in every province in PNG and I've seen some really beautiful things in this country. It's said many times but the tourism potential here is just enormous. There are some worldclass sceneries in PNG which include the Hindenburg Wall (Western Province), the Bever Falls (Southern Highlands), and the Huon Terraces along the Finschafen Coast (in Morobe Province) which people hardly hear about.

What were some of the challenges you faced when you first joined the newly-established Chamber?

The organisation was 'brand new' so I was able to put in some of my own ideas. But it was a challenge as we had absolutely nothing. The (Chamber) office was at 6-Mile (in Port Moresby at the back of Granville Motel) and it had just two support staff. That time we had less than 100 members but over the years, the membership has grown significantly and the organisation has grown big as well.

What was the Government's reaction to the establishment of the PNG Chamber of Mines and Petroleum?

Government was very supportive because the creation of the Chamber meant there would now be a common voice for the industry instead of individual companies approaching the Government.

What were some of the immediate goals for the newly-established Chamber when you joined and have the Chamber achieved

those goals?

When the Chamber was created, we wanted to grow and promote the resource industry in PNG. That was the underlying goal. We also wanted to make sure the industry was healthy by having reputable players that had good international standards. That has always been my vision and we have achieved that.

What were some of the main successes you had as CEO of the Chamber?

The Chamber has been able to build a wonderful record of conferences and publications. We were the trailblazers for hosting overseas investment conferences and promoting Papua New Guinea. I am also very proud of the team that I've built at the Chamber. They are multi-skilled and talented and will be working very well with the new executive director Professor Albert Mellam. I know the Chamber will go a very long way under the stewardship of Prof. Mellam.

Where would you like to see the Chamber in the next 10 to 20 years?

The Chamber is a small organisation with a lot of responsibility. The main thing is to keep it highly professional, well-organised, disciplined and have some strategic goals in place. Maintaining the conferences, the workshops, and the strategic sessions for our members and the industry are important to drive the industry forward. Maintaining a close relationship with the Government and the many stakeholders that the Chamber has is also important. The large goals of supporting the projects and maintaining a vibrant exploration industry underscores the future of the industry.

What are your views on the current changes to legislations?

There are disagreements to the Mining Act review and that is something I hope can be sorted out very soon. I must say I am a little disappointed because I've seen PNG's achievements from 2003 to 2012 when commodity prices were strong. The country benefit-

ed significantly because we had a consistent taxation and regulatory regime which were not changed even though things were buoyant. PNG kept everything stable and the results spoke for itself. We got two mining projects (Ramu Nickel and Hidden Valley) and we delivered the Solwara 1 Project and of course the LNG project.

What are your views about PNG's LNG sector?

PNG has huge potential and I'm convinced that despite the challenges we have at the moment with legislation and taxation changes, we will get further LNG developments whether it be an expansion to the current PNG LNG project or another stand-alone project. The record and the reputation that PNG has established from the PNG LNG project is immense. Because the project was delivered successfully on time and now producing well above its nameplate capacity of 6.9mtpa, that has put us well and truly on the world stage as a significant LNG player. It's going to be tough in future for LNG markets but PNG is very well positioned competitively to be on the forefront of the next round of LNG projects.

What will you miss most about the Chamber?

I very much enjoy the friendship and the excitement of the mining and petroleum industry. Nothings ever consistent. You come to the office and you think you can plan out your day and say you've achieved this and that but then something else comes up or things get changed. It's often very difficult to plan our programs because things are always moving. And that the excitement and challenge I'll miss.

Any favourite things you love about PNG?

It's got to be the people. PNG people are very friendly and the country itself is a very nice place to work in. I had many wonderful times myself working in the rural areas of PNG and that will be one of the things I'll really miss.

Greg Anderson's farewell party in pictures



Chamber President Gereia Aopi presenting Mr Anderson a gift while (right) Mr Anderson and wife Crescentia share a moment.



Long-time friend Robin Moaina and Mr Anderson admiring the cakes while (right) Chamber Senior Vice President Peter Aitsi presents Mr Anderson gift.



Former Chamber President and Barrick Niugini's PNG Country Executive Dr Ila Temu presenting Mr Anderson a gift while (right) former colleague and long time friend Bill Searson looks on as Mr Anderson takes a picture of a cake.



The Chamber staff with Mr Anderson. Right: Mrs Anderson and Chamber's Projects Manager Leah Warupi-Morlin share a light moment on stage as Chamber Vice President Richard Kassman looks on. Pictures by Rocky Roe

Chamber briefs MPs on the importance of resource industry



Top: **Members of Parliament, Parliamentary staff and ExxonMobil staff after the tour of the plant.** From left: **Chamber Public Relations and Communications Manager Mr Mackhenly Kaiok speaking to Wabag MP Dr Lino Tom at the Chamber booth at the Parliament House; Chamber Vice President Mr Richard Kassman speaking to the MPs at the PNG LNG Plant site; and EMPNG Managing Director, and Chamber Councillor Mr Andrew Barry briefing the MPs about the PNG LNG Project.** *Pictures courtesy of Loop PNG and ExxonMobil.*

The PNG Chamber of Mines and Petroleum recently conducted a series of briefing sessions for the new Members of Parliament.

The sessions, which included a visit to the PNG LNG plant site outside Port Moresby were part of the National Parliament's Orientation Programme held from August 14-18.

The Chamber was also given an opportunity by the National Parliament to showcase its activities as well as promote the resource industry by setting up an information booth at the Parliament House.

Chamber President Mr Gereia Aopi and Senior Vice President Mr Peter Aitsi also gave presentations to the MPs as part of a panel discussion

session hosted by the Business Council of PNG during the week.

Both Mr Aopi and Mr Aitsi spoke about the economic and social contributions of the industry as well as some of the issues the industry was facing such as the changes to the Mining Act, the Mineral Resources Authority Act, and the changes to Taxation.

The Chamber's briefing sessions culminated with a tour of the PNG LNG Plant by the MPs on the 17th of August.

At the plant site, ExxonMobil PNG Managing Director Mr Andrew Barry provided an overview of the project while EMPNG National Content Manager Susil Nelson spoke about

the significant contribution of the project to PNG.

The MPs were then taken on a tour of the plant where they visited the two LNG trains and the plant's marine terminal where they saw firsthand the LNG cargo being loaded to a vessel.

The MPs also had an opportunity to speak to some of the Papua New Guinean employees during lunch.

Speaking on behalf of the 34 MPs that visited the plant site, first-time MP and Member for Madang, Honourable Bryan Kramer thanked the Chamber and ExxonMobil PNG for giving them an opportunity to visit the plant.

Chamber calls on MPs to be mindful policy changes and their impacts



Chamber Senior Vice President Peter Aitsi speaking to the MPs during a briefing session organised by the PNG Business Council as part of the week-long National Parliament Orientation Program.

Members of Parliament are being challenged to be mindful of the impacts any changes to PNG's fiscal and regulatory regime would have on the economy of the country.

This was some of the remarks made by Senior Vice President of the PNG Chamber of Mines and Petroleum Peter Aitsi during an orientation program for the MPs in August.

While providing the MPs an overview of the industry's economic contributions, Mr Aitsi said it is essential that MPs understand the implications the changes to legal, fiscal and regulatory regime will have on the industry.

Mr Aitsi made that statement during the PNG Business Council briefing sessions held during the orientation program hosted by the National Parliament.

"As we think about our economy, one important point to remember is that PNG by global standards is a small and open economy," he said.

"Our economy is heavily dependent on revenues generated by the resource sectors which enables the government to meet the cost of delivering essential public services

such as education, health, and law and order."

He said according to the Department of Treasury, revenue from the mineral sector alone dropped markedly between 2012 and 2014.

"Given our small, open economy, our nation is prone to being impacted whenever there is a global downturn in commodity prices or economic shocks. As per the information from the Department of Treasury, in 2014 the mineral sector contributed just under 10% of government revenues through Salary and Wages Tax, and Company Tax."

"It is also important to note that PNG's number one source of revenue is Personal Income Tax, representing around 25% of our annual total revenue," he said.

"PNG is a small and open economy that is heavily dependent on its resource revenues. The challenge to all of us is how we can grow our resource industry. We need to support the growth of the industry in order to generate further revenues that can be channeled to stimulate other sectors such as agriculture, tourism and manufacturing which in turn will help create more jobs."

"In order for us to do this, we need to retain PNG's status as an attractive investment destination. This can only be done if we have stable and equitable fiscal and regulatory framework," Mr Aitsi said.

"Wafi Golpu, in its first stage will be a 27 year life mine. If Newcrest Mining and Harmony Gold do their jobs well, this mine life can be further extended. This is the challenge for all of us, you as new Members of Parliament and we as members of the industry on how best we can work together in order for us to grow this industry."

"How best can we work together to ensure the benefits of our resources are properly managed and are better directed to stimulate the broad economic growth that is going to be needed for us to provide a better future for our children," he said.

Resource industry - a major contributor to PNG's economy

The economic and social contributions of the mining and petroleum industry to Papua New Guinea are immense.

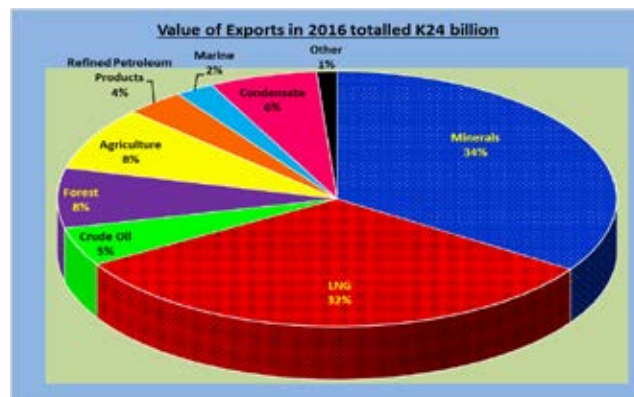
President of the PNG Chamber of Mines and Petroleum Gereia Aopi made this remark while briefing Members of Parliament during an orientation program organised by the National Parliament.

"PNG's economy is highly reliant on the resources industry - more so than many other resource jurisdictions," Mr Aopi said.

"The resource sectors make a significant direct and indirect contribution to the country which benefits all Papua New Guineans. The resources sector contributed over 26% of PNG's GDP and around 84% of the nation's export revenue valued at K24 billion in 2016."

He added that in terms of employment, the industry was a leader employing directly over 20,000 people of which many more are employed in sectors associated with the industry including landowner businesses.

"Resource development brings with it key infrastructure and contributes to a wide range of community development programmes in host communities and provinces. This includes health, education, law and order, and agriculture infrastructure as well as numerous health care and medical outreach programmes, scholarships and student support, agriculture outreach, and law and justice programmes," he said.



Value of Exports in 2016



The bridge built by Ramu NiCo mine connecting Usino and Bundi in Madang Province.

Stable fiscal and regulatory policies needed

The resource industry will return to its traditional role as a strong contributor to PNG's economic prosperity once commodity prices increase again.

However, continued growth and development in the sectors will depend on continuation of supportive government policies and an attractive stable, internationally competitive legal, fiscal and regulatory regime.

Chamber President Gereia Aopi told Members of Parliament in August during the orientation program that stable and effective fiscal and regulatory policies in the past have underwritten the success of the resource sectors in PNG.

"When commodity prices were

strong, the PNG mining and petroleum industry contributed over one third of government tax revenue. The industry paid K12,570 million in corporate tax, K1,537 million in dividends, K1,658 million in royalties and K542 million in the tax credit scheme (equivalent to tax paid) to the National Government from 2005 - 2012. This totaled K16.31 billion, an average of over K2 billion a year," Mr Aopi said.

However, he said currently resource sectors globally are being impacted by the downturn in commodity prices and this was having an impact on the PNG resource industry.

"Major commodity prices have fallen dramatically and expenditure on exploration and development has significantly reduced. This has

been reflected in declining resource taxes and government budgets," he added.

"The resource sectors are facing a range of revised legislation as well as major taxation changes that have already been implemented. The final outcome of the review of the Mining Act and the Mineral Resources Authority Act will be critical to future investment in mineral exploration and development. This process has already created a great deal of uncertainty in the minerals sector.

"The remainder of 2017 and 2018 will be a very difficult period for PNG economically and close co-operation and partnership between government and industry will be more important than ever," he said.

Community Affairs workshop a major success



A community affairs and business development workshop was recently held in Port Moresby for community affairs practitioners, mining and petroleum companies, community-based organisations and landowner businesses.

The two-day workshop held from August 15-16 was attended by 145 participants which included various Government agencies and departments such as the Mineral Resources Authority (MRA), the Department of Petroleum and Energy, Department of Treasury, Department of Commerce and Industry, Investment Promotion Authority, and the Conservation and Environment Protection Authority.

Organised and facilitated by the PNG Chamber of Mines and Petroleum, the workshop covered topics on *Mining and Petroleum project agreements - Implementation and Review, Case Studies on Community Affairs Issues, the Role of External Observers in Progressing the Role of External Observers or Facilitators in Progressing Community Issues, Resources Industry Community Relations Manual, Landowner Investment Trusts, Managing Landowner Businesses and Associations in a Low Commodity Price Environment, and Community Business Development Planning for Proposed Projects.*

The workshop's theme was 'Improving

and Maintaining Stakeholder Relations for Sustainable Projects, Communities and Businesses'.

Chamber Executive Director Dr. Albert Mellam said during his opening remarks that the Chamber was committed to providing such avenues for the industry to exchange ideas and learn from each other's best practices.

'The Chamber is committed to actively organising and facilitating workshops and conferences to bring qualified people from the mining and petroleum industry together to share their experiences and discuss new issues and ideas affecting their operations,' Dr. Mellam said.

'We want all of you to know that regardless of the size and nature of your operations, our mission is to facilitate such events to bring you all together.'

Some of the key presentations that were given during the workshop included an *Update on the Revised Mining Project Memorandum of Agreements* by MRA Managing Director Philip Samar; *Transition of the Oil Projects to Designated Gas Projects and Implementation of the Landowner Benefits Sharing Agreements* by DPE Acting Secretary Kepsey Puiye; *PNG LNG Plant Site Benefits Sharing Agreement Implementation* by Mineral

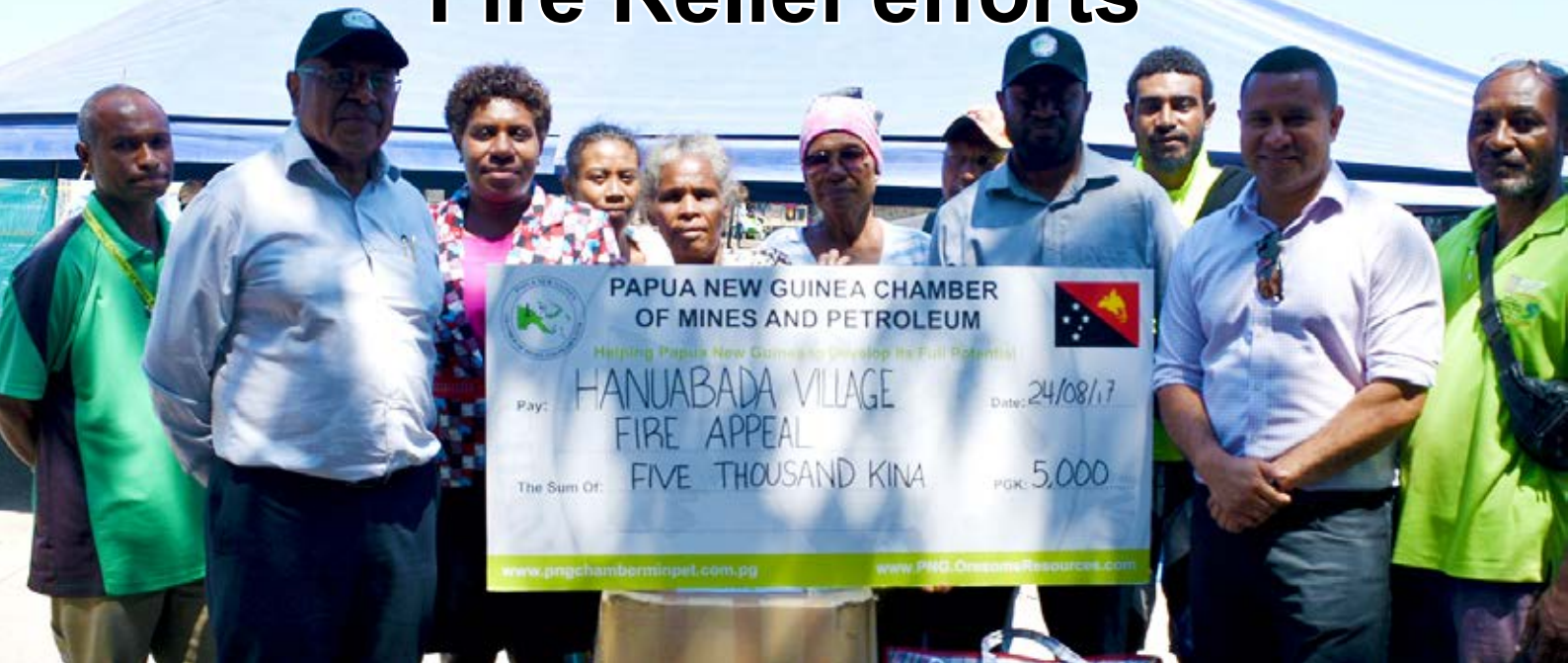
Resources Development Company General Manager External Affairs and Sustainable Development, Imbi Tagune; *Ok Tedi Mining Ltd's Benefits Sharing and Distribution* by the company's Community Relations Manager Kuam Sanewai; *Porgera Joint Venture Law and Justice Initiative* by Ila Geno, an Independent Consultant working on that project; and a panel discussion on the topic of '*A Proposed Constitution for LO Businesses in PNG Resource Projects*'.

The workshop also heard presentations from some of the successful landowner businesses and investments such as the Mineral Resources Star Mountains, Laba Holdings Ltd, and the Ok Tedi Landowner Royalty Investment Trust.

One of the major outcomes of the workshop was the proposal by the Chamber for the establishment of the Community Affairs Committee which will be made up of community affairs practitioners and representatives from other private and government agencies and hosted by the Chamber.

The proposal, which received the support of the MRA and other companies, will see the establishment of this committee who will develop the industry's positions on community issues that are affecting projects and their beneficiaries.

Chamber donates to Hanuabada Fire Relief efforts



PNG Chamber of Mines and Petroleum Executive Director Dr Albert Mellam (second from left) with Chamber staff handing over the donations to some of the families including relief committee coordinator Dadi Toka Jnr (right).

The PNG Chamber of Mines and Petroleum donated K5,000 to the Hanuabada Village Fire Appeal to assist those families affected recover from the fire disaster that has left more than 200 people homeless when fire destroyed their houses on the 19th and 22nd of August.

The first fire incident which happened on the afternoon of 19th August saw 15 houses burnt down while the second incident which happened in the early hours of 22nd August claimed three more houses.

The Chamber staff, led by Executive Director Dr Albert Mellam visited the families and made the

donation which included clothing, cooking utensils and kids toys donated by the staff.

On hand to receive the donations was coordinator of the appeal Mr Dadi Toka Jnr and some of the families.


Speaking during the donation, Dr Mellam said the Chamber hoped the assistance would help those families rebuild their lives.

“Port Moresby is what it is today because of the generosity of the people of Hanuabada and the other Motu Koitabuan villages who gave their land for the city to be built. The

Chamber, like other organisations operating out of Port Moresby is grateful for that,” Dr Mellam said.


“Houses are important to us all. Losing your home to fire is something most families wouldn’t want happening because it causes a lot of stress and distraught, especially for children and the elderly. The Chamber felt compelled to help in what little we can so that the affected families can quickly rebuild their lives,” he added.

The Chamber is appealing to other business houses in Port Moresby to help the Hanuabada families recover from the incident.




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Annual gold output hits a record 940,000 ounces at Lihir



The Lihir operation in the New Ireland Province.

Lihir gold produced a record 940,000 ounces of gold in the year ended 30 June 2017, up from 900,000 ounces in 2016, with 'All In Sustaining Costs' (AISC) rising to US\$858 an ounce from US\$830 in 2016.

In its annual results for 2016-17, Newcrest Ltd said export revenue from Lihir totaled US\$1,181 in the year to June compared with US\$1,035 the previous year.

Lihir, which is fully owned by Newcrest, expects gold production in the current year to total between 880,000 ounces and 980,000 ounces.

It said Lihir's record production was mainly due to an 8% increase in mill throughput and a 5% increase in gold recovery, which was partially offset by a 7% decrease in gold head grade.

It said: "The sustainable mill throughput rate target of 13 million tonnes per annum by the end of December 2016 was achieved in the current period, demonstrating the availability, utilisation and rate

improvements achieved through Edge initiatives.

"The 8% higher mill throughput was achieved with no increase in cost of sales (exclusive of depreciation), resulting in lower cash operating costs per tonne relative to the prior period.

"Revenue for the current period was 14% higher than the prior period, reflecting increased production and an 8% increase in the average realised gold price."

The report said the higher AISC per ounce reflected the lower head grade and an increase in sustaining capital expenditure and production stripping.

Newcrest is planning to hit a throughput rate of 14 million tonnes annually by December. Studies are underway to increase this further with an "aspirational target" of 17 million tonnes annually.

Lihir produced 434,000 ounces of gold in the first half of 2016-17 with a total production cost of US\$913

per ounce but lifted this to a record 506,000 ounces produced at US\$810 an ounce. Comparable figures for the previous year were 431,000 ounces and 469,000 ounces produced at US\$890 and US\$779 an ounce. In June this year, the mine had 2,362 employees and 3,188 contractors.

The company's operating and financial review also noted that the PNG Government "has undertaken a broad review of mining laws and its taxation regime.

"In addition to the risk of an increased tax cost to the Group's operations, potential reforms from these reviews may include changes to the level and manner of local equity participation in projects and the introduction of additional retrospective reporting and compliance requirements which may increase operating costs.

"There is also the risk of changes to foreign exchange controls and/or laws or regulations pertaining to the holding of cash offshore and remittance of profits and capital to the parent company."

Turning waste into gold



An aerial view of the Cyclone Tower at the Lihir mine, New Ireland Province. Insert: Newcrest Lihir's Engineering Projects Development department Andrew Moulds with Downer Construction Supervisor Richard Kuaru inspecting work at the top of the Cyclone tower. Pictures courtesy of Newcrest Mining

Newcrest-Lihir has successfully completed the installation of its Float Tails Leach Phase 2 Project cyclone tower and associated pipework to recover cyanide soluble gold from the flotation Grade Gold (FGO) and High Grade Gold (HGO 1&2) flotation tails.

This is the first stage in the project. The installation of the Nutec Bickley kiln is the second phase in the project and is currently in construction.

Superintendent-Major Projects Greg Bridge said the Cyclones and Neutralisation, Cyanide and Absorption (NCA1) kiln replacement upgrade projects were costed at a total of US\$19 million.

"Previously, gold was lost through the flotation circuit. With the addition of the two cyclone clusters we reduce our losses and increase our recover rate, subsequently increasing our gold production," Bridge said.

Once commissioned, the cyclone will process flotation tails, separating the fine cyanide soluble gold to the cyclone overflow for leach in the Carbon in Leach (CIL) circuit and utilizing the excess capacity available in the

circuit.

With the addition of the cyclones, coupled with the commissioning of the new kiln, the project is anticipated to provide production benefits worth up to \$27 million per year, a payback of approximately eight (8) months.

Newcrest Lihir's business partner, Downer Construction was contracted to build the cyclone tower over the past six months and it is currently being commissioned. Downer Construction Structural Mechanical and Piping Supervisor Richard Kuaru said constructing the cyclone tower was a positive experience for his team.

"As Papua New Guineans working on the project, the experience has given us great job satisfaction. We are also gaining more experience in building it from the ground up right to its completion stage and we are proud of our work in helping Newcrest in its business improvement projects."

This is a significant milestone in enhancing Lihir's gold production and improving gold recovery from the historic flotation waste stream.

Record Ramu Nickel output generates cash surplus



Ramu NiCo's Basamuk Refinery Plant site.

The Ramu nickel mine in Madang Province has produced a record 9,072 tonnes of nickel and 869 tonnes of cobalt in the June quarter as it targets 2017 output of 32,600 tonnes of nickel in concentrate, up from 22,269 tonnes in 2016.

Nickel and cobalt output in the June quarter was well above plant design capacity, Highlands Pacific said in its June quarterly report.

The report said the project had net cash inflow of US\$51 million during the quarter, taking year to date cash inflow to US\$78 million after capital expenditure of US\$4 million.

It added: "The quarter saw excellent performances across all segments of the operation. Mine production at Kurumbukari exceeded budget, leading to higher rates of slurry transfer to the Basamuk process plant. Slurry nickel and cobalt rates were in line with expectations, averaging 1.1% nickel and 0.11% for cobalt.

"Process plant throughputs reached record levels following planned maintenance work completed on two HPAL in the March quarter, with the third HPAL train scheduled for a 14-day shutdown in the September quarter." The mine is operated by the Metallurgical Corporation of China (MCC). Highlands has an 8.56% interest, which will increase to

11.3% at no cost once project debt is repaid.

Cobalt prices hit US\$60,000/t, Ni US\$9,000/t

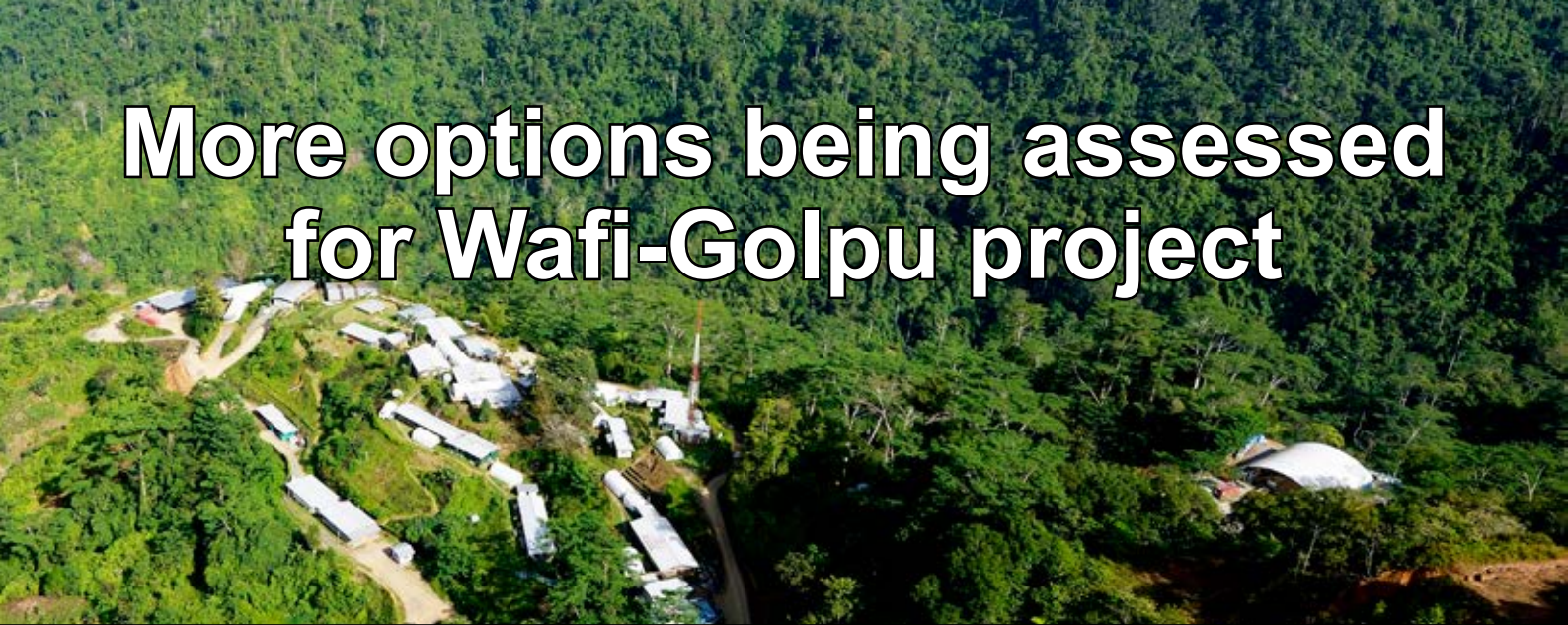
Highlands said the Ramu operation benefitted from strong cobalt prices, which increased to US\$60,000 per tonne in the June quarter, while nickel prices hovered around US\$9,000 per tonne after prices strengthened during the quarter.

"Average revenue received per tonne of nickel sold in the June quarter was approximately US\$10,340, including cobalt credits and net of selling costs and payable charges. Average operating cost per tonne of nickel produced was approximately US\$5,660, generating cash operating margins of approximately US\$4,680 per tonne."

Highlands said it was hopeful that if nickel and cobalt production and prices were sustained to the end of the year it would receive a maiden distribution by the end of the year. Presently, the company's share of net cash inflow is being used to repay its share of operating losses in 2015 and 2016.

"Highlands, the PNG Government and landowners are currently in discussion with MCC concerning an extension to the current debt repayment structure," the report said.

More options being assessed for Wafi-Golpu project



Newcrest Ltd has announced plans to update its feasibility study on PNG's Wafi-Golpu copper-gold project in the first quarter of next year.

Directors said in the company's latest annual report that work is currently focusing on internally generated power options and on developing deep sea tailings disposal options to compare with terrestrial tailings storage options.

The deep-sea options study is expected to be completed

in the second quarter of 2018.

The joint venture, made up of Newcrest and South Africa's Harmony Gold, was also reassessing block cave levels and increased mining rates as a result of improved knowledge gained from additional drilling carried out this year.

"Timing of first production is dependent on the updated study outcomes and the granting of a Special Mining Lease," they said.

PanAust and Highlands Pacific look to arbitrator to resolve differences over Frieda River project



Frieda River employees on Day One of the PanAust acquisition of an 80 per cent interest in the Frieda River project. Photo courtesy of PanAust

Highlands Pacific has announced the commencement of arbitration proceedings to resolve a dispute with PanAust over funding of project expenditure at their big Frieda River copper-gold project.

The company's latest quarterly report said the two companies are in dispute over their funding responsibilities under a joint venture agreement, including whether Highlands is due to commence the funding of project expenditures.

"Highlands previously has sought to resolve the dispute

through mediation, however the parties have now agreed to seek a final and binding arbitration before a sole arbitrator. It is expected the arbitration decision will be received before the end of the year," it said.

Under the joint venture agreement Highlands is required to commence funding its 20% share of the Frieda River project on completion of a feasibility study. PanAust is awaiting approval for a Special Mining Lease application it has presented to the Mineral Resource Authority.

Discussions underway with potential

buyers

Meanwhile, Highlands has said that it has commenced a process seeking to maximise the value of its Frieda River asset and has appointed advisers, Cutfield Freeman and Co to investigate opportunities, including a potential sale.

"Interested parties have been engaged in the process and options are being assessed, with a view to finalising the process by the end of the September quarter. This may or may not lead to a transaction being completed," Highlands said.

Anglo American becomes project manager at Star Mountains after spending US\$25 million

Highlands Pacific joint venture with South African giant Anglo American in the Star Mountains has completed its phase one exploration with Anglo American spending US\$25 million and achieving an inferred contained resource of three million tonnes of copper.

Highlands quarterly report said the US\$25 million spending hurdle has led Anglo American to assume the role of project manager.

Successful intercepts included 596m at 0.61% copper and 0.85 g/t gold from 24m depth and 68m at 0.97%

copper and 0.37 g/t gold from 280m downhole.

The goal was attained five years after the original agreement when Anglo American paid Highlands Pacific US\$10 million to farm into the venture.

To increase its 51% equity to 80%, Anglo American will need to complete a bankable feasibility study by 2030. Under the agreement Anglo American has also agreed to provide Highlands Pacific with US\$150 million in project funding as a deferred free carry.



Crater Mountain Gold venture seeks new beginnings

Crater Gold Mining has announced an entitlement offer of 11 shares for every two held by shareholders at an issue price of A1c per share in a bid to raise A\$15 million for renewed activity at its Crater Mountain gold project in Eastern Highlands.

The company also expects to sell its Croydon Project in Queensland for A\$1.2 million.

Alex Molyneux, who will take over as Crater's Chairman if the entitlement issue is successful, said in a letter to shareholders the company already has a proven inferred resource of more than 800,000 ounces of gold.

The resource was open at depth and in various directions at its flagship Crater Mountain project.

"We aim to resume drilling with two rigs on site and quickly ramp up to a drilling rate in excess of 10,000 cumulative linear metres per year. Our goal is a transformational increase in gold resources," he said.

Plans were also being developed to mine the high-grade zone at the Nevera Gold Mine for sustainable gold production that would partly self-fund exploration activities.

Nautilus submits draft environmental plans to CEPA and beefs up its CSR programmes



Namatanai Nursing Officer Richard Watt during a consultation with a family in Kono village – Ward 15. Picture courtesy of Nautilus

Nautilus Minerals has submitted its draft Environmental Monitoring and Management Plans (EMMPs) to PNG's Conservation and Environmental Protection Authority (CEPA).

According to the company's June Quarter's Management Discussion and Analysis, the EMMPs outline specific environmental management and mitigation measures that will be implemented for the operational phase of the Solwara 1 project.

It also stated that CEPA will appoint a consultant to undertake an independent review of the EMMPs prior to their finalisation and approval for implementation.

Meanwhile the company also stated its expenses for its Corporate Social Responsibility programmes in the second quarter increased to US\$500,000 from US\$300,000 in 2016.

"The increased expenditure relates to the completion of a medical patrol for communities in the coastal area of benefit on the west coast of New Ireland during the reporting period," the company said.

This was the first outreach program to be undertaken in conjunction with the New Ireland Provincial Government

under a Public Private Partnership (PPP) agreement on health services.

The patrol consisted of two doctors holding clinics in every village in selected coastal wards in order to generate data on community health. The patrol was an outstanding success with 6,900 local residents consulting the doctor's, with almost 60% of patients receiving treatment for a range of medical conditions. The data collected will now be used plan further outreach programs under the PPP.

Nautilus also said it has completed the first phase of an infrastructure improvement program which will see bridges built in place of wet crossings on the main road on the west coast of New Ireland.

A new bridge for the Pubonom wet crossing was officially opened by New Ireland Governor Sir Julius Chan earlier this year.

The ultimate aim of the program is to provide access to health facilities, to facilitate the delivery of government services and to encourage business development in the region.

Ok Tedi completes investment in Mine Life Extension and announces higher 2016 profit

The big Ok Tedi mine in Western Province has completed its net investment phase for mine life extension with reduced operating costs helping to restore its reputation as “a low cost global copper producer”.

The 2016 annual report of Ok Tedi Mining Ltd said the mine, which operates as a State-Owned Enterprise, had a net profit after tax of K384 million in 2016.

It paid out K150 million in dividends for the year, in addition to royalty and compensation totalling K94 million.

Profitability was restored even though copper prices had fallen 21% since 2014. The mine only operated for ten months last year after the El Nino-induced drought saw the mine and plant suspend operations for ten months from August 2015 to February 2016.

OTML Chairman Sir Moi Avei said it was pleasing that the mine operated profitably despite the fall in copper prices even though an additional K499 million had been invested during the year in the final phase of the mine continuation program.

Sir Moi said the Fly River Provincial Government and the Community Mine Continuation Agreement (CMCA) communities agreed last year that the two entities would collectively hold a 33% interest in

Ok Tedi with the State retaining the balance.

“While not formalised during 2016 this is expected to occur in 2017 and we look forward to welcoming a director representing the community entities,” he said.

Remedial work reduced costs

The annual report said a cost reduction program and remedial work undertaken during the suspension of operations has enabled the company to regain its position as a low cost global copper producer.

OTML Managing Director Peter Graham said replacement of the outer shell of a Semi-Autonomous Grinder, after more than 35 years of continuous service, and refurbishment of the Ok Menga hydro power station took place during the suspension of operations.

He said gross monthly operating costs had fallen 12% in 2014, 20% in 2015 and 18% in 2016.

Operations began with one processing train brought online on 1 March 2016 and the second train commencing operations on March 31. OTML produced 321,000 tonnes of copper concentrate for 80,000 tonnes of copper in addition to 218,000 ounces of by-product gold.

The concentrate was exported to

customers in Japan, South Korea, the Philippines, Germany and India as well as spot shipments to other customers.

Better grades, more profit

The average copper grade last year increased to 0.58% copper compared with 0.46% in 2015 and 0.54% in 2014 with the gold grade also improving to 0.73 grams per tonne compared with 0.64 g/t in 2015 and 0.68 g/t in 2014.

The 2016 after tax profit of K384 million offset a loss of K347 million in 2015 and exceeded the K340 million profit generated in 2014.

Cash generation of K338 million enabled debt repayment of K195 million at the end of 2015 with net debt eliminated in October 2016 and a cash balance of K179 million achieved at the end of 2016.

OTML's gross operating cost in 2016 was K1,250 million (US\$395 million). This represented an average of K117 million (US\$37 million) per month of operation, excluding the K66 million (US\$21 million) of dry weather costs incurred in January and February 2016.

“This was 18% lower than 2014 in Kina terms, despite the strengthening of the US dollar. In US dollar terms, the gross operating cost in 2016 was 33% lower than in 2014,” the report said.



Environmental impacts at Ok Tedi to come under greater public scrutiny

Reuben Lapin, OTML's Manager for Bige Operations and Kenneth Foster, Bige Rehabilitation officer inspecting Bige revegetation.

Ok Tedi Mining Ltd and the National Government this year will formalise a new Environmental Permit that will require increased monitoring and reporting on environmental impacts and success of mitigation strategies.

Announcing this in its 2016 annual report, OTML noted that Ok Tedi was the only large copper mine globally that separates sulphides from tailings prior to the discharge of tailings.

OTML Chairman Sir Moi Avei said Ok Tedi's environmental programs continue to focus on managing mine waste and tailings that impact nearby creeks, eventually flowing into the Ok Tedi and then the Fly River.

The report said: "Over the past 20 years, a range of initiatives have been implemented to mitigate these effects and the results continue

to be positive. Dredging at Bige represents more than 10% to the Company's annual operating cost and involves the removal of a large portion of the sediment flowing down the Ok Tedi River.

"The dredged material is stored in engineered stockpiles adjacent to the river. The potential for acid rock drainage is mitigated by the addition of acid-neutralising limestone to the materials going into the river from the mine and processing plant, and the operation of a secondary flotation plant which was constructed in 2008 at a cost of PGK 1.2 billion.

"This plant removes acid-forming pyrite materials from the tailings, with the pyrite material being transported by pipeline to Bige, where it is stored in engineered structures under water with a non-acid forming cover system.

"The environmental management

and monitoring programs aim to minimise impacts whilst continuing mining and processing operations." The report said that since 1997-98 about 10 million cubic metres of sand has been dredged from the riverbed.

Geochemical sampling has identified that non-acid forming materials tend to deposit at the southern end of the dredge slot, while heavier pyrite material deposits at the northern end, enabling selective dredging and placement of the sand on the stockpiles.

"The stockpile embankments range from about 12 metres (m) to 22 m high with outer overall slopes including swales to reduce surface water runoff velocity. Revegetation trials on the slopes and top have demonstrated that a good primary and secondary vegetation cover can be established," it said.



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Western Province health service rated 4th in the PNG thanks to OTML's help



A villager is carried on a stretcher by health officers involved in the North Fly Health Services Program.

In contrast to media reports and public perception, an annual health performance review by the National Department of Health in 2015 showed that health services in Western Province is ranked 4th out of the 22 provinces and well above the national average.

The OTML annual report for 2016 said company sponsored programs provided significant resources to enable people in the province to access quality health services.

It said: "The Company works closely in partnership with health service providers including the Western Province Provincial Health Department, various church-based providers, NGOs and private health providers.

"The Tabubil hospital is an accredited five-star facility and is managed by Diwai Pharmaceutical Limited, a commercial subsidiary of Divine Word University (DWU). The hospital provides services to the North Fly District and Telefomin commu-

nities.

"The hospital is also used by DWU as a rural health teaching hospital for medical undergraduates. In 2016, OTML funded the operation of the hospital at a cost of K12 million with the FRPG contributing K2.6 million. In 2016, only 25% of the patients treated at the Tabubil hospital were OTML employees."

In addition, OTML has funded the North Fly Health Services Program (NFHSDP) since 2009 and supported development and operations of the Tabubil Urban Clinic and Kiunga hospital.

The clinic undertakes regular health patrols, radio health consultations and completed 25 outreach clinics to remote communities in 2016.

The NFHSDP program supports the Kiunga hospital, which has been recently upgraded through a works program and considerable donations to a four-star facility servicing communities across North Fly but

increasingly from other districts and provinces.

In 2013, a similar program, the Community Mine Continuation Agreement Middle and South Fly Health Program (CMSFHP), commenced with K43 million funding from the CMCA portion of the WPPDTF.

In 2016, both the NHFSDP and CMSFHP were integrated into a single program in order to create greater efficiency, maximise service delivery and reduce overhead costs.

The programs, implemented by Abt Associates, are aligned with the PNG National Health Plan 2011-2020.

Since the implementation of the program, there have been significant improvements in all 16 health indicators across the Western Province.

Frieda River prepares for development

PanAust Managing Director Dr Fred Hess says substantial progress was made last year towards attainment of its Final Investment Decision for the multi-billion kina Frieda River copper-gold project in Sandaun province.

PanAust last year spent US\$34.3 million (K109 million) at Frieda River, inclusive of completion of its feasibility study and submission last December of its Environmental Impact Statement to PNG's Conservation and Environment Protection Authority (CEPA).

The company's 2016 Business Review said these costs included completion of a feasibility study and permitting costs, drilling, exploration access track works, corporate support and site-based activities.

According to the EIS, the project will generate substantial benefits including the creation of 3,720 jobs at the peak of construction and approximately 2,000 direct jobs during the planned 17 years of operation. It estimated the annual income stream at around US\$500 million with a total tax, royalty and production levy to the PNG Government and landowners of over US\$3.5 billion.

Dr Hess said progress last year included completion in May of the feasibility study, followed in June by submission of a Special Mining Lease application.

Consensus reached for nation-building venture

He said: "Chief Mining Warden's hearings were completed in November and the Environmental Impact Statement (EIS) for the Project was lodged in December. The Project has achieved consensus support from all relevant landowning communities as it has progressed through each approval stage completed to date.

"Our intention is to maintain this ongoing support of host communities, including those along the Sepik River, through transparent and

effective stakeholder engagement, targeted community development programs and capacity-building initiatives, commensurate with the level of development. The Frieda River Project has been identified as the potential catalyst for the development of nation-building infrastructure in a least developed part of PNG. As such, it offers the potential to transform the well-being of many people. We look forward to working with our stakeholders in PNG and internationally to realise our vision for the Frieda River Project."

Awareness programs are well attended

PanAust has conducted two Sepik River Awareness Programs in 2015 and 2016 and is currently conducting its third program.

About 55 meetings involving about 80 villages have been held along a 700km stretch of the river. The two previous campaigns were attended by about 14,000 people and aimed at increasing understanding between the project and riverine communities.

The EIS acknowledged the importance of the Frieda and Sepik Rivers for fishing, hunting, drinking, cooking, laundry and bathing and concluded that "the project will not reduce the water quality of the Sepik River".

PanAust is committed to ensuring there is no riverine disposal of waste rock or tailings, which will be contained in a specially constructed Integrated Storage Facility.

The EIS proposes 19 monitoring and management plans to address potential environmental risks during construction, operations and closure," the company said.



Community consultation in Amaromin village which lies near the Frieda River Copper-Gold Project. Picture courtesy of PanAust

Community development, health and education initiatives

During the year PanAust contributed US\$108,000 to community development programs with an additional US\$277,000 spent on the use of helicopters to deliver these programs to Frieda River communities that are inaccessible by road.

It said: "These programs focused on improved health and education services and capacity building. Health assistance was delivered in collaboration with Telefomin District Health and the PNG Baptist Church Health Services, and focused on the seven mine landowning communities.

"Programs included the provision of National Supplementary Immunisation Activities, the delivery of Community Outpatient Clinics, attending to medical emergencies and evacuations and referrals of patients to regional health facilities.

"Support was also provided to Interplast to carry out the first surgical assessments of villagers with conditions potentially rectifiable by plastic and reconstructive surgery.

"Education assistance was delivered in cooperation with Telefomin District Education and the boards of various local schools. Activities included school improvement programs, provision of materials for maintaining and upgrading infrastructure, logistics support to teachers and their families, and school fee assistance for students."



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Twinza eyes K1.7 billion offshore oil development at Pasca



The COSL Seeker jack-up drilling rig which was at the Port Moresby Harbour in September and later moved to the Pasca A drilling site in the Gulf of Papua.

A public unlisted Australian company, Twinza Oil, is expected to drill an appraisal well at its Pasca A prospect in line with plans to build PNG's first offshore oil and gas facility at an estimated cost of up to K1.7 billion (US\$550 million).

With early approval of a petroleum development licence Twinza expects to bring Pasca A into production in June 2018. An application for a PDL was lodged with the Department of Petroleum and Energy in June 2015.

Pasca A, discovered 47 years ago, 265km west of Port Moresby and 85km from Ivo River Delta along the Gulf coastline, is at a relatively shallow water depth of 93m.

It is said to contain a highly productive oil and gas reservoir.

According to an Environmental Impact Statement submitted to PNG's Conservation and Environment Protection Authority (CEPA), the company plans to extract wet gas that can be processed to condensate, liquefied petroleum gas (LPG) and dehydrated gas that will be reinjected into the reservoir for future use.

Twinza envisages the use of a production platform and two Floating Storage and Offtake Vessels (FSOs) for handling of the condensate and LPG.

It expects to produce 19 million bar-

rels of condensate and 20 million barrels of LPG over a field life of 20 years.

Twinza's EIS said "in addition to the purely economic benefits to the national and regional economies from the sale of hydrocarbon products, direct and indirect taxation and royalties the project will also bring other additional benefits to PNG."

This included provision of LPG into the domestic market to replace other liquid fuels such as kerosene, diesel and gasoline as well as positioning PNG as a regional energy exporter.

Oil Search to spend US\$200-300 million a year on PNG exploration



Muruk 1 well in the NW Highlands of PNG. Image courtesy of Oil Search Ltd

The granting of new exploration licences and three successful farm-ins has convinced Oil Search it is now capable of supporting a multi-year, high quality exploration program with an annual appraisal budget of US\$200 million to US\$300 million.

The company's recently released 2016 report said that subject to oil prices Oil Search was planning to drill three to four exploration wells annually.

In the June quarter Oil Search further announced that it has farmed into five onshore exploration licences held by ExxonMobil affiliates, where Oil Search will operate a seismic program.

It said the Muruk well in PPL 402 is an exciting discovery that has validated the company's exploration strategy. Muruk was identified in a seismic survey in 2015 and first drilled in November 2016.

The drilling program at Muruk 1 was concluded in the June quarter with production testing confirming a good quality reservoir with high deliverability, consistent with Toro reservoirs in the Central Fold Belt, according to the company's June quarterly report.

It said a comprehensive appraisal program is being planned with seis-

mic programs over Muruk and adjacent targets scheduled for the fourth quarter of this year. Site preparation for a Muruk appraisal well is expected to commence late this year with drilling in 2018, subject to joint venture approval.

Muruk is located between the Hides and Juha gas fields and is 21km from the nearest PNG LNG Project infrastructure. It could be easily tied-in to existing LNG infrastructure. The Muruk well has upgraded several prospects that are on-trend between Hides and P'nyang and has been found to extend into PDL 9.

Analysis of samples from the well show gas that of similar quality to Juha, with a condensate yield closer to Hides.

"The Muruk discovery," it said, "has significantly reduced the uncertainty of a number of leads and prospects on-trend that have similar attributes to Muruk, including the Karoma prospect in PPL 402.

Gas discovery potential of 4-6tcf occurs near Muruk

"These prospects will be matured further during 2017. We estimate that the gross unrisks mean resource potential of these related prospects is in the range of 4-6 tcf, with drilling targets to be confirmed by seismic in 2017."

Botten told the recent AGM the prospects in the north west were quite exciting with a potential to hold "multiple tcf" that could provide opportunities in future to determine how many LNG trains can be built beyond the two now being planned.

"So Muruk and its follow-up will be a key part of 2017 programs and beyond," he said.

Mr Botten said the P'nyang and Elk-Antelope field in PRL 15 now contained 10 tcf of proven gas which was adequate for construction of two more trains with a resource-size that was larger than the committed reserves at the PNG LNG foundation project.

He said PNG was well placed to capture market opportunities that would open up in the coming decade, including a range of countries in Asia that were planning to commence imports of LNG. These included Pakistan, Vietnam and Cambodia.

The company last year abandoned the unsuccessful Strickland 1 and 2 wells and more recently the Antelope 7 well into the Antelope Deep target showed it had limited reservoir potential and unlikely to be hydrocarbon bearing.

Oil Search announces plans for small-scale gas projects

While Oil Search continues to focus on the next phase of its mega-project LNG expansion, the company has simultaneously commenced work on small scale LNG projects that could supply natural gas to domestic as well as overseas customers.

In his address at the recent Oil Search annual general meeting, Managing Director Peter Botten said the company was currently studying the development prospects “for some of our smaller gas fields that won’t be part of the large LNG project.

“We believe there’s a regional base for customers who want gas, who want to substitute diesel-fired generation with gas-fired generation, and small-scale LNG (0.5 million to 1.5 million tonne).”

Mr Botten said such markets could be found in diverse markets such as Alotau and Madang or in a number of islands in the Pacific, along with large resource projects “that may need energy in a cost-effective way.”

In line with this approach Oil Search plans to conduct further drilling in smaller fields such as Barikewa in PRL 9 (Oil Search 45.1%) and Kimu in PRL 8 (OSH 60.7%) in the latter half of this year.

Oil Search said recently it has identified about 1-2 trillion cubic feet of contingent resource potential in the Gulf and Forelands region, which also includes the shallow water discovery at Uramu in PRL 10. A well is planned 2km north of the Uramu discovery well next year.

Barikewa was discovered in 1957 but the appraisal well 25 years later in 1982 was dry. Oil Search will drill Barikewa 3 in the second half of this year, while the ap-



Map showing potential markets for a smaller scale LNG development for in-country and regional end users. Image courtesy of Oil Search Ltd

praisal well at Kimu is a follow up to a seismic program conducted last year.

Oil Search said small-scale LNG represented “a large focus” for the company and had the potential to be “a nice little earner and a good program to bring cheaper, cost-effective power to a range of communities across the Pacific.”

Horizon-Repsol JV finalise Western Province LNG plan

Horizon Oil and its multinational Spanish JV partner, Repsol, has engaged pre-FEED contractors to finalise assessments of upstream processing, pipelines and floating liquefied natural gas (FLNG) in Western Province by the end of this year.

Horizon Oil Chief Executive Brett Emmett told the Southeast Asia Australia Offshore and Onshore Conference in Singapore on August 17 these studies would pave the way for design work and front-end engineering and design to take place over the next two years with a final investment decision in 2019.

The partners are assessing a 1.5 million tonne a year floating LNG facility to be built on Daru Island in Western Province. The project will involve construction of 520km of gas and condensate pipelines to connect western forelands fields that contain 2-2.5 trillion cubic feet of gas and 60-70 million barrels of condensate.

Emmett said Horizon has equity interests in all fields in the proposed gas aggregation, equivalent to 28% of

the total resource. Repsol owns an additional 41%. All the relevant gas fields are operated either by Repsol or Horizon.

He said the primary focus of the development scheme was on LNG and condensate sales, including gas sales on the domestic PNG market at multiple outlets in addition to sales of liquefied petroleum gas (LPG).

Benefits will flow to landowners, local communities, Western Province and the State, he said.

Horizon believes the LNG sales could target rapidly growing markets in neighbouring Indonesia, countries on the South China Sea Rim (Malaysia, Philippines, Singapore, Thailand and Vietnam) as well as China and India.

“These markets are likely to be undersupplied in the early 2020s,” Emmett said, adding that preliminary project economics appear attractive.

PNG LNG project achieves record monthly output in June 2017



The PNG LNG Project continues to show its upside potential with a new record monthly production figure of 8.65 million tonnes a year recorded in June this year following the compressor upgrades.

Due to scheduled maintenance in May the project operated at an annualised rate of 8.1 million tonnes a year in the second quarter, 3% less than in the first quarter this year.

Although revenue for Oil Search slid 3% to US\$332.5 million in the March quarter, total sales revenue managed to increase by 16% to US\$676.2 million in the half year to June, the company reported.

Because of maintenance shutdowns and timing of shipments, second quarter production was down 4% from 7.57 million barrels oil equivalent in the March quarter to 7.24 million barrels of oil equivalent in June quarter, taking total first half production to 14.81 mmboe (Million Barrels of Oil Equivalent). This was 1% lower than the comparable 2016 half year figure of 14.89 mmboe.

Oil Search said its average realised LNG and gas price was US\$7.93 per million Btu, 7% higher than the March quarter.

However, the average realised oil and condensate price fell by 8% to US\$50.99 a barrel in the June quarter.

New customers keen on extra LNG purchases

The ability of the project to constantly operate well above nameplate capacity has encouraged project operator ExxonMobil to seek customers for additional long-term LNG sales contracts.

In its June quarterly report, Oil Search said “strong interest has been shown from potential customers for the additional volumes being marketed by ExxonMobil on behalf of the PNG LNG Project. Should contracts be secured for the full 1.3 million tonnes a year being offered, this would take total contracted volumes to 7.9 million tonnes annually.”

The Hides F1 well was completed and brought online during the June quarter with good progress made to tie-in the Angore A1 and A2 wells to the existing LNG processing facilities. This is scheduled to be completed by mid-2019.



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Harmony Hidden Valley launches Tutudesk

Harmony Gold's Hidden Valley gold mine launched its 'Tutudesk' initiative at Kaisenik Primary School in Wau and Hompiri Elementary School in Morobe Province on August 22.

The launching saw 1,000 portable Tutudesks distributed to 28 elementary schools in Wau, Bulolo and the Bian-gai and Watut tribes that are landowners to the Hidden Valley mine.

These desks were made in South Africa and are named after Nobel Peace Prize recipient and retired Anglican Bishop Desmond Tutu.

Chairman of Kaisenik Primary School, Samuel Krimbu, thanked Harmony Hidden Valley for the tutudesks stating that it was a step forward to enhancing a child's education.

"Elementary is where children start to learn. The key is the foundation where children must learn and the initiative goes a long way to assisting their education," he said.

Chairman of Hompiri Elementary School, Thomas Nohuwan, said elementary schools have been struggling.

"Who is going to come in and save us? We have to save ourselves. There are times when companies come to our aid, if they have funds available. What Harmony has done shows they appreciate us, appreciate our children. They don't do it to please themselves," he said.

Harmony Hidden Valley General Manager, Gary Davies,



Riverside Elementary 2 school children trying out the tutudesks.

spoke briefly about the Hidden Valley operations and the community projects they did previously in health and education.

"Let's work together for the future of the mine and also the future of the communities," he said.

Mr Davies said Hidden Valley mine had the potential to create a lot of benefits for the landowners, Bulolo District, Morobe Province and the whole of PNG.

Tutudesks offers children their very own workstation creating immediate, high impact and positive change under any learning condition. Made from a robust child-friendly polymers, Tutudesks are designed to last the duration of a learner's school career.

Surgical procedures for 772 Sandaun villagers

Interplast support for Frieda River communities PanAust has collaborated with Interplast in Laos since 2012.

The program provides life-changing surgical treatment to people who would otherwise not be able to afford access to such services.

Since the collaboration commenced, 1,631 people have received consultations, of whom 772 have undergone surgery. Excellent feedback has been received from the people and communities who have benefited from the program.

In 2016, PanAust extended this collaboration to support Interplast through a round of surgical assessments of villagers in communities close to PanAust's Frieda River Copper-Gold Project.

The week-long visit took the Interplast team, along with PanAust Community Affairs personnel, to the villages of Paupe, Wabia, Ok Isai, Oum 3, Iniok, Sokamin, Fiak

and District capital Telefomin.

The team carried out surgical assessments of villagers who presented with conditions relating to plastic and reconstructive surgery, met with community leaders and compiled patient data. A follow-up surgical campaign will be implemented in 2017.

Interplast have been working in PNG since 1985, delivering surgical and training programs in Port Moresby and across the districts in partnership with local hospitals, government and universities.

Interplast Chief Executive Officer Prue Ingram spoke of Interplast's partnership with PanAust.

"Working with PanAust in PNG has enabled Interplast to reach communities it has not previously worked in, and is further extending the reach and impact of its training of medical professionals across the country," Prue said.'

Improving representation of women in management at Ok Tedi

Mining has traditionally been a male dominated industry but this is changing.

Ok Tedi Mining Limited recently announced the appointment of three female employees to managerial roles - Hillary Turnamur as Manager Kiunga Operations, Beverley Pasen as Manager, Information and Communications Technology, and Chantel Christensen as Manager Contracts and Compliance.

Managing Director and CEO, Peter Graham said "It is particularly pleasing to see our female employees progressing into managerial roles based on merit which reflects Ok Tedi's commitment to being an equal opportunity employer."

"These three new managers have each demonstrated strong lead-



Beverley Pasen



Chantel Christensen



Hillary Turnamur

ership and the capacity to take on expanded roles; we congratulate them."

Mr Graham added that Ok Tedi has recently established an Ok Tedi Women's Network to identify development pathways and remove impediments to progression for female employees, encourage mentorship

and training for female employees and identify ways to improve our success in attracting and retaining female employees.

"We hope to see the representation of women in management and in non-traditional mining roles continue to increase" added Graham.

Oil Search aid reaches remote Western communities

Children attending two very remote elementary and primary schools in the upper reach of the Fly River were excited to receive reading books and stationery, thanks to Oil Search who are in the area as part of the P'nyang exploration and seismic activities.

The Kaiyangabip and Swetigin communities lie in a very remote part of Western Province, with very limited access to services. Kaiyangabip is perched on a hill just above the banks of the Fly River and is accessible by outboard motor but has no road access to Kiunga and Tabubil.

Recognising the dire need for stationery and reading books, Oil Search's Stakeholder Engagement team organised for 35 boxes of reading books and stationery. The company donated all stationery along with teachers' reference materials while the books were donated by Buk bilong Pikinini.

Bob Yaki, Kaiyangabip Community School Head teacher said: "To run a school in a remote place like Kaiyangabip is very challenging for



George Rami - Oil Search Community Affairs Development and Information Management System Support Officer (left) and Simon Pulupa - Oil Search Community Affairs Supervisor for Exploration and Drilling delivering donations in Kaiyangabip by helicopter, much to the delight of the locals.

teachers. It is a day's walk to the nearest PMV stop at Sisimakam, where we catch a PMV to Kiunga or Tabubil. Because our school is new and not registered, we do not receive subsidies from the government. This makes it very difficult for us to purchase curriculum materials, teaching resources, reading books and stationery. I really appreciate and am thankful

for this donation from Oil Search. These items will allow the teachers to teach well and for the students to learn well".

Apart from the stationery and teachers' reference materials, two bags of clothing for women and infants were also donated by the employees of Oil Search.

Frieda River school improvement programs

A School Improvement Program has been implemented in the host communities around the Frieda River Project to address the low levels of education.

Due to the remoteness of these communities, it has historically been difficult to attain a full year of education as teachers were unable to reach the communities within the required times.

To address this issue, PanAust provides transport assistance to teachers, as well as each School Board. In 2016, this resulted in both the Frieda River Primary and Fiak

Primary Schools operating for a full academic year for the first time.

In 2016, PanAust paid the educational fees for school students from the project communities to attend the Frieda River Primary, Fiak Primary, Telefomin Secondary and Ambunti Secondary Schools.

Students in tertiary level of education were also provided with financial support and transport assistance. PanAust also provided building materials for maintenance work at both the Frieda River Primary and Fiak Primary Schools.

PNGEITI welcomes MRDC participation in EITI process

The PNG Extractive Industries Transparency Initiative (PNG EITI) National Secretariat recently welcomed the Mineral Resource Development Company (MRDC) for joining the PNG EITI Multi Stakeholder Group (MSG).

The MSG is the primary body responsible to oversee and coordinate the successful and effective implementation of the global EITI standards in PNG. The body provides and establishes a framework to promote collaboration and consensus.

MRDC acts as a trustee shareholder for beneficiary landowners and provincial governments as per provisions under the Oil & Gas Act and the Mining Act

“MRDC joined the MSG in 2016, following recommendations in the PNG EITI Report 2013. As a result of increased engagement in the EITI process, MRDC provided data for the PNG EITI Report 2014. Given the importance and value of the assets they hold for the people of PNG, we congratulate them for taking this step towards greater transparency,” PNG EITI Head of Secretariat Lucas Alkan said.

Mr Alkan when noting the important role MRDC played in managing revenues for landowner and provincial government for resource projects said the public should to be made aware of the processes and channels that are involved in the disbursement of resource benefit managed.

“One way MRDC can become transparent on how much it receives and manages is through MRDC’s active participation in the EITI process as reporting agent as well as a MSG member” Alkan said.

“We see that the MSG is becoming robust in its discussion and activities towards coming up with best options on improving the EITI reporting process and this can make way for greater transparency in the revenue management in the country,” Mr Alkan said.

The Extractive Industries Transparency Initiative (EITI) is an international standard for openness around the management of revenues from mineral and petroleum resources. Governments disclose how they receive from the extractive companies in their countries and companies disclose how much they pay to government.

About Us:

The PNG Chamber of Mines and Petroleum is a non-profit, peak industry association that represents the interests of the mining and petroleum industry and associated industries in Papua New Guinea.

The Chamber has a membership of about 220 companies. This includes most of the mining and petroleum companies active in PNG who comprise the Full Members. Associate and Service Members make up the balance of the membership and these are support companies with business connections to the mining and petroleum sectors in PNG.

About the publication:

The *Mining and Petroleum Review* is a bi-monthly e-newsletter that aims to inform Chamber members, the private and public sectors including the Government, interested groups and the general public about developments happening within the PNG resources industry.

General enquiries:

The Chamber commissions and publishes a wide range of reports on the mining and petroleum industry in the country. A number of these reports can be downloaded for free from the Chamber website while others can be purchased by completing an order form which is available on the website. Forms can be returned to info@pngchamberminpet.com.pg or can be dropped off at Level 1, The Lodge, Brampton Street, Port Moresby.

Media enquiries and contributions:

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