

MINING AND PETROLEUM **REVIEW**

April-June 2019



PG 3
LANCO commences international cargo service



PG 6
New Community Affairs manual launched



PG 20 - 21
Resource exports worth K27.6 Billion in 2018

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Global mineral exploration spending hit three-year high while PNG exploration shrinks below K300m



Core sampling at the K92 Mine in the Eastern Highlands Province.

Global mineral exploration expenditure has risen sharply since 2016 while exploration expenditure in PNG shrank to its lowest point in almost a decade as a result of investors' concerns regarding the country's fiscal and regulatory climate.

The Executive Director of the PNG Chamber of Mines and Petroleum, Prof. Albert Mellam, said the declining trend in exploration activity was of significant concern especially when global activity has been rising strongly.

"PNG boasts of a very favourable geological environment for new mineral discoveries," he said, "and the country needs to maintain an attractive fiscal and regulatory environment to ensure it remains a competitive global destination for mineral exploration activity."

"Exploration is the lifeblood of the industry and it contributes significantly to employment opportunities in rural areas generally far away from the towns and cities."

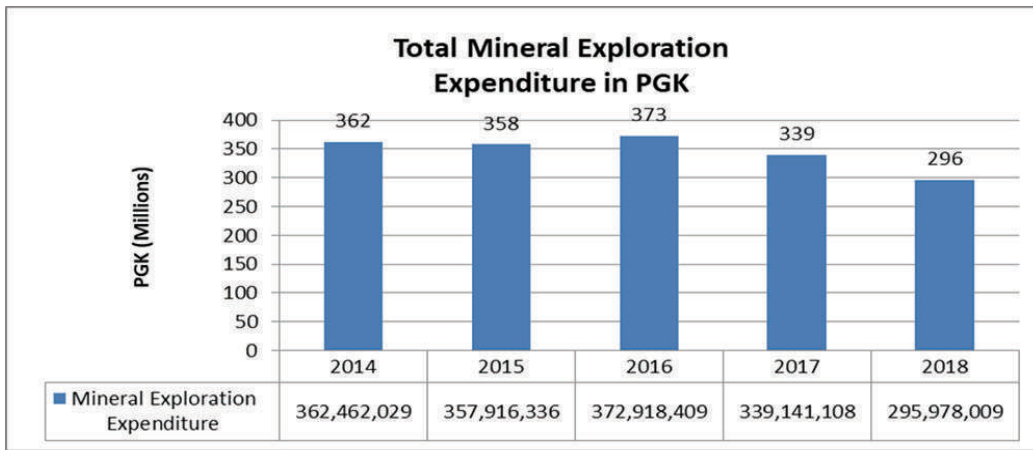
An international group of mining consultants, CSA Global, estimated

that mineral exploration activity worldwide picked up by 20% last year to around US\$10 billion, the largest figure in several years.

The US financial services company, Standard & Poors Global Markets, said global spending on exploration for non-ferrous metals rose from US\$7.3 billion in 2016 to US\$8.4 billion in 2017 and that, by the end of 2017, exploration activity was at the highest level since 2013.

Meanwhile, exploration activity in PNG last year fell to K296 million just slightly higher than the K283 million expenditure level eight years previously in 2010, according to official data from the Mineral Resources Authority (MRA).

Data from MRA shows that exploration spending in PNG peaked at K596 million in 2013 and has fallen to below K400 million annually since then. Recent exploration expenditure figures showed that spending last year fell to a low of K296 million compared with K339 million in 2017 and K373 million in 2016.



Graph from MRA showing the total mineral exploration expenditure between 2014 and 2018.

Success of current and new projects **critical to PNG**

The PNG Chamber of Mines and Petroleum said that the continued success of existing projects and the development of new ones is critical to the future of Papua New Guinea.

And that any significant delay in the renewal and extension of mining licences for the country’s biggest producing mines would have a detrimental effect on the nation’s economy.

Chamber president Mr Gereia Aopi said this in light major mining projects such as Porgera whose licence would expire this year.

“Security of tenure and continuation of mining leases is essential if we want investors to spend billions of Kina in our country,” said Mr Aopi.

“Delays and uncertainty about min-

ing leases could cause major interruptions to some of the big mines, and discourage any new investor.”

Mr Aopi said the Chamber and its members are keen to work with Government to ensure that PNG’s investment climate for resource projects remains attractive as this will underwrite a strong growing economy and increased prosperity for the people.

The industry is concerned that mineral exploration activity in PNG has fallen significantly in the past six years even though global exploration has experienced a significant upturn since 2016.

With this decline in exploration, any uncertainty about the renewal of mining licences would have an impact on the country’s economy, and also send international investors

the wrong signal, particularly when the World Bank through its PNG Economic Update released early this year had projected a positive rebound in the country’s real Gross Domestic Product to 5 per cent this year on the back of upcoming major resource projects.

While certainty of mining leases is critical, Mr Aopi said all Chamber members are committed to ensuring that benefits flow from their operations to the country especially the local communities and he applauded the Government’s continuing commitment to ensuring the sustainable and accountable sharing of benefits.

“The industry remains ready and willing to work with Government and relevant authorities to ensure a fair distribution of benefits for the State, local communities and the industry,” he said.

“PNG is one of the few countries in the world where mining and petroleum projects consistently provide socio-economic opportunities to the local areas they operate in. Projects have opened up access and opportunities in some of the most isolated rural communities in PNG,” he said.

According to the 2017 PNG Extractive Industry Transparency Initiative report, the industry paid a total of K1.5 billion in direct and indirect taxes.



A bridge built in 2008 by Ramu Nico at a cost of K20 million has helped communities living between the Usino and Bundi areas of Madang Province access vital government services and transport their cash crops and garden produce to markets.

Landowner companies important to communities

Diversification means greater return

Landowner companies are important because they economically empower communities and provide employment and training to citizens of local communities, and directly benefit families to reduce dependency on royalties.

Chamber president Mr Gereia Aopi said this when speaking at the 35th

Australia PNG Business Forum which was held in Port Moresby in June this year.

“Resource companies invest heavily in establishing, and providing necessary governance and administrative support to landowner companies which serve to ensure long term sustainability,” Mr Aopi said.

With this ongoing support, he said many landowner companies such as Anitua, Ipili Payala Investments, Trans Wonderland Limited, Hides Gas Development Corporation, NKW Limited, Star Mountains Holdings Ltd, and Mineral Resources Star Mountains just to name a few have been able to grow and diversify their business portfolios and expand to other parts of the country and abroad.

“As a Chamber, this is what we would like to see happen with other landowner companies so that they can be sustainable when a mine, or an oil and gas project ceases to operate,” he added.


The diversification of these successful businesses has also helped their communities and their local shareholders gain additional benefits.

Landowner and local companies are important to mining and oil and gas companies because they provide a wide range of services including labour hire, janitorial services, catering, security, earth moving, freight and logistics, and transportation.

“Resource companies invest heavily in establishing, and providing necessary governance and administrative support to landowner companies which serve to ensure long term sustainability.”



Landowner company, Trans Wonderland is a success story of how resource projects have helped communities venture into strong viable businesses.

 **Trans Wonderland's success story, including that of the women of Western Province is on our website (www.pngchamberinpet.com.pg), and our Facebook and LinkedIn pages. Visit the sites, watch the video and we'd love to hear from you.**

Landowner company commences new international cargo service

Pacific Cargo Services (PCS) has commenced an international cargo service.

This coincides with the opening of the new Brisbane office and warehouse.

The company, which is a division of Morobe-based NKW Group of Companies this year launched its FAK Service that is operated twice a month between Brisbane, Australia, and Port Moresby and Lae.

Keith Schulstad, Regional Business Development Manager with PCS said the service is available to anyone and departs on schedule, whether the containers are full or not, and the cargoes can be delivered to a customer's doorstep if required.

“The service offers competitive rates, and FCL

container services are also available,” he said.

Companies and individuals wanting to know more about this service can contact these phone numbers +61 432 912 084 or +675 7059 4639.



Investments in social and economic programs fundamental

The mining and petroleum industry will continue to be the backbone of Papua New Guinea's development contributing immensely to the development of the nation's human resource, economy, infrastructure, and improving the livelihoods and living standards of thousands of communities.

Chamber President Mr Gereia Aopi said this when speaking at the 35th Australia Papua New Guinea Business Forum which was held in Port Moresby on June 17th and 18th, 2019.

"The industry alone contributes 26% of PNG's GDP and 80% of the nation's export revenue," Mr Aopi said.

"The sector also provides more than 20,000 jobs to Papua New Guineans, whilst 30,000 more are employed in landowner businesses, and other PNG businesses that support the industry."

"We also deliver strong and sustainable growth in areas such as infrastructure by building roads and bridges; health facilities and services where we continue to support the provision of much needed medical drugs and supplies for health centres and hospitals, immunization programs for mothers and children; education and training for thousands of our young Papua New Guineans who have been trained to work in this world-class industry, and business development where we have helped established and grow landowner businesses," he said.

"The resource industry in PNG is a significant economic driver – contributing a sizeable chunk of PNG's Gross Domestic Product, and providing many other socio-economic benefits," he said.

He added that in order for the industry to continue supporting and

growing the PNG economy, there needs to be stable and predictable government policies and a favourable investment climate that underpins PNG's investment attractiveness.

"We have heard the Government's desire to amend resource laws, and to ensure PNG benefits more from its resources. We share this desire and will support the development of legislations that encourage investments and provides a better outcome for PNG. We want to work with the Government and all stakeholders to make this happen. We want to see a stronger Papua New Guinea with a stronger economy,

and a bright future for our country," he added.

PNG is one of the few countries in the world where mining and petroleum projects provide socio-economic opportunities to local areas they operate in. Many of these projects have open up access and opportunities to some of the most isolated rural communities in PNG.

This benefit structure is unique in the world as mining and petroleum companies in many jurisdictions of the world do not provide socio-economic services to the areas they operate in.

"We have heard the Government's desire to amend resource laws, and to ensure PNG benefits more from its resources. We share this desire and will support the development of legislations that encourage investments and provides a better outcome for PNG."



Wafi Golpu Joint Venture recently funded the renovation of the Zindaga Health Centre in the Morobe Province. The project which was completed in June this year saw the installation of an electric water pump, five solar panels, six batteries and a 5KVA inverter that can power the whole aid post. Pic courtesy of WGJV

World Bank report forecast rebound in PNG's GDP



An worker at Simberi gold mine's warehouse.

The PNG Chamber of Mines and Petroleum has welcomed a report by the World Bank stating new large-scale resource projects could boost Papua New Guinea's real Gross Domestic Product (GDP) to five percent this year.

The World Bank in its February 2019 Edition of the PNG Economic Update outlined PNG's economic situation and medium-term development prospects.

The report stated that the country's medium-term economic outlook was optimistic if proposed large-scale resource projects are approved, and that real GDP growth was forecast to rebound this year as major mineral and petroleum export projects return to full production following the 2018 earthquake.

The report further found that jobs in the extractives sector continued to grow in 2018, while overall employment in other sectors fell.

Chamber Vice President Mr Richard Kassman said the World Bank's forecast of a rebound in PNG's economy was welcome news for the country and the business sector, particularly at a time when the

country continues to face challenges with its foreign reserve.

"The World Bank Report demonstrates that the mining and petroleum sector remain absolutely critical for PNG jobs, the economy, and all the social benefits that flow from this," he said. "Timely approval of the proposed major new projects is essential to getting these projects up and running, and the benefits flowing to the people."

"The mining and petroleum industry has been the backbone of PNG's economy for many years with the ongoing success of resource projects, and with these new waves of investments, PNG can further establish itself as a prime destination for investment and exploration, provided government maintains the right fiscal, regulatory and legislative settings to continue to attract responsible and sustainable global investors," he said.

Major resource projects which could further drive PNG's growth include:

- the Papua LNG and P'nyang gas development, which jointly will more than double current

liquefied natural gas (LNG) production capacity to around 8 million tonnes annually in the next five years;

- production and export of condensate and liquefied petroleum gas (LPG) is projected to commence in 2021 from the Pasca field, PNG's first offshore development in the Gulf of Papua; and,
- the world-class Wafi-Golpu copper-gold project in Morobe Province which, if approved, an initial capital investment is expected of approximately K9.1 billion, with total capital expenditure expected to be around K17.4 billion (US\$5.4 billion) over the estimated 28-year life of the mine. As well as this significant injection into the PNG economy, the project will create economic benefits across the country, which will include providing about 2,500 direct jobs during construction, about 850 ongoing operations jobs and other indirect jobs.

"These projects, once approved, are expected to inject significant capital into the PNG economy, create thousands of jobs for our people, and also contribute significantly to improving health, education and infrastructure development," Mr Kassman said.

The industry contributes over 26% of PNG's GDP, around 80% of the nation's export revenue and provides employment to over 20,000 Papua New Guineans with significantly more working in other sectors dependent on the industry, including landowner businesses.

Chamber welcomes new Prime Minister

Resource industry policies a priority



*PNG Prime Minister Hon. James Marape.
Pic courtesy of PM's Media Unit*

The PNG Chamber of Mines and Petroleum has assured Prime Minister James Marape of its continued support to the PNG Government.

Chamber President Mr Gereia Aopi CBE made these remarks following the election of Mr Marape in May

this year.

Whilst congratulating the country's eighth Prime Minister, Mr Aopi said the resource industry looks forward to working with the Prime Minister and his Government on matters concerning the resource industry.

"On behalf of the Chamber, its 200-plus Members, and the resource industry of which we represent, we congratulate Honourable Marape on his election as PNG's eighth Prime Minister," Mr Aopi said.

"We look forward to working with Honourable Marape on many of the resource industry policies, particularly the long overdue revised Mining Act, the establishment of

a Petroleum Resource Authority, and re-visiting some of the sector's taxation reforms."

"Stability on many of the fiscal and regulatory regimes is important to ensure ongoing investment in the sector, hence we welcome discussions on some of the country's major projects in the pipeline such as the Wafi Golpu, Frieda River, and the Papua LNG projects."

"The Chamber and the industry would like to thank outgoing Prime Minister Honourable Peter O'Neil for the partnership he has had with the industry and the good work he has done during his term in the last eight years, particularly promoting investment in the resource sector."

"We look forward to working with Honourable Marape on many of the resource industry policies..."

- Mr Gereia Aopi, Chamber President.

Chamber reaffirms its support to MRA

The PNG Chamber of Mines and Petroleum welcomed the new Managing Director of the Mineral Resources Authority (MRA) Mr Jerry Garry early this year.

Congratulating Mr Garry on his appointment, Chamber Vice President Mr Richard Kassman said the MRA Board and the Mining Minister should be commended for appointing someone with outstanding credentials, including international mining experience, to head an important State institution like MRA.

Mr Kassman said the MRA's good performance would be further strengthened under Mr Garry's leadership.

"On behalf of the members of the



MRA Managing Director Mr Jerry Garry. Pic courtesy of MRA

Chamber, I would like to warmly congratulate Mr Garry on his appointment," Mr Kassman said.

"The MRA has an admirable history of strong leadership and safe, efficient management of the mining sector, and we are confident that Mr Garry will continue and further improve this fine tradition. The Chamber particularly welcomes his extensive international experience, technical expertise, and sound understanding of our industry," he said.

He added the Chamber stood ready to work with Mr Garry and his team to face both the challenges and opportunities facing the mining industry.

Mr Kassman also expressed industry's sincere thanks to Mr Nathan Mosusu for his exemplary leadership and collaborative approach while acting Managing Director.

Chamber launches new revamped website

The general public can now access information about the PNG mining and petroleum industry following the launch of the PNG Chamber of Mines and Petroleum revamped website in June.

Chamber Executive Director Dr. Albert Mellam said the website will now serve as an information hub for people who want to know more about the country's resource industry.

"Apart from the website having a fresh new modern look, it is also easy to navigate and has information on the industry's social and economic contributions, and existing and upcoming projects," he said.

The website was developed by Papua New Guinean website designer, the Old Plantation.

Other features of the website include online registrations for organisations that want to become members of the Chamber, a Tender Notices section, and a dedicated page on Careers which will have job vacancies, and training programs offered by Chamber members, and the resource industry.

"Being a significant body in the country, we often receive queries



from the general public seeking information on job vacancies or training programs offered by the industry. So by having a dedicated section on Careers, we hope that will help many of our citizens find jobs and training opportunities offered by our members," Dr Mellam added.

The website also has an Events section which contains information

on all Chamber activities as well as a Media Centre that has media releases, presentations and videos.

The website can be accessed via www.pngchamberminpet.com.pg

Members and the general public requiring any further information on the website can contact the Chamber on phone +675 321 2988 or email info@pngchamberminpet.com.pg

How can Members of the Chamber utilise the website?

There are three ways Members of the Chamber can utilise the new website.

1. Have your Job Vacancies, and/or Graduate Development Programs posted on the website at no cost.

The Chamber receives queries on a daily basis from individuals across the country seeking employment opportunities in the resource industry. Having your job vacancies or announcements about your training, and graduate development programs on the website, will help people find employment and apply for development programs.

2. Have your organisation's Tender Notices uploaded onto the website at no cost

The Tenders page is only accessible to Chamber Members only. In order to view the tender notices, Members will have to request log-in details from the Chamber.

3. Have your company logo on the website

Chamber members can send us their logos to put in the Membership category of the website for people and other organisations to easily find their company. The logos are hyperlinked to members respective websites or any other related sites.

Send the Chamber your job vacancies, tender notices and company logos to info@pngchamberminpet.com.pg or if you require additional information, please call +657 321 2988.

New community affairs manual launched

A guide for community affairs practitioners was launched by the PNG Chamber of Mines and Petroleum in April this year.

The 'Manual for Community Affairs Practitioners at Resource Projects in Papua New Guinea' was launched by Chamber President Mr Gereia Aopi and outgoing Chamber Councillor Sir Melchior Togolo during the industry body's annual general meeting in Port Moresby.

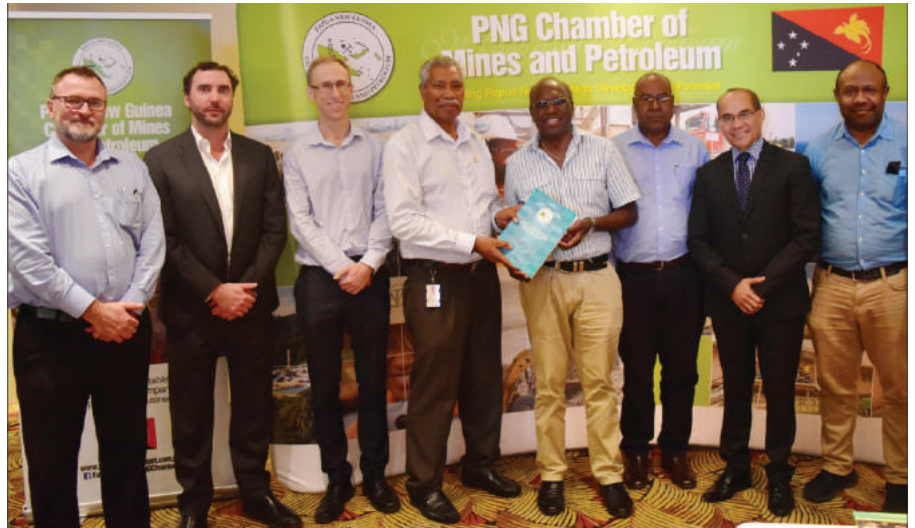
Mr Aopi when launching the manual said the manual provides comprehensive insight into various aspects of community affairs.

The main aim of the manual is to provide basic reference material for Community Affairs practitioners in the field to help them with their daily tasks.

The Chamber had produced a comprehensive series of manuals for community relations in early 2000.

The guide was recently rewritten and updated to cover relevant regulations and recommendations in managing community affairs matters.

The new manual is co-authored by Richard Jackson and John Brooksbank.



Mr Aopi (4th from left) and Councillor Sir Melchior launching the book at the Chamber's AGM in April. Standing alongside with them are other Councillors; (L-R) Mr Mark McMonagle, Mr Tim Richards, Mr Andrew Harris, Mr Aopi, Sir Melchior, Mr Ron Gawi, Mr Richard Kassman (VP) and Mr Anthony Smare (Senior VP). PNGCMP Pic

Mr Jackson was a former Professor of Geography at the University of PNG and the director of what is now called the National Research Institute in the 1980s while Mr Brooksbank has been involved in the PNG resource industry for many years promoting local business development, maximisation of local community involvement in spin-off economic and livelihood enhancement opportunities, and conducting social and economic impact assessments in green and brownfield license areas.

The manual is selling for K100.00 for members and K120.00 for non-members.



A list of books published by the Chamber and other partners can be viewed on the Chamber website www.pngchamberminpet.com.pg

OTML Deputy CEO joins Chamber Council

Ok Tedi Mining Ltd Deputy Chief Executive Officer and General Manager External Relations Mr Musje Werror was elected as a Councillor of the PNG Chamber of Mines and Petroleum at the Chamber's AGM in April.

Mr Werror was elected following the resignation of Sir Melchior Togolo this year after serving on the Council since 2013.

Mr Werror was the Chamber's Vice President from 2009 - 2012.

Other Councillors that were

re-elected included Mr Ron Gawi of Highlands Pacific, Mr John Chambers of Santos, Mr Andrew Barry of ExxonMobil PNG, and Mr Mark McMonagle of Sun Engineering. The councillors will serve for two years.

Also re-elected for another year's term were Mr Gereia Aopi as President, Mr Anthony Smare as Senior Vice President and Mr Richard Kassman as Vice President.



Mr Musje Werror. Picture courtesy of OTML

Chamber starts monthly column in newspaper

The PNG Chamber of Mines and Petroleum has begun publishing a column in the Post Courier newspaper.

The initiative is part of the Chamber's communications and advocacy program to better inform its Members, and other relevant stakeholders including the general public about industry developments, and Chamber activities.

The column will be published every month and readers are encouraged to send their feedback or any suggestions to the Chamber by emailing info@pngchamberminpet.com.pg.



Copy of the column that was published in the Post Courier in June.

Welcome onboard

The PNG Chamber of Mines and Petroleum would like to welcome these companies that have joined as Members this year.

Associate Members



Searcher Seismic provides high quality, non-exclusive seismic datasets, and associated products to the global oil and gas industry. Searcher's

specialty is providing leading edge, non-exclusive seismic data that assists oil and gas companies to de-risk their exploration portfolios in a cost effective manner. www.searcherseismic.com



Lucas Drilling became a highly specialised mining

and infrastructure service provider in Australia. Currently the Australian business focuses on drilling services to the Eastern seaboard coal mining industry by providing surface to in-seam drilling services as well as exploration drilling projects. It is also a leading provider of exploration, production and directional drilling services to some of the world's largest coal miners. www.lucas.com.au

Service Members



Pacific Cargo Services delivers tailored end-to-end freight and shipping agency services to customers moving goods, equipment and people in and

out of PNG. Key focus areas are customs clearance, freight forwarding air and sea, local logistics and container unloads. www.pcpsng.com



Poly Allied is a specialist manufacturer and supplier of polyethylene pipe, water and septic tanks, and water treatment plants for ground or surface-base water sources. The poly pipe provides solution in the reticulation of water, gas, waste, sewer and energy industry. www.pap.com.pg



Southern Cross Pumps was established in 1980 in Port Moresby and is PNG's largest locally owned and operated Water Services Company. The company specialises in providing engineered fluid handling solutions to the mining, oil & gas, construction, water, waste water, agriculture and industrial markets. www.southerncross.com.pg



Want to become a Member? Visit our website www.pngchamberminpet.com.pg for all the information.

Meet PNG's first CASA



Twenty-four year old Louis Wanpis is the first Papua New Guinean to become a certified Unmanned Aerial Vehicle (UAV) or drone pilot.

From a mixed-parentage of Masahet Island in the Lihir group, and East New Britain, Wanpis was recently certified by the Civil Aviation Safety Authority (CASA) as a drone pilot.

Wanpis has been working as a survey technician with Newcrest Lihir (Lihir Gold Limited) since 2016, and is currently part of the survey team within the mine's Projects and Engineering Department.

In April this year, Wanpis and five employees conducted an Australian and PNG CASA-certified course to fly drones.

Like a giant praying mantis in

flight, the drones take synchronised images that are used to make aerial maps.

Surveyors extract three-dimensional data from drone flights for production and planning needs. Drones are also used to do land/air surveys and land use mapping for social performance departments.

As part of his training, Wanpis was taught to keep strict accurate logbooks of flights, as well as his drone's maintenance records and accessories like batteries and props.

Knowing how to take manual control of the drone during emergencies and how and where to operate them were some key factors in his training.

Wanpis knows the difference between controlled and uncontrolled airspace and how to get authorities'

approval if necessary.

Before he was certified, Wanpis did 15 solo flights, equivalent to 30 minutes of flight time, with no incidents or accidents.

Attaining a UAV license is an outstanding achievement for Wanpis, but this is one more feather in his hat as he works towards his long-held dream of becoming a fully certified engineer/surveyor.

Wanpis attended Lihir High School and continued onto Manggai Agro Secondary School in New Ireland, but had to withdraw midway through Grade 12.

With the support of Lihir Sustainable Development Planning, he completed his secondary schooling at the Coronation High School in Lae and later enrolled

-certified drone pilot

at the University of Papua New Guinea's Open Campus in Kokopo, East New Britain Province before returning to Lihir.

"Being a survey technician has developed my technical skills. I am deeply thankful to my supervisors and my team. Now I can do survey work on the field as well as some paper work," Wanpis said.

"During the drone training, I learnt there are regulations that cover drones. Drones are helpful in conducting aerial surveys and so far

there are marked improvements, yielding better results."

"Being there was no easy passage. I came through the hard way. At times I would be on the verge of crying, giving up. I urge the young people of Lihir to remember that giving up is never an option. Nobody is born a failure. Balance is key, draw firm support from family, relatives and the Church but never, ever give up – come what may." he said.

Article & pic courtesy of Newcrest Lihir Media

"Nobody is born a failure. Balance is key, draw firm support from family, relatives and the Church but never, ever give up – come what may." - Louise Wanpis, Newcrest Lihir Survey Technician

Chamber Members!



If you have that one individual in your team who is doing extremely well in her or his job, send us their story and few photos and we'll feature them in this section, as well as on our Facebook and LinkedIn pages.



Chamber's upcoming events

PNG's premier conference all set for December

The PNG Chamber of Mines and Petroleum for many years has been hosting conferences and workshops to keep its members, the industry, the government and the country informed, and updated about developments in the mining and petroleum industry.

This year 2019 will be no different as the industry prepares to host a number of events.

Beginning August 2019, the Chamber will kick off a string of activities with the first being the Community Affairs and Business Development (CA&BD) Workshop which will be held in Port Moresby on August 14 and 15.

This workshop is intended mainly for community affairs and business development practitioners in resource projects, including relevant Government departments and agencies to share ideas and experiences.

Following the CA&BD workshop, the Chamber will stage the PNG Extractive Industries Emergency Response Challenge (EIERC) on October 1st and 2nd at the Sir John Guise Stadium in Port Moresby.

In 2017, the Chamber was given the responsibility of organising and facilitating the event, which was previously managed and facilitated by the Mineral Resources Authority.

The EIERC is the only such event in PNG that provides a platform for

Fire and Emergency Rescue teams from various resource companies to compete, and sharpen their skills by taking part in activities such as rope rescue, fire-fighting, hazmat, endurance, confine space rescue and multi-causality.

Following these two significant industry events, the Chamber will host its biennial PNG Mining and Petroleum Conference in Port Moresby at the Stanley Hotel.

This conference alternates between Sydney and Port Moresby and mainly covers project and technical updates, and challenges and issues that are faced by the industry while the Sydney-conference showcases the PNG mining and petroleum industry to the international finance and investment sectors, hence it's convened in Sydney, an investor hub.

Since the conference's inception in 1995, it has firmly established itself

as a prestigious forum that provides comprehensive information about the industry including the major projects, prospects, and exploration, as well as issues and future plans of the industry.

The direct participation of the Government of PNG, at the political and senior departmental level, ensures a full and balanced coverage of all significant policy issues.

Both forums have played an important part in promoting mineral and petroleum investments in the country which now underwrites about 26 percent of the PNG economy.

Information on how to register for the CA&BD Workshop, and the conference in December can be found on the Chamber's website www.pngchamberminpet.com.pg



The Chamber's Community Affairs and Business Development Workshop will be held again this year on August 14th and 15th in Port Moresby. PNGCMP Pic

2019 PAPUA NEW GUINEA MINING AND PETROLEUM CONFERENCE *and Exhibition*

3rd - 5th DECEMBER 2019 The Stanley Hotel, Port Moresby

PNG Resources: Developing Shared Value

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E: info@pngchamberminpet.com.pg

REGISTER NOW

Registration Fees (GST Inclusive)

Before September 30 (Early Bird)
Chamber Members and PNG Government - K1,980
Non-Members - K2,530

After September 30
Chamber Members and PNG Government - K2,530
Non-Members - K3,080

Visit www.pngchamberminpet.com.pg
for registration, exhibition and sponsorship
information



Lihir share price surges as gold output costs decline

Lihir Gold produced 238,279 ounces of gold in the March quarter to take total output in the first nine months of its financial year to 671,503 ounces, up from 648,435 ounces in the same period last year.

Mine owner Newcrest Mining Ltd said gold production was 5% lower than in the previous December quarter due to lower recovery rates from marginally lower grade material.

Lihir's All-In-Sustaining-Cost (AISC) in the March quarter totalled US\$849 per ounce with total costs year to date totalling US\$896 per ounce. The latter was sharply lower than the comparable figure for the 2018 financial year when AISC amounted to US\$1,029 per ounce.

With steadily rising gold prices, which have surpassed US\$1,300 an ounce in recent times, the Newcrest share price has risen from around A\$20 at the beginning of the year to just over A\$30 a share at present.

The Cadia mine in Australia's New South Wales, which is part of the Newcrest Group, had an AISC of



A worker at the Lihir gold mine in the New Ireland Province. PNGCMP Pic

US\$147 per ounce in the latest March quarter.

Newcrest Mining now claims to be the lowest cost gold producer among the world's major gold

producers with an average AISC of US\$738 in the latest March quarter compared with US\$825 for Barrick Gold and US\$907 for Newmont Mining.

Porgera has potential to produce 500,000 ounces of gold annually

The Porgera gold mine in the Enga Province has the potential to produce 500,000 ounces of gold each year for the next 20 years.

But to ensure the mine achieves this result, the challenge is now on the management and staff and the local community to work together and to ensure that benefits continue to flow to all stakeholders.

President and Chief Executive Officer of Barrick Gold Corporation, Mark Bristow made these comments during a 'question and answer' session with employees

in February this year at the mine during his maiden visit to the country.

"When you look at the current plans of Porgera, it has the potential to be able to deliver 500,000 ounces for the next 10 years. The geologists are indicating that there's potential for another 10 years after that," Mr Bristow said.

He also noted that the biggest challenge for the operation was cost associated with operating the mine.

Mr Bristow also took the opportunity to talk about the Porgera Joint Venture (PJV) partners and their commitment to the future of the mine.

"We want to renew our special mining lease. We are prepared to invest in the future of this mine and its people. It's not only an asset for Porgerans. It's a national asset that makes its contribution to everyone in this country," Mr Bristow added.

Porgera mine shareholders meet new PNG government about SML extension

Barrick President and Chief Executive Mark Bristow, along with Zijin Executive Director and Senior Vice President George Fang recently met with Prime Minister James Marape soon after his election.

During the meeting, Mr Bristow and Mr Fang reaffirmed the company's commitment to working with the PNG government and local communities to ensure that the Porgera gold mine continues to deliver value to its stakeholders past the expiry of the current Special Mining Lease on August 16, 2019.

While in the country, Mr Bristow also met with Enga Governor Sir Peter Ipatas, Porgera landowners, and other stakeholders.

Since pouring its first gold in 1990, Porgera has paid more than K3.6 billion (US\$1.1 billion) in taxes and K1 billion (\$297 million) plus K600 million (\$178 million) in equity cash payments and royalties respectively to the provincial government and customary landowners.

This represents a significant contribution to the country's economy, as well as a substantial amount to the landowners.

An application to extend Porgera's special mining lease for a further 20 years is currently in progress.

Mr Bristow said Porgera was an important long-term asset for PNG as well as the mine's owners, Barrick Gold Corporation and Zijin Mining Group.

"The proposed extension to its lease will allow the mine to remain productive for at least another 20 years. To sustain mine operations, however, it will require a significant capital injection, and it is difficult to justify that kind of investment without the security of an extended mine lease," he said.



BNL employees with some of the local communities which the mine supports. PNGCMP Pic

"To sustain mine operations, however, it will require a significant capital injection, and it is difficult to justify that kind of investment without the security of an extended mine lease."

- Mark Bristow, Barrick President & CEO

"Barrick believes in true partnership with our host countries, sharing both the responsibilities and the benefits that come with mining. We are engaging with the government to breathe new life into our long-standing partnership, so that Porgera continues to deliver value to all its stakeholders.

"In our meeting with the Porgera landowners, we invited our stakeholders to join us in continuing to improve the quality of life, security and welfare in the Porgera valley."

Porgera is a joint venture between Barrick and the Zijin Mining Group, which each owns 47.5% with the remaining 5% interest being held by Mineral Resources Enga (owned equally by Porgera Special Mining Lease Landowners and the Enga Provincial Government).

The mine is operated by Barrick (Niugini) Limited.

PanAust delivers EIS to landowners, provincial authorities

The Environmental Impact Statement (EIS) for the Sepik Development Project was submitted to the West Sepik, and East Sepik provincial administrations this year.

PanAust announced in April that its subsidiary Frieda River Limited (FRL), together with the Mineral Resources Authority (MRA) and the Conservation and Environment Protection Authority (CEPA) presented the EIS to the two provincial administrations.

The company stated that copies of the EIS were to be presented to 'near-project communities' during the project's Community Leaders Forums.

CEPA was also expected to conduct a full consultation with communities along the project's proposed Vanimo to Frieda River road corridor and along the Sepik River following the delivery of the EIS.

PanAust stated that the consultation process and delivery of the EIS to key project stakeholders demonstrates FRL's commitment to working with communities and the Government to progress the necessary permits and approvals for the project.

FRL formally submitted the EIS to CEPA on 12 December 2018. The EIS and a feasibility study formed the updated Proposal for Development for the project that was delivered to the MRA the same month.

The Sepik Development Project will deliver a long-life hydroelectric power facility and world-class copper-gold mine.

The two projects will be enabled by the third party development of an international maritime port, public

The West Sepik Provincial Administration with a copy of the Sepik Development Project Environmental Impact Assessment, April. Pic courtesy of PanAust.

roads, a regional airport and telecommunications services.

The project will improve transport and connectivity, facilitate the delivery of services to remote communities and boost domestic and international trade and investment.

PanAust says the project aligns with, and will help realise the government's development plans as outlined in Vision 2050 and the Papua New Guinea Development Strategic Plan 2010-2030 and eschews an 'enclave' approach to mining development in which economic benefits are constrained.

It builds on recent infrastructure developments in West Sepik Province including the construction of a road linking Vanimo to Green River, the planned Port of Vanimo redevelopment, and responds to stakeholder feedback received since the lodgment of the 2016 Special Mining Lease application for the Frieda River Project which contemplated a standalone mine development.

The Sepik Development Project is projected to deliver significant direct and indirect local employment, business opportunities, attract foreign investment and boost trade and commerce.

Host communities, especially in rural areas, will benefit from access

to improved transport, telecommunications, health, education and government services that will support a higher quality of life and greater social participation.

More broadly, training and employment of Papua New Guineans will provide the skills and capacity to support the nation's future development and prosperity.

Project planning has sought to avoid, minimise and offset environmental impacts. The EIS incorporates comprehensive environmental baseline data which was collected over a period of ten years.

The biodiversity surveys represent some of the most extensive ecological surveys conducted for a major project in PNG.

The project's hydroelectric facility encompasses a dam that will be engineered to store water for reliable, low-cost hydroelectric power generation and permanently contain process tailings and waste rock from the copper-gold mine to protect downstream water quality in the Sepik River.

Environmental management strategies will be guided by standards implemented by PanAust, an internationally recognised leader in environmental management and sustainability.



Simberi mine produces record 71,849 ounces of gold in half year



Simberi Gold Mine haul trucks moving ore to the crusher. PNGCMP pic

St Barbara Ltd's Simberi gold mine produced a record 71,849 ounces of gold at an All-In Sustaining Cost (AISC) of US\$801/oz (A\$1,107/oz) in the half year to December 2018, up from 70,650 ounces compared to the same period in 2017.

Total gold export revenue rose to A\$133.2 million at an average gold price of A\$1,685 per ounce, up from A\$115.2 million in the same period in 2017 at an average gold price of A\$1,640.

St Barbara said output in the December half year benefitted from improved head grades, reflecting the mining of high-grade zones in the Sorowar and Pigibo mine sequences.

The company is forecasting production in the financial year to 30 June of between 120,000 and 130,000 ounces.

This contrasts with production of 134,661 ounces in the 2018 finan-

cial year.

In an upskilling program at the mine during the past year, 19 employees were enrolled in apprenticeships, three were appointed as qualified tradespeople, 13 students were offered work experience and three scholarships granted to university degree level students.

Five employees graduated from an office administration trainee program, with three taking up jobs with Simberi.

Some A\$7 million was spent on landowner services during the year.

A fisheries business advisor was engaged and a hatchery established on the mining lease. Other ongoing projects include agriculture and support for cocoa plantations.

Only 2% of the company's Simberi employees are expatriates with the majority from the local Simberi and Tabar Islands (56%) and other PNG nationals (42%).

Higher operating costs and impairment causes HPL net profit to drop

Highlands Pacific saw its net profit fall to US\$22.3 million last year, compared with a net profit of US\$37.4 million in 2017, according to the company's 2018 annual report.

The Ramu mine last year achieved a record output of 35,255 tonnes of nickel, up 2% from 2017, with cobalt production of 3,275 tonnes being slightly lower than the record 3,308 tonnes the previous year.

Highlands' general administration costs were reduced from US\$3.1 million to US\$2.4 million but foreign exchange losses of US\$800,000 led to an increase in total operating costs from US\$2.9 million to US\$3.3 million in 2018.

Although the carrying value of Highlands' interest in Ramu increased to US\$142.1 million following a reversal of a previous US\$31.4 million impairment, the company suffered a further impairment of US\$9.6 million on its 100% interest in the Star Mountains exploration project, which is in care and maintenance following withdrawal of its joint venture exploration partner.

At the Star Mountains project, where exploration has been halted, Highlands early last year announced a maiden resource of 210 million tonnes grading 0.4% copper and 0.4 grams a tonne of gold for 840,000 tonnes of contained copper and 2.9 million ounces of contained gold.

Anglo American had spent US\$38 million on exploration, including a US\$10 million payment to Highlands, prior to withdrawing from the joint venture.

The international trading house, Japan's Sojitz Group, and Pacific Metals have withdrawn from Highland's 100% owned Sewa Bay nickel laterite project in Milne Bay and the project is now under a strategic review, the company said.

OSL profits rises 13% in 2018

despite 17% fall in sales

After tax profit for Oil Search increased last year by 13% to US\$341 million even though LNG and crude oil sales fell 17% as a result of the 2018 earthquake and the eight-week closure of oil and gas operations.

Oil Search Chairman Richard Lee told the company's annual general meeting in Port Moresby in May that the improved financial outcomes followed a 27% increase in average realised oil and condensate prices and a 31% increase in the average realised LNG and gas price.

Total dividends increased from US 9.5c a share in 2017 to US10.5c, equivalent to 20 toea per share, representing a dividend payout ratio of 47%.

Socio-economic contribution to PNG tops K1.5b in 2018

Mr Lee said the socio-economic contribution made by Oil Search to PNG totalled more than K1.5 billion in 2018, inclusive of taxes paid to the government, royalties and levies, providing employment and development opportunities, procuring goods and services from local suppliers and contractors as well as strategic community investment, both directly and through the Oil Search Foundation.

"We donated almost K17 million in cash and kind to support earthquake disaster relief efforts and are continuing to provide assistance to help rebuild communities and livelihoods," he said.

Mr Lee said Oil Search also contributed to infrastructure development through the government's Infrastructure Tax Credit scheme and National Infrastructure Tax Credit Scheme.

The company project managed and delivered the world class APEC Haus venue, along with other projects that included the Nipa to Ambua and Kutubu Access roads in



Oil Search were the first respondents to the 2018 devastating earthquake in the Highlands of PNG. OSL Pic

"We donated almost K17 million in cash and kind to support earthquake disaster relief efforts and are continuing to provide assistance to help rebuild communities and livelihoods." - Oil Search Chairman Richard Lee

the Highlands; the Erave to Samberigi Road Project, which will join the Highlands Provinces to the Gulf; redevelopment of the Kupiano District Hospital and support for Kutubu High School, which suffered significant damage in last year's earthquake.

Mr Lee said a detailed breakdown of payments made to government, including royalties, taxes, levies and other fees and charges, were detailed in Oil Search's 2018 Transparency Report. In March 2018, Oil Search was one of the first ASX-listed energy companies to release a 'Climate Change Resilience Report.

Mr Lee said Oil Search this year is celebrating its 90th anniversary since its incorporation in PNG,

during which time it has grown from a tiny exploration company to a regionally significant oil and gas producer and LNG exporter.

He said the Oil Search Board was well advanced on managing the succession plan for the company's Managing Director, Peter Botten, who has successfully led Oil Search for more than 25 years.

Smooth progress being made on LNG expansion plans

Good progress has been made on upstream and downstream studies for construction of three new LNG trains each with a capacity of 2.7 million tonnes annually, according to Oil Search.

In its March quarterly report, Oil Search said upstream studies prior to detailed engineering and design had pointed to the construction of a well pad at Antelope with up to 7 production wells, one well pad with a single production well and a water reinjection well.

Studies were also progressed on a multiphase gathering system, a Central Processing Facilities and related infrastructure and export pipelines for gas and condensate.

The pipelines will extend 60km onshore and 260km offshore to the PNG LNG Project plant site, where the additional three LNG trains will be built.

The company said good progress was also made on work to accelerate delivery of gas from the Oil Search operated Kutubu, Agogo and Moran fields to the PNG LNG Project and to provide gas to front end the proposed LNG P'nyang expansion train.

A preferred development option is under study with the aim of commencing FEED studies this year.

Independent certification of the P'nyang field early last year has resulted in a tripling of the 1C gas resource to 3.51 trillion cubic feet and 2C gross resource to 4.36tcf.

Combined with gas resources from Elk-Antelope there is approximately 11tcf of 2C certified gas. Project definition studies on P'nyang (PRL 3) are also underway.

Good progress has also been made on downstream pre-FEED studies.

The joint venture parties have also agreed on a downstream concept involving two trains for the Antelope-Elk fields and an additional train using gas from P'nyang.

It said engineering work on design, process and layout optimisation were nearing completion.

This included tie-ins with current facilities (brownfields), selection of compression drivers, LNG loading and shipping, condensate treatment and execution planning.

Under a Memorandum of Under-

standing signed in November 2018 between Papua LNG and the Government key terms include:

- Equitable split of value between State and Developers;
- Fiscal arrangements and method of smoothing early tax flows for government, if required;
- Domestic Market Obligations, National Content;
- Deferral of payment of past costs until first production.

The Papua LNG Gas Agreement was signed in April between the State and the joint venture partners Total SA, ExxonMobil and Oil Search.

Meanwhile, Oil Search has taken up 25% equity in PPL 474, 475 and 476 as well as PRL 39, which are adjacent to the Elk-Antelope fields and which contain "many multi-tcf structures".

A second phase of seismic activity is planned this year with the aim of identifying drilling targets from late 2020.



Key strategic areas of OSH portfolio assessed. OSL Pic

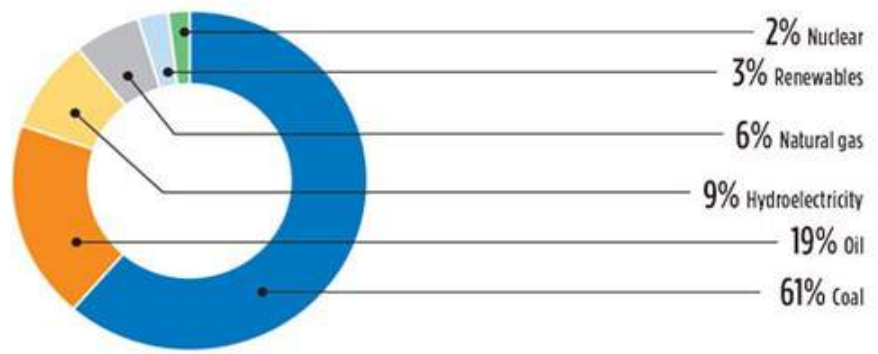
World LNG demand growing

Global demand for LNG grew by 6% to a record 320 million tonnes in 2018, with current expectations that a sustained 4.5% annual growth rate will require supply of an additional 120 million tonnes annually by 2030.

Oil Search estimated that there was scope for 90 million tonnes annually of uncontracted demand, including expiring contracts, by 2025.

A significant part of the increased demand flows from the decision of governments in North East Asia, particularly China, to prioritise use of gas over coal and nuclear because of environmental concerns.

It said the first large scale capacity expansion since 2015 occurred in 2018 and several new projects needed to complete their final investment decision by the end of next year in order to meet this



China's total energy mix: China's coal-to-gas conversion policies and GDP growth are increasing the country's natural gas consumption. At present, natural gas makes up approximately 6% of the country's total energy mix (figure above). According to China's gas to power plan, natural gas market share in the country's total energy mix will increase to 10% by 2020 and to 15% by 2030. Pic: Norton Rose Fullbright

demand.

Oil Search, which has set up a LNG marketing team in Tokyo, has

already received positive responses from key buyers and markets to equity marketing of new LNG capacity.

Oil and Gas Briefs

Record LNG Output: The PNG LNG Project achieved an annualised production rate of 8.8 million tonnes annually in the second half of 2018, and has maintained this record rate in the first quarter of this year. This is the highest half-year rate since project start up in 2014 and 28% above nameplate capacity.

P'nyang farm-in: Australia's Santos Ltd has signed a binding letter of intent to acquire a 14.3% interest (pre-PNG government back-in) for Petroleum Retention Licence 3 (PRL 3) which contains the P'nyang gas field. Santos was expected to pay US\$120 million by around the end of June 2018 and an additional US\$67 million contingent on the awarding of a production development licence and a final investment decision for construction of an LNG train to liquefy gas from P'nyang.

Resource Upgrade: Oil and gas production has reduced 1P Reserves (Proven) by 8% to 54.1 million barrels of oil and condensate for Oil Search Ltd with 2P Reserves (Probable) down 7% to 68 mil-

lion barrels, gas reserves shed 5% respectively to 1,937 billion cubic feet (1P) and 2,209 billion cubic feet (2P). However, 2C Resources (Contingent) have risen by 252% to 185.5 million barrels oil and condensate and was up 13% to 4,533 bcf for gas. Consequently, total 2P and 2C resources were up 102% at 253.5 million barrels and 6,742 bcf respectively.

Oil Production Update: Oil Search Ltd will conduct a five-year oilfield optimisation program to extend plateau oil production until 2023-24 by potentially adding some 30 million barrels to current reserves. This is inclusive of a new exploration well at Gobe which has the potential to

extend the field life at Gobe. Oil production has been declining since project start-up in 1992.

Exploration potential: Interpretation of recent seismic data from the Gulf of Papua deep-water prospects have highlighted potential targets for multi-trillion cubic feet hydrocarbon resources, according to Oil Search. Additionally, multi-tcf leads and prospects have been identified in seismic surveys conducted last year in areas close to planned onshore infrastructure for the Papua LNG Project.



LNG Cargo loading at the LNG LNG jetty in the Central Province. Pic courtesy of Exxon-Mobil PNG

Partnership forged to find energy solutions

Kumul Petroleum Holdings Limited (KPHL) is working with the Lihir landowner company, MRL Capital to find energy solutions for the Lihir gold mine and the Lihir Islanders using natural gas and other energy sources.

A Memorandum of Understanding (MOU) was signed in May between KPHL and MRL Capital.

The MOU paves the way for both companies to conduct a feasibility study to evaluate power solutions including gas power generation and determine if it is economically viable.

KPHL Managing Director, Mr Wapu Sonk said as part of its vision to create value and opportunities for PNG and its people, KPHL intends to explore the potential to supply alternate energy solutions in PNG, including supply of liquefied natural gas.

“This MOU is intended to reflect the nature of the commitment and inten-



Mr Sonk (right) and Mr Rausim signing the MOU. Pic courtesy of KPHL

tions of Kumul Petroleum Holdings Ltd and MRL Capital Ltd in relation to the project. We are excited to take on this initiative especially because it will empower the people of Lihir where one of the largest gold mines in the country has been operating for many years,” Mr Sonk said.

“We hope that we can build from this MOU with MRL Capital to supply LNG and gas fired power solution to the giant Lihir Mine and also supply access electricity to the Lihir

community as part of our community obligation programme.”

Mr Rausim added that MRL Capital would seek to secure the support of Lihir Gold Limited to participate in assessing available energy solutions, including liquefied natural gas for the Lihir gold mine.

He also said his company would source co-investors, equity partners, and technical know-how, expertise, and end-user clients for the project.

Former PNG Treasurer relinquishes EITI International Board position

The recent change of government has impacted PNG Extractive Industries Transparency Initiative’s position on the EITI International Board, according to the PNG EITI Secretariat.

The former Treasurer, Mr Charles Abel, relinquished his position as an EITI International Board Member representing the Southeast Asian region in the 2019-2022 EITI Board.

In his place the International Board has appointed EITI SEA alternate board representative, Ms Maria

Teresa S. Habitan, Assistant Secretary of the Philippine Department of Finance.

Sam Basil assumed the role of PNG Treasurer in a handover ceremony on June 13 at the Department of Treasury.

He has assumed the role of chair of PNG EITI.

The PNG EITI Multi-Stakeholder Group are progressing the nomination for a new PNG candidate to the EITI International for the EITI SEA Board Representative.



Maria Teresa S. Habitan. International EITI Pic

News Briefs

Resource sector taxes increase: PNG’s 2018 Final Budget Outcome noted that mining and petroleum taxes had increased by K661.4 million compared with 2017, reflecting higher oil and gas prices and despite the additional earthquake related costs. Mining and petroleum taxes in 2018 amounted to K775 million compared with the 2018 Budget

estimate of K725 million and the 2017 total of K113.6 million, according to the PNG Department of Treasury.

Explorers demobilise: Consort Express Lines, a subsidiary of Steamships, said that while its liner fleet performed below expectation, its project fleet saw increased

activity “due to unbudgeted charters in the Gulf as exploration companies scaled down operations and required support demobilising equipment. This short-term boost was welcome, but the reduction of activity does not augur well for the project fleet, which is expected to be underutilised in 2019 as a result,” the company reported.

Petroleum and mineral exports

worth K27.6 billion in 2018



The Harmony-owned Hidden Valley mine in the Morobe Province. PNGCMP File pic

PNG exports of petroleum and mineral products hit a record K27,579 million in 2018 compared to K25,381.1 million in 2017, the Bank of Papua New Guinea reported in its December quarterly bulletin.

It said the increase, which was led by LNG exports worth K12,814.7 million, up from K10,467.5 million in 2017, was due to higher export prices which offset declines in export volumes for all commodities.

Condensate exports totalled 8.9 million barrels compared with 10.93 million barrels in 2017 due to lower production associated with the temporary shutdown of operations in the wake of last year's Highlands earthquake.

The average free-on-board price for condensate export was K237 per barrel in 2018, up from K177 per barrel in 2017, reflecting higher international prices. The increased export price more than offset the decline in export volume and resulted export receipt rising to K2.1 billion in 2018, compared with K1.9 billion in 2017.

Crude oil exports fell sharply to 3.99 million barrels from 7.3 million barrels in 2017 as a result of lower production at the Kutubu, Gobe and Moran oil fields, due to

the earthquake.

The average export price of crude oil was K232 per barrel in 2018, compared to K172 per barrel in 2017, reflecting higher international prices attributed to production cuts from the Organization of Petroleum-Exporting Countries (OPEC) and non-OPEC countries. The decline in export volume contributed to lower export earnings of K927.5 million in 2018 compared with K1.3 billion in 2017.

Export receipts for refined petroleum products rose to K1.2 billion in 2018, compared with K1,196.5 million in 2017. There were lower export volumes for different refined petroleum products, BPNG said.

The volume of gold exports fell from 63 tonnes in 2017 to 58.7 tonnes in 2018 as a result of lower production at Porgera, Ok Tedi, Lihir and Simberi, and by licensed alluvial gold exporters. These more than offset higher production at the Hidden Valley and Kainantu gold mines.

BPNG said the average f.o.b. price for gold was K133.4 million per tonne in 2018, compared with K120.8 million in 2017. Higher international gold prices and the depreciation of the kina accounted for the increase. The increase in export

price more than offset the decline in export volume, resulting in a higher export receipts of K7,828.1 million in 2018 compared with K7,612.2 million in 2017.

Copper exports totalled 87,400 tonnes in 2018, compared to 100,400 tonnes in 2017 due to lower production and shipment by the Ok Tedi mine. The average f.o.b. price of copper was K21,621 per tonne in 2018, compared to K19,544 per tonne in 2017.

Due to the decline in export volume, export revenues fell to K1.89 billion compared with K1.96 billion in 2017.

Nickel exports totalled 25,800 thousand tonnes in 2018, compared to 35,800 tonnes in 2017 due to lower production and shipments from the Ramu Nickel mine. The average f.o.b. price of nickel was K42,132 per tonne in 2018, compared to K32,933 per tonne in 2017.

BPNG said the increased price was due to robust demand from China where the steel industry grew strongly. In addition, there were lower supplies from the Philippines as a result of environmental issues. Export receipts fell to K1.09 billion in 2018, compared to K1.2 billion in 2017.

Cobalt exports totalled 2,900 tonnes compared with 3,400 tonnes in 2017. The average f.o.b. price of cobalt was K198,448 per tonne in 2018, compared to K180,618 per tonne in 2017 due to strong demand from battery manufacturers, and lower supply from the Democratic Republic of Congo, the world's largest producer.

Export revenue from cobalt totalled K575.5 million compared to K614.1 million in 2017.

PJV continues to support public infrastructure



The PJV community roadworks team working on replacing deck planks at the Aipulungu bridge at Porgera Station. Pic courtesy of PJV

Porgera Joint Venture (PJV) continues to maintain important public infrastructure along the Lagaip-Porgera section of the Highlands Highway, particularly in Porgera, Enga Province.

Recently, the company carried out maintenance work on the Aipulungu bridge, one of the two bridges that

connects the Paiam Township and the Porgera station and the mine.

In February this year, the PJV community roadworks team removed the damaged deck planks on the bridge, including the damaged stringers, and replaced them with new stringers and deck planks before reopening the bridge to

motorists.

According to PJV's Senior Engineer Josiah Kunai, the maintenance work was carried out after the company conducted an inspection of the bridge.

PJV engaged local contractors to assist with the maintenance work.

Pepe Contractors were engaged to control motorists and pedestrians while Niera Ipisakale, another local contractor was hired for the use of its trucks and other equipment.

"Since the replacement of the failed stringers and deck planks on one of the bays, PJV has replaced a total of 20 bridge stringers and 24 deck planks on a total of 4 bays," Mr Kunai said.

There was a general appreciation from motorists and members of the public that PJV was doing some maintenance work on the bridge.

Scholarship students graduate as Community Health Workers

TWENTY-year old Florence Robert who completed her Community Health Worker (CHW) training recently says she is confident to serve her community of Membok Village in the Upper-Middle Fly (CMCA) region of Western Province.

Florence graduated along 41 other students this year from the Rumginae Community Health Worker Training School.

She is also one of the 11 locals who are part of this batch who received scholarship assistance from the Ok Tedi Development Foundation (OTDF).

"After today, I feel confident to help my community to practice proper sanitation and hygiene, assisting the women during delivery and giving advice to mothers on proper nutrition for the children, the more vulnerable ones," she said.

For Florence, constant family support motivated her to complete her studies, and be able to graduate.

She intends to go back to a sub health centre nearest to her village to work and gain further experience, with the intention to pursue studies of becoming a registered nursing officer.

Every year 30 scholarship spaces are made available upon application from the OTDF Scholarships desk.

OTDF Program Services Manager Mr Eric Kuman said this when addressing graduates of the 40th Rumginae - CHW Graduation ceremony on the 13th of March.

He mentioned that all mainline churches were to be thanked for their immense contribution to providing health services beyond the most extreme terrains, and all partners involved in the rural health

programs in Western Province.



Ms. Florence Robert. Pic courtesy of OTDF

Miner cleans up local village

Ok Tedi Mining Limited successfully hosted a clean-up exercise at one of the mine villages and established for the first time, a sustainable rubbish removal plan for the village as part of the World Environment Day activities.

Finalbin village, located less than an hour's drive from the mining town of Tabubil had one of its popular rubbish dumping location cleaned.

An astounding 10-15 tonnes of rubbish was picked up and taken away for proper disposal by a team of volunteers including OTML employees, contractor business partners, school students and Finalbin villagers.

For years the dump grew becoming an eye sore, a huge contrast to the natural greenery of the surrounding mountains and terrain.

OTML Superintendent Industrial Site and Water Management, Paulus Pank said, "Picking rubbish marks



Environment Officer, David Amos (left) and Graduate Environment Officer, Monica Kolopen tying up bags of collected rubbish. Pic courtesy of OTML

our small contribution towards environmental protection to commemorate the World Environment Day for this year. There were other week-long simultaneous activities involving OTML departments and

schools located near Tabubil, but this initiative brings the awareness back to the community who have little understanding when it comes to the subject of environmental protection."

Woman bitten by poisonous snake saved

A local woman who was bitten by a venomous snake was recently saved thanks to the heroic efforts of her husband and the Oil Search seismic team.

Lucy John, mother of three, is from the village of Wabo in the lowlands of Gulf Province. This lowlands region is home to the death adder – a highly venomous snake. Mrs John and her husband were completing their day's tasks when she was bitten.

Her husband, Iksy John, knew her life was in grave danger and that an antivenom dose was the only way to save her. He also knew that the antivenom could be found at the Oil Search seismic base camp, located on the river bank some 40km away. With no time to lose, he carried her to a motorised canoe and travelled at nightfall, through bad weather, to the seismic camp.

The couple were met by Oil Search's medical doctor, Dr Robert Imambu. The medical team quickly stabilised Mrs John with an antivenom infusion and monitored her progress throughout the evening. She made a full recovery by the next morning and was discharged from the seismic crew clinic. The company's Community Affairs team then supplied fuel for the family's trip home.

Mr John thanked Oil Search for saving his wife.

"If Oil Search wasn't here, I would have lost my wife, and this would be devastating for my children and I. Thank you very much."

The Oil Search seismic team has now saved the life of three snake bite victims from the Wabo area. Antivenom is costly (about K20,000 per dosage) and needs

special cool storage, so is typically not available in remote clinics.



Oil Search seismic medical doctor, Dr Robert Imambu stabilising the snake bite victim in the seismic crew clinic as her husband watches on. Pic courtesy of OSL

PanAust recognised as an innovator in the mining industry



A truck bound for the Phu Kham Copper-Gold Operation loaded with a full fuel tank (bottom) and an empty concentrate container (top). Pic courtesy of PanAust

PanAust is pleased to announce it has been acknowledged for its innovative approach to the business of mining, winning the 'Miners Innovation Award' at Austmine's '2019 Mining Innovation Conference & Exhibition' in Brisbane.

The award recognises an inventive solution, conceived of and implemented by the Company's logistics teams in Laos, to backload diesel to its Phu Kham Copper-Gold Operation.

PanAust Executive Chairman, Dr Qun Yang spoke proudly of the Company's achievement.

"At PanAust, we are always looking for out-of-the-box ways to improve our costs and sustainability outcomes. This initiative – six years in the making – does both. On behalf of PanAust, I wish to thank Austmine for this recognition and for all of their support to our Company over the years," Dr Yang said.

Diesel backloading utilises returning 'empty' concentrate haulage trucks to transport diesel to and from the Company's Phu Kham Operation. A custom-built, half-height tank is filled with diesel and loaded under an empty concentrate container and trucked from PanAust's logistics hub at Ban Thouay to Phu Kham.

After arriving at Phu Kham, drivers discharge diesel at the fuel farm and proceed to the process area to collect concentrate. The empty half-height tank is then loaded on top of the full concentrate container for the return journey to Ban Thouay.

The backloading of diesel is saving PanAust approximately US\$1.2 million per year by offsetting the cost of transporting diesel. It has removed approximately 3,310 truck movements a year, significantly reducing the Company's carbon emissions. Through the targeted employment of Lao-local female truck drivers and forklift operators, the initiative has also increased gender diversity within logistics teams.

"On behalf of the Company and its Board of Directors, I want to thank everyone involved in the diesel backloading project. I also extend my personal thanks to all the cross-functional teams for demonstrating that cost, production and sustainability outcomes are indeed mutually supportive," Dr Yang said.

Chamber Members!

Send us a story about an innovation you are doing and we will have it featured in this newsletter including on our Facebook and LinkedIn pages.

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 regular newsletter that aims to inform Chamber members, the private and public sectors including the Government, interest groups and the general public about developments happening within the PNG extractive industry.

General enquiries:

The Chamber commissions and publishes a 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 4, Habourside West, Stanley Esplanade, Port Moresby.

Media enquiries and contributions:

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