



# MINING AND PETROLEUM NEWSLETTER

December 2021 | ISSUE No.: 01

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## Chamber and Rotary partner on **3.3 million Masks Project**



*NCC Representative, Megan Gaure, receiving the masks from Suresh Shetty of Rotary, and Executive Director of the PNG Chamber of Mines and Petroleum, Albert Mellam.*

The PNG Chamber of Mines and Petroleum has partnered with the world's largest volunteer service club association, Rotary, on a humanitarian project to ship a total of 3.3 million medical-grade respiratory face masks, to medical workers in Papua New Guinea.

The Chamber, which represents major stakeholders in the mining and petroleum sector, received a donation of 3.3 million KN95/P2 respiratory masks from Rotary Australia, to distribute to medical workers in the country, through the National Department of Health, and the National COVID-19 Control Centre in Port Moresby.

The Chamber received funding donations from its members, to ensure the shipment of six 40ft freight containers, containing the masks, valued at around K5.5m.

The Rotary Clubs involved in this massive logistical project, are the Rotary Club of Greater Springfield in Brisbane, and the Rotary Club of Boroko in Port Moresby, along with Rotary Australia World Community Services (RAWCS).

Chamber Member, Ok Tedi Mining Limited were first to commit to the Mask Project, agreeing to facilitate the shipping costs of

the masks to PNG.

Upon the landing and delivery of the first of the six containers of masks in Port Moresby, OTML Managing Director and Chief Executive Officer, Musje Werror, said, "OTML is pleased to work with the PNG Chamber of Mines & Petroleum and its members to deliver essential personal

Chamber's 2021 Mining and Petroleum Conference sets the scene for industry in 2022

Featuring Prime Minister James Marape as the Keynote Speaker, and project updates from each of the major mining and petroleum projects, the Conference was a strong commentary covering the need for stable, legislative environments, reaffirming PNG as a solid investment destination, and providing a snapshot of what is yet to come in the resources sector.

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protective equipment to PNG during these unprecedented times, and we will continue to provide support where appropriate to combat COVID-19.”

At the official handover of the first shipment to the National Control Centre (NCC) for distribution this week, Executive Director of the PNG Chamber of Mines and Petroleum, Albert Mellam, acknowledged the support of all the Chamber member companies who donated to the project.

“We have worked with Rotary Australia and Rotary PNG on this important project, and we acknowledge the support from our members who have given generously to this project which we hope will go a long way in helping to stop the spread of COVID-19 in our country. Without the support of our members, the Chamber would not have been able to be involved in this project,” Dr. Mellam said.

Rotary PNG Representative, Suresh Shetty, who was present at the handover of masks to NCC, said the masks donation was one of several other initiatives the Rotary community in Australia and PNG, had committed to in the fight against COVID-19.

“On behalf of Rotary Australia, and Rotary Club of Boroko, we would like to say thank you to the Chamber and its members for helping us move these masks to PNG. Thank you also to Chamber Councillor and Rotarian, Mark McMonagle who helped us a lot in coordinating this project.”

Rotary Governor for PNG, Togaro Adiba, who was also at the handover event, was equally appreciative.

“We thank the Chamber of Mines and Petroleum and their members for this partnership, and we look forward to working closely with the Chamber in any future projects that we have, which will help contribute to the health of our people,” Mr. Adiba said.

NCC representative who received the masks, Megan Gaure, explained where the masks would be distributed to.

“These masks will be distributed to provincial health authorities, through our provincial control centres, to send out to all health facilities for the health workers on the frontline, who are treating COVID-19 patients,” Ms. Gaure said.

Sun Engineering Chief Executive Officer, Chamber Council Member, and passionate Rotarian, Mark McMonagle who was instrumental in coordinating this project,



*Rotary, NCC and Chamber representatives, standing in front of the first shipment of pallets of KN95 masks.*



*The first of six 40ft containers of KN95 masks being unpacked for storage in the NCC storage facility in Port Moresby. This storage facility houses all donated COVID-19 medical supplies and personal protective equipment (PPE) for distribution to all medical health facilities around the country.*

acknowledged the support from Chamber members.

“We would like to give special thanks to Rotary for the masks and to Musje Werror and OTML for committing to the shipping of the masks from Australia to PNG. We would also like to thank the below listed companies for their generous donations which covered port costs, road transport and logistics,” Mr. McMonagle said.

While the Chamber’s members play significant philanthropic roles in their own resource areas, they also give generously to assist in national aid and humanitarian programs, as members of the country’s mining and petroleum sector.

A sincere word of thanks to the following Chamber members who contributed to this extremely worthy cause:

- Ok Tedi Mining Ltd
- Wafi-Golpu Joint Venture
- ExxonMobil PNG
- Tetra Tech Coffey and Coffey Services PNG
- Sun Engineering
- K92 Mining
- Highlands Pacific
- Erias Group
- Oil Search Ltd
- Pronto Software
- Markham Culverts
- Curtain Bros. PNG
- Aspen Medical
- International SOS



*Chamber Council Member, Mark McMonagle played a key role to facilitate this partnership between the Chamber and Rotary*

## 'A sustained commitment to Papua New Guinea' The Oil Search Story

On December 9th, Oil Search Limited announced an update via the Australian Stock Exchange, that the National Court of Papua New Guinea had made orders approved the scheme of arrangement under which Santos would acquire all of the shares in Oil Search in return for the issue of new Santos shares to Oil Search Shareholders. This follows approval of the Scheme by Oil Search shareholders during the Scheme Meeting on Tuesday, December 7th, 2021.

It also went on to announce that the Oil Search expected to lodge a certified copy of the orders with the Papua New Guinea Registrar of Companies, in accordance with the Merge Implementation Deed between Oil Search and Santos, dated 10 September 2021, on Friday, December 10th. At which time, the scheme would have become effective. Oil Search would then apply for its shares to be suspended from trading on the PNGX and the ASX with effect from close of trade on Friday, December 10th.

A week before this announcement, Oil Search Executive Vice President and Co-Head for PNG, Leon Buskens, spoke at the 2021 PNG Mining and Petroleum Conference and Exhibition at the Hilton Hotel in Port Moresby. He reiterated the company's proud history, and its strong and continued commitment to the Papua New Guinea.

Represented again for this publication, is an edited version of his presentation.

"It is an honour and a real privilege to represent Oil Search today not only to give a business update but to share a bit of our history and our experiences of operating in Papua New Guinea. In line with the theme of our Conference, 'Resource Industry - Making it work for Papua New Guinea', I will also speak directly to the power of collaboration and partnerships with government, the industry, communities, and other stakeholders and how these meaningful partnerships are contributing to improvements in socio-economic outcomes at present and beyond our projects."

Exploration in PNG began during the First World War initially in the lowland areas of Papua. After the First War, Oil Search was incorporated and commenced its exploration efforts in 1929. The Company then joined BP and Mobil to form



OUR PEOPLE: Leon Buskens, Oil Search Executive Vice President and Co-Head PNG

Australasian Petroleum Company Limited in 1938. The first well had just commenced drilling at Kariava in Gulf Province in 1941 when the Second World War broke out in the Pacific. APC had to suspend activities and relocate to Melbourne in 1942. After the war, the company returned to PNG in 1946 and resumed drilling.

Despite some early gas finds in the 1950s and 1960s in the Gulf areas, it was the opening up of the Highlands Foldbelt in the 60s and 70s that led to initially gas, and then oil discoveries in the 1980s at Hides, Kutubu, Angore, South East Mananda and P'nyang when large helicopters were introduced to allow access into our remote Highlands. Puri 1, which spudded in 1957, was the first well in the world to be drilled entirely with helicopter support.

Oil production, operated by Chevron, commenced in 1992 and further discoveries at Gobe and then Moran were commercialised through the early to mid-1990s. The Elk-Antelope gas discovery was made in the early 2000's and of course the sector has seen the development of the PNG LNG Project which began production in 2014 ahead of schedule.

"At this juncture, I take the opportunity to pay tribute to late Imbi Tagune who until his untimely passing, was the General Manager Client Services at MRDC and whose tireless efforts played a vital role at the commencement of the Kutubu oil project and our ongoing stakeholder collaboration with Government, our landowners and

development partners in this space. I also honour the memory of other late colleagues who have recently passed and acknowledge their contributions to the development journey of Oil Search."

### Persistent Explorer – a sustained 90-year commitment

For the resource industry, we operate in some of the world's most challenging terrain and as many of you know, apart from the road infrastructures, we rely heavily on aerial support. For Oil Search, the cost for heli-supported exploration wells in the Highlands is between US\$100million to 150million per well whereas, the probability of commercial success in PNG is about 1 in 10. Despite the business challenges, there have been opportunities as we have remained consistent in our efforts and maintained our PNG focus and commitment. When others exited PNG, Oil Search remained.

And, it certainly has been a long road to success. It took the Company more than 60 years to generate revenue from our exploration and development efforts however, the last 30 years has seen Oil Search grow into a significant energy company and we remain steadfast in our commitment in generating shared value for all our stakeholders.

### Our Purpose

As an upstream energy company, understanding and managing the risks and opportunities posed by energy transition pathways is critical for our ►

Continued from page 3

long-term success. We acknowledge the PNG Government's ambitious efforts and the governments of other jurisdictions we operate in for the prominence given to the science of climate change. At Oil Search we are committed to delivering low-cost, high value energy that meets society's needs.

That is our purpose.

And with a focused portfolio, our ambition is to be the preferred energy company for all stakeholders.

### Strong PNG Country presence

Since 2003, we have been the operator of all PNG's producing oil fields. Our facilities, pipelines and licences straddle the Southern Highlands, Hela, Gulf, Central and Western provinces. The scale of our operations reaches across one million hectares of land, 8 local level governments, 492 villages, approximately 35,000 landowners, 13 language groups and hundreds of clans and incorporated land groups.

### Our People and Our Way

At Oil Search, we know our long-term strategy is underpinned by one of our business objectives - to become the trusted and preferred employer and partner of choice.

Our commitment to supporting, empowering, and enabling our people is sustained by our diversity and inclusion strategy and our plans for succession management. Through our training and development programs, we are helping to expand the national skills base of which I am pleased to say that 88% of our PNG team are Papua New Guinea citizens and almost 80% of leadership roles in PNG are filled by Papua New Guinean leaders. In terms of

gender diversity, we will continue our efforts to further improve the representation of

females in the oil and gas sector. In 2020, 21% of senior management level roles were held by women while our graduate program had 58% female representation.

At Oil Search, we are committed in providing a safe work environment and protecting the mental and physical wellbeing of our employees and contractors. This is our duty of care and in an environment exacerbated by a global pandemic, we rely on our dedicated team of Medical and Occupational Health Service professionals at each of our project sites in PNG including Port Moresby and Australia to provide our personnel with the best medical and healthcare.

Apart from the free medical care at each of our site clinics, we strive to play a leadership role in employment practice in areas such as paid parental leave, first home ownership and supporting employees who are affected by family violence. And through our ongoing support of the Bel isi PNG initiative and membership to the Business Coalition for Women, we are receiving additional resources and transformational tools to support positive change in the workplace, in homes and communities.

With our core values and behaviours of One Team, Stakeholder Focused, Courageous, We Deliver, and We are Sustainable, Oil Search will continue to provide a supportive and collaborative workplace where every employee feels respected and recognised. The next phase of our journey will see us continuing to prioritise activities that support our leaders in role-modelling our inclusive culture and behaviours or pasin as we say in Tok Pisin.

This is our sustained commitment.

### Quality assets and resilient operations

The successful delivery of our growth relies on sustaining an accountable, high performing culture and looking after the safety and wellbeing of our people. As a result of our strict adherence to COVID-19 protocols, including early quarantine detection and isolation, our safe and reliable operations have been maintained despite the impacts of COVID-19.

Our third quarter operating revenue was US\$409 million, up 12% from the previous quarter. This came off the back of a solid production performance in the previous quarter through a lot of hard work and the dedication of our people. I would like to take this opportunity if I may to recognise all Oil Search employees and contractors, our landowner company leaders and the local area communities in each of the Petroleum Development License areas we operate, our medical and the field operation leadership team, COVID-19 action taskforce and our vaccine advocacy team for going above and beyond as One team to deliver through these very challenging times.

The PNG LNG Project, a world class asset with a world class operator in ExxonMobil continued to perform above nameplate production. At Oil Search, we progressed our business improvement initiatives including process safety and operational excellence. I will share with you few of these initiatives.

At present, good progress is being made across all our major growth projects. We are seeing a ramp up of Papua LNG project activities as the operator targets FEED entry in 2022.

### Operational Highlights – North-West Moran

I would now like to share few of our operational highlights. The first is the North-West Moran Flowline Repair which was completed at the end of 2020. When the 2018 7.5 magnitude earthquake devastated many local communities, it also caused significant damage to three of our production wells at the Agogo Production Facility.

We commissioned a major project to reconstruct the North-West Moran flowlines and repair damage to the impacted well pads. Following a huge collective effort by various teams in a remote setting, the North-West

Moran flowlines were reconnected with aerial support, six months ahead of schedule.

This project and the outcomes that have been

## A proud history in Papua New Guinea

<p><b>1929</b></p> <p>Oil Search Limited was incorporated to explore what is now modern-day Papua New Guinea</p> 	<p><b>1950 – 1969</b></p> <p>The introduction of large helicopters and the construction of the Highlands Highway allowed access into the remote Highlands, opening up vast opportunities</p> 	<p><b>1986 – 1992</b></p> <p>Oil was finally discovered in 1986 at Iagifu (Southern Highlands) and we generated our first revenue from the Kutubu and Hides Gas-to-Electricity developments in 1992, over 60 years later</p> 
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*A proud history*

Papua LNG: Steps to FEED Entry	
<input checked="" type="checkbox"/>	Government support of key projects
<input checked="" type="checkbox"/>	Signing of Fiscal Stability
<input checked="" type="checkbox"/>	Strong partner alignment and project prioritisation
<input checked="" type="checkbox"/>	Remobilisation of Papua LNG project team (TotalEnergies / ExxonMobil)
<input type="checkbox"/>	Optimise synergies with PNG LNG infrastructure
<input checked="" type="checkbox"/>	Restarted project financing activities
<input checked="" type="checkbox"/>	Downstream infrastructure sharing agreements
<input type="checkbox"/>	Encouraging markets soundings for LNG contracting
<input type="checkbox"/>	FEED entry targeted 2022
<input type="checkbox"/>	FID targeted 2023 (affirmed by Operator & Govt)

LNG Expansion	
<input type="checkbox"/>	Papua LNG will deliver a range of new benefits to Government and landowners, increasing value to the State
<input type="checkbox"/>	During the third quarter, the Papua LNG project experienced a ramp up in project activity
<input type="checkbox"/>	Pre-FEED work is expected to continue into 2022

The P'nyang project	
<input type="checkbox"/>	Good progress was made in the third quarter, with the execution of a Heads of Agreement for negotiating a fully-termed Gas Agreement.
<input type="checkbox"/>	ExxonMobil and the PNG Government are progressing negotiations with a target of executing the Gas Agreement before the end of the calendar year

Complete    
  In Progress    
  To go

*Papua progressing towards FEED in 2022 and FID 2023*

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delivered closely align with our Company purpose of delivering low cost, high value energy that meets society’s needs.

**Oil Search Integrated Operations Centre**

Another achievement which I am really pleased to announce is a first of its kind ‘Integrated Operations Centre for Oil Search and Papua New Guinea. Established recently in the Oil Search head office in Port Moresby, the ‘Centre’ has been designed to drive safety, production, and cost performance by leveraging on technology to create a robust connected workforce through live feed to CCTV at Oil Search production facilities in the Highlands, digital whiteboards, 3D models, safety and reservoir performance data among others. The ‘Centre’ empowers our Port Moresby based technical staff to directly work with and support the Oil Search field operations.

It took a significant team effort to deliver this first for Oil Search and for Papua New Guinea. Part of the Project Team is a young Papua New Guinean engineer Ali Manasingkec who led the Installation and Commissioning efforts. Ali joined Oil Search through our Graduate Development Programme in 2019 and we are proud to see in-house talent such as Ali advance in their roles. Ali will be instrumental in evolving the data and visualisations to improve the real-time support for our production facilities.

**Strong Sustainability Foundations**

Sustainability is embedded across the business and sits at the core of all decisions.

In 2020, we took significant steps to define an overarching Sustainability Strategy and create a model that clearly represented the elements and boundaries of sustainability, providing a framework to engage with external stakeholders about

key sustainability risks and to measure our performance.

The Sustainability Strategy sees Oil Search focus its sustainability efforts under a 7-pillar sustainability model for action with a series of clear commitments on Climate, Environment, Community, Health & Safety, People, Integrity and Economic sustainability to deliver short to medium term sustainability outcomes.

Oil Search was recently recognised for its efforts and commitment to sustainability. We were ranked in the 92nd percentile of all Oil and Gas Upstream & Integrated participants, with an improved score of 71/100, up 11% on 2020 by the Dow Jones Sustainability Indices; from Sustainability ESG; a Risk Rating of 6 out of 260 of global oil and gas producers and we were included again on the GivingLarge Top 50 list for 2021. Companies are selected for inclusion in the Dow Jones Sustainability Indices, S&P 500 ESG and several other sustainability indices in part based on their results in the S&P Global Corporate Sustainability Assessment (CSA).

Inclusion in the DJSI Australia is an outstanding achievement for Oil Search and reflects our absolute and sustained commitment to a sustainable future as the preferred energy company for all stakeholders.

We are determined to play a constructive role in the energy transition through the responsible delivery of low cost, low GHG intensity energy; we have set a goal of reducing the GHG intensity of our operated assets by more than 30% by 2030; we aim to be a net zero energy company by 2050; we will minimise our environmental footprint by developing assets close to existing infrastructure where possible and ensuring that there is no net loss of biodiversity in our new projects, we also remain committed to our communities and have a renewed

focus on partnering with key stakeholders to support youth and facilitate a better, independent and self-sustaining future for the communities we work in.

**Supporting the national economy and building safer communities**

Our investment in PNG goes much further than straight taxes, royalties and development levies. In 2020, we contributed K1.5 billion to socio-economic contributions in PNG. This includes payments to PNG Employees, Government, Landowner and Supplier companies, Shareholders and Community Investments. We paid K86 million in community investment in 2020 including K36 million to the Oil Search Foundation. Between 2010 to 2020, we paid K2 billion in contracts to landowner companies, and we delivered 280 projects under the PNG Government General Infrastructure Tax Credit Scheme at a cost of K524 million in the areas of education, health, transport, district administration and law & justice. We have also paid more than K3 billion in taxes between 2013 to 2020.

At Oil Search, we also publish what we pay through the Extractive Industries Transparency Initiative. ●

Porgera accounts for 2% of **real Gross Domestic Product**

**T**he 2021 National Budget has acknowledged that the Porgera gold mine is a major contributor not only to the Mining and Quarrying Sector but also to the overall PNG economy. “In 2019 alone, it contributed to 16.3% of Mining and Quarrying real GDP, which translated to 2% of real GDP for 2020,” according to the 2021 National Budget, Volume 1.

Prime Minister James Marape, when speaking at the recent 2021 Mining and Petroleum Conference and Exhibition at the beginning of this month, announced that for the 2022 National Budget, he had given specific instructions to Treasury not to include revenue projections for the recommencement of the Porgera Gold Mine, along with other projects yet to come online. ●

# Porgera Mine contributed K26.6 billion financially to PNG – Institute of National Affairs study

**P**orgera Mine contributed K26.6 billion financially to PNG – Institute of National Affairs study

A recently concluded study on the economic impact of the Porgera gold mine by the PNG Institute of National Affairs (INA) said the total financial contribution of the Porgera mine from 1990 to 2019 was K13.2 billion, equivalent to K26.6 billion in 2019 prices.

The study by Dr John Fallon calculated that the financial benefits to PNG from Porgera, as a proportion of export values, averaged 40.9% annually over the 30-year period. This included an annual average contribution of 12.9% annually to government tax, provision of 17.3% annually under national and local operations contracts, and 5.4% of PNG wages.

For the latest calendar year of 2019, before the mine was placed on care and maintenance, taxes to government constituted 13.9% of total export revenue, while royalties, compensation, education, and infrastructure accounted for 4.4%, with 15.8% paid out to national and local operations contractors and 6.7% for PNG wages.

The study said employment of PNG nationals including Porgera’s and Enga’s, at the mine averaged 2,578 over the 30-year period with 3,527 Papua New Guineans being employed in 2019.

The population of the Porgera Valley increased from approximately 4,000 people in 1988, when mine construction began, to approximately 73,000 people “as people migrated from other districts for work”.

Social tensions: “Even though the mine has generated significant financial benefits there are a range of social and institutional factors that mean there are significant underlying tensions, social issues and dissatisfaction about outcomes.”

Dr Fallon said there was a “critical lack of transparency at both the national and sub-national government levels about where the substantial financial payments ultimately go, and their effectiveness in providing tangible benefits to local stakeholders. This has contributed to frustration at the community level about the economic impact of the mine.

The cumulative nominal kina value for the Enga Province for the whole period is about

Excerpt from INA Study, Economic Impact of the Porgera Gold Mine: 1990-2019 and Loss of income from Suspension of Operations

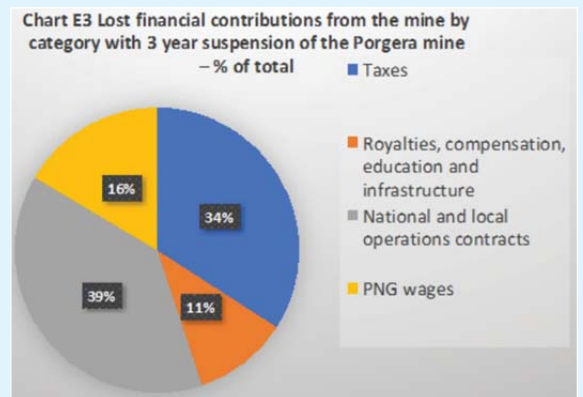
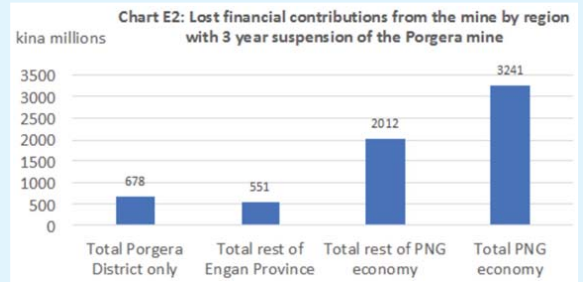
## Impact of suspension of mining

“The price of gold increased substantially in 2019 and the first 10 months of 2020. The IMF forecasts some weakening of the price in 2021 but for prices from 2021 to 2024 to remain at an average of around US\$1,600 per ounce which is 23% higher than the average for the 2016-2019 period.

Based on these price forecasts it is reasonable to assume that a conservative estimate of the lost income for the economy for one year would be the outcome for 2019 and would be three times that value for a three-year suspension of the mine.

Based on these assumptions, the total lost financial contribution in 2019 prices would have been at least K1.1 billion kina for one year and at least K3.3 billion for three years.

The breakdown of these figures into impacts for the Porgera District, the rest of the Enga Province and the rest of PNG is shown in Chart E2. Chart E3 shows the shares of the impacts by category. The impacts on the Porgera District and the rest of the Enga Province constitute about 40% of the total impact.



*(Editors note: The IMF appears to have significantly under-estimated the strength of the gold price, which averaged US\$1,774/ounce in 2020 and US\$1,798 in the first five months this year. The current spot price for gold is around US\$1,900.)*

The biggest single category impact is for national and local operations contracts comprising 39% of the total loss, followed by the loss of tax revenue at the national level which constitutes about 34% of the total forgone economic benefit. ●

K5.2 billion, or around K10.3 billion in 2019 prices. Local business development made up about half this total, followed by local wages.

“In addition, there were construction contracts that would have provided some economic benefits to local companies and employees, and these were not included. These considerations imply that the figures would be an under-estimate of the total benefits.” ●



## World Bank supportive of Porgera renegotiation, raises prospect of PNG government breaking even by April 2022

**W**orld Bank supportive of Porgera renegotiation, raises prospect of PNG government breaking even by April 2022

The World Bank has estimated that if returns to the PNG Government from the Porgera mine are lifted to the equivalent level from the Ok Tedi copper-gold mine, the PNG Government would break even by April 2022.

This forecast, based on the assumption that gold production from Porgera would have commenced early this year, following an agreement in principle last year between the government and Barrick to reopen the mine.

The WB's PNG Economic Update, published in January, based its forecasts on data gleaned from the PNG Extractive Industries Transparency Initiative where the government 'take' from Porgera, described as the proportion of profits that goes to the state, amounted to about 11% in 2016, in contrast to 9% from Lihir and 17.5% from the state-owned Ok Tedi mine.

Industry observers regarded the comparisons as surprising in view of the

government-landowner ownership of 100% of Ok Tedi, the high values derived at Ok Tedi from the mine's copper content in addition to the gold, which is exported in the form of concentrates.

The Bank acknowledged that its forecasts were approximations and dated from 2017 when gold price were 27% lower than they were in 2020, but it said this provided "a sense of the calculations underpinning the ongoing negotiations".

The WB report said: "The Government of Papua New Guinea entered negotiations with Canada's Barrick Gold and China's state-owned Zijin Mining in April 2020 on renewing the mining lease for the Porgera gold mine. In 2019, Porgera was the second most productive gold mine in the country, producing 18.6 tons and generating US\$326 million in profits (earnings before interest, taxes, depreciation, and amortization).

"Production at Porgera has been suspended since April 2020, costing the government roughly US\$3 million per month in lost revenue (roughly 1% of total revenue). In a joint statement from the government and Barrick in late 2020, the parties announced

their agreement in principle to reopen Porgera, ending a period of uncertainty.

"Although the exact date of reopening is not clear yet, if Porgera reopened in early 2021, the government would have foregone around US\$24-36 million in revenue. The benefits of this loss are a higher take into the future.

"Assuming that the new take equals that of Ok Tedi (17.5 percent), then revenues will rise to around \$4.8 million per month based on forecast gold prices and Barrick's production cost estimates. In this scenario, the government would break even by April 2022.

"Of course, there are other costs involved – for example, retrenched mine workers' lost incomes and the cost of any future equity investment in Porgera by the government to ensure a higher take. Moreover, many service providers have been impacted negatively by the Porgera closure as well.

"Nevertheless, while these calculations are simplistic approximations, they shed light on the revenue arithmetic behind renegotiating mining contracts." ●

## Industry united against COVID-19

**S**INCE the first positive case of COVID-19 was detected in Papua New Guinea, the Mining and Petroleum industry has been leading from the front in enhancing health and safety measures and protocols both for project sites, and in surrounding project impact communities. This work resulted in the proclamation of a united mining and petroleum industry in the fight against COVID-19. This year, industry

has moved to ensure that all fly-in-fly-out processes were first enhanced, and then improved to ensure secure travel bubbles for all their workers. Much of this work has included working with various health, government, and international stakeholders in both PNG, and abroad. President of the PNG Chamber of Mines and Petroleum, Anthony Smaré said "Despite the bad press the mining and petroleum sector received and continues to receive about their commitment to our country, this sector, and the companies who operate in this sector, have had to live through new lock down measures nearly every three months. This means a lot of adapting and shifting in complex industry work schedules. "Much of the work needed in projects in these sectors has very stringent COVID-19 protocols and requirements. Many of them first ever tried, as we learn to live and work with COVID-19, under Niupla Pasin guidelines. It has seen increased pressure on our fly-in-fly-out industry personnel, but we are managing as best we can." Mr. Smaré said industry was extremely proactive in working



*MASKED UP: Staff of the OTML Processing Business Unit masked up in one of their health awareness sessions – Pic Courtesy of OTML Media*

with the Australian High Commission, and Australian State governments to ensure continued and effective COVID-19 FIFO travel. An Industry FIFO Taskforce was established under the Chamber, and it continues to manage FIFO travel, in close consultation with the COVID-19 National Control Centre. All industry FIFO matters can be channelled to this FIFO Taskforce, through the Chamber. ●



*GOT IT: Ok Tedi TKI Contractor Goli Mapao showing off his vaccination card after receiving his second Astra Zeneca jab*

## 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 200 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](mailto:info@pngchamberminpet.com.pg) or can be dropped off at Level 7, MRDC Haus, Port Moresby.

### media enquiries and contributions

For enquiries regarding articles in this newsletter or contributions, please contact Neville Choi on email [NChoi@pngchamberminpet.com.pg](mailto:NChoi@pngchamberminpet.com.pg) or Jeremy Mogi on email [JMogi@pngchamberminpet.com.pg](mailto:JMogi@pngchamberminpet.com.pg) or you can call +675 321 2988.

## Newcrest firm on 'Niupela Pasin' measures



*STRAIGHT TALK: National COVID-19 Pandemic Deputy Controller, Dr. Daoni Esorom (Centre), presenting the facts on the COVID-19 Delta Variant to Newcrest Staff at the Lihir Mine Site following protests by staff against vaccination*

**N**EWCREST Mining Ltd has maintained its stance on putting the health and safety of their workers first, to ensure that their operations at their Lihir Mine Site continue, and that their staff are fully informed of the reasons why getting the COVID-19 vaccination is important to keep their workforce safe and productive.

A section of the company's workforce on the island staged a sit-in protest on the morning of November 2, raising concerns about a Domestic COVID-19 Control Measure requiring all people travelling by air into and out of high-risk provinces, to be fully vaccinated.

Emphasising Newcrest Mining Lihir's duty of care to ensure the health and wellbeing of its employees and contractors, Mine General Manager, Johan Labushagne confirmed that the company had introduced COVID-19 Control Measures across its operations in line with PNG government directives and measures to keep its workforce and contractors safe.

"At Newcrest Mining Lihir, the health and safety of our workforce is our priority - it is like wearing Personal Protection Equipment and going to work every day," Mr. Labushagne explained.

The Company reiterated that it had not mandated compulsory vaccination for employees and contractors, but it had always strongly encouraged vaccination.

It also confirmed that it has never had a 'No Jab, No Job' policy.

"Vaccination is not mandatory - people have a choice on whether to be vaccinated

or not. We cannot force them, however, as a company we have a duty of care for everybody's health and well-being, which is why vaccination is encouraged.

"Newcrest Mining Lihir had received PNG government approval for a transitional arrangement to allow its employees and contractors from high-risk provinces to travel to site and get vaccinated or return to their home provinces until the 15th of November.

"If an employee chooses to resign over that, it is their right.

However, we would encourage them to take some time to consider their decision carefully, and the impact it will have on their future and the future of their families," Mr. Labuschagne said.

In an effort to strengthen vaccination awareness among their workforce, the company invited Deputy COVID-19 Pandemic Response Controller,

Dr. Daoni Esorom, to the project site to speak directly to their workforce.

Deputy Controller Daoni, who has been leading the charge in explaining the benefits of being vaccinated, against the dangers posed by not getting the jab, was straight to the point.

He explained that even though medical professionals around the world were still trying to understand fully the COVID-19 virus, the facts were clear in every country - a large majority of the COVID-19 positive patients, were of people who were not vaccinated. ●





# 2021 PNG MINING AND PETROLEUM CONFERENCE & EXHIBITION

News Supplement

RESOURCE INDUSTRY - MAKING IT WORK FOR PAPUA NEW GUINEA



## Welcome Address

Anthony Smaré, President  
PNG Chamber of Mines and Petroleum Inc.

**'Government and resource sector partnership can forge brighter future for Papua New Guinea'**



The tone for the 2021 PNG Chamber of Mines and Petroleum conference was set by the opening address of Prime Minister James Marape on the theme, 'Resource Industry – Making it work for PNG' and a pre-recorded presentation by Australia's Minister for International Development and the Pacific, Hon. Zed Seslja.

Industry leaders in PNG provided updates on the performance of PNG's prime resource projects, including the PNG LNG Project, the Ok Tedi mine, Lihir and Ramu Nickel, all world class resource projects. These projects have contended with risks created by Covid-19, while coping with heightened society expectations of improved benefit flows to the National Government and to local and regional communities.

Speaking of the Covid pandemic I should acknowledge the extraordinary work done by the industry, the government of PNG and Australia and all stakeholders to ensure that PNG resource projects kept functioning through the covid pandemic. As the mining and petroleum industry is responsible for nearly 90% of Papua New Guinea's exports, it is critically important the industry remained operational.

Maintaining the full participation of an international workforce, in light of international border closures, dynamic quarantine requirements, vaccination access challenges, and supply chain threats, helped to ensure that these projects remained productive during the pandemic.

This was an extraordinary challenge that the industry met. It would not have been possible without the support of both governments, the PNG Covid National Control Centre, Australian Border Force, the Queensland State Government, Department of Foreign Affairs and

Trade, Air Niugini and support of loyal team members through the length and breadth of the industry in PNG. Thank you to all of you and well done!

All PNG's key mining and petroleum companies have supported the Covid public health efforts in PNG. Among our support and assistance, we have supported the government's vaccine rollout plans, provided skilled personnel to support the government's Covid-19 Control Centre, provided support both financially and in kind to various provincial health authorities, local health facilities in our areas of operations, and nationally. We are glad that our support was able to make a difference in the country's response to the pandemic.

### Changing Policy Climate

There has been heightened concerns among Chamber members about the changing PNG policy climate that has resulted in the shutdown of Porgera since April last year, the

nation's second largest gold producer. Subsequently, other major resource projects have been stalled over various policy considerations.

Changing government policies were discussed in terms of national interest perspectives at webinars hosted by the Chamber over the past year.

Despite the robust performances of the nation's world class projects, which are major contributors to government revenue and key employers in remote, regional locations, there has been significant concern about a sharp ongoing collapse in PNG's exploration activity, with expenditure falling to the lowest levels in a decade.

This has been highlighted by the Government's Mineral Resources Authority. The Chamber is keen to work with government to assess the causes of the downturn and to cooperatively design measures to make PNG attractive once again to investment flows.

The conference theme "Resource Industry – Making it Work for PNG", comes at a challenging time. Export revenues from the sector fell by K6 billion last year, following sustained growth since exports from the PNG LNG Project commenced in 2014. According to statistics released by the Bank of Papua New Guinea, petroleum and mining exports last year fell from K32.5 billion in 2019 to K25.8 billion because of a fall in LNG prices and shutdown of the Porgera mine.

Although petroleum and mining exploration activity has fallen sharply in recent years with no current sign of an upturn, I am hopeful the conference will spark renewed interest in the resources sector because of the sterling performance of PNG-based operations, which will be showcased at this conference.

The presentations by industry leaders on current petroleum and mining operations could provide confidence

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Delegates at the Brisbane Hilton

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Covid-19 guidelines were observed.



## Opening Address

Hon. James Marape, MP  
The Prime Minister of Papua New Guinea

**'We are open for business today as we have been open for business for the last 46 years, and we will be open for business for the next 46 years and beyond.'**



Papua New Guinea is a business address for well over five thousand Australian businesses, big, medium, and small, and has never been an uncertain place for investment.

We are an oil and gas and mining nation. As evident in the fact that quite a substantial part of our GDP, has its anchor in the mining and oil and gas space. That is something investors right across planet earth must know from the outset.

We are a robust democracy. We have been an independent nation since 1975. Our judiciary is totally independent from the executive government. We have successfully held ten democratic elections since 1977.

Our country has hosted Placer Dome. Our country has hosted BHP. Today we have ExxonMobil's business address in our country. We have Total's business address in our country. We have Barrick's business address in our country. We have Santos' business address in our country. We have JS Nippon of Japan; they have been consistent business residents in our country for many years. And so, it is undisputed that Papua New Guinea finds itself, a welcome business address for world-class investors. The goalposts for investment are fixed.

Papua New Guinea is placed in a very interesting part on planet earth. The next hundred years are the years that belong to the Asian Tiger economies.

Papua New Guinea is closest to the 1.5 billion people in China. We have been in good relations with China since 1975 [and] amongst [one of] the first nations to declare a One-China policy, which we keep up to today. We are a friend and close associate to the 1.5 billion people in India. We are a friend and associate to the 110 million people in Japan, who were amongst the first to be the traditional buyers of our PNG LNG project.

We have a good relationship with the rest of the 500 million people plus, in Asia, west of us. The 110 million people in the Philippines, the 280

million people in Indonesia. And so Papua New Guinea, with close proximity to the Asian market, is a very exciting place for investment.

I point to you five projects, which in my view, remain 'low hanging fruits', the presentation from Total, will inform this august conference, that the Papua LNG Project has never been off track. Papua LNG project is working on time and on schedule. The project partners, led by Total and assisted by Exxon and the PNG government's flagship company, Kumul Petroleum, and all partners in the Papua LNG are working on site. We are on schedule for pre-FEED, the running FEED and pre-FEED together. FID will possibly be in 2023, and 2024. And of course, if we can get Papua LNG synchronized with what is now being ramped up in our discussions with ExxonMobil for P'nyang, then we have construction synergies. Papua LNG, P'nyang LNG that could easily mean for us – two trains in Papua LNG confirmed, and an additional four (4) TCF of gas from P'nyang, combined into a synergy that should see our economy, and our country, being increased, in as far as our LNG production is concerned, from our present two trains from the PNG LNG, to incorporate what will be two trains from Papua LNG, and the possible extension of us as a gas-producing nation beyond the 2060s, with P'nyang coming on board later on.

Papua, P'nyang, and of course, the Pasca project is now being moved into our State Negotiating Team level. And for the mining space – Porgera and Wafi-Golpu, remain our two projects that we are moving towards conclusion.

As we open the window to what our economy will be in the next 10 years and based on our focus on downstream processing. Especially our sustainable industries – forestry, fisheries, agriculture. And of course, our greater push for downstream industries in the mining space, downstream industries in the domestic market side of things for our gas that we will secure from our

partners. The little bit of gas they give for our domestic market obligations.

So, at the greater scale, Papua New Guinea is confident as we are – the earnings from our revenues from our oil and gas, from mining, from agriculture, from forestry, from our fisheries and I point out to you, Fisheries. For those of you who have been worrying about our intention for a refinery and mint in the gold industry – it is something we are not in a rush to go into. Our industry members in Newcrest, Barrick, and all our existing players will be deeply consulted. But you can see on the other side of our economy – we are investing a hundred million kina into Madang and Manus maritime zones, for all our fish catches to be brought onshore. To add value to our economy. And so the value-adding, downstream processing concept and discussions we are having as government, is not just strictly confined to the mining space or the petroleum space. It is a general step-back for us as a body of leaders, to look at what we have achieved in the last 46 years. The last 46 years achievements still stand, where 80 percent of our people remain marginalized and in the rural enclaves of our country. That's a sad statistic, that I, as a leader, inherit today. And for the next 10, 15, 20 years, I want to unlock Papua New Guinea, so that

all citizens have equal opportunity – like those of us who live in conference rooms and the ambience of modern comfort.

And so, in this pursuit, we are trying to go into the unlocking of our resources, and going for partnership with all resource developers in our country.

In summary, we are a democracy. If there is any dispute between government, or agencies of government, or landowners, and investors, our judiciary and court rooms have been a fair place for all our investors and all people who have residency in Papua New Guinea.

We have been a known investment address for many world class investors over the last 46 years, and we will continue to be, because Exxon is here to stay with us for the next 20 to 30 years plus. Total is here to stay with us for the next 20 to 30 years plus. Newcrest, Harmony, Barrick, JX Nippon.

What more evidence do you need for PNG to be shown to you as an investment destination?

We are open for business today as we have been open for business for the last 46 years, and we will be open for business for the next 46 years and beyond.



*Prime Minister addressing the 2021 Conference virtually*

## Welcome Address by Anthony Smaré, President

<< Continued from Page 1

about future activities. Newcrest anticipates hitting a million ounce a year gold production in the next two years and steady increases in production is forecast at Ok Tedi.

Current projects such as the PNG LNG Project, Ok Tedi and Lihir continue to perform well despite difficulties created by the Covid-19 pandemic.

The confidence has been acknowledged in the 2022 National Budget. Mineral and petroleum taxes are forecast to increase by 41.8% to be a significant contributor to the 5.4% GDP growth that is anticipated. Clearly higher commodity prices are a key contributor to revenue growth of 11.4% annually in the medium term, and the PNG Treasurer is counting on a surge in revenue from the PNG LNG Project to provide the first budget surplus, in over a decade, in 2027.

At the current time TotalEnergies is about to commence front-end engineering and design studies in the New Year and anticipates making a Final Investment Decision on Papua LNG in 2023. For other major resource projects further negotiations need to be concluded before they get the green light.

### Finding the way to a brighter future

I am sure there will be considerable interest in the presentation by Kevin Gallagher, Managing Director and Chief Executive of Santos, who is in the process of implementing a merger with Oil Search. Combining the two companies will create a Top 20 oil & gas company internationally, as portrayed in talk, "Creating a Regional Champion with a PNG focus".



Prime Minister Marape at the 2021 Conference, Port Moresby

Santos is no stranger to PNG and have a long and storied history in PNG over 40 years as an explorer and producer. As a young graduate geologist, I spent several months as a well site geologist on their exploration wells in Western Province and West Sepik.

However, as a Papua New Guinea, I feel a touch of sadness and nostalgia knowing that Oil Search will be absorbed into Santos given Oil Search's 100-year history in PNG, starting as a junior and growing to a fully-fledged oil and gas producer.

But I know that the positive elements of the OSL DNA, those qualities found in its incredible Oil Search people, that made it special and successful in a dynamic PNG environment, will combine with the strengths and organisational depth of Santos, to produce a much stronger, adaptable and resilient regional giant that will not just be able to help PNG deliver on its potential in gas production, but, given Oil Search's foray into biomass energy and Santos's carbon sequestration projects in Moomba and the Timor Sea. will also play a crucial role in helping both Australia and PNG navigate this new global paradigm after COP26 - the path to net zero emissions.

There is considerable uncertainty at present over policy issues and the potential impacts of Covid-19 and Climate Change. However, this conference will reinforce the view that, combined with some assurance of a more stable regulatory and fiscal regime, PNG can steer a course that will lead to a renewal of investor interest in mining and petroleum activities.

## Mineral Policy and Legislation Review

Hon. Peter Sapia MP,  
Vice Minister, Mining & Member for Rai-Coast



The Ministry of Mining had undertaken the review of the mining policies and legislations including the development of new mining sector policies since 2009.

The review of the Mining Act 1992 was completed in 2016 and is still before the National Executive Council for its endorsement. The revised Mining Bill is one of the lengthiest consulted Bills in the country spanning over 12 years since 2009.

The government has recently made some changes to the Mining Act 1992. I will point out two of these changes which are now law in Papua New Guinea.

The Mining (amendment) Act 2020 stipulates that the state must maintain a repository of all mineral and geological data at the Mineral Resources Authority.

The holder of a tenement and/ or any other person in possession of mineral and geological data or information, inclusive of research activities, relating to the mineral and geology of the land in Papua New Guinea must submit all such data and information to the authority.

MRA is now in the process to establish a central monitoring hub for every operating mine in Papua New Guinea to transmit their live data on

mineral extraction, production and sale in real time to the hub which will be administered and monitored by the MRA.

The Mining Ministry has also developed a range of policies covering offshore mining, mining project rehabilitation and mine closure, mining project involuntary resettlement, geothermal resources policy, sustainable mining development policy and the alluvial mining policy.

The alluvial mining policy dictates that alluvial mining is reserved specifically for natural Papua New Guinean citizens only. It is an activity that directly impacts the livelihood of our people and therefore the government is specifically reserving the alluvial mining business for its natural citizens as a reserved activity.

The Ministry of Mining is also developing a downstream mineral processing policy. It is an aspiration of the people of Papua New Guinea that one day our mineral resources will be processed onshore for export

The Government is changing the way business was done in the past in PNG. We are calling upon the mining sector in particular to partner with us as we work through these developments and manage the changes that are taking place within the country.

## Global Resource Outlook

Paul Richards

*“Mine gold supplies are expected to rise in 2022, as operations face fewer pandemic disruptions. Overall, we expect gold prices to average around 1,705 US\$ an ounce through next year.”*

THE resource sector global outlook remains constrained and affected by the impact of the COVID-19 pandemic, exacerbating weather conditions in the Northern hemisphere, and changes in the way populations approach work and travel.

ANZ Banking Group’s head of Resources, Energy and Infrastructure Business in Corporate Finance, Paul Richards, explained to delegates at the 2021 PNG Mining and Petroleum Conference and Exhibition, that the pandemic, coupled with changes in supply and demand of resources, and an impending transition to greener technology were among many factors dictating the short to mid-term future of the resources sector globally.

### Gold

Gold is unique among commodities, as its price is influenced, not only by physical supply and demand fundamentals, but also by inflation, rallied value of the US Dollar, equities markets, interest rates, Central Bank activities, and geo-political environments.

Since the start of the pandemic in early 2020, a low-rate, low-inflation environment has supported gold prices at robust levels. That said, has had high levels of volatility in the last year.

“In the latter stage of the first half of 2021, some price reductions from these very high levels, could be attributed to rising treasury bills, which in turn, resulted in positive outlook

for growth as economies in regions emerged from lockdowns.

“We expect gold to remain supported at current levels in the short term, given the oil pressures in the US, and the feds signalling a delay in increasing interest rates. We expect gold prices to start at the rate height cycle into 2022.”

### Copper

Increased supply disruptions and depleted inventories are offsetting weakening industrial activities. This kept copper prices above the US 9,000 a tonne level this year, while thin inventories resulted in a spike in prices to 10,000 US dollars a tonne, just last month.

Labour strikes and social unrest in Chile and Peru, have kept the supply growth muted for the second consecutive year. Mine supply contracted later in 2020, due to COVID-19 related mining outages, and supply growth was capped at 2 percent this year, which kept the market undersupplied in 2021.

“Standard and Poors expects mine copper production to rise over 2022, through to 2025, bolstered by brownfield mine expansion, and some large greenfield projects. This is expected to relieve concentrated tightness in the market, however there are always downside risks to mine supply. This has been increased again, by political risk in Chile and Peru, which can delay project delivery.

“China is the world’s largest consumer of copper, accounting for half of global refined copper concentrate. In addition to being the largest refiner of copper. It appears to be slowing, as industrial activity is being weighed down by repeated COVID 19 outbreaks.”

### Gas

In the past year, aggressive restocking in the face of robust demand and supply side issues, has pushed up spot LNG prices to record highs of around 50 US dollars per MMBtu.

Coronavirus containment measures snuffed out power demands, forcing LNG producers to slash production, and reducing shipments. This had a lasting impact on global gas inventories in 2020, and 2021, then caught many power providers short.

China is now set to overtake Japan as the top LNG importer this year, at 78.7million metric tonnes, versus Japan’s 78.3 million.

Now how cold or warm this Northern Hemisphere winter is will impact regional gas price benchmarks for seasons ahead.

The role of LNG in Europe remains a question. Or be it, its role in firming for intermediate renewables has become more prominent of late.

It can either become a sink, or a pool market from next year onwards. In the long term, major gas and the LNG suppliers will see the high prices as a

tailwind, to support signing long-term gas supply investments and contracts.

### Oil

Oil prices have continued to improve, after the significant decline seen in 2020 as a result of the COVID-19 pandemic.

Brent crude prices have strengthened from an average of around 69 US dollars a barrel, to around 73 US dollars a barrel in the September quarter, at around 80 US Dollars a barrel in October, and November. Now OPEC’s decision to stick with its scheduled 4,000 barrel a day increase in output for November, is likely to keep the crude oil market tight this quarter, and in the first quarter of 2022. This comes amid the energy shortage that is threatening to curtail economic growth amidst shortages in supply.

In China, the world’s second largest consumer, in the last couple of months, the contagious Delta variant, and now Omnicron, has popped up in more than half its provinces, despite watertight border controls, triggering targeted lockdowns, travel curbs, and mass testing. This suggests the government is maintaining its zero COVID 19 strategy or leading a more targeted approach. This strategy is to remain at least until the Beijing Winter Olympics in February.

The impact is lower demand for oil, as people are travelling less, or at least travelling shorter distances.



The Chamber’s Administration at the 2021 Conference, Hilton, Port Moresby



# Economic Overview of the Extractive Sector

Hon. Charles Abel,  
Alotau MP and Former Treasurer



Good morning to everyone here in the room in front of me, and of course to the wider audience in this new format and day and age of COVID, and I know the bigger audience online and elsewhere in the world.

A special mention to the landowner representatives who are in the next room watching.

### Landowners inclusion

Talking about landowners, this is one of the things we are proud of in Papua New Guinea. One of the unique factors in terms of our fiscal regime, relative to the rest of the world, is how we include the landowners in the picture. It is something we are very proud of. At the same time, it adds to the complexity and risk profile of investing in Papua New Guinea.

Thank you to the Chamber of Mines and Petroleum for having me this morning. I am a little bit out of touch with the nitty gritty and details of industry particulars, but relying of course on experience and history, and what I have been following in the press.

### Importance of industry

Let me say that the government on both sides, acknowledges the industry, and continues to say thank you. Thank you for your resilience, thank you for your investment in

PNG, and thank you for continuing. You are very important.

### Engagement and Consultation – Crucial

I have quite some strong views as some of you would know, in terms of how we should liaise with the private sector and your industry. And at the heart of it, I continue to say, is the engagement is so important. Listening. Making decisions based on that consultation. Making decisions based on facts and figures. And being decisive after that consultation. Being prompt.

### Selling PNG to the world

I went to the world in 2018 to market our first ever sovereign bond issue. Many of the things I described, spelt out the wonderful opportunities this country had to offer. Based on political stability. Based on a stable regulatory environment. Based on a chain of projects that were coming up. Based on the wonderful, successful delivery of the PNG LNG Project. We were able to market to the world, our country, based on those facts.

### Policy Decisions on facts and figures

I stand here today, not to discourage you. One of the important things that the prime minister emphasised

as well, that this is the process of a democracy. You have changes. Every government has a right to review the situation. To try and get a better deal. But it all comes back to this point: base your policy decisions, on facts and figures, and consultation. Get those facts and figures – how does Papua New Guinea compare to the rest of the world, for example? Are these projects relative to the rest of the world?

### Business needs certainty

The issue is this – business needs certainty. This is a partnership. We work together to make things happen for our people.

And I think when you create that uncertainty, when you make scary statements, at the end of the day, nobody wins.

Parliament will continue, and I am a member of the opposition, and I will continue to voice our concerns.

If there is going to be a change, what is that change, and make that change, and do it quickly. So that we can realise those opportunities, wonderful first-class investors who want to come to our country.

We are part of a global village. We must all work together. Including landowners. We are not an island in a vacuum. We exist in a global

community. We must be competitive, in that context. Otherwise, they simply won't come to Papua New Guinea.

### Government Responsibility

This consultation, this partnership is very, very important. Government has a deep responsibility to make sure there is genuine engagement and partnership with this industry.

We are not going to rely on this industry forever. Times are changing anyway. The global circumstance is changing anyway. We are moving away from fossil fuels.

But Papua New Guinea today needs this impetus, this investment, to create that sustainable economy in the future.

So there is wonderful wealth and opportunity that God has given us in Papua New Guinea and we need to realise that better through such engagements and partnerships with our international partners, and our good local companies.

Just keep that in mind. Consider Papua New Guinea when you are making your investment decisions. Some of us are doing our best to create that conducive environment, and we listen to what you are saying.

## 'Niupla Pasin' Covid-19

Peter Larden, Managing Director, ExxonMobil PNG

'We commend the Prime Minister for the government's Niupela Pasin efforts to control the virus from the start of the Covid-19 pandemic in early 2020. In support of this, ExxonMobil launched a K4.3 million program to support the National Control Centre as well as the Provincial Health Authorities in Hela, Central and National Capital District.

This has ranged from embedding staff in the NCC, provision of new beds and power generation equipment to Port Moresby General Hospital, donation of critical care equipment at Tari Hospital, provision of medical supplies for health workers in Central, plus the donation of vehicles and a mobile vaccine clinic to the Motu Koita Assembly to support its vaccine rollout.

I am immensely proud that over 90 per cent of ExxonMobil staff have chosen to be fully vaccinated. Even more impressive is our sites, the LNG Plant and Hides Gas Conditioning Plant, are both nearly 100 per cent vaccinated. Tackling this virus requires a collective approach.

Sadly, people are dying, our families remain at risk, and members of the

Chamber face a range of business continuity challenges.

I encourage us all to step up to keep everyone safe – PNG is depending on it. While the pandemic continues to create market uncertainty and the energy transition is evolving at pace, we believe the future for LNG remains bright, with this lower carbon intensity fuel, replacing higher carbon intensity sources.'





## Wealth creation from the industry

Augustine Mano,  
Managing Director, MRDC

As a vital partner to the resources sector, the Mineral Resources Development Corporation (MRDC) has, over the years, diversified its focus on national wealth creation – both for landowners as project beneficiaries in the resource industry, and for the national economy.

MRDC Managing Director, Augustine Mano, told the 2021 PNG Mining and Petroleum Conference & Exhibition, that the last two years had been challenging, because of the COVID-19 pandemic.

“MRDC has a long association with the industry, representing landowners in the oil, gas and mining projects throughout the country.”

### Main Functions

- MRDC’s main function is to manage all its subsidiaries (Corporate Trustees)
- MRDC holds the shares in trust for project beneficiaries

### Operational Funding

- MRDC does not receive any funding support from the National Government
- MRDC’s revenue sources include management fees, and MRDC’s own investments

### Petroleum & Mining Project Benefits (equity & royalty)

- By law or agreements, the project benefits and the interest in the respective project licenses are received and held by the Corporate Trustees.
- The Boards of the Corporate Trustees have exclusive control and management of the Trustee company and its assets. MRDC has no powers to spend those funds without respective board’s approval.
- The funds held in trust by the Corporate Trustees are not public funds; they belong to the project area landowners and provincial governments identified in accordance with the law.

### Pillars of wealth creation

1. Beneficiaries – Community Projects, Dividend Payments, Royalty Payments, Scholarships, Community Donations, which result in better education, improved health, enhanced agriculture and promoting of SMEs
2. Corporate Trustee – Manages and invests the Resource Wealth to ensure long-term sustainable

wealth for beneficiaries and the nation.

3. National Economy – Long term investments targeting sustainable capital growth and dividend income after project life through employment creation, tax income, spin off businesses and GDP Growth

### Measuring sustainable wealth creation

“True wealth creation is measured when long term investments made using resource funds are able to sustain beneficiaries beyond the life of a project”

### Major Investments

100% Investment Subsidiaries  
Sector Location

1. Dirio Gas & Power Company Power Generation PNG
2. Pacific Property Trust Real Estate PNG
3. Star Mountain Plaza Hospitality PNG
4. Star Mountain Service Station Ltd Fuel Distribution PNG
5. Coleman Properties Real Estate Australia

6. Pearl Resort Hospitality Fiji
7. Other Properties Real Estate PNG

MRDC is a leader in multi-sectoral benchmark investments, contributing to National Economic growth through employment generation, tax generation and spin-off businesses.

### Going Forward

Existing Challenges remain and we are working towards addressing them:

- Clear separation between Trustee and Fund Manager
- Clear regulatory framework like the Superannuation Industry
- Clan vetting
- Audits
- Implementing Community Based Projects
- Managing Investments and Operations during COVID 19
- Major economic impact projects like Porgera, Papua and P’ynang LNG, and Wafi-Golpu mine will stimulate business and economic growth



Delegates from the landowner groups listening attentively through virtual feed



Managing Director MRA and delegates



## The Santos-Oil Search merger can deliver significant benefits to the PNG economy and to local communities

Kevin Gallagher - Managing Director, Santos

*'The merger will position us for success in the new era of cleaner energy and clean fuels'*



Momentum continues to build for the compelling opportunity to create a company with the size and scale to fund the energy transition. The merger will deliver a company with a market cap of more than A\$20 billion and that is in the top-20 ASX-listed companies and the 20 largest global oil and gas companies.

It is our intention to establish a secondary listing on the PNG exchange on standard terms and conditions for an exempt foreign listing. This will allow PNG based shareholders to trade their Santos shares on the local exchange.

This merger will create an entity that will have the balance sheet to fund major projects in PNG and facilitate the creation of a highly skilled workforce and progress the long-term wealth and prosperity of the people of PNG.

The merger is good news for Papua New Guinea. Importantly, the merged entity will bring significant benefits to shareholders and to PNG, including more than 4,000 Oil Search shareholders in PNG.

In discussions with Prime Minister Marape, I have made the following commitments:

- There will be no planned employee job losses for the national workforce based in Papua New Guinea as a result of the merger.

- Our intention is to offer a Papua New Guinea national a seat on the Santos board to reflect the importance of Papua New Guinea to Santos' overall business.
- We recognise the important role Oil Search has played in Papua New Guinea through its social program and have committed to maintaining the work of the Oil Search Foundation. We will establish the leadership of the Papua New Guinea business in-country.
- We will implement a capability building program, including secondments, for high potential Papua New Guinea national employees to work across Santos' broader portfolio of assets to develop their technical and leadership skills.
- We will maintain focus on exploration activities in Papua New Guinea to support the development and commercialization of the nation's resources.

In support of the PNG governments aspirations to mitigate the impacts of global warming, our carbon solutions business will seek opportunities to work with the Papua New Guinea Government and regional stakeholders to identify and develop carbon abatement projects in Papua New Guinea as well as pursue future

clean fuels opportunities such as hydrogen or ammonia.

The merger aligns with this long-term strategy to transform, build, and grow around our core, long-life assets.

In PNG, we have maintained a country office in Port Moresby since 1988 and we will seek to build local capability and promote opportunities for PNG citizens within our operations.

We will maintain Oil Search's strong focus on community programs, and we have committed to maintaining the Oil Search Foundation. We will support the development of local contractors and suppliers so that all the community benefits through our projects.

We have a proud history in PNG. We know PNG and PNG knows us. Santos has been a committed participant in PNG for over 40 years, having been involved in more than 30 different licenses and in the Papua Basin, becoming a producer in 1998 through the SE Gobe oil project in Gulf Province. We have previously contributed A\$1 million to construct the Emergency Wing of the Hela Provincial Hospital in Tari, and provided A\$500,000 in response to the 2018 earthquake.

The merger will position us for success in the new era of cleaner energy and clean fuels. Critically, the

merger will provide the platform for us to self-fund growth and deliver sustainable shareholder returns, well into the future.

The merger also provides an opportunity to improve alignment between the PNG LNG and Papua LNG projects, supporting the Papua LNG final investment decision, jobs growth and long-term wealth for Papua New Guinea and its people.

I was pleased to see during COP26 in Glasgow that the Australian and Papua New Guinea Government's agreed to join forces to create an efficient and accessible carbon market under the Indo-Pacific Carbon Offsets Scheme.

PNG was announced as the second international partner of the Australian scheme and will ensure that PNG is internationally recognised as a source of high-quality offsets. PNG joins Fiji has the only other international partner that other Pacific Island nations may also join.

Zero-emission technologies like CCS that make hydrocarbon fuels cleaner are essential to meeting the world's emissions reduction targets. At Santos, we are embarking on a very deliberate strategy to produce clean hydrogen first using natural gas and CCS and eventually transition to renewable hydrogen technology, as the technology develops.

## Oil Search has a proud history

Leon Buskens - Executive Vice-President, Oil Search

Oil Search, on the cusp of becoming a subsidiary of Adelaide headquartered Santos Ltd, highlighted its proud 92-year history in PNG at the recent Chamber conference.

Oil Search Executive Vice President, Leon Buskens, said although the company began its exploration efforts in 1929, including pioneering efforts in the use of helicopters for exploration, first oil in PNG was only discovered at Iagifu in 1986.

First revenue to the company only

flowed after the Kutubu and Hides Gas to Electricity development in 1992, some 63 years later.

With full ownership of the country's rapidly depleting oilfields and 29% in the PNG LNG Project, the largest project ever developed in PNG, Oil Search has become one of the largest contributors to government revenues in recent years.

In 2020 Oil Search contributed K1.5 billion in socio-economic contributions to PNG and K86 million in community

contributions, including K36 million to the Oil Search Foundation. Over the previous decade it had paid K2 billion under contracts to landowner companies. Total taxes paid between 2013 to 2020 amounted to over K3 billion.

The company's 50% owned NiuPower subsidiary, an Independent Power Producer, operates the 58-megawatt Port Moresby Power Station.

The Oil Search Foundation has worked with Provincial Health Authorities to

fund, deliver and distribute 12.4 tonnes of personnel protection equipment to health workers across project impact areas. The company's involvement with the Hela Provincial Health Authority has made this PHA one of the top six performing provinces.

The Foundation has administered more than one million vaccinations through the PHAs for children under 5 and for kids up to 15 years for polio. There have also been 3,000 health workers trained in emergency obstetrics throughout PNG. Some 80 scholarships





# 2021 PNG MINING AND PETROLEUM CONFERENCE & EXHIBITION

RESOURCE INDUSTRY - MAKING IT WORK FOR PAPUA NEW GUINEA



## PNG LNG – world class and doing PNG proud in the global arena

Peter Larden, Managing Director, ExxonMobil PNG

THE PNG LNG PROJECT is truly a world class operation. This is a testament to the hard work of the ExxonMobil PNG workforce, the strength of collaboration between our organization and the National Government, Provincial governments, our joint venture partners, the international financial community, and diverse landowner communities stretching from Hela through to Central Province.

This collaboration has resulted in PNG LNG building a reputation for excellence, while positioning Papua New Guinea as a significant player in the LNG market. Since 2014, customers know PNG LNG for its reliability and incredibly in 2020, we achieved 99 per cent uptime.

Reflecting on the past year standout performance areas include safety, the environment, production optimization as well as accelerated nationalization of the PNG LNG workforce.

For a project still in its relative infancy, only seven years old, these are defining achievements when compared to other global LNG projects at the same stage of their lifecycles. Despite the challenges faced in 2020 and 2021, these were still incredible years for our Project.

In September 2020 a new daily production record was set at 9.3 million tonnes per annum and August 2021 was the best month of production on record, sustaining an average rate of 9 MTA over a full 30 days, for the first time ever. In addition, last year the Project achieved its best safety performance

since production began in 2014 and, pending a safe December, we're on track to do that again this year.

As a contribution to the nation, we are proud that up to October of this year, PNG LNG has generated over K11 billion in revenue to the State and Landowners, which support the provision of services and infrastructure to all Papua New Guineans. In addition, over K15 billion kina in business opportunities have been generated for local PNG companies.

Wherever we operate, we are committed to delivering the highest standards of sustainability and environmental protection.

Firstly, on greenhouse gas emissions, ExxonMobil Corporation, globally, is aggressively reducing emissions consistent with the goals of the Paris Agreement. Over the next six years, Exxon Mobil plans to invest more than US\$15 billion on low carbon solutions and technologies. This spending will accelerate efforts to reduce greenhouse gas from our facilities, including PNG.

Third party benchmarking shows that the PNG LNG facilities are already at the leading edge in terms of GHG intensity. By investing in new technology, maintaining high levels of reliability, and focussing on flare reduction programs we continue to forecast improvements in greenhouse gas performance.

Greenhouse gas intensity and flaring emissions in 2020 were at their lowest levels since the start of production. In caring for the environment,

regeneration monitoring surveys are conducted every two years across our project areas along the entire pipeline route. The most recent results, indicate vegetation regeneration is progressing well.

Secondly, we partner with local organizations to support conservation workshops for national biodiversity practitioners. One example is our support for a Conservation Management Study conducted through a scholarship program.

This initiative has seen 89 students graduate in the field of Biodiversity Conservation with 10 earning post-graduate diplomas. The effort to achieve these results cannot be taken for granted.

Producing and exporting liquefied natural gas is a complex operation. Central to achieving these results is world class organization. Our staff are required to have deep knowledge to solve complex problems and lead diverse teams in a dynamic environment.

Investment in our Papua New Guinean workforce is central to who we are as a company. Papua New Guineans are integral to all aspects of operations. They are setting the highest standards for the LNG industry, not just in PNG, but globally.

Only seven years into production, over 91 per cent of our workforce are now Papua New Guineans, with almost 80 holding leadership roles. Based on other ExxonMobil operations at the same point in their

lifecycles, this level of nationalization is well ahead of the norm.

By the end of 2018, all maintenance scheduler positions at the LNG Plant and Hides Gas Conditioning Plant were nationalised. September 2020 witnessed the first all Papua New Guinean control room shift at Hides. Today, all control room technicians are Papua New Guineans.

We are proud our workforce is composed of 30 per cent women, one of the highest representations across our global affiliates. Women hold roles across engineering, safety, environmental, IT, national content, procurement, media and communications and security. They are also engaged across a range of women's empowerment initiatives in their communities.

Our Em Pasin bilong ExxonMobil long PNG program, grounded in safety, security, the environment, integrity, teamwork and excellence, has instilled a sense of collective pride and a passion for being the best that we can be.

Our global business also provides opportunities for overseas appointments. Papua New Guinean staff have taken roles in a range of international locations where we operate, including our offices in the United States.

I'm incredibly proud we're not only building a pipeline of experienced Papua New Guineans to support our own business, but we're developing the next generation of intellectual leaders



L-R: Peter Larden ExxonMobil, Leon Buskens Oil Search and Jean-Marc Noiray TotalEnergies



## PAPUA LNG

### Two-year delay has impacted Papua LNG schedule

Jean-Marc Noiray, Managing Director, TotalEnergies E&P PNG Ltd

Following the PNG Government decision on P'nyang in 2019 and the Covid-19 pandemic, work on Papua LNG was stopped and the upstream PRL-15 site placed on care and maintenance. The number of people employed has been reduced from 350 to less than 50.

The project is being relaunched and we hope it will not be interrupted again. We are still years away from first revenue and first gas.

Total has undertaken adult education programs in Gulf Province in conjunction with Digicel Foundation, provided 100 scholarships for youth

and distributed medical supplies.

Globally in terms of Scope 1 and 2 emissions, Total is committed to reducing emissions by 40% in 2030 as compared with 2015. The emission reduction will occur even though production by the company continues to grow.

TotalEnergies worldwide operations are targeting net zero emissions by 2050 covering Scope 1 and 2, and with Scope 3 emissions – which takes into account customer emissions - included in the case of European operations.

Studies are underway to minimise emission from Papua LNG with plans for acid gas removal, inclusive of carbon dioxide and hydrogen sulphide. It is Total's plan to reinject CO2 from start of operations with maximum use of hydropower through run-of-river generators and solar power. Such power is eventually anticipated to generate up to 150 megawatts.

The proposed development for Papua LNG has slipped by two years with Front End Engineering and Design now anticipated to start in the second quarter of next year with Final

Investment De-cision in the fourth quarter of 2023. The first LNG cargo is forecast for the fourth quarter of 2027.

Upstream site clearing could commence late next year with site construction and laying of the gas pipeline occurring in 2025-2026. Since Papua LNG has been disentangled from P'nyang, the number of proposed LNG trains has been reduced from three to two.

There will still be some synergies at the Caution Bay LNG plant site. A new LNG loading jetty will no longer be needed, just a condensate facility.

## Pasca project could come onstream by 2026 with early approval

Stephen Quantrill - Chairman, Twinza

The offshore Pasca offshore project in the Gulf of Papua could be in production within four years of receiving project approval, Twinza's recently appointed Chairman Stephen Quantrill told the Chamber conference.

The project, which contains an estimated 120 million barrels oil

equivalent, would provide US\$200 million a year in benefits to PNG once in production starts

Twinza Oil, which has been working on Pasca for a decade, estimates the State will receive revenue totalling US\$2.5 billion over the life of the project, equivalent of two thirds of

the PNG government's total projected revenue in 2022.

Quantrill said with early approval the final investment decision on Pasca could be made by 2023 with first gas produced in 2026 under a two-phase program which will see a floating LNG facility built in the second phase.

Under the proposed development Twinza has agreed to provide 10% of LNG under a domestic market obligation for use within PNG. Contributions to the state will also be greatly enhanced with the additional development of stranded gas projects such as Pandora.

## Arran Energy: Western Province Development

Michael McGowan, Managing Director, Arran Energy Niugini Pty Ltd

Arran owns a portfolio of oil and gas assets in the Western Province. The assets were acquired via the purchase of the PNG business interests of Repsol in January 2020, followed by Horizon Oil and Osaka Gas in December 2020.

Arran is now the majority equity holder and Operator of:

- PDL-10
- APDL-12
- PRL-40
- PRL-28
- PPL-574 and
- APRL-42

The company is focused on commercializing these assets as quickly as possible.

"Our initial focus is the development

of the Stanley Gas Condensate Field," Mr. McGowan said.

### Relevant Experience

- Over 90 years of experience in gas processing, field development operations and asset management globally
- Extensive PNG operating experience
- Large database of project experience & equipment pricing dating back 25 years
- Proven ability to self-perform, significantly reducing our reliance on expensive EPC contracting structures – which allows us to manage our risk profile and increase competitiveness

Extensive experience of generating gas commercialization options specific to PNG and in particular, Western Province

Track record of innovation, on budget project delivery, facility performance and safe operations.

### Historic challenges

- Lack of viable development plan
- No joint venture alignment
- A development licence at Stanley without a clear pathway to commercial development
- Lack of a near term, viable pathway to market for the gas
- Lack of progress creates challenges around government and local landholder relations

Continued spend/holding costs without pathway to value realization

### Arran Energy solutions

- Viable development concepts – lower cost, PNG appropriate development plan
- Funding partners identified
- Enhanced government and community relations
- Clear pathway to value realization for all parties
- Arran is now working with its joint venture partners to accelerate a final investment decision for Stanley (PDL-10), and to optimize wider development activities in Western province.



## We are Ok Tedi

Musje Werror - Managing Director, Ok Tedi

“We are Ok Tedi” has resonated across the business and it reflects the pride and commitment of the workforce, our business partners, and communities to ensure that OTML remains successful.”



OK TEDI Mining Limited Chief Executive Officer and Managing Director, Musje Werror, says Ok Tedi is more than a mining company.

“It is the mining flagship of our country, of which the people of the Western Province and the country should rightly be proud.”

The highlights of Ok Tedi operations:

- OTML commenced production in 1984 with the development of the Mt. Fubilan open pit copper-gold mine located in the Star Mountains of Western Province.
- OTML is a 100% PNG-owned company with 67% held by Kumul Minerals Holdings Limited after the State transferred its shares in August this year. Remaining 33% is held by the Western Provincial Government (12%), Mine Area Landowners (9%), and Mine Affected Communities (12%).
- Between 100 to 110 Million tonnes of material is mined in a normal year, and 20 to 24Mt of ore is processed. This produces 400,000

to 450,000 tonnes of copper concentrate, containing around 100,000 tonnes of copper, 300,000 ounces of gold and 1,000,000 ounces of silver.

- The concentrate is transported by a 156km pipeline to Kiunga port facilities on the Fly River for shipment via Port Moresby to customers in Asia and Europe.
- OTML’s combined workforce is around 8,000 with 3,000 being permanent employees of which 97% are Papua New Guineans. Over a third come from the Western Province and Telefomin District in the Sandaun Province.
- With the change in the shareholding, 3 new directors from KMHL have been appointed to the OTML Board.

“The future looks very promising from a social and economic perspective for the country and the extension of mine life provides additional time for the company to explore and develop new ore resources,” Mr. Werror Said.



L-R: Sheryl Peter, The Chamber and Celestine Ove, Oil Search

## Forging a stronger Newcrest

Ben Burger, Head of Development and Planning, Newcrest Mining Ltd

“We have a goal of net zero carbon emissions across our operations by 2050. At Lihir, we’re focusing on reducing our impact on the environment, which includes exploring opportunities for a low carbon future.”



### A Global Company

Newcrest is a global company with operations in Canada, Australia and Papua New Guinea, and interests in Ecuador, North America, Chile, and Fiji.

Since August 2010, Newcrest has invested more than 3 billion US Dollars, around K10billion, in capital expenditure into Lihir

In financial year 2021, Newcrest made approximately K1b in payments to Papua New Guinean suppliers; more than K400m was paid to Lihirian vendors.

Lihir has a workforce of 4,500

Lihir paid K80m in corporate income tax and K99m in royalties in the past financial year

Strong safety standards, and promoting collaboration, innovation, and an ‘owner’s’ mindset, are the foundation on which Newcrest Mining Limited hopes to build a stronger company.

“We are outstanding operators, and we continue to safely operate our assets to their full potential. We’re a leader in innovation and creativity, and create lasting value through audacious breakthroughs, especially in the areas of safety and sustainability,” Mr. Burger said.

### Sustainability

At Newcrest sustainable mining means engaging and respecting local communities, assessing and managing safety, social and environmental impacts, and making ethical and transparent, strategic decisions.

“Sustainability is firmly integrated in our business strategy. Not only is it the right thing to do. It creates business value by encouraging innovative solutions to operational and global challenges, while mitigating business risk.

### Climate Change challenges

“We have a goal of net zero carbon emissions across our operations by 2050. At Lihir, we’re focusing on reducing our impact on the

environment, which includes exploring opportunities for a low carbon future.”

Newcrest is also investigating ways to reduce its power consumption, through the optimization of oxygen use in its autoclaves.

### Being transparent and ethical

Mr. Burger said the company’s commitment to operating as a transparent and ethical business, also includes the release of our first Modern Slavery Statement, to identify, manage, and mitigate the risk of modern slavery across our operations.

### Building strong partnerships

Newcrest’s commitment to building strong partnerships with the communities in which they operate includes helping them in times of crisis, as presented with the COVID-19 pandemic.

“We established more than 40 programs globally, within our Community Support Funds in which we have invested 20 million Australian Dollars to help deliver improved access to healthcare, education, and providing further business support.”

### Lihir operations

Lihir is well-positioned for the future, and a significant reduction in injury rates reflecting of improvement in on-site safety culture and behaviours.

Since August 2010, Newcrest has invested more than 3 billion US Dollars, around K10billion, in capital expenditure into Lihir, which is a significant injection into the PNG economy.

“This investment continued during a period of low gold prices. A large operation like Lihir incurs significant running costs, including investments into infrastructure, equipment, labour, maintenance, consumables, accommodation, food, fuel, and energy.”

>> Continued to Page 12



# Ramu Nickel and Cobalt project update

The Ramu Nickel and Cobalt project was first discovered in 1962. Prefeasibility Explorations were made by Highlands Pacific Ltd until 2000, when a Special Mining Lease was issued to HPL and Oregon Minerals.

Project financing for the Joint Venture project was finalized in 2004, and construction began in 2006 until 2011. The project was commissioned in 2012 and has been in operation since 2013.

The current structure of the Ramu Nickel Project has MCC Ramu owning 85%; HPL owning 8.56%; MRDC (3.94%); with 2.5% held by the project landowners.

## Response to COVID-19

The COVID-19 pandemic continues to be the biggest challenge facing the project. The project develop has given high priority to ensuring a targeted response to the pandemic, while maintaining its operations by:

- Implementing strict control measures to prevent occurrence and spread of COVID-19 at all project sites

- Establishment of covid19 testing laboratory at our Madang Base office and contracting of Sky Health Services to conduct routine covid19 tests.
- Promoting voluntary vaccinations for both employees and contractors
- Rationalising field breaks for employees to comply with Government's restrictions on international and inter-provincial travels
- Conducting counselling and other physical and mental health programs to help employees cope with unusual, prolonged work schedules without breaks.
- Actively participating and cooperating with the Local authorities to prevent the occurrence and spread of covid19 in Madang Province.
- The company has spent a total of K11.1m on COVID-19 mitigation measures

## Community Development Fund (CDF)

MCC Ramu's setting up of the CDF has allowed it to contribute effectively to the needs of its surround impact communities.

This fund contributes K1.2m every year.

## Compensation Payments

In 2020, the company spent up to K8.9m in compensation payments:

- Land Use & Occupation – K340,000
- Plants & Environment Compensation – K1.7m

## Education

Toward education, the company has spent K1.3m:

- Teachers' house built in 2020 under CDF – Badiat Primary School
- Double Classroom building built this year under the CDF for Yanglap Elementary School

- School fee subsidies from 2013 to 2020, total K926,000

## Health

In Health, and outside of its commitment to COVID measures, the company has spent K1.3m through donations of medical equipment to the Usino Health Center, and the quarterly supply of medicinal drugs.

## Gender Development & Empowerment

The company has helped the local communities through the funding of Women's poultry projects, and small business.

## Agriculture

In Agriculture, the company has funded cocoa nurseries and an ACIAR-RNML Partnership Training Program at Erima, in the Astrolabe Bay LLG area in Madang.

## Royalty

The project has spent K93, 800, 520.15 in royalty payments from 2013 to 2020.

# The Woodlark gold project

Tim Richards, Chief Executive Officer, Geopacific Resources Ltd

The Woodlark Gold Project being developed by Geopacific Resources, is a high margin, low development risk project in the Milne Bay province.

Construction and development activities commenced in the second quarter of this year.

## Key Activities

To date, the main project activities include:

- Mobilisation of engineering contractor
- Early earthwork activities and the long lead time equipment has been ordered
- Key infrastructure activities including site preparation works, roadwork and community infrastructure works are well advanced

The impact of recent weather has delayed project activities and resulted in a deferral of all non-essential site activities until the new year

The Company is working on updated schedule of work which will be communicated when complete

In the coming months, the Geopacific

will be focusing on:

- Progressing key infrastructure activities including community infrastructure works and permanent camp development;
- Ongoing design and engineering work with engineering contractor GR Engineering Services ;
- Focus of all earthwork activities; and
- Planning and engineering work to finalise and cost the optimal wharf location
- The Company is well positioned to fund these activities with A\$77.2m of unrestricted net cash reserves

## Extending the mine life

Woodlark has a growth strategy which revolves around increasing reserves and inventory to the current mine plan.

- Optionality exists to debottleneck and expand the mill footprint to accommodate increased ore feed
- All drill-defined resources remain open along strike, down dip and at depth

- Three Phase exploration strategy:
  1. Pit extension exploration
  2. Mineral Lease
  3. Regional step out on to exploration leases
- Exploration budget will be managed with available cashflow and project development timing

## Exploration in numbers at Woodlark

- GPR has delivered a conversion rate of 5.4oz of resource per exploration metre drilled on the ML
- Over 40,000m of ML exploration drilling scheduled for 2021/22
- Every 100koz of 0.5g/t ore adds \$40m to post tax cashflow

## Developing Sustainable Local Economies

Key initiatives include:

- Training and development to provide industry standard skills and qualifications for local employees.
- Partnering with key stakeholders

and experts to identify and develop viable alternative industries on Woodlark such as agriculture, aquaculture or tourism.

- Community development projects with a focus on long term and responsible economic growth and standard of living improvements.
- Supporting the development of Government service improvements in the areas of health, education and law and order.
- Improvement in female workforce participation and training.
- Development of a Biodiversity Action Plan.

## Hiring and upskilling local workforce

- Woodlark Gold Project already employing and upskilling men and women in the community
- GM of People and Performance, Susan Scheepers, passionate about hiring and developing a PNG workforce



## Mining with purpose

Gary Davies, Executive General Manager Operations,  
Harmony Gold SE Asia

## Forging a stronger Newcrest

<< *Continued from Page 10*

This translates into another significant contribution to the PNG economy.

In financial year 2021, Newcrest made approximately one billion kina in payments to Papua New Guinean suppliers, and of that, more than K400m was directed to Lihirian vendors.

### COVID-19 Costs

Measures that we have had to take to minimize the impact of COVID-19 on our communities and operations has also translated into some additional management costs totaling over K180m.

Lihir provides additional financial in-kind support via a K20m commitment under the Community Support Fund, plus K70m of investments into local communities. And a further K24m to manage the Lihir Medical Center, which provides medical services to employees, their families, and the local community. That equates to 50,000 consultations a year.

In the last financial year, Newcrest continued supporting a range of national social investment programs, which included:

- Midwifery and nursing scholarships under the Australian Award
- Supporting Australian Doctors International Rural Health Outreach Patrols and health worker training in New Ireland.
- KTF's teacher training in New Ireland
- And conservation of the endangered tree kangaroos at the Port Moresby Nature Park.

### Impacts on operations

Ongoing travel restrictions and quarantine measures due to the pandemic have impacted the company's ability to retain staff, both domestically, and internationally. Fortunately, Lihirian employees have risen to the challenge and shown great resilience and flexibility during these times.

Sacrifices by employees and their families have allowed the company to maintain operations, despite longer rosters.

### Support for vaccine rollout

Newcrest continues to work closely with the New Ireland Provincial Health Authority to support the COVID-19 vaccine rollout, through the training of health workers, advocating for the vaccine in the community, and enabling the delivery of the vaccine to most remote areas of the province.

Harmony Gold is a global, sustainable gold producer creating shared value for all stakeholders while leaving a lasting positive legacy.

It has over 70 years' gold mining experience in South Africa and almost two decades of operating in Papua New Guinea.

### Harmony today

- 1.5Moz produced in financial year 2021
- 42.5Moz gold and gold equivalent Mineral Reserves
- South Africa – 9 underground operations
- Papua New Guinea – Hidden Valley (open pit mine), Wafi-Golpu project (50-50 JV), Multiple exploration areas

### Key Focus Areas and Strategy

Harmony's strategy is to produce safe, profitable ounces and improve margins through operational excellence and value-accretive acquisitions.

Harmony have been active in Papua New Guinea since 2004.

- Experienced explorer and operator in the Morobe Province, Highlands, Sandaun, and Hela

- Various exploration tenements in Morobe and Hela
- Core asset portfolio in PNG comprises:
  - 50% joint venture ownership interest with Newcrest Mining in Wafi-Golpu project, a tier 1 copper-gold porphyry in the Morobe Province
  - 100% ownership of Hidden Valley, an open-pit gold and silver mine achieving gold production of 150,755 oz this year

### Wafi-Golpu project

- Applied for Special Mining Lease (SML) in 2016. Feasibility Study Update in 2018
- Estimated 28-year life of mine production post construction on current design
- Est. 1.4 million ounces per annum production
- Projected 1.27% copper, 0.9g/t gold grade
- Waste disposal method – deep sea tailings placement
- Environment Permit granted in December 2020
- Resumption of negotiations with State Negotiating team targeted for first quarter of 2022.

### Paying significant royalties

- Hidden Valley Mine has paid an aggregate PGK174.3 million in royalties as of 30th June, 2021
- Since Harmony's re-investment (2016 – 2021) PGKK82.5 million has been paid

### Impact of COVID

COVID-19 Impacts and challenges include:

- Employee safety, health and morale
- Employee travel and staff rostering
- Productivity and profitability

Harmony entered into agreements with the Provincial Health Authority to assist with supplies, logistics, education assistance and information flow alongside access to vaccines.

Worked with local landowner company (NKW) to:

- Set up of major Entry Point Center screening facility in Lae
- Provide catering services at other facilities in Wau and Bulolo – investment of PGK36M



Gary Davies presenting at the Hilton, Brisbane

# Building the next world class gold mine in PNG

John Lewins, Chief Executive Officer, K92 Mining Inc.

On the back of significant resource growth in the past four years, K92 Mining is already well through its expansion plans to build the next sustainable world-class gold mine in

Papua New Guinea.

Chief Executive Officer, John Lewins, says all the expansion work the company has committed to, has been funded from the company's own

cashflow.

"We have increased our measured and indicated resource by over 450 percent, and our inferred by 120 percent over a three-year period," he told delegates at the PNG Mining and Petroleum Conference and Exhibition, adding that the company would be updating its resource volumes in the coming weeks.

Since starting commercial production in 2018, K92 Mining has reached around 14 grams per tonne of gold.

The growth and success of the mine has been supported by an experienced team and a heavy focus on environmentally sustainable growth.

### Best Global Discovery

- In 2021, K92 was awarded the Thayer Lindsley Award for the best global discovery of the year.
- Award presented to the MRA in recognition of PNG as a resource-rich country

### Supporting local business

- 63% of all K92's expenditure since establishment has been on goods and services from within the country.
- We have been creating a number of long-term business opportunities for our landowner groups and

joint ventures, and supporting the development of business within the community, including agriculture and empowering women.

### Growing PNG's future

- Started contributing tax, two years after declaring commercial production.
- Strong focus on tertiary education, providing 50 tertiary education scholarships for local community.

Also developing PNG mineral resource industry with a variety of initiatives and one of the highest exploration activities currently in the country.

### Focus on Environment

- Strong focus on protecting the environment.
- Small impact footprint because it is an underground mine.
- Participating in the 10m tree program.

### COVID-19 Response

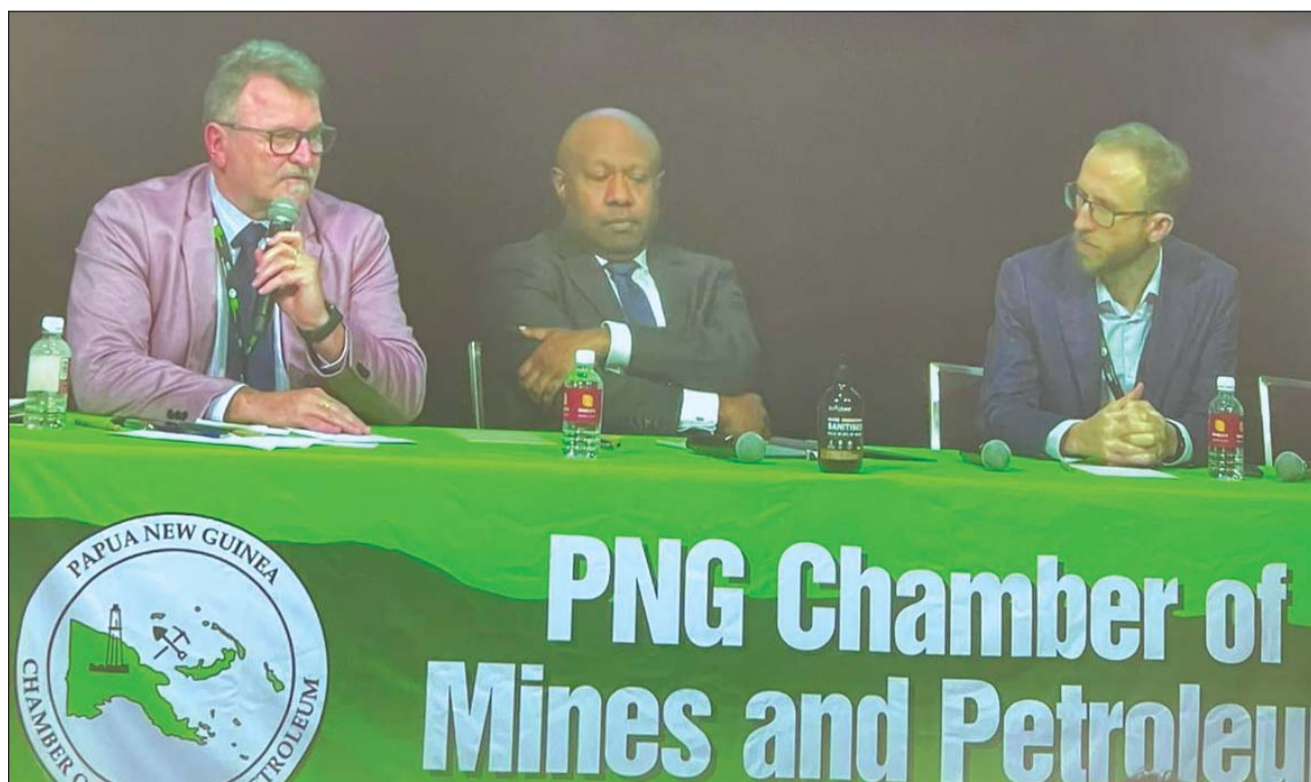
- Stringent control measures in place on site
- Vaccination program ramp up – over 55% of workforce at least one dose of vaccination
- K1.5 million Assistance Fund set up in April 2020
- K1 million additional assistance to EHP – October 2021
- First Oxygen plant delivered to Goroka Hospital – November 1

### Other highlights

- K92 Mining currently employs over 1,000 employees and contractors
- Over 95% of employees are from PNG, with a majority from local communities
- More jobs will be created through multiple mine expansion programs currently underway
- Holds one of the best safety records in the Australasia Region.



Live virtual telecast, Hilton, Port Moresby



Live virtual telecast, Hilton, Brisbane

## Stable regulatory environment promotes investments and rising levels of prosperity



Richard Kassman, OBE, Senior Vice-President  
The PNG Chamber of Mines and Petroleum Inc.

studies are well advanced on ways to sequester and capture this harmful gas, so it is not emitted into the atmosphere.

And who can forget the vigour and sterling efforts of Oil Search when the company mobilised its resources to go to the help of stranded villagers and thousands of others in the wake of the 2018 Highlands earthquake. Their efforts have been acknowledged locally and has won accolades abroad.

These days when new mining or petroleum projects are undertaken, landowner and community benefits are front and centre of the planning process. This was well articulated by Geopacific Resources CEO Tim Richards when he spoke about plans for the Woodlark gold mine, the first greenfield mining project in over a decade.

Construction of the relatively small scale mine at Woodlark began in the June quarter this year. Already considerable thought and planning has been given to local benefit flows, from relocation of houses to areas of choice for landowners, to active use of landowner contractors and the use of high-tech simulators for on-the-job training – even investments in education for youth in this remote corner of Milne Bay.

All this expenditure is happening even though the first toea of export revenue will be at least a couple of years away. No such plans would have been contemplated in most other foreign jurisdictions. Governments need to recognise this as part of the risk-reward scenario for potential investors.

Mining and petroleum companies have been true partners in PNG's development. In the remote areas where they operate, local workers make up a significant proportion of employees. The current trend of project shutdowns and scale backs is harmful to future progress and development. A way forward desperately needs to be charted.

At the end of the day a vibrant and successful resource sector, with benefit flows to local and regional communities and to the nation, will only be possible if these companies can operate in a stable environment where longer term profitability can be sustained despite the notorious rises and falls in commodity prices.

It is only with political and financial stability that projects such as the PNG LNG Project and, indeed Papua LNG, can expect to proceed. The largest part of their development costs, which can amount to several times the size of the PNG National budget, can only be obtained through loan funding which is not an easy hurdle to surmount.

This is a reality that needs to be kept in mind in a changing policy environment. With virtually all resource projects considerable costs are involved up front many years before first revenues flow. It took many decades for Oil Search to see its exploration spend covert to the first barrel of oil or first gas to be sold.

In most cases the many millions of kina spent exploring for mining and petroleum resources is not included in final project costs. A reasonable return on capital and for project risks must be part of the consideration for any developer or investor and government needs to consider this factor in the overall policy environment.

For P'nyang, which is on the cusp of signing a development agreement with the state, their massive exploration expenditure amounted to K1.6 billion on which there will be no return since these costs are not included in project development costs.

PNG is competing for its share of exploration and development expenditure. More than 200 countries produce gold. Many lay out the red carpet for foreign investors, including nations such as Australia, the United States, South Africa and many Latin American nations.

PNG's policy formulas need to be right to attract PNG's share of global exploration expenditure, which has fallen considerably in the past decade. The petroleum sector story is not dissimilar.

The final panel discussion underlined that stability of law and regulation was fundamental to consistent long-term investment and noted it was imperative that the issue of climate change becomes a fundamental part of development and investment narratives going forward.

Resource companies are true partners in national development and very cognisant of the nation's goals and aspirations in a wider socio-economic context. In his opening address Prime Minister Marape acknowledged this and his running theme was one of optimism, inviting developers and investors to invest in PNG.

The conference heard how Oil Search helped to lift performance in some Public Health Administrations. Resource companies are big contributors to many aspects of the fight to contain the Covid Pandemic, even some companies now in their exploration and development phase.

Most mining and petroleum companies have major initiatives to help local communities with food security programs, something that's not required or done anywhere else in the world by mining and petroleum companies.

Indeed, with help of Newcrest and Harmony farmers in parts of Morobe have produced chocolates and won international awards for their

produce. Landowners in Simberi have cocoa going into Queen Emma chocolates because of the mining project in Simberi.

A few years ago, ExxonMobil board members made a rare visit to PNG. Nowhere else in the world is ExxonMobil involved in agriculture, so they had to be convinced these projects were valuable community initiatives for a petroleum company.

The PNG Government and people are very concerned about global warming and determined to play their part. PNG's Resource companies are meeting this challenge head on, at least as well as counterparts anywhere else in the world.

Ramu Nickel is one of the lowest emitters of greenhouse gases among nickel mining companies worldwide. It is still aiming to do very much better.

TotalEnergies explained that from Day 1 of gas production for Papua LNG it intends to minimise carbon dioxide emissions. Even before completion of engineering studies and the final investment decision,