

**Press Review:
Mining in the South Pacific**

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Abbreviations in common use:

BCL: Bougainville Copper Limited

LNG: Liquid Natural Gas

PIR: Pacific Islands Report

PNG: Papua New Guinea

Websites:

Radio New Zealand: <http://www.radionz.co.nz/international>

PNG Post-Courier: <http://postcourier.com.pg/>

PNG National: <http://www.thenational.com.pg/>

Exxon LNG is hurting Papua New Guinea economy – new report

Jubilee Australia, 30 April 2018

A new report on the economy of Papua New Guinea shows that despite predictions of a widespread economic boost from the ExxonMobil PNG LNG project, on most economic indicators the economy has actually gone backwards relative to predictions. Jubilee Australia's new report 'Double or Nothing: The Broken Economic Promises of PNG LNG' is co-authored by Paul Flanagan, director of think tank PNGEconomics. Paul has worked for the Australian government in senior executive positions and with the PNG Treasury where he was Team Leader and Senior Advisor to the SGP Program from February 2011 to August 2013. "In 2008 Australian economics consultants ACIL-Tasman provided inflated projections of growth in employment, essential services, household income and the broader economy if the PNG LNG project went ahead.

This new analysis proves just how misleading these promises were and how PNG has slipped back into the poor policies associated with previous experiences of PNG's resource curse. Currently, on almost all economic indicators, the people of PNG would have been better off had the project not

happened at all,' said Paul Flanagan. The aim of this study was to compare the projected benefits for the early years of the PNG LNG project with the actual outcomes. By building an 'underlying growth path' based on how the economy would likely have performed without the PNG LNG project, this study has made the following findings:

- Despite predictions of a doubling in the size of the economy, the outcome was a gain of only 10% and all of this focused on the largely foreign-owned resource sector itself;
- Despite predictions of an 84% increase in household incomes, the outcome was a fall of 6%;
- Despite predictions of a 42% increase in employment, the outcome was a fall of 27%;
- Despite predictions of an 85% increase in government expenditure to support better education, health, law and order, and infrastructure, the outcome was a fall of 32%; and
- Despite predictions of a 58% increase in imports, the outcome was a fall of 73%.

These findings are even more extraordinary given that PNG's exports (due to PNG LNG) have actually exceeded projections (106% relative to the higher figure of 114%). The PNG LNG pipeline is an Exxon-led project which supplies about 8 million tonnes of LNG a year to Japan, South Korea and China from the gas fields of the Hela region. It is projected to run for 30 years. The project's partners are Exxon, Oil Search, Santos and the Government of PNG. The Australian government lent AU\$500 million of taxpayer's money to the project. "Over the next 9-12 months, a final investment decision is expected to be made about whether or not Total, in partnership with ExxonMobil and Oil Search, will start work on the development of the new Elk Antelope gas field in PNG. The new project, known as Papua LNG, has been projected to produce as much as 8.8 million tonnes per year for around 15 years.

"The economic findings of this report, are crucial to understanding the difficulties that large resources project can pose to a small economy like PNG. A decision on new gas projects should be informed by an accurate assessment of the impacts of PNG LNG," said Dr Luke Fletcher, Executive Director of Jubilee Australia and co-author of the report. "Exxon and Oil Search should be paying half a billion dollars (AUD) to the PNG government every year, since the gas started to flow in 2014. Instead, they are paying a fraction of this amount, partly because of their use of tax havens in the Netherlands and the Bahamas. "The fact that the revenues are not flowing at the levels that was predicted is a key reason why ordinary people in PNG are not seeing the sort of economic benefits that were promised to them when this project was first proposed.

The reports also demonstrates the dangers of relying on economic projections based on dodgy economic models that are paid for by the companies. The people of PNG should never let this happen again by insisting on independent and verifiable analysis before approving these sorts of projects concluded Dr Fletcher. 'Double or Nothing: The Broken Economic Problems of PNG LNG' is the first of two papers on the PNG-LNG pipeline that has been commissioned by Jubilee Australia. The second paper will discuss the unpaid royalties and development benefits and the escalating violence as a result of the PNG LNG project.

BACKGROUND

The PNG LNG pipeline consists of gas wellheads in the Hela Province in the Southern Highlands of PNG, a gas pipeline running from the highlands to just north of Port Moresby and an LNG liquefaction plant. The lead operator is Exxon-Mobil, although there is also significant involvement from the ASX-listed Oil Search. It is the largest development project (in monetary terms: US\$16 billion, further blowing out to US\$19 billion) in the history of the Pacific region. Construction on the project was started in 2010 and completed in 2014, at which point the gas started to flow. Concerns about the economic non-viability of the project and the dangerous risks of social conflict in the project area were raised by Jubilee Australia in an open letter to Australia's then Trade Minister Simon Crean in October 2009, two months before the decision was taken.

The letter to Mr Crean predicted that the PNG LNG project would not likely lead to poverty-reducing growth in PNG and would likely entrench a culture of corruption in the country. It argued that there was a serious risk of the project increasing social disruption and violence in the project areas. Finally, it claimed that the project would undermine the aims of Australia's aid program in PNG. Efic's National Interest Account approval process was completed behind closed doors and, despite requests by politicians, journalists and Jubilee, the official advice given to Minister Crean, upon which the loan decision was taken, has never been revealed. The Export Finance and Insurance Corporation (Efic) is Australia's export credit agency. Efic provides loans, insurance and other financial services to Australian companies that do business overseas. Historically, around one quarter Efic financing by value goes to companies involved in the resources (mining, oil and gas sector). Projects supported by Efic have been implicated in environmental disasters (Ok Tedi mine, Panguna mine) and human rights abuses (Porgera mine, Panguna mine) and tax evasion (Oyu Tolgoi mine, Mongolia).

Exxon and Oil Search's Use of Tax Havens

The report shows that since 2014, the project companies should be paying revenues of approximately 1.4 billion Kina (AUD\$560 million), and yet they are only paying a fraction of this amount. The lack of revenues flowing are seriously undermining potential positive benefits to the PNG economy. The report argues that these missing revenues are a result of two phenomena: a secret commercial agreement struck between the companies and the government, and ExxonMobil and OilSearch's use of tax havens in Holland, Delaware and the Bahamas. Indeed, Exxon appears to be using the same techniques to avoid paying taxes from its operations in PNG as, a recent Australian Senate inquiry has heard, it is also using for its operations in Australia.

About Paul Flanagan

Paul Flanagan is a Canberra-based economist and former federal public servant with many years of experience working in the field of aid, development, and economic policy. He worked in a range of policy and program roles in Australia's overseas aid program from 1986 through to 2002. After this, he held a number of important roles within the Australian Treasury Department including head of the International Finance and Development Division during the Global Financial Crisis from 2008 to 2011. Paul was then seconded to PNG Treasury, where he was Team Leader and Senior Advisor to the SGP Program from February 2011 to August 2013 - a position at the same public service level as Australia's High Commissioner to PNG. Since 2015, he has been the Director of PNG Economics.

About Dr Luke Fletcher

Dr Luke Fletcher is the Executive Director of the Jubilee Australia Research Centre. He is the principal author of a number of Jubilee's reports, including Pipe Dreams (2012) about the PNG LNG project and Risky Business (2009) on the activities of Australia's export credit agency, Efic. Dr Fletcher has a PhD in Politics and International Studies from the University of Cambridge and has been involved in Jubilee in both staff and Board roles since 2005.

About JARC

The Jubilee Australia Research Centre (JARC) engages in research and advocacy to promote economic justice for communities in the Asia-Pacific region and accountability for Australian corporations and government agencies operating there. Jubilee's work has been quoted in Australia and international media: The Australian, ABC, The Guardian, Reuters, The Asia Pacific Report. Jubilee has made Parliamentary submissions to a number of government inquiries as well as provided testimony. Link: <http://www.jubileeaustralia.org/LiteratureRetrieve.aspx?ID=162637>

Backed by extravagant claims, PNG's LNG project failed to deliver

Radio New Zealand, 30 April 2018

When the US\$19 billion liquefied natural gas project was first pitched in Papua New Guinea, extravagant claims and grand promises were made about how it would transform the country's economy. But a new report claims that many of those promises have never eventuated, and instead, the impacts on the economy have been mostly negative. The report, "Double or Nothing: The Broken Economic Promises of the PNG LNG Project," was compiled by Jubilee Australia, a development research centre. The scheme, run by the global energy heavyweight ExxonMobil, was promoted as likely to double the size of the PNG economy, create hundreds of thousands of jobs and grow household incomes by 84 percent. None of this happened. Instead, Papua New Guinea's economy grew by only 10 percent, household incomes have fallen by 6 percent, and employment has fallen by 27 percent.

One of the authors, former PNG Treasury official Paul Flanagan, said that on the projections of rapid growth and an influx of easy money, PNG's government went on a spending spree from 2013-2015, which has since crippled the economy. "The modelling that was behind those estimates for such massive increases in the economy - that's poor modelling. It's a model that's still used in PNG unfortunately, the PNG Gem," he said. "It's not very transparent, it's a black box. It produces numbers that just aren't realistic and we have seen that in subsequent plans also." Mr Flanagan said it was yet another example of PNG falling prey to the so-called "resource curse" in which the mishandling of opportunities undermined the economy.

"There would never have been a 50 percent planned increase in government expenditure from 2013 to 2015 if this project wasn't in place and that has put massive strains on the economy. "The exchange rate is overvalued - that would not have happened without this particular project. There has been an undermining of institutions. The negative impacts are associated with poor policies, associated with the resource curse," he said.

Australian-backed gas project fails to deliver PNG economic boom – report

Study shows PNG would have been better off if massive ExxonMobil-led project had never happened. Christopher Knaus and Helen Davidson, The Guardian, 29 April 2018



A boy walks on the ExxonMobil pipe in Papua New Guinea. Jubilee Australia says projects like these need greater accountability in their economic modelling. Photograph: Ian Shearn

The massive ExxonMobil-led liquid natural gas project in Papua New Guinea, backed by a \$500m Australian government loan, has failed to deliver on a promised economic boom for the country a new report has found. The PNG people would have been better off if the project had never happened, according to the analysis, commissioned by research group Jubilee Australia. The US\$19bn project has been supplying LNG to Japan, South Korea, and China since 2014, using gas production and processing facilities connected by 700km of onshore and offshore pipeline across PNG. The project, owned by an Exxon-led joint venture, was strongly backed by the Australian government through the [largest loan ever provided by the nation's export credit agency](#). The \$500m loan from Australia's Export Finance and Insurance Corporation (Efic) was made with two chief aims: to help Australian exporters win contracts in the project's construction phase; and to potentially add "considerably to PNG's economic growth".

But the Jubilee report found that while the project had been a "remarkable technical success", with export gains exceeding expectations, the promised economic windfall has failed to materialise for PNG people. The report author, Paul Flanagan, a former senior Australian treasury official, found that overall, the PNG economy had grown by 10% – far less than the near-doubling of GDP predicted in Exxon-commissioned modelling produced in 2008 by the strategy consultants, Acil Tasman (now Acil Allen). That same modelling, which has been removed from the ExxonMobil website, predicted the project would help drive significant growth in other areas of the economy, but the reality has been quite different. The report found:

- instead of household income increasing by a predicted 85%, it fell by 6%.
- instead of employment increasing by 42%, it fell by 27%
- instead of government expenditure to support education, health, law and order, and infrastructure increasing by an estimated 85%, it fell by 32%
- instead of imports increasing by a predicted 58%, they fell 73%

"On every other measure of economic welfare (household incomes, employment, government expenditure, imports and every non-resource sector of the economy), the PNG economy currently would have been better off without the PNG LNG project, often drastically so," wrote Flanagan. Separately the project has consistently sparked security concerns, with the Highlands region's notorious tribal violence as well as local landowner anger directed at the project over [alleged non-payment of royalties](#). The Jubilee report made several recommendations to the Australian government, including the development of a code of conduct for economic modelling. Dr Luke Fletcher, executive director of Jubilee said there was little to no transparency about what assumptions were made by economic modellers hired by resource firms proposing large-scale projects. Fletcher said the problem wasn't just restricted to PNG but occurred across Australia.

"It's about transparency about how these models are conducted, but also accountability when the models turn out to be bogus or problematic," he said. ExxonMobil did not respond to questions about the Jubilee report. Efic was asked detailed questions about the economic outcomes of the project. A spokesman said Efic "takes steps to ensure that all transactions that it enters into comply with relevant laws and regulations, and Efic transaction documentation contains provisions to this effect". Guardian Australia made attempts to obtain due diligence reports on how it assessed and approved the loan, however Efic refused to provide the reports on the basis of a special exemption contained in freedom of information laws. The funding of the PNG LNG project was "the biggest decision Efic ever made," said Fletcher. "The argument we're making is that this is a decision which had a huge impact on the economy of a country of six million people," he said. "These decisions have huge consequences, not just for particular communities but in this case for an entire nation. There needs to be more of a public discussion about what taxpayer money is going towards." Fletcher noted the broad exemptions Efic had from freedom of information laws.

“Given what we’ve seen in PNG ... there’s just no way for there to be accountability unless we’re able to understand its decision making. Unless it’s releasing its decision-making and benchmarking its due diligence, there is no way we can hold them to account.” Fletcher said the report estimated the PNG government should have collected around 1.4bn kina (AU\$567.8m) in revenue but was instead collecting about 500,000 kina (AU\$203,000). While this shortfall was likely “a combination of generous fiscal terms and aggressive taxation tactics by the companies”, Fletcher said, there were also concerns about the government management of what was collected. “The resource curse is a well established phenomenon where you get a huge resource boost to a relatively undeveloped economy and despite what you’d expect the economy doesn’t do well,” he said. A 2017 analysis by the Lowy Institute found that from 2003 to 2011 PNG experienced “comparatively healthy macroeconomic conditions”, including a “major boost” to the domestic economy from the LNG project’s construction phase.

“However, from 2012, fiscal policy settings began to deteriorate and the budget deficit increased markedly,” [the Lowy report said](#), adding that while the end of the commodity price boom was a factor, so too were expansionary fiscal policies adopted by the PNG government. Fletcher said profligate spending during the construction phase, weak central institutions like the sovereign wealth fund and central bank, and poor management of the exchange rate which hit non-resource sectors hard, were all potential contributors to the dramatic economic decline. “This is exactly what happens when a country goes down this path – it puts all its focus and belief that resources are going to solve everything,” said Fletcher. “This is not just a PNG problem, Australia in many ways could be seen to be cheerleading, not just with Efic but in encouraging PNG down this path, with a unique belief that big resource projects can solve anything.”

Fiji: New \$10Mil Vatukoula Shaft Ready Next Year

Site preparation is well under way, official groundbreaking ceremony is expected to take place on May 8. Charles Chambers, Fiji Sun, 29 April 2018



The two cable drums used in the construction of the new Dolphin Shaft. Photo: Charles Chambers

A new ventilation and haulage shaft is under construction by Vatukoula Gold Mines. With an investment of \$10 million it is expected to be completed early next year. The new 700 metres deep Dolphin shaft is being constructed with the main aim of providing better ventilation for the mine’s Philip Shaft. This will be the first such shaft sunk at Vatukoula since the Philip Shaft was constructed by the former Joint Venture between Emperor Gold Mining and Western Mining in the mid 1980s. The project, besides being planned to improve ventilation and working conditions for the Philip Shaft, will also see the opening up of new areas for mining. Although site preparation is well under way, the official groundbreaking ceremony is expected to take place on May 8.

The company's Surface Project Manager, Onesimo Fonmanu, said the site was also where an old shaft was in the 1980's. "The shaft then was only about five levels deep which was around 160 metres." With the new shaft expected to be around 700 metres deep, the company has hired expert contractors from China to carry out the project. The shaft main purpose would be similar to that of an exhaust ventilator. Mr Fonmanu said: "The Philip shaft needs more air flow than what it currently has. "This project is aimed at rectifying that," Mr Fonmanu said.

A tunnel will be dug from the Philip shaft to join with the Dolphin shaft and this new line will be used to suck the air out of Philip Shaft. "Once it does this then the airflow will be much better and it would also be cooler too for the workers who work there." Mr Fonmanu said the work presently being carried out at Dolphin shaft was a term called 'shaft sinking.' The work had to be done carefully as while the shaft was getting deeper, they had to be careful of the sides not caving in. "It is a project which has to be done carefully as we have people who will be working below as the shaft deepens."

Landowners disappointed with Bougainville Copper Ltd.

PNG Loop, April 29, 2018



The Special Mine Lease Osikaiyang Landowners Association Inc has expressed disappointment with Bougainville Copper Ltd's conduct. In a statement, SMLOLA chairman, Philip Miriori, and his advisor Lawrence Daveona say BCL has shown that they have not changed or learnt any lessons "from the tragic history they put us through". "The Warden's Hearing could not have been a stronger message from our community – BCL is not welcome at Panguna ever, yet they try and say they have majority landowner support. "Respect the call of the people and the Government and leave. "The decision of the ABG to deny their purported renewal application has been incredibly positive for our landowners, allowing the real facts to come to light and getting rid of the menace that was trying to divide our people. We are now united behind a fresh new development of Panguna with our preferred developer, RTG Mining Inc. and want nothing to do with BCL again." The following comments are in response to the 2017 Annual Report of BCL which was released to the Australian Stock Exchange recently. Miriori says for a company that:

- Has been given almost 30 years to fix up their failings of the past with no progress;
- Accepted a further 2 year exploration licence under the very Bougainville Mining Act they now conveniently say is illegal;
- Sought a renewal of the exploration licence under the very Bougainville Mining Act they now conveniently say is illegal;

- Were given a further 18 months after the expiry of their 2 year exploration licence to secure landowner support and still failed throughout that 3 and half year period to overcome or even acknowledge the legacy issues and win landowner support;
- Attended a Warden’s Hearing under the very Bougainville Mining Act they now conveniently say is illegal and failed;

They now try and cry wolf saying they have been treated unfairly and actually have strong landowner support despite the obvious facts. How naïve do they think the landowners and the ABG are? Daveona says: “I know BCL well, I sadly supported them for 34 years till 2017 but I have now seen the truth. “My fellow SMLOLA members are now all united against the return of BCL at any time. We will not be taken advantage of again. Even if they tried to finally step up and listen to us and compensate us for the past, it is too late, we cannot trust them. Too many broken promises.” Miriori adds: “The Annual Report accuses the ABG of expropriating BCL’s Panguna mine assets in breach of the Bougainville Copper Agreement Act 1967; the same Bougainville Mining Act that they were happy to take advantage of and use to prolong their involvement in Panguna. “They also say the ABG has no legal powers in respect to mining on Bougainville and that the ABG has now illegally expropriated its mine. Could there be any greater show of disrespect for our ABG and Bougainville at large?” The landowners have made their choice on the redevelopment of Panguna and are committed to working with the ABG to implement a successful new mine that will benefit all Bougainvillians.

Aussie taxpayers chipping in for mining giant

PNG Loop, April 27, 2018



Works are well underway in New Ireland on a major project to reconstruct 32.4 kilometres of the Boluminski Highway between Pinatgin and Loloba. The K39.4 million project is being delivered through the Papua New Guinea - Australia Partnership, with the support of the New Ireland Provincial Government. Australia is committed to supporting a prosperous Papua New Guinea. Works along the Boluminski Highway will help business and local communities access markets and services and boost the tourism industry in New Ireland Province. Department of Works Secretary, David Werh, is pleased to see the project progressing well. “This is an important project on an essential economic corridor for Papua New Guinea. The project will nally link the centres of Namatanai and Kavieng with 265km of sealed maintainable road. “This will be a signi cant achievement made possible through a long term commitment by the Papua New Guinean and Australian governments,” he said. More than 140 local residents are employed on the project and works are expected to be

completed by the end of December 2018. The project is being delivered through the Papua New Guinea – Australia Transport Sector Support Program.



OTML finds natural, human acts obstacles to development

By ANGELA PAUL, April 27, 2018, The National Business

Natural and human acts have hindered the development of infrastructure tax credit scheme projects for Ok Tedi Mining Ltd (OTML), according to manager-economic programmes Francis Chibelle. These included weather conditions, landowner issues, assets transfer and ownership of facilities after handover, among others. Chibelle said only K326,000 out of the K1.2 million allocated for the OTML’s tax credit scheme budget was used to establish those projects. “Hospitals, schools, roads and bridges and public servants’ houses were constructed from this scheme from West Sepik to Western,” he said. “We also carried out a project in Enga about four years ago. “Some of our projects have been completed while others are on hold. “However, we are doing our best to tackle these challenges and I commend the current Government for their continuous support,” OTML is working alongside the Western government to address these issues and allow for the projects to be completed soon.

Porgera still at 25% capacity

PNG Industry News, 27 April 2018



BARRICK Gold is still evaluating the impact of the February 26 earthquake at its Porgera joint venture copper-gold mine in Papua New Guinea's Enga Province. It has, however, kept its 2018 group guidance unchanged at 4.5-5 million ounces of gold at all-in sustaining costs of \$765-\$815/oz, and 385-450Mlb of copper at \$2.30-\$2.60/lb. The Porgera processing plant is operating at 25% capacity and is expected to return to full production by the fourth quarter. The Canadian-based miner produced 1.05Moz of gold in the first quarter at an all-in sustaining cost of \$804/oz and 85 million pounds of copper at AISC of \$2.61 per pound

K5m projects for Nimamar as Sir Julius fires broadside at Lihir Gold Mine

Post-Courier, April 26, 2018

Traditional dance groups added colour to the launching of nearly K.5 million worth of projects for five wards in the Nimamar LLG on Malie Island in the Lihir group last Saturday. The projects include 60 solar street lights to light up village communities in the four island wards from Malie, Masahet and Mahur. But three boats and one sawmill marked the biggest village impact projects rollout that came under two project initiatives of the New Ireland Government – the Ward Level Project Policy and the Lighting Up New Ireland Policy' Governor Sir Julius Chan, deputy governor and president of the Nimamar LLG, Ambrose Silul, PEC and provincial assembly members, shipping operator Michael Chan from Vanmak Shipping and staff from the governor's office and Nimamar LLG gathered with the people to witness the occasion. Sir Julius had the chance to meet with his people in the electorate. He was at Lambom to launch seven sawmill projects for the Konoagil wards last Thursday with the president James Pandi and then joined president Silul on Saturday to wind up the week.

He told the Lihir people that the Lihir gold mine is the third largest in the world and yet after 20 years in operation Lihir still was without a sealed ring road up until only three years ago, and no power to the inhabitants, even to the islands. "We recognise that a lot of money for the province comes from Lihir so today I am happy to join with Ambrose so we can put something back to the place of origin. So we will light up the islands and shame the mining giant with the glow of our solar street lights and show that even though the the mine is not forthcoming, this government cares and does what we can to better the lives of our people". Sir Julius said he's optimistic of a better deal for the people in the negotiations under the MOA revision that will increase the mining royalty from the current 2% to 10%. "We fight to put wealth in the hands of the people. Development won't come if people have no money. If the people are rich the country is rich." He encouraged the people to rally behind their president who has been part of the major policies that have impact the province and elect good leader in the coming LLG elections.

Western lags in service and socio-economic developments

Despite hosting the giant Ok Tedi Copper Mine in the past 30 years, Western Province is still lagging way behind in infrastructure and socio-economic developments, performance indicators revealed during the province's first ever development forum that was held last week in Kiunga town.

Post-Courier, April 23, 2018

We do not want to remember you only for a hole in the mountains or a dead river flowing past us. the amount and quality of the existing infrastructures did not reflect the 30 years and volume of revenue generated from its mining operation in the Star Mountains.

Despite hosting the giant Ok Tedi Copper Mine in the past 30 years, Western Province is still lagging way behind in infrastructure and socio-economic developments, performance indicators revealed during the province's first ever development forum that was held last week in Kiunga town.

Attended by close to 200 senior public service and Ok Tedi mining officials, led by the provincial governor Taboi Awi Yoto, the other MPs for North Fly, South Fly and Telefomin, including Ok Tedi Mine's managing director and CEO Peter Graham and Ok Tedi Development Foundation (OTDF) CEO Ian Middleton. Though the mine will go on a lot further than 2024, as asserted by Mr Graham, a post-mortem done on the status of the province has shown minimal government intervention in terms of service in the last 40 years. In his opening address to the first ever Western Province Development Forum last week, provincial governor Taboi Awi Yoto challenged Ok Tedi Mining Limited (OTML) to leave behind lasting legacies.

"We do not want to remember you only for a hole in the mountains or a dead river flowing past us," he told close to 200 forum attendees, including OTML managing director and chief executive officer Peter Graham and Ok Tedi Development Foundation (OTDF) chief executive officer Ian Middleton at the New Century hotel in Kiunga town. Even while acknowledging OTML for the province's existing infrastructures, he said the amount and quality of the infrastructures did not reflect the 30 years and volume of revenue generated from its mining operation in the Star Mountains. Telefomin MP and Defence Minister Solan Mirisim told the forum that Western Province is where it is in terms of infrastructure and socio-economic developments because of OTML. While clarifying that his remote Telefomin district benefits marginally from OTML through its tax credit schemes, it is the only intervention in their otherwise-forgotten corner of the country. "Ok Tedi stap na mipla stap," he said in *Tok Pisin* which translates to 'We are here because of Ok Tedi'.

Mr Graham told the forum that Ok Tedi Mine is a valuable business that is currently worth in excess of US\$2 billion and the people of Western Province are fortunate to own a third of it. "It's a big deal the government has given you," Mr Graham told Governor Yoto, mentioning the 33 per cent share equity given the Western Province people on last week Tuesday by OTML board chairman Sir Moi Avei. While describing 2017 as a "pretty good year" with a cash generation of K700m and K800m profit after tax, Mr Graham said the projections done on further deposits prove that the mine should last "a lot longer than the 2024 scheduled mine life expiry date" The forum also follows from the unveiling of the plaque to commemorate the hand-over of the Cassowary hotel, an iconic new addition to the township of Kiunga that is an investment of the people from the community mine continuation agreement (CMCA) region.

The people of the CMCA region have reason to celebrate on April 17 when their most recent investment, the Cassowary hotel, is jointly opened by Ok Tedi Mining Limited board chairman, Sir Moi and Governor of Western Province, Taboi Yoto. The highly anticipated opening of the 40-roomfull servicehotel is poised to be a major event at the growing riverside township of Kiunga with a number of traditional singsing groups from the North, Middle, and South Fly CMCA regions performing. The Cassowary hotel is the eighth and final major community mine continuation agreement (CMCA) Trust investment project to be delivered by the Ok Tedi Development Foundation under the current CMCA Trust investment processes. The investment completes a real estate, aviation and shipping portfolio worth in excess of K110 million for the eight CMCA Trusts of Nupmo, Tutuwe, Wai Tri, Middle Fly, Suki Fly Gogo, Manawete, Kiwaba, and Dudi. The hotel will be managed by Coral Sea Hotels (CSH).

The hotel's substantive internal works were completed of by the end of 2017 by Pacific Palms Properties (PPP). Both PPP and CSH are owned by the Steamships Trading Company (STC). CSH began recruitment of staff in November 2017 and where possible, hotel management will give priority to filling the various positions with experienced and qualified applicants from CMCA areas, including those from within Western Province. The investment will not only provide a guaranteed return of more than K2.5 million per year to the eight CMCA Trusts for 20 years and four North and Middle Fly Women's Associations for 10 years, but will also increase paid employment for locals; and create opportunities for sale of local produce and provision of hotel operating services.

Practical completion was delayed by eight months due to performance issues resulting in the termination of the initial construction contractor in May 2017. OTDF agreed to partner with PPP to take on the responsibility of completing the building.

The anticipated completion cost of K34.8 million is K4.8 million (14 percent) over the original projection of K30 million, due to costs incurred as a result of the contract termination and replacement of module components damaged in 2016. The additional cost has been financed in accordance with existing CMCA Trust Investment Guidelines from investment funds that were released to the four South Fly Trusts following the court ruling in February 2017, enabling them to join the other CMCA Trusts as project partners and increase their Trust Investment portfolios. OTDF is pursuing the recovery of cost from associated contractors. OTDF is also negotiating revised terms with STC to extend the Cassowary lease agreement from 10 to 20 years: yielding a gross return in excess of K55 million.

‘PNG is on the cusp of a super cycle in mining investment’

Dr Kishti Sen, ANZ Bank, 20 April 2018

Papua New Guinea’s real gross domestic product averaged around 2 per cent per annum in 2016 and 2017. This is a significant step down from the previous two years when growth averaged over 10 per cent thanks mostly to the sizeable liquefied natural gas (LNG) exports. These benefits have now largely faded. Recently released ANZ research expects growth to remain subdued in 2018 and 2019 as the benefits of the LNG expansion diminishes and as non-mining sectors struggle owing to an overvalued currency and foreign exchange shortages.

<h4>GROWTH 2018</h4>  <ul style="list-style-type: none"> • Short-term GDP growth subdued as benefits of LNG expansion fade. • We expect growth of around 2% p.a. in 2018 and 2019. 	<h4>EARTHQUAKE</h4>  <ul style="list-style-type: none"> • Government has provided PGK450m towards reconstruction. • Impacted LNG operations have now resumed production.
<h4>STRUCTURAL SHIFT</h4>  <ul style="list-style-type: none"> • PNG is on the cusp of another resource boom • PNG LNG Expansion and Papua LNG FID expected in late 2018/2019. • Wafi-Golpu and Frieda River to commence early next decade. 	<h4>MANAGING THE BOOM</h4>  <ul style="list-style-type: none"> • Maximise local industry participation. • Utilise SWF to absorb shock post-boom. • Consider a domestic gas reservation policy to secure broad-based growth.
<h4>FOREIGN CURRENCY</h4>  <ul style="list-style-type: none"> • A large backlog of import orders has resulted in excess capacity, cash flow problems and low business confidence. • Non-mining business investment is very weak as a result. 	<h4>EXCHANGE RATE</h4>  <ul style="list-style-type: none"> • Kina remains an overvalued currency - contributing to build-up of import demand. • A fall toward its fair value of USD0.23 could bring benefits.

Infrastructure investment associated with the upcoming APEC meeting and higher agriculture output should be the main drivers of activity in the short term. The national budget is in deficit with debt already at 32 per cent of gross domestic product (just 3 per cent below the self-imposed limit of 35 per cent) and the government is limited in its ability to support the economy. However, PNG's longer-term prospects are more encouraging as it would appear to be on the cusp of a 'super cycle' in resources investment, particularly in gas, gold and copper projects. The challenge for the government and business is to manage the next upturn so that a boom-bust cycle is minimised. Meanwhile, the Kina remains an overvalued currency and better macro balance could be achieved if faster depreciation occurred. The currency's fair value on our estimate is around \$US0.23-0.25. At this level, the Kina would likely remove uncertainty in the foreign exchange market, add liquidity and help clear the backlog of import orders, maximise import substitution and assist Kina-exposed industries including agriculture and mining.

Freeport open pit mine to stop in 2019

Radio New Zealand, 19 April 2018



Freeport's Grasberg mine in Papua, Indonesia. Photo: AFP

The management of the mining company Freeport Indonesia says it will close the operation of its open-pit gold mine in Papua next year. An Executive Vice President of PT Freeport Indonesia, Sony Prasetyo, says that production of the mine in Papua's Mimika regency would wind down as 2019 approaches. Indonesia's Tempo news outlet reports that exploitation of the gold resource will not be able to be sustained in the open-pit mine. He says the only way Freeport can continue its operations at the Papua Grasberg deposit is ongoing underground mining. But he indicated that issues around operating permits would need to be resolved before that underground operations can be extended. Sony says closing the open-pit mine will affect revenue, but is reluctant to confirm whether there will be staff layoffs. *Freeport currently has three mining operations at grasberg: the open pit, the Deep Ore Zone underground mine, and the Big Gossan underground mine.*

Ok Tedi challenged to leave lasting legacy

BY CLEMENT KAUPA, Post-Courier, April 19, 2018

In his opening address to the first ever Western Province development forum yesterday, governor Taboi Awi Yoto challenged Ok Tedi Mining Limited (OTML) to leave behind positive legacies. "We do not want to remember you only for a hole in the mountains or a dead river flowing past us,"

he told close to 200 forum attendees, including OTML managing director and chief executive officer Peter Graham and Ok Tedi Development Foundation (OTDF) chief executive Officer Ian Middleton at the New Century hotel in Kiunga town. Even while acknowledging OTML for the province's existing infrastructures, he said the amount and quality of the existing infrastructures did not reflect the 30 years and volume of revenue generated from its mining operation in the Star Mountains. The forum also follows from the unveiling of the plaque to commemorate the hand-over of the Cassowary hotel, an iconic new addition to the township of Kiunga that is an investment of the people from the community mine continuation agreement region.

However, Telefomin MP and Defence Minister Solan Mirisim told the forum that Western Province is where it is in terms of infrastructure and socio-economic developments because of OTML. While clarifying that his remote Telefomin district benefits marginally from OTML through its tax credit schemes, it is the only intervention in their otherwise-forgotten corner of the country. "Ok Tedi stap na mipla stap," (We are here because of Ok Tedi). Mr Graham said Ok Tedi mine is a valuable business that is currently worth in excess of US\$2 billion and the people of Western Province were fortunate to own a third of it. "It's a big deal the Government has given you," Mr Graham said when mentioning the 33 percent share equity given the Western Province people on Tuesday by OTML board chairman Sir Moi Avei. While describing 2017 as a 'pretty good year' with a cash generation of over K700m and K800m profit after tax, Mr Graham said the projections done on further deposits prove that the mine should last "a lot longer than the 2024 scheduled mine life."

Deep-sea mining possibly as damaging as land mining, lawyers say

Environmental and legal groups warn of potential huge effects on Indigenous people and the environment. Ben Doherty, The Guardian, 18 April 2018

The "new global gold rush" over deep-sea mining holds the same potential pitfalls as previous resource scrambles, with environmental and social impacts ignored and the rights of Indigenous people marginalised, a [paper in the Harvard Environmental Law Review](#) has warned. A framework for deep-sea mining – where polymetallic nodules or hydrothermal vents are mined by machine – was first articulated in the 1960s, on an idea that the seabed floor beyond national jurisdiction was a "common heritage of mankind". But exploration has gathered momentum in the past three years, with [licences granted off Papua New Guinea's coastlines](#), and successful [mining off Japan](#) late last year. The International Seabed Authority, which is drawing up a draft mining code, has issued 29 exploration contracts for undersea mining in international waters beyond any national jurisdiction.

Proponents argue deep-sea mining could yield far superior ore to land mining – in silver, gold, copper, manganese, cobalt and zinc – with little, if any, waste product. Different methods exist, but most involve using some form of converted machinery previously used in terrestrial mining to excavate materials from the sea floor, at depths of up to 6,000 metres, then drawing a seawater slurry to ships on the surface. The slurry is then "de-watered" and transferred to another vessel for shipping. Extracted seawater is pumped back down and discharged close to the sea floor. But environmental and legal groups have urged caution, arguing there are potentially massive – and unknown – ramifications for the environment and for nearby communities, and that the global regulatory framework is not yet drafted, and currently deficient.

"Despite arising in the last half century, the 'new global gold rush' of deep-sea mining shares many features with past resource scrambles – including a general disregard for environmental and social impacts, and the marginalisation of Indigenous peoples and their rights," the paper, written by Julie Hunter and Julian Aguon, from Blue Ocean Law, and Pradeep Singh, from the Center for Marine Environmental Sciences, Bremen, argues. The authors say that knowledge of the deep seabed remains extremely limited. "The surface of the moon, Mars and even Venus have all been mapped

and studied in much greater detail, leading marine scientists to commonly remark that, with respect to the deep sea, ‘We don’t yet know what we need to know.’ ” Scientific research – including a [recent paper in Marine Policy](#) journal – has suggested the deep seabed, and hydrothermal vents in particular, have crucial impacts upon biodiversity and global climate regulations. Hydrothermal vents act as a sink, sequestering carbon and methane. The mineral-rich vents and their surrounds are also home to animals and organisms including crustaceans, tubeworms, clams, slugs, anemones and fish.

“It is becoming increasingly clear that deep-sea mining poses a grave threat to these vital seabed functions,” the paper says. “Extraction methods would involve the operation of large, remote vehicles on the seafloor to chemically leach or physically cut crust from substrate and/or use highly pressurised water to strip the crust. “All of these methods would produce large sediment plumes and involve the discharge of waste and tailings back into the ocean, significantly disturbing seafloor environments.” The Harvard Environmental Law Review article says the exploratory phase of deep-sea mining has already adversely affected Indigenous people in the Pacific. In Tonga, large mining prospecting vessels have disturbed traditional fishing grounds, and in PNG villagers bordering the exploration site in the Bismarck sea have reported high incidence of dead fish washed ashore. The paper argues for governments globally to reform the international seabed regime to reflect modern developments in law and science, and to protect potentially vulnerable communities. “They should recognise the risks of operating in an unknown environment, fully embrace the precautionary approach, and protect and conserve the ocean for the benefit of current and future generations,” it says.

Harvard Environmental Law Review calls for precautionary new legal standards

The Harvard Environmental Law Review published an article entitled, “Broadening Common Heritage: Addressing Gaps in the Deep Sea Mining Regulatory Regime.”

Post-Courier, 17 April 2018

Today, the Harvard Environmental Law Review published an article entitled, “Broadening Common Heritage: Addressing Gaps in the Deep Sea Mining Regulatory Regime.” The article provides a new perspective on the incipient global industry of seabed mining, heralded as the next extractive frontier despite growing concerns and opposition from civil society, scientific experts, and indigenous groups worldwide. “Deep sea mining has been framed by proponents as a lucrative mineral windfall with minimal impacts,” says author Julie Hunter, attorney and Clinic Fellow at the University of British Columbia. “This narrative entirely disregards recent scientific information linking the deep seabed with major climate regulation and biodiversity functions. Destroying these ecosystems before more can be learned about them not only risks major health and fisheries impacts – it could completely upend global climate change efforts.”

The article provides a brief overview of the so-called ‘gold-rush’ for seabed minerals, in which countries and companies have scrambled to buy up licenses for seabed exploration covering millions of square kilometers of ocean, before environmental and regulatory standards have even been drafted. With Japan becoming the first country to successfully mine its deep seabed in 2017, and Canadian company Nautilus Minerals scheduled to begin the world’s first commercial operation in Papua New Guinea’s waters in 2019, deep sea mining is rapidly becoming a reality.

However, the risks of operating in an unknown environment less documented than Mars are starting to become apparent. In 2016, a consortium of scientists and oceanographers released a study detailing the critical carbon sequestration functions of deep sea hydrothermal vents and methane seeps. Combined with other studies establishing irreversible impacts from seabed mining, these findings trigger a body of protective environmental and human rights law, including the precautionary prin-

principle and the need to obtain free, prior, and informed consent from indigenous and other affected peoples.

“Pacific Islanders have already suffered negative consequences as a result of mere exploratory mining in the region,” says author Julian Aguon, attorney and founder of Blue Ocean Law—a law firm that works throughout the Pacific region to defend and advance the rights of colonized and indigenous peoples. “Our work has documented impacts to fisheries and traditional customs in coastal communities in Papua New Guinea, Tonga and elsewhere, and the disconcerting absence of true and meaningful consultation with affected groups.”

Other acknowledged impacts of deep sea mining include contamination of the water column and fisheries by tailings and heavy metals, species extinction, coral reef acidification, carbon emissions from onshore mineral processing, and increased risk of oil spills and surface accidents, among others. Given the unique biodiversity, genetic, and biomedical properties of deep sea ecosystems, not to mention their potentially critical role in climate regulation, the so-called “common heritage” of the seabed extends far beyond the value of its minerals. “It would be tragically ironic if, in our rush to obtain minerals for use in green tech and renewable energies, we end up bulldozing the most important climate regulator of our planet,” says Hunter. “That possibility alone merits a cautious approach.”

Wafi-Golpu: Environmental concerns raised

By PISAI GUMAR, April 17, 2018, The National Business

Towangola-Zindanga communities located along exploration license (EL) 440 of Wafi-Golpu mine project site are concerned about long-term environmental damage if a tunnel is dug through to mine gold and copper. Towangola clan leader Levi Kikalem said Wafi was the main water source for Kumalu, Lupo, Wafi, Zenaga and Lucpoko rivers that flowed into the bigger Watut and Markham. According to an updated feasibility study, a tunnel will be dug from the northwest site of Babuaf (EL 1105) through to EL 440. Kikalem is concerned that if a tunnel is dug through to the core of the gold-copper deposit, it will affect water sources and vegetation. “In the long run, will the soil sink or cause underground flooding causing extensive harm, if river systems are disturbed?” he said. “The company and government will change the landscape of the environment in the interest of profit.

“What is the alternative plan to replace environments that will be destroyed?” Kikalem said while the community appreciated the investments by Newcrest and Harmony through the Wafi-Golpu Joint Venture, Government agencies such as the Mineral Resources Authority and Conservation and Environment Protection Authority lacked critical assessments into environmental issues. “The investors and Government are interested in profit,” he said. “In the long run, locals will suffer from losing all natural resources.” Kikalem also raised concern over non-identification of traditional boundaries between Towangola-Zindanga, Hengabu, Yanta and Babuaf. “We need proper land mediation to identify our traditional boundaries,” he said. “This is to ensure we claim environmental damage where it is due.”

Call to work with Ok Tedi Mine

Post-Courier, April 17, 2018

Ok Tedi Mine is critical to the development aspirations of Western Province, Governor Taboi Yoto told a gathering of locals and visitors in front of Kiunga’s new magnificent Cassowary Hotel, which underpins a development forum that gets underway today. “Where would you be if Ok Tedi had left

in 2013? Kiunga-Ok Tedi highway would have been washed away, isolating people up in the Star Mountains. Kiunga wharf would disintegrate out of disuse. “I can’t see any future in Western Province. Health and education workers would have left their post. Where would our sick go then? We are not prepared for Ok Tedi to shut-down and go tomorrow. Why because we are not economically independent to survive without Ok Tedi. For that reason we must work together with Ok Tedi and every other developmental partner to drive our development plan together and to put all our resources together.”

Governor Taboi Yoto said. According to the Governor, the Development Forum is to set a new way forward for Western Province and they are calling on every entity that has custody over their mining funds, including Ok Tedi, PNG Sustainable Development Program (PNGSDP), Mineral Resources Authority (MRA), Mineral Resources Development Corporation (MRDC) and everyone else. “We call them all to come and listen to our development plans,” Governor Taboi Yoto said. The Western Province Development Forum that is underway today will include prominent presenters from the mining and petroleum industries and will go on for the next two days.

Ok Tedi mine landowners get share certificates

Post-Courier, April 17, 2018

The people of Western Province finally own 33 percent of the giant Ok Tedi Copper Mine following the handover of equity share certificates by Ok Tedi Mining Limited Board Chairman Sir Moi Avei to Governor Taboi Awi Yoto yesterday in Kiunga. “OTML is now a third owned by the people of Western Province,” Sir Moi told a large gathering of locals and invited guests in front of the grand Cassowary hotel. “We have heard so much about this 33 percent. Is it every going to happen? The board in its wisdom made a decision that the only way to move this share transfer is loan MRDC K30million to pay for the stamp duty. Governor the stamp duty has been paid. OTML is now one third owned by the people of Western Province,”

Sir Moi Avei told the excited crowds. He also said this ensures that politics cannot interfere now because they own more than thirty percent of the mine. Western Governor Taboi Yoto said in the past we were told that we own 63 percent but we do not have direct control of the funds. “We have direct control of the 33percent and that’s the difference,” Mr Taboi Yoto said. According to the Governor out of the 33percent, 12percent is owned by CMCA communities through their board, the mine villages own 8.4 percent and the Fly River Provincial Government owns 12.6 percent. “For the government with the four MPs, the PEC members and the LLG presidents, we will decide how we will use the money for development purposes. “I thank the government of Prime Minister Peter O’Neill for this.”

Bougainville president elaborates on ‘No’ to mining

Radio New Zealand, 17 April 2018

The President of the autonomous Papua New Guinea region of Bougainville has elaborated on why his government is saying no to mining at Panguna for the foreseeable future. Panguna was the site of the Bougainville Copper Ltd mine which was at the crux of the ten year long civil war. In recent years there has been a push to have it re-opened to help drive the Bougainville economy forward. Two companies, Bougainville Copper Ltd and RTG have been battling for the rights to mine Panguna but last week the government announced an indefinite moratorium on mining there. Don Wiseman asked Bougainville President John Momis why they had taken such action. JOHN MOMIS: Because landowners themselves are split. One faction supporting another company in developing the mine and another faction supports another company. So we don’t want to cause a split

amongst the landowners because we have a referendum coming. We want to make sure we unite our people.

DON WISEMAN: Yes, although the landowners you say are supporting another company - that's the Osikaiang group and they are right at the site of the current mine so as far, I think, as they are concerned, they are the landowners at that point, therefore they are ones that make that decision.

JM: Not really. Titleholders have rejected their claim. They have said they are not the legitimate titleholders, this Osikaiang group. Titleholders, according to law, are people who are supporting another company. So there is a definite divide and until the people are united we will not proceed with any mining.

DW: So in the meantime, in terms of trying to orchestrate some sort of unity, is the ABG going to do anything? Are you going to undertake anything, or leave it up to the landowner groups themselves?

JM: No, no we have taken steps to unite them. For us you know determining Bougainville's future is more paramount right now. It is the priority we are focussing our attention to, to make sure that the people of Bougainville are united, so we don't want any other issues to undermine this unity.

DW: Essentially it is off the radar until after the referendum?

JM: That's probably it. I can't see how the landowners can unite before the referendum. If they do then that will be good and we will look at other possibilities.

DW: The ABG of course is in an invidious position because you are a significant owner of Bougainville Copper Ltd, which is this other company you talk of. If the landowners agreed and they wanted to go with RTG, the second of those companies, would you, the ABG, accept that?

JM: We have some problems with RTG right now. In fact they are causing a lot of confusion and division in the community and we are not prepared to go ahead while this situation prevails.

DW: One of the reasons for this focus on Panguna had been to get the economy cranking ahead of the referendum, if that was possible. So if the effort is now going in a different direction is there going to be this focus that's been talked about up to now but I am not sure how much has been done, in terms of agriculture and tourism and fishing.

JM: We cannot sacrifice unity for the sake of even generating revenue at this point in time. We have the referendum coming and it's going to be very high on our priority list, so we have made it very clear to the landowners that unless they are totally united and they are prepared to subject themselves to the rule of law and so on and so forth, the ABG will leave the reserve [moratorium] in place.

DW: But in terms of these other industries is any effort going into those?

JM: We are looking at timber development and other industries, yes.

Mining interests 'stalling' SA plans to protect more of the ocean

A global ocean protection group has expressed concern that plans to fast-track the expansion of Marine Protected Areas off the South African coast appear to have stalled.

Tony Carnie, Daily Maverick, 16 April 2018

Plans to enlarge South Africa's protected ocean reserve network have come to a halt, allegedly due to pressure from the oil, gas and extractive mining sector. This is the claim from Ocean Unite, a Washington DC based global ocean protection group headed by former University of Cape Town international environmental law graduate Karen Sack. Sack, co-author of a 2013 scientific report which urged the United Nations to establish a new Department for Oceans and a new Interpol-style navy to police the high seas, has voiced disappointment that plans to fast-track the expansion of Marine Protected Areas (MPAs) off the South African coast appear to have stalled. Sack said only 0.4% of the country's Exclusive Economic Zone (EEZ) currently enjoyed legal protection. In 2014 the government had announced plans to expand this area of protected seas to 5% by 2016, increasing to a total of 10% by 2020.

“Unfortunately, this process has stalled with stakeholders raising concerns that this hiatus is owing to undue influence from the extractive mining sector which is seen as one of the main drivers for unlocking South Africa’s Ocean Economy”. Sack did not identify any mining companies by name, but said it was significant that the Department of Energy had placed 98% of South Africa’s EEZ under acreage lease for oil and gas exploration or production rights, and there was also talk of new mining opportunities for phosphate extraction and other seabed minerals. “Encouragingly, the drive to achieve a 10% (and more) MPA target appears well supported at the most senior levels in Department of Environmental Affairs and aligns with South Africa’s National Development Plan outcomes and international commitments at the United Nations. South Africa has recently assumed the role of Chair of the Indian Ocean Rim Association (IORA) and there is a timely opportunity for South Africa to lead the way to establishing MPA expansion as a key blue economy ocean governance goal within the African region.

“Marine parks are about more than just a haven for the species that live in them. These national parks at sea are critical climate change fighting tools and help support food security. The ocean is a massive carbon sink and science is now demonstrating that marine reserves slow the effects of climate change, rebuild biodiversity, and help build resilience. Governments can affirm their international commitments to combating climate change, securing jobs and food through the creation of marine reserves,” Sack said in a statement. The Department of Energy has not responded to requests for comment on Sack’s claims about “undue influence” from mining interests. However, former Ezemvelo KZN Wildlife senior marine scientist Dr Jean Harris said South African marine protection strategy currently ranked poorly compared to other nations.

“When South Africa’s current Marine Protected Areas (MPAs) were surveyed alongside 39 developed countries they ranked 34th out of 40, with 0.4% current marine protection, compared to an average of 11.2% for the other countries. When South Africa was surveyed together with 129 developing countries it ranked 90th out of 130 – an average of 5.8% compared to South Africa’s measly 0.4%,” said Dr Harris, who now heads the WildOceans programme of the Wildlands Conservation Trust. She added that “0.4% is hopelessly inadequate to maintain sustainable benefits in a growing ocean economy. A minimum target agreed to as a global standard is 10% marine protection, with South Africa committing to achieving this by 2020. “As an interim step, the Department of Environmental Affairs published intention to gazette 22 new/expanded MPAs to achieve a 5% target. This will also see benefits to fisheries, including protection of nursery and spawning areas, resource recovery and the management of essential fish habitat.”

By contrast, several other developing nations had announced much more ambitious MPA targets over the past year. For example, she said, Brazil announced plans in March to create four new MPAs covering an area of more than 900,000 km² – larger than France, England, Belgium, Netherlands and Switzerland combined. In 2017, Mexico announced it would protect nearly 92,000 km² of the ocean from fishing and resource extraction, while Chile had announced plans to protect over 1 million km² of Chilean waters – more than 40% of its seas. “This Latin American ocean protection leadership follows clear science that shows the importance of these national parks at sea to build resilience as well as revitalise the abundance and diversity of marine fish stocks.” Closer to home, Harris said the Seychelles had also announced plans to protect 210,000 km² of ocean and set a further goal of setting aside 16% of its waters for marine protection. South Africa currently has a network of 24 coastal MPAs, covering only 0.4% of the continental EEZ (Exclusive Economic Zone), and one sub-Antarctic MPA (Marion/Prince Edward Islands).

Kiwis Against Seabed Mining promises to take case to Supreme Court if necessary

Tom Pullar-Strecker, Stuff, April 16, 2018



KASM chairwoman Cindy Baxter says the previous government's support for the iron sands project was "very clear' to the Environmental Protection Agency. Photo: Pullar-Strecker

One of the lobby groups fighting a decision to approve iron sands mining off the Taranaki coast says it is prepared to take the case all the way to the Supreme Court if necessary. The Environmental Protection Agency (EPA) in August approved an application by miner Trans Tasman Resources (TTR) to dredge a billion tonnes of iron sands from the South Taranaki Bight, in a split decision that swung on committee chairman Alick Shaw's casting vote. A total of 11 groups with environmental, fishing and Maori interests are appealing the decision at the High Court in Wellington. They are concerned about issues such as the plume from waste material that will be returned to the seabed. Some have also warned the project would set a precedent for seabed mining elsewhere in New Zealand waters and beyond. Cindy Baxter, chairwoman of Kiwis Against Seabed Mining (KASM) – speaking outside the High Court before proceedings began – said it was very clear the former National government supported the mining venture. She believed that had not been lost on the EPA, which is an independent body. "The Government changed the legislation to make it easier for it to get through and Callaghan Innovation suddenly gave TTR a big grant when it wasn't even a New Zealand company," she said.



The 66 square kilometres off the South Taranaki coast (shown in dark green) where Trans Tasman Resources has applied to mine iron ore.

"This is a company that brought 35 per cent of its shares across from Holland three weeks before its application so it could claim it was a Kiwi company." Baxter said she couldn't say whether the EPA was influenced by the former government's support for the venture. But "it certainly got that message" and the process it had gone through to approve the mining application was flawed, she said. Even so, two of the commissioners still voted to reject the mining application, issuing a "strongly dissenting opinion", she noted. Baxter said she believed the new government was trying to be "hands off" and was waiting for the outcome of the court challenge. "I think they are letting the legal process go through. They don't really want to talk to us about it at the moment – although certainly the Green Party does." Baxter said KASM was prepared to take the court challenge as far as it needed to. "If we have to, we will take it to the Supreme Court. This is a precedent-setting case. "It is the first seabed mining application that has been approved in New Zealand and it would open the flood gates for others around the country."



Opponents of the Taranaki iron sands project gather outside the High Court. Photo: Pullar-Strecker

TTR has been contacted for comment. It has previously said the Taranaki Iron Sands project would be "a sustainable and world leading development" that would have little environmental effect and directly employ 463 people, generating about \$7 million of royalties for the Crown. Baxter said seabed mining was basically new internationally, though diamond giant De Beers has vacuumed diamonds from 6000 square kilometres of sea floor off the coast of Namibia. There are proposals to mine a large area about 500 miles south-east of Hawaii called the Clarion-Clipperton Fracture Zone which Japanese scientists are reported to estimate contains up to 100 billion metric tons of rare-earth deposits. Southern Cross Cable, which has surveyed a route for a new internet cable between New Zealand, Australia and the United States, has been re-surveying its route to avoid that mining zone. Greenpeace campaigner Michael Smith said the South Taranaki Bight was a "vital ecosystem" that was home to endangered blue whales and Maui dolphins.

Taranaki iron sand seabed mining consent reduced Māori interest to lip service, court told Stuff, April 16 2018

Māori interests were not properly considered in the decision to allow iron sand seabed mining off Taranaki, a court has been told. They went to the High Court at Wellington on Monday seeking to overturn environmental permission for the project. A lawyer for Māori and fishing interests, Francis Cooke, QC, said as far as they were aware this was a world first for deep sea iron sand mining to be allowed to be undertaken.

The permission, though, had split the Environmental Protection Authority decision making committee, and the outcome depended on the chairman's vote. Cooke said the majority decision of the

committee had reduced to an "interpretive gloss" the strongly-worded direction to take into account the interests of Māori, and give effect to the principles of the Treaty of Waitangi. Instead the interests of Māori could be said to be reduced to lip service, he said. The highest concentration of suspended sediment would occur in coastal marine area offshore from the Ngāti Ruanui district, and fish were expected to avoid the area, with severe effect on seabed life within 2km of the operation, and moderate effects up to 15km of the mining area. Cooke said an earlier decision for the same activity, the same parties, in the same area had been declined, on different evidence. One of the later committee's alleged errors was not taking into account the first decision to decline the application.



Ngati Ruanui protested against Trans-Tasman Resources' bid for marine consent to mine the seabed for iron sand. More than 6000 people signed the petition calling for a moratorium on seabed mining. (File photo: Monique Ford)

Even the committee that gave consent described some of the effects as perhaps being catastrophic from Trans-Tasman Resources' mining, Cooke said. The company has allegedly spent about \$80 million preparing for the mining. The decision making committee said that when extraction finally ended the effects would be long term, but not permanent. Cooke said the committee appeared to have applied a standard that allowed the environment to be harmed provided it ultimately recovered. It had misunderstood, and misapplied the law, he said.

The committee never identified the standard against which it judged the environmental effect. At the start of Monday's hearing some members of the public could not find seats in the crowded courtroom and had to listen to proceedings via a link to a court foyer. In August, the authority's committee granted Trans-Tasman Resources 35-year marine and discharge consents to annually mine up to 50 million tonnes of iron sand in the South Taranaki Bight. A remote-controlled dredge will vacuum sand from the sea bed between depths of 20 metres and 42m, at a rate of 8000 tonnes an hour, to a processing ship. The dredging is earmarked in an area 22 kilometres to 36km off the coastline from Patea.

The decision committee said the company proposed extracting seabed material and processing it on a vessel. Approximately 10 per cent of the material would be processed into iron ore concentrate and the rest would be discharged to the seabed. It was expected much of the concentrate would be sent to China for steel making. Taranaki iwi, Greenpeace, Kiwis Against Seabed Mining, the Royal Forest and Bird Protection Society, the Taranaki-Whanganui Conservation Board, Cloudy Bay Clams, the Federation of Commercial Fishermen, Southern Inshore Fisheries Management Company, Talleys Group, Te Ohu Kai Moana Trustee Ltd, and Trustees of Te Kaahui o Rauru, have appealed against the authority's approval. Trans-Tasman Resources is supporting the committee's decision. The hearing is expected to take about a week.

Ok Tedi mine beneficiaries to open hotel in Western

April 16, 2018, The National Business



A new K34 million hotel will be opened in Kiunga, Western, tomorrow. The beneficiaries of the Ok Tedi mine, through the Community Mine Continuation Agreement (CMCA), have invested in the construction of the 40-room hotel. It is an investment project by the Ok Tedi Development Foundation under the current CMCA Trust investment processes. The hotel will be managed by Coral Sea Hotels. The hotel was completed at the end of 2017 by Pacific Palms Properties. Both companies are subsidiaries of Steamships Trading Company (STC). The hotel will be opened by Ok Tedi Mining Ltd board chairman Sir Moi Avei and Western Governor Taboi Yoto. The Cassowary Hotel is the eighth and final major CMCA Trust investment project to be delivered by the OTDF.

The hotel is expected to provide a return of more than K2.5 million per year to the eight CMCA Trusts for 20 years. It will also benefit four North and Middle Fly women's associations. Moreover, it will increase paid employment for locals, create opportunities for sale of local produce and provide of hotel services. The CMCA Trust also has investments in real estate, aviation and shipping. It has an investment portfolio worth in excess of K110 million. This is for the eight CMCA Trusts of Nupmo, Tutuwe, Wai Tri, Middle Fly, Suki Fly Gogo, Manawete, Kiwaba, and Dudi areas. The OTDF is also negotiating revised terms with STC to extend the Cassowary lease agreement.

Amended bill gives Ok Tedi mine right to access fund

April 16, 2018, The National National

Ok Tedi Mine Ltd will now be able to access the additional funding of US\$35 million (K111m) kept under the financial assurance fund (FAF) to invest in the expansion of the mine and its operations. Parliament on Friday passed an amended bill for Mining Ok Tedi's continuation of its Ninth Supplementary Act 2018. Prime Minister Peter O'Neill told Parliament that Ok Tedi was obliged under the code to establish a reserve account approved by the company and the state. He said the fund was established to ensure that money was set aside to meet mine closure obligations. O'Neill said on a regular basis (every four years since 2009) OTML reviewed the mine closure liability, with such review being independently audited and submitted to the Mineral Resources Authority and Conservation Environment Protection Authority for approval. He said the most recent review and audit were completed last year, with the approved mine closure estimated at US\$196 million.

“The FAF currently has a balance of approximately US\$231 million and is therefore over-funded by approximately US\$35 million,” O’Neill said. “OTML has high-value opportunities to better use those funds for sustainment and growth investments in the business and would like the ability to withdraw excess funds subject to approval by the state. “In addition, withdrawal of excess funds could make a contribution to easing foreign exchange pressures as they could, for example, be sold into the commercial foreign exchange market and converted to kina. “The cost as it presently stands has no mechanism to enable the withdrawal of any excess funds, including even earnings on those funds which are credited to the FAF.” O’Neill said the amendments to the legislation now provides the means for excess money to be released from the FAF to OTML, subject to recommendation by the company’s board and subsequent approval by the state.

Ok Tedi sharing K380m after ‘exceptional’ year

April 16, 2018, The National National

THE financial position of Ok Tedi Mining Limited has strengthened, generating more than K777 million of net investment activities allowing it to have nearly K380 million to be distributed to its shareholders. Prime Minister Peter O’Neill, tabling the annual reports and financial statements in parliament, said Ok Tedi had done exceptionally well. “The balance has to be retained so that Ok Tedi continues to have good working capitals and provide self-funded growth capital requirements for 2018 and beyond. “In 2017, OTML generated a profit of K848 million – which is 120 per cent higher than in 2016 where we had a net profit of K384 million. “That came about as a result of a revenue increase. The revenue for the mine was K3.3 billion which was up by 57 per cent from 2016.”

O’Neill said copper prices were up by 18 per cent while gold was relatively flat. The balance was that the underlying production of both copper and gold was up by 35 per cent and 36 per cent respectively. “Also globally, we had an independent audit done by a global leader in the mining industry called Wood Mackenzie which assesses the mine’s ability to operate profitably. “OTML was in 2013 ranked 99 in the world against all the global mining companies. But in 2017, we were able to improve our position to the 12th most competitive mine in the world.” O’Neill said Ok Tedi had paid K31 million in stamp duties to the Internal Revenue Commission on behalf of the landowners and the provincial government.

Barrick Calls For State Intervention in Porgera

After more than 25 years of mining by international companies, local people are still waiting to see the promised development benefits. They are becoming increasingly frustrated and desperate...

Post Courier, April 16, 2018

Barrick (Niugini) Limited , operator of the Porgera Mine in Enga, reported that operations in the Porgera open pit were temporarily suspended last week after a violent confrontation broke out between groups of illegal miners. The company reported that mining operations in the open pit were suspended at around midnight, after two large groups of aggressive illegal miners, including some armed with firearms, began a violent confrontation near the stage 5C area of the open pit mine. The fighting between the groups continued until about 2:30am on Tuesday morning. BNL executive managing director, Richmond Fenn, confirmed that while all Porgera mine employees and contractors are safe and no injuries have been reported, the confrontation was a dangerous escalation of recent violent behaviour among illegal miners, due to the use of firearms by the opposing groups.



Women search for gold downstream from the Porgera mine

“More than 18 shots were fired by these people over a period of about two hours,” Mr Fenn said. “While at this stage we have not confirmed whether there have been any casualties among the illegal miners from this latest outbreak of violence, the fact that violent people are engaging in gun battles on the mine’s open pit is of critical concern, and we are calling on State authorities to provide urgent assistance in bringing this under control,” Mr Fenn said. “It is simply unacceptable that these criminals believe they can behave in this way with impunity,” Mr Fenn said. “Mining operations in the Open Pit have resumed, but this escalation of violence needs to be stopped before someone is killed or injured. “We have advised the relevant authorities about the situation, and will be working closely with the police and others in responding to this latest outbreak of violence,” Mr Fenn said.

NZ EPA seabed mining court case a fight for the future

Scoop NZ, April 15, 2018

The future of the South Taranaki Bight lies in the hands of the High Court next week, which will hear appeals against the Environmental Protection Authority’s decision to grant a marine consent to Trans-Tasman Resources’ bid to dig up the seabed for its iron ore. Kiwis Against Seabed Mining (KASM), with Greenpeace, is appealing the decision, alongside six other appellants. The EPA decision was released in August 2017, a year after Trans-Tasman Resources submitted its application to dig up 50 million tonnes of the seabed a year in a 66 square kilometre section of the South Taranaki Bight – for 35 years. A total of 95% will be discharged, resulting in a large sediment plume, to get five million tonnes a year of iron ore. Of the 13,733 submissions (a record) received by the EPA, all but 147 – one percent – were either opposed to the consent or neutral.

“This is a fight for the future of our precious oceans,” said KASM chair Cindy Baxter. “The outcome of this case will set a precedent for a number of other companies waiting in the wings to mine our seabed, in the South Taranaki Bight and beyond. Trans-Tasman has prospecting permits for at least two more in the Bight, and two others around the country.” “Our Oceans are in distress, and are facing a crisis of marine biodiversity loss. Our oceans provide us vital services, food and livelihoods, as well as oxygen and carbon sequestration when we have healthy ecosystems,” said Michael Smith, a campaigner with Greenpeace New Zealand. “The South Taranaki Bight is one such vital ecosystem, home to a population of endangered blue whales and Maui dolphins. Protecting its biodiversity is why this case is so important.”

KASM and Greenpeace are appealing on 12 points of law. Among these is the issue of what is called “adaptive management” whereby an activity like seabed mining is allowed to go ahead, adapting the conditions on which it occurs along the way. “The EPA has set down 109 conditions, but many are still to be developed, such as the effect of seabed mining on marine mammals and seabirds,” said Cindy Baxter. “We are also raising other issues, such as natural justice, the way economic benefits have been calculated, and the role of the precautionary approach.” The hearing begins at the High Court in Wellington, 10 am, Monday 16 April 2018 and will last for four days.

Mine Refutes Slime Spillage Claims

Waisea Nasokia, Fiji Sun, April 15, 2018



Nirmala Devi, 58, at her home in the Toko area in Tavua on April 13th. Behind her is mud residents claim is mixed with slime. Photo: Waisea Nasokia

The Vatukoula Gold Mine Limited (VGML) says its activities and operations pose no direct threat to its surroundings and residents in the area. VGML made the comment after reports that the Ministry of Lands and Mineral Resources was investigating claims that the Nasivi River in Vatukoula may have been contaminated by what has been described as toxic slime, which overflowed into the river at the height of Tropical Cyclone Keni. Vatukoula Gold Mine Limited Corporate Services Manager and Senior Adviser to the General Manager Dinny Laufenboeck said the torrential rainfall brought on by TC Keni after weeks of prolonged rain and flood water in the Lobia Creek caused a washout of some dry tailings from an old tailings storage dam established in the early days of mining at Vatukoula. “Solid tailings of the age of those which were washed out have minimal chemical residue since they have oxidised in the main,” she said.

“They are not water soluble. They therefore do not prevent the threat in a spillage which an uncontrolled discharge would pose from VGML’s current storage dam, for example, which is some distance from where the incident occurred.” Ms Laufenboeck’s comments came as Ministry of Lands and Mineral Resources permanent secretary Malakai Finau said: “Staff from the Mineral Resources Department are currently at Vatukoula to inspect and verify the claims.” A team from this newspaper visited some homes in Vatukoula which were affected by the floods in the wake of Tropical Cyclone Josie and Keni. It was observed that the so-called slime blended with mud and had a distinct odour and colour at close inspection. The slime is claimed to be waste that usually contains arsenic and mercury which flowed from the Vatukoula Gold Mine Limited slime dam. In response, Ms Laufenboeck said, “VGML analyses all discharges from the Mine at a number of boundary points daily, including the Nasivi River, the results of which are provided to both the Mineral Resources Department as well as the Department of Environment.

“No threat has been detected to the waters surrounding Vatukoula by the events of the past week. “Officers of the Mineral Resources Department have been on site during the week as part of their regular control inspections. She refuted the claim that the discharge contained arsenic and mercury. “Arsenic has never been used in the processing of ores at Vatukoula,” Ms Laufenboeck said. “Mercury, which poses significant risks to the environment in countries where alluvial mining is carried out, has never been used in the main ore processing systems here because Vatukoula is a hard rock mine.” Some residents are urging authorities to find out if the discharge did overflow into the Naisivi River and into residential areas. Nirmala Devi, 58, of the Toko area said: “We noticed slime in our homes. During two previous floods we did not notice any slime. “The company workers came and water-blasted our home, for which we are grateful,” Ms Devi said.

Nikola Nasila, 24, of Lomalagi said: “There has been deposit of slime found in the waterways. This is not only a health hazard, but will be an environmental disaster if it has happened.” The majority of the residents confirmed what was found on the basis of anonymity. “There were deposits and the company sent diggers to clear. We are told that when the mud is hard it will be taken to the mill for further process,” said one resident who declined to be named. Ms Laufenboeck refuted the claims. “The unpleasant smell experienced by the residents in the area would therefore not be attributable to any chemical residue from the tailings residue,” she said. “Certainly VGML has offered assistance to the residents affected to clean up their homes. “Should any resident in the area have any concerns, we would encourage them to make contact with the mine and ask for clarification.”

Mine spill worry in Fiji

Luke Rawalai, Fiji Times, April 13, 2018



The sediment pond at the XINFA Bauxite mine in Naibulu, Dreketi which is said to have spilled waste water. Picture: LUKE RAWALAI

SASAKE villagers in Bua, including fishers in Dreketi have showed their concern on the spillage of wastewater from Naibulu bauxite mining site, claiming the spillage has grown worse. The fishers said the discolouration of seawater during heavy downpour continued to happen in the area. Sasake villager Viliame Bailato claimed fish population in the area had dwindled over the years, adding they were worried about its effect in the next few years if spillage continued. "People rely on fish and other marine organisms such as crabs for their sustenance and also to earn a living," he said. On behalf of fishers in the Dreketi irrigation area, Ashnil Kumar claimed waterways in the area would turn dark red during heavy rain because of the spillage from the mine's sediment pond. Re-

sponding to these concerns, Minister for Lands and Mineral Resources Faiyaz Koya said the ministry routinely and at times randomly carried out water sampling as they continued to monitor the mining operation and its commitment to environmental protection.

Mr Koya said past analytical results indicated that they conformed to the National Water Discharge Standards. "Physical parameters such as total suspended solids (TSS) and total dissolved solids (TDS) were analysed to be also within the standard in the mine vicinity," he said. "However, water samples collected during periods of heavy rain indicates high TDS and TSS which is basically discolouration along the normal waterways draining the water catchments that includes Naibulu East mine. "The ministry remains committed to continue with such monitoring and is not working in isolation as it encourages self-regulation by the mining companies, because it is in their best interest to follow best international practices and comply with the relevant laws," said Mr Koya.

ExxonMobil resumes LNG production in PNG

Radio New Zealand, 13 April 2018



ExxonMobil PNG Photo: RNZ Pacific

This comes after the shutdown forced by a severe earthquake in the region in late February. Exports of LNG are expected to resume soon. Earlier this week the company had indicated it would be May before it resumed production. The president of the ExxonMobil Production company, Neil Duffin, said re-starting LNG production ahead of the company's projected eight-week timeframe was a significant achievement.

P'nyang expansion concept

ExxonMobil has found that the gas reserves in its P'nyang field in PNG's Western Province are 84 percent higher than it previously thought. The company said this opened the potential to expand the P'nyang field facilities for the PNG LNG foundation project. The president of ExxonMobil Development Company Liam Mallon said the increase in the estimated resource size of the P'nyang field helped illustrate the tremendous growth opportunities for the company's operations in PNG. "This investment would extend our gas pipeline infrastructure into the country's Western Province and have a meaningful and lasting economic impact for Papua New Guinea and its people," Mallon said.



ExxonMobil PNG volunteers packing food supplies to be sent to Moro Photo: supplied

Bougainville Govt says no to Panguna indefinitely

The government in the autonomous Papua New Guinea region of Bougainville says it will not allow exploration or mining activities at the Panguna mine site until landowners unite.

Radio New Zealand, 13 April 2018



An abandoned building at Panguna mine site in Bougainville Photo: supplied

Two companies have been battling to re-open the mine, a move the government had been touting as vital to developing Bougainville's economy. But at the end of last year President John Momis announced a moratorium on mining at Panguna and in a new statement he says it is 'absolutely clear the landowners and the people of Panguna are divided over their preferred developer. He said after debate in the ABG House of Representatives it was very clear this decision could not be avoided and has been made in the best interests of the landowners and the people of Bougainville as the region prepares for its referendum next year. Mr Momis says landowner leadership at Panguna remains unresolved creating factional groups with opposing views and positions on how the mine should be developed. He says as long as the landowners remain divided the moratorium will remain in place. Mr Momis says the ABG had invested a lot of effort trying to unite the landowners but while most Bougainvilleans are in favor of reopening the mine, the Panguna landowners are holding the region to ransom.

Pundari eyes assessment of Wafi-Golpu mine

By LUKE KAMA, April 12, 2018, The National Business

ENVIRONMENT Conservation and Climate Change Minister John Pundari says a detailed environmental impact assessment will be done on the Wafi-Golpu gold and copper mine in Morobe to ensure best environment practices are employed. Pundari gave this assurance in Parliament yesterday when responding to concerns from Markham MP Koni Iguan regarding possible environmental impacts of the mine. Iguan said the mine would impact the environments of Markham, Bulolo, Huon Gulf and Menyamya districts. Iguan said based on past experiences of mining activities in the country, like Ok Tedi in Western, Wafi-Golpu was expected to pose a substantial threat to the well-being of the people and environment. This included the Markham River, the lifeline of many communities, and asked what steps would be taken to ensure the mine was operated in a way that did not cause harm to the people and environment. Pundari said as far as Wafi-Golpu was concerned, an environment inception report had already been provided to his organisation, the Conservation and Environment Protection Authority (Cepa).

“Whilst we consider extractive industries like mining to be a significant contributor to the growth of our economy, we must also seriously consider their impacts to the environment because our people are dependent on environment for their daily lives,” he said. “Best environment practices and standards are a legal requirement that must always be followed and adhered to. “As far as Wafi is concerned, an environment inception report has been provided to Cepa. “The developer is carrying out a detailed environmental impact assessment. “Cepa will be going through this and assess properly in detail. “Peer reviews will be done thoroughly for input from the public and experts, and will go through the Environment Council before I give my final approval.” Pundari said the developer was looking at the options of building a terrestrial dam tailing facility to treat mine waste and deep sea tailings placement into the Huon Gulf. He said Cepa would ensure best environment practices and standards were adhered to by the developers.

Samb wants study on Tolukuma mine tabled in Parlt

April 12, 2018, The National Business

GOILALA MP William Samb, pictured, has urged Minister for Environment Conservation and Climate Change John Pundari to table studies of the environmental impacts of the Tolukuma mine in Parliament. Samb told Parliament yesterday that three different assessment reports of destruction and damage done to the environment and the Handabanga River by the mine had been done. He said none of these reports had been made available for public consumption. “Because of the fact and the legacy of OK Tedi mine causing so much destruction to the environment and the river system of the Western people, we are concerned that these assessment reports have not been made available to public for their viewing,” he said.

“I’m asking the minister (Pundari) to ensure these reports are tabled in Parliament so that a appropriate action can be taken to minimise environmental issues while the mine is under liquidation.” Samb said if there was possibility of severe environmental destruction, the mine should be closed completely. He said after 30 years of operation, the people had received no tangible benefits apart from employment as general labourers. Pundari concurred and said the issues raised by Samb were serious. He said he would take it up with his organisation, Conservation and Environment Protection Authority (Cepa), and provide a detailed response.

Porgera: Royalty issue leads to shoot-out

BY JEFFREY ELAPA, Post-Courier, April 12, 2018

The recent incident of armed illegal miners shootout with mine security guards is a result of landowner benefits, local landowner leaders from Porgera claimed. A chief and community leader Ekale Kangalia said the recent shootout between armed illegal miners and company securities is a result of the stop on the royalty payments since 2014. He said the cashflow in the area was sustained by the royalties from the Porgera gold mine until infighting in the Porgera Special Purpose Authority (PDA) led to the closure of the account. Mr Kangalia said after years of frustration, the locals resorted to accessing the mine pit to venture for gold to sell and earn money to support themselves and their families. He said the PDA directors' infighting has forced them to go to the courts to obtain a court order to stop the royalty payments to the landowners.

Mr Kangalia claimed the PDA is a government sectioned body that comes under the Porgera Paiala Local Level Government Council and had nothing to do with the landowner royalty. "This is unnecessary court orders when there is nothing to do with the directorship of the board of PDA. A royalty is an undisputed benefit to the landowners. Something has to be done to allow the people to benefit from their rightful benefits to put a stop to illegal mining as the only means of cash flow has been stopped by the court. "Their only benefit is being stopped so the people have no other option but get into the mine and look for gold," he said.

Mr Kangalia is calling on Barrick Niugini Limited and the National Government to look at ways to allow the people to receive their benefit as matter of importance. He said the recent incident of armed conflict must not be taken lightly. "We must know that the landowners are entering into the mine pit armed with high powered weapons to look for gold is the first time since the start of the mine. They have been supportive of the company but they can't wait anymore so they went in to look for money," he said. Barrick Niugini Limited management also confirmed shutting down of the mine pit operations after the shootout with armed men. Porgera Landowners Association chairman Tony Mark Ekepa when contacted confirmed the incident. He said the stop payment on the royalties is now before a three-men Supreme Court.

Exxon looks to restart PNG gas project in early May

Radio New Zealand, 12 April 2018

Exxon Mobil is looking to restart production at its LNG (Liquefied Natural Gas) project in Papua New Guinea at the beginning of May. Project operations were suspended following a magnitude 7.5 earthquake in late February near Exxon's gas plant at Hides in Hela province. Some of the project's infrastructure in Hela sustained damage in the quake, which caused at least 125 deaths and widespread damage in the surrounding Highlands region. In the intervening weeks, Exxon and its project partners have been assessing the overall damage. It said there was no indication that the 700 km pipeline that delivers gas from Hela to a coastal LNG plant had been damaged by the quake. Reuters reports Exxon LNG Vice President Emma Cochrane as saying the company hopes to re-start operations early next month.

P'nyang expansion concept

Ms Cochrane also said the company has found that the gas reserves in its P'nyang field in PNG's Western Province are higher than it previously thought. The gas resource has increased to 4.36 trillion cubic feet of gas, an 84 percent increase from a previous assessment completed in 2012. According to Ms Cochrane, this gives Exxon the potential to expand the P'nyang field facilities for the PNG LNG foundation project. The president of ExxonMobil Development Company Liam Mallon said the increase in the estimated resource size of the P'nyang field helped illustrate the tremendous

growth opportunities for the company's operations in PNG. The development concept, which would add approximately 8 million tons of LNG annually, would double the capacity of the existing LNG plant operated by ExxonMobil. "This investment would extend our gas pipeline infrastructure into the country's Western Province and have a meaningful and lasting economic impact for Papua New Guinea and its people," Mallon said.

Ok Tedi: PM accused of being an ‘octopus’

A rather heated verbal exchange occurred on the floor of parliament yesterday between Prime Minister Peter O’Neill and members of the Opposition, which led to the PM being likened to an octopus. Post-Courier, April 11, 2018

A rather heated verbal exchange occurred on the floor of parliament yesterday between Prime Minister Peter O’Neill and members of the Opposition, which led to the PM being likened to an octopus. While responding to a series of questions raised by Member for South Fly Sekie Agisa on the age old extractive pollution of the river systems in his province, the PM was abruptly called to a point of order thrice and was accused of using “sticky fingers to take money from the people.” First when answering Mr Agisa’s question on what the government is doing about the alleged pollution, the PM was halted by his shadow counterpart Opposition leader Patrick Pruaitch, but not before humorously saying in tok pisin, quote “plis lusim mi pinis pastaim yah” which when translated in context reads, “Please, can you allow me to finish.” Mr Pruaitch simply called the point of order to rephrase the question for the PM, reminding Mr O’Neill to answer the questions and refrain from deviating.

The PM was allowed to continue and went on to speak about the controversial BHP – Ok Tedi – PNG landowner case that was discontinued in 2004 pursuant to community mine continuation agreements signed between the company, the PNG government and villages in the affected radius. It was at this point that the good PM was again stopped, this time interjected by Member for Moresby North-West and former PM Sir Mekere Morauta who basically accused Mr O’Neill of speaking about things he knew little about. “The PM is speaking about things he knows nothing about, how can he know about these things when he was not there,” said Sir Mekere. The senior Opposition man went on to speak of his time at the helm of the country when the BHP case was at its climax contrasting the history with today’s politics before concluding that the PM is selfishly benefiting from entities set up in the past to benefit the people.

The PM however, barked back at Sir Mek stating that he was launching a commission of enquiry into the whole BHP-Ok Tedi extractive pollution saga and that he was happy that the veteran politician had come back to political service as he could now be questioned on what transpired back in his day. Mr O’Neill also mentioned how well the country is doing off the back of OK Tedi stating that, quote, “That is how good my fingers are.” Mr Agisa who initially asked the questions called the third point of order and asked all to keep the focus on his question. The PM said the COI would be launched within the next few weeks.

PNG government to sue BHP Billiton over alleged environmental damage

ABC News, 11 April 2018

Papua New Guinea’s government says it will sue Australian mining giant BHP Billiton for alleged environmental damage in the Western Province when the company was operating the country’s largest copper mine in the 1990s. It’s not the first time legal action has been touted. In 2004, a massive law suit representing thousands of PNG landowners, was dropped after settlement was reached, which included compensation. PNG’s Prime Minister Peter O’Neill says the government will also

initiate an independent commission of inquiry into the PNG sustainable development program, which has been a subject of a court case in Singapore. Former PNGSDP Chairman and Opposition member of Parliament Sir Mekere Morauta says Mr O'Neill doesn't understand the purpose of the project.



Children playing in tailings downstream from the Ok Tedi Mine in Papua New Guinea, 2009. (Brent Stirton/Getty Images)

Commission of inquiry into OK Tedi

A COMMISSION of inquiry into the OK Tedi issue, the environment damage and the establishment of the PNG Sustainable Development Program will be set up.

Post-Courier, April 11, 2018

A COMMISSION of inquiry into the OK Tedi issue, the environment damage and the establishment of the PNG Sustainable Development Program will be set up. Prime Minister Peter O'Neill announced this in Parliament yesterday. "Papua New Guineans deserve to know the truth, not just colouring of the truth so that it suits somebody's interest, they deserve to know the truth and that's why I have decided to establish a commission of inquiry," he said. Mr O'Neill said he would get an independent person, possibly an Australian judge, to carry out the investigation. He also said the State had also engaged the biggest environmental law firm in Australia, Slater and Gordon, to review the case that was done by Rex Dagi so that the PNG Government itself takes out the court case against BHP.

"We have to sue this company for the substantial environmental damage they have caused to our people," he said. Mr O'Neill was answering questions from South Fly MP Sekie Agisa who, during Question Time, asked the PM what the government and OK Tedi were doing to mitigate the environment damage to Western Province. Mr O'Neill said the issue about the environmental damage to Western Province has been well publicised, well debated and well documented. "It is certainly a sad story which successive governments had no due care for the welfare of their own people and protected the interest of the big mining giants and was given protection in fact by legislations passed by this parliament," he said.

He said the saga is continuing with the PNG Sustainable Development Program that was established as part of that compensation program by the then Morauta Government while giving indemnity and legislative protection to BHP. "BHP walked away unchallenged for their responsibilities that they had to the people of Western Province on the massive environmental damage they have conducted while they were managing OK Tedi, that is a proven fact. "I know that our people have now taken over the mine and I know there are certain improvements in the way they manage their

waste in OK Tedi, but I feel that this is a question that still lingers in the mindset of our people,” he said. He said PNGSDP is now subject to a court case in Singapore between the State and the directors of PNGSDP.

Mayur Resources raises \$6.8 million for Papua New Guinea projects

Proactive Investors, 11 April 2018



Mayur managing director Paul Mulder with Gulf Provincial Governor Chris Havieta in 2017

Mayur Resources Ltd has received firm commitments to raise \$6.8 million via a placement of CHES Depository Interests (CDIs) to professional and sophisticated investor at 80 cents per CDI. The new funds will allow Mayur to pursue a number of value accretive initiatives that have been identified in Papua New Guinea subsequent to the company’s listing on the ASX in September 2017.

Port Moresby Limestone Project

The Port Moresby Limestone Project is located 25 kilometres north of Port Moresby. Mayur has delineated a JORC resource of 382 million tonnes of high-grade limestone across two deposits within the project. The funds raised will be utilised, in part, to deliver a definitive feasibility study for the extraction of limestone and downstream processing facilities to produce quicklime and clinker/cement.

Depot Creek Coal Project

Mayur holds a portfolio of contiguous tenements (including the Depot Creek Project) that cover the main coal bearing geology in the Papuan Basin of the Gulf Province. Funds from the placement will provide additional funding to conduct expanded coal mapping and resource delineation work programs across the portfolio.

Feni Copper-Gold Project

The Feni Island Gold-Copper Project has a 650,000-ounce gold JORC inferred resource. The project warrants a drill program to follow up on encouraging co-incident historical copper and gold targets. Mayur will use the new funds to undertake a diamond drilling program with the aim of identifying the source of copper and gold mineralisation.

New deep sea mining venture to launch

International Mining, 10 April 2018

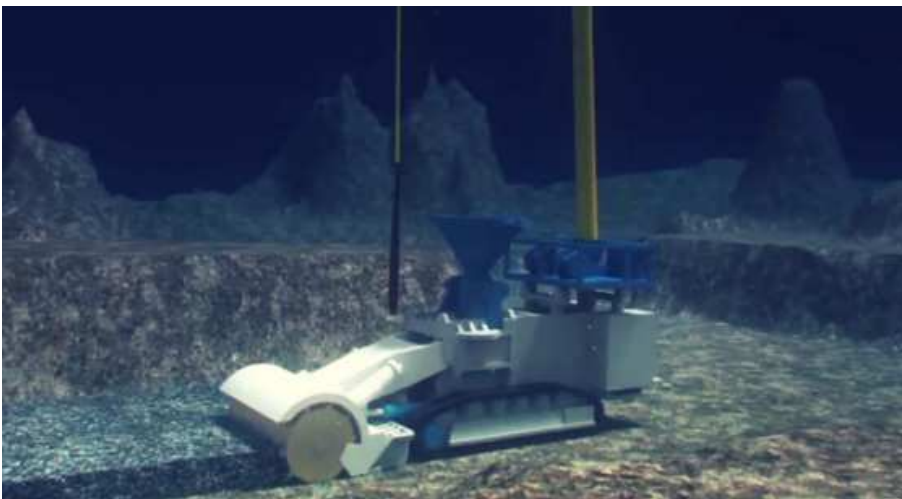
A historic ocean mineral resource expedition, using the Maersk Launcher, launches from San Diego on April 12 to further a mission to responsibly produce the world's future metal supply from the deep-ocean floor. This is the first of five offshore campaigns that are part of a strategic alliance with Maersk, one of the world's largest shipping groups. DeepGreen's subsidiary, Nauru Ocean Resources Inc (NORI), will be carrying out extensive scientific and resource surveys within a 75,000-km² contract area of the Eastern Pacific's abyssal plain, granted to NORI by the United Nations' International Seabed Authority (ISA). DeepGreen and NORI are developing technology that will allow the responsible production of polymetallic nodules, which sit on the ocean surface, and contain metals in growing demand and critical to global social and economic growth.

The intention is that, when collected and brought to the surface using state-of-the-art technology, the polymetallic nodules — usually small enough to fit in the palm of your hand — will be processed for metals such as cobalt, nickel, copper and manganese. Those future metals are becoming increasingly harder and more difficult to find on land, but are in great demand for technologies such as electric cars, battery storage, wind turbines and many more digital technologies essential to a sustainable future.

“This voyage is a continuation of the work required in preparation of an Environmental Impact Statement that NORI aims to submit to the ISA, a necessary step to move the Exploration license to exploitation license, which will enable NORI to bring these essential metals for our future to the surface where they will be treated onshore using DeepGreen's patented processing technology, which aims to produce zero waste,” said Gerard Barron, CEO of DeepGreen. “We believe these future metals can be produced responsibly, protecting ocean health, while avoiding the deforestation, pollution and child labor that too often are part of traditional mining.”

Seabed mining opposition is pro-development says Church

Carolyn Ure, PNG Loop, April 10, 2018



While the Catholic Church in the Oceania Region has joined the global fight against seabed mining and climate change, the Church is in no way opposing development. These were the words of Bishop Charles Drennan from New Zealand. He is part of the 80-man delegation that is in the country to attend the Assembly of Federation of Catholic Bishops Conference Oceania. The vast ocean is the common home of countries and people in the Oceania Region. The sub-theme; “A Sea of Possibilities”, captures the interdependency between the ocean and the people. “The land and the sea depend

so much on each other and therefore for the well-being of us and the future generations,” said Bishop Charles. A sea of possibilities is a hopeful statement, the Bishop pointed out. While the negative impacts of deep seabed and other marine industries are evident, Churches also recognise and understand their significance. “Perhaps the Church, NGOs and aid agencies are somehow against development and business. But we also care very much for people’s employment.” In light of this, the ocean has great rich potential as a means of growing responsible tourism and fishing industries. “We want families to be satisfied in their jobs, we want parents to look at their children and say there are employment opportunities for them,” Bishop Charles further stated.

Geopacific kicks off Woodlark DFS in PNG

Matt Birney, The West Australian, 10 April 2018

Aspiring gold producer Geopacific Resources has kicked off its Definitive Feasibility Study for the Woodlark Island project in PNG and all things being equal, should have the completed document on the street by the third quarter of this year. The DFS follows on from the company’s encouraging Pre-feasibility Study results, which were announced in March, after an extensive work program throughout 2017. The PFS supports the development of a conventional open pit operation delivering an average output of 100,000 ounces of gold annually for at least 10 years, with an all-in sustaining cost to produce of A\$1100 per ounce. Exhibiting very simple metallurgy, a high gravity gold content, low striping ratios, lowish CAPEX and a post-tax payback of just over 2 years, the Woodlark project appears to be quite robust on paper. According to the company, the epithermal gold mineralisation at the project is amenable to bulk-style, low-grade mining, with large volume, shallow, open pits.

The breadth and rigour of the PFS document, particularly in relation to the estimation of mining costs and metallurgy, which were both done to DFS standards, has shortened the estimated completion time for the DFS. The aim of the DFS is to finalise and optimise plant design and infrastructure, delivering capital costs to within a 15% level of accuracy. Importantly, the project sits on a granted mining lease and is already fully permitted, which means that things could move quickly for Geopacific after the DFS is churned out. Woodlark also has solid regional exploration potential to grow beyond the global mineral resource of 1.58 million ounces, providing an element of blue sky for the 100,000 ounce a year project. A number of key, near-mine brownfields areas have the potential to materially add to the mine plan at Woodlark, opening up further options for the operation, once in production.

Managing Director Ron Heeks said; “The PFS showed that Woodlark is a robust project that can surpass the critical production level of 100,000oz gold per annum. We see clear potential for upside from the Woodlark PFS estimates as well as significant exploration potential within close proximity to the current 1.1million ounce Reserve. “Woodlark’s PFS outcomes see the project compare favourably to competing gold development projects on key metrics including the low forecast strip ratio and short post-tax capital payback.” Heeks continues to put his family money where his mouth is too having recently waded into the market to pick up another 746,000 Geopacific shares in his wife and daughter’s name. The company now holds a 92.75% interest in Woodlark via both its shareholding in Kula Gold, the project originator and its direct interest in the project, courtesy of a farm in agreement with Kula. Geopacific is in good company in Papua New Guinea, surrounded by multi-million ounce gold deposits located on the country’s mainland and surrounding archipelago. If the stars align for the company as expected, construction of the Woodlark project could commence in 2019, with first gold out by the middle of 2020.

Strong opinions on deep-sea mining in Cook Islands

Liam Ratana, Cook Island News, April 06, 2018

Cook Islanders have been quick to air their opinions about deep-sea mining, following the recent visit to this country of Ocean Minerals Ltd. (OML). Two weeks ago, the Cook Islands took a step towards becoming the first in the world to mine deep-sea nodules, with [six representatives from OML visiting](#) the islands of Aitutaki and Rarotonga to explore the viability of harvesting nodules. CINews shared the story last Wednesday and have been inundated with comments since. Most of those who commented had concerns regarding the environmental impacts that deep-sea mining may have in the Cook Islands. One comment read "...all mining causes destruction", while another said, "they (OML) will get their riches and leave us with the crumbs, the mess, and no fish for future Cook Islanders". Yet another commenter said, "our entire ecosystem will be destroyed...no matter how many thousands of miles the seabed mining will be away from us, it will destroy us".

Many people also made mention of the Republic of Nauru, which is a tiny island nation that was once considered to be the wealthiest in the world. Nauru once had rich deposits of phosphate which were mined until there were no more commercially viable deposits left. The Nauru Phosphate Royalties Trust was initially established to ensure the ongoing prosperity of Nauru and its people after phosphate mining had ceased. However, due to mismanagement, the great wealth of the tiny Pacific nation was squandered away. Even though there was strong opposition on social media to the idea of deep-sea mining in the Cook Islands, there were also some who enthusiastically supported it. Said one commentator: "People are being hypothetical about the risk to this exploratory initiative, based on historical experiences that have happened in other mining sites.

"If our legislation and regulations are based on New Zealand's and Norway's experiences...then there is hope that proper procedures will be followed to minimise risk and environmental impacts...take the right steps to reduce, eliminate, and/or minimise any impact to the environment". Paul Lynch, who has led the Cook Islands Seabed Minerals Authority since 2012, claims that deep-sea mining will not impact islands, villages, and lifestyles here. He says it could help to diversify the Cook Islands' small economy. Lynch says that "minerals could help to provide new revenue streams and jobs" and that people "appreciate the Cook Islands steady approach". "A crucial part of deep-sea mining is sensible exploration and research". Lynch says that this involves "gathering good baseline deep-sea environmental data and managing it well...facts and data that can help our Cook Islands communities and decision-makers make informed decisions.

"Then we can decide whether or not to, or how we want to develop our own natural resources, based on our own facts and thinking..." Lynch says that laws are being drafted now, "decades before revenue is anticipated so if there are no more seabed minerals left in the future, a well-managed national sovereign wealth savings fund" will ensure that the people of the Cook Islands will be cared for. "We need to protect all national revenue from deep-sea mining" he says. One commenter said that they would "welcome the day when we can bring up the first load of nodules from the depths (of the ocean) without negatively impacting our environment and finally start our journey to true financial independence. The focus then will be on managing our wealth". Another commenter said, "...that's why the seabed (minerals) authority was established. They have legislation, policies, guidelines, and regulations in place to safeguard the country from any potential risks...I'm sure the seabed (minerals) authority is also mindful of the challenges and risks involved".

There is little known about the deep-sea environment, especially at a depth of 5000 metres, where the Cook Islands nodules are located. Even less is known about the potential environmental impacts of mining those nodules. Some reports state that the impacts of deep-sea exploitation will "last forever" and many others say that environmental risks and impacts of deep sea mining would be "enormous and unavoidable". According to one report, the effects could include seabed habitat deg-

radation over vast areas, the extinction of species not yet discovered, reduced habitat complexity, and much more. However, these are all just educated guesses. The reality is that no one knows what the impacts will be. Research is ongoing and the exploitation of Cook Islands nodules is “at least eight years away from beginning”, according to OML director David Huber. The potential benefits will have to be considered in-light of the potential environmental effects.

PNG earthquake’s political aftershocks require careful handling

Paul Flanagan*, East Asia Forum, 6 April 2018



People receive aid after the earthquake. Photo: Reuters

The 7.5-magnitude earthquake in Papua New Guinea (PNG) on 26 February 2018 killed over 100 people and left 270,000 in need of immediate humanitarian assistance. There have been dozens of physical aftershocks. But the most damaging aftershock may be the earthquake’s undermining of the ‘social licence’ of the affected areas’ PNG LNG project, which is responsible for 40 per cent of PNG’s exports. The immediate disaster relief effort is proceeding slowly but surely. The Highlands Highway, a lifeline through PNG’s Highlands Region, has been cleared, although many important side roads remain blocked. In the affected areas, health centres were badly damaged but 73 per cent have re-opened. Early damage estimates are at US\$200 million (600 million kina). International cash contributions totalled some US\$45 million by mid-March, and there has been further in-kind assistance such as military transport support from Australia. A state of emergency in the area has been declared, and a new Restoration Authority has been created to guide reconstruction over the next four years.

The physical aftershocks have been significant: quakes measuring up to 6.7 in magnitude have killed more people and have kept them fearful of returning to sleep in their damaged homes or to tend their gardens. The latter is especially important — subsistence agriculture dominates the area, supplemented by coffee or other cash crops and by the promise of royalties from resource projects. The public’s growing concern is whether the earthquake demonstrates the ancestral spirits’ disapproval of the LNG project. Most areas affected by the earthquake are very remote and have little contact with the modern world. Traditional belief systems remain very strong and ancestors are ever present.

Local landowners were meant to receive most of the 4 per cent of royalties and development levies based on the wellhead value of resource production in these areas. But a pre-condition for these payments was that the actual landowners be identified. This has not happened in the project area, and no payments have been made even though the project has been exporting gas since May 2014. Legal experts have serious doubts whether there can be any agreement on exactly who are the legit-

imate landowners. Without such an agreement and with no payments to local landowners, there were already growing concerns about the project's 'social licence' to operate. The Hide gas plant was closed by landowner leaders in late 2016 and special police squads were mobilised to protect the site.

The 2018 earthquake occurred among an already volatile mix of weapons, tribal conflicts, growing disenchantment with the project due to a lack of cash benefits, and traditional belief system concerns about the project. There is now local concern that the LNG project itself was the reason for the earthquake. Although geological experts are clear that the earthquake resulted from natural movements, social media and local discussions are generally blaming ancestors or the drilling from the LNG project. The extent of this disquiet, although 'irrational', has resulted in senior political leaders such as PNG's Minister for Finance and its Vice-Minister for Petroleum and Energy calling for an inquiry into the reasons for the earthquake to confirm if it was natural. PNG's opposition leader has also called for all outstanding royalties to be paid before the project re-opens. Following a request from Prime Minister O'Neill, Geoscience Australia has agreed to investigate the causes. The immediate economic impacts from the earthquake are the estimated US\$200 million damages bill, the closure of the LNG project for an estimated eight weeks and the effect on government revenues.

These economic impacts are bearable. The government has promised to spend US\$150 million in repairs, but this is likely to be spent over several years and is only a very small proportion of the state budget. Losing eight weeks of production at the LNG project is balanced out by the increase in oil prices in early 2018, so PNG's overall export values in 2018 are still likely to exceed those in 2016 and 2017. Revenue flows from the project are only 1 per cent of the government's budget due to very generous depreciation and other tax concessions. The real economic risks are if the earthquake marks a turning point in local support for the LNG project. This could be psychological, building on the continuing frustrations over the non-payment of royalties and development levies, and the willingness of the local Huli people to take direct action.

The worst case scenario is one that PNG has already experienced. The loss of social licence for the Bougainville copper mine in 1989 started a decade-long civil war that led to thousands of deaths, undermined development prospects on the island for a decade, damaged PNG's economy more broadly and quite directly led to the removal from office of prime ministers Paias Wingti and Julius Chan. Following the earthquake, the PNG government and LNG-project partners will have to work even harder to maintain a social licence for the project. The alternative would be catastrophic for Papua New Guinea. When the Bougainville Copper mine closed in 1989, there were other major resource projects in the pipeline to 'pick up the slack'. This time around, even with LNG and other major mining projects in the offing, there are no projects as advanced or as large as the early 1990s resource projects of Kutubu Petroleum and the Porgera Gold Mine. History shows economic pressures lead to political pressures, and mishandling the 'irrational' elements of this earthquake would put Prime Minister Peter O'Neill's coalition government under great strain.

** Paul Flanagan is Director of PNG Economics and an Associate at the Development Policy Centre, The Australian National University.*

Three dead since Sunday in renewed fighting in Papua

Gunfire exchanges between Indonesian military forces and West Papuan guerillas in Mimika re-gency have left three people dead since Sunday.

Radio New Zealand, 6 April 2018

The death of a soldier with the Indonesian army, or TNI, prompted renewed fighting in the mountainous area around the Freeport mine in Papua province. TNI and police forces had gone into a remote part of the area to reclaim villages controlled by the West Papua Liberation Army, or TPN. TPN guerilla forces have declared war on the Indonesian state and the operations of the Freeport mine. An NGO worker in Mimika's capital Timika, Demi Picoalu, said the TNI killed two Papuans in an intense sweep operation sparked by the killing of one of their troops on Sunday. "After that, massive sweeping operation in (local) villages, and they (joint TNI and police troops) shoot everyone, because the TPN is hiding in the community village, so TNI used rockets."



Members of the Indonesian Army in Papua. Photo: AFP

Earlier, according to the [Jakarta Post](#), the TPN said that over 1,000 civilian lives were at risk due to the TNI's operation. TPN spokesperson Hendrik Wanmang said they had gathered civilians in Kampung Opitawak and TPN fighters had retreated and left the kampung to avoid civilians being mistaken for armed fighters. However, Demi Picoalu said that according to reports he had received from Banti village, the TNI's sweep operation had stopped. Local villagers had been evacuated to the relative calm of a village named Banti 2 where they were considered safe lest fighting break out again.

Letter to the editor

Plight of Ok Tedi and Fly River status

Post-Courier, April 5, 2018

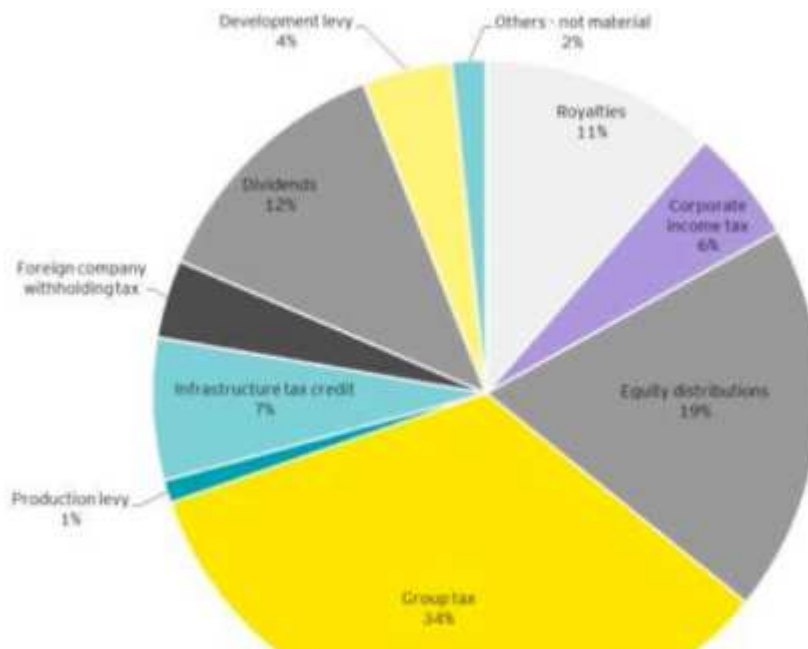
'Western Concerns' by Arago PC Tuesday 20th March 2018) prompts me to respond accordingly. Arago points an interesting but concerning narrative about OK Tedi mine and Fly River pollution and subsequent changing effects, legal battles, out of court settlements, and mine indemnity by law. However, there is some elements of naivety in his commentary and I find it rather difficult to comprehend his reasoning and why he is raising these issues now. The list of concerns been raised needs to be clarified: The 1994 Class Action in Melbourne by the plaintiff is done and dusted. Lawyers and plaintiffs benefitted big time financially. They were the big winners while the Fly River corridor dwellers are the biggest losers and they will live with this inane decision for the rest of their lives. This is the most unfortunate, a cowardly and inhuman way of dealing with such issues. There is nothing one can do by raising them again but ensure that there is no reputation in the future. The indemnity of the then operator of OK Tedi mine BHP Billiton is a controversial legal decision in the

Ninth Supplemental Agreement of OK Tedi and Fly River systems but exempting BHP Billiton which operates Ok Tedi mine from being legally sued for environmental damage.

This is now law as it is today. This law shall remain so long as OK Tedi mine operates for many years and everyone living along the river corridors dies from direct or indirect effects of the mine. This is the unfortunate scenario Western Province sees itself. Supporting this indemnity clause where the Community Mine Continuation Agreements (CMCAs) signed by all the river corridor people along the OK Tedi and Fly River system. This was the trade off for the financial benefits the community would receive annually whether it is “Compo” (Compensation) payments to river corridor people individually which is peanuts or equity payments to various source accounts but managed by the State. Remember PNG also benefited very much from OK Tedi mine as the main revenue source and still is today. One has to weigh the financial benefits to the environmental damages. This scenario will only change if the indemnity clause is repealed by law which is a mammoth legal undertaking.

The funds earmarked for Western Province invested by Papua New Guinea Sustainable Development Program (PNGSDP) in Singapore which is a Future Generation Fund is quite substantial at present but nobody can touch that fund, not even any government, private organisations, or individuals the law is. This money can be brought back to Western Province AFTER the mine closes finally and this is the law again still. Arago’s thematic suggestions for the future are steps in the right direction but requires absolute elitism and proficient professionals in leadership and bureaucracy to achieve positive developments and much needed essential service delivery in the province. The time for complacency, inactivity and rubbish in the system is over and it starts now. Let us all rise for the province. **MOTE KOBEAM, KIUNGA, WP**

Transparency Initiative report calls for improved systems in extractive sector in Papua New Guinea, Business Advantage, EMTV, 4 April 2018



Sources of revenue from extractive sector to government. Source: EITI

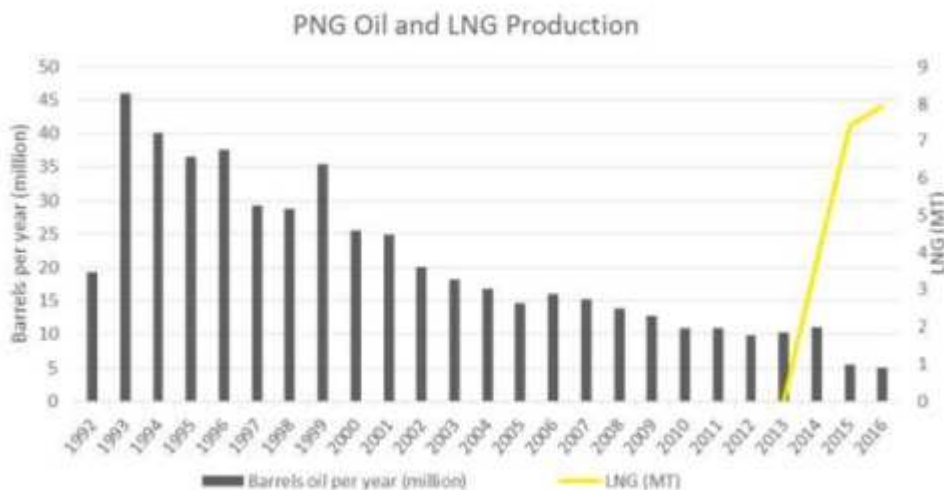
The 2016 *Papua New Guinea Extractive Industries Transparency Initiative* report has found that improvements are being made to registry and payment systems in Papua New Guinea, but more needs to be done. It notes that budgeting for government revenues remains difficult because of the resources industry’s volatility, and the relatively small number of companies paying full tax. The

EITI [report](#), which is produced by Ernst & Young, says that ‘in some cases, the absence of a robust system for managing government revenue payments in PNG leaves the system vulnerable to fraud, corruption, and human error.’ It found that the problem of transparency is amplified when payments to sub-national [provincial and district] governments are taken into consideration, noting that the Asian Development Bank has called for greater transparency in sub-national government resource revenue flows.

Budgeting

Budgeting for government revenues, the report says, from the extractive sector is ‘complex due to the revenue being subject to fluctuations in quantities produced and global commodity prices’. A further issue is the high number of extractive companies that have some form of tax exemption. ‘Medium-term projections anticipate that corporate income tax (mining and petroleum tax) will come mainly from Ok Tedi, Porgera and the oil fields. ‘The Ramu Nico mine has a 10-year exemption from corporate income tax. The Lihir mine continues to undertake high capital expenditures which reduce its taxable income. ‘Low LNG prices, together with an accelerated depreciation allowance, means there may not be corporate income tax from the PNG LNG project. ‘In addition, key mines are claiming Infrastructure Tax Credits (ITCs).’

Figure 39: PNG Oil and LNG Production, 1992-2016¹⁹⁴



PNG oil and gas production. Source: EITI

Recommendations

The EITI report makes a number of recommendations. One was the implementation of a reliable electronic registry system to supersede the current paper ledger system. The report noted that scanning of all documents has begun, but it will require additional resources to adhere to the EITI Standard. ‘The Department of Petroleum and Energy will need to provide information regarding licences awarded and transferred in previous reporting periods.’ Another recommendation has been that the Mineral Resources Development Company (MRDC) reports on the equity distribution and all other funds it holds in trust and invests for the landowners and for future generations.

It notes that there has been better information on payments and receipts, especially from the MRDC. Making electronic payments, rather than using cash or cheques, is identified as a priority. The lack of a ‘robust system for managing resource payments leaves the system vulnerable to fraud, corruption and human error,’ the report says. ‘There were specific financial instructions from the Finance Minister for government agencies to heed this change and transition into electronic payments system where possible.’ Two other areas of focus are improving reporting on sub-national payments and ensuring that Memorandums of Understanding (MOAs) are made public.

Positive prospects

The EITI report says the medium-term economic outlook for PNG ‘remains positive, with foreign investments in the pipeline’. It anticipates 2.8 per cent GDP growth in 2018, pointing to:

- A gradual pick-up in the global economy, which is expected to boost commodity prices and stimulate activity in sectors outside resource extraction.
- Increased output in mining.
- Forecast growth in agriculture, forestry and fishery output of 3 per cent, with increases in both price and production.
- PNG’s hosting of the Asia-Pacific Economic Cooperation Leaders’ Meeting in 2018.
- Legislative changes introduced on 1 January 2017 on taxation of the extractive sector.

Mine to direct tailings into Huon Gulf waters

By MALUM NALU, April 4, 2018, The National Business

THE Wafi-Golpu mine in Morobe will channel its tailings into the waters of the Huon Gulf, according to an updated feasibility study report released last week. It said three types of tailings management options had been considered during the various studies undertaken since 2012. They are the various terrestrial tailings storage facilities, dry-stacking and deep-sea tailings placement (DSTP). It opted for the DSTP. “DSTP studies have been conducted as part of the 2017-18 work programme,” the report said. “Oceanographic and environmental studies in the Western Huon Gulf to date have confirmed that area to be a highly-suitable environment for DSTP.

It hosts a deep canyon leading to a very deep oceanic basin with no evidence of upwelling of deeper waters to the surface. “The tailings are expected to mix and co-deposit with a significant, naturally occurring loading of riverine sediments from the Markham, Busu and other rivers that also are conveyed via the Markham Canyon to the deep sea. Around 60mtpa of sediment has been estimated. “The pelagic, deep-slope and sea floor receiving environment has a very low biodiversity as a result of the riverine sediment transport, deposition and regular mass movements (underwater landslides).”

Wafi-Golpu reserve estimated to be holding 5.5 million ounces of gold

April 4, 2018, The National Business

AN updated feasibility study of the Wafi-Golpu mine in Morobe shows that the ore reserve is estimated to contain 5.5 million ounces of gold and 2.5 million tonnes of copper. “The feasibility study update ore reserve is estimated to contain 5.5 million ounces of gold and 2.5 million tonnes of copper,” the report released last week said. “This estimate is materially in line with previous estimates, and reflects updated long-term cost and metal price assumptions and optimised designs in the Golpu feasibility study update.” Block cave (BC) 44 and BC42, which are at a feasibility level of accuracy, account for 49 per cent of gold reserves and 52 per cent of copper reserves.

BC40, which is at a pre-feasibility level of accuracy, accounts for 51 per cent of gold reserves and 48 per cent of copper reserves. Newcrest managing director and chief executive Sandeep Biswas said in the report: “The improved business case set out in the updated feasibility study clearly demonstrates the world-class nature of this multi-decade project. “At Newcrest we are excited to have this tier 1 asset in our portfolio with an IRR (internal rate of return) of 18 per cent, first quartile production costs and decades of operating life. “We have a clear pathway forward for the project and together with our joint venture partner, we are committed to working with the Government and people of PNG to progress this world-class asset.”

Deep sea mining ship launched in China

Post-Courier, April 4, 2018

Chinese media Xinhua reported that a Chinese shipbuilder had launched a deep sea mining vessel in east China's Fujian Province on Thursday last week. The manufacturer, Fujian Mawei Shipbuilding Limited, said that it is the world's first deep sea mining vessel capable of working at a depth of 2,500 meters. The 227-meter-long, 40-meter-wide vessel will provide living and working space for 200 people and can store up to 39,000 tonnes of ore. The vessel will undergo testing before it is delivered to Canadian mining company, Nautilus Minerals Inc at the end of this year. It will be used to mine polymetallic sulphide deposits in the waters around Papua New Guinea, according to the mining firm.

Kua queries Abel on gas project levy

BY GORETHY KENNETH, Post-Courier, April 4, 2018

ABOUT K45 million of the two per cent project development levy out of the PNG Gas project has been paid to responsible provincial governments. And funds belonging to the landowners of the Hela, Enga, Western Highlands, Southern Highlands, Western Province and Gulf provinces are secured and parked at the PNG Central Bank. Treasurer and Deputy Prime Minister Charles Abel announced this yesterday during Question Time in Parliament yesterday. He was responding to Questions raised by Sinasina Yongomugl MP Kerenga Kua to explain why the two per cent project development levy out of the gas project has not been released to the Governors and the council presidents of Hela, Enga, Western Highlands, Southern Highlands and Western Province and maybe Gulf. "The funds are secured and at an appropriate time, the process is completed, money will be released to the appropriate landowners," Mr Abel said.

"Those funds in the provincial governments have been released – only the landowners proportions; we got to be very careful on how we address this issue, it is a sensitive issue and we have to be very careful on how we debate this. "I can confirm that up to K45 million was released last year but each to the main provinces affected, where the footprint area is. Pipeline landowners have been receiving some of these funding. "The LO royalties in relation to the 2 per cent, the good thing in the first instance, those monies have been accumulating in an appropriate place, the first instance at the Central Bank so the mechanisms under the agreement that secured these funding, in the first instance, those funding are secured. The government had been going through a difficult process in terms of releasing those funds," Mr Abel said.

"Of course in this particular time, with the disaster that's come up, the requirements are even more acute, the necessities to utilise the funding is even more acute, but that doesn't mean that we bypass or ignore the process that are required. It has come through an exhausted process, however, the process is still ongoing, in terms of the Gulf Province and the Southern Highlands and Hela Province in terms of the particular, the royalty benefit. That process is protected but is necessary. It is very important that the correct landowners are identified before the funds are released. "If not, it may create even more problems if the funding goes to the wrong LO, so we need to find other mechanism to satisfy the requirements to the disaster which is the subject of the debate."

Groups prepare for seabed mining hearing in Wellington

Wanganui Chronicle, 3 April, 2018

It's good to see so many groups banding together to oppose mining the South Taranaki seabed, Kiwis Against Seabed Mining chairwoman Cindy Baxter says. The groups will be heard in the Wel-

lington High Court from April 16-19. They include iwi, conservation and fishing interests. They are appealing against the Environmental Protection Authority's August 2017 decision to give mining company Trans-Tasman Resources consent to mine iron-sand offshore from Patea. The consent was narrowly granted. Two of the four-member decision-making committee opposed it and chairman Alick Shaw used his casting vote to grant it. The hearing will be before High Court Justice Helen Cull, and can only be on points of law. Ms Baxter has about 15 points of law ready for Kiwis Against Seabed Mining (KASM)'s lawyer Davey Salmon to make. Those points will be shared among the others groups that are appealing. "We are trying to avoid repetition and not waste the judge's time."



There have been a series of protests against consents to mine the South Taranaki seabed. Photo/File

The other groups involved in the appeal are the Taranaki-Whanganui Conservation Board, Te Rūnanga o Ngāti Ruanui Trust, Te Ohu Kai Moana Trustee Limited, Fisheries Inshore New Zealand Ltd, New Zealand Federation of Commercial Fisherman Inc, Talleys Group Ltd, Southern Inshore Fisheries Management Company Ltd and Cloudy Bay Clams Ltd, Te Kāhui O Rauru trustees, Royal Forest and Bird Protection Society of New Zealand Inc, and Greenpeace of New Zealand Inc appealing in tandem with KASM. Trans-Tasman Resources has spent \$65 million so far on progressing its mining aims. In the South Taranaki Bight it wants to suck up 50 million tonnes of iron-sand a year, exporting the 10 per cent iron ore content and returning the rest to the sea floor.

The mining is to be done across 66 square kilometres, all 22-36km offshore from Patea, in 25-60m of water. The consents are the first granted in New Zealand for mining in the country's large exclusive economic zone (EEZ). The company's website anticipates the first export will take place in 2020. It says the operation will create 300 local jobs and spend \$350m a year on operating costs. Export revenues are expected to be \$400m a year. Trans-Tasman Resources also has a prospecting permit for a long stretch of the South Island's West Coast. There it is looking for mineral sand containing ilmenite, zircon, rutile, garnet and gold.

Demo at Freeport office in Jakarta calls for self-determination

Tony Firman, Pacific Media Centre, April 2, 2018

Calls for West Papuan self-determination were prominent during a demonstration in front of the offices of PT Freeport Indonesia in the Kuningan area of South Jakarta at the start of Easter. The action was held by about 70 protesters from the Papuan Student Alliance (AMP) and the Indonesian People's Front for West Papua (FRI-WP) who held the demonstration last Thursday to demand the closure of the Freeport copper and gold mine in Papua. FRI-WP spokesperson Surya Anta said that

the international community must take a position on the forced incorporation of West Papua into the Unitary State of the Republic of Indonesia (NKRI). “Since May 1, 1963, until now, West Papua was removed from the Dutch decolonisation list without the West Papuan people’s knowledge,” said Anta. Anta also accused Freeport of being an entry point for the colonisation of West Papua on the grounds that the first work contract between Freeport and Indonesia was signed in 1967. Meanwhile, the Act of Free Choice (Pepera) which resulted in the incorporation of West Papua into the Indonesia was held in 1969. Anta said that the Pepera was manipulated and undemocratic.



Papuan protesters outside the offices of PT Freeport Indonesia in South Jakarta last Thursday. Image: Tirto.id

No prosperity or peace

Dorlince Iyowau, a resident of the mining town of Timika who took part in the action, added that Freeport’s presence in Papua had not brought prosperity or peace to the West Papuan people. “Violence against the people and damage to the environment by waste tailings discarded into the Ajkwa River is a concrete form of Freeport’s colonial presence”, said Iyowau.

In a media release received by Tirto, the FRI-WP and the AMP made nine demands, three of which were:

- the closure of PT Freeport,
- the withdrawal of the TNI (Indonesian military) and Polri (National Police) from Papua, and
- self-determination for the people of Papua

The media release also stated that based on a report by the Papuan Institute for Human Rights Studies and Advocacy (Elsham) in 2002, numerous cases of violence had been committed by security forces in Papua. The report noted that thousands of people had died, scores had disappeared and hundreds more had been arrested and tortured. In addition to this, it also noted places of worship that had been burnt down, villages and other locations that had been destroyed, many of which have yet to be properly documented. The demonstrators began leaving the Freeport offices at around 3.15 pm. Similar actions are planned to take place simultaneously next Saturday in several different cities, including Yogyakarta and Semarang (Central Java), Bandung (West Java), Surabaya and Malang (East Java), Makassar (South Sulawesi), Palu (Central Sulawesi), Ternate (North Maluku) and Papua itself. *Tony Firman is a reporter for Tirto news website in Indonesia.*

Translated by James Balowski for the Indoleft News Service. The original title of the article was [“Demo di Kantor Freeport Juga Serukan Penentuan Nasib West Papua”](#).

Tanker docks at ExxonMobil's Papua New Guinea LNG export terminal

Jessica Jaganathan, Reuters, April 2, 2018



A liquefied natural gas (LNG) tanker has docked at ExxonMobil's Papua New Guinea export plant, which has been shut since late February following a powerful earthquake, indicating that the facility is preparing to resume shipments. The 172,000-cubic metre capacity LNG tanker Kumul, custom-built for the ExxonMobil operated PNG LNG project, is currently moored at the terminal, Thomson Reuters Eikon shiptracking data showed. It has a draft of 90 percent, suggesting it is nearly full, after leaving Indonesia's Bontang on March 26. This is likely the LNG cargo ExxonMobil purchased last month to keep its PNG plant cold, an industry source said, but that could not be verified. Exxon officials could not be reached on Monday, a public holiday in Papua New Guinea. LNG achieves its fluid status by being super-cooled to around minus 160 degrees Celsius (minus 260 degrees Fahrenheit).

A senior ExxonMobil executive said in March that the company was shipping in the cargo to keep the LNG export plant cool so it is ready to start production from the gas when it comes down from its Hides facility. The company hopes to resume shipments from the export facility - one of its top performing assets in 2017 - by late April, or eight weeks after it shut following a 7.5 magnitude earthquake that killed dozens of people. Led by Exxon, with a one-third stake, and its Australian partners Oil Search and Santos, PNG LNG is the impoverished nation's biggest revenue earner. Exxon and France's Total plan to double their gas exports from Papua New Guinea to around 16 million tonnes a year at an estimated cost of \$13 billion.

Press Release

Nautilus Minerals Seafloor Production Vessel Launched

Toronto Ontario, March 29, 2018 - Nautilus Minerals Inc. (TSX:NUS, OTC:NUSMF Nasdaq Intl Designation) (the "Company" or "Nautilus") announces that its production support vessel was today launched at the Mawei shipyard in China. The vessel will be used by Nautilus and its partner, Eda Kopa (Solwara) Limited at the Solwara 1 Project site, in the Bismarck Sea of Papua New Guinea. Mike Johnston, Nautilus' CEO commented at the launch, "Today's launch is a significant milestone for the Company and the deep water seafloor mining industry. Mawei Yard has designed and built the world's first Deep Sea Mining Production Support Vessel, in cooperation with Nautilus and Marine Assets Corporation. This has involved much discussion, thought and innovation, to produce this magnificent vessel. The Yard's efforts have been truly amazing, and I would like to

thank the Management and team at Mawei Shipbuilding for the terrific work that has been done to get the vessel to this stage of completion.”

He further added, “We believe that mining the seafloor for much needed minerals will be a more cost effective and environmentally friendly source of obtaining high grade copper, gold and silver*. Nautilus further differentiates itself from others by having a “first-mover advantage” which is protected by intellectual property and 20 patents. Once our new vessel is delivered, and subject to final funding, mining operations at 1600m water depth is anticipated to commence in late 2019.”

* Please refer to the NI 43-101 technical report dated February 27, 2018 titled “PEA of the Solwara 1 Project, Bismarck Sea, PNG” prepared by AMC Consultants Pty Ltd (AMC) (the "PEA Technical Report"), available at www.sedar.com and the Company’s website: <http://www.nautilusminerals.com/irm/content/technical-reports.aspx?RID=306>



About the vessel

The Production Support Vessel (PSV), which the Company will lease from the owner thereof, provides a stable platform for operations using world-class dynamic positioning technologies to ensure it stays on location at Solwara 1 irrespective of wind and wave conditions. The PSV has been designed for use in offshore construction and seafloor mining industries. The PSV, as launched today, is approximately 75% complete with the final vessel delivery currently scheduled for March 31, 2019.

Bougainvillean communities confront Filipino miner

Radio New Zealand, 29 March 2018

There are reports from central Bougainville of a confrontation earlier this week between landowners and a Philippines mining company. SR Metals is undertaking exploratory work in the Papua New Guinea autonomous region for the Isina mining development, a short distance south of the shut-down Panguna mine. One of the masterminds behind Isina is Sam Kauona, who was once a military leader in the Bougainville Revolutionary Army. But a chief at nearby Koianu, which is also in the sights of the company, Cletus Miarama, said SR Metals does not have free and informed consent to proceed. "According to the Mining Law any such development that takes place in the land they must first of all identify the real landowners before these explorers can go into the land. They are going into our customary land without our permission. And they are even also going into our sacred sites." Cletus Miarama said SR's presence was sparking divisions in communities with promises of wealth for some but not others. He said it was destructive, coming as the region is preparing for the vote on possible independence from PNG in June of next year.

One step closer to mining sea floor

By Liam Ratana, Cook Islands News, March 28, 2018



Representatives from Ocean Minerals Ltd (OML) inspected the Layar Mas 291 last Friday. OML are expected to purchase the boat and repurpose it for deep-sea exploration. 18032629

The Cook Islands is the only country in the world with a widely recognised, commercially viable ‘polymetallic nodule field’ – including valuable deposits of cobalt and titanium – within its exclusive economic zone. Last week, the country took a step towards becoming the first in the world to mine those nodules, with six representatives from the American-based Ocean Minerals Ltd (OML) company visiting the islands of Aitutaki and Rarotonga to explore the viability of harvesting nodules. Last year, OML gained exclusive rights to apply for licensing to undertake prospecting and exploration activities in an area of around 23,000sqm. This area lies within the South Penrhyn Basin, one of only four locations in the world with densities high enough for potential commercial extraction of nodules.

The agreement with the Cook Islands government was reportedly worth \$100,000 and is valid for 18 months. OML director David Huber says the company is now in the process of applying for a licence to prospect and explore the area. Cobalt metal fetches more than \$130,000 a tonne and its value is expected to keep soaring. According to a report published by the Cook Islands Natural Heritage Trust, the South Penrhyn Basin could meet 24 per cent of global demand for cobalt and 26 per cent of the demand for titanium. It is assumed that a commercially viable mine would need to harvest at least 2.5 million tonnes a year for at least 20 years. At current value, that much cobalt would be worth \$3.25 billion a year.

Cobalt has many uses, including the production of batteries, alloys for aircraft engine parts, electroplating, and imparting blue and green colours in glass and ceramics. Radioactive cobalt is even used in the treatment of cancer. OML’s interest in the nodules is well-known – particularly with regard to cobalt’s “green” uses. It possesses many unusual properties, one of which is that it increases power efficiency when used in batteries. This is particularly important to renewable energy industry and electric car manufacturers, as it allows the use of smaller batteries. These batteries are identical to the ones being considered for the power storage project now underway in the Cook Islands.

Agencies in New Zealand, such as the National Institute of Water and Atmospheric Research, have been working in collaboration with the Seabed Minerals Authority in the Cook Islands to ensure environmental issues are well understood. In 2013, the Seabed Minerals Act came into effect in the

Cook Islands. It was the world's first dedicated seabed minerals-related national legislation. Paul Lynch, who has led the Cook Islands Seabed Minerals Authority since 2012, says the Cook Islands has developed a regime of controls on seabed minerals activity, which includes community input and strong environmental safeguards. "We see the technical and environmental issues as the most challenging to be addressed and overcome." The Cook Islands has also passed the 2017 Marae Moana Act, forming a nationally managed ocean space over the whole exclusive economic zone, which is almost two million square kilometres. The Act is based on conservation and zoned areas of resource utilisation, founded on a "whole of ocean" and precautionary approach.

OML had a number of engagements whilst here, including meetings with Lynch and Business Trade Investment Board chief executive Teariki Vakalalabure. Director Huber said the purpose of the visit was to "seek the environmental, business, and government permissions to allow us to commence with the environmental data collecting and research phases of our project". OML says they are taking a "precautionary approach" towards the exploitation of the Cook Islands seabed and are focussed on the environment. Sharing part of OML's plan exclusively with CINews, engineer and chief operating officer for OML Hans Smit says their programme to collect environmental data, not only in nodule-rich areas but also across the broader Cook Islands region, spans at least three years. "Our objective is to use Cook Islands vessels and Cook Islanders to collect this data and we have been in discussion with local companies and the authorities to establish what is required to commence these operations" says Smit.

"OML will gather data about sea life, birds, and many other things – statistics that Huber claims "have never been collected in the Cook Islands before". Last Friday, the group inspected the Layar Mas 291, a vessel owned by local businessman Malcolm Sword. Huber said the boat was far from ideal, but added, "if there's any way we can make this boat work, then we will". Huber has been in discussions with Sword about advanced requirements for the boat and says he admires Sword's zeal. Huber says that even if the boat is not used to extract the nodules, it is likely to be used by OML for other purposes, including "baseline studies" of the environment. OML have plans to soon establish a base in Rarotonga. Huber says that his company is dedicated to ensuring that the people of the Cook Islands see some benefit from their activities. He says legislation that ensures profits from OML's activities remain within the country is currently before the Cook Islands parliament.

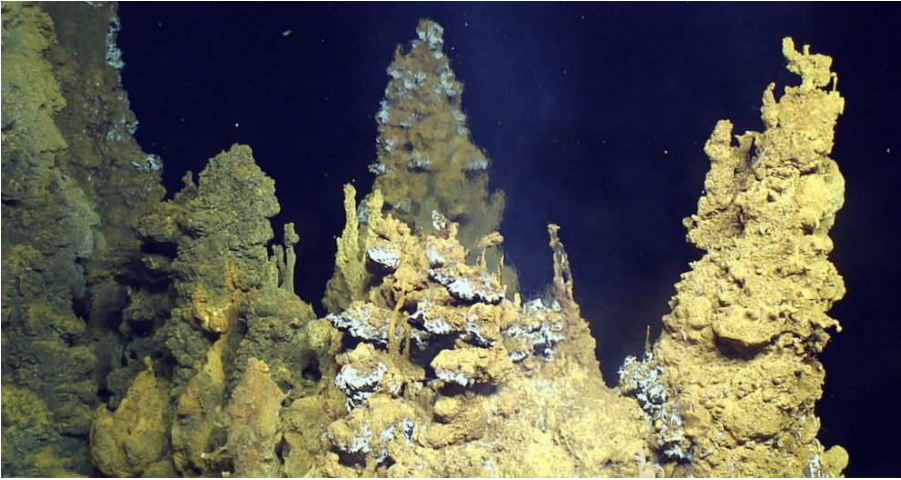
According to Huber, it is likely some money will go into a fund dedicated to upgrading infrastructure and other resources within the Cook Islands. However, he also confirmed that once extracted, the nodules will be taken to offshore smelting plants, probably in Australia or Indonesia. OML will be advertising a vacancy within the next six months for an environmental and outreach coordinator to take charge of interaction and consultation with the people of the Cook Islands. Huber says the company will be focused solely on the Cook Islands. "A lot will be happening within the next six months". However, he estimates mining operations are at least eight years away from beginning.

Deep sea mining decisions: Approaching the point of no return

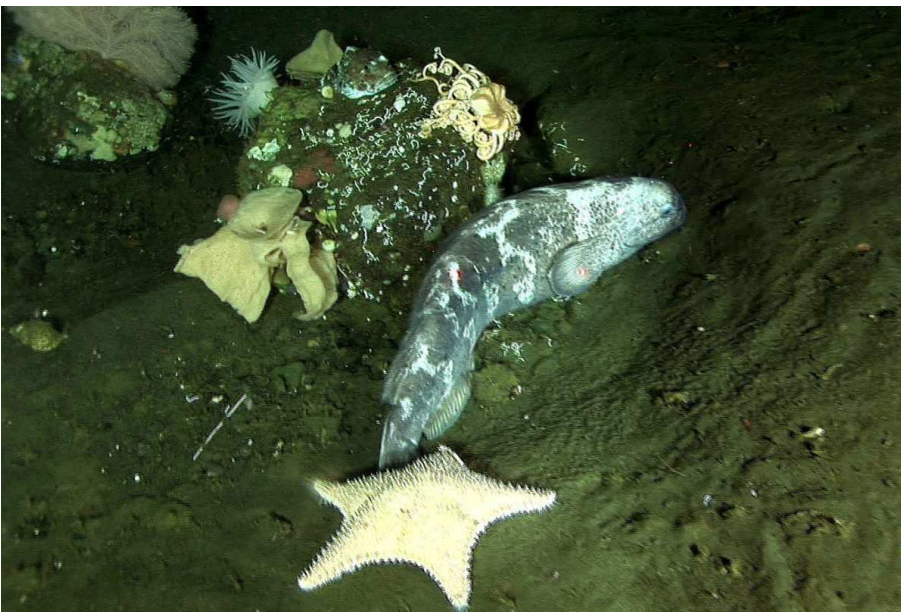
The Vanuatu Independent, By Greenpeace, Authors: Sebastian Losada and Pierre Terras,
March 28, 2018

OVER the last two weeks, the International Seabed Authority (ISA) has been in discussions in Jamaica. Its mission – to work towards the finalisation of exploitation regulations, a so-called mining code that will allow commercial deep sea mining operations to begin all around the world. The coming two years are critical in the opening – or not – of this unnecessary new frontier of resource exploitation. The deep sea covers around fifty per cent of the Earth's oceans and a great share of that is in international waters. Hidden under thousands of metres of water, the vast majority of it hasn't been explored, meaning deep seabed mining could wipe out species and ecosystems before

we even know them. The ISA regulates the sea floor outside nations' jurisdiction. It has to decide what the rules are: how much money will go to developing countries and their communities, what kind of environmental controls there will be. And, right now, decisions that could impact the earth's seabed forever are being made in Jamaica; ushered through under pressure from industry and mining advocates with a decided lack of transparency.



Sulfide chimneys coated with iron-based microbial mat at Urashima Vent. Deep sea hydrothermal vents like these are targeted for mining. Picture: NOAA / Flickr



A rocky outcropping with a prowfish skate corals and seastars as viewed by a manned deep submersible at approximately 1000' deep in the Bering Sea. Picture: Greenpeace / John Hocevar

Advocates of ocean exploitation, like US giant military company Lockheed Martin, argue that we need deep sea mining in order to meet 'the growing global demand for precious metals' and to support 'economic growth'. They also claim that deep sea mining is necessary to satisfy our endless thirst for technological and electronic innovation, conveniently ignoring many aspects of the problem. "Are we going to continue to develop huge mines that destroy villages, alter rivers, pollute water courses, take thousands of years to restore, remove whole mountains? You don't have any of that with deep seabed mining," said ISA Secretary General, Michael Lodge, recently. While it's true that mining for essential and finite raw materials often endangers workers and leaves the Earth irreversibly scarred, the solution is not – and cannot be – to translate these mining impacts to other ecosystems that provide crucial services to humanity and our climate.

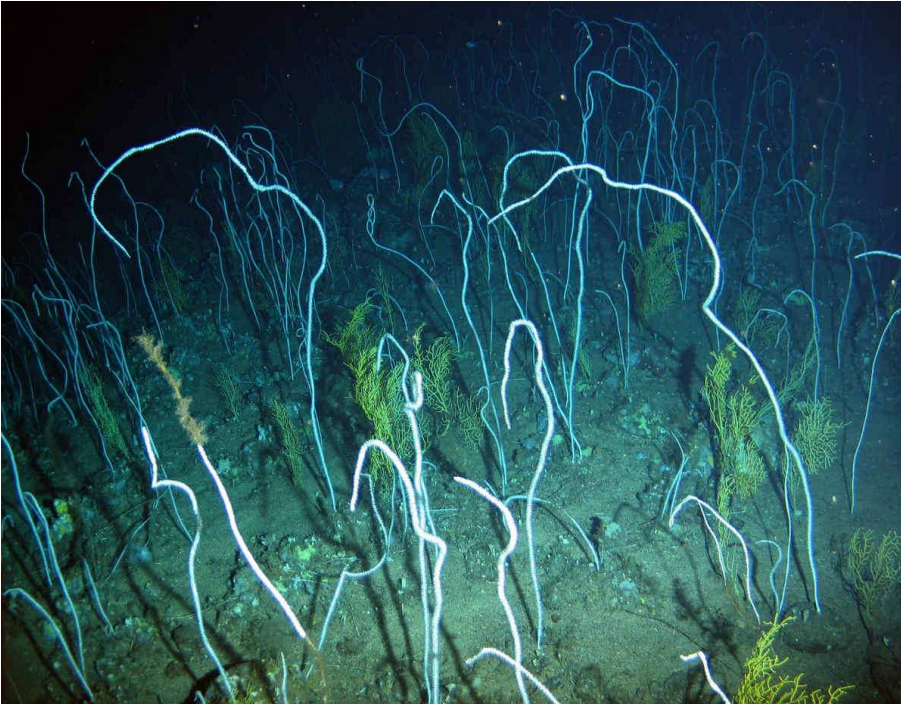
Doing so would not only result in potentially irreversible biodiversity losses, but would also send a completely wrong signal: that we do not need to improve efficiency and reduce resource use because there is plenty down there. Why is it that the IT sector, and its current leaders such as Samsung and Apple, can show the ingenuity to develop technologies that allow us to do things we could only have dreamed of a decade ago, but do not put such ingenuity to the service of a truly sustainable economy within the boundaries of the planet? Instead, in the race to gain market share, IT companies increasingly change the design of their products in a way that accelerates the replacement cycle, making them difficult to service, upgrade or repair and shortening their useful life.



Greenpeace protests outside the Palau de Congressos de Catalunya (Catalunya Palace of Congress) during the presentation of Samsung ahead of the Mobile World Congress to ask Samsung for a compromise to recycle the 4.2 million of Samsung Galaxy Note 7 devices that were defective. Picture: Pablo Blazquez / Greenpeace

Mining advocates also argue that we need the minerals to meet increased demand from the growth of renewable energy technologies and the electrification of transport. But there is no evidence that a transition towards renewable energy necessitates mining in the deep ocean. On the contrary; a recent report by the the Institute for Sustainable Futures found that: “Even with the projected very high demand growth rates under the most ambitious energy scenarios, the projected increase in cumulative demand – all within the range of known terrestrial resources – does not require deep-sea mining activity.” Different types of seabed mining involve different extraction methods and technologies, but whatever the approach severe impacts can be expected. Sediment plumes, the potential release of toxic chemicals, habitat destruction, increased temperature and noise all threaten the deep sea’s precious and as yet untouched environment. Researchers recently concluded that most mining-induced loss of biodiversity in the deep sea is likely to last forever on human timescales, given the very slow natural rates of recovery in affected ecosystems.

Yet the ISA has recently rejected the establishment of an environmental committee to better include environmental considerations in its functioning, and key environmental information is not public. It’s Legal and Technical Commission meets mostly behind closed doors, and its composition is such that biological and ecological considerations are underrepresented. Despite all the arguments against this unnecessary pillaging of planet’s seabed, so far the ISA has approved 28 exploration contracts in the Pacific, Indian, and Atlantic oceans – covering more than 1.4 million square kilometers, roughly four times the size of Germany – to companies like Lockheed Martin. And in the meantime, the first commercial test case for the deep seabed mining industry is already planned to take place in the waters of Papua New Guinea. Canadian company Nautilus Minerals plans to extract mineral-rich sulfides, containing copper, zinc and gold, at depths between 1,500 and 2,000m. The mining operation, known as the Solwara project, is scheduled to begin early in 2019.



A dense field of whip coral (*Viminella flagellum*) found at 250 -300 meters in the Azores captured with the use of a specialised underwater camera. Picture: Greenpeace / Gavin Newman

A strong alliance of NGOs made of over 20 communities in the Bismarck and Solomon Seas is fighting to stop the project. Arguing a lack of consultation, and drawing attention to the grave impacts that could be derived from the project, the local opposition is growing stronger while the company is facing potential financial troubles. The European Union Parliament has recently agreed on a resolution on international oceans governance, which calls for a moratorium on seabed mining. In an effort to push back against the plunder, almost 800,000 thousand people have called on the ISA and its member parties to agree to the moratorium. While opposition is mounting, alternative economic models are gaining momentum and people are increasingly aware of what's at stake, for the sake of the oceans, the planet and the people, it's urgent we stand to prevent commercial deep sea mining, before it's too late.

Sebastian Losada is Oceans policy adviser for Greenpeace International, and Pierre Terras is an Oceans campaigner for Greenpeace International

Kainantu Mining Put On Notice By Landowners

Post Courier, March 28, 2018



Landowners from the K92 Mining Limited in Kainantu, Eastern Highlands province have raised concerns over 18 years of being left out of spin-off benefits from the Kainantu mine operation. The groups from Kainantu in Eastern Highlands and Markham in Morobe are calling on the operator to back pay them over no spin-off. Pomasi and Unantu groups from Kainantu and the Watarais and Marawasa groups in Markham said since the establishment of the mine, they have not been part of any spin-off activities. Chairman of associate infrastructure group Aigdevco Limited, Sonny Maraba, said the groups have missed out on royalties, enclave allowances and employment from the mining operations.

“The four mentioned groups and five others have been left out from the development stages to the construction and actual progress of the mine and not in any way received royalty payments, and compensation payment for the damage done to the environment and even have not been given spin-offs,” Mr Maraba said. He said the mine commenced operation in 2000 and since then the groups have not received anything. “The Markham landowner groups have been ignored for 18 years now,” he said. He added that the groups want the mining operators to calculate 18 years of no spin-off benefit and pay the agreed 30 percent benefit. “We have been spectators to the benefits for so long and as the new chairman I want to make it happen for my people,” he said.

Fracking technology not used: Pok

Post-Courier, March 28, 2018

THE oil and gas industry in PNG do not use fracking technology. This is the assurance from Minister for Petroleum Dr Fabian Pok amidst rumours that the recent 6.5 magnitude earthquake was caused by petroleum activities in Hela and Southern Highlands. “People need to focus on the relief efforts to support those affected by the recent earthquakes and others affected by it,” he said. Mr Pok said the Prime Minister has announced an independent investigation into the earthquake and it is now time to put aside speculation following aftershocks and to concentrate on efforts on helping people recover and rebuild their lives. “I welcome the investigations and while we consult with experts, I want to make it clear that there is no fracking for oil and gas being done. Oil and gas in PNG is being extracted using conventional wells that are tapping into underground reservoirs which hold free flowing gas.

Fracking technology is used in other parts of the world because their gas is tightly trapped between rocks,” he said. Mr Pok said licences that the oil and gas industry operate under do not permit fracking. And the Department of Petroleum as the regulator of the industry monitors all oil and gas operations. He reiterated that there was no fracking used to extract oil and gas anywhere in the country. He said there are a number of reputable geology and geophysics experts in PNG including the Department of Mining and GeoHazards who can assist with more information and let us allow them to investigate further while we turn our energy to assist people in need. The comments by the Minister comes following ongoing speculation and misleading statements especially in the social media on the cause of the earthquake.

Traditional landowners reject mining exploration bid in Bougainville

Catherine Wilson, Mongabay, 27 March 2018

- *Ahead of next year’s referendum on independence from Papua New Guinea, the government of the autonomous region of Bougainville believes reopening the Panguna copper mine is the key to gaining economic self-sufficiency.*

- *In January, traditional landholders rejected a bid by Bougainville Copper Ltd. — now majority owned by the Bougainville and Papua New Guinea governments — to renew exploration at the mine.*
- *The dispute of the mine highlights the ways in which traditional communal landownership in Melanesian states complicates both public and private development projects — and the role landowner groups can play in environmental stewardship.*

Traditional landowners in Bougainville, Papua New Guinea, have exerted their power of veto under the autonomous region's new mining laws and rejected a corporate bid by Bougainville Copper Limited (BCL) to embark on renewed exploration at the war-ravaged Panguna copper mine, which has been dormant for 28 years. New legislation introduced in 2015 gives them ownership of any mineral resources on their land, as well as rights in key decisions about their exploitation. At the core of concerns by many indigenous landowners is the company's record on environmental and social responsibility. BCL, a former Rio Tinto subsidiary, operated the mine at the time civil war broke out in the late 1980s — a conflict sparked by claims of extensive environmental damage and inequities connected with its operations. Two years ago, the global mining multinational sold its stake in the mine and, at the same time, dismissed any obligation to clean up or rehabilitate land and rivers contaminated with mine waste.

The landowner vote in January was not, however, unanimous, with evidence of opposition from some landowning groups and support from others. Bougainville's president, John Momis, then imposed an indefinite moratorium on mining in Panguna. He expressed concerns that the depth of local division on the issue could trigger tensions, even unrest, and undermine the region's progress toward a referendum on independence set to be held on June 15 next year. Although the Bougainville government has a 36.4 percent stake in BCL, Momis told Australia's ABC News in January that "If we went ahead now, you could be causing a total explosion of the situation again," referring to the devastating war on the island from 1989 to 1998 that left some 20,000 people dead.

Nevertheless, debate about reopening the Panguna mine is unlikely to dissipate, as mineral extraction is believed by local leaders to be the only feasible economic option for driving the region's fiscal self-reliance alongside ambitions of self-determination. Other companies with rival bids to redevelop the Panguna mine are also waiting in the wings, including Australia-based RTG Mining, which has forged an alliance with local Mekamui tribal leaders.



The abandoned Panguna mine pit, as it is today. Photo by Catherine Wilson.

Bougainville's history of resource extraction and conflict has been affected by some unique factors, including the long-held desire for secession in the region, which contributed to the widespread unity of landowners and the scale of their mobilization and resistance to the foreign-led extractive venture. However, in common with other Melanesian island states, such as the Solomon Islands and Vanuatu, it is a prime example of how customary landownership, which covers over 80 percent of these countries, can have a crucial influence on a wide range of public and commercially driven development projects. Friction between differing worldviews about the value of land is at the heart of localized conflict related to mining in Bougainville, but also at the Porgera gold mine in Papua New Guinea's remote Enga province, and the massive PNG LNG natural gas project in the highlands.

For companies from the industrialized West, where laws endorse the rights of individual land tenure, land is a major source of commodities for generating profits and corporate or personal wealth. But for Melanesian societies, the centuries-old system of customary landownership is communal. Land is owned not by individuals but by clans and family groups, who are considered custodians until it is passed on to the next generation. The right to use land by members of landowning groups, whether for agricultural cultivation, building homes, hunting, or worshiping ancestors, reinforces social structures held together by mutual kinship obligations and ideas of collective social security. Traditionally held land is, therefore, entwined with social harmony and cohesion. Intensified interest by export-oriented foreign resource-extraction companies in Papua New Guinea in the mid-20th century heralded an era of confrontations. Their ambitions often encountered major hurdles in countries where land was not surveyed or registered and no single individual was traditionally entitled to sell it.

In communities affected by the PNG LNG project in the Papua New Guinean highlands, for example, claims that individuals have been incorrectly named as beneficiaries in landowner identification programs have been a factor in regular episodes of disrupted operations and localized violence in the past eight years. In a country where customary laws and land rights are oral and undocumented, the risk of incorrectly identifying landowners and the potential for opportunists to hijack the process for their own reward is very high. Obtaining rights to customary land to build infrastructure and improve much-needed public services in Pacific island states, such as water, power, communications and transport, can also involve lengthy negotiations with traditional owners.



Local Panguna landowner, Lynette Ona, believes Bougainville islanders were at the forefront of the global environmental movement in the 1990s. Photo by Catherine Wilson.

And delays, work stoppages and disruptions to projects easily follow when there are disagreements about the activities involved, the social and environmental impacts, or the nature and amount of compensation to be paid to landowners. This is a growing problem in expanding cities and towns, such as Port Moresby, the Papua New Guinea capital, where the demands of urban development are matched by the growing need for more land. In Honiara, capital of the Solomon Islands, the civic water supply has been disrupted on numerous occasions because of disputes over compensation with the owners of the land where the Kongulai water catchment, the supply's source, is located.

Yet, at the same time, the culturally entrenched role that customary landowners perform as “custodians of the land” could be seen as aiding environmental protection. In Panguna, it was the landowners who called for action on deforestation, soil erosion, crop degradation and the pollution of rivers and streams. Panguna landowners Phillip Takaung and Lynette Ona believe the campaign they waged in the 1990s put them at the forefront of the then-burgeoning era of global environmental activism. “This is the first island in the world where we fought for the life of the people and for the environment,” Takaung said during an interview at the mine in 2016. There is an increasing call by governments in the region for greater mobilization of land as part of their larger aim to boost human development and standards of living. But there remains little will for land reform at the local level. Many clans and families still view land as vital for their economic and social survival, now and in the future.

And the long connection between local governance and landownership means that many chiefs and local leaders see external government and political control as unwanted interference and, in some instances, motivated by intentions to wrongly “steal” their land and its wealth. This has been a major issue in Papua New Guinea, where the government's Special Agriculture and Business Lease (SABL) program has fallen foul of manipulation and corruption. This attempt to free up traditional land for economic projects resulted in 12 percent of the country, or 55,000 square kilometers (21,200 square miles), being allocated mostly for logging by foreign companies, rather than agricultural projects to benefit local communities. There are exceptions, such as the recent national land reform initiative in Vanuatu, which gained popular support. In a bid to reduce land-related disputes, conflict and fraud, and provide better governance of investment and development projects, the Vanuatu government introduced new laws in 2014 aimed at strengthening and integrating the rights of traditional landowners with government planning and oversight institutions. Time will be needed to judge their effectiveness.

Ok Tedi: Landowners in trust firm upskilled

By Nikints Tiptip, Post-Courier, March 27, 2018

A landowner trust company can operate efficiently with good governance and a strong team, CEO of Star Mountains Group Aubrey DeSouza told a directors training meet in Port Moresby. It coincided with the group's quarterly board meeting last week. The Star Mountains Group is a subsidiary of the Ok Tedi Landowners Royalty Investment Trust with properties and capital investments domestically and abroad in Australia. Before the board meeting last Thursday, board members representing Ok Tedi landowner were reminded of their role as directors and when and how to correctly interact with management. Board director and participant John Wanim said it was a first of its kind for him to learn about the actual roles and responsibilities of directors adding he has learnt a lot during the short training.

He said at first he thought being a director was only to attend meetings and collect allowances but after attending the training he has learnt and understood the true meaning of being a company board director. Deputy chairman Patrick Buleng shared similar sentiments while thanking the training facilitators, CC Pacific Limited, an International HR firm with offices in Port Moresby and Australia.

“We need more of these trainings to help us with the right knowledge and skills to manage assets and investments worth millions of kina,” he said. Mr Buleng said this was the first training run for board members and management of Ok Tedi landowners since 1969 when the trust was first established.

Former chairman of Ok Tedi Landowners Royalty Investment Trust Henry Asekim said the training has given new skills and knowledge to the directors. “I am happy to see the trust growing from strength to strength and with such training our directors can now be able to make informed decisions,” he said. Mr Akesim also challenged other resource landowner trust companies to do the same so landowners in the village know how much their investments are worth and how they are taken care of. Course facilitator Des Blake, general manager CC Pacific, said Ok Tedi Mining Royalty Investment Trust was one of the best landowner holding companies in the country with a sound track record. He said the company has set a bench mark in sound management and investments evident both in Australia and PNG.

Basil: DMO to benefit from white paper policy

BY JEFFREY ELAPA, Post-Courier, March 23, 2018

Domestic Market Obligation in any petroleum project in the country will be compulsory and will be non-negotiable, the recent Petroleum and Energy Summit was told. Minister for Communication, information and energy Mr Sam Basil said he will work closely with the Minister and Department of Petroleum to make sure that DMO is factored in every project agreement which will be included in the white paper policy. Basil told summit participants, including LNG buyers, possible LNG Investors and the stakeholders that the Government is serious and will make DMO as factored to use the gas for power in the country. Petroleum Minister Dr Fabian Pok also stress that although there was no provision for DMO in the PNG LNG Project, any other project that comes on stream will make sure there is a percent gas reserve for the domestic gas market. He said the domestic market LNG will be used for power to supply the energy needs in the country and for other uses such as petrochemical industry.

He said industrialization can only take place when there is constant and sufficient energy supply. Kumul Petroleum Holding Limited Managing Director Wapu Sonk KPHL supports the Government’s nation-building policies to power 70 percent of household in the country as captured in the Vision 2050. He said it has a role in the domestic gas market through DMO by making sure some gas is made available domestically. He added that entering into an third-party pipeline access, to provide reasonable access for third parties to transport gas from stranded LNG fields to meet the local market. He said the supply of domestic gas has an important role to play in meeting the government policies and for industrial development in the long-term sustainable development of the country that will create direct and indirect jobs and open up other opportunities. Mr Sonk said through the DMO, it would also promote small-scale distribution of gas to industrial users and for fuel for electricity besides LNG powered electricity.

Papua New Guinea archbishop worries about impact of climate change on his and other islands

Brian Roewe, National Catholic Reporter, March 22, 2018

Rising seas and new technology to mine beneath them are forefront concerns these days for Cardinal John Ribat of Papua New Guinea. During a 12-day U.S. trip along the East Coast that concludes March 22, the head of the Port Moresby archdiocese on the South Pacific island nation has in numerous settings expressed his worry with the continuing impact of climate change on his and other islands, as well as the development of first-of-its-kind deep seabed mining in waters off his home-

land. Ribat, 61, has long spoken out about the impacts of climate change on the people of the Pacific islands, considered one of the ground zeros of global climate change, where rising seas have submerged portions of islands and have already led to communities relocating from their homes to nearby islands. Last week, Ribat raised his concerns about climate change again on Capitol Hill in meetings with Sen. Edward Markey (D-Massachusetts) and officials for Sen. Jeff Markley (D-Oregon). Both sit on the Senate Committee on Environment and Public Works, and its subcommittee on fisheries, water and wildlife.

In their meeting, the cardinal pointed out on a map to Markey, who is Catholic, the locations of the islands as he described how rising seas have forced people to relocate farther inland every few years as the tides rise and come in farther themselves. On Bougainville, one of Papua New Guinea's roughly 600 offshore islands, the diocese has offered a piece of land to help people resettle from the Carteret Islands, which have shrunk under rising ocean tides. Ribat said that during a trip around Easter last year to Ahus and Andra islands he witnessed similar scenes of shorelines and agricultural lands that had washed away. Sea level rise is driven by two primary factors: the oceans expanding as waters warm, and increased water mass due to melting ice from glaciers and ice sheets.

According to a climate science special report, published in November and compiled by 13 U.S. federal agencies, global mean sea levels have risen roughly 7 to 8 inches since 1900 — three inches since 1993 — with human-driven climate change making "a substantial contribution" during that period. Scientists project further rise of 1 to 4 feet by 2100 and have not ruled out a rise as high as 8 feet. "When you're on an island, you get it, when you got to keep moving your house," said Franciscan Fr. Michael Lasky, who helped organize the cardinal's trip. In the Capitol Hill meetings, Ribat also raised another problem accompanying rising tides: seawater seeping into the freshwater table underground and turning some crops inedible. "When they harvest them it's salty. They cannot eat them anymore because the sea is rising," he said.

Clean water impacted

The impact of rising seas on clean water came up as well during a meeting March 15 with officials at the U.S. Environmental Protection Agency. He also reiterated concerns he shared with the senators' offices about new seabed mining technology set to begin next year in waters east of Papua New Guinea. Nautilus Minerals, a Canadian-based company, in 2011 received a mining lease from the Papua New Guinea government for extracting deposits of copper and gold from the floor of the Bismarck Sea. The project will be the world's first attempt at mineral extraction from the deep sea. The mining operation — which would occur 1,600 meters, or nearly 1 mile, under the sea about 20 miles off the western coast of New Ireland and 31 miles north of New Britain, both islands east of Papua New Guinea — is set to begin in 2019.

According to Nautilus, the deposits of the deep sea Solwara 1 Field ("salt water" in the Tok Pisin language native to Papua New Guinea) contain copper and gold at grades much higher than typically found in land-based mines. The potential mining site holds added significance for Ribat, who calls home Watom Island, off New Britain's north coast. While on the island at Christmas, fishers shared with him anxieties over how the mining may impact fishing grounds. During meetings with U.S. government officials, the cardinal described the seabed mining process as "taking the lawnmower over the reefs where people fish," according to Lasky. Ribat told NCR he is concerned that the project does not include the necessary oversight and monitoring of any underwater mining operations, particularly since the machines would be remote-controlled from a large sea vessel, and that not enough is known at this point to what effects such mining will have on local marine life and people reliant on fishing and the sea for their livelihoods. A particular concern is the mining operation's proximity to a tuna breeding ground.

"There's no clear information about how or what the negative effect it will bring to the environment and also to the marine life that we have," he said. In an August 2016 statement, the Federation of Catholic Bishops Conferences of Oceania, of which Ribat is president, voiced their opposition to seabed mining, and instead endorsed sustainable development in coastal communities through tourism, fisheries and agriculture. "The sea is a treasure for all and should never become a 'playground of exploitation,'" the statement said. Ribat suggested it would be best "to delay this operation until we have people better prepared to assess and monitor this operation, so we're not destroying the environment for the sake of just testing this technology." In an emailed response to NCR, a Nautilus Minerals spokeswoman called the Solwara 1 site "one of the best studied deep sea ocean sites on the entire planet," and said the company's work has been reviewed by external independent experts for the Papua New Guinea government and the International Seabed Authority.

"All of these reviews have confirmed that seabed mining has limited environmental impacts, and has positive net benefits," said Noreen Dillane, corporate communications manager for Nautilus Minerals. She said that "independent expert observers" chosen in consultation with nearby provinces would be aboard the vessel to ensure compliance with the permit conditions. Its environmental impact statement, completed in 2008, found there would be no impacts from mining on reefs or tuna fisheries, and that any impacts would be limited to a 27-acre area and beneath 1,300 meters (.8 miles) below sea level. Critics of the seabed mining project contend there has been no independent environmental study and the present one contains gaps. In December, the Guardian reported that the Centre for Environmental Law and Community Rights, in Port Moresby, filed suit on behalf of several coastal residents over the operation, alleging that key documents were withheld and that residents had a constitutional right to that information. They have also questioned the relationship between Nautilus and the Papua New Guinea government, which holds a 15 percent share in the Solwara 1 project.

Dillane said that Nautilus has conducted "regular awareness meetings" in the coastal communities near the project site and has reached more than 30,000 people through such programs since 2008. She added that information sessions were being held in the western coastal areas of New Ireland this week. As for communication with Ribat, Dillane said Nautilus Minerals and the government have made numerous attempts to meet with him. "To date the Cardinal has not accepted any of these attempts to meet in person to discuss the topic, and provide him with all the independent expert advice in person. Similarly, the Company has never been approached by the Federation of Catholic Bishops to provide information on the Project, or to discuss their concerns one on one," she said in an email. The cardinal did not respond for follow-up comment.

Raising awareness

The cardinal said he hoped his visit to Capitol Hill and EPA headquarters would raise awareness of what's happening in the South Pacific and amplify efforts to address issues they're facing, given that other islands in the region are U.S. territories. While also in Washington, Ribat, who was elevated to cardinal in November 2016, spoke about climate change and mining March 13 at the Catholic University of America, and later met with a group of roughly 80 religious seminarians to talk about his vocation. Before departing for home, he was set to meet in New York with members of Franciscans International, the religious order's NGO at the United Nations, to further discuss sea rise and seabed mining. He was also scheduled to meet March 21 with Karenna Gore, the founder of the faith-based Center for Earth Ethics at Union Theological Seminary; Gore is also the daughter of former vice president and climate activist Al Gore.

It was an award from the Church of St. Ignatius Loyola, in New York City, that spurred the trip for the first cardinal of his island country. On March 11, Laetare Sunday, he presided at Mass and was honored with the parish's Loyola Medal, which recognizes people who have made significant contributions to their community. "Our [parish] Lenten theme is healing," Elizabeth O'Sullivan told

NCR. "And we believe that Cardinal Ribat's work in climate change, which is healing on a global level, is worthy of acknowledgement and worthy of honor." Throughout his time in the U.S., Ribat has received updates from Papua New Guinea about the aftermath of an earthquake that rocked the island in late February. In the early morning Feb. 26, a magnitude-7.5 earthquake struck the Southern Highlands province, that along with a landslide, has killed at least 145 people and displaced upwards of 35,000 others. The inland region is a remote part of the island, overlapping with the Mendi diocese led by U.S.-born Bishop Donald Lipert, which has made relief efforts and communication more difficult. "The earthquake has been very devastating," Ribat said.

Gas deal a boost for landowners

March 22, 2018, The National Business

PRIME Minister Peter O'Neill says a white paper on natural gas development in PNG will enable landowners to get a better and fairer return on their resources. "This is an important document for our country as we move forward. But it will be developed together taking into account all partners including our landowners," he said. "PNG has the opportunity to broaden its economic base so that we are not overly dependent on the resources sector. But we continue to promote other sectors in tourism fisheries, forestry and agriculture which hold the greatest potential for our nation. "Natural gas continues to hold a greatest potential of our country. We have to take advantage of every opportunity it presents." He said PNG continued to export much of the raw form of gold and copper, oil and gas and minerals. "It is time for us to develop some of these sectors in our country. They provide the greatest opportunities for creating additional investment, more jobs and strengthening our economy. "We cannot continue to export raw products so that the value added to these resources is to the benefit of others." O'Neill said PNG needed to ensure that there were jobs for its young population as it continued to provide opportunities for small to medium-sized enterprises.

PNG's Hela Province risks falling into the hands of criminals - police

Radio New Zealand, 22 March 2018

Papua New Guinea's Hela Province is at risk of falling into the hands of armed criminals, local police say. The *Post Courier* reported Western Highlands police commander Martin Lakari as saying the provincial capital Tari was a "battle field" where there was no respect for law and order. Tribal enemies in the province have reportedly been searching and murdering each other in the capital, and police officers have become targets when they try to enforce the law. On Friday, a ward councillor was brutally shot at close range and killed in front of a large crowd outside an illegal gambling house beside the airport. During the same day, a young woman was gang raped by armed men who had set-up a roadblock in Tigibi along the Highlands Highway outside Tari. Mr Lakari called for immediate intervention by the police hierarchy and Government or he says criminals will take total control of the province. Hela was one of the worst hit provinces when a 7.5-magnitude earthquake struck in February.

Flaws in landowners benefits

BY JEFFREY ELAPA, Post-Courier, March 21, 2018

There are fundamental errors in the distributions of the royalties and equities to the landowners and provincial governments, Mineral Resources Development Company managing director Augustine Mano said. Mr Mano said MRDC as the fund manager of the petroleum and mining equities of landowners believes the distribution and percentage given to the landowners and provincial governments were not sufficient when distributing the shares to the many groups. He said the 2 percent

was not enough and there was a need to relook at the benefits for the provincial governments and landowners. He said in the mining projects, the landowner equity was about 5 per cent and another 25 per cent for the state, a total of 30 per cent but in the petroleum projects it was not the case. He said after 26 years there was a need to change the way benefits were going to the affected landowners and provincial governments. He said a benchmark was set in the Kutubu oil project, the first petroleum project when it was given 6.75 per cent where the landowners were given 4.05 per cent equity and provincial government 2.7 per cent but that was never followed in subsequent projects.

“In the petroleum projects like Moran, Gobe and Hides, the provincial governments have missed out equity and there is a need to increase equities to cater for the provincial governments and also the equities for the landowners,” Mr Mano said. He said that times and expectations had changed over time and needs a complete change in the way the equities and royalties had been offered to the landowners and the provincial government with the increasing in demand. Mano said another project was that the landowners’ identification was a major problem which the stakeholders should address before production. He said as a result, more than K450 million was still parked in the trust account because the matters had gone back to court following the failure of the State and the developers to do proper identification. “You are dealing with my landowners who are voiceless and they have to have sufficient funds,” he said.

K660m in royalties from Lihir

Loop PNG, March 20, 2018



Of the total royalty payments made between 1997 and December 2017 (K660m);

- New Ireland Provincial Government (+ districts) had received K330,057,253
- Nimamar Local Level Government had received K198,034,351
- Special Mining Lease Block Owners had received K132,022,902

From January to December 2017, Lihir Gold Limited royalty payments to the people of New Ireland have added to a total of K75,065,077 as highlighted (in yellow) in the table below.

Royalty 2% Payment Summary to December 2017 in PNG Kina.

		1997-2005	2006-2016	2017 Jan-Sep	2017 Oct-Dec	Total 1997-2017
New Ireland Province (+ Districts)	50%	54,973,702	237,551,013	27,438,331	10,094,207	330,057,253
Nimamar Local Level Government: Projects	20%		95,020,405	10,975,332	4,037,683	110,033,420
Nimamar Local Level Government: Investment	10%		47,510,202	5,487,666	2,018,841	55,016,710
Nimamar Local Level Government: Total *	30%	32,984,221	142,530,607	16,462,999	6,056,524	198,034,351
Lihir SML Block Owners	20%	21,989,481	95,020,406	10,975,332	4,037,683	132,022,902
Total Royalty Paid	2%	109,947,404	475,102,025	54,876,662	20,188,415	660,114,505

What are royalties?

The PNG Mining Act defines royalties as payments by a mining company to the State based on 2 percent of the value of all gold sold. The Mining Act further states that it is up to the State to decide how it wants to redistribute the royalties. For the Lihir operation, the State, in a Memorandum of Agreement (MOA) – signed with NIPG, NLLG and the Lihir Mining Area Landowner Association (LMALA) – agreed that the National Government shall ensure that all royalties be distributed in the following way;

- 50 percent be paid to NIPG
- 30 percent be paid to NLLG
- 20 percent be paid directly to the SML block owners.

The MOA further states that the 50 percent portion for the NIPG be divided as:

- 20 percent to the Namatanai District for infrastructure projects and programs pursuant to its district and provincial development plans. (Lihir comes under the jurisdiction of the Nimamar Local Level Government in the Namatanai district.)
- 20 percent to the Kavieng District for infrastructure projects and programs pursuant to its districts and provincial development plans.
- 10 percent for general administration as well as for the administration of the MOA obligations.

The MOA allocation of royalties for infrastructure projects and programs in both Namatanai and Kavieng fulfils Recital C of the MDC's Social Impact Monitoring Plan for the Lihir operation. It therefore makes Lihir a business that is benefitting the whole of New Ireland Province.

For the 30 percent NLLG portion of total royalties, the MOA states that it be split further in the following way:

- 20 percent to be spent on community development and programs
- 10 percent to be spent on long term growth-driven investments

For the 20 percent royalty portion for SML block owners, an arrangement was made between the SML block executives and LMALA for Newcrest Lihir to deduct 20 percent and pay it directly to LMALA to put in a financial savings scheme for the landowners. The remaining 80 percent is paid to the SML block executive to distribute to the SML block owners. In a statement, the mining rm said: "LGL as a corporate citizen and development partner for New Ireland and PNG honours the MOA and other agreements and complies with all laws of PNG. "LGL pays royalties every month and reports to the Mineral Resource Authority (MRA), the Internal Revenue Commission and other stakeholder government agencies." Newcrest Mining Limited, owner of LGL, is a publically [sic] listed company on the PNG and Australian stock exchanges. As such it is required to regularly report its financial performance through various communications channels, including its website <http://www.newcrest.com.au>.

Independent mining consultant questions Papua New Guinea government role as both shareholder and regulator

Kevin McQuillan, *Business Advantage PNG*, 20 March 2018



Mining consultant Jerry Garry (centre) on site in Sierra Leone. Source: Jerry Garry

To remain impartial, the Papua New Guinea Government should not be a shareholder, but only maintain regulatory oversight of mining projects, according to geologist and mining consultant, Jerry Nombri Garry. He tells *Business Advantage PNG* there are other ways for the country to derive healthy revenues from mining projects. Simbu-born Jerry Garry has worked in some of the toughest mining environments in the world: Indonesia, Sierra Leone, Tanzania, Afghanistan—and PNG. After returning home in 2013 to work as Country Manager for Crater Gold, he describes the PNG mining industry as ‘mature and operates upon a very stable regulatory framework and friendlier tax regime compared to other jurisdictions.’

But he believes some regulatory processes and legal requirements require fine-tuning to ensure that projects are established quickly and provide fair and equitable revenues. He argues that in the interests of impartiality, the government should only play a regulatory role. ‘Government participation underpins confidence in the developer and financiers.’

‘Whenever the state exercises its option to acquire a portion of the allowable 30 per cent equity in any mining project, it automatically becomes a player. ‘Government participation underpins confidence in the developer and financiers; [adopting a] dual role as operator/regulator can compromise enforcement of the laws and regulations.’

Revenues

The aim, he says, is to maintain healthy revenues for the country. Solutions could include negotiating increased royalties on a sliding scale at different benchmarks; introducing the compulsory participation of state-owned enterprises (SOE) in mining projects (e.g. PNG Power); or reserving a reduced equity percentage for PNG-based entities (such as super funds and investment companies). ‘The benefits of extinguishing equity participation, will not only promote impartiality, but safeguard the state from unnecessary debts and debt financing, and commit itself fully to the service delivery obligations.’ He points out there have been many missed opportunities associated with the extractive industries. ‘For example, PNG Power/Elcom [the former PNG Electricity Commission] missed out completely on power generation and the distribution business in mining projects.’ PNG Power could now have double its installed capacity of 300MW, if it had been involved at mines like Bougainville (135MW), Ok Tedi (110MW), Porgera (75MW) and Lihir, (56MW), he observes.

Opportunities

Some new opportunities are emerging, he says, listing Frieda River (estimated at about 150MW) and Wafi-Golpu (estimated at more than 100MW). ‘SOEs must re-think their business model, by

expanding their capacities through direct participation in the extractive industries, rather than increasing tariffs as a business profitability norm. ‘The onus is on the government to draw a national master plan for infrastructure (e.g. roads, power) that meaningfully connects all major natural resource areas.’ In doing so, shared-use infrastructures can be jointly funded by mining project and Government under Public-Private-Partnership (PPP) arrangements and foster sustainable economic growth.

Simbu born

Born in 1967 in the Gumine District of Simbu Province, Garry was raised in a rural setting. He completed high school at Kabiufa SDA in Eastern Highlands Province. What attracted Garry to geology were stories from an older student about his helicopter adventures and the job potential associated with the course. After graduating in 1990, the Ok Tedi mine employed him under their Graduate Development Scheme and sponsored him to complete his Honours degree at the University of Ballarat, near Melbourne, Australia. ‘Field geology is fun, because you always get to see new places, people, rocks and minerals.’

Negotiation skills

One of those places was Sierra Leone. When he arrived, in 2001, the country was going through a disarmament phase after a 10-year civil war. It is there he nurtured his negotiation skills. ‘Crafting the right balance in our negotiations for access, and to re-gain trust from each chiefdom, were crucially vital survival skills. ‘The country was devoid of its experienced and skilled mining workforce. ‘Mentoring young national graduates, from basic survival skills, to exploration and mining techniques, gave me a sense of usefulness.’ He was excited by the challenge to understand West African mineral potentials including diamonds, banded iron ore formations, rare earth elements and Archean gold deposits. From Sierra Leone, Garry moved onto Tanzania, where, as General Manager for Savannah Diamonds, he commissioned a dense media separation plant and ‘x-rays flowsort’ to recover macro-diamonds. In 2009, he went to Afghanistan, where he was involved in nation-building and restoration programs, including rewriting the country’s mining laws. ‘We trained the entire geological survey staff and guided more than 20 intelligent, young Afghans for post-graduate studies in Japan, India, the UK and US.’

Reform puts locals in the picture

March 20, 2018, The National Business

THE Ministry of Petroleum has completed a policy white paper for natural gas development reflecting lessons learnt from the PNG LNG project, says Petroleum Minister Fabian Pok. “It is time to make sure that PNG’s policy and legislative frameworks are designed so that PNG and its citizens are more fully and directly involved in our country’s natural gas industry,” Pok said. The policy paper is with the National Executive Council for approval before it is tabled in Parliament. Pok told the PNG Petroleum and Energy Summit in Port Moresby yesterday that the policy recommended that the following changes be introduced:

- An investment framework and robust third party access regime for strategic gas pipelines and related infrastructure;
- a domestic market obligation with respect to domestically produced gas of up to a certain percentage of national gas production, pro-rated across all producers; and,
- A flexible and responsive national content requirement to ensure that gas explorers and producers maximise on the amount of locally available and sourced labour and content in their operations in PNG.

“Government will not issue any new petroleum development licence, or enter into any gas agreement, until these policies have been implemented,” Pok said. He said the changes from the policy would not apply to pipeline licences, petroleum development licences or gas agreements which had already been granted. The policy will be effected in the negotiations of three projects – Pasca A, the off-shore facility in Gulf; P’nyang gas in Western; and the Elk/Antelope in Gulf. The projects are in exploration stages and yet to be awarded development licences. “The three new gas fields proposals are nearing grant or refusal decisions,” Pok said.

Pok reveals new authority will replace department

March 20, 2018, The National National

THE Government will create the National Petroleum Authority to replace the Department of Petroleum, says Minister Dr Fabian Pok. Pok said it was part of the government’s effort to reform the natural gas industry. “The prime minister has announced the removal of the portfolio of energy from my ministry. The core focus of my ministry will be petroleum,” he said. Speaking at the PNG Petroleum and Energy Summit in Port Moresby yesterday, Pok said the National Executive Council in 2013 approved the abolishment of the department and the creation of the authority. He said while the energy sector was moving to establish the energy authority, work was progressing for the establishment of the Petroleum Authority.

“With the immense energy resource availability in the country, the government believes the separation is the correct approach to maximising these resources to enable and boost development in other sectors,” Pok said. “The industry is growing fast and I am determined to make the necessary changes to the department this year so it becomes a competent and modern organisation to meet industry needs.” Pok said the department would focus on LNG project security by reviewing the LNG Umbrella Benefits Sharing Agreement and Landowner Benefit Sharing Agreements and for the payment of outstanding royalties. He said amendments to the Oil and Gas Act would be made to allow local MPs to hold trustee roles on the board of the Mineral Resources Development Company’s subsidiary companies.

P’nyang South-2 is a huge investment

Post-Courier, March 20, 2018

Exxonmobil managing director Andrew Barry told the second Petroleum and Energy summit in Port Moresby yesterday the P’nyang South-2 well in Western Province represents a further multi-billion dollar investment. and extends gas pipeline infrastructure into Western Province that will potentially create more jobs and revenue for the nation. And he said ExxonMobil is looking forward to working with the government to progress the development concept and secure the petroleum development and associated pipeline licenses for the field. Furthermore, ExxonMobil is also continuing to work with Total, as operator of Papua LNG, to support them in the development of the Elk-Antelope fields. Mr Barry said the joint venture partners are making good progress on alignment on the development concept.

“Subject to partner approvals we expect to commence discussions with the government on the project gas agreement leading up to a decision on FEED later this year, Mr Barry said. He proudly announced that last year ExxonMobil achieved more than four years of operation without a lost time incident that is around 10 million work hours where not a single person has needed to take time off from work as a result of an injury. He said ExxonMobil has produced more than 27 million tonnes of LNG and delivered 374 LNG cargoes since production began. “More than 8.2 million tonnes of

LNG was produced and 110 cargoes delivered during 2017 – this is about 20 percent beyond what we originally thought the plant could achieve when the facilities were designed,” Mr Barry said.

ExxonMobil also recorded less than 2 per cent unscheduled downtime and in May 2017, the Hides gas conditioning plant achieved a milestone with 1 trillion cubic feet of gas produced since operations began. Barry said they achieved these milestones while also completing the largest scheduled major maintenance program at the LNG plant since start-up and completing some of the work “on site” for the first time ever around the world. It demonstrated the amazing capabilities of ExxonMobil’s growing Papua New Guinean workforce, Barry said. “Our investment in the acquisition of InterOil last year demonstrates the great confidence ExxonMobil has in Papua New Guinea and the opportunity which exists to expand our business significantly and deliver additional benefits to this country. He said the Elk/Antelope interests, the InterOil acquisition also provided ExxonMobil with significant new exploration acreage which includes acreage across the Western Highlands, Eastern fold belt and offshore in the Gulf of Papua, making PNG one of ExxonMobil’s significant focus areas in the world.

OIL AND GAS OUTLOOK POSITIVE

BY CLEMENT KAUPA, Post-Courier, March 20, 2018

The future outlook for the oil and gas sector is bright, according to the existing developers Oil Search, ExxonMobil, Total and Santos. They told the second Petroleum and Energy Summit in Port Moresby yesterday that they were planning to commercialise three new LNG (liquefied natural gas) trains of Pasca A, P’nyang and the Elk-Antelope developments. The developers’ announcement comes as Mining and Petroleum Department seeks Cabinet approval on a White Paper to reform gas policies. THE Prime Minister assured the hundreds of energy buyers and investors at the summit that current changes in the economy indicated a turnaround and the future of the hydrocarbon industry is very bright. Mr O’Neill said there was huge potential in the oil and gas sector which, the government wants to translate to real development especially with the upswing in energy prices.

“We believe very strongly that PNG has great potential in offshore waters (and), we are on the very of significant discoveries in the waters of PNG and Australia and our government is encouraging greater participation in this area,” Mr O’Neill said, referring in particular the Gulf of Papua as well as the Bismarck Sea. Oil Search Limited managing director Peter Botten said PNG was on the cusp of a significant change and major developments in the oil and gas industry. “PNG has an outstanding future for oil and gas development, there is opportunity to further grow our oil and gas here in a responsible way it brings both government and community along with it,” Mr Botten said.

“We are very much on the cusp of a new development and I don’t believe you have really gone into FEED, and not quite to FYD but I want Andrew (ExxonMobil managing director Barry Andrew) and Philippe (Total managing director Blanchard Philippe) to describe it – it’s a really, really smart capital efficient way of our next phase of LNG development.” Mr Barry said that the P’nyang South2 well in Western Province represented a further multi-billion dollar investment and extended gas pipeline infrastructure into Western Province that would potentially create more jobs and revenue for the nation. He said ExxonMobil was continuing to work with Total, as operator of Papua LNG, to support them in the development of the Elk-Antelope fields. Mr Barry said the joint venture partners were making good progress on alignment on the development concept.

“Subject to partner approvals we expect to commence discussions with the government on the project gas agreement leading up to a decision on FEED later this year,” he said. “We believe very strongly that PNG has great potential in offshore waters (and), we are on the very of significant discoveries in the waters of PNG and Australia and our government is encouraging greater participa-

tion in this area,” Mr O’Neill said, referring in particular the Gulf of Papua as well as the Bismarck Sea. “We have great confidence in the hydrocarbon potential in the Gulf of Papua. I thank the exploration companies who have undertaken comprehensive seismic activities in the last few years. We will have to think beyond the way that we have been doing business in the past and look forward to the future and we must embrace new technologies that make it easier for us to develop new resources.”

Harmony adamant that can find funding for Wafi-Golpu project

Allan Secombe, Business Day, 19 March 2018



Picture: PHILL MAGAKOE

Harmony Gold will have to find \$1.41bn to fund its stake in the Wafi-Golpu copper and gold project in Papua New Guinea over five years once it secures a mining right, but management said it would keep the mine and that it was fundable. Harmony CEO Peter Steenkamp has since last year spoken of exploring options to realise value from the project, with deep scepticism from shareholders and analysts about Harmony’s ability to financially participate in the project. The project has not been reflected in Harmony’s share price. The options Harmony was exploring included an outright sale of its 50% stake in the undeveloped Wafi-Golpu deposit, bringing in a partner to share the costs and rewards, or keeping its share, with the potential decrease in capital expenditure if the Papua New Guinea government exercised its right to a 30% stake in the venture.

On Monday, Steenkamp said it was a project Harmony wanted to keep and that the new feasibility study showed it to be one that Harmony could fund along with Australia’s Newcrest Mining. “We are delighted with the results of the feasibility study,” Steenkamp said. The cost of building the mine and all associated infrastructure like on-mine power generation, pipelines to the coast and processing plants rose to \$2.825bn from \$2.67bn in the 2016 study, but the overall cost of the project, including sustaining capital gave a total life of project capital bill of \$5.38bn, down from \$6.38bn before. Harmony FD Frank Abbott said during a media briefing that Harmony would fund the first three years of construction off its balance sheet, using cash flows from its mines in SA and the re-started Hidden Valley gold and silver mine in Papua New Guinea.

For the next two years Harmony would need funding and plans for that expenditure would be finalised in the next 12-18 months waiting for the Papua New Guinea government to grant the project a special mining lease. The projections are for the project to start positive cash flows from the seventh

year and for it to generate \$1bn for the partners from year eight, which for Harmony means \$500m if the Papua New Guinea government doesn't take up its option, said Abbott. African Rainbow Minerals, a 15% shareholder in Harmony, has been touted as a potential partner or buyer of Harmony's stake, but Steenkamp declined to comment whether ARM, which is on the hunt for copper after pulling out of a Zambian mine, would be included.

One of the potentially controversial aspects of the proposed mine is the option to dump tailings in the sea rather than setting up tailings deposition sites on land, which the study showed to be fraught with problems and risk. There are three mines in Papua New Guinea pumping their tailings in the sea, said Johannes van Heerden, the head of Harmony in South East Asia, arguing it was a viable and acceptable option that the partners had explored with local authorities. The project, which will deliver on average 161,000 tonnes of copper and 266,000oz of gold a year, will be one of the lowest cost copper and gold mines in the world, Steenkamp said. The boards of Harmony and Newcrest will finalise and approve the study once they have secured the special mining lease from the Papua New Guinea government.

Newcrest dealing with tailings challenges in NSW and PNG

Matthew Stevens, Australian Financial Review, March 19, 2018



Newcrest has two adjacent tailings dams at its Cadia mine in New South Wales. The wall of the northern mine suffered a "minor" breach last week.

Newcrest finds itself uncomfortably poised at the polar extremes of the mining industry's relentless waste management dilemma. Unhappy serendipity sees the accident-prone copper and gold miner working to recover the integrity of a thoroughly conventional tailings dam at a mine in distant western New South Wales while promoting plans for a big new mine in Papua New Guinea whose viable future relies on dumping waste directly into the Solomon Sea. Production at the gold and copper miner's most consistently profitable operation, the Cadia mine in NSW, was bought to an unexpected halt on March 9 by a "limited" breach in the walls of one of its two tailings dams. It seems the emergency that is almost certainly destined to inflict more damage on Newcrest's 2018 bottom line than it will to the local environment was most likely triggered by a small earthquake.



A close-up of the dam wall breach.

But, now 11 days on from the breach, Newcrest is still working overtime to assess the cause, and the best path to mitigation, of the loss of a 270-metres-wide, 100-metres-deep chunk of the wall that secured the waste stored in Cadia's southern tailings dam. There is speculation that Cadia could be out of action for up to six months as Newcrest works to find comfort that the damage is limited to the breach and then fills that hole effectively. To keep track of what this is all going to cost you need to understand that the fix could cost more than \$150 million and that Cadia would be throwing off free cash at a rate of \$90 million a month at current copper and gold prices. Meanwhile work continues on Newcrest's next big project. It is called Wafi-Golpu. It is planned to be Papua New Guinea's first block cave mine and the new design presented in the latest feasibility study sees a mine of three big caves. The study released on Monday puts the cost of building the mine at \$US2.8 billion and predicts the extremely low cost copper mine to absorb investment of \$US5.4 billion over a 28-year mine life.

The study also revealed that, after analysis of 45 waste management options, Newcrest and its partner Harmony would seek approval to pump 60 million tonnes a year of mine tailings into a deep and very still part of PNG's Western Huon Gulf. The tailings would be delivered to the coast by a buried pipeline and then carried a further one kilometre offshore where it would be released into the Gulf at an initial depth of 200 metres. The tailings in question here are waste sands that carry with them a mixture of the frothing agents that release the valuable metals from the crushed ore. The metals are to be exported as a concentrate, which means that there will be no gold extraction at the mine. That means, in turn, that there will be no cyanide in the tailings that will be diluted in seawater before being released into the ocean.

Newcrest says that the deep water dumping has been designed to protect particularly the coastal marine environment and the communities it supports. The miner notes that the local fisheries do not extend beyond 100 metres in depth. It also notes that the existing rivers routinely carry "at least 60mtpa" of naturally occurring waste into the gulf. This results in "a highly disturbed receiving en-

vironment that is subject to regular sub-sea landslide events and results in low natural biodiversity," Newcrest said. It also means there are no nearby coastal coral reefs to disturb.



Newcrest Mining's Cadia East Decline Project, a gold-copper mine in central NSW 2011. AFR Picture



Newcrest Mining's Cadia East Decline Project, a gold-copper mine in central NSW. AFR Picture

In effect, Newcrest argues that nature has created a perfect host environment for its plan. It may be right. But the miner's proposal is, nonetheless, likely to attract controversy. Newcrest is an Australian incorporated entity that is significantly populated by hard-working, clever Australian citizens and that is still heavily owned by Australian investors. And it is a point worth making, I think, that the waste management plan that Newcrest is proposing for its ground-breaking mine in PNG would simply not cut the regulatory mustard in Australia or in a host of the other key mining constituencies. Australia was one of 42 original signatory nations to the London Protocol of 1996 that, since 2006, has further constrained the use of oceans and seas as dumping grounds for anything but the most inert of waste materials. And mine tailings are nothing like benign enough to crack it for approval under that international agreement.

Newcrest tells me that PNG is also a signatory to the 1972 London Convention that preceded the protocol. It says that both agreements allow leeway enough for individual nations to make their pre-

cautionary assessment on deep water tailings management. Several other signatories, including Norway, make liberal use of that leeway. There have been 13 mines internationally that have used modern deep-sea tailings strategies. PNG has played host to three of them, the Newcrest-operated Lihir gold mine, the Chinese owned Ramu nickel mine and the now closed Misima gold mine that was run by Canadian major Barrick Gold. Given it proceeds as proposed, Wafi-Golpu will be the first Newcrest constructed mine that uses the deep seas as tailings storage. Newcrest, of course, acquired Lihir and its environmental legacy in 2010. There will be critics who accept that there is no changing history, but that Newcrest should have learned its lessons.

But the history here is more complicated than it may seem. The same forces that have made PNG a wonderland for geologists render it a nightmare for mining engineers. Orthodoxy says there are too many earth tremors and quakes and there is just too much rain to safely construct tailings dams at mines in PNG. And history demonstrates that riverine tailings management (which is a flash way of saying flushing massive amounts tailings down rivers) does not work either. So, given an emerging nation like PNG wants to capitalise on its minerals bounty, there are not a lot of other choices beyond finding an appropriately deep and still corner of the ocean floor.

One of the other points of interest to emerge from Monday's diversion from the latest Cadia calamity was that the PNG government has a call on up to 30 per cent of any future project at Wafi-Golpu but that there is no free-carry on the project. All that means is that whenever and however the government exercises that right, it will carry its full financial burden up front rather than be able to cover the entry and development costs by surrendering future dividend flows. Given the parlous state of PNG's national accounts, it is pretty hard to see how that might work, but there is speculation that the government could end up working with Newcrest to secure some form of direct project financing.

Newcrest to spend more on \$US2.8b Wafi-Golpu mine, chooses ocean tailings

Peter Ker, Australian Financial Review, 19 March 2018

Newcrest Mining's top growth project Wafi-Golpu will cost \$US200 million (\$259 million) more to build under updated plans that envisage a larger mine being built and mine wastes being piped into the ocean. Last estimated to cost \$US2.6 billion, Newcrest said on Monday it would now cost \$US2.8 billion to build a mine at the Wafi-Golpu site in Papua New Guinea, with the mine expected to last 28 years and offer an 18.2 per cent rate of return. Capital spending over the life of the mine would rise to \$US5.4 billion. Wafi-Golpu will produce copper and gold, and is expected to be a cheaper producer of copper than 90 per cent of the world's copper mines once gold credits are taken into account. Monday's updated study suggests each pound of copper produced at Wafi-Golpu will have a unit cost of US26¢, well below the \$US3.11 per pound that copper was fetching on Monday morning.

One of the major decisions facing Newcrest and its joint venture partner Harmony Gold was how to manage the mine wastes or tailings from Wafi-Golpu, given the mine is located in hilly terrain, in an area known for its seismic activity and its heavy rainfall. Newcrest confirmed on Monday that mine wastes would be piped into the ocean, under a method dubbed "deep sea tailings storage". Newcrest already pipes mine wastes into the ocean at its Lihir mine in Papua New Guinea, and said the method was chosen for Wafi-Golpu after a detailed study of 45 potential sites for the construction of tailings dam on land. The company said an on-land tailings dam would disturb land that was valuable for biodiversity, heritage and economic reasons. "The project area has high seismicity and complex geology including active faulting which could at some sites result in liquefiable soils. Complex design would be required to partly mitigate such factors and that would carry high risk and high cost," the company said on Monday. "Any (dam) structure would contain very large

amounts of water with commensurate risks." On the contrary, Newcrest said the nearby Western Huon Gulf was a "highly suitable environment" for tailings storage.

"It hosts a deep canyon leading to a very deep oceanic basin with no evidence of upwelling," the company said. In February Newcrest boss Sandeep Biswas said deep sea tailing storage at Wafi-Golpu would probably cost more than building an on-land tailings dam initially, but would probably be a cheaper option over the life of the mine. The decision to pipe wastes into the ocean comes barely a week after a tailings dam wall slipped at Newcrest's flagship Cadia mine in New South Wales, leaving the operation suspended indefinitely. Newcrest currently owns 50 per cent of Wafi-Golpu, but that stake could fall to 35 per cent if the PNG government takes up an option to buy 30 per cent of the mine. Studies conducted in 2012 estimated a larger version of the mine would cost \$US4.8 billion, with such a project producing 400,000 ounces of gold annually and 250,000 tonnes of copper. But subsequent studies have considered smaller development options. A 2016 study into the project envisaged a mine producing 202,000 ounces of gold and 130,000 tonnes of copper per year. Monday's updated study envisages a mine that produces 266,000 ounces of gold per year and 161,000 tonnes of copper per year.

EITI report launched

BY MATHEW VARI, Post-Courier, March 19, 2018

The PNG Extractive Industries Transparency Initiative (EITI) national secretariat launched its 2016 and 2015 reports last Friday. Treasury Minister Charles Abel was on hand to launch both reports as the head of the secretariat Lucas Alkan delivered the progress of the country to the global initiative. In launching its fourth report, Alkan said the Multi Stakeholder Group (MSG) agreed to publish the reports together as both reports will be used by the EITI International Secretariat to assess PNG's progress in implementing the initiative in the country. "EITI International started taking this thing up to make sure that companies that are operating in the countries we should know who is the owner, the shareholders, these are the things that EITI international has made a requirement for us to take on board as an implementing country," Mr Alkan said. "We are also conducting sub national payments. We have been concentrating at a national level of payments and transfers taking place.

"But we are all aware that a lot of the transactions happen down the line past the national level to provincial local and district resource revenues so we need to put some light into what is happening, accountability, transparency got onboard," he said. The PNG EITI national secretariat was established NEC when PNG applied for membership 2014 and the international secretariat accepted the country as a candidate. "The reports have been covering the revenue streams and reporting entities. Reporting revenue streams like corporate income tax, group tax, mining and petroleum tax all these things are being reported in this reports. "We are reporting on companies that are in production and exporting these commodities and not exploration activities. "There is a section on legal framework and fiscal regimes tax arrangements and taxation legislation governing the extractive sector activities in the country management and distribution of revenues, how the money from the resource sector gets into the budget." Mr Alkan said the documents are not just reports but need to be translated to actual reforms that matter to the country as far as transparency, accountability and governance is concerned.

Fiji: \$1.61M paid to 4 landowning units in Nawailevu village in premium and rental returns – Koya Iva Danford, Fiji Village, 16 March 2018

A total of \$1.61 million has been paid out to the four landowning units in Nawailevu village in Vanua Levu in premium and rental returns. This was highlighted by the Minister for Land and Mineral

Resources Faiyaz Koya who says that the Mataqali, Nalutu received \$85,893.45 in rock royalty payments. Koya says that 11 Yavusa's in the Districts of Lekutu and Navakasiga in Bua have received fishing rights compensation amounting to \$275,000. He says the other benefits enjoyed by the landowners are the trucks purchased from the lease money that have been used for business purposes like transportation of staff, school children and other mataqali needs. Koya says that the Mataqali Naicobo purchased a 3-tonne carrier to transport workers, school children and attended to other mataqali commitments.



Minister for Land and Mineral Resources Faiyaz Koya

He says that the Mataqali Nalutu has utilized their lease monies for housing purposes, purchase of fishing gear to assist them with their small business operations. While responding to Koya's statement, SODELPA MP Josefa Dulakiverata says that the mining company in Nawailevu should not have been given new exploration and mining license until rehabilitation process in Nawailevu has finished. Meanwhile, the Minister for Lands and Mineral Resources says that government cannot influence the utilization of revenues received and the landowners are at liberty to utilize their funds how they want to, as the choice rests solely on the landowners.

ARM may join Harmony in funding Wafi-Golpu gold project

Brendan Ryan, Mining Mx, March 16, 2018

AFRICAN Rainbow Minerals (ARM) may be considering getting involved with associate Harmony Gold over the development of the Wafi-Golpu copper/gold project in Papua New Guinea (PNG) which is a joint venture between Harmony and Newcrest Mining. That possibility was raised thanks to ARM chairman Patrice Motsepe's rambling reply to an analyst's pointed question at today's presentation held in Johannesburg of ARM's interim results for the six months to end-December. Motsepe tap danced around the issue in his lengthy answer during which he – effectively – neither confirmed nor denied the suggestion of a joint venture over Wafi-Golpu. "A very good question," Motsepe commented when the question was put to him. He then went into the history of ARM's relationship with Harmony going back to when ARMGold was merged with Harmony so giving ARM its current 14.3% stake.

Motsepe added: "There are on-going discussions between Harmony and ARM on a number of issues. We continue to be very excited and confident about the future of Harmony. "The issue relating to copper is that we are looking at opportunities in different parts of the world and, of course, Harmony and ARM have their own on-going discussions in terms of how their partnership could work to the benefit of both parties. "Very, very important – particularly for us because Harmony has been

a critical part of our strategic future. There are opportunities in copper and we are looking at them and the plan is not to make the same mistake we made in Zambia.”

That mistake was the Lubambe mine which ARM finally got rid of in December at a huge loss realising net proceeds of just R492m after spending more than \$400m on the development of the mine with partner Vale. Both Motsepe and ARM CEO, Mike Schmidt, have on several occasions stated that the group intended getting into another copper venture despite the setback at Lubambe. The perennial criticism by analysts of Harmony’s involvement in Wafi-Golpu has been that the gold producer lacks the financial resources to fund its share of what would be a multi-billion dollar development.

Tensions rise in Temotu as expiry of Australian miner's licences loom

Tensions are rising in Temotu as an Australian miner's licences to prospect and operate in the Solomon Islands' province approach their expiry date.

Radio New Zealand, 15 March 2018



NASA picture of Nende, known also as Santa Cruz, in Solomon Islands' Temotu province. Photo: NASA

Pacific Bauxite secured a prospecting license in 2016 with the support of some local landowners and obtained a provincial business licence, after a change in the local government, to begin working on Nende Island. But it has met with stiff opposition from other landowning groups who accused the company of operating illegally and are trying to take it to court. At the heart of the local protests against Pacific Bauxite is the fact that the area it's hoping to mine is among the most fertile farming land on the island of Nende. A member of the Temotu Provincial Assembly, Nelson Omar, said he told the miners as much in 2016 when he was the premier and his administration rejected their application for a provincial business licence. "You came without gun. Better you go back and you bring a gun, you shoot every people on the island and then you do your mining," Mr Omar told the miners. "Because it is in no way different from what will happen thereafter after you mine this place."

After a change of provincial government, Pacific Bauxite was swiftly granted a provincial business license. That licence expires on the first of April. Just last week the latest protest by those opposing Pacific Bauxite took place at the office of the current provincial premier, David Maina, urging him not to renew the licence. Mr Maina said he listened to the protesters' views but condemned their actions as illegal. "They didn't follow the protocol they gave their letter less than 24 hours but by the law of this country any protest [notice] should be [given] 14 days through the police," David Maina

said. Mr Maina said he is also considering pursuing legal action because he and his family also received death threats from anti-mining groups.



Temotu locals want to protect their land against devastation from mining activities. Photo: Facebook

"We have to weigh these things properly, because already they have threatened where I come from the Reef Islands with threats and then my family itself. They used some words that are not fit or pleased to be heard. Like blood shed like this. So now I will try to find and file a court case for this," said David Maina. Nelson Omar said Mr Maina would do well to heed the groundswell of opposition to mining and reject any application to renew Pacific Bauxite's licence. "Once the premier doesn't listen to them. And he will grant a, renew the licence again then there will be bigger protests for him to resign his seat as a sitting premier of the province," warned Mr Omar.



A village in Temotu. Photo: Britt Basel

One of the leaders of the main group of landowners opposing Pacific Bauxite, Ruddy Oti, said having the provincial business licence declined would be a small victory. Mr Oti said the real battle was trying to raise enough funds to challenge the legality of the miner's prospecting licence in court. He said his group had found a lawyer willing to take up their cause and raised \$US1936 of the \$US6,455 Solomon dollars needed to open a case. "We are looking at filing two cases. First one is injunction case. While we stop any prospecting activities we ask court to review the process in which the licence was obtained and that will be the second case," explained Ruddy Oti.



Honiara High Court Photo: RNZ Koroi Hawkins

Pacific Bauxite's prospecting licence expires in December. But Mr Oti said company officials are meeting with pro-mining landowners in the capital Honiara this week to discuss applying for an actual mining licence. For the Temotu premier David Maina this would be a positive step. He said as one of the most remote provinces in Solomon Islands, Temotu could not afford to be picky with economic opportunity. Mr Maina said he wanted to mediate between those for and against mining Nende. "It will be fair if both parties come together and find a neutral zone that will take you together to discuss their issues. Because the government only caught in between the system," said David Maina. But Ruddy Oti said consultation should have been done before the company was granted a prospecting licence. "So that you have all these things in place before you have prospecting licence. As it is now the prospecting licence is now granted and so the whole process was flawed," said Ruddy Oti. "There is too much corruption in it. So what we want to do is just to stuff up the whole thing."



An island in Temotu Province. Photo: Supplied

Ruddy Oti said his group had appealed to the wider international community for assistance to help them meet their legal costs. He said time was of the essence because Pacific Bauxite could submit

an application for a mining licence before September. If it does and it is granted there are fears tensions could boil over in Temotu.

St Barbara resolves Simberi dispute

Australian Mining, March 15, 2018



Simberi Gold Mine

St Barbara has resumed full operations at the Simberi gold mine in Papua New Guinea following "illegal" industrial action at the site. The Australian gold miner halted production at the site last week for safety reasons as management attempted to resolve the dispute. In an ASX announcement, St Barbara reported that a contingent of the mine's workforce initiated the industrial action. Around 40 per cent of the mine's workforce remained at work during the stoppage, it added. Mediation, led by representatives from the PNG Department of Labour and Industrial Relations, has since resolved the stoppage, with full operations resuming late yesterday. "The stoppage was primarily due to misunderstandings regarding leave provisions and other employment conditions, which have now been clarified," according to St Barbara. Simberi has produced 93,000oz of gold this financial year. St Barbara expects the mine will achieve full-year guidance of between 115,000–125,000oz of gold despite the interruption.

Drilling programs to increase mining activity in Fiji

Aqela Susu, The Fiji Times, March 14, 2018

Minister for Lands and Mineral Resources Faiyaz Koya says five extensive drilling programs have been proposed by local mining companies which will increase exploration activities. In his ministerial statement to Parliament on Monday, Mr Koya confirmed the five companies are Thunderstruck Company in Serua, Vatukoula Gold Mines Ltd in Vatukoula, Dome Mines on Ono Island in Kadavu, Kalo Exploration in Cirianiu and Matai Holdings Ltd at Udu Point on Vanua Levu. "The Vatukoula Gold Mines Limited (VGML), our major gold-mining company, will continue to undertake mining exploration activities to ensure minable resources are available for its mining operation," he said.

"The iron sand mining project for Ba delta is at its development state as the tenement holder Amex Resources Limited is currently developing its loading port facility in Lautoka at a total investment

of \$30 million (USD). "Lion One Limited, as the holder of Tuvatu Mining lease, is also at its developing stages with late 2018 as a proposed date of production. The company is focusing on stabilising the site to set up its mine mill and is working with the ministry as well as other respective stakeholders to ensure mining commences as agreed." Mr Koya said the bauxite mining in the Northern Division was progressing well and in a sustainable fashion. He also confirmed that mining operations at Nawailevu on Vanua Levu have ceased because of the exhaustion of bauxite ore on site. "This mining licence to XINF A Aurum is currently under rehabilitation and is monitored by the ministry on a monthly basis."

Newcrest woes bad news for Harmony Gold's Wafi-Golpu project

Allan Seccombe, Business Day, 13 March 2018

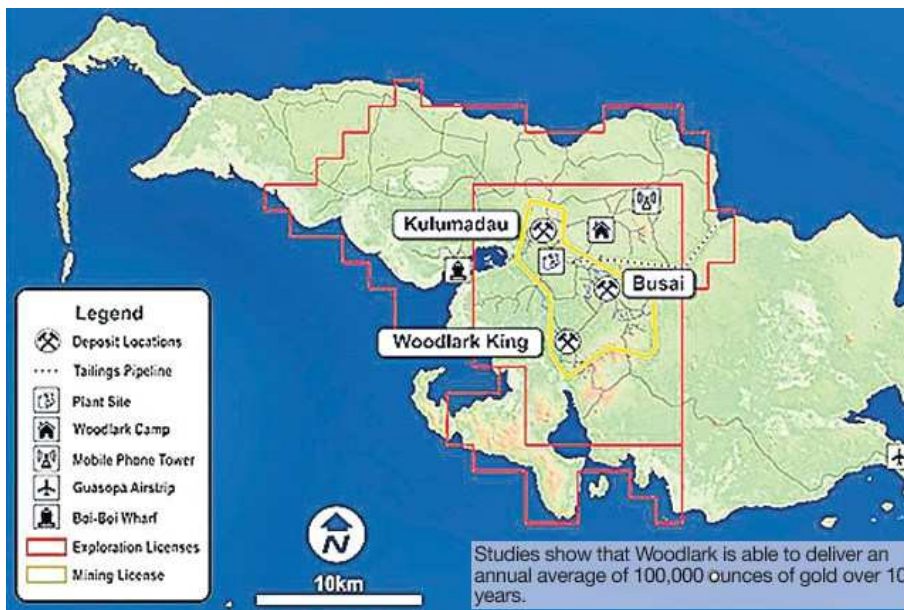
The last thing the partners in the undeveloped Wafi-Golpu gold and copper prospect in Papua New Guinea want right now is for one of them to have difficulties with their flagship mine. Harmony Gold and its Australian partner Newcrest Mining share the Wafi-Golpu deposit in Papua New Guinea and they are finalising an updated feasibility study on building a mine, processing plant and tailings facility. The study is due for completion at the end of March. The bad news for the partnership is that Newcrest has shut its flagship Cadia mine in New South Wales, Australia, after an earthquake damaged one of its tailings facilities. "Whilst it is too early in the evaluation and recovery process for Newcrest to provide an indication of the extent to which financial year 2018 production, capital and cost guidance will be [affected], this event will adversely [affect] guidance for financial year 2018 given the contribution of Cadia to the overall outcomes of Newcrest," the company said.

Harmony CEO Peter Steenkamp is talking openly about assessing options around realising value from Wafi-Golpu, either keeping it, selling it or bringing in a partner. That decision is likely to be made this year. Asked whether there were concerns about developments at Newcrest for the project, Harmony spokeswoman Lauren Fourie said there was still some way to go. "It would be premature to comment on any of these items before the release of the update. Further, the advancement of the project to development stage is still subject to obtaining the necessary permits from the PNG government and approvals from the respective boards of Harmony and Newcrest. This also applies to early works," she said. For Newcrest to think of starting a project costing hundreds of millions of dollars in Papua New Guinea when it is losing revenue and faces the bill for repairing its tailings dump is going to be difficult.

The study, which will be made public in coming months, will precede a decision from the Papua New Guinea government on whether to exercise its right to earn into a 30% stake in the project and subsequent mine, something that will leave Harmony and Newcrest with a 35% stake each in the mine and, consequently, a lower capital bill. A decision on whether to build a mine is some months away, but it is still unclear how long Cadia will be out of operation. Cadia was the most important mine in Newcrest, said RBC Capital Markets analyst Paul Hissey. He calculated the mine accounted for A\$12bn (\$9.44bn) of the company's A\$17bn value. "We believe that the value of this asset is such that the cost of any technical solutions/re-engineering will not be insurmountable, and as such we would assume at this point in time that the closure is only temporary, while further risks are assessed and the company satisfies any additional regulatory requirements," he said in a note.

Positive results paving the way for Geopacific to give Woodlark the tick

The National Business, March 13, 2018



THE gold and copper firm Geopacific Resources Ltd is to make a development decision on the Woodlark gold project in Milne Bay after receiving positive pre-feasibility study results. Geopacific has a portfolio of assets in the Asia-Pacific region and has set its sights firmly on production. The study demonstrates that Woodlark is a robust, low-cost, low-stripping ratio, open-pit operation that can deliver an annual average of 100,000 ounces of gold over 10 years. The company is now progressing a definitive feasibility study which is expected to be completed in the September quarter of this year. Managing director Ron Heeks said: “We are extremely pleased with how the project has evolved over the past year.

“Our PFS indicates a robust, open-pit mine plan with strong, steady-state production over a long mine life. “Woodlark benefits from flat topography, wide zones of ore from the surface, a substantial proportion of free-dig material, as well as the proximity of the plant to the pits and waste dumps. “Our PFS presents a low-cost solution for treating low-grade ore, to improve returns and deliver a project payback estimated at two years. “We expect the project to grow further from the substantial, demonstrated exploration upside.” The completion of the PFS sees Geopacific increase its interest in the Woodlark joint venture with Kula Gold Ltd to 93 per cent. Woodlark is surrounded by world-class gold mines. Two neighbouring mines, also located on islands, are Newcrest’s Lihir at 66 million ounces of gold and St Barbara’s Simberi at 6 million ounces.

Letter to the editor

Seabed must not be disturbed by mining

Post-Courier, March 13, 2018

I have been following Nautilus’ Solwara 1 deep sea mining exploration project off the coast of New Ireland and East New Britain provinces for some time now and wish to make some observations and relevant commentary. Oceans and seas make up almost 70 per cent of the earth’s surface in which we live. It is one of the biggest environments we use to source food in fish of all kinds and other edible marine creatures. The seas (and oceans) are also used to gather our traditional treasures and other variables for our consumption and for trade. The sea is also used as a means for travel by sailing to other places for pleasure or just exploration further from home or expeditions. The ocean

environment has been kept clean and pristine over many centuries up till now and hope that it continues likewise. However, the latest plans by Nautilus to do seabed mining raises serious questions immediately and needs urgent consideration and appropriate response.

- Deep sea mining is disastrous to marine life. It will destroy fish breeding grounds, and hence rapid decline in fish population of all types. It will cause damage to coral and reefs which are ideal habits for fish and other marine creatures to survive and multiply.
- Seabed mining will cause huge and growing cloud of dust and aggregates to form and further water turbidity and disrupt marine environment. The cloud and turbidity will cause changes in water temperature and interfere with fish movement and migration for suitable habits for breeding and multiplication.
- Marine creatures and fish in shallower parts of the ocean feed on creatures from the abyss and vice versa and maintain the ecosystem. Deep sea mining will destroy this cycle.

For these reasons and experiences globally, deep seabed mining was abandoned outright. There are ships carrying treasures in the early exploration days and during the war which sank around the Pacific Ocean and along the coast of Africa. To retrieve these treasures without authorisation by owners will be regarded as piracy and liable for prosecution. Nautilus assertion that deep sea mining will not disturb fishing and other marine life is erroneous and their motives questioned seriously. Authorities in New Ireland and East New Britain provinces, and individuals who have consented and agreed to deep sea mining, have signed a death warrant for their own people and the future generation. In less than 50 years, there will not be any major commercial fishing for tuna and other fish species because their numbers will be depleted. The Government should reconsider and review the licence it granted to Nautilus Minerals.

There are environmental laws governing such mining operations and deep sea mining is not an exception. Deep sea mining is part and parcel of the environmental laws that we must abide by. The constitution is there for our guide and we must respect it at all times and avoid its breaches. No amount of wealth from the seabed can buy life that we live right now or to replace it. Leave the seabed alone and do not disturb it. **Pacific Oceanographer**

PNGEITI 2015/2016 reports to be launched

Post-Courier, March 13, 2018

The PNG Government has made significant progress towards meeting its Extractive Industries Transparency Initiative (EITI) global best practice requirements to be accepted as an EITI compliant country. It was prompted by the first report of the PNGEITI that highlighted serious information gaps and inconsistencies that required government attention. These were listed as recommendations for the government to consider going forward in the next EITI reports. The reports list 9 reporting entities from the mining sector and 7 entities from the oil and gas sector that made material payments to the Government in 2015 and 2016. It also lists 7 SOEs and 8 relevant government departments that received these payments in the same years. The revenue streams covered in the reports are:

- Mining and petroleum tax (corporate income tax)
- Group tax (tax withheld on employee salaries)
- Royalties
- Equity distributions
- Production levy
- Dividends
- Development levy

On determination of materiality threshold for these revenues, the reports only include those revenue streams that contribute 2 percent or more to the total known revenues received by the government from the mining, oil and gas sectors in the fiscal years being reported. According to PNGEITI, Deputy Prime Minister and Treasurer Charles Abel will be launching the PNGEITI 2015&2016 Reports this Friday, March 16 at the State Function Room, at Parliament House in Port Moresby.

Tuke praised for plans

Post-Courier, March 12, 2018

PLANS to reserve alluvial mining for locals has attracted praise from local landowner companies across the country. Minister for Mining Johnson Tuke said he wants to enable locals to build up wealth and capital to prosper in the next stages of the mining-especially in the mineral rich areas. An aspiring umbrella landowner company, Tundaka PNG Limited of Mt Tundaka exploration licence area, applauded the move. The new prospect is located in Enga's Kandep district along the border with Magarima in Hela. "As the chairman of the umbrella company, I congratulate Mr Tuke and support this initiative to empower landowners to the landowners to venture into such lucrative businesses on extractive industries," chairman Pokya Pea said.

He said to break the barrier of landowners being the collectors of royalties only and spectators in their own resource developments is the step in the right direction. "We can't be bystanders for foreigners to extract our valuable resources and giving us 2.5 per cent only as equity share especially in the extractive industries. "The proposal, when established, will strengthen our economy through setting up our bullion bank and financially empowered," he said. Mr Pea called on the government to amalgamate the Mineral Resource Authority and the Department of Geo-hazards Management to bring about new extractive projects as well as to build the capital wealth of people.

Ok Tedi provides big cheque for PNG quake victims

Radio New Zealand, 10 March 2018

Ok Tedi Mining Ltd is to donate of \$US15 million to help restore services and infrastructure to the communities affected by the recent devastating earthquakes in Papua New Guinea. The Post Courier reports the company chairman Sir Moi Avei saying that given the magnitude of the disaster, it is the company's responsibility to help the people of PNG. He said the money was intended to provide assistance to the impacted areas in Western Province - the company's home province. The OK Tedi chief executive, Peter Graham, said while no staff were hurt the company had been seriously affected by the quake. He said the families of some employees have also suffered.

Professor Kaluwin: Deep Sea Mining Operations Will Pose a Threat to PNG Marine Life

Staycey Yalo, EMTV, 8 March 2018

Papua New Guinea would possibly be the first country in the world to conduct Deep Sea Mining. The technology and equipment developed for the activity will be experimented in the waters of PNG. Academics such as the Executive Dean for the School of Natural & Physical Sciences, Professor Chalapan Kaluwin, who has been researching the marine environment of PNG says, these new equipment pose a threat to the country's marine environment as no one knows yet the advantage and the disadvantages of these materials. Yesterday, an environment activist group in Milne Bay raised concerns about deep sea mining being extended to the waters of Milne Bay. "Nautilus Technology has not been tested anywhere in the world and is sitting in Port Moresby.



It will go 1500 metres deep into the ocean, and mind you, the world still does not know much about the ocean floor and thus poses a risk for the marine life,” Professor Kaluwin said. He says the waste from this experimental mining project can be dumped back into the ocean. He says if this happens, the rest of PNG waters will be polluted as Milne Bay & New Ireland waters have one of the fastest currents in the world where the wastes will be fast dispersed to other parts of PNG. “The areas where the experimental mining will take place houses the largest Tuna stock in PNG and once you have unknown machines digging your ocean and dumping waste, you will find your Tuna migrating elsewhere.

“The government for years have been ill-advised and make decisions with little knowledge of the issues surrounding mining. As such you see a rise in social and economic problems, such as the recent LNG project areas,” Professor Kaluwin said. He stressed that the government should consult with landowners before engaging in commercial activities on land that belong to the people. He encouraged the ‘Ban Sea Bed Mining Group’ in Milne Bay to map and register their customary boundaries (sea & land) so that they are not easily manipulated. Professor Kaluwin stressed that sustainability is vital for PNG’s development and protecting resources for the future generation will benefit PNG in the long run.

Papua mine revenue to Jakarta reached US\$756m in 2017

Indonesia's government collected US\$756 million in revenue from the Freeport gold and copper mine in Papua province last year. Radio New Zealand, 8 March 2018



Freeport-McMoran mine in West Papua. Photo: AFP PHOTO / OLIVIA RONDONUWU

The *Jakarta Post* reported that this was confirmed in an Indonesian House of Representatives hearing by the vice president of Freeport's Indonesian arm, Tony Wenas. Mr Wenas said that total state revenues from the mine during the period from 1992 to 2017 amounted to US\$17.3 billion. PT Freeport Indonesia, the subsidiary of US-based company Freeport McMoran, has been in protracted negotiations with Indonesia's government over renewal of its mining permit. In exchange for long term operating rights, the miner has agreed to divest 51 percent of shares in its Indonesian subsidiary. However, Freeport and Jakarta have not yet settled on a price for the shares. Indonesia's President Joko Widodo has called for negotiations to be completed by the end of April.

Indonesian president wants Freeport purchase talks over by May

Indonesia's President is pushing for completion of talks over the purchase of a majority stake in the Freeport mine in Papua before May.

Radio New Zealand, 7 March 2018



Photo: AFP

Last August, the American miner Freeport McMoran agreed to divest 51 percent of shares in its Indonesian subsidiary which runs the lucrative mine at Grasberg in Papua province. This was in exchange for the miner securing long-term operating rights. Indonesia's government currently owned a less-than-10 percent stake in Freeport Indonesia. However long-running negotiations over the terms of the divestment have not been finalised. *Reuters* reports that President Joko Widodo has instructed his administration to complete negotiations over the purchase of a majority stake in Freeport-by the end of April. Freeport said in January it was close to a deal with Indonesia for Grasberg, the world's second-biggest copper mine. However a fair price for the shares has been a sticking point.



West Papuans have long expressed frustration about the environmental destruction caused by the Freeport mine operations in Mimika regency. Photo: Mineral Policy Institute

Papua province itself has also been seeking a greater share of the mine. The provincial government last year reportedly secured a ten percent share in Freeport's local operations as part of the divestment package. Seven percent was to go to Mimika Regency where the Grasberg mine complex is located, while three per cent would go to the provincial government. Papua's Governor Lukas Enembe confirmed that the new arrangement, having previously complained about the lack of participation by Papuans in the control of Freeport. For years, the Freeport mine has been Indonesia's largest single source of revenue.

East Timor: Australia to end \$50 billion feud

Australia and East Timor have signed a treaty ending a long-running dispute over their maritime border, in a move which could unlock billions of dollars in revenue from offshore oil and gas.

Post-Courier, March 7, 2018

UNITED STATES: Australia and East Timor have signed a treaty ending a long-running dispute over their maritime border, in a move which could unlock billions of dollars in revenue from offshore oil and gas. The treaty is expected to provide a boost to East Timor's struggling economy by giving them more sovereignty over the Greater Sunrise, a lucrative oil and gas field located roughly 150km southeast of East Timor, and 450km northwest of Darwin. The area has an estimated value of up to \$50 billion. The treaty was signed at the United Nations headquarters in New York by Foreign Julie Bishop and East Timor's Deputy Prime Minister Agio Pereira. Ms Bishop said: "This treaty represents the importance of rules and the benefits of all states abiding by the rules. "It required compromise and goodwill on both sides. "It is an example to all of how international rules-based order serves our interests."

Ms Bishop said she hoped both states could "live peacefully and prosper together" and was pleased to be personally involved. "With this treaty, we open a new chapter in relations between Australia and Timor-Leste. "As good friends and close neighbours, we want Timor Leste to achieve its potential." But some experts have warned that East Timor's success may spark a feud with another of our close neighbours. Australia and East Timor have been at loggerheads for the past decade over the Timor Sea. East Timor, which is one of the world's poorest countries, was dependent on oil and gas for most of its revenue last year. In 1989, when East Timor was still part of Indonesia, the governments of Australia and Indonesia signed what became known as the Timor Gap Treaty, which allowed both countries to share in the wealth of the Timor Gap equally.

In 2002 East Timor gained independence from Indonesia, but no permanent maritime border was established. That same year, Australia and the United Nations Transitional Administration in East Timor (UNTAET) negotiated the 2002 Timor Sea Treaty — a variant split 90-10 in favour of Timor, which applied to fields in the Joint Petroleum Development Area. The country has since argued for a border in the median line between Australia and East Timor, which would give 100 per cent of these resources to the latter. It's also likely to increase East Timor's ownership of the more lucrative Greater Sunrise. In 2002, Timor had just 18 per cent of its future revenues, which increased to a 50-50 split in 2006. Now Timor could receive up to 80 per cent of the revenue from this lucrative field. (-news.com.au)

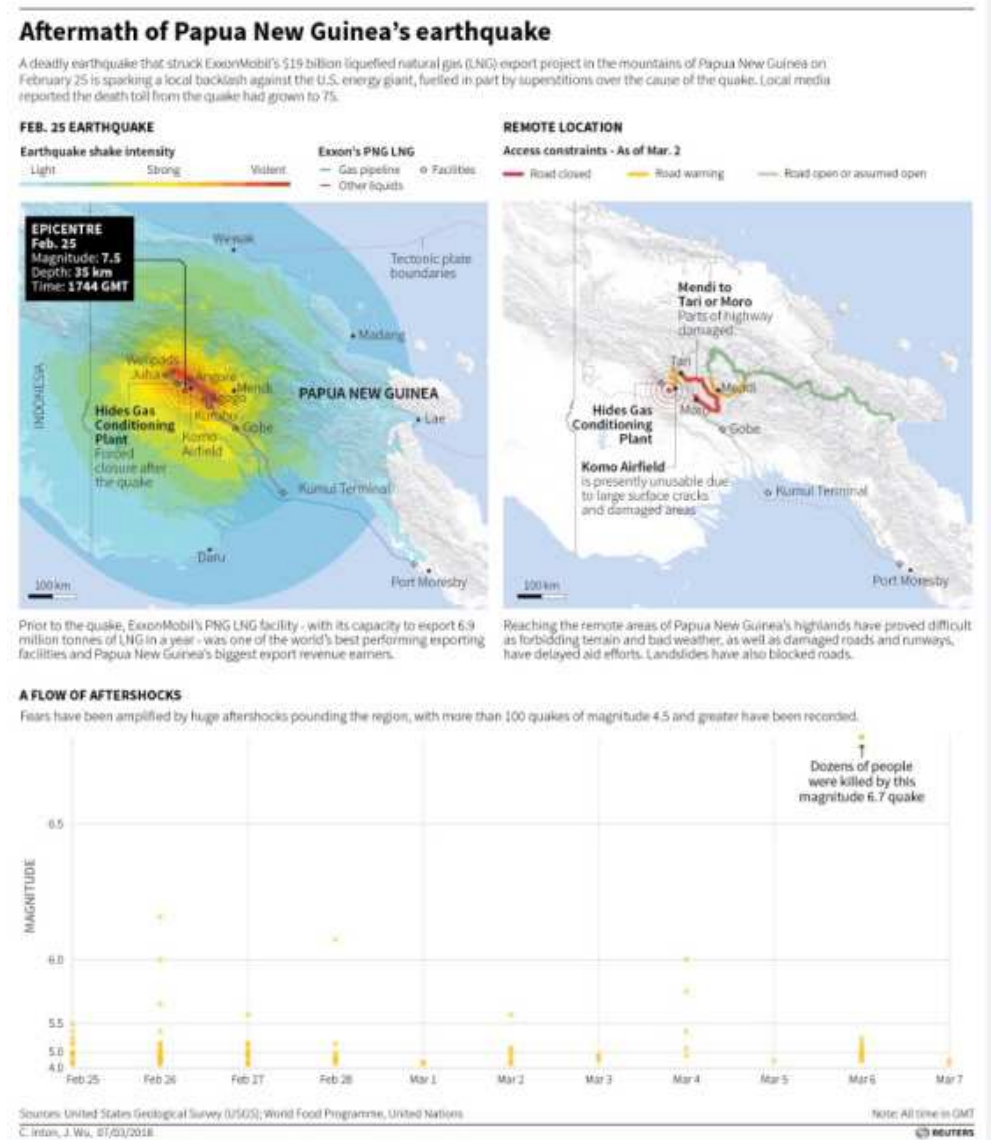
Shakes and superstition: Exxon faces backlash in Papua New Guinea

Jonathan Barrett, Henning Gloystein, Reuters, March 7, 2018

A deadly earthquake that struck ExxonMobil's \$19 billion gas project in the mountains of Papua New Guinea is sparking a backlash against the U.S. energy giant that could prove harder to fix than buried roads and broken pipes. Some spooked locals blame Exxon and its project partners of caus-

ing, or at least magnifying, the 7.5 magnitude quake on Feb. 26 and a series of intense aftershocks that continue to pound the impoverished and isolated region. While firmly denied by Exxon and debunked by geologists, the accusations suggest that the project known as PNG LNG, one of the most successful liquefied natural gas (LNG) developments in the world, is sorely lacking goodwill from at least parts of the local population. The concerns about the project – the country’s biggest revenue earner - are even being expressed at senior levels in the Papua New Guinea government. PNG’s Vice Minister for Petroleum and Energy, Manasseh Makiba, told Reuters in a phone interview there should be an inquiry to respond to local concerns that mother nature had reacted after the ground was disturbed by drilling.

Graphic on Papua New Guinea's earthquakes and aftershocks:

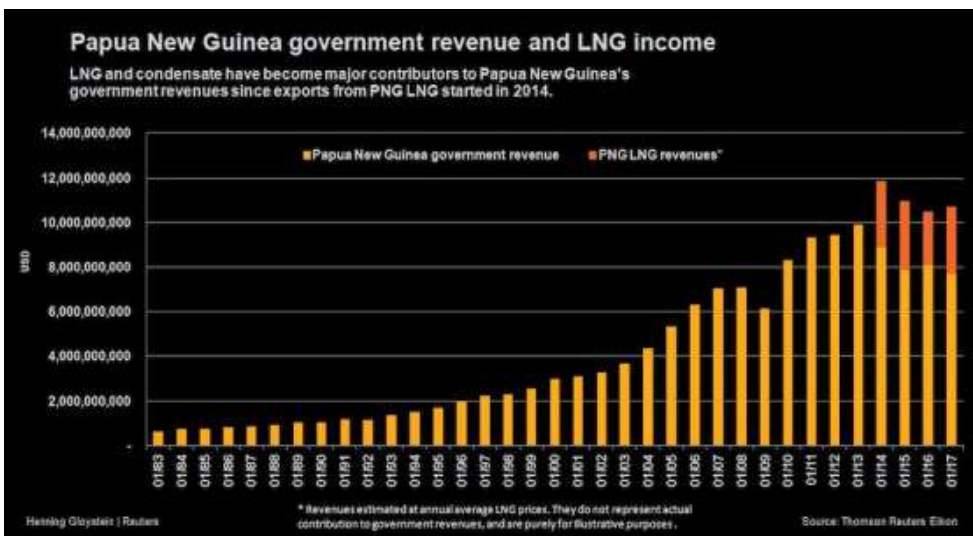


“It could be man-made but that cannot be confirmed until a proper scientific inquiry can be done,” said Makiba, who represents parts of the quake-hit area. “We need to resolve that.” PNG’s Minister for Finance James Marape has also demanded answers from the company. “In a world of science and knowledge, I now demand answer(s) from Exxon and my own government as to the cause of this unusual trend in my Hela,” wrote Marape on his private feed on Facebook, referring to the quake-struck province. He is among many who have lit up social media in PNG, with blogs and Facebook posts pointing the finger at the oil and gas sector’s alleged contribution to the disaster. Around Exxon’s operation, communities remain fearful as the death toll climbs, with 18 more killed by a 6.7 magnitude aftershock on Wednesday. Papua New Guinea straddles the geologically active

Pacific Ring of Fire. Chris McKee, acting director of the Geohazards Management Division in Port Moresby, said there was no link between the project and seismic activity, which has included more than 120 quakes of magnitude 4.5 and greater in the week after the initial hit.



The ExxonMobil Hides Gas Conditioning Plant. ExxonMobil/Handout via REUTERS



“Earthquake activity has been going on much longer than the oil and gas industry presence in the region - there is no connection at all,” McKee said. Scientific evidence strongly suggests the earthquake was “naturally occurring and consistent with prior events”, an Exxon spokeswoman said in a statement.

CORPORATE SUPPORT

Led by Exxon, with a one-third stake, and its Australian partners Oil Search and Santos, PNG LNG could be shut for months as it inspects pipelines, the processing plant and the gas field for damage. Exxon said it was giving \$1 million to assist communities affected by the earthquake and was providing on-the-ground support to relief agencies so that resources could reach areas in greatest need. “Logistics remains a challenge with roads cut and communication with remote communities difficult,” a company spokeswoman said. “We are continuing to provide logistics and human re-

sources to help aid agencies to deliver support to our communities for the long term as they recover from this event.”

Oil Search Managing Director Peter Botten said he had not witnessed any local animosity toward the LNG project. Oil Search was constantly balancing the need for relief aid and keeping the community-sustaining business going when allocating post-quake resources, he said. “There’s a lot of concern the gods have been offended and specifically this is about education, and what earthquakes are about,” Botten told Reuters in a phone interview from PNG’s capital Port Moresby. “This is a communication issue.” Most of the nation’s 8 million inhabitants live in remote communities where traditional beliefs remain strongly held.

SHAKY GROUND

Exxon has previously faced resentment in PNG, which contains vast natural resources but remains desperately poor. Martyn Namorong, national coordinator for landowner rights and governance lobby group PNG Resource Governance Coalition, said the quake had reawakened concerns raised in 2012 when a landslide tore through a quarry used by Exxon, killing at least 25 people. “It’s not just a localized thing or an ignorant thing. People are wondering what might be the contributing factor of oil and gas extraction,” said Namorong, referring to the quake. Exxon said at the time it had closed the Tumbi quarry five months before the landslide. “Tumbi was a tragic event that had its own unique set of circumstances,” Exxon told Reuters in an email, without elaborating. Concerns flared again last year when the oil major had to evacuate staff due to unrest in Hela province, where the project’s Hides Gas processing unit is located. The trouble was linked to national elections and disputes over royalties from the PNG LNG project, which generates around \$3 billion in sales per year at current LNG prices LNG-AS.

“PEOPLE ARE TERRIFIED”

The earthquake forced a closure of the Hides Gas processing facility which feeds a 700-km (435 miles) pipeline snaking through the jungle to the LNG plant and export terminal near Port Moresby. The disruption in Papua New Guinea comes shortly after Exxon reported disappointing results, with PNG LNG a rare bright spot. Its shares have underperformed compared with its main competitors Royal Dutch Shell, Chevron, BP and Total. “PNG LNG had reportedly been running at a very healthy 20 percent above nameplate capacity... There will be some hit to the PNG industry,” said Readul Islam, research analyst at consultancy Rystad Energy. If repairs take long, the quakes could even delay plans with France’s Total to double output to around 16 million tonnes per annum at an estimated cost of \$13 billion.

The companies plan to add three new LNG units, or trains, with two underpinned by gas from the Elk-Antelope fields, run by Total, and one underpinned by existing fields and a new Exxon-run field. Repairs have been complicated by landslides blocking roads and the closure of the Komo airfield, which is the main lifeline of the region to the outside world. Oil Search’s Botten said, importantly, the integrity of the gas facilities had been maintained and there were no leaks. Still, the aftershocks have kept the local population on edge. “The people are terrified,” said Australian Sally Lloyd, from near the quake zone in Mount Hagen. “They think the world is coming to an end.”

Nautilus arranging bridge loans

March 7, 2018, The National Business

NAUTILUS Minerals is continuing to arrange bridge loans from a lending company, which are to be part of a larger secured credit facility of up to US\$34 million (K107.80 million). The company is the Deep Sea Mining Finance Ltd. Nautilus said in a statement that it had received bridge loans totalling US\$6.65 million (K21.08 million). In conjunction with the most recent advance of US\$1.9

million (K6.02 million), the company has issued to the lender an additional 8,161,512 warrants of the company for a total of 28,565,291 share purchase warrants issued to the lender to date. Each warrant entitles the lender to purchase one common share of the company at a price of US\$0.17 (K0.42) for a period of five years from the date of issuance of the warrant.

The bridge loans will assist the company's immediate working capital requirements and facilitate payments required to continue the development of the company's seafloor production system to be first used at the company's Solwara 1 Project. The loans bear interest at eight per cent per annum, payable bi-annually in arrears with a one year maturity date. The company requires significant additional funding to complete the building and deployment of the seafloor production system to be used at the Solwara 1 Project by the company and the Government (15 per cent) as its joint venture partner. Nautilus said there could be no assurance that the firm would be successful in securing the necessary additional financing in the required time or at all. Failure to secure the necessary financing may result in the company undergoing various transactions, including without limitation, asset sales, joint ventures and capital restructuring.

Experts believe miners could inadvertently destroy precious species and geological structures in their quest for minerals.

Ed Conway, Sky News, 6 March 2018



Image: The Lost City in the Atlantic Ocean

One of the world's most important sites of scientific interest has been officially designated as part of a mining exploration zone, Sky News can reveal. Scientists believe life on earth may have begun in deep sea vents such as the ones discovered in the Lost City, an area deep on the sea floor in the middle of the Atlantic Ocean. The hydro-thermal vent system in which warm alkaline waters from the rocks react with seawater and create hydrocarbons - the building blocks of life - is the only such formation yet discovered in the world. But the International Seabed Authority - a UN organisation charged with managing the use of the seabed in the high seas - has now allotted the Lost City, along with 10,000 sq km of the Mid-Atlantic Ridge, to Poland to explore for mining.

Deep sea mineral extraction is regarded as one of the most important global industries of the future, with billions of dollars of gold, copper and other key metals lying on the seabed. However, scientists have warned of the possibility that miners may inadvertently destroy precious species and geological structures in their quest for minerals. Gretchen Früh-Green, from the Swiss Federal Institute of Technology (ETH) in Zurich, was the scientist who first discovered the Lost City, on an expedition in 2000. She told Sky News she and her colleagues had written a letter of concern to the ISA but had not received a reply. She said: "We could destroy this place before we've understood it - be-

fore we can really appreciate the significance of these unique white towers and these very strange fluids that are coming out of the ocean floor.



Image: Experts believe studying the Lost City could help understanding of the origin of life

"The significance of that for understanding the origin of life, for understanding processes in early Earth. "It's our history, it's the Earth's history, and if we perturb it we don't know how fast it will recover, or what influence the perturbation would have on ocean chemistry." The ISA, which is based in Kingston, Jamaica, confirmed that the Lost City was part of the area designated to Poland for seafloor exploration. But its secretary general, Michael Lodge, told Sky News that there was no suggestion that it would damage the site. "The Lost City is a site of scientific interest," he said. "It's been explored and studied scientifically for many years. There is no suggestion that Poland is necessarily going to mine the Lost City."

He said that the ISA may introduce rules to prevent miners from exploiting areas of scientific or ecological interest but that those rules were still in the process of being written. "We're actually actively engaged with the scientific community. The major element of exploration which applies to Poland as it does to others is to conduct environmental studies. "So actually we expect that we'll find out much more about the Lost City and other similar sites over the next few years." Nonetheless, some have asked questions over whether the ISA has been transparent enough about the process, or has made the requisite environmental checks. Deep sea mining is expected to become a commercial reality next year, thanks to advances in the autonomous technology necessary for working on the seafloor. The UK is seen as a leader in the industry, with one Gateshead-based company, SMD, developing the machines to be used in an upcoming project in Papua New Guinea.

Two Months To Repair LNG Facilities

Post Courier, March 6, 2018

Preliminary assessments by ExxonMobil PNG Limited on damage to PNG LNG facilities caused by the 7.5 magnitude earthquake in the Highlands on February 26 indicate that it may take approximately eight weeks to repair and restore production. ExxonMobil PNG managing director Andrew Barry said the company withstood the earthquake extremely well because of the world-class design and construction of the facilities and the quick response by its staff. "The initial rapid response by

our well-trained workforce, coupled with controlled emergency shut-down systems, safely shut in our facilities, minimising damage to equipment and ensuring there was no release of hydrocarbons,” Barry said. “Most importantly, we were able to quickly account for all of our employees and contractors at our facilities and confirm that everyone was safe. Nearly 300 non-essential personnel were subsequently evacuated as quickly as possible.”

Work at the Hides Gas Conditioning Plant has turned to restoring camp and associated facilities. “We have assembled a team of technical experts from ExxonMobil’s global workforce to help the local team complete damage evaluations and restore production,” Barry said. “It is very important that we recover as quickly as possible to restore normalcy for our workforce, help our nearby communities to recover and contribute important revenue for the country.” While the gas conditioning plant was safely shut in, there has been some damage to various pieces of equipment and foundation supports that will need to be inspected and repaired. Initial visual inspections of the major processing equipment indicate that they have not been significantly impacted. Surveillance of the pipeline conducted on 28 February confirmed it has not been damaged.

The wells remain safely shut in. A detailed inspection of some well pads has been hampered by earthquake-related impacts to the roads. It is hoped this work can be completed within the next week. Komo airfield will remain closed. Options are being developed to return the airfield to service as soon as possible. ExxonMobil PNG has also brought forward scheduled maintenance activity at the LNG plant and has redeployed maintenance and support staff from the Hides gas conditioning plant to assist. ExxonMobil PNG’s parent company Exxon Mobil Corporation has announced US\$1 million (nearly K3.5 million) to the humanitarian relief effort to assist communities affected by the earthquake.

Australia: Gold miners dig deep

Post-Courier, March 5, 2018

The search for major gold discoveries in Australia is heading deeper than ever before, pushing technology and drillers to their limits in some of the country’s most remote locations. The challenge of digging deeper is underlined by two major gold mining operations in Western Australia’s remote northern Goldfields. The owners of Australia’s deepest gold mine, the historic Gwalia mine near Leonora, have announced expansion plans that will enable mining to advance more than 2km below the surface. Gold miner Northern Star Resources has also begun drilling what is set to be the deepest diamond-drill hole in Australian mining history. Contractor DDH1 Drilling is working on the hole at the Jundee operations near Wiluna, 950 kilometres north-east of Perth, as Northern Star looks to firm up a significant new gold discovery called Zodiac.

Zodiac, just 800 metres east of existing underground workings, is described by Northern Star’s executive chairman Bill Beament as a “game-changer of enormous proportions” for Jundee, which has produced more than 7 million ounces of gold over the past 22 years. Drilling will take about two months to complete and should reach more than 3km below the surface when finished. The planned depth of the Jundee hole is 3,100 metres, which would better the previous Australian record of 3011.5m at Kalgoorlie-Boulder’s world-famous Super Pit gold mine in 2015. DDH1 Drilling managing director Murray Pollock, who got his start in the industry as an offsider during WA’s 1960s nickel boom, said precision was key, and drillers must be almost “surgical” when working at those depths.

“Things can go wrong. It requires a lot of attention and monitoring of what’s happening to produce a good result. While breaking the 3km barrier is rare in Australia, it is nothing compared with Africa, where 5,000-metre holes are not uncommon because of the difference in geology. Deeper explo-

ration is symptomatic of a bigger problem in the Australian gold sector, which has picked most of the low-hanging fruit in major gold discoveries starting on the surface. Mr Pollock said deposits were becoming harder and more expensive to find. (ABC)

Exxon declares force majeure on exports from Papua LNG project: source

Osamu Tsukimori, Sonali Paul, Reuters, 2 March 2018

ExxonMobil Corp has declared force majeure on exports from its Papua New Guinea liquefied natural gas (LNG) project, which has been shut since a powerful earthquake on Monday, an industry source familiar with the matter said on Friday. At least 31 people were killed by the 7.5 magnitude quake, and Prime Minister Peter O'Neill has declared a state of emergency across the remote highlands region as rescuers struggle to reach villages buried by landslides. Exxon shut its \$19 billion LNG facility, the country's biggest export earner, amid fears of damage to gas field infrastructure and the pipeline that carries gas to the coast. Exxon declined to comment on Friday on whether it had invoked force majeure. A company spokeswoman reiterated that the company was focusing on assessing damage from the earthquake, a process that "is expected to take time particularly given the damage to roads and other infrastructure." "We are continuing to work with our customers to minimize the impact on their business," ExxonMobil PNG said in emailed comments, adding that its commercial arrangements were confidential. Exxon had earlier told buyers that the plant's two LNG trains would be shut for at least seven days.



Locals surround a house that was covered by a landslide in the town of Mendi after an earthquake struck Papua New Guinea's Southern Highlands, in this image taken February 27, 2018 obtained from social media. Francis Ambrose/via REUTERS

The PNG LNG project has been producing at around 20 percent above its rated capacity of 6.9 million tonnes a year. Asian LNG market sources say there are concerns about a possible extended shutdown, which could affect not only the project's four main buyers but also other buyers in Asia. "It is difficult to assess the duration of production outages, but in our view, given the location and magnitude of the earthquake, as well as the scale of the aftershocks, we anticipate at least a month's downtime is likely," UBS analysts said in a note this week. Uncertainty around production from PNG has drained liquidity from Asia's spot LNG markets with buyers and sellers taking a wait-and-see approach before committing to trade, a market source said.

This is reflected in the wide bid-offer spread on the forward-month contract for April, he added.

The PNG LNG project is considered one of the world's best-performing LNG operations. Exxon said earlier this month that together with its partners, France's Total SA and Australia's Oil Search Ltd, it plans to almost double the facility's export capacity to 16 million tonnes per year. PNG LNG's long-term buyers are top global LNG buyer JERA, Osaka Gas, Taiwan's CPC [CHIP.UL] and China's Sinopec [SASADZ.UL]. JERA is a fuel joint venture between Tokyo Electric Power and Chubu Electric Power.

OK Tedi set to announce bumper profit

Post-Courier, March 1, 2018

Papua New Guinea's very own OK Tedi Mining Limited is set to announce a profit of more than K700 million from last year. Ok Tedi managing director and chief executive officer Peter Graham in his address to the sixth Leadership Summit in Port Moresby yesterday announced that the company has made a profit from 2017 which would be announced later. "OK Tedi is now a globally competitive company," Mr Graham said. "We got a strong business and a bright future and OK Tedi will be in business for many years to come," he added. Mr Graham said that the mine has seen a positive stance in its operation despite challenges in their initial stages of takeover. "Our challenge is to move from the bottom of the pyramid, to the top. Our exploration in the first six months this year, we will invest US\$12 million," he said. We are working closely with the new Western Province MPs and hope to see a positive outcome." Mr Graham said the mine has been assisting the people of Western Province in maintaining the priorities – education, infrastructure and agriculture.

"We need to operate our business so people get more comfortable," he said. We are generating sufficient cash to keep us sustained," he said. "In summary, we see OK Tedi well positioned and in a comfortable growth...we will be announcing some considerable profits for 2017," he said. Last year Ok Tedi announced that following the strong first half year performance of the Mine, an interim dividend of US\$50 million/K160 million was paid. "The mine has exceeded forecast metal production year to date and in recent months we have seen a higher than forecast copper price further strengthening profitability. Mining on the West Wall continues to be challenging with complex geotechnical and hydrogeological conditions and heavy rainfall in July and August. "These factors are being carefully managed. Our focus continues on safety, reliability, productivity and costs control," chairman Sir Moi Avei said.

RTG Mining raises US\$34M to re-develop Panguna mine

RTG Mining via PMG Mine Watch, March 1, 2018

The Board of RTG Mining Inc. is pleased to announce that the Company has received commitments to raise approximately US\$34 million in a private placement to Australian and international institutional and sophisticated investors. Hartleys Limited, together with Trump Securities LLC, acted as Joint Lead Managers to the Private Placement. The Private Placement was oversubscribed, reflecting the strong institutional interest in RTG's proposal with a landowner lead consortium to secure an exploration licence at the high tonnage copper-gold Panguna Project in Bougainville PNG and the development of the high grade copper/gold/magnetite Mabilo Project in the Philippines. The Private Placement will result in the issue of approximately 311 million Chess Depository Instruments ("Securities") to be listed on the ASX at an issue price of A\$0.14 per Security, representing a 12.5% discount to RTG's last closing price on the ASX of A\$0.16. Net proceeds of the Private Placement will be used:

- to advance the interests of RTG in the proposal to secure a role as the development partner with the landowner consortium led by the Special Mining Lease Osikaiyang Landowners Association (“SMLOLA”), at the old Panguna Mine in Bougainville;
- to progress the arbitration process to confirm the 100% interest of Mt. Labo Exploration and Development Corporation in the Mabilo Project in the Philippines and consider additional drilling at the site;
- to pursue new potential business development opportunities; and
- for working capital and general corporate purposes.



PHOTO: Philip Miriori’s Me’ekamui group has entered into a joint venture with RTG mining. (ABC News: Eric Tlozek)

Commenting on the success of the Private Placement, RTG’s President & CEO Justine Magee said: “We are extremely pleased with the strong support that RTG has received for the Private Placement from a number of new high quality international institutions, as well as from our existing shareholder base. Following completion of the Placement, RTG will be in a strong financial position with cash and liquid assets of circa US\$33.5 million net of fees to brokers, leaving RTG well-funded to progress various business development opportunities and continue to seek to build a social licence to sustainably redevelop the Panguna Project in Bougainville.”

Environmental safeguards being ignored for deep sea mining

RNZ, March 1, 2018

A Guam-based lawyer says the international community's legal position largely ignores environmental safeguards when it comes to Deep Sea Mining. Blue Ocean Law's Julian Aguon says the International Seabed Authority does not give due consideration to the precautionary principle or the prevention of transboundary harm when issuing exploration licenses. These safeguards ensure unknown risks to the environment or international neighbours outweigh potential economic gains. Mr Aguon said some Pacific communities' right to free and prior informed consent, a legal mechanism designed to engage native peoples, is also being ignored. He said the impact of deep sea mining, or DSM, on biodiversity, climate change and the rights of indigenous people is not well understood. "In PNG, where experimental DSM is already underway with the Canadian company Nautilus Minerals off the New Ireland coast, villagers have already reported high incidents of dead fish washing up on shore including strange deep sea creatures that are not familiar to anyone and are actually hot to the touch," said Julian Aguon.