

**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/>

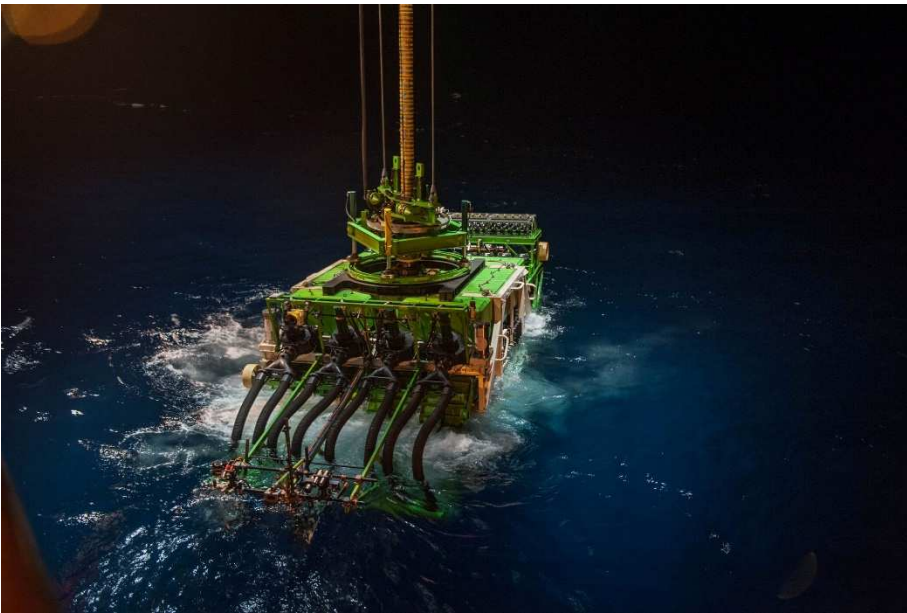
PNG National: <http://www.thenational.com.pg/>

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**Mining robot stranded on Pacific Ocean floor in deep-sea mining trial**

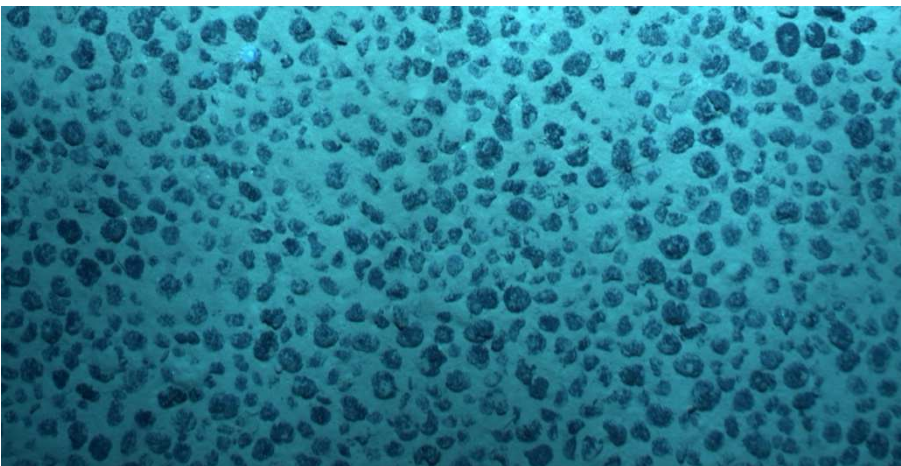
Reuters, April 29, 2021

A seabed mining robot being tested on the Pacific Ocean floor at a depth of more than 4 km (13,000 ft) has become detached, the Belgian company running the experimental trial said on Wednesday. Global Sea Mineral Resources (GSR), the deep-sea exploratory division of dredging company DEME Group, has been testing Patania II, a 25-tonne mining robot prototype, in its concession in the Clarion Clipperton Zone since April 20. The machine is meant to collect the potato-sized nodules rich in cobalt and other battery metals that pepper the seabed in this area, and was connected to GSR's ship with a 5km cable. "On its final dive in the GSR area, a lifting point separated and Patania II now stands on the seafloor," a GSR spokesman said in an emailed statement. "An operation to reconnect the lifting point begins this evening and we will provide an update in due course." The GSR trial is being observed by independent scientists from 29 European institutes who will analyse data and samples collected by the robot in order to measure the impact of seabed mining. While several companies and countries have seabed exploration contracts, regulations governing deep-sea mining have not yet been finalised by the International Seabed Authority, a U.N. body.



Patania II, a 25-tonne seabed mining robot, is lowered into the Pacific Ocean to begin a descent to the sea floor, in the Clarion Clipperton Zone of the Pacific Ocean, April 2021. GSR/Handout via REUTERS

Critics, including environmentalist David Attenborough, say seabed mining is untested and has a [largely unknown environmental impact](#). Google, BMW, AB Volvo, and Samsung SDI have backed a call for a moratorium on deep-sea mining. Dr Sandra Schoettner, deep-sea biologist at Greenpeace, said: "Losing control of a 25-tonne mining machine at the bottom of the Pacific Ocean should sink the idea of ever mining the deep sea." A spokesman for GSR said the company has not lost control of Patania II, and that projects like this always have challenges to contend with. [GSR has said](#) it will only apply for a mining contract if the science shows deep seabed minerals have advantages, from an environmental and social perspective, over relying solely on land mining.



Rocks called 'polymetallic nodules' are seen on the seabed in the Clarion Clipperton Zone of the Pacific Ocean, April 2021. GSR/Handout via REUTERS

### **Ok Tedi Development Foundation launches their five-year plan**

Post-Courier, April 28, 2021

The Ok Tedi Development Foundation (OTDF) launched its five-year strategic business plan 2021-2025 last week. The plan is aimed at realigning its strategies and programs to deliver on realistic targets. This is in line with OTDF's vision to empower the Community Mine Continuation Agreement (CMCA) communities and associated entities in the Western Province to be self-sustaining beyond 2025. Extensive study and planning over the last 12 months, involving key stakeholders,

has provided OTDF with a better understanding of current development needs highlighting the importance of effective stakeholder collaboration; increasing importance of women and children and the rise in community law and order issues.

Included in the plan are economic and income generation, education, water and sanitation, and food security and agribusiness. “We have done our groundwork, we know our current position, we have set our targets and are focused to achieve these over the next 5 years,” said OTDF CEO, Havini Vira at the launch. “This plan has aligned all of us and we are now challenged to make this plan become a reality. “It will take commitment, dedication, effort and energy to deliver the plan and I am confident that we can,” said OTDF board chairman, Musje Werror, who launched the plan. OTDF was established in 2001 as a not-for-profit organisation, servicing the CMCA communities in Western Province.

### **MRA wants landowners involved in construction phase of mining projects**

By CLARISSA MOI, April 21, 2021 The National Business

MINERAL Resources Authority (MRA) says it would like to see landowners participate in mining projects, especially during construction phase. Managing director Jerry Garry said this in an update of the review of the memorandum of agreement (MoA) for the Woodlark gold project in Milne Bay. He told The National that the project’s MoA discussions concluded last October and the agreement was put through the established government process for clearance before getting National Executive Council’s (NEC) approval. Garry previously said the MoA review process for the Woodlark gold project was successfully concluded in record time under a week last year. He said they were able to achieve those results as negotiations and discussions between the stakeholders were within the framework of existing laws and policies. During the project’s stakeholders meeting in Alotau last October, issues discussed included land, royalties, tax credit scheme, special support grants, infrastructure, business development plan, employment and training, and mine closure.

The stakeholders included the State, project developer Geopacific Resources Ltd, Dal Wanuwun Woodlark Lease Association Inc (landowners), Murua local level government and the Milne Bay government. The Government, which was led by the Commerce and Industry Department, came up with a national content plan to ensure landowners and businesses were engaged by the developer in business spin-offs, beginning from the construction phase of projects. Garry said the discussion on the national content plan was yet to be concluded as it was a priority of the Government. “We (MRA) would like to see project landowners participate in the project development during the construction phase,” he said. “The national content plan is yet to be approved by NEC. “It should have been completed last December and processed. “However, due to the Covid-19, sanctioned activities and programmes geared towards the national content plans discussions were deferred, they are anticipated to be concluded next month.”

### **After unrest nickel production at New Caledonia plant to resume**

*New Caledonia's nickel plant at Goro is expected to restart production this week after being shut down during unrest in December.* Radio New Zealand on 20 April 2021

The plant was sold by Vale of Brazil to a New Caledonian-led consortium Prony Resources after a prolonged sales process. The new owners plan to produce 20000 tons of nickel this year and eventually hike the annual output to 35000 tons. The interruption is said to have incurred damage and production losses of more than \$US 100 million.

## Govt raises demand on gas deal

Ian Munro, April 20, 2021, The National Business



Flaring at the Pasca A project well offshore Gulf.  
— Pictures courtesy of Twinza

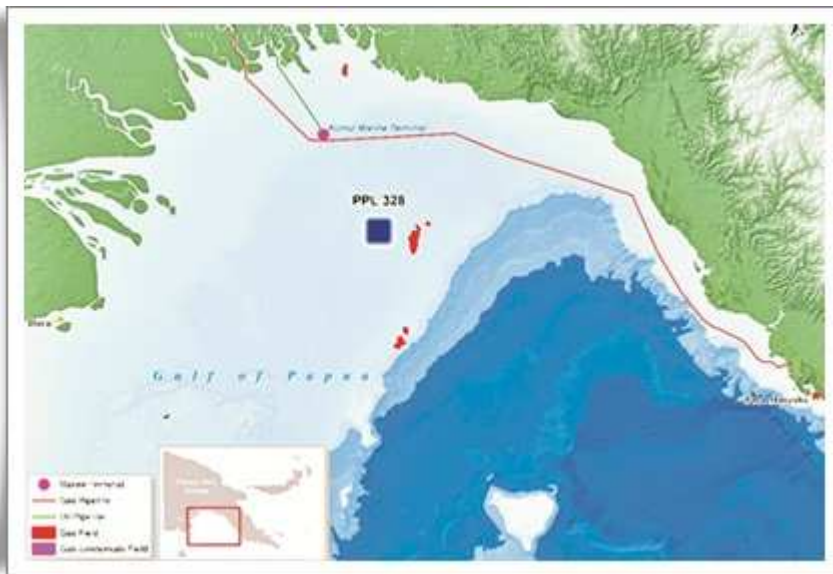
THE Government has increased its demand on the Pasca A Gas agreement yet again, ahead of the scheduled signing today, according to project operator Twinza Oil Ltd. According to a statement from Twinza, the Government informed the company last Friday that it now required a 6 per cent production levy to sign the agreement. It read: “This is 4 per cent higher than the production levy that was agreed as part of the comprehensive terms (agreed terms) for Pasca A, negotiated by the state negotiating team and announced by the Prime Minister James Marape last Sept 24. “The additional levy requested would make the Pasca A project un-financeable for any investor. “The agreed terms would have delivered the highest State take from any resource development in PNG and were widely regarded as meeting all of the demands of the State, including early revenues, full royalty and development levy entitlement and a domestic market obligation of 5 to 10 per cent, while satisfying the requirements of project financiers.” It said the State had also sought to change the agreed terms via a letter from the Petroleum Minister Kerenga Kua on Feb 4.



Flaring at the Pasca A project well offshore Gulf.

“The Government’s demand to raise the fiscal take to (between) 55 and 60 per cent nominal share, which is 75 to 85 per cent of the actual project value, would make Pasca A unviable for investors and financiers alike,” it said. “Notwithstanding the changing State positions, Twinza remains

committed to PNG and progressing the Pasca A Project on the agreed terms.” In an effort to close-out the agreement, Twinza offered an additional concession to the agreed terms, to increase the production levy to 4 per cent, with a further increase to 6 per cent at higher oil prices. “This will provide 65 to 70 per cent of project value to the State or 52 to 54 per cent of nominal take,” it said. “The State take has been independently verified by Deloitte in a comprehensive report commissioned by the Department of Petroleum and delivered to the minister this month.” In expectation that the gas agreement would be signed by the end of 2020 after the agreed terms were announced in September by Marape, Twinza has maintained its project team for Feed (front-end engineering and design) – readiness.



Twinza acreage in Gulf of Papua.

The signing of the Pasca A gas agreement this month would have allowed the project to immediately move into the Feed phase, with a final investment decision in 2022 and first production in 2025. “Given the continued delays, Twinza will now stand-down the Pasca Project team until there is clarity on terms and execution of the gas agreement.” Chairman and chief executive Ian Munro said: “Twinza was awarded the Pasca license nearly 10 years ago as a foreign direct investor. And since this time, the company has spent more than K350 million in developing a field that was discovered over 50 years ago and passed over by other industry players. “It is disappointing that at the closing stages of a drawn-out 10-month gas agreement process, the State is now seeking to again revise terms to ones that are demonstrably unacceptable to any investor. “Consequently, while Twinza remains committed to progressing the Pasca A project on a fair and equitable basis, the company will streamline its costs while awaiting a gas agreement signing on acceptable terms. “We remain focused on developing PNG’s first offshore oil and gas field and opening up the Gulf of Papua to much needed investment as soon as circumstances allow.”

*Twinza’s principal asset is the Pasca A liquids-rich gas field. According to the company, the Pasca A field development plan has been completed, the petroleum resources certified and the programme necessary to obtain the licences for full field development is complete. Once the necessary government approvals have been received, the Pasca A development will become the first offshore field development in Papua New Guinea. It is anticipated that development of the field will support further exploration and development of other fields in the Gulf of Papua. The Pasca A gas condensate field, is 85 km from the shores of Gulf and within the exclusive economic zone.*

## **Cabinet's decision to move royalty funds affecting partners: Sir Julius**

April 19, 2021, The National Business

THE New Ireland government's subsidy policies have been affected by the National Executive Council's decision to move the Lihir Royalty Government funds directly to the district development authorities of the two open electorates, Governor Sir Julius Chan says. Sir Julius said according to clause 6(c) of the Lihir memorandum of agreement (MoA), the Government was to pay 50 per cent of the royalties to the provincial government. The provincial government would in turn distribute that amount to Namatanai (40 per cent) and Kavieng (40 per cent) for projects and programmes pursuant to its district development plans while the New Ireland government would retain a portion (20 per cent). As a result of the revised distribution of royalties, Sir Julius directed chief executive of subsidies, Mactil Bais to convene a meeting with affected priority partners including heads of education institutions, health and churches on Thursday.

Bais, who relayed the news to all development and service partners, said it was in their best interest and the people of New Ireland that they be made aware of the potential impact the NEC's decision to transfer all funding directly to the open members would have on them. The stakeholders especially the heads of education institutions expressed serious concern for their students and parents who had been benefitting from the free and subsidised policies for the past 12 years. "We have been relying on funding from the provincial government especially for rations for our boarding students," Mangai Agro Secondary School principal John Tokmun said. "How are we going to feed our students? "The tuition fee free funding that comes from the national government does not cover this component. "We might have to start charging school fees of K1,000 or more now," he said.

## **Kroton Equity subsidiary of KPHL**

April 19, 2021, The National Business

KROTON Equity Holdings Ltd (KEHL) is a subsidiary of Kumul Petroleum Holdings Ltd (KPHL) and is also the nominee company that has an interest in the PNG LNG project, according to KPHL. Managing director Wapu Sonk told *The National* that under the umbrella benefits sharing (UBS) agreement signed in Kokopo in 2009, the landowners and provincial governments of the five PNG LNG project impacted provinces – Gulf, Hela, Southern Highlands, Western and Central – were given a 25.75 per cent share of Kroton as part of the development agreement. Sonk said the signing ceremony last Wednesday was for those landowners and the provincial governments, especially the governors, to become directors so a new company could be created. "We have been keeping it so that the landowners can get themselves organised as it was also commercial," he said.

He said the provinces were required to pay the state to exercise their right in the stake in KEHL. However, the provinces were unable to because of the low oil prices and the clan vetting system had not been completed and KPHL needed to deal with properly elected and appointed landowner representatives. Sonk said it had taken a while but KPHL wanted to start working with the provincial governors. "That's why we got them on board to start and create the company and they can start to use that money to expand and invest for the future," he said. "The company is already set up but will take about six months to be properly established."

## **Kumul Petroleum in good position to operate Kikori gas fields: Sonk**

By CLARISSA MOI, April 19, 2021, The National Business

KUMUL Petroleum Holdings Ltd (KPHL) is in a good financial and technical position to operate the new gas fields in Kikori, Gulf, and is ready for the participation of other resource projects such

as Papua LNG. Managing director Wapu Sonk said this in welcoming the Government's decision to award the petroleum retention licences 48, 49 and 50 covering the gas fields of Kimu, Barikewa and Uramu to the national oil and gas company to wholly own and operate. Kimu and Barikewa fields are onshore and Uramu is offshore in the shallow waters of Kikori area. "Kumul Petroleum is almost debt-free," he said. "Our balances are very strong. "We have a very strong cash flow that comes from the PNG LNG project and other projects including the power projects in Hides and the Port Moresby power station (NiuPower Ltd) as well. "So we are stronger to operate the licences." Sonk noted that the Petroleum Advisory Board (PAB) had assessed the company's financial position and had agreed to award them those licences.

He said KPHL had disclosed its financial statements and reports for the last three years and the board had agreed that the company was in a strong position. "This is not a free gift from the Government," he said. "It has gone through proper assessment process by the PAB which is an independent body." Sonk said PAB had also assessed KPHL's technical capacities. "We have been here for 10 years building capacities and we got this on merit," he said. "But it also fits into the Government's overall policies." Sonk also noted that KPHL would explore cheaper and more cost effective ways to commercialise the fields not only in liquefied natural gas production but downstream processing, power generation, quicklime and cement production, among others. He said KPHL would invite partners, who were interested in those gas fields, assess them and get them on board in the drilling and development process.

### **Govt grants firm licence**

April 19, 2021, The National Business

THE Government has handed over petroleum retention licences (PRL) to the Kumul Petroleum Holdings Ltd to develop gas fields in Kimu, Barikewa and Uramu in Kikori, Gulf. Petroleum Minister Kerenga Kua said on Friday that it was the way forward in realising the potential in the country's resources, especially for the oil and gas company to wholly own and operate the three gas fields. It was in line with the Government policy for Papua New Guineans to take a larger share in any major resource project. "We have been heading in that direction by looking at reforming the laws to achieve that kind of outcome, at the same time using contractual negotiations to achieve the same kind of outcome: maximise benefits to Papua New Guinea." Kua said KPHL had applied for the licences when they expired.

After consideration by the Petroleum Advisory Board (PAB), it made recommendations to the Government which then gave the licenses to KPHL. KPHL managing director Wapu Sonk said the licences were previously held by Oil Search Ltd, Santos and other operators. "When the licenses expired, we applied and we now have 100 per cent ownership of these licenses," he said. "The licences are discovered gas fields and they have 2TCF of natural gas and about 60 million barrels of condensate that comes with it. "We will try our best to be compliant with the Oil and Gas Act, environment laws, and compliant with all our laws and look at the best way possible to commercialise these three licences to benefit our people."

### **PNG does deal with devil it knows over gold mine**

Johnny Blades, RNZ Pacific Journalist, Radio New Zealand on 16 April 2021

Papua New Guinea's government has done a deal with "the devil" to reopen a large gold mine in the country's Highlands region. With an economy in contraction due to the pandemic, the PNG government has reached an agreement with Canada-based company Barrick Gold on plans to reopen the Porgera mine.

The Enga province mine had been in operation for 30 years until a year ago when it closed after PNG's government denied Barrick and its joint venture partner in Barrick Niugini Ltd, Zijin Mining of China, a renewed mining lease. Barrick never wanted to leave PNG because it saw Porgera as a long-life, high-margin asset with accessible reserves that can produce half a million ounces over a decade. But the joint venture had encountered deep opposition from Porgera landowners and residents over nagging issues related to the mine, including environmental and social problems, and minimal economic benefits for the local community. Also, despite the mine being one of the world's top producing gold mining operations, PNG's government felt the country was not getting enough of a cut of the profits.



Aerial view of the Porgera gold mine. Photo: Zijin Mining

The James Marape-led government suggested PNG would operate the mine itself. But with a lack of capital, and a health crisis on its hands, the prospects of a return to mining seemed remote. In the interim, thousands of people lost jobs, while the national and Enga provincial governments lost sorely needed revenue. PNG's government decided to be pragmatic, according to its Mining Minister Johnson Tuke at the bubbly agreement signing ceremony in Port Moresby. "Though Barrick has taken us to court, we work in harmony. It's better to work with the devil you know than the devil that you don't know," he said to hearty laughter from representatives of Barrick in attendance. After months of difficult negotiations, a deal has been forged between the resource-rich Pacific nation and the forces of global capital, giving PNG majority ownership of the mine. Previously, Barrick Niugini enjoyed 95 percent ownership of the mining operation. The remaining 5 percent was shared among PNG's government and local landowners.

Under the agreement, ownership of the mine will transfer to a new joint venture, which will be 51 percent-owned by PNG and 49 percent by Barrick Niugini Limited, the mine's operator. The agreement also gives PNG stakeholders - government and landowners - 53 percent of the economic benefits from the mine. The prime minister said state negotiations secured the best deal they could for PNG. "Barrick and BNL (Barrick Niugini Ltd) will carry a cost of almost 65 percent in refinancing the reopening of the mine, and we are contributing at 36 percent to restart up the mine, going forward. A gold mine is capital intensive every time, going forward." Marape said Barrick would cover PNG's share of reopening costs interest-free. "Instead of us going to the bank, borrowing at 6 percent or 7 percent, Barrick will be advancing us the 36 percent (of costs) that we're supposed to pay at zero percent interest."



For Barrick and Zijin, reopening the mine as soon as possible is the priority. "For BNL, Barrick Niugini, time is money," said Barrick's Chief executive Mark Bristow at the signing ceremony. With PNG's recent rainy season having taken a toll on the open pit at Porgera, he said it would take at least seven months to get the mine operational again. "So it's in our interest to work hard to get the mine to where it's producing revenue again," Bristow explained, adding that they hoped to get production to a level even exceeding its previous levels.



PNG prime minister James Marape and Barrick Gold CEO Mark Bristow in Port Moresby, 15 October 2020. Photo: PNG PM Media Unit

### **Landowner grievances**

Despite the enthusiasm of Barrick and PNG's government, landowner issues cast a shadow over the plan to reopen the Porgera gold mine. Various local landowner groups have unresolved grievances with the mining operations including environmental damage, rape and human rights abuses affecting the local community. Phillip Marokon of the Akali Tange Association of landowners in Porgera said they were not involved in the agreement. "Barrick never seemed to pursue our issue - the state and Barrick," he said. "So these outstanding issues are still pending, but they never inform us in advance of what is happening, and the agreement has already been signed." As well as matters up for landowner approval, the government still has to address the establishment of development commitments to PNG, Enga and Porgera under the venture. Tuke said the government's next focus, before the reopening of the mine, was addressing concerns within a Porgera landowner forum. It knows that landowner opposition could yet prove obstructive to the chances of the mine reopening this year.

"As affected landowners, we really don't want them (the miners) to come until and when they sort our issues out," Marokon explained. But PNG's elected leaders are putting on an upbeat face about the agreement as a positive distraction from the worrying Covid-19 surge being experienced around the country. The Governor of Enga, Sir Peter Ipatas, said his province was happy that the framework agreement had been reached after what he called a "long journey". Sir Peter has been Enga's governor for the past 23 years, and knows how much of an impact the mine has had. "Despite all the clashes that Mr Bristow and our team had, it's all for the benefit of our people," Sir Peter said at the signing ceremony. "It's not personal, but at the end of the day we had to get somebody who will deliver for us and work with the devil I know... and that's Barrick."



Members of the Papua New Guinea government and the mining company Barrick Gold attend a signing ceremony for their joint Porgera gold mine project. Photo: PNG PM Media

It's unclear if Barrick will increase remedial efforts to address the legacy of rape and violence by its security contractors and other social problems on the mine lease area, or the mine's pattern of environmental destruction. But Mark Bristow cited a phrase used in Chinese foreign policy when opening up about his company's strategy at Porgera. "People in the industry always talk about 'win win'. But what we talk is the win win concept and put it into an agreement. And, you know when I joined Barrick, the one thing I said, we have an objective of achieving is we want to be the most valued mining company in the world. That means we want to be acceptable for future generations." The agreement also includes an option for PNG to acquire the whole mine at fair market value after 10 years.

### **Signing seals deal for KEHL**

April 16, 2021 The National Business

KROTON Equity Holdings Ltd (KEHL) will now be established following a signing ceremony on Wednesday between the PNG LNG project impact provinces. KEHL will be owned by provincial governments of the five respective provinces – Gulf, Hela, Southern Highlands, Western and Central. KEHL will hold a 4.27 per cent interest in the PNG LNG project. Governors Philip Undialu (Hela), Taboi Awi Yoto (Western), William Powi (Southern Highlands), Chris Haiveta (Gulf) and Robert Agarobe (Central) signed the agreement witnessed by Kumul Petroleum Holdings Ltd managing director Wapu Sonk. Undialu on his social media page said the governors thanked Prime Minister James Marape for fulfilling his promise to empower provincial governments and landowners. The governors agreed that the transferring of the 4.27 per cent equity was a testament to Marape's commitment.

"The five governors today (Wednesday) signed documents to formally establish the company," Undialu said. "The KEHL is expected to generate between K300 million to K500 million depending on the oil price. "There's no better gift than this that the Government can offer to the provinces and landowners impacted by the PNG LNG project," according to the governors' joint statement. They would like to see KEHL grow and be a player in the country and region in the private equity and financial sector with sound corporate structures and investment policies. The governors also thanked former Prime Ministers in late Grand Chief Sir Michael Somare for the decision to allocate the equity at the Umbrella Benefit Sharing Agreement (UBSA) and Peter O'Neill. "It is Marape that

is finally freeing up this long waited equity interest and he deserves credit for it.” Marape is expected to issue share certificates to respective beneficiary groups soon.

### **Pacific groups write to UK for support against deep sea mining**

Radio New Zealand on 15 April 2021

Pacific civil society groups have written to the British government seeking support on calls for an international deepsea mining moratorium. The United Kingdom is being urged to use its ocean leadership position to encourage a moratorium on deepsea mining regulations being developed at the UN-backed International Seabed Authority.



One of the leading advocates of the fledgling deep sea mining sector, DeepGreen Metals hopes to mine the Pacific seabed for polymetallic nodules using collection vessels such as the ultra-deepwater drill ship 'Vitoria 10000'. Photo: DeepGreen Metals

The letter was sent to the UK Minister for Pacific and the Environment at the Foreign, Commonwealth & Development Office, Lord Zac Goldsmith. It was signed by the Pacific Islands Association of Non-governmental Organisations, the Pacific Youth Council, Te Ipukarea Society of the Cook Islands, and the Civil Society Forum of Tonga. They also seek a moratorium on the Authority issuing exploration contracts in international seas. Governments in several Pacific Islands countries - Cook Islands, Tonga, Kiribati and Nauru - have sponsored exploration contracts for companies hoping to mine the deepest parts of the seabed for polymetallic nodules. The Authority, which consists of 167 countries, has so far issued exploration contracts to 21 companies, but mining cannot commence until a mining code is agreed on. Advocates of deep sea mining [say nodules found on the Pacific seabed are needed](#) to make batteries for electric vehicles which will aid transition to decarbonised economies. But the NGOs say there should be no issuing of exploitation or exploration contracts in the international seas, unless and until the environmental, social and economic risks and the technology are comprehensively understood. Scientists [have warned](#) that deep sea mining would inflict long-lasting damage to ocean ecosystems, while calling for a precautionary pause while more research is conducted on this little studied frontier of the earth's environment.

The warnings have given urgency to a [campaign launched last month](#) by a Pacific Regional NGO Alliance of church and civil society groups calling for a global ban on deep sea mining. Last week, a team of Greenpeace activists onboard the [Rainbow Warrior confronted a vessel](#) used by deep sea mining company DeepGreen in the Pacific ocean's Clarion Clipperton Zone. This week the Rainbow Warrior confronted Belgian deep sea mining company Global Seabed Mineral Resources in the middle of the Pacific where GSR is testing a mining machine.



Te Ipukarea Society's Deep Sea Minerals Campaign Consultant, Teuru Tiraa Passfield. Photo: Supplied

### **Govt hopes to bring great benefits with projects: PM**

April 15, 2021, The National Business

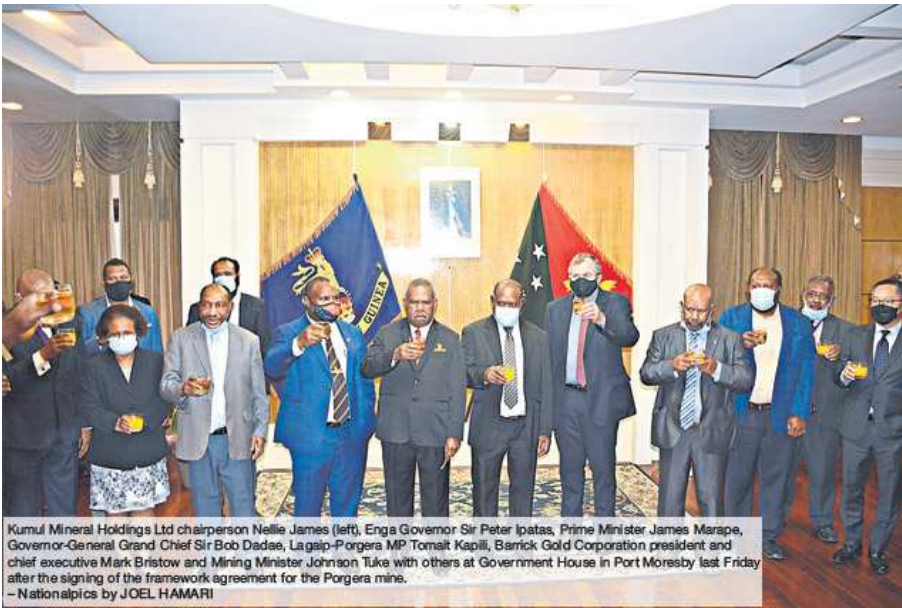
PRIME Minister James Marape says the Government hopes to build similar frameworks of achieving greater benefits for the country through its resource projects. He said this in Port Moresby last Friday after the signing of the framework agreement with Barrick to reopen the Porgera mine in Enga. PNG stakeholders (Kumul Minerals Holdings Ltd, Enga provincial government and landowners) own 51 per cent of the mine. "This announcement is a significant milestone in the Government's effort to build strong frameworks within the resource sector which will benchmark future considerations for similar projects around the country," Marape said. He said in the old structure, State parties only had five per cent through Mineral Resources Enga (2.5 per cent Enga government and 2.5 per cent landowners), while 95 per cent was held between Barrick Niugini Ltd (47.5 per cent and 47.5 per cent Zijin).

Under the new deal, the equity split is 51 per cent and 49 per cent in favour of PNG stakeholders. Marape said there was an opportunity for landowners to increase their equity beyond 15 per cent with the additional 10 per cent free equity paid for by Barrick. The royalty paid was two per cent to the special mining lease landowners and the Enga government but the new deal secured an additional one per cent to make it three per cent. "Up to 2019, the economic split stood at around 25 per cent for the PNG stakeholders with equity and taxes, whereas the new deal will see that move to around 53 per cent in favour of the PNG stakeholders over the life of the mine," he said. "The new arrangement does not give away and tax concessions which means that the State is able to collect its taxes upfront."

### **Deal sending positive message**

April 15, 2021, The National Business

Last week, an agreement was signed between the Government, Barrick Niugini Ltd for the mine in Porgera, Enga. Business reporter PETER ESILA this week talked to Institute of National Affairs director PAUL BARKER about the multi-billion kina mine.



Seated left to right: Mining Minister Johnson Tuke, Governor-General Grand Chief Sir Bob Dadae, Barrick Gold Corporation president and chief executive officer Mark Bristow and Kumul Mineral Holdings Ltd chairperson Nellie James at Government House in Port Moresby last Friday during the signing of the framework agreement for the Porgera Mine.

IT has been said that short-term loss leads to long-term gain but in business, it's the short term that matters the most. The new Porgera mine agreement should be a lesson to all stakeholders that with an existing operation, especially one with a limited remaining mine life, one wants to avoid disruptions and unnecessary additional capital and restoration costs. Last week, a framework agreement was signed between the Government and operator Barrick Niugini Ltd (BNL) for the Porgera mine in Enga. The PNG stakeholders – Kumul Mineral Holdings Ltd, Enga government and landowners – now own 51 per cent of the mine while the BNL holds 49 per cent. BNL will fully fund the reopening of the mine which was closed last year because of a dispute over the non-renewal of BNL's licence. Barker says: "There's a strong message here that while signing an agreement now is a good outcome, the current outcome, or something similar could have been achieved a year ago without all these disruption to the people's lives and income, businesses, or to State or provincial revenue, and without causing major disruption to wider business confidence. "The company indicated that it was ready for major alterations in investment arrangements, but also that it was committed to the future development of the mine. "Restoration won't happen overnight.

“There will be major cost outlays and while BNL has said they will carry these costs, it will delay the time in which Porgera returns to profitability, and, therefore, in a position to be paying corporate tax to the Government. The concluding of this framework agreement between BNL and the Government will send a very positive message to the business community in Porgera and Enga, the Highlands and down to Lae. “It will also send a wider positive investment message that PNG is still open for business and investment and able to retain not only one of the largest, but, also, the most respected international mining companies in PNG. “Having the mine closed for a year was like a gaping sore for the resource sector, and invariably put off other investors and lenders, that might be cautious to do business in PNG, for fear of repercussions and potential changes of investment rules down the track. “Having an agreement in place and seeing this progress to actual restoration and resumption of production will restore opportunities, economic activity and wider business confidence, and is almost a prerequisite, or precondition, for investment in other major new resource projects.

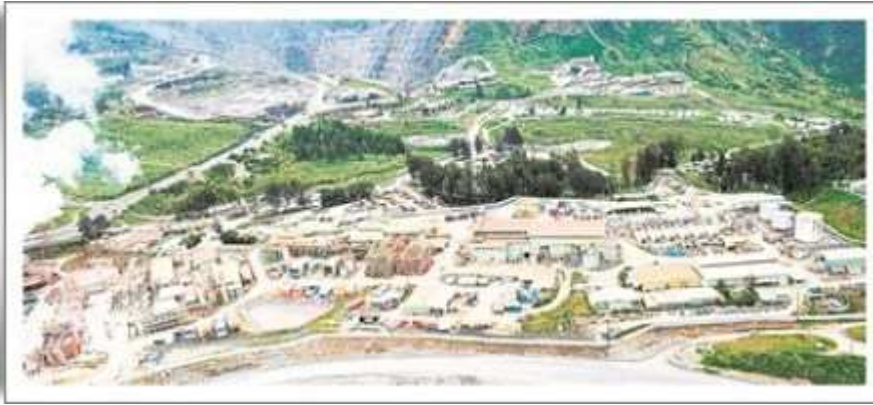
“The closure of the mine over the past year has had a devastating impact on businesses and households in the Porgera valley, in other parts of Enga and down the Highlands Highway to Lae.” Of the 3,500 employees, around 1,200 were from Porgera and 800 from other parts of Enga. The others are from other parts of PNG, including 200 overseas workers. “This comprises a lot of people, including their households, using goods and services from stores to markets and schools mostly locally supplied and, being on good salaries, paying substantial taxes to the State,” Barker said. “It has been said that short-term loss leads to long term gain, but in business it’s the short term that matters the most. “The biggest single impacted segment was local and other national businesses and contractors to the mine, which comprised over 15 per cent of the value of the exports, or markedly more than twice the value of the wages and salaries.

“Again, this comprises of dozens or businesses, and, therefore, thousands of people employed by the contracted companies and their families. ‘The restoration of the mine, of course, will take time and cost money. “Most staff and contractors have relocated, and initially certain skills and a reduced team will be required to restore the mine site and plant and equipment back to full operating order, but this will start feeding back into the Porgera economy and the wider Engan economy over the course of several months. “The extended closure had a major negative economic and social impact on households, businesses, local and national revenue, especially considering the missed opportunity from gold prices being at record levels last year. “The negative effect included not only the loss of revenue, taxes, incomes, contract, royalty and desperately needed export earnings, but also considering the Government’s high budget deficit and the need to borrow both domestically at high interest rates and internationally to help finance the shortfall. “The closure also had a negative impact on investor confidence, especially on the resource sector, at a time when PNG was trying to attract new investors and finance.”

### **Tuke: Bill helped with deal**

By SHIRLEY MAULUDU, April 15, 2021, The National Business

THE Mining (Amendment) Bill 2020 approved by Parliament last year contributed to the framework agreement recently signed by the Government and Barrick Niugini Ltd to reopen the Porgera gold mine, Mining Minister Johnson Tuke says. Parliament passed the Mining (Amendment) Bill 2020 which enabled the State to participate in the development of the country’s mineral resource projects. The Bill was to provide a legal base for the State to apply for a tenement and develop a mine. Johnson said then that the Bill was to establish a mechanism in law whereby the State could reserve land, the subject of expired, surrendered, cancelled or relinquished tenement over which a new application was made by the State. Whether the amendment contributed to the discussions on the new Porgera agreement, Tuke said: “That also had a reference to it.



An aerial view of the mine site. – Pictures supplied



The Porgera mine open pit.  
– Pictures supplied

“But sometimes we have to change the culture of conducting business. “Our conduct of business in mining has to be in the international context. “The former and the colonial way of conducting business must change, and we apply the national principles of conducting business. “What has happened is not a surprise. “Most of our mining operations are subscribed under the Mining Act 1992.” Tuke said in the PNG context, “we are playing a catch-up game. “We have got to be on par.” Meanwhile, first assistant secretary Motsy David said the State never used to have records of how much mineral resources were exported. “In the 70s and 80s, we never monitor how (much) gold went out,” David said. “We only relied on (information) the company was supplying. We believe those information like (the) Bible.”

### **Tuke: Alluvial mining policy being worked on**

By SHIRLEY MAULUDU, April 14, 2021, The National Business

MINING Minister Johnson Tuke says work is being done to have in place an alluvial mining policy to guide the sector. Tuke said currently alluvial mining was an unregulated and unstructured business. “We are still in the process of developing alluvial mining policy,” he said. Tuke said as a result of little regulation and oversight in the industry alluvial miners were causing environmental damage in their areas. “They are not mindful of the safety,” he said. “Because you are a landowner, that does not give you the right to go and mine if and when you feel you like it. “These are called artisanal miners. “Their activities are of course concern to the community in terms of safety and the

environment, and the chemicals they use. “That triggered us to come up with policy intervention, so we are in the process of developing an alluvial mining policy.

“Right now, alluvial mining is an unregulated and unstructured business. “When we have a policy in place, they (alluvial miners) can comply with environmental law, labour law, etc, so that they can be held accountable for their actions should anything go wrong.” Tuke said a separate division may also be established in the near future for alluvial mining alone. “In due course, I might establish a division out of the Mineral Resources Authority to manage alluvial mining because it is seen as one of the biggest SMEs in this country and we have not realised that,” he said. “In the last year’s operation, alluvial miners came up with K600 million. “That is why most of the Papua New Guineans are engaged in alluvial mining businesses. “However, there is no surrounding Act that will govern their operation.”

### **Saonu wants similar benefit sharing as Porgera mine for Wafi-Golpu**

April 14, 2021, The National Business

MOROBE Governor Ginson Saonu wants the Wafi-Golpu project to get the same benefit sharing arrangement like that of the new Porgera mine. He said the Porgera agreement of 51 per cent ownership by PNG stakeholders was positive news for upcoming discussions for Wafi-Golpu. “I am optimistic we will have a much more superior arrangement coming out of Wafi-Golpu,” he said. “We have learnt, but there is still much more to be done as we as a country and for our Government, under the leadership of Prime Minister James Marape and Pangu Pati, to own our resource projects and strive towards economic independence.” Saonu said Morobe wanted to lead the way and saw Wafi-Golpu as the catalyst for this change that would see the development of more businesses and other economic benefits.

He said the Morobe government was now finalising the review of their position paper given the many new developments. Saonu said he intended to deliver this to the National Government this month and prepare for the mining development discussions and also on the benefits for the province and the landowners. “Our position is that we want all stakeholders to benefit equitably,” he said. “The developer, the Government, the Morobe government, landowners and Morobe province. “This Wafi-Golpu mine is a significant mine in the region and it is important all parties are happy to move this project.” Saonu said the Morobe government’s position on the deep sea tailing placement and court matters remained.

### **Businesses hail mine deal**

By CLARISSA MOI, April 14, 2021, The National Business

BUSINESSES have welcomed the announcement to reopen the Porgera gold mine in Enga as this will bring in the much needed foreign exchange into the country. Bank South Pacific group chief executive officer Robin Fleming said the signing of the framework agreement between the Government and Barrick Gold Corporation last Friday was most positive and had been well received by the business community. “Notwithstanding that there still needs to be a more detailed agreement on certain aspects of the agreements, Friday’s announcement gives business much confidence of a process of rehabilitation of the mine commencing with a re-commissioning this year,” he told The National. “Barrick’s stated commitment to funding the costs associated with re-commissioning is also positive, and preliminary work required to move the mine towards commencing operations will-in-itself bring much needed foreign exchange into the country.



“Businesses in Porgera and support companies, especially transportation companies will see this as a much needed boost to their businesses and of course former employees of the Porgera Joint Venture will be looking forward to rejoining the workforce.” Brian Bell group chief executive officer Cameron Mackellar, in welcoming this news, said the country needed that now more than ever, as it “will most certainly help kick-start a somewhat subdued economy”, as well as their business, particularly in the regional locations. “It will be great to hear when operations will resume and see the positive impacts on all those small-to-medium enterprises (SMEs) who absolutely relied on Porgera operations.” The Stanley Hotel and Suites general manager Geoff Haigh said like everyone in the hospitality industry, they were pleased with the news about the Porgera gold mine reopening. This will provide a much needed boost to the economy in general,” he said.



Part of the 789 truck fleet parked up at the Porgera mine following the shutdown last year. – Picture courtesy of PJV Media

The Porgera chamber of commerce and industry said it was a relief to the local community and business houses in the Porgera-Laiagam and Enga. President Nickson Pakea said the closure of the mine a year ago had severe implications on smaller businesses operating from the business spin-off catchments of the Porgera mine. The mine has been closed and was on care and maintenance since last April over the rejection by the State to renew the special mining lease. It is set to resume operations later this year. As per the terms of the agreement, ownership of Porgera will be held in a new joint venture owned 51 per cent by PNG stakeholders (Kumul Mineral Holdings Ltd, Enga government and landowners) and 49 per cent by Barrick Niugini Ltd (BNL).

### **Porgera LOs oppose Barrick**

BY FRANK RAI, Post-Courier, April 13, 2021

Affected landowners from Porgera mine in Enga Province have vehemently opposed Barrick Niugini Limited’s return to re-open the mine. Porgera River Alluvial Miners Association founder and chief executive officer Opis Papo said the affected landowners will continue to oppose BNL’s return to Porgera. The affected landowners took the stance after learning from the media on Prime Minister James Marape’s announcement to re-open Porgera mine with a “far superior deal” with BNL. Last Friday, Mr Marape, Mining Minister Johnson Tuke, Enga Governor Sir Peter Ipatas with other MPs and Barrick Gold chief executive officer Mark Bristow sealed the agreement for the company to move in to re-open the mine. “We, the mine affected Porgera River landowners and other lease for mining (LMP) landowners including those affected, have not been consulted before inviting Barrick back to Porgera,” Mr Papo said.

He said the affected landowners have lodged serious environmental fraud, socio-economic impact and environmental complaint against BNL which led to the Government's non-renewal of the special mining lease (SML) in April last year. The former Laigaip Porgera MP said the National Government promised to assess the socio-economic and environment damages and audit fraud complaints in November 2020. Mr Papo said this has not happened and while affected villages and landowners wait for a positive response from the government, the announcement by PM Marape for BNL to re-open Porgera mine was a 'slap in the face.' "Through the Prime Minister's media release on April 5, we are led to believe that because of Barrick's numerous court cases against the Government and for economic reasons, the government is allowing Barrick back as operator of Porgera Gold mine without addressing the complaints registered by landowners," he said. Mr Papo said since an agreement has been sealed to re-open the mine, landowner issues should be priority for the mine operator and the National Government.

### **Wafi-Golpu next priority, says Tuke**

April 12, 2021, The National

WAFI-GOLPU Mine in Morobe is the next priority for the Government, according to Mining Minister Johnson Tuke. Tuke said this in Port Moresby on Friday after the signing of the framework agreement with Barrick to reopen the Porgera Mine in Enga. "At this juncture, let me also announce that Wafi-Golpu is the next project which this Government is looking forward to endorse before its term expires," he said. "Hopefully, in the course of this year's political year calendar, I will endorse or grant a licence Special Mining Lease to Wafi-Golpu. "This Government is proactive in its approach, this Government is proactive in committing itself to deliver what it meant to deliver. "Wafi-Golpu, irrespective of the court proceedings, the manner is more or less uniform. "Though Barrick has taken us to court, we (Government and Barrick) work in harmony. "It's better to work with the devil you know than the devil you don't know."

### **Deal sealed to reopen mine**

By PETER ESILA, April 12, 2021, The National



Mining Minister Johnson Tuke (left), Prime Minister James Marape and Barrick Gold Corporation president and chief executive Mark Bristow addressing the media at Government House in Port Moresby on Friday after the signing of the Framework Agreement for the new Porgera mine.  
— Nationalpic by JOEL HAMARI

PRIME Minister James Marape says the Government hopes to achieve greater benefits for Papua New Guinea through more resource projects. He said this in Port Moresby on Friday after witnessing the signing of the framework agreement with Barrick to reopen the Porgera Mine in Enga. PNG

stakeholders (Kumul Minerals Holdings Ltd, Enga government and landowners) own 51 per cent of the mine. “This announcement is a significant milestone in the Government’s effort to build strong frameworks in the resource sector which will benchmark future considerations for similar projects nationwide. “In the old structure, State parties only had five per cent through Mineral Resources Enga (2.5 per cent Enga government and 2.5 per cent SML Landowners), while 95 per cent was held between Barrick Niugini Ltd (47.5 per cent and 47.5 per cent Zijin).

Under the new deal, the equity split is 51 per cent and 49 per cent in favour of PNG stakeholders. He said there was opportunity for landowners to increase their equity beyond 15 per cent with the additional 10 per cent free equity paid for by Barrick. The royalty paid was two per cent to the SML landowners and the Enga government but the new deal secured an additional one per cent to three per cent. “Up to 2019, the economic split stood at around 25 per cent for the PNG stakeholders with equity and taxes,” Marape said. “The new deal will see that move to around 53 per cent in favour of the PNG stakeholders over the full life of the mine. The new arrangement does not give away any tax concessions which means that the State is able to collect its taxes upfront. “There is applicable 30 per cent corporate income tax to the project.

“An additional two per cent are paid for fiscal stability, previously conceded by the state. “In terms of community obligations, Barrick will pay US\$3 million (K10.6 million) annually for 10 years to Porgera Sustainably Development Fund, and a further US\$15 million (K53 million) upfront to appropriate categories of landowners. “The biggest possibility in the agreement is that the State retains the right to acquire the full 49 per cent of the shares in 10 years’ time at fair value and that Barrick finance the required start-up of the mine.” Marape added that other key benefits captured in the agreement included the immediate employment of citizens and significant personal income tax inflows and development of key leadership and technical capabilities for Kumul Mineral Holdings Ltd in view of their future involvement in mining projects in the country.

### **Barker discusses closure**

By CLARISSA MOI, April 9, 2021, The National Business

THE closure of the Porgera gold mine in Enga for a year has not only affected job loss and revenue but also caused extensive deterioration to the mine site, economist Paul Barker says. Barker, who is also the executive director for the Institute of National Affairs, said this included water entering the mine, deterioration of plant and equipment all of which cost a lot of money to be restored. He told *The National* that if the Government planned to be the majority shareholder and, therefore, beneficiary of the mine, clearly the State would have to pay its share in rehabilitating the mine site. Barker said this following the announcement by Prime Minister James Marape earlier this week that the Government was poised to sign an agreement with Barrick Gold Corporation to reopen the mine, 12 months after its closure over the rejection of renewing the mining lease by the State.

“It’s a year now since the decision by the Government advising Barrick and their partners that their operating licence would not be renewed,” he said. “This caused a devastating impact in terms of loss of jobs, contracts, company earnings and, therefore, tax revenue from both corporate tax, salaries and wages tax and foreign exchange earnings. At the worst possible time, when the Covid-19 was impacting the economy and revenue and when gold prices reached record levels, when most other commodity prices were really low. “The impact on households who lost jobs and savings and contractors and employees of contractors across Enga and down the Highlands Highway to Lae, would have been tragic, widespread and hard hitting, highlighting that there are much better ways to go about resource project agreements to achieve the objectives of the Government and other parties, notably in improving or shifting the share of benefits from the mine towards the Government and local (non-company and community) interests.

“It’s very unfortunate that negotiations and constructive resolution of the issues did not occur prior to last April, especially as clearly the company (Barrick) was willing to dialogue constructively with the Government and agree to arrangements which would substantially enhance local benefits, without the incredibly costly closure for a year. “It’s good to hear many of the issues have now been addressed and will now be agreed to between the investors and the Government. “There are clearly other issues which will need to be addressed, including who is going to pay for the rehabilitation of the mine site and restoration of operations.”

### **PNG's Porgera gold mine set to reopen**

New Zealand on 9 April 2021

The Porgera gold mine in Papua New Guinea is on the verge of reopening. The Canada-based miner Barrick Gold says it's about to finalise an agreement with the PNG government to reopen the gold mine. Porgera has been closed for almost a year while the Government sought to negotiate better benefits from the mine. Barrick's lease over the lucrative Enga province mine expired last April, and the government refused to extend it. Although the government had wanted the mine to be PNG operated, Prime Minister James Marape appears to have reached a compromise. *Mining Technology* reports the new agreement will see a joint venture between Barrick Niugini and PNG Government to operate the mine. It is subject to increased ownership for PNG and a fair sharing of economic benefits. Barrick Niugini Ltd, owned by Barrick Gold and China-based Zijin Mining, will continue as the operator of the mine.

### **Placer Dome Gold Mine – Porgera – Papua New Guinea**

Mining Technology on 8 April 2021



The Porgera gold mine is located in Enga Province, about 600km north west of Port Moresby. The mine is operated by a joint venture between Placer Dome (75%), Orogen Minerals Ltd (20%) and

Mineral Resources Porgera Pty. Ltd (5%), the latter two representing the state of PNG and local landowners. In early 2006, Barrick Gold Corp acquired Placer Dome in a US\$10.4bn takeover, thereby acquiring its interest in Porgera, in which Placer had increased its own holding from 50% during 2002 following its take-over of Aurion Gold Ltd. Porgera was initially an underground operation, with open-pit mining becoming increasingly important from 1993 onwards.

Underground production ceased in 1997, but was resumed in 2002. In 2005, 11% of the mine's output came from underground, with the remainder sourced from open pits and low-grade ore stockpiles. Using an additional secondary crusher and treating higher ore grades, Porgera upped gold output by 20% in 2004, producing 1.02Moz at a cash cost of US\$192/oz. However, its output fell again to 835,000oz in 2005, with open-pittable resources nearing depletion. For the remaining life of the mine, production will be obtained from residual underground resources and from stockpiled low-grade ore.

## **GEOLOGY AND RESERVES**

Mineralisation occurs along the margins of the Porgera intrusive bodies. The Porgera Zone VII orebody is an epithermal style orebody hosted within thermally metamorphosed sediments of the cretaceous. The four precious metal associations are: auriferous pyrite, sphalerite and galena; coarse euhedral auriferous pyrite; fine anhedral auriferous arsenical pyrite; gold and electrum. The majority of gold occurs as submicroscopic gold associated with pyrite. As of December 2004, proven and probable reserves totalled 58.37Mt grading 3.9g/t and containing 7.31Moz of gold, plus measured and indicated mineralisation containing a further 3.16Moz. Exploration by the joint venture continues to identify medium and low grade extensions to the north of the Main Zone.

## **MINING**

The open pit has been mined in five stages, with final-stage overburden removal taking place during 2001. Ore is currently mined in the Stage 5 pit, as well as from underground. The open-pit truck and shovel fleet was expanded in 1995, with an O&K RH200 shovel and five Caterpillar 789 trucks. It was again expanded in 1997 to increase production rates from 150,000t/day to 210,000t/day. The mine now handles more than 210,000t/day of ore and waste, with a target supply to the mill of 17,700t/day of ore. Material-handling requirements in 2005 totalled 6Mt of ore and waste.



## **ORE PROCESSING**

Run-of-mine ore is crushed and ground, free gold is recovered in a gravity circuit and flotation is used to recover a sulphide concentrate. This is then oxidised using autoclaves, producing feed for

conventional carbon-in-pulp cyanide leaching to recover the contained gold. Low-grade stockpile and open pit ore are crushed using a gyratory crusher. Coarse ore is conveyed from the stockpile to two parallel SAG mills. The discharge is pumped to three clusters of cyclones in closed circuit with three ball mills. Coarse SAG mill discharge is crushed in two cone crushers and returned to the SAG feed. The slurry is then pumped to the flotation circuit. A Knelson concentrator gravity separation circuit, installed in 1997, has improved recovery of free gold prior to flotation.

Flotation concentrates, thickened to 50% solids, form the feed for the oxidation process. Autoclave feed is pumped through three closed stainless steel carbonate reaction tanks in series, the concentrate being mixed with recycled oxidised slurry. The autoclaves operate at 1,725kPa pressure and 197°C, producing feed for the leaching and CIP circuits. Combined leach and CIP recovery is 90–95% of the contained gold. In 1999, a floatation expansion was installed and additional oxygen capacity was added to increase autoclave throughput.

### **GOLD RECOVERY**

Thickener overflow is percolated upwards through one of two series of five carbon columns, each containing a static bed of 1.5t of activated carbon. Recovery of gold from solution exceeds 99%. The elusion (ion exchange) circuit consists of two pressurised vessels each holding 10t of carbon. Pregnant carbon is eluted using 15 bed volumes of eluant at 140°C and 400kPa pressure. 10t/d of carbon are stripped. During electrowinning, gold and silver metal is precipitated on to steel wool. It is then pressure filtered in a plate and frame press. The resultant ‘cake’ is smelted in a 1,000kg induction furnace to produce bars of doré bullion averaging 88% gold.

### **Alluvial mining more harmful**

BY PETERSON TSERAHA, Post-Courier, April 8, 2021

ALLUVIAL mining is the major cause for environmental damages in Bougainville, an activist said yesterday. Former PNGDF soldier Justin Kungkei said the uncontrolled and unregulated alluvial mining activities on the island, especially Central Bougainville, has contributed immensely to the degrading river systems and has impacted the general environment. He said everyday there was a new site discovered for alluvial mining and the use of chemicals has now become a norm for alluvial miners. Mr Kungkei said Panguna mine and surrounding areas were being crowded with miners from all over Bougainville, while others were coming in from other parts of the country. He said Bougainvilleans have been pointing fingers at Bougainville Copper Limited (BCL), but the damage caused by alluvial mining has exceeded the damage caused by the mining company. “Now we are faced with a much bigger problem caused by ourselves. We often blame BCL all the time but we need regulations and control right now before something drastic happens,” Mr Kungkei said.

“First of all there has to be a big environmental awareness throughout Bougainville and the Mining Department needs to start regulating alluvial mining,” he said. Mr Kungkei said during the BCL days, mining waste were contained along the west coast, adding that alluvial miners were mining everywhere, disposing waste into the environment and river system. “The biggest river on Bougainville is Luluai River that borders Central and South Bougainville. It is now being polluted because of alluvial mining up in the Kongara constituency. A lot of traditional methods used to trap fish are now no longer working because fish have now migrated to other parts in small streams leading to big rivers,” he said. The activist also said the use of chemicals was uncontrollable and a lot of miners were not aware of the dangers posed by those chemicals to the surrounding environment. “Down at the coast, a lot of plants are dying because of a lot of soil being dumped by high tide, and mercury is also being used,” Mr Kungkei said.

## **Talks in line with principles: Firm**

April 7, 2021, The National Business

BARRICK Gold Corporation says discussion between the company and the Government is in line with principles announced last October, providing for a joint venture between Barrick Niugini Ltd (BNL) and the State to operate Porgera going forward. The company said in a media release on Monday that this was on the basis of increased PNG ownership and a fair sharing of economic benefits. The company was reacting to a recent statement by Prime Minister James Marape announcing that the Government was poised to sign an agreement with Barrick Gold for reopening of the mine, 12 months after its closure over rejection of renewing the mining lease by the State. “Barrick Gold Corporation notes the statement released by Prime Minister James Marape announcing an imminent agreement to reopen Porgera mine,” Barrick said in its statement. “Barrick and the Government have continued to hold constructive discussions on a framework agreement for the recommissioning of Porgera, which has been on care and maintenance since April 2020. The agreement under discussion is in line with the principles announced in October, providing for a joint venture between Barrick Niugini Ltd and the Government to operate Porgera going forward on the basis of increased PNG ownership and a fair sharing of economic benefits.

“BNL would continue as the operator of the mine. “We remain hopeful that we will reach agreement with the PNG Government on a long-term partnership that will see the reopening of Porgera in the near future.” Marape said State-owned Kumul Minerals Holdings, which was granted the special mining lease (SML) over Porgera, could have started operating the mine but was unable to do so because of the court cases Barrick had filed which was delaying the reopening and had, therefore, caused the Government to enter into these negotiations. “We realised that these court cases could have dragged on for years, so we have reached out for a possible commercial negotiation with Barrick,” he said. “We are almost at the point of signing an agreement with Barrick. “Let me assure my landowners: there is more for you. “Let me assure Enga: there is more for you. “Let me assure PNG: we are restarting Porgera to a better deal for all of us, with better project economics for the county. “Barrick has agreed with us on an exit option in the new Porgera agreement 10 years from now.” The Porgera joint venture is an open pit and underground gold mine located in the Enga. BNL is a joint venture company in which Barrick and Zijin Mining group – each owns 50 per cent.

## **Govt close to sealing deal with Barrick**

April 6, 2021, The National

THE Government is poised to sign an agreement with Barrick Gold for the reopening of the Porgera Gold Mine in Enga, 12 months after its closure last April over rejection of renewing the mining lease by the State, Prime Minister James Marape announced yesterday. Announcing the breakthrough in negotiations by the State and Barrick, Marape said Papua New Guinea would receive a “far superior deal” than the 31 years from 1989 to 2021. “I’m announcing to our country that within the principles of my Government, which includes getting more from our natural resources, we are in a better position now to sign an agreement with Barrick for what will be a new Porgera,” he said. “I can assure our country that this is a far-superior and better deal, meaning our landowners and Enga provincial government will get more, and the balance of equity through Kumul Minerals will mean we hold majority in equity.”

## Vale concludes sale of New Caledonia nickel plant

*The Brazilian-owned mining company Vale has concluded the sale of its New Caledonia nickel plant. Radio New Zealand on 1 April 2021*



Photo: AFP PHOTO / FRED PAYET

Following months of disquiet in the French territory over the proposed sale, Vale has confirmed the consortium Prony Resources as new owner. Pro-independence groups in New Caledonia had been firmly opposed to the deal because of the involvement of a Swiss commodity trader Trafigura in the consortium. However Vale's chief executive officer, Eduardo Bartolomeo, said the sale would benefit the plant's New Caledonian employees and all its stakeholders. He said it also enabled Vale to withdraw from New Caledonia in an orderly and responsible manner. While the Brazilian company hasn't disclosed the exact terms of the deal, it said that \$US1.1 billion would be invested in the New Caledonia assets. As part of the sale agreement, Vale was entitled to a long-term nickel supply contract for a portion of the operation's production. The company said this would allow it to continue to meet the growing demand for nickel from the burgeoning electric vehicle industry. Economic unrest and disagreement over the sale of the country's nickel unrest [had earlier led to the collapse of the French territory's government](#), which was still [trying to elect a new president](#).

## Major companies call for moratorium on deep-sea mining

Radio New Zealand on 1 April 2021

Major car companies are among the global companies who have signed up to a World Wildlife Fund call for a moratorium on deep-sea mining. Volvo and BMW say they won't buy metals sourced through deep sea mining until the risks are far better understood.

[Advocates of deep sea mining](#) say polymetallic nodules found on the Pacific seabed are needed to make batteries for electric vehicles which will aid transition to de-carbonised economies. But Volvo, BMW and other companies signing up to the [WWF call](#) say they will exclude any deep sea minerals from their supply chains before environmental risks are "comprehensively understood". Scientists have warned that deep sea mining would inflict long-lasting damage to ocean ecosystems, while [calling for a precautionary pause](#) while more research is conducted on this little studied frontier of the earth's environment. Meanwhile, tech giant Google and Korean battery maker Samsung SDI have also signed up to the call for a moratorium. They and the other companies have



committed to not finance any deep sea mining companies. The companies say alternatives to deep sea mining must be explored urgently, including recycling, reducing demand, and developing "responsible" land-based mining.



BMW (file photo). Photo: 123rf

Several Pacific governments including the Cook Islands, Kiribati and Nauru have backed exploration activities by companies spearheading the embryonic deepsea mining sector. Regulations to guide deep sea mining in international waters are yet to be settled on at the United Nations-backed International Seabed Authority. The Authority, which consists of 167 countries, has so far issued exploration contracts to 21 companies, but mining cannot commence until a mining code is agreed on. The WWF call comes as Pacific civil society last week launched a campaign to lobby for a global ban on deep sea mining activities.



DeepGreen Metals seeks to mine parts of the Pacific ocean seabed for polymetallic nodules. Photo: DeepGreen Metals

## **Ok Tedi resumes operations after surge**

April 1, 2021, The National

OPERATIONS at the Ok Tedi Mining Ltd (OTML) will resume today after operations were suspended temporarily on March 19 following a surge in Covid-19 cases detected at the mine site. OTML acting managing director and chief executive officer Kedi Ilimbit made the announcement yesterday saying while the start-up of operations will be gradual, ramp up to full production is expected to take up to two weeks. Ilimbit said the temporary suspension of operations had allowed the company to repatriate personnel who were not required onsite, restrict the movement of people and conduct a mass testing exercise which saw over 10,000 swab samples being collected from the workforce and town residents and sent to accredited laboratories in Australia and PNG for analysis.

Most of the positive cases that were recorded from these tests were asymptomatic and have recovered or have been medically cleared as per the Department of Health and the World Health Organisation's testing and isolation protocols. "The safety, health and wellbeing of our workforce, our communities, business partners and support service personnel continues to be our number one priority," Ilimbit said. "The testing conducted during the temporary suspension of operations has been critical in ensuring a successful restart as scheduled. "Hence, our immediate focus now is to safely resume operations and ensure we effectively manage our Covid-19 control measures. "Our medical team, including all personnel who assisted with the mass testing did a tremendous effort, which has enabled us to contain the spread of the virus and provide the necessary care to those who tested positive to the Covid-19." Despite the temporary suspension of operations, the company forecasted a solid profit outlook for the year.

## **K92 delivers record high production**

March 31, 2021, The National Business

THE Kainantu gold mine in Eastern Highlands delivered a record production and development last year, according to operator K92 Mining Inc. Chief executive John Lewins said some major achievements were achieved in the final quarter of the year. "2020 represented another transformational year for K92," Lewis said. "In terms of operations, Kainantu delivered record throughput, production and development, and finished the year strong, with multiple quarterly records achieved in the fourth quarter. "In the third quarter, K92 achieved two major growth milestones: the completion of the stage 2 plant expansion commissioning, and; the stage 3 expansion PEA (preliminary economic assessment) study. "The stage 2 plant expansion, has already delivered a notable step-change in terms of the capabilities of the operation, doubling throughput capacity from 200,000 tpa (tonnes per annum) to 400,000 tpa.

"On exploration, Kainantu doubled the number of drill rigs to 10, providing a significant boost to not only the rate of drilling but our capacity to drill multiple targets concurrently. "In the second half of the year, this resulted in high grade mineralisation recorded at both the underexplored Karempe and Judd vein systems. "Exploration results have increased our conviction for a higher throughput rate for the stage 3 expansion definitive feasibility study and resulted in more drill rigs being added through 2021. "Lastly, I would like to highlight that this transformational year was achieved in one of the most challenging environments globally due to the Covid-19 pandemic. "The dedication and resourcefulness of our workforce has been exemplary, and the support of government has also been a major factor in our success."

## **Kingston Resource owns project**

March 30, 2021, The National Business

KINGSTON Resources Ltd now owns 100 per cent interest in the Misima gold project in Milne Bay after completing all terms with former joint venture partner Pan Pacific Copper to acquire its 19 per cent interest in the project. Following receipt of all PNG regulatory approvals, Kingston has paid the AU\$1.65mil (K4.31mil) final tranche of the total consideration of AU\$2mil (K5.23mil). According to the announcement released on the Australian stock exchange last week, this now formalises Kingston's 100 per cent ownership of the project. Details of the acquisition agreement were announced on Nov 12, 2019, and updated last June 24. Kingston managing director Andrew Corbett said this was an outstanding outcome for shareholders and an important milestone for the company in its pathway to become a new gold producer in the Asia-Pacific. "The completion of this transaction provides Kingston with 100 per cent ownership of our flagship asset, which is rapidly progressing towards development," he said.

"Since we first acquired an initial 49 per cent interest in the Misima gold project back in late 2017, we delivered a number of key project milestones that culminated in the delivery of a highly positive pre-feasibility study (PFS) for Misima in 2020. "This PFS clearly demonstrated that Misima is a large-scale, long-life, low-cost gold project that is set to deliver significant value and opportunities for all stakeholders. "We have grown the initial resource base from 2.3Moz (million ounces) to 3.6Moz, delivered a maiden 1.35Moz ore reserve, and we expect both our resources and reserves to continue to grow through ongoing in-fill drilling and testing of exploration targets. "Completion of this acquisition provides Kingston with a streamlined and simplified ownership structure, providing a strong platform and added flexibility to continue checking off the necessary milestones to re-start gold production on Misima Island."

## **Local contractor gets green light to buy mining fleet**

March 30, 2021, The National Business

GEOPACIFIC Resources Ltd, operator of the Woodlark gold project in Milne Bay, has issued a letter of intent to HBS (PNG) Ltd to support the purchase of its first tranche mining fleet. According to a market release last week, the letter provides HBS with the authority to order five Caterpillar 775 haul trucks and one Caterpillar 6015 excavator, which will be delivered to the site during the fourth quarter of this year. It said the commencement of mining operations in the fourth quarter (Q4) of 2021 was consistent with the overall mining strategy which entailed HBS undertaking pre-strip and the first three years of mining allowing Woodlark to leverage off their in-country expertise and de-risk the early stages of the project. It added that mining contract discussions with HBS were progressing well with the contract anticipated to be finalised in the second quarter.

Chief executive officer Tim Richards said: "Committing with HBS to the procurement of this mining equipment reflects our confidence in the project and the progress that has been made since the release of the execution update in Q4 2021. "HBS already has a significant presence on the island assisting the company with our pre-construction activities which are progressing according to schedule. "The Q4 2021 delivery is consistent with our project timeline and sees the company well placed to achieve our Q4 2022 target for gold production. "HBS is a local company with an outstanding reputation in the mining sector and we look forward to working with them to develop the Woodlark gold project over the coming years."

## **ABG receives environment damage petition**

BY PETERSON TSERAHA, Post-Courier, March 26, 2021

PANGUNA mine affected people have for the first time presented a petition to the Autonomous Bougainville Government over environmental damages, the major cause of the 10-year crisis on the island. Dominic Sipu, chairman of the landowner group, said he represents more than 9000 people, when he presented the petition on Wednesday to ABG Mining Minister Rodney Osioco. The environmental damages caused to the Kwarong River and other areas near the mine has been the major cause of the crisis, but has been overlooked for many years after the crisis due to its sensitivity. A newly-formed group, comprising youths, women, men and chiefs of the upper, middle and lower tailings areas, has decided to take the issue head on, resulting in the preparation and presentation of the petition.

“I stand here representing my indigenous affected people of SML (special mining lease), upper tailings, middle tailings and lower tailings who have been susceptible and suffered by the mess that BCL has left behind due to the uprising in late 1988,” Mr Sipu said. The group stated that their main issue they want addressed is the dumping of wastes into the river systems and the impacts that has had on the environment over the years. The petition was addressed to the ABG for it to find solutions to save what is left of the environment and improve it for future generations. “We are concerned that when we concentrate on the mining issues or re-opening of Panguna mine it will take time and more damages are expected to take place to the lives of our people and our environment,” Mr Sipu said.

## **Garry: Deals come after stakeholders’ negotiations**

March 26, 2021, The National Business

THE memorandum of agreementa (MoA) for mining projects are usually agreed on after the completion of negotiations between stakeholders of the various mining projects, according to the Mineral Resources Authority (MRA). Managing director Jerry Garry said this in response to questions from *The National* on the process of producing and signing MoAs for mining projects in the country. Garry explained that the negotiation begins after the mining minister officiates the development forum as stipulated under the Mining Act 1992. “Each project MoA has a review period stipulated within the agreement itself,” he said. “The process is usually lengthy and very expensive, as the process demands full members of the respective stakeholders, including the Government represented through the State team comprising of representatives from each department, the mining company, the host provincial and local level governments, project landowners and other invited parties.

“The process starts with negotiations by the stakeholders to the project. “Upon conclusion of negotiations, the document is subject to vetting through the Department of Treasury for fiscal clearance and state solicitor for legal clearance, the document is submitted to the National Executive Council for approval and signing by stakeholders follows thereafter. “When parties observe, adhere and are guided by the prevailing laws, the MoA can be concluded smoothly and in reasonable time. “However, when demands are outside the ambit of the laws and when a consensus cannot be reached, improved benefits may be lost. “Thus, the MRA always encourages everyone to discuss benefits within the ambits of the prevailing laws; and those outside the law which require amendments to certain Acts and policies must be raised along appropriate channels.”

## **MRA seeks views over project**

By CLARISSA MOI, March 26, 2021, *The National Business*

THE Mineral Resources Authority (MRA) is in the process of seeking views of all project stakeholders of the Simberi gold mine in New Ireland on the appropriate actions to take regarding the revised memorandum of agreement (MoA). Managing director Jerry Garry told *The National* that the initial Simberi revised MoA was approved for signing by the National Executive Council (NEC) in April 2017. He said since then, many attempts by the MRA to get the 2017 Simberi revised MoA, signed by the parties, had been unsuccessful because the New Ireland government (NIPG) had been refusing to sign. Garry said the New Ireland government's grounds for refusing to sign the revised agreement was that its request for increased benefits had not been considered. "The benefits include royalties, special support grants and the tax credit scheme. "The State maintained its position that the current rates stipulated under relevant laws would remain until such time these rates were reviewed." Garry said the demands put forward by NIPG were:

- 10 PER cent royalty rate, an increase from the two per cent prescribed rate;
- 10 PER cent special support grant (SSG), an increase from 0.25 per cent prescribed rate; and,
- 10 PER cent tax credit scheme (TCS), an increase from 0.75 per cent.

He noted that last year, the proposed changes were submitted by NIPG through an NEC submission to the Office of the State Solicitor (OSS) for legal clearance. "The OSS advised that the Simberi revised MoA was approved by the NEC in 2017 and had gone through the legal and the established MoA vetting process and that all parties should sign," he said. "The MRA is currently in the process of seeking the views of all project stakeholders on what would be the appropriate action to take in respect to the 2017 Simberi revised MoA. (This is) because it has been five years since the MoA was agreed on by the stakeholders to the Simberi project. "The duration of the revised MoA is five years and the term has naturally lapsed," Garry said. St. Barbara Ltd is the operator of the Simberi gold mine.

## **Pacific call for global ban on deep sea mining**

Radio New Zealand on 26 March 2021

A widespread Pacific civil society call for a global ban on deep sea mining activity has been launched. The Pacific Regional NGO Alliance of church and civil society groups kickstarted their campaign to stop deep sea mining yesterday in Fiji.

Their Blue Line Statement said that as custodians of the world's biggest ocean, Pacific people had a moral obligation to protect it against exploitation and destruction. However, a number of Pacific governments including the Cook Islands and Nauru have backed exploration activities by companies spearheading the embryonic deepsea mining sector. Opening the Blue Line launch, the Secretary General of the Pacific Conference of Churches, Reverend James Bhagwan said governments and companies claiming there would be minimal damage to the ocean from deep sea mining ran the risk of being on the wrong side of history. "That which is actually known about our ocean depths actually runs contrary to the push for deep sea mining," Bhagwan said. "Scientists regularly warn against the devastating and irreversible damage to ecosystems and habitats; the resulting biodiversity loss, including of many known endemic species and others yet to be identified, that will be affected and most likely will never recover; the risk of giant sediment plumes travelling beyond the mining sites, smothering and potentially destroying all life forms on the sea floor."



The general secretary of the Pacific Council of Churches, James Bhagwan. Photo: RNZ / Jamie Tahana

The coordinator of the Pacific Network on Globalization, Maureen Penjueli, told the campaign launch that scientists have given clear warnings about damage to oceans and the link to climate change. "Recently they warned us about the carbon storage facilities of our ocean floor itself. Recovery of biodiversity destruction would be something that would not happen in human timelines." She said the Pacific Ocean had long been viewed by external powers as a kind of "anti-space" or void. "A space in which great tests and experiments have taken place, first for world peace. "In the past it was used as the proving ground for nuclear weapons. Our people drew a Blue Pacific Line and said never again." She said the advocates of deep sea mining were now presenting the industry as necessary for the world's fight against climate change under "false narratives of green technological revolution".



The Deep Sea Mining Campaign warns that if nodule mining is allowed to take place in the Pacific Ocean, species such as the Sperm Whale could be adversely affected. Photo: WILLYAM

Companies such as [DeepGreen Metals](#), which is looking to mine parts of the Pacific, say the world needs polymetallic nodules on the seabed for materials to make batteries for electric vehicles that will drive the carbon-free societies of the future. Bhagwan described this argument as spurious, saying the minerals needed could be sourced from better recycling efforts and land-based resources.

In a [recent interview](#) with *RNZ Pacific*, the Cook Islands prime minister Mark Brown denied that his country was gambling with ocean health by opening up for deep sea mining exploration. Economic strains caused by the pandemic have highlighted the need for Cook Islands to diversify its tourism-reliant economy. The Cook Islands' roughly two million square kilometres of Exclusive Economic Zone contains an estimated 10 billion tonnes of polymetallic nodules, rich in manganese, nickel, copper, cobalt and rare earth minerals. Bhagwan noted that decades ago land-based mining also began with promises of economic and social benefits for Pacific people. "And our lived experiences in the Pacific show clearly that the powerful corporations benefit the most while it is our people who bear the costs of destruction of our natural environment. "Across resource frontiers of our region, history records this deception time and again."



Cook Islands Prime Minister Mark Brown Photo: Cook Islands Ministry of Foreign Affairs & Immigration

Tuvalu's former prime minister, Enele Sopoaga who attended the online launch, said countries inviting seabed exploration were opening up a huge range of problems for ocean health. "Soon they will be coming to Tuvalu, especially the vulnerable economies looking for the extra dollar. No. This is not on as long as I am in the parliament of Tuvalu. "I will use all my energy to stop this mad idea about mining the seabed." Sopoaga is also calling for an end to the shipment of nuclear waste and disposal of plastics.

### **Rethinking the new minerals boom.**

#### **Consumption and production patterns need to change in the energy transition.**

Andy Whitmore, Financial Times, 25 March 2021

The mining industry is currently alight with talk of a new commodity "supercycle". The last one coincided with China's rapid industrialisation growth spurt, and whether it is a supercycle or not, a major boom looks likely because of infrastructure-led spending to speed recovery from the pandemic coupled with the energy transition. Indeed, the talk of Green New Deals seeks to wed this energy transformation with that economic stimulus. Mining companies, and their investors, are obviously enthusiastic about such an expansion. Mining entrepreneur Robert Friedland gloated that "if we get a Green New Deal where bankers just hit the zero keys . . . it would make our day".

However, miners are also taking advantage of their role supplying metals to renewables, batteries and electrical infrastructure to create a new green narrative forming — the "black-to-green revolution". In this new world, mining companies are the climate heroes saving the world, although it

also conveniently downplays overall demand for critical metal end-uses, in the likes of construction, aviation, electronics and the arms industry. For example, even in the highest demand scenarios, under no circumstances will the renewable energy sector consume the majority of the annual production of copper. The new demand supporting the energy transition does not change the act of mining. Extracting minerals, such as lithium, cobalt or copper, is still a dirty business with significant environmental and human impact. This new boom threatens to open new extractive frontiers, in the global south but also in North America and Europe. There is an urgent need to deal with the potential widespread destruction and human rights abuses that could be unleashed. Although it is crucial to tackle the climate crisis, and rapidly transition away from fossil fuels, this cannot be achieved by just expanding our reliance on other materials. The energy crisis is fundamentally a resource-usage crisis.

Our use of natural resources has more than tripled since 1970 and is on a continue dgrowth path. According to the International Resource Panel, 90 per cent of biodiversity loss and water stress are caused by resource extraction and processing and these same activities contribute to about half of global greenhouse gas emissions. A new War on Want report, called “A Material Transition”, seeks to explore these dilemmas. It looks first to those communities affected by the resource extraction. The concept of a “just transition”, currently applied to energy use, must be extended to those who would otherwise inhabit “sacrifice zones”. On the supply side, the focus on supply-chain due diligence brings hope that investors and the end users of transition minerals — such as electric vehicle manufacturers — will be able to eradicate human rights abuses from their supply chains. An example is an addition of mandatory human rights due diligence in the proposed EU regulation on batteries. Civil society and affected communities can work directly with suppliers and manufacturers to ensure the effectiveness and legitimacy of key initiatives.

On the demand side, there are a number of practical solutions that should be initiated or accelerated to enable better-informed choices about our energy and consumption, and to reduce the need for new resource extraction. However, it is not enough to switch to green growth, such as simply increasing the production of new electric vehicles. Recently the European parliament has demanded the first-ever EU targets to reduce overconsumption. MEPs have voted to push for legally binding targets to reduce resources by 2030 and bring EU consumption within planetary boundaries by 2050. Such thinking is necessary to moderate any new minerals boom. As Sir Partha Dasgupta notes in his government review on biodiversity, we need to change our production and consumption patterns. The human economy is bounded, and it would be entirely counterproductive to seek growth that damages nature.

\*Andy Whitmore is author of the War on Want ‘A Material Transition’ report and co-chair of the London Mining Network\*

## **One sided Govt view sways Cook Islands Opposition - Evans**

Radio New Zealand on 25 March 2021

An internationally celebrated environmentalist in the Cook Islands, Jacqui Evans, says she is disappointed in a change in stance on seabed mining by the Opposition, Democratic Party.

The Opposition leader, Tina Browne, announced last week they would no longer support the call for a 10 year moratorium on seabed mining exploration. This was in line with the Cook Island Government's position. Jacqui Evans said the Opposition switch showed how effectively the government had pushed its views on seabed mining. "It's a reflection of the kind of discourse there is in the country at the moment where the government has been quite active in promoting one side of the story and people are starting to think that mining is not going to have much of an impact and it is going to be worthwhile getting that revenue, so people are starting to look favourably to it".





Jacqui Evans receives the 2019 Goldman Environmental Prize Photo: Goldman Environmental Prize

Evans was awarded the Goldman Environmental Prize in 2019 for her work in helping establish the Cook Islands Marae Moana, one of the biggest marine reserves in the world. She was later sacked by the government with environmentalists claiming it was over her opposition to seabed mining while the government said at the time it chose not to renew Evans' contract so it could replace her with someone more attuned to working with grassroots communities and agencies. Meanwhile the Democratic Party said in ending its opposition to the 10 year moratorium it was not saying it now supported seabed mining, rather that such a moratorium wouldn't work in the Cook Islands' favour. The government said exploration was underway but any commercial mining was years away.

### **Bougainville's tough path to economic independence**

Radio New Zealand on 25 March 2021

The Bougainville Government is being advised to set up a wealth fund that could make payouts to all citizens on a regular basis. This is one of the ideas put forward by Papua New Guinea's National Research Institute, which has been looking at how Bougainville can fare economically if it becomes independent. They outline what a tough road ahead it will be, though likely greater access to fisheries revenues could bring significant benefits. One of the researchers, Australian National University emeritus professor in development economics, Ron Duncan AO [Order of Australia], said the earnings from fisheries could go into a wealth fund, such as exists in Alaska.

"Alaska has put money from its oil revenues into a sovereign wealth fund and paid out the dividends from that to all Alaskan citizens on a quarterly basis," he said. So every Alaskan citizen, man, woman and child receives a cheque from the dividend." Duncan said such a move gave all the citizenry a keen interest in ensuring the funds were well managed. The researchers estimated that about 30 percent of the tuna caught in PNG waters was in what would become the Bougainville EEZ. But presently just a fraction of the fishing income was returned to Bougainville by Port Moresby. The researchers wrote tax collection could also be improved, though most of the economy was informal or outside of the tax system. They also saw opportunities, but limited, in cash crops, such as coffee and cocoa, and in tourism, which was handicapped by poor infrastructure, at least in the short term.

"Transition to economic independence will take time; it will need to be staged, and it will require support from the PNG government," the researchers wrote. They also issued a warning on mining, saying the signatories to the peace agreement expected mining to re-start soon afterwards, and for this to fund economic independence. "Unfortunately, mining has remained dormant for two

decades, suggesting that a lot more work remains to be done before mining can recommence.

"While it may be preferable to leave the minerals underground (for future generations to exploit) as the preconditions for peaceful and sustainable mining are being put in place, the opportunity costs of the delay are the lost time, income and wellbeing of the current generation."

### **Pasca talks ongoing: Minister**

By SHIRLEY MAULUDU, March 23, 2021, *The National Business*

NEGOTIATIONS on Twinza's Pasca A project in Gulf is ongoing, says Petroleum Minister Kerenga Kua. Kua told *The National* that it would take some time for an agreement to be reached on the country's first offshore oil project. "(Project) still under negotiations," he said. "Generally, it could take few years to negotiate an agreed position. Once in a while, it takes less time. "Patience is important to all sides." Twinza said earlier that the talks were on the fiscal terms that would apply to the development of the gas-condensate field in the Gulf of Papua. "The company is committed to working collaboratively with the Government to deliver an agreement that allows the project to move forward toward development, while providing a higher state take than previous projects," country manager Roppe Uyassi said.

"Once the Pasca A gas agreement and the petroleum development license are in place, the project is well-positioned to enter the front-end-engineering and design phase later this year." Twinza was also looking forward to addressing with the SNT important non-fiscal opportunities, including domestic market commitment, third-party access to facilities and national content. "These matters were differentiated from land-based projects as Pasca A field is planned to be the first offshore development in PNG." Meanwhile, information from the company indicated that Twinza's principal asset is the Pasca A liquids-rich gas field offshore. The Pasca A field development plan had been completed, the petroleum resources certified and the programme necessary to obtain the licences for full field development was completed. Once the necessary Government approvals have been received, the Pasca A development will become the first offshore field development in the country.

### **Cook Islands Democrats change view on mining moratorium**

Radio New Zealand on 22 March 2021

The Cook Islands opposition believes a ten-year moratorium on seabed mining will serve little purpose. The idea of a moratorium was endorsed at the 2019 Pacific Islands Forum summit, winning significant support, but a number of Pacific nations, including the Cook Islands, has opposed it. The Democratic Party leader Tina Browne says committing to an arbitrary 10-year moratorium on commercial seabed mining is ill-advised.

But she says any decision on mining actually going ahead would depend on two critical factors. "One is the existence and availability of environmental friendly deep-sea mining technology, and secondly the existence and availability of Cook Islands specific scientific data. In other words what we are saying is that for any of the mining to go-ahead these conditions must be met," she said. Prime Minister Mark Brown has welcomed the opposition's change in stance, saying it now aligns with the government's position. Mr Brown told the *Cook Islands News* the government had always maintained the need to make decisions based on science rather than arbitrary timelines. Seabed Minerals commissioner Alex Herman said it is reassuring there is bipartisan political support. Marine scientist Steve Lyon agreed with the Democrats position. He said without the exploratory licences, good science can't be done as it is simply too costly.



Cook Islands opposition leader, Tina Browne Photo: supplied



Recovered nodules Photo: Cook Islands Seabed Minerals Authority

The conservation group Te Ipukarea Society called the party's move "very disappointing."

### **Ok Tedi suspends ops**

March 19, 2021, The National Business

OK TEDI Mining Ltd (OTML) is expected to make a loss of K210 million in foreign currency inflows as the company temporarily suspends operations at the mine starting today (Friday). According to OTML, the decision to suspend operations was made to protect its workforce, communities and operation from the Covid-19. The operations will be suspended for 14 days. OTML noted that the suspension coincided with the Government's national isolation strategy that would be rolled out starting Monday (March 22). A planned return to normal operations would be determined by the effectiveness of the control measures and when the spread of the virus has been contained. "The decision to suspend operations signifies OTML's commitment to take all reasonably practical measures

to ensure the safety, health and wellbeing of its employees, families, contractors and host communities and to enable the resumption of operations in a safe, economical and timely manner for the benefit of all stakeholders,” a statement from the company said. “Key measures the company will be implementing during the suspension include repatriating non-essential personnel to their home provinces and implementing a mass testing programme within its workforce.



“During the suspension of operations, there will be some employees who will be required to attend to normal work to maintain essential services or for care and maintenance. “Loss in revenue during the suspension is expected to be in the order of K210 million which will directly impact foreign currency inflows into PNG.” Meanwhile, the company is currently reviewing options following the Australian government’s announcement to temporarily stop the fly-in and fly-out of mine employees living in Australia. “We do not anticipate significant disruption to our operations as a result of the Australian government’s announcement. “However, we are looking at alternative ways to repatriate several of our expatriate employees during the suspension of operations. “The company had previously announced that it was suspending its international charter flights into Australia after Covid-19 cases were detected in Queensland from international travellers in hotel quarantine. “OTML employs directly over 1,800 employees, of which less than four per cent are expatriates.” OTML also indicated that it will be liaising with the PNG Government to assist with the procurement and roll-out of the vaccines for OTML employees.

### **Miner pledges to follow due process to acquire lease**

March 18, 2021, The National Business

THE Wafi-Golpu Joint Venture (WGJV) will follow due process until its application on special mining lease 10 is granted, an official says. WGJV principal community engagement adviser David Masani said this during the company’s various scheduled consultations with communities who would be affected by the K18.4 billion gold-copper project. Masani said the problem now was that people were using mainstream and social media to talk about the benefits and processes. “Our province is jumping ahead in the process, talking about benefits, businesses and contracts,” he said. “We are not following due process; the mandated process by the government.” Mineral Resource Authority representative Moses Mambu clarified that the environmental permit was one part of a longer process. “An environment permit does not mean the company can now develop this project,” he said.

Mambu said the application for SML 10 submitted in August 2016 was still with the Government and would go through a rigorous process before it was granted. For this to happen, a mining development contract will be signed, a memorandum of agreement (MoA) will be established between the national, provincial and local level governments, the landowners and WGJV through a developmental forum. “This agreement is yet to eventuate,” he said. “And two key benefits to be discussed under this agreement are royalties and equity. “These are only for people living along the pipeline footprint, SML area or the tailings outfall.” Mambu said two other agreements to be reached were the fiscal stability agreement and State equity acquisition agreement. “Such things are to be considered before granting the SML,” he said. “Once granted, the SML now gives company exclusive rights to commence construction on the project.”

### **NRI: B’ville’s location has possibilities for minerals**

March 17, 2021, The National Business

GIVEN Bougainville’s location within the Pacific Rim of Fire, the possibilities for mining various minerals, particularly gold and copper, are huge, according to National Research Institute (NRI). In a recent report on Bougainville, NRI noted that regaining confidence of foreign investors for mining in Bougainville, following the collapse of the Panguna mine, was proving very difficult. “Even more difficult is the effective management of the revenues from the sale of public resources such as minerals, forestry and fishing, which has long been a challenging problem for developing countries,” the report highlighted. “The primary management problem has been with the effective expenditure of the resource revenues. “Therefore, a major issue for discussion in Bougainville should be on whether institutional arrangements can be devised that will ensure that the resource revenues collected by the ABG – from, say, fishing, forestry or mining – will be put to good use in developing the economy.

“We have argued for a management system where a share of mineral rents are directly paid to the public in the form of compensation for the sale of their asset. “This has several advantages, including the fact that such transfers will bind the public across space and generations, concentrate attention on the returns from publicly owned assets, and create economic spillovers in the form of increased output and revenues for the budget. “The model used in Alaska to manage the collection and distribution of its oil and gas revenues seems to be very worthy of consideration by Bougainville. “This regime establishes a political constituency with an interest in protecting the revenues from corruption, waste, and so forth. “If Bougainville is to adopt a policy of this kind, the nature of politics dictates that it should be done as soon as possible. “Otherwise, if an alternative policy is adopted, it will be impossible to dismantle later as it will have formed its own constituency by then.”

### **Ramu Nico pays K2.9m in royalties outside project area**

Post-Courier, March 15, 2021

RAMU Nico has paid more than K2.9 million royalty payments to 14 local level governments in the Madang Province. The royalty payment is for the years 2018 and 2019 and had been shared equally among these LLGs which are outside of the impacted areas of the nickel and cobalt mine project. The announcement was made by the Community Affairs Department recently. General Manager Martin Paining said the payment of royalties to the LLGs outside of the project area is unique and not practiced by other mining developers in the country. Mr Paining said as per the memorandum of agreement (MOA) seven per cent of the total for every royalty payment is allocated to the 14 LLGs and shared evenly.

The 14 LLGs are Almami, Iabu and Yawar LLGs in Bogia district, Ambenob, Madang Urban and Transgogol in Madang District; Arabaka, Josephstaal, Kovon and Simbai in Middle Ramu district, Nahu-Rawa and Nayudo in Rai Coast district and Karkar and Sumgilbar in Sumkar district. The amount paid for the two years (2018 & 2019) was K2,982,534.10. Each LLG received equal share distribution of K213,038.15, which was directly paid into the respective LLG accounts last week. According to Ramu Nico, the company anticipates that when paying out royalties Ramu Nico wants to work with the provincial government, LLGs and landowners associations. This is to ensure a smooth and efficient operation of the project and to maintain the constant flow of such benefits. Usino LLG president Peiwa Aimai commended the company and challenged the LLGs to utilise the royalties and to use it for community projects to benefit the people.

### **Decision to reopen Panguna mine lies with landowners**

March 15, 2021, The National Business

The head of one of the Bougainville landowner groups affected by the Panguna mine, says any decision on re-opening the mine is for the landowners to make. The Panguna mine was at the centre of the ten-year Bougainville civil war, forcing its closure in 1989 when it was PNG's biggest export earner. But there is renewed talk of bringing the closed mine back into production, initiated by the Panguna Development Company Ltd, which has brought together almost all the landowner groups. Agreement has been reached to support the former miner, Bougainville Copper Ltd's quest for an exploration licence, and for the landowners to be given shares in the company. There has been widespread opposition to a return to mining at Panguna but Siokate landowners' group chair Therese Jaintong said it's for them to decide. "The landowners are empowered by the Bougainville Mining Act, so what ever they say they have the power with the government – all of us talking together," she said. "We are coming close to finding some good solutions. Jaintong said they wanted to bring all the interested parties together to discuss the mine's future. – RNZ

### **Rohstofflager Meeresboden**

*Tiefseebergbau: Lobbyisten geben Ressourcenraub als Klimaschutz aus*

Von Burkhard Ilschner, Junge Welt, Ausgabe vom 10.03.2021, Seite 5 / Inland



Sind vor dem Raubzug gieriger Meeresausbeuter nicht sicher: Manganknollen; Caroline Seidel/dpa

Die Klage ist deutlich: »Das Wettrennen um die Schätze des Meeres wird als Klimaschutz getarnt« – mit diesen Worten kritisiert das Projekt »Fair Oceans« des Bremer Vereins für Internationalismus und Kommunikation (IntKom) die Debatte um den Rohstoffabbau am Meeresboden. »Nötig ist ein definitiver Stopp derartiger Pläne statt nicht endender Debatten über absehbar ins Leere laufende Moratorien«, wirbt Projektkoordinator Kai Kaschinski für eine zivilgesellschaftliche Initiative gegen Versuche, Tiefseebergbau als notwendigen Beitrag zum Klimaschutz zu rechtfertigen.

Es geht um die Förderung mineralischer Ressourcen aus ökologisch höchst sensiblen Meerestiefen: Manganknollen am Meeresboden und Kobaltkrusten an den Hängen unterseeischer Bergketten enthalten neben den namensgebenden Metallen auch Kupfer, Nickel oder Titan; ferner locken Sulfidschichten rund um sogenannte Hydrothermalquellen am Meeresboden mit hohem Gehalt an Kupfer, Gold und Silber. Hinzu kommen in allen drei Fällen viele weitere Metalle in jeweils kleineren Mengenanteilen. Der Streit um diese Ressourcen begann vor rund 50 Jahren, als die UNO über die 1994 endlich in Kraft getretene Seerechtskonvention debattierte: In ihr wurden die Meeresbodenschätze zum »gemeinsamen Erbe der Menschheit« erklärt, das Gemeingut verwaltet die International Seabed Authority (ISA) auf Jamaika als UN-Behörde.

Seit den 1970er Jahren gieren westliche Industriestaaten und führende Konzerne nach diesen Rohstoffen – in der BRD etwa die staatliche Preussag AG oder die Frankfurter Metallgesellschaft AG. Allerdings gab es damals so gut wie keine maritime Technik für wirtschaftlichen Abbau, zudem minderten vorhandene Rohstofflandlagerstätten den ökonomischen Druck zu ihrer Erschließung. Trotzdem ließ die BRD 1989 im Ostpazifik in rund 4.000 Metern Tiefe ein mehr als 3,5 Quadratkilometer großes Meeresbodenareal umpflügen: 2020 zeigte sich, dass die damals angerichteten Schäden bis heute sichtbar sind.

Aktuell geben drastischer Anstieg der Rohstoffpreise sowie Entwicklung potentieller Fördertechniken der Gier nach Tiefseeressourcen neue Nahrung. Nicht nur rohstoffarme Industrieländer wie Japan, Südkorea oder Deutschland sehen im Tiefseebergbau strategische Perspektiven: 2014 haben etwa deutsche mittelständische Anlagenbauer in Hamburg den Lobbyverein »Deep Sea Mining Alliance« (DSMA) gegründet, aus dem inzwischen eine »Pressure Group« von internationalem Gewicht geworden ist. Auch China, Russland, Frankreich oder Indien wollen dabeisein – und infolge der Aushöhlung ursprünglicher Seerechtsregeln können längst nicht nur Staaten, sondern auch Konzerne bei der ISA Explorationslizenzen erwerben.

Tiefseebergbau, schreibt »Fair Oceans«, sei nachhaltig und vorsorgend nicht umsetzbar. Das gemeinsame Erbe der Menschheit werde verschachert, ökologisch das höchst sensible Meeresleben bedroht, zudem berge das Profitstreben entwicklungspolitische Gefahren: »Ein weiteres Mal werden die Ressourcen für die Konsumansprüche der Industrienationen und Schwellenländer aus dem globalen Süden geholt, und die Gesellschaften dort müssen den Preis für ihre Abhängigkeit vom Rohstoffmarkt, auftretende Umweltfolgen und soziale Ungleichheit tragen.«

Scharf kritisiert »Fair Oceans« den Versuch, den Tiefseebergbau zum Garanten der Klimawende zu stilisieren: Ohne ihn, so behauptete die Industrie, drohe eine Verknappung strategisch wichtiger mineralischer Rohstoffe für die Produktion alternativer Energieträger oder E-Autos. Tiefseebergbau gefährde, was Klimaschutz bewahren wolle – die Funktion der Ozeane als wichtigste Kohlenstoffspeicher des Planeten. Explizit richtet sich der Aufruf gegen die Forderung nach einem Moratorium – denn dieser Ruf beinhalte immer die Option einer alsbaldigen Aufhebung und suggeriere so, dass Tiefseebergbau mittelfristig akzeptabel, sinnvoll und notwendig sein könne. Nur ein Stopp dieser Pläne schaffe Raum für nachhaltige Rohstoffnutzung sowie Klima- und Rohstoffgerechtigkeit.

### **Garry: ILGs not recognised**

By SHIRLEY MAULUDU, March 9, 2021, The National Business

THE mining sector does not recognise incorporated land group (ILGs) in relation to mining developments in the country, Mineral Resources Authority (MRA) managing director Jerry Garry says. He said MRA had been working with associations and the arrangement had proven to be successful over the years. "The mining sector does not recognise ILGs," Garry told The National. "We have

been working with associations and they have worked really well for us. “You look at mega projects such as Ok Tedi (copper/gold project), Ramu (nickel project), Lihir (gold project), Hidden Valley (gold and silver mine), Porgera (gold project), all these mines have been run successfully under the associations. “That was because when those projects were at the early stages of development, we have been asking the companies to do very detailed landowner identification studies. “Landowner identification studies simply means where we expect the mining footprints to be.

“Whether it be a road, airstrip, processing plant site, etc. “It’s something that been done transparently.” Garry said the process was called the landowner identification vetting process. “At MRA, we encouraged the development partners to undertake detailed landowner identification studies,” he said. “This is during the advanced stages of exploration, or prefeasibility stage so that we can tie in every square meter of land to the right landowners.” Meanwhile, Garry said MRA recognised three main landowner groups from the Wafi-Golpu project area in Morobe. “The State knows who is who and the company also knows who owns the land,” he said. “Right now, for convenience sake, there are three SML (special mining lease) landowners, who own the land around the special mining lease area. “One for the pipeline, deep sea tailings placement outfall area, past Lae to outfall area – the Butibam landowners.”

### **Provinces end 13-year feud over LNG benefits**

BY PATRICK TOM, Post-Courier, March 8, 2021

THE two sister provinces of Hela and Southern Highlands have ended a 13-year feud over the split to the PNG LNG Project benefits and other resources benefits. Hela and Southern Highlands provinces through the leadership of Governors Philip Undialu and William Powi inked the final resolution to the 13-year feud through a memorandum of agreement signing facilitated by the MRDC last Friday. The agreement sets out how the benefits from the PNG LNG project will be divided between the two provincial governments in a 60 to 40 per cent and vice versa agreements. “We can’t continue to procrastinate, sit back. It may be painful but for me, I have taken an unprecedented decision to realise that Hela was part of Southern Highlands,” said SHP Governor William Powi.

“We jointly owned assets, just the provincial governments some of which are not included in the PNG LNG project benefits. Like the shares in BSP, shares in Star West, company in joint venture arrangements with Curtain Brothers and of course other assets that are owned by the Southern Highlands provincial government.” Mr Powi said Hela before they became a province, they jointly owned these resources. “Put the PNG LNG streams including development levies, royalty, BSP shares. The bigger contribution in this instance is the PRK shares that I am bringing on the table. “It is appropriate and the time is right, we cannot allow our provinces to fight over the benefits that our former leaders left hanging loose, on a loose verbal sister-sister relationship that has no legal framework,” said Mr Powi.

“For me, I see Hela progress as the pride of Southern Highlands.” Hela Governor Philip Undialu said this was a long outstanding issue since the first UBBSA signing in Kokopo. He said these assets are testament to the leadership in being decisive and allowing proper transition to take place. “What Southern Highlands owned and host, they will return 60 per cent and 40 per cent will be given to Hela and Hela will reciprocate, what we owned, we will place 40 per cent for Southern Highlands to take it on board and we will take back 60 per cent.” “To arrive at this juncture after 13 years, it’s a good decision we have reached to foster the two sister provinces at the time of the mourning of the Grand Chief Sir Michael Somare who was the man who linked the deal at that time,” said Mr Undialu.



## **MRA to table assessment on Wafi-Golpu project**

March 5, 2021, The National Business

A technical team from Mineral Resources Authority (MRA) will soon be tabling an assessment on the details regarding construction of the Wafi-Golpu project to the mining advisory council (MAC), an official says. MRA managing director Jerry Garry told *The National* yesterday that this should happen at the end of this month. “Permitting of a special mining lease for large projects will require a different pathway than permitting a medium scale to small scale mine under the mining lease,” he said. “For special mining lease, requires three distinct pathways for permitting. “One, the environmental permitting is a mandatory requirement and is done independently through the environment act under the custody of Conservation and Environment Protection Authority (Cepa). “That process has been done and Cepa has issued the environment permit for Wafi-Golpu project. “The other is technical, from the mining perspective. “That includes looking at structures to be built on the ground, the roads the buildings, the processing plants.

“Because it will be an underground operation, we will also look at designs to critically ensure that the integrity of the structures and any development met the expected standards. “Once that is done and we are satisfied, we will give the green light for them to go and construct. “During construction, we also provide that oversight to ensure that it is done safely. “We have looked at all the proposals. “Our technical team is about to table the technical assessment to MAC for the council to deliberate on. We anticipate that process to conclude by at least end of March.” Garry added that if it goes to the MAC and the council was satisfied, then it (council) would deliberate on the application. He said third stream was the mining development contract. “It’s between the State and developer to go by the books in terms of the benefits and any fiscal stability that they want. “When that is locked in, then we have a lower level called a development forum which will then involve MRA and State team to negotiate with the provincial government, LLGs and landowners in terms of benefits.”

## **PNGEITI publishes first ownership report**

March 5, 2021, The National Business

THE Papua New Guinea Extractive Industries Transparency Initiative (PNGEITI) has published its first beneficial ownership (BO) report as a requirement under the EITI 2019 global best practice standard. Head of PNGEITI national secretariat Lucas Alkan said the report was published on the PNGEITI website last December. “All EITI implementing countries including PNG are required to produce a Beneficial Ownership Report by Jan 1, 2020,” he said. Alkan said in order for PNG to comply with the requirement, it needed to have a public register that register beneficial owners of corporate entities who apply for or hold a interest in exploration or production licenses of oil, gas, or mining contracts. This included identity of their beneficial owner and details of the level of their ownership. Alkan said it was found that reporting entities did not fully understand the concept of beneficial ownership reporting. “This is because they were unable to provide a complete information of what was requested in the reporting template,” he said. “In addition to the challenges faced in obtaining information for BO reporting, PNGEITI still does not have a legal basis to collect the required BO information which makes it difficult to obtain complete information from the companies.”

## **Landowner company, Kuima ink deal for mine security**

March 4, 2021, The National Business

A LANDOWNER company in the multi-billion Wafi-Golpu mine area in Morobe has signed a joint venture agreement with a firm to provide security at the mine. The Golpu-Wafi Security Services

(GWSS), owned by the landowners of Yanta, Hengambu and Babuaf, signed the agreement last week with Kuima Security Services Ltd for a three -year period. The Golpu-Wafi Development Corporation Ltd (GWDC) chairman Jack Laban said the GWSS was part of the umbrella company which looked after companies owned by the landowners of special mining lease (SML 10) where Yanta, Hengambu and Babuaf had equal shares in. "We chose Kuima because they have experience on mine sites and they are also a Lae-based company," he said. "We want more of our men and women to be involved in this company to gain experience so we can work on our own." GWSS director Bob Sali said governance and sustainability were important in the contract. "The mine will not last forever. Any agreement we sign must be sustainable and will benefit the next generation," he said. Kuima Security Services Ltd managing director Anthon Kaupa said it was not easy to get the contract.

### **Tighter controls called for on PNG sand exploitation**

Radio New Zealand on 3 March 2021

After successfully stopping one sand mining project, Papua New Guinea environmentalists now want the government to tighten the rules around the industry. A Singaporean company, Niugini Sands, last week dropped plans to mine the black sands along the Madang coast, with director, Marcus Ong, saying bad publicity was pivotal in their decision. The environmental group, Mas Kagin Tapani, advocated for the more than 10,000 who lived in communities along a 38 kilometre stretch of the shoreline in Madang province. They also wanted to ensure breeding grounds for endangered Leatherback Turtles weren't threatened. Spokesman, Wenceslaus Magun, said people were delighted but their job was still not done. He said there was an insatiable demand for sand around the world but PNG had no relevant laws to govern the practice and the government's Mineral Resources Authority, the MRA, must develop new policies and rules to govern the sector.

"PNG must have stricter monitoring and enforcement in place should it welcome this industry," Magun said. "Under such legal circumstances we ask the MRA to consider developing this necessary policy, law and regulation first, prior to entertaining future applications for exploration to mine sand." The group also suggested another solution - one it believed could help solve several key environmental issues. Magun said fine grain plastic particles could be used as a substitute for sand, which is used in construction, for glass making, and myriad other uses, including in stock feed. He said if plastic was used in construction instead of sand the benefits would be significant. "We recommend that PNG use fine waste plastic particles to replace sand for construction purposes. It would contribute to keeping our environment safe, healthy and clean, and provide an added economic incentive to our nation building," he said.

### **Sand mining company pulls out of PNG**

*A campaign to stop sand mining along 38 kilometres of Papua New Guinea's Madang coast has been successful.* Radio New Zealand on 1 March 2021

A Singaporean company, Niugini Sands, had applied to mine the sands but concerns were raised about the impact on coastal communities and the environment, which includes nesting grounds for the endangered leatherback turtle. A court injunction was sought to try and force the Mineral Resources Authority to conduct further consultations with local communities within the Sumgilbar local government district. But the authority advised environmentalist, Wenceslaus Magun, who led the campaign, that Niugini Sands had withdrawn its application to mine the sands. He said the people were delighted with the outcome. A Director of Niugini Sands, Marcus Ong, told RNZ Pacific earlier that all mining was harmful so the critical issue was how this was managed and how affected

zones were rehabilitated. He also said preliminary information showed the Madang sands were of too poor a quality for many other uses.



Sea front in Madang, Papua New Guinea. Photo: RNZI/ Johnny Blades