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/

Covid-19 would 'wipe out' PNG's Daru

Following <u>unconfirmed reports</u> of Covid-19 in Papua New Guinea's Western Province, the mayor of the provincial capital, Daru, has warned the coronavirus could "wipe out" his town. Benjamin Robinson-Drawbridge, Radio New Zealand on 28 February 2020

Situated on an island of the same name off PNG's south coast, Daru is a "colonial town initially designed to hold 5000 people". Samuel Winggu is its mayor, a politician keen to explain the plight of his rapidly expanding community. "The population of the town has exploded to almost 30,000... Most of the people who have flooded into town are from the Fly River. "That is where the giant Ok Tedi gold and copper mine - the mine tailings have affected them. Their villages have been destroyed and a lot of these people have migrated to Daru." Those displaced have found dilapidated infrastructure that Mr Winggu argues makes Daru ripe for Covid-19. "The town basically has no reliable running water, we do not have garbage or sewerage [systems] and everybody relieves themselves in the bushes and in the sea.



Samuel Winggu (centre) leading people in Daru. Photo: Samuel Winggu

"All the infrastructure in this town is basically falling apart." Government buildings in Daru are also in a state of disrepair. The recently created Western Provincial Health Authority has <u>reportedly</u> condemned a number of structures and ordered others to fix sanitation problems. "The prison that we have here has been condemned... Our police barracks that we have here is also soon to be condemned," Mr Winggu said. The town's intermittent electricity supply is also a health hazard, depriving Daru's hospital of power needed "to run machines and equipment". "We don't have a regular power supply, we have power that's been rationed. We only receive power a few hours in the night."



Rubbish in Daru. Photo: Samuel Winggu

While the mayor's tale of woe was inevitably followed by a pitch for his \$US70 million Daru Rehabilitation Project, his warnings about the corona virus are not without context. A cholera outbreak in 2010 was no doubt linked to Daru's water and waste issues. They could also be contributing to its current problems with Tuberculosis and Leprosy. "Although we have partners here to help us with the problems, we really have not been successful with the Tuberculosis," Mr Winggu lamented. "Just last week I attended a meeting and in that meeting I was informed that Daru town is sitting in the number one position as far as Leprosy is concerned. "That has made me fear for the worst and now that we have the corona virus sweeping through the planet... once it hits the town its going to absolutely do a clean sweep." How would it get there? Mr Winggu points to the porous PNG / Indonesian border which he claims is regularly skirted by Indonesian poachers. The frontier is also

straddled by traditional hunting grounds of tribes not bound by lines on a map. "Whilst they are moving in out they may be also bringing in sickness," the mayor warned. "Once anything happens out there and it's brought into Daru, it's going to absolutely wipe out the population of Daru town."

Huge potential in alluvial mine

February 28, 2020, The National

ABOUT 80,000 small scale alluvial miners (Ssam) earn a living through non-mechanised methods and contribute to a total production of 1.9 million ounces of gold to the economy. According to small scale mining report (2012), the industry has huge potential, exporting 95,000 ounces of gold in 2012. As such, the sustainable alluvial mining services (Ssam), a non-profit organisation, aspires to enhance the needs of many Ssam to create a viable basis in regulations and cost measures to ensure a responsible activity in country. Ssam founder Immaculate Javia said assisting Ssam needs in the country would ensure capable and increased gold production for all miners to enable them improved livelihoods in rural mining communities Ssam, a nationally established group, aim to assist on technical, legal and sustainability needs of small-scale miners in rural areas.

It also aspires to provide financial and technical guidance to miners to form associations to ensure their voice in decision-making level. "Importantly, help small-scale miners improve mining activities, increase their production through improved technical skills training, continuous awareness in cross-cutting social issues, including gender equality," Javia said. "Also change alluvial mining approach from traditional panning to responsible mechanised mining, increases value of their effort, assist with business opportunities and ensure that mining is conducted in an acceptable environment to enable miners involve in fair-minded initiatives." Ssam co-facilitated training with Artisanal Gold Council (AGC) for PNG in Esa'ala, Milne Bay. As a result, it alleviated poverty and encouraged improved living standards.

Sinivit clean up to cost K10mil

By PETER ESILA, February 27, 2020, The National Business

IT may cost up to K10 million to detoxify and clean up cyanide at the abandoned Sinivit mine in East New Britain (ENB), an official says. Mineral Resources Authority (MRA) managing director Jerry Garry said the Conservation and Environment Protection Authority (Cepa) and MRA officials visited the site last year and had completed monitoring by sampling to test for elevated cyanide content in the soil and water sources. "There are interim plans to have security guards on site," he said. "Cepa advised that it may cost up to K10 million for external experts to detoxicate and clean up the cyanide." Last week, ENB Governor Nakikus Konga told Parliament that there were 18 vets, (an outdated way of storing mine wastes at the abandoned mine), which could be disastrous for the people, especially during the flash flood the province was experiencing.

Konga's concerns were on the effect the mine wastes would have on his 45,000 people along the Warangoi River catchment area. He said he had been discussing with Mining Minister Johnson Tuke for the last six months regarding the mine. "He came to my province last weekend to see for himself what is happening with the abandoned Sinivit Gold mine, it will cause a catastrophe to my province." Meanwhile, Environment, Conservation and Climate Change Minister Wera Mori said he would be visiting the abandoned mine to assess the wastes. "I will basically make a visitation to that province, hopefully together with MRA," he said.

Court halts royalty payment

February 27, 2020, The National

A LAND court in Tabubil has restrained OK Tedi Mining Limited (OTML), the state and any developer from executing any royalty payments to (former and current) recipients involved in a dispute over customary land pending a resolution of the court. Magistrate Ernest Wilmot made the orders on Feb 17 while in a Land court circuit at Tabubil in Western, ordering any payments relating to the contested land area known as Mt Fubilan halted until further orders of the court were made. The land dispute is between David Kabomyap Allolim and Kimka Sepiyan (applicants/complainants), and Biul Kirokim (respondent/defendant). Magistrate Wilmot made orders that:

- Land area known as Mt Fubilan, the mine and areas surrounding the areas as customary land under dispute;
- All parties are restrained from receiving and collecting any more royalties, cheques, damages, compensations and dues owed by the state and OTML;
- All parties and their clan members, relatives, agents, and associates are ordered to keep peace at all times while the land dispute is before the court; and,

The matter was adjourned to the registry and the land dispute over Mt Fubilan referred back for mediation.

Deal with locals at New Caledonia's Vale in doubt

New Caledonia's Vale nickel company has met representatives of the indigenous Rheebu Nuu group and local customary leaders as the company is in the process of selling its 59 percent stake. Radio New Zealand on 26 February 2020



A photo taken on May 27, 2015 shows Brazilian Vale's nickel processing plant of Goro in southern New Caledonia. Photo: AFP PHOTO / FRED PAYET

According to media reports, the group and the chiefs failed to get assurances that the arrangements with Vale will continue to be honoured by a prospective buyer whose name could be announced within a month. The deal, signed in 2008, was aimed at protecting the environment and securing local involvement in the nickel mining and production process at Goro, in the very south of the main island. It was reached after years of confrontation between the developers and Rheebu Nuu. The head of Vale New Caledonia is quoted as saying that for the next five years orders were in while he

hoped prices would not sag. The nickel sector has been boosted by hopes that the metal will be in increased demand to build batteries for electric vehicles.

Kua: Encouraging more resource projects in mines will help with debts

By PETER ESILA, February 26, 2020, The National Business

PETROLEUM and Energy Minister Kerenga Kua says encouraging more resource projects in the extractive industry will help Papua New Guinea deal with its large debts. Kua told Parliament last week that with the debt level as stated by Treasurer Ian Ling-Stuckey as being at K37 billion, more projects needed to be brought on line. "We need to bring on more projects on stream because as you can hear from the treasurer, PNG has already been sold out and is in a deep hole," he said. Kua said when giving an update on the progress of the Pasca gas reserves offshore Gulf to be developed by Twinza. "We need every business we can encourage to take off and we will be looking at the particular project very shortly, they are doing the paper work and as soon as they are ready, we will dispatch a State negotiating team to sit down with them and talk thorough the details of the project," he said.

"We need new projects to bring ourselves out of that hole, so I will be looking for the support of this Parliament as we stand out together, through this very sensitive period." Kua said once Pasca was commercialised it would generate US\$400 million (K1.36bil) annually over its 20-year expected lifespan. "By our PNG standards, that is a good enough business to encourage to take off, even with that US\$400 million, we can use it to do something about it (debts). "We are expecting to establish a State negotiating team to engage with the holders of the retention licence Twinza, to see whether we can agree to the terms of the commercialisation. In P'nyang, you will note that the State has signalled the kind of expectation it now has on behalf of the people of PNG and that position is pretty well known by other licence holders like the holders of the retention licence like in Pasca. "They are saying that they are aware of what the State is up to and they are still happy to talk. "That is an encouraging general position."

PNGEITI to conduct scoping study of SOEs

February 26, 2020, The National Business

The PNGEITI (PNG Extractive Industries Transparency Initiative) National Secretariat through its multi-stakeholders group (MSG) has commenced preparation to engage a consultant to scope out operations of state-owned entities (SOEs), according to PNGEITI. This would also include trustees involved in extractive sector or those that have an equity share (either on behalf of the Government or provincial governments). Head of National Secretariat Lucas Alkan announced this week that execution of the study on SOEs was an important undertaking in not only meeting requirement of EITI standard as recommended in the country's first validation but also, as part of the Government's commitment to enhance transparency in operations of these entities. "The scoping study will also include Trustees established by the Government for managing businesses arms established by provincial, local level governments and landowners using revenue flows from extractive activities in the country," Alkan said.

"The study is intended to understand the relations between all SOEs and trustees and the transactions between extractive SOEs (and their subsidiaries) and to recommend possible policy and legislative reforms to improve transparency and accountability for EITI reporting requirements. "Most importantly, to enable the Government to have a clear visibility and oversight on the operations of these entities." He said though the study would be confined to SOEs involved in the extractive sector, the work would complement and support the Government's overall SOE reform policy agenda

being progressed. A technical working group made up of MSG members are working on engaging a consultant to execute the study.

Mori to visit abandoned Sinivit gold mine to assess waste

February 26, 2020, The National Business

ENVIRONMENT, Conservation and Climate Change Minister Wera Mori says he will be visiting Wild Dog's abandoned Sinivit gold mining operation in East New Britain to assess the waste left there. Mori told Parliament following East New Britain Governor Nakikus Konga's concerns on the effect mine wastes would have on some 45,000 people along the Warangoi River catchment area. "I will basically make a visit to that province hopefully together with MRA (Mineral Resources Authority), because for us we do not have the capacity to deal with that exposure at Wild Dog and it is important that we address that," he said. "I have already written to MRA, on the need for us to address the cyanide that is basically disposed at Wild Dog. "What was supposed to happen was that they were supposed to powder that mineralisation which has got a lot of sulphur."

Konga has been in discussions with Mining Minister Johnson Tuke for the last six months. "He came to my province last weekend to see for himself what is happening with the abandoned Sinivit gold mine," he said. "It will cause a catastrophe to my province. Konga asked Treasurer Ian Ling-Stuckey to release some funding for the ENB government to address the issue of mine pollution and its impacts. "This is the fourth time to stand in Parliament to show my frustration," he said. "Last February, I raised an issue and I think my provincial team has done very well by getting a submission to the prime minister and to the minister for provincial affairs and also the disaster office. "I requested for K17.8 million to solve the problems which were caused by flash flooding in my province. "I have not received any money even though the former minister for provincial affairs approved it already. "I was given a cheque of K5 million which bounced."

Thai geologist shot dead in second mining-related killing in Bougainville

Channon Lumpoo, 27, was shot as he conducted exploration activities for a new gold mine in the region. Dickson Sorariba, The Guardian, 25 February 2020



Bougainville has a fraught relationship with mining. Disputes over the Panguna mine (pictured) were the catalyst for the decade-long civil war that devastated the region.

A Thai geologist working at a new gold mine in Bougainville has been shot dead in the second killing at a mining project in the autonomous region of Papua New Guinea in recent months. Channon Lumpoo, 27, was shot by a high-powered weapon on Monday in the Kokoda constituency of south Bougainville. Channon was a geologist with Austhai Geophysical Consultants, which is attached to a Philippines-owned company SRMO, and was involved in exploration activities at the time of his death. Deputy police commissioner and chief of the Bougainville police service, Francis Tokura, said police were conducting investigations around Arawa because they were unable to travel further inland between South and Central Bougainville where the killing took place. Bougainville police said the remoteness of the location made it impossible to conduct proper investigations.

Late last year, a Papua New Guinean geologist was killed in a similar manner. Tokura said the incident continues to overshadow the image of the Autonomous Bougainville Region, which voted overwhelmingly for independence from Papua New Guinea in a referendum late last year. Mining is a fraught subject in Bougainville, with disputes over the Panguna gold the catalyst for a decade-long civil war in the region, which ended with a peace agreement in 2001. Tokura blamed the foreign companies operating on the island for not following proper protocols. "If the companies had followed proper process in talking to the rightful landowners prior to conducting exploration activities, I'm sure we would have avoided such unwarranted deaths," said Tokura.

The deputy police commissioner has called on all companies intending to enter Bougainville to talk to rightful landowners and report to the Bougainville police and the ABG government before conducting their business. "Mining is a very sensitive issue and there are various factions who claim ownership of these mines. I appeal to all companies intending to do exploration activities to refrain from such investment until all issues are sorted out," said Tokura. He said there are illegal weapons still in the hands of locals and any misunderstanding may result into unnecessary killings. The body of the Thai national killed is at the morgue in Buka while preparations are done to fly the body to Port Moresby for a postmortem. The Thai consulate in Port Moresby said it was aware of the death of its citizen. It declined to make further comment when contacted.

Oil Search works to revive Exxon, Papua New Guinea talks on LNG expansion Reuters, 25 February 2020

Oil Search Ltd is pressing to revive talks between Exxon Mobil Corp and the Papua New Guinea government over a \$13 billion plan to double the country's natural gas exports, the company's new boss said on Tuesday. Oil Search's new Chief Executive Officer Keiran Wulff said he hoped negotiations could resume "within weeks" between its partner Exxon and the state. The government ditched talks in January with Exxon on terms for developing the P'nyang gas field to feed an expansion of Exxon's PNG liquefied natural gas (LNG) plant, amid a push to reap more benefits from resources projects for the impoverished South Pacific nation. Oil Search's veteran boss Peter Botten, who just retired as CEO but is still working for the company, is sounding out the government this week on what it would need to resume talks, Wulff said.

"We would hope to see some sort of formal negotiations recommence between Exxon and the state negotiating team within a reasonable period of time," Wulff told Reuters in an interview after the company released earnings earlier on Tuesday. "We're hopeful that it's weeks. We don't think it'll be months," he said. Oil Search reported an 8% fall in annual net profit to \$312.4 million, hit by weaker oil and LNG prices, missing analysts' forecasts of around \$339 million, according to Refinitiv IBES estimates. Oil Search's growth prospects are largely tied to a combined plan to develop P'nyang and Papua LNG, led by France's Total SA, to feed three new processing units, called trains, at Exxon's PNG LNG plant. All the partners want a three-train development, Oil Search said, as sharing infrastructure would be the most efficient way to develop P'nyang and Papua LNG. "For

us we're strongly behind the operator to pursue a three-train development, which is as much in the joint venture's interest as it is in the state's," Wulff said.

He said they would only consider a two-train development without P'nyang "after all options were exhausted". Exxon Mobil had no immediate comment, but Chief Executive Darren Woods said earlier this month the company hoped to revive talks on P'nyang to get to a "win-win proposition". The coronavirus has dampened demand for LNG from China, but Oil Search said it expected that only to be a short term issue. "We are confident in our ability to secure LNG offtake agreements once we resume discussions with potential Asian buyers, due to the attractiveness of LNG from PNG," Botten said in a statement. If an agreement is reached on P'nyang and early engineering work on a three-train development begins in 2020, Oil Search expects its capital spending this year will be in the range of \$710 million to \$845 million.

Developer qualified for licence, says minister

February 24, 2020, The National

TWINZA, the operator of the Pasca gas reserves offshore Gulf, is qualified for a petroleum development licence (PDL) to proceed with commercialisation, says Petroleum Minister Kerenga Kua. North Waghi MP and former Petroleum Minister Dr Fabian Pok queried about issuing a PDL to Twinza in Parliament on Friday. Pok wanted to know whether Twinza had carried out a minimum of three drills to qualify for a PDL. "The answer is no, it is not a conditioned precedent. The work programme can require a number of drillings to take place but if in anyone of those you make a commercial finding, then you can put in an application for development licence and you can to be given a development licence if there is a commercial prospect and you are able to commercialise it," Kua said.

Kua said Pasca had done four drills. "So if the minimum was three, they have already done four. In 2017 the last drilling was done at the request of former minister Dr Fabian Pok himself when he was the minister. It was the fourth drilling that confirmed total reservoirs of 0.8 TCF (trillion cubic feet) and that is enough for a small operator to commerce operation. "They have done their numbers and they feel that you can operationalise that, run it and if you make money, then you can explore further into other areas of the licence, "By oil and gas standards, it is only a very small reserve."

Tiefseelobbyismus 2020 Heise Online, 22. Februar 2020, Bulgan Molor-Erdene



Erz der Finsternis: Manganknollen liegen auf dem Boden der Tiefsee. Bild: Wikipedia

Wird der "Mining Code" dieses Jahr ratifiziert, werden die Ozeane auf den Kopf gestellt. Das soll dem Planeten und der Menschheit dienen. Welche Rolle spielt die International Seabed Authority?

Man muss sie einfach nur einsammeln: Dort, wo noch nie das Licht der Sonne hingekommen ist, liegen begehrte Metalle auf dem Meeresboden herum. Die Schätze in der Tiefsee könnten als Rohstoffquelle der Zukunft dienen werden. Die ökologischen Kosten der Plünderung sind kaum zu ermitteln. Trotz aller bekannten und unbekannten Folgen scheint es jedoch unvermeidlich (vgl. Teil eins: Tiefseeraubbau 2020?). Doch wäre es das kleinere Übel, um den künftigen Hunger nach Rohstoffen zu stillen? Jahrhunderte des Erzabbaus an Land haben schließlich einen verheerenden Preis gefordert: Berge, Täler, Wälder zerstört, Flüsse trockengelegt, Grundwasser kontaminiert, unzählige Arten ausgerottet und den Klimawandel befeuert. Ein Preis, der immer noch gefordert wird: Millionen Kinder arbeiten immer noch im Bergbau.

Das Mining-Unternehmen DeepGreen verspricht das zu ändern. Der Abbau der Metalle aus der Tiefe soll den Planeten "grüner" machen. Es will der erste "Zero-Waste"-Rohstoffproduzent werden. CEO Gerard Barron <u>sagte</u> kürzlich: "Die Gewinnung von Metallen für Batterien wie Nickel und Kobalt aus Onshore-Minen steht vor vielen Herausforderungen, und die Umwelt-, CO2- und Sozialkosten sind einfach zu hoch. Polymetallische Knöllchen auf dem Meeresboden enthalten mehr als genug Metalle, als die Welt benötigt. Um sie zu fördern, muss weder gestrahlt noch gebohrt oder ausgegraben werden. Es wird viel weniger CO2 ausgestoßen als beim Abbau dieser Metalle an Land." CEO, Gerard Barron

Mit dem Versprechen einer sauberen Rohstoffförderung hat DeepGreen viele namhafte Investoren gewinnen können. Etwa den Schweizer Rohstoffriesen Glencore, die weltgrößte Containerreederei Maersk und letztes Jahr auch die Schweizer Allseas Group, führend in der Verlegung von Offshore-Pipelines. Kaum ein anderes Unternehmen dürfte so sehr auf den Mining Code warten wie Deep-Green. Die Meeresbodenbehörde der Vereinten Nation, International Seabed Authority (ISA), ist für den Schutz des Meeresbodens zuständig. Ihr obliegt es den Bergbaukodex der Tiefsee, den Mining Code, festzulegen. Dabei sollen nicht nur Umweltstandards eine Rolle spielen, sondern auch finanzielle Aspekte: Sämtliche Länder der Erde sollen am Gewinn der Ausbeute beteiligt werden. Die Hohe See sei gemeinsames Erbe der Menschheit, heißt es schließlich im Seerechtsübereinkommen der UN.

Die ISA plant derzeit mit Lizenzgebühren von etwa 4% bis 6% für die Abbaurechte, abhängig von dem Wert des Erzes in den Claims. Diese Einnahmen sollen dann unter den 168 Mitgliedsstaaten verteilt werden mit besonderer Berücksichtigung der Interessen und Bedürfnisse von Entwicklungsländern als auch Staaten, die keinen Zugang zum Meer haben. Ein Vorhaben, beispiellos in der Geschichte der Menschheit. Kritiker beobachten jedoch, dass die ISA ihrem Mandat nicht ganz gerecht wird. Die ISA scheine eher daran interessiert zu sein, den Abbau der Rohstoffe zu ermöglichen, als die Arten und Lebensräume vor jeglicher Aktivität zu schützen. Die Tiefsee ist dunkel und tief. Bekanntlich ist sie schlechter erforscht als die Oberfläche des Mars.

Undurchsichtige Behörde

Umweltschützer und NGOs, die sich für die Erhaltung der Ozeane einsetzen, kritisieren seit längerem die Arbeit der ISA. Sie gilt als intransparent, ihre internen Strukturen erlauben keinen Einblick von außen. Zum Beispiel bleibe für die Öffentlichkeit geheim, nach welchen Kriterien die Lizenzen bisher vergeben wurden. "Es gibt keine Aufzeichnungen über die Lizenzvergabe, wir wissen nicht, auf welcher Grundlage das geschieht", sagt Matthew Gianni von der Deep Sea Conservation Coalition, die 70 NGOs zum Schutz der Meere vertritt. "Jedes Land, das eine Explorationslizenz beantragt, erhält auch eine Lizenz. Bisher hat die ISA nicht einen einzigen Antrag abgelehnt." Hauptverantwortlich für solche Verwaltungsaufgaben ist ein 30-köpfiges Gremium der ISA, die juristische und technische Kommission (Legal and Technical Commission). Sie spielt eine entscheidende Rolle

in der Behörde. Ihr komme es zu Explorationslizenzen zu erteilen, als auch die Daten und Berichte der seit fast zwanzig Jahren prospektierenden Unternehmen zu überprüfen. Diese blieben stets vertraulich.

"Die Zivilgesellschaft ist von der internen Kommission ausgeschlossen", sagt Helen Rosenbaum von der NGO "Deep Sea Mining Campaign". Nur diesem Gremium sei vorbehalten, was die Mining-Firmen am Meeresboden tun, was sie finden und ob Vertragsbedingungen und Umweltschutzmaßnahmen einhalten werden. Für Umweltgruppen gebe es keine Möglichkeit, die Verträge und Berichte zu prüfen oder mögliche Auswirkungen auf die Umwelt zu bewerten. Ein weiteres Problem, das die Deep Sea Conservation Coalition bemängelt: Verstöße gegen Umweltauflagen können nicht überwacht werden. "Niemand kann überprüfen, ob die Berichte der Abbauunternehmen überhaupt stimmen", sagt Gianni. "Die Einzigen, die Auskunft über Umweltrisiken in den Explorationsfeldern geben, seien nun mal die Abbauunternehmen." Wer soll dafür sorgen, dass die Schäden, die in der Tiefe verursacht werden, auch ans Licht kommen?

Auch die etwaige Haftung für Umweltschäden gilt im Mining Code als noch unklar. "Wenn nun doch Umweltschäden festgestellt werden, muss nicht etwa das Abbauunternehmen dafür geradestehen, sondern das jeweilige Sponsorland", sagt Umweltanwalt Duncan Currie. "Und was passiert, wenn ein Land wie Nauru oder Tonga Hunderte Millionen Dollar für Umweltschäden aufbringen muss, aber nicht aufbringen kann?" Letztes Jahr sagte ISA-Generalsekretär Michael Lodge: "Es gibt immer noch Diskussionsbedarf über bestimmte Details des Mining Codes - technische Anforderungen, Aufsichtsverfahren, das Gewinnbeteiligungsmodell -, so dass die Abstimmung zur Ratifizierung ein weiteres Jahr warten muss."



So könnten Manganknollen aufgesammelt werden. Bild: Promo-Video DeepGreen

Ist die ISA eine Lobby-Organisation für den Tiefseebergbau?

Dass die ISA dazu tendiert, einen für die Bergbauindustrie freundlichen Mining Code herauszugeben, nährt die Tatsache, dass zu den jährlichen Treffen die meisten Mitgliedsländer nicht erscheinen. Und die, die kommen, sind ohnehin diejenigen, die vom Meeresbodenabbau profitieren können. Darunter sind Entwicklungsländer und Ozeanstaaten wie Nauru, Tonga und Kiribati. Flächenmäßig kleine Länder, die jedoch genauso einen Anspruch auf die 75.000 km2 großen Claims haben wie Industrienationen. Da sie weder über die nötigen finanziellen Mittel als auch das Knowhow verfügen, gehen sie Joint Ventures mit ausländischen Unternehmen ein. Global Sea Mineral Resources, eine Tochtergesellschaft der belgischen DEME Gruppe, exploriert im Claim der Cook Islands. Die Tonga Offshore Mining Company ist eine hundertprozentige Tochtergesellschaft der kanadischen Nautilus Minerals. DeepGreen, dessen CEO Barron früher auch Geschäftsführer von Nautilus war, exploriert auf den Flächen von Nauru und Kiribati. Die Claims, die Entwicklungsländern vorbehalten sind, gelten als rohstoffreicher.

Eine Art Worst-Case-Szenario für derartige Partnerschaften erlebte zuletzt Papua-Neuguinea. Vor dessen Küste, in der Bismarcksee, liegen große Kupfer-, Kobalt- oder Zinkvorkommen, Nautilus Minerals bot an, sie abzubauen. Das Land beteiligte sich mit 30 Prozent an dem Projekt. Doch bevor der Abbau beginnen konnte, meldete Nautilus Insolvenz an, denn das Unternehmen hatte eins seiner Spezialschiff verloren. Papua-Neuguinea blieb schließlich auf Kosten von 100 Mio. US-Dollar sitzen. Für die Regierungen von Pazifikstaaten wie Fidschi oder Vanuatu Grund genug, um sich gegen den Tiefseeabbau zu stellen. Doch für die Regierungen von Nauru, Tonga oder Kiribati scheint mehr dafür zu sprechen die Rechte an ihren Claims ausländischen Firmen zu übertragen, um durch Steuereinnahmen und eventuellen Gewinnbeteiligungen am Abbau zu verdienen, als auf eine fern in der Zukunft liegende Ausschüttung von der ISA zu warten.

Nauru, das seit langem in tiefen Geldsorgen stecken, tritt sogar offizielle Ämter an Unternehmen ab. Das führt dazu, dass bei der ISA Bergbauunternehmer auf beiden Seiten des Verhandlungstisches sitzen. So durfte letztes Jahr DeepGreens CEO Gerard Barron als offizieller Vertreter von Nauru bei der jährlichen Versammlung der ISA anderen Ländern die eindeutigen Vorzüge des Tiefseebergbaus erklären. Doch DeepGreens Verbindungen gehen weiter, bis in die Spitze der Meeresbodenbehörde ISA. Dass die kanadische Firma Größen wie Glencore und Maersk als Investoren gewinnen konnte, liegt vermutlich an ISA-Generalsekretär Michael Lodge, der enger mit Bergbauunternehmen zusammenzuarbeiten scheint, als es sein Amt als Verantwortlicher der Vereinten Nationen gutheißen dürfte. Mit den Vereinten Nationen im Rücken macht Lodge offen Werbung für DeepGreen, unter anderem in einem Video für potentielle Investoren.



Arbeitet ISA-Generalsekretär Michael Lodge für DeepGreen? Bild: Deep Sea Mining Campaign

Lodge scheint das hehre Ziel der Vereinten Nationen zu untergraben, die Hohe See als Erbe der Menschheit zu schützen. Für Helen Rosenbaum von der NGO "Deep Sea Mining Campaign" lässt das tief blicken. Sie hat letztes Jahr den Bericht "Why the Rush?" veröffentlicht, in dem Lodges Verbindungen aufgedeckt wurden. "Es ist schwer zu glauben, dass die Organisation, deren Generalsekretär er ist, bei der Entwicklung von Vorschriften unparteiisch sein wird. Wir haben deswegen kein Vertrauen in die Vorschriften der ISA", sagt Rosenbaum. "Es wirft die gesamte Frage der Rechenschaftspflicht auf der Ebene der Vereinten Nationen auf."

Trübe Aussichten

"Wir stehen vor einer der größten Transformationen, die Menschen jemals an der Oberfläche des Planeten vorgenommen haben. Wir werden einen riesigen Lebensraum abbauen, und wenn er einmal weg ist, kommt er nicht mehr zurück", sagt Jeff Drazen von der Deep Ocean Stewardship Initiative, die sich für Ressourcenschonung und Erhaltung der Tiefsee einsetzen. Letztes Jahr wurden

Rufe nach einem <u>Moratorium</u> lauter. Eine <u>Initiative</u> von NGOs und Organisationen der Zivilgesellschaft wie der Deep Sea Mining Campaign, der Deep Sea Conservation Coalition und Greenpeace tritt für ein Verbot des Tiefseebergbaues ein. Auch die Regierungen von <u>Fidschi</u>, Vanuatu und Papua-Neuguinea stellen sich gegen den Tiefseeabbau. Beinahe einstimmig entschied auch das EU-Parlament. In einer <u>Resolution</u> richtet sich das Europäische Parlament an die Europäische Kommission: Diese sollen die Mitgliedstaaten auffordern, "Schürf- und Förderlizenzen für den Abbau von Bodenschätzen in der Tiefsee in Gebieten jenseits der Grenzen der nationalen Hoheitsbefugnisse nicht länger unterstützen."

In Deutschland sieht die Lage anders aus. Auf eine <u>Kleine Anfrage</u> der Grünen antwortete die Bundesregierung letztes Jahr: "Angesichts des Umstands, dass kommerzieller Tiefseebergbau bislang nicht existiert, stellt sich die Frage nach einem Tiefseebergbau-Moratorium aus Sicht der Bundesregierung derzeit nicht." Im Koalitionsvertrag <u>heißt</u> es: "Vor dem Hintergrund des wachsenden Bedarfs an Hochtechnologie-Rohstoffen wollen wir Projekte im Tiefseebergbau vorantreiben und unterstützen die Durchführung von Pilot-Mining-Tests." Offiziell will die UN abwarten. Nächstes Jahr soll die "Dekade der Ozeanforschung für eine nachhaltige Entwicklung" <u>beginnen</u>, eine Kampagne der Vereinten Nationen.

Zehn Jahre lang sollen Mittel bereitgestellt werden, um das Wissen über die Tiefsee zu erweitern. Dadurch soll auch herausgefunden werden, ob der Abbau des Tiefseebodens der richtige Weg in die Zukunft ist. Umweltschutzgruppen rufen daher auf, erst nach Ende dieser Dekade den Abbau des Meeresbodens zu verhandeln. Doch die ISA scheint nicht länger warten zu wollen. Die diesjährige Sitzung, die diese Woche stattfindet, eröffnete ISA-Generalsekretär Michael Lodge am Montag mit den Worten: "Der wichtigste Punkt auf unserer Agenda ist der Mining Code. Er hat erfreulicherweise mit dem konsolidierten Entwurf nun einen wichtigen Reifegrad erreicht hat. Im Geiste der Transparenz und Offenheit, der die Arbeit der Behörde seit jeher kennzeichnet, war jeder einzelne Schritt des Prozesses für alle Beteiligten offen."

Issues in mining activities affect women

February 20, 2020, The National

MOST issues affecting women involved in alluvial mining activities, including training, are overlooked although they contribute significantly to the local economy apart from providing food on the table after panning for the day. Issues in decision-making, training on how to use equipment and mercury, financial literacy on how to budget their earnings and training in more mechanised mining are among those issues. Alluvial mining trainer for training specialists Immaculate Javia said women needed to be organised into associations and cooperatives to ensure mining activities were easier, organised and more responsible to make investments.

"The small-scale alluvial mining involving women is less researched and documented; therefore, women's participation is less understood by men and key government organisations," Javia said. "Sadly, there is a poor and unreliable enhancement training and marketing opportunities for women in disadvantaged rural areas." Javia initiated the Wau-Bulolo female small-scale miners' association in 2014, comprising 50 registered women and more than 1,000 interested women. The two female groups are from Wau and Bulolo But lack of funding prevented them from organising the rural Waria (Garaina) women. Javia said the main objectives were to:

- GIVE women a voice at the decision-making and political fronts;
- EMPOWER women through skills training and knowledge that are aligned to women's needs;
- EMPOWER women economically or financially to improve their mining activities; and,
- TAILOR capacity-building programmes to address women's issues faced in the sector.

ExxonMobil has rights to take another offer to Govt: Kua

February 20, 2020, The National

EXXONMOBIL has a commercial right to take another offer to the Government to negotiate if it wants to, says Petroleum and Energy Minister Kerenga Kua. Kua told parliament that when responding to North Fly MP James Donald's query regarding the P'nyang project in Western. Donald wanted to know why there were ongoing talks between ExxonMobil and the State after Prime Minister James Marape had announced that no deal had been reached during negotiations. "To my knowledge, when it is announced that there is no deal, it means that there is no room for negotiations," Donald said. He said from confirmed sources, it was understood that ExxonMobil's P'nyang gas field Petroleum Retention Licence (PRL) had expired in May 2016 and asked the minister to confirm if this was true.

"This is after three consecutive terms of issuance according to Oil and Gas Act and a room for extension had been exhausted which is now over 20 years," Donald said. "ExxonMobil has failed to meet the requirements for which we are told that they have full-field only four out of the nine criteria." Kua said the reason why there were still some conversations going on was that according to the law (Oil and Gas Act), which also explained the expiry issue of ExxonMobil's retention licence. He said under the Oil and Gas Act, the government could issue different licences which were given at different stages. "There is an exploration licence, a retention licence and a development licence," Kua said.

"The retention licence has a duration of two years which can be extended three times under the act, but cannot be extended further thereafter." He said, however, the Oil and Gas Act stated that the holder of a retention licence could apply for a development licence when the duration of the retention licence neared expiration. "When that happens, all the rights under the retention licence extends, which is the case for Exxon," Kua said. "Their licence has expired but before that happened, they applied for a development licence. By operational law, their rights under the retention licence continues which is enforceable in our courts. "Exxon has a continuous legal right under its retention licence and because that right continues to exist, if they come to us with a revised offer, it is a commercial decision and that potential still exists and we will wait and see."

Government gives assurance to process royalty payments

February 20, 2020, The National

THE Government will ensure that royalty payments are processed quickly for landowners and provinces, says Petroleum and Energy Minister Kerenga Kua. Komo-Margarima MP Manase Makiba asked in parliament when clan-vetting would resume at the PNG LNG pipeline-impacted areas so they could be paid their royalties. "We still have legacy issues relating to the existing PNG LNG that we need to fix of which clan-vetting is one of the big problems," Makiba said. He said the past government had allocated funding and had set up a special clan-vetting team to go ahead and do the job which the operator had failed to do 10 years ago. He said as a result of the clan-vetting team being set up, vetting was completed for seven segments, which included both the upstream and down-stream areas inside the green fields and also for upstream PDLs one and seven. "After the clan-vetting, special ministerial determination was signed for each block inside PDL one and seven.

But around early last year, clan-vetting was stopped due to lack of funds and court proceedings. When will the clan vetting resume?" Makiba said he has ongoing complaints from landowners because they have not received their equity and royalties since production began some years ago. He also said there should be resolutions made to make it easy during court proceedings to enable undisputed blocks within a certain PDL to receive their payment if an issue arose and a disputing block

took the matter to court. Kua said it was true that there were delays in payments to PDLs one and seven and although disputes tended to be in one sector, if an injunction was taken, it covered everyone which was the current problem. He said his department would take note by trying to isolate sectors that were in dispute by quarantining them and putting their benefits aside and enabling payments for the undisputed segments to flow to the beneficiaries.

New report names top British companies responsible for toxic mining legacies

BHP and Rio Tinto have a long history of extracting minerals then pulling out, leaving devastation in their wake. Climate justice organisation London Mining Network reveals the extent of this in a new report. London Mining Network, Feb 19, 2020



Kalimantan, Indonesia. Coal mining operation. Credit: Daniel Beltrá

London Mining Network has published a new report entitled 'Cut and run: How Britain's top two mining companies have wrecked ecosystems without being held to account'. The report includes examples from Southeast Asia of where the British-Australian multinationals BHP and Rio Tinto have left legacies of conflict and environmental destruction, long after they've fled the scene. Recent examples of mining messes include Brumadinho, the tailings (mining waste) dam owned by Brazilian mining company Vale, which collapsed in January 2019 in Minas Gerais, Brazil. Vale executives, along with its German advisors TUV Sud, were recently charged with the homicide of 272 people; 14 people are still missing. Vale, along with BHP, jointly own the Samarco iron ore mine and tailings dam which also collapsed in 2015, causing Brazil's worst environmental disaster in history and the deaths of 20 people. The trauma due to loss of life, displacement and job loss and the environmental repercussions of contamination of river systems in both catastrophes will be felt for decades to come. The entire mining industry needs to be held to account for such mining messes, and laws made which demand the cleaning up of messes made by mining companies before they pull out of projects.

Despite the best efforts of the industry, particularly BHP, to greenwash the extraction of fossil fuels and metals, the practice of 'cutting and running' when companies close mining operations tells us another story. The harm that extraction causes people and the planet doesn't end once the companies disappear. On 10th February, BHP became the world's top copper producer, but this isn't good news for the communities affected by their copper mines, and the other metals and minerals it extracts. In 2002, the company walked away from the Ok Tedi copper-gold mine it had controlled since 1982 in Papua New Guinea. For years it had dumped waste straight into the local river

system. Eventually the company concluded that it should no longer do that and should not have operated the mine after all. But 18 years later the contamination and mess remains.

Rio Tinto was the majority owner of the Panguna mine in Bougainville, operated by Bougainville Copper Ltd (BCL), for 45 years. It dumped toxic mining waste the copper-gold mine in Bougainville (an island off the coast of Papua New Guinea) straight into the local river system between 1972 and 1988. This caused such outrage that it sparked a war for independence from Papua New Guinea, a war in which thousands were killed and independence was not won. The mine was abandoned. In 2016 Rio Tinto gave the mine to the authorities in Bougainville and Papua New Guinea but they do not have the financial or technical means to clean up the waste. For shareholders in Rio Tinto and BHP, the deadly legacies of these mines make for risky investments, as the report illustrates.

Co-author of the report, Hal Rhoades, from The Gaia Foundation, said: "This report shows how British multinationals have profited from destroying ecosystems and people's livelihoods on vast scales in the Global South, while leaving their mess behind for communities to deal with. These are the same companies who are now trying to convince us that they hold the answers to the climate emergency. We cannot continue to pay lip service to tackling climate change while allowing the world's largest corporations to devastate ecosystems that help regulate the climate and the communities that care for them. Holding these companies accountable and calling out their greenwashing is a crucial part of climate justice."

Booting Exxon gives Marape a boost - for now

The rejection of the P'nyang LNG deal signals a new way of doing business, and a shifting land-scape for US concerns. Bal Kama, The Interpreter, 19 February 2020



Western Highlands province in Papua New Guinea, the region of the proposed P'nyang LNG development (ADB/Flickr)

The recent announcement of the Papua New Guinea (PNG) Government to cease all negotiations with one of the United States' largest oil and gas companies, Exxon Mobil, over the P'nyang LNG project, a new gas field in PNG, has broader implications for the US and Papua New Guinea. At first glance, the decision against Exxon for allegedly acting in bad faith is part of a wider crackdown by the government of Prime Minister James Marape to ensure greater fairness in the resource sector. Since ousting then–Prime Minister Peter O'Neill in a vote of no-confidence in 2019, Marape

has charted a different approach from that of his predecessor, under the banner of "Take Back PNG" – a larger policy objective to reassess PNG's developmental direction and regain lost opportunities. Marape laid out his vision in his inaugural visit to Australia in 2019 and is gradually applying it in many sectors.

The decision illustrates the growing frustrations of dealing with investors in resource-rich PNG, and it further demonstrates an emerging crop of PNG leaders confident in reassessing the status quo. For the US, Exxon's alleged conduct, criticised by the PNG government as being "exploitative", undermines US efforts in the Pacific region as a force for good. Exxon Mobil has a US\$19 billion lique-fied natural gas project in PNG (PNG LNG), which made its first shipment in 2014. The PNG LNG project, which remains the largest economic investment by the US in the Pacific, coincided with former US President Barack Obama's announcement in 2012 of a "pivot to the Pacific" policy. The geopolitical scenario of the day, the excitement of having the US interested in PNG, and the high expectations surrounding a global and reputable company, among other factors, influenced the PNG government's initial agreement for Exxon to operate the PNG LNG project. It was thought the deal would have a transformational impact on PNG's economy – an assurance that continues to be projected by some quarters.

However, the overall economy of PNG did not experience the projected windfall. Instead, there were a series of negative outcomes over the years at both a national and a local level – national debts grew, and unfavourable benefit-sharing arrangements and royalties led to conflict among traditional resource landowners. Many have questioned whether the resource boom marked by the PNG LNG project was in fact a "resource curse".

"Absolute bad faith"

The ousting of Prime Minister Peter O'Neill in 2019 was partly a result of growing grievances over the failure to deliver on the promises of the Exxon-led project and other resource deals. An important issue was the high level of concessions made in those deals. Historically, PNG governments, desperate to become investor-friendly, have made hasty concessions that often disadvantaged the country from having a fair share of the revenue from the development of their resources. In a 2016 report, the International Monetary Fund (IMF) observed that "the tax arrangements for PNG's mining and petroleum sectors are very generous compared to other resource-rich countries and do not reflect the maturity of the PNG resource sector". The World Bank, in a 2017 report, also found particularly for the Exxon-led LNG project that Exxon Mobil and its PNG LNG partners created "a complex web of exemptions and allowances that effectively mean that little revenue is received by government and landowners".

The PNG government must share some burden of fault for creating this scenario – including, for instance, the failures by previous PNG governments to negotiate a favourable outcome for the country, the misuse of funds by political leaders, a politicised bureaucracy unable to carry out their due diligence, and judicial interventions that at times hinder payments to disgruntled landowners. This does not, however, excuse Exxon and its partners from the grave unfairness suggested in these reports. This, together with his experience as a minister in previous governments, underpinned Marape's firm stance on taking a different approach in the current deal on the P'nyang LNG project. In his appeal for Exxon Mobil to act fairly, Marape noted that "the initial terms [in the PNG LNG project] provided by PNG were so generous" and that new "reasonable terms" should be considered for the P'nyang project.

The terms proposed by the PNG government are not publicly available, but they appear to include giving no fiscal concessions in P'nyang, treating it as separate project from the current LNG projects and increasing domestic market obligations, local content participation, and landowner's royalties from the current rate of two percent. The Prime Minister described Exxon's refusal to accept

the terms as a move to "extract even more profit for themselves", while Kerenga Kua, the Minister for Petroleum and Energy denounced Exxon as acting in "absolute bad faith" and coming into PNG "with a determination to exploit our vulnerabilities, exploit us for our weak economic position and take advantage of us".



Papua New Guinea's Prime Minister James Marape (C) at Parliament House in Canberra, during a six-day visit to Australia in July 2019 (Mick Tsikas/AFP via Getty Images)

A principled populist

The firm position taken by the Marape government is historic – no previous government has ever taken such an approach. PNG has had resource deals in the past that have resulted unfavourably for the country, but past governments have been shown to align more closely with investors than with their citizens. The leaders and the people of PNG appear to be supportive of Marape's approach. Further, the government is considering amending and tightening the legislative framework to ensure an equitable resource sector. Marape is unlikely to concede to Exxon Mobil, as he insists: "You win for your shareholders, and I win for my people". James Donald, a Member of Parliament representing the area where P'nyang LNG site is located, cautioned Exxon against crossing "a line between commercial parity and commercial greed". Other MPs representing the resource areas have also demonstrated support for Marape's stance against Exxon.

The PNG government is likely to reconsider its current position if Exxon responds positively to its terms. Unless that happens, however, there appears to be a general distrust for Exxon among the people of PNG – a situation far from the hope Exxon represented when it first entered the country. The distrust for Exxon has broader implications when one considers Exxon not only represents US economic prestige in the Pacific, but a society whose business ideals are expected to reflect the democratic values of fairness and just outcomes. The longer this tussle between Exxon and the PNG Government continues, the greater the distrust is likely to be, not only for Exxon, but for what it represents – the United States – in the Pacific. As the vote of no-confidence scheme against a sitting government in PNG resumes later this year, those affected by Marape's firm policies may hope for a change in government. In the fluid political landscape of PNG, a populist and comparatively principled Marape faces a challenge beyond just his immediate political rivals, and inside company boardrooms. However, if anything, his approach to governance so far has been reassuring for the people of Papua New Guinea.

Newcrest: K82mil paid to landowners, provincial govt

February 19, 2020, The National Business

NEWCREST'S Lihir operation in New Ireland paid K82 million to landowners and the provincial government during the 2019 financial year, according to the company. Newcrest, in a media statement yesterday, said a further K151 million in tax contributions was also paid during the year, which included K128 million in salaries and wages tax. Lihir's workforce includes 5,000 employees and contractors, approximately 90 per cent are Papua New Guinean. The gold mining operation also generated significant flow on benefits for the PNG economy by engaging 105 Lihirian companies and 351 other PNG companies to provide a wide range of goods and services, which amounted to payments of K810 million in the same period. In addition to taxes, royalties, employment opportunities and supporting local companies, Newcrest is one of the single largest contributors of foreign exchange to PNG. During the last financial year, the operation contributed US\$361 million (K1.19bil) to the national account through acquisition of K1.22 billion of foreign currency.

These was highlighted during visits by New Ireland Governor Sir Julius Chan and Mining Minister Johnson Tuke recently to Lihir Island, to attend the first provincial executive council meeting for this year. Lihir operations general manager Chris Jordaan said Newcrest Lihir would continue to work with the Government to fulfil their development aspirations. "Your visit is an indication of the strong partnerships we have and the importance of working continuously on building our relationship for the benefit of our stakeholders – importantly the people of Lihir and New Ireland," he said. "We are aware of the major challenges facing this province and we stand committed to work together with all government, based on transparency, accountability and good governance. "We believe that a strong mining industry has a vital role to play in achieving the visions and development aspirations of the government of PNG, New Ireland and especially Lihrians."

PNG Prime Minister officially takes on Horizon Oil

Fraser Palamara, The Market Herald, 19 February 2020



- A saga of corruption and bribery allegations continue for Australian company, Horizon Oil
- Papua New Guinea's (PNG) Prime Minister, James Marape, has now publicly taken aim at the scandal making the issue a priority
- The scandal involves a AU\$15.4 million transaction to a small shell company, reportedly linked to former PNG Petroleum and Energy Minister, William Duma
- Duma continues to work in the PNG Government and James Marape has denied calls for an immediate sacking
- Marape and Duma are expected to make a formal statement on the scandal

• Shares in Horizon Oil continue to devalue on the Australian market, falling 3.61 per cent on Tuesday for a worth of eight cents each

Prime Minister of Papua New Guinea (PNG), James Marape, has publicly taken aim at Australian company Horizon Oil (HZN). The pacific island leader is backing an investigation into the Australian explorer — spiralling from reports of 'missed corruption warnings' and a <u>suspicious</u> multi-million-dollar payment. News of the saga first reached headlines earlier this month, including allegations of bribery. Now the investigation has reached all the way to the top order of Papua New Guinea's Prime Minister, James Marape. "If there is corruption involved, then find the evidence and due action will take its course," James Marape said publicly on Tuesday. "I have sent a request to the highest levels in Australia. I am interested in this matter." "The Ombudsman and the police have every right to establish a file on this matter." Marape was elected as Prime Minister last year, running a campaign on promises to clean up corruption and hold foreign companies more accountable. He has commented that domestic investigations into Horizon Oil could begin. The Horizon Oil allegations of corruption spawn from a payment made in 2011, following a denied petroleum licence application in 2009.

Horizon Oil then made a AU\$15.4 million payment to an 'unknown shell company' — reportedly linked to PNG's Minister for Petroleum and Energy at the time, William Duma. Duma's department was shown in documents to award a 10 per cent stake in a development licence to the same shell company. This company was listed in ownership under Duma's personal lawyer at the time. William Duma still works within the PNG Government, but Prime Minister Marape has denied calls for an immediate sacking. However, Horizon Oil's Chief Executive Michael Sheridan has faced fallout — being suspended as of last week. Share prices in the publicly traded Australian explorer also fell 30.8 per cent at the time, lowering to a valuation of 8.3 cents each. James Marape said on Tuesday that he and William Duma will make a formal statement on the matter in the very near future. Shares in Horizon Oil continue to shrink, lowering an additional 3.61 per cent on Tuesday. They last closed at eight cents each.

PAPUA NEW GUINEA: 'If we allow seabed mining everyone is at risk'

Civicus, Interviews 17 February 2020

Following a year marked by massive mobilisation around the climate emergency, CIVICUS is interviewing civil society activists, leaders and experts about the main environmental challenges they face and the actions they are taking. CIVICUS speaks with Jonathan Mesulam, spokesperson for the Alliance of Solwara Warriors and a campaigner on issues relating to experimental deep-sea mining, climate change and logging in Papua New Guinea (PNG).

The Alliance of Solwara Warriors is an anti-mining alliance of local communities in areas affected by deep-sea mines in PNG and across the Pacific. It has organised the <u>resistance</u> against seabed mining since 2009, when the controversial deep-sea mining project Solwara 1 was proposed to mine mineral-rich hydrothermal vents on the floor of the Bismarck Sea. The alliance also launched a <u>legal case</u> against the project in PNG's courts. In November 2019, the company behind Solwara 1, Nautilus, was declared bankrupt and it is uncertain if the project will continue.

Can you tell us about the Alliance of Solwara Warriors and how it was formed? What are its main objectives and why is it opposed to seabed mining?

The Alliance of Solwara Warriors was formed in 2016 by representatives of communities along the Bismarck Sea who are threatened by seabed mining. The members of the Alliance also include the Papua New Guinea Council of Churches, international and local environmental civil society organisations (CSOs), educated elites, local community-based organisations and a few politicians who support the call to ban deep-sea mining. Our main objective is to ban deep-sea mining in PNG

waters and the Pacific and we also call for the cancellation of exploration and mining licences. Seabed mining is a new frontier for the mining industry and is very risky as our understanding of the seabed is very limited.

The first discovery of deep-sea minerals was in 1979 and we have no idea how the seabed ecosystem operates. If we allow seabed mining, then we may just call for the end of humanity, as the complexity of the food chains on which humans depend will be affected, putting human life at risk. I think we should all stand in solidarity to ban deep-sea mining in our area because the sea has no boundaries and when the marine ecosystem is affected, everyone everywhere is at risk. Environmental and legal groups have urged extreme <u>caution</u> around seabed mining, arguing there are potentially massive – and unknown – ramifications for the environment and for nearby communities, and that the global regulatory framework is not yet drafted, and is currently deficient.



How has the campaign against seabed mining progressed? What have you achieved?

The campaign against seabed mining has been very challenging and at times we almost lost hope because of the heavy presence of Nautilus, the company behind the Solwara project, at the project site for the last eight years. However, there has been growing opposition from coastal communities, local and international CSOs and churches, especially the Catholic and Lutheran churches. An environmental law firm, the Centre for Environment and Community Rights, filed a legal case and we were able to stop this project from going into full-scale mining operation. Every concerned individual and organisation has played a very important role in their respective areas of work, such as finance, the environment and politics, to stop this project. During the Pacific Islands Leaders Forum, held in Tuvalu in August 2019, the Pacific Island leaders also called for a 10-year moratorium on deep-sea mining. But that is not what we wanted. We are calling for a total ban on deep-sea mining.

What challenges has the alliance faced in recent years?

Funding activism is a big challenge. To travel to a community to talk to people you need to pay for a bus. You have to raise funds to enable mobility and communication. The second major challenge is capacity development. As members of an alliance we deal with that by distributing challenges; we then help each other and strategise in our workshops so that we can learn from each other. Networking helps with this a lot, and the support of partners such as Bismark Ramu Group, Caritas PNG and the PNG Council of Churches. We have also received a lot of support from CSOs and individuals outside the country. People and organisations including Sir David Attenborough, the Deep Sea Mining Campaign, Mining Watch Canada and Caritas New Zealand, just to name a few, have really supported the campaign in terms of funding, providing information on the campaign and

lobbying with banks and financers not to support such a project. As a result, we have seen positive results in our work on the ground.

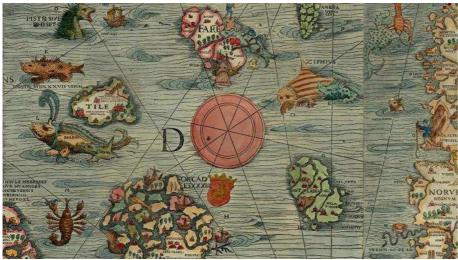
Another challenge we face is that some people in the community support deep-sea mining, and this creates division. We have had to work hard at times to really convince people that this project is not good. It's only through persistent, dedicated work and making information available so that people have all the facts, not just the perspective that the company wants people to know, that people will really support you. Once people know the truth, then you get the support.

What is the state of civic freedoms – the freedom of association peaceful assembly and expression – in Papua New Guinea?

The media in PNG is controlled by the state and they only publish stories that are good for the government. Sometimes our stories are not covered, and we end up publishing them through social media. The right to the freedom of association in PNG really depends on the kind of issues that are being addressed. On some very sensitive issues, the police will not allow people to organise and take part in protests. Our ability to carry on our work also depends on the kind of companies we are dealing with. Some companies have spent millions of Kina – the PNG currency – to stop environmental human rights defenders, and going against them is obviously risky.

Tiefseeraubbau 2020?

Bulgan Molor-Erdene, Heise Online, 17. Februar 2020



Carta Marina von Olaus Magnus (1539) / Bild: Wikipedia

Wird der "Mining Code" dieses Jahr ratifiziert, werden die Ozeane auf den Kopf gestellt. Das soll dem Planeten und der Menschheit dienen. Welche Rolle spielt die International Seabed Authority?

Die ersten Abbildungen der Weltmeere waren reich verzierte Karten mit allerlei Ungeheuern und Meereslebewesen, die nur vage den Schatz der Ozeane preis gaben. Viel ist davon hunderte Jahre später nicht übrig geblieben. Der organische Reichtum der Ozeane ist leer gefegt. Wenn dieses Jahr der "Mining Code" der Tiefsee veröffentlicht wird, dürfte auch das anorganische Material auf den Meeresböden weggefegt werden. Seit 2016 arbeitet die International Seabed Authority (ISA) an der Ausarbeitung von Verordnungen zur Exploitation von Bodenschätzen, dem Mining Code. Michael Lodge, Generalsekretär der ISA, wirbt schon länger damit, dass ein solcher Abbau der Mineralien nachhaltiger, fairer und ertragreicher sei als der Bergbau zu Land. Die nötigen Regularien soll seine Behörde noch dieses Jahr herausgeben, dann könnte 2020 tatsächlich das Jahr sein, in dem der kommerzielle Abbau in der Tiefsee ernsthaft beginnt. Doch unklar ist, wie die Regeln zustande kommen

und wem sie dienlich sein sollen. Dem Rohstoffhunger der Welt, dem Ökosystem Ozean oder dem Wohl der Menschheit?

Die ISA wurde 1994 von den Vereinten Nationen eingerichtet und sitzt in der jamaikanischen Hauptstadt Kingston. Jedes Land, das das Seerechtsübereinkommen der Vereinten Nationen (UN-CLOS) ratifiziert hat, zählt automatisch als Mitglied der ISA. Derzeit sind es 167 Länder und die Europäische Union. Die USA gehören nicht dazu. Die ISA soll regeln, dass kein Mitgliedsstaat in See stechen und den Meeresboden nach Belieben ausgraben kann. Schließlich wird im UNCLOS festgehalten, dass der Tiefseeboden und seine Ressourcen das "gemeinsame Erbe der Menschheit" sind und nur "zum Wohle der gesamten Menschheit, unabhängig von der geographischen Lage der Staaten" abgebaut werden dürfen. 2001 vergab die ISA erstmals Explorationslizenzen. China, Korea, Japan und Russland gehörten zu den ersten Ländern, die die Clarion Clipperton Zone, ein riesigess Gebiet zwischen Hawaii und Mexiko, auf Mineralienvorkommen erkunden durften.

Was soll abgebaut werden?

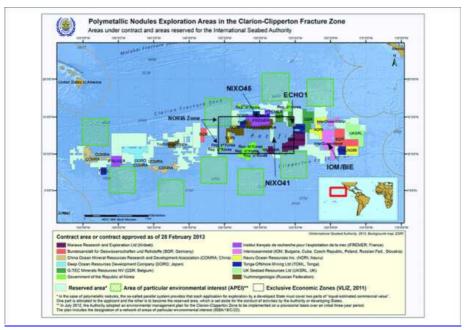
Drei Mineralienarten sind dabei von kommerziellem Interesse: Manganknollen (enthalten Kupfer, Nickel, Kobalt), Eisen- und Mangankrusten (enthalten Kobalt, Titan, Platin) sowie Massivsulfide (enthalten Kupfer, Zink, Gold, Silber, seltene Erden). In der Clarion Clipperton Zone soll es nach Schätzungen der ISA allein über 20 Milliarden Tonnen von Manganknollen geben. Sie sind etwa so groß wie ein Golfball. Aktuell sind es 21 Länder, die in der Tiefsee nach Rohstoffen prospektieren, mehr als die Hälfte davon suchen Polymetallknollen im Pazifik. Weitere Lizenzgebiete befinden sich im im Indischen Ozean und im Mittelatlantik. Auch Deutschland hat sich zwei Claims gesichert, für ein 10.000 Quadratkilometer großes Gebiet im Indischen Ozean südöstlich von Madagaskar und 2006 für eine 75.000 Quadratkilometer große Fläche in der Clarion Clipperton Zone. Das Gebiet im Pazifik ist etwas größer als Bayern, wird auch das 17. Bundesland genannt. Das Forschungsschiff "Sonne" stanzt dort 50 mal 50 Zentimeter große Proben aus dem Meeresboden, in der Hoffnung darin genügend Manganknollen zu finden.

Die Bundesanstalt für Geowissenschaften und Rohstoffe (BGR) schätzt, dass in dem Gebiet im Pazifik etwa eine Milliarde Tonne Manganknollen liegen. Nach einer internen Berechnung der BGR hätten die dort vermuteten zehn Millionen Tonnen Nickel, die acht Millionen Tonnen Kupfer und die 1,2 Millionen Tonnen Kobalt einen Marktwert von rund 561 Milliarden Dollar (2016). Jede Explorationslizenz hat eine Laufzeit von 15 Jahren mit der Möglichkeit, die Lizenz mehrfach um jeweils 5 Jahre zu verlängern. Wird der Mining Code ratifiziert, gilt das als der Startschuss für den "gold rush" des 21. Jahrhunderts. Dann können Staaten exklusive Nutzungs-/Extraktionslizenz für 30 Jahre beantragen und den Meeresboden pflügen, um Manganknollen zu ernten. Bisher hat kein Land eine Nutzungsgenehmigung erhalten. In internationalen Gewässern hat also noch kein Bergbau stattgefunden. Etliche Staaten warten darauf, dass die Schleusen für die kommerzielle Extraktion endlich geöffnet werden. Mit dem Mining Code 2020 soll es soweit sein.

Von der Exploration zur Extraktion

Smartphones, Batterien für Elektroautos oder zum Mars fliegen, all das war vor zwanzig Jahren kein Thema, als im Jahr 2000 der allererste Entwurf des Kodex des ISA zur Erkundung der Mineralknöllchen in der Clarion Clipperton Zone unterzeichnet wurde. Die Welt ist immer noch weit davon entfernt, genau zu verstehen, wie das Ökosystem der Tiefsee funktioniert, welche Umweltschäden durch den Bergbau entstehen. Gewiss ist, dass alle Schäden unumkehrbar sein werden. Die Arbeiten am neuen Mining Code dauern bereits vier Jahre an. Michael Lodge, Generalsekretär der ISA ist optimistisch, dass er dieses Jahr ratifiziert wird. "Wir haben die einmalige Gelegenheit, es richtig zu machen. In der Tat ist dies wahrscheinlich die am besten regulierte Branche, die noch nicht stattgefunden hat", sagte Lodge. "Ich denke, der aktuelle Entwurf ist weitgehend vollständig." Viele große Mineralkonzerne investieren in Unterwasserabbauprogramme und Ausrüstung, die technischen Herausforderungen für jede Art von Tiefseeabbau sind gewaltig. Sie graben in nationalen

Küstengewässern an der Westküste Afrikas etwa nach Diamanten. Oder testen in der Clarion Clipperton Zone Bagger- und Extraktionsmethoden, während sie darauf warten, dass der Mining Code für die internationalen Gewässer veröffentlicht wird.



Die Clarion Clipperton Zone zwischen Hawaii und Mexiko. Bild: Researchgate CC BY 4.0

Mehr als ein Dutzend Unternehmen würden dann ihre Erkundungen in der Tiefsee auf die Förderung im industriellen Maßstab umstellen. Auf tausenden von Quadratkilometern kriechen dann Saugmaschinen und Sammelfahrzeuge systematisch über den Meeresboden und tragen die obere Schicht ab. Über mehrere tausend Meter lange Vakuumschläuchen werden dann Knöllchen und Sedimente abgesaugt, um sie auf Schiffen zu filtern. Der Schlamm und Lebewesen kommen zurück ins Wasser. Sie treiben in der Strömung, bis er sich in nahe gelegenen Ökosystemen niederlässt. Für Lodge eine lösbare Sache: "Sicher, das ist ein großes Umweltproblem. Es gibt eine Sedimentfahne, und wir müssen damit umgehen. Wir müssen verstehen, wie die Wolke funktioniert, und derzeit werden Experimente durchgeführt, die uns helfen werden."

Tiefseebergbau löst die Probleme der Menschheit?

Gregory Stone von <u>DeepGreen</u> sagt, wenn die ISA es richtig macht und angemessene, strenge Regeln festlegt, können wir die Mineralien für unsere erneuerbare Revolution tatsächlich umweltfreundlicher und fairer sichern als bisher in der Vergangenheit. Letztes Jahr gab DeepGreen bekannt, dass das Start-Up 150 Millionen US-Dollar aufbringen wird, um mit der Exploration von Mineralienreichtum in einem Teil des Pazifiks zu beginnen. Es wurde als Zeichen für das wachsende Vertrauen in die Zukunft der Branche gewertet. DeepGreen-CEO Gerard Barron glaubt, dass die Welt nicht überleben wird, wenn sie weiterhin fossile Brennstoffe setzt. "Auch der Übergang zu anderen Energieformen wird eine massive Steigerung der Batterieproduktion erfordern. Auf einem Planeten mit eine Milliarde Autos würde die Umstellung auf Elektrofahrzeuge ein Vielfaches von dem erfordern, was der herkömmliche Bergbau aufbringen kann." Ausserdem bedeute der Abbau der Tiefseebodenschätze ein Ende der Kinderarbeit, etwa in kongolesischen Kobalt-Minen.

Explorations- und bald Extraktionslizenzen können bei der ISA nur von Staaten beantragt werden. Unternehmen kriegen keine Lizenz, außer sie werden von einem Land gesponsert. Das kanadische Unternehmen DeepGreen zum Beispiel hat mit dem pazifischen Inselstaat Nauru zusammen das Unternehmen Nauru Ocean Resources Inc. (NORI) gegründet, um eine Lizenz für Abbauflächen in der Clarion Clipperton Zone zu erhalten. Die Regierung von Nauru hat Barron von DeepGreen sogar erlaubt, das Land bei der ISA offiziell zu vertreten. Barron nutzte dies als Gelegenheit, um auch

die ISA dazu zu bewegen, die Vorschriften so schnell wie möglich zu entwickeln. und diese unternehmensfreundlich zu gestalten.

Letztes Jahr sprach er bei der ISA vor und argumentierte mit dem Klimawandel: Als globale Gemeinschaft rennen wir gegen die Zeit. Wenn wir den CO2-Ausstoß nicht schnell und deutlich reduzieren, verlieren unsere Freunde und Partner in Kiribati und Nauru ihr Land, und das ist nur die Spitze des Eisbergs, der auf uns wartet - einschließlich der verheerenden Auswirkungen auf die Ozeane. Die vor uns liegende Wahl ist also, ob wir uns für "den Teufel, den wir kennen", die Bergbauindustrie an Land entscheiden oder ob wir die Metalle aus unseren Ozeanen holen? Ich würde heute nicht vor Ihnen stehen, wenn ich nicht glauben würde, dass der Weg zum Meer die bessere Alternative wäre.

Opposition to seabed mining from chiefs in Fiji's Macuata

Radio New Zealand on 17 February 2020

Fijian chiefs from the northern province of Macuata have warned they will not allow seabed mining in the area. The decision by the chiefs includes the province's natural resources management plan (NRM). Head chief Ratu Wiliame Katonivere told the *Fiji Times* they would not allow seabed mining to take away their source of livelihood. He said the chiefs also decided that no other mining activities would take place in the province. Mr Katonivere said underwater mining was lethal to marine organisms. The risks and harmful effects of seabed mining far outweighed the benefits of finding precious stones, oil or minerals, he added. Macuata is home to a large portion of the Great Sea Reef which runs over 200km from Udu point to Bua and across the Vatuira Passage.

The inside story of a gas deal gone bad

Australian Financial Review, February 15, 2020

Along the Fly River in the remote Western Highlands province of Papua New Guinea, a region best known for coffee plantations and tribal headwear, a gas boom was taking hold. Chancers and prospectors mixed it with the world's oil majors, all seeking to transform this region of waterfalls and dense jungle into a new jurisdiction for liquefied natural gas (LNG). ExxonMobil, France's Total and Australia's Oil Search had all staked a claim as the new decade began in 2010. Less well known, but no less ambitious was the ASX-listed Horizon Oil, which was looking to thread together a series of smaller development licences to support a new pipeline and LNG plant. The pay-off would run to at least eight digits, at a time when natural gas billionaires were being minted from central Queensland to south Texas. For a company like **Horizon**, which saw its market value hit \$550 million as the gas boom peaked, getting to first production in the Pacific nation was always going to be a sizeable task.

Then the politics of PNG intervened. After early attempts to resist "the bad guys", as one of its law-yers put it, Horizon chose to engage with the then minister for petroleum and local powerbroker, William Duma - a decision that has come back to bite it nine years later. The company, which saw its stock price drop 30 per cent this week, is now confronting allegations it repeatedly ignored corruption warnings and paid \$US10.3 million (\$15.4 million) to a politically exposed shell company. That company, Elevala Energy Ltd, listed its sole director and shareholder as Simon Ketan, a man with close personal and business links to Duma. The documents, obtained by The Australian Financial Review and which reveal in granular detail how Horizon operated in PNG, are now being examined by the Australian Federal Police, which said it takes "allegations of foreign bribery very seriously".

Point of no return

Horizon has also stood aside its chief executive Michael Sheridan, a 17-year veteran of the company, as it conducts an independent investigation. It has all the makings of a grubby little scandal. But at the same time, it's hard to see how it could have played out any differently from the moment Horizon wrote to then petroleum minister Duma, in November 2010, saying it was "open to any suggestion" on how the "current tension might be defused". At that point there was no turning back. The files document in tropical colour the narrow line Horizon was already walking in PNG, with a seemingly endless list of paid political consultants and community affairs managers, who were chasing rumours about shifting power structures, seeking "per diems" for provincial staff and arranging drinks with the then prime minister Sir Michael Somare and his daughter Betha at Port Moresby's Airways Hotel.

Then came the task of managing warring villagers, joint venture partners, feasibility studies, and chartering helicopters for access to remote locations. It was high finance and geoscience meets local politics and the everyday challenges of PNG, a country the World Bank ranks as poorer than Sudan. Into this environment strode the former investment banker Brent Emmett, who had taken over as Horizon chief executive in 2000 and been joined three years later by Michael Sheridan, as chief financial officer. Together they had refocused the company's attention on PNG and by mid-2008 were running hard at this emerging LNG jurisdiction with stakes in three prospective oil and gas licences. Their timing was good. By 2009 Morgan Stanley was reporting that land under lease in PNG had increased fivefold over the previous seven years and it predicted a rush of deals and ballooning asset values. But Emmett was unsure how best to play this boom.

Tricky terrain to navigate

In one email he pondered whether he should prove up the resource and commercialise slowly or go for the land grab. To make such a call, Horizon, which also had assets in China, New Zealand and the United States, needed to better understand the local political terrain, which was notoriously tricky around licence transfers and renewals. In an attempt to smooth out these wrinkles, Emmett organised to introduce himself to Duma, while Sheridan was charged with meeting Sir Michael Somare and daughter Betha at the Havanaba bar within the Airways Hotel, famous for its leather armchairs and antique cabinets. "It was a pleasure to meet you and welcome you as yet another investor in our country even though you have been here before," Betha wrote to Sheridan in June 2008. From that point, Horizon began to get serious: the company set up an office in Boroko and hired a country manager. By October 2008, Morgan Stanley's prediction was already being realised when AGL sold its 3.6 per cent interest in the giant pipeline and processing plant known as PNG LNG for \$1.1 billion. It was a reminder of how much was at stake.

Vulnerable to political pressure

By May the next year, Horizon was also in on the action - selling half of its interests in two licences, PRL4 and PRL5, to Thailand's P3 Global Energy Co for \$US55 million, almost three times more than analysts believed the assets to be worth. The company's share price soared. But things weren't as rosy as they appeared. Behind the scenes, the Thais were questioning their investment, and Horizon was working overtime to get someone else - Canada's acquisitive Talisman Energy on the hook. At the same time, with increasingly larger amounts at stake, the local politics started to get complicated. And unlike the big diversified players, Horizon couldn't simply threaten to walk away. Its big bet was in PNG.

The company's big pay day was contingent on firming up its gas resources to build its own pipeline and LNG-processing plant or tap into one of the existing projects. Even then its resources were on the marginal side, which meant any loss of acreage was potentially fatal for its ambitions. That left it exposed to political pressure and everyone knew it. Enter PNG's former petroleum minister and deputy prime minister, Sir Moi Avei, who Horizon hired as an adviser to the board, despite one

industry contact warning he may be "implicated in some dubious licence deals etc". Those claims were never tested, but the public record shows just a year earlier, Sir Moi was found guilty on three counts of "misconduct in office". He was fined \$1500 and forced out of parliament.

'You scratch my back ...'

That was apparently no obstacle for Horizon as Sir Moi set about working the corridors and securing the company's licences. In outlining his role to Emmett and Sheridan, he stressed the importance of face-to-face meetings and not stepping on the "turf" of other fixers, managing relationships within the department and at the village level. And when it came to handling Duma, he was clear how the minister operated. "I've been helping Minister Duma out for the past 6 weeks because the LNG project is in my backyard. You know how the system works ???you scratch my back and I'll scratch yours'," he wrote. But Sir Moi, who one source described as the epitome of PNG's "big man culture", quickly came to see the political winds shifting against Horizon.

"With regards to the minister [Duma] I can sense he is up to something. He did call me two weeks ago but somehow we have yet to meet in person. I'm still chasing him," he wrote in November 2009. He was right. Duma was indeed "up to something". The trigger for the minister to make his play was a move by Horizon's joint venture partner, the South Australian energy giant Santos, to sell out of its interest in one licence. That suddenly became a road-block. Sir Moi characterised these as "basic" issues, that could be untangled once Horizon understood the "process". He warned the company's failure to stay with the "process" would see it become a "political pawn". "We need to avoid [this] at all cost. I will elaborate when I see you and Brent," he said.

Licence in jeopardy

By July, those fears were out in the open, and rumours were swirling. One engineer warned Duma "has done this before". "[He] rescinded a licence and resold to someone else," the company was warned. "Duma has a buyer." As the reality of losing a licence worth more than \$100 million grew, a series of heated emails were exchanged. The Department of Petroleum and Energy accused the operators of failing to keep the site in "good standing" and not having spent the agreed amount. Horizon and joint venture partner Santos responded with strongly worded legal letters. But on June 28, 2010, Duma served a notice that PRL5 was to be cancelled. Horizon countered by taking the unprecedented step of suing the minister, the department and the Petroleum Advisory Board for an unfair loss of licence. It was taking on a corrupt and broken system. "I want to convey a message to Minister Duma, that's he's got a real dog fight in [sic] his hands," Sir Moi emailed.

Horizon's lawyers at Blake Dawson said the company had strong support in the industry for its stance. "The good guys are all pretty stirred up by these goings on," the company was told. Then the company abruptly changed tack with a grovelling letter. "Minister, we very much regret that this issue [the revoked licence] has led to the current situation [the litigation]," Emmett wrote to Duma. "As always, we remain open to any suggestion from you as how the current tension might be defused." The message got through and by March 2011, a sealed settlement had been negotiated and approved by the court. Horizon would keep 70 per cent of PRL5 (now known as PRL21), and the minister would award the other 30 per cent at his discretion. From the minister's discretion a 10 per cent stake in PRL21 would be given to the shell company Elevala Energy Ltd, a company without the experience or capital to develop such a complex asset and whose sole shareholder, Simon Ketan, had close personal and professional links to the minister. In the weeks following this grant, Horizon would ignore repeated corruption warnings and buy out Elevala for \$US10.3 million, a price tag which was revealed on Monday by the Financial Review after remaining secret for nine years.

Bids in for Vale nickel company in New Caledonia

The Vale nickel company in New Caledonia says three bids are in to buy the 95 percent stake put up for sale by Vale of Brazil. Radio New Zealand on 14 February 2020

The head of its Noumea-based subsidiary has declined to name them but said by the end of June he expected the deal to be signed off. Southern Province President Sonia Backes, who attended a meeting with Vale's leadership, said for geostrategic reasons the French state will pay attention to who the buyer would be. Accompanying the sale is a restructure of the operation for which \$US120 million has been approved. Up to 140 employees are expected to lose their job once the nickel refinery closes as Vale prioritises making NHC, or nickel hydroxide cake, which is in demand for batteries for electric vehicles. The restructure also includes plans to export two million tonnes of nickel ore a year, but this requires an amendment of New Caledonia's mining code.

Ok Tedi Province receives dividend

February 14, 2020, The National Business

THE Fly River government received their second batch of K7.2 million in dividends from Mineral Resources Ok Tedi No.2 (MROT2). Governor Awi Taboi Yoto told the media in Port Moresby on Wednesday that from the K7.2 million, K720,000 had been allocated to subsidise school fees for Western students with the balance of K6.48 million being shared between the Fly River government (FRPG) and the three district administrations. He said FRPG would get K2,592,000 while the three districts – North Fly, Middle Fly and South Fly – would receive K1,296,000 million each. Taboi said the payment was part of dividend proceeds for the 2019 financial year from MROT's equity in Ok Tedi Mine Ltd, and the shares were decided by the provincial council.

Marape pushes for benefits in oil, gas sector

February 14, 2020, The National Business

CERTAIN percentages of resources harvested in the oil and gas sector will be quarantined for domestic use, according to Prime Minister James Marape. Marape said this during the presentation of the Manus provincial government's share of the subscription payment to the National Gas Corporation (NGC) yesterday at the state function room at Parliament house. He said this was part of the Government's outlook to do more downstream processing in the oil and gas sector. "Every nationally-owned company should be given equal opportunity to participate in the oil and gas business," he said. "As far as our outlook is in the oil and gas sector, downstream processing is something that we are seriously discussing and that's part of our policy and this Government's DNA.

"This will not only be in oil and gas but all the other sectors of our resource harvest including forestry. "But in the oil and gas sector in particular, we are looking at quarantining certain percentages of our resource harvest for domestic use which is better known as domestic market obligation. Certain percentages of resources harvest will be put in law through an amendment that is currently taking place that this percentage is now given for the domestic market to use." Marape called on provincial governments to support the state's initiative in encouraging combined investment in nationally-owned resources development companies. "The power is in the combined balance sheet," he said.

Alluvial mines reserved for locals to explore, says Tuke

February 14, 2020, The National

COMPANIES with exploration licence do not have the right to stop landowners from doing alluvial mining in areas listed under their exploration licence, Mining Minster Johnson Tuke says. He said under the Constitution, a company could obtain an exploration licence but alluvial mining was confined and reserved for landowners. Tuke was responding to East Sepik Governor Allan Bird's questions relating to landowner groups in Maprik being denied access by a foreign company to do alluvial mining on their own land. Bird said even though the Mineral Resources Authority (MRA) issued a number of alluvial mining licences to landowner groups for the many alluvial prospects there, issues were still faced by those operating under those licences. He said a foreigner was killed three months ago in his province as a result of issues relating to the MRA alluvial mining licences.

"MRA and other Government departments and agencies do not consult us before allowing foreign companies to operate in our province," he said. Bird said a foreigner operating in Maprik had restricted local landowners from obtaining alluvial mining licences to operate on their own land. "What happens to the rights of landowners when MRA issues exploration licences to foreign companies to operate on their land?" Bird asked. Tuke said even though alluvial mining was reserved for landowners, MRA, through its mining advisory council, had the power to determine who was capable of conducting mining activities. Northern Governor Gary Juffa also raised a concern about MRA conducting warden hearings in the absence of landowners. "Landowners need to be properly advised about the time and venue of these warden hearings to avoid inconveniences," he said. Tuke said the issue was a result of poor communication between MRA, provinces and landowners.

Rio Tinto behaviour 'outrageous' – NZ Environment Minister Conan Young, Radio New Zealand, 13 February 2020



The flooded Mataura River rips past the former Mataura paper mill. Photo: Stephen Jaquiery

Environment Minister David Parker says he has had enough of Rio Tinto and is considering legal action against the owner of the Tiwai Point aluminium smelter over its failure to deal with its hazardous waste. Parker's tough words follow claims the company reneged on a verbal agreement

given last week to remove the waste that has been stored in the Southland town of Mataura for the past six years. The 10,000 tonnes of ouvea premix in a disused paper mill came close to being inundated by flood waters last week which could have set off a highly dangerous cloud of ammonia gas. Rio Tinto's website states it is committed to mitigating its operations' impact and has stories about its efforts to help look after the environment, from bears in Canada to native trees in Australia. Parker said Rio Tinto needed to clean up its "mess" in Southland. "For them to try and escape some responsibility for cleaning up the mess that comes from their own smelter. It's outrageous. I can't reconcile it with their statements of corporate responsibility that they put on their own website. "You know, they talk about preserving grizzly bears in Canada and migrating birds in Australia. Well perhaps they could take the same stance when it comes to the people and the environment of Southland."

Rio Tinto thought it had dealt with the problem when it paid Bahrain's Taha Industries to take the dross off its hands in 2014. That company went into liquidation in 2016 and the waste sat in the old paper mill until a deal was cut last year between the Government and local councils to move the waste from the Mataura mill and other sites over six years. Fast forward to last week, and Gore District Council chief executive Steve Parry said it had a verbal agreement with the chief executive of the smelter, Stewart Hamilton, to speed up the removal of the dross, and and store it at the smelter. But days later, Parry said, the head of the smelter had reneged on that deal. Parker said that was disgraceful. "Central government agreed to kick in a million dollars, the smelter a bit more than a million dollars and the councils some hundreds of thousands of dollars to get the clean-up started in a major way. "You know, we didn't bring to bear those underlying legal liability issues but, you know, maybe we the Government should be looking at suing them now. I've had enough."



Parry said he was told that Rio Tinto did not want to import any extra liability on the site until its strategic review on the future of the Tiwai Point smelter was completed at the end of March. The contract in place provides for moving the dross from the factory in up to two-and-a-half years. "Given the floods we've just had that was considered to be just too long." The high-level agreement in principle was for a three-month removal period starting at the end of March, Parry said. Parry said as a small council, Gore would be reluctant to take legal action on its own. "What we don't want to see is a process bogged down in legal action which could take a long time and cost a lot of

money. "We need to remember there is a contract in place, it is still running, it's performing to expectations and in two, two-and-a-half years that warehouse in Mataura will be cleared out."

Rio Tinto is carrying out a strategic review of the Southland aluminium smelter. Parker told Morning Report he was staggered that Rio Tinto had tried to connect the waste from aluminium production with its strategic review. "It's got a history of crying wolf over their financial situation to try to wring out concessions from successive New Zealand Governments," he said. "They're trying to hide behind a contract they had that went wrong. They paid a company to take this dross from this site and in the end that dross was just dumped at various sites around Southland. It wasn't processed. Rio Tinto say it's not their problem that their contractor didn't do it." The minister said any court action would not take place quickly, and he didn't want to overstate the risk given the highest flood on record did not get into the warehouse. But there was a contrast between Rio Tinto's statements on the environment and its conduct in New Zealand. Smelter chief executive Stewart Hamilton did not return RNZ's calls asking for comment. He released a statement which did not address whether the company had given a verbal undertaking.

"We remain committed to a solution that removes the material," the statement reads. "NZAS has committed to contributing \$1.75 million to the costs of safely removing and processing the material." Sort Out the Dross action group spokesperson Cherie Chapman said Rio Tinto should take care of its waste instead of palming off the problem on to the people of Southland. "The community is very angry, very concerned, very bewildered about why this stuff has not been picked up at speed and taken out of the end of the Mataura paper mill." Chapman said it was important to remember that nobody in Mataura had a say about the dross being stored in the middle of their town. "It was snuck in to those buildings without any consents whatsoever, and the resource consent was then retrospective. Shortly after the company went into liquidation. The council has no recourse really when a company goes into liquidation, this is why I think Rio Tinto needs to pick up its act." Chapman was sending out an open invitation to the smelter to attend a public meeting in Mataura tomorrow night to discuss the problem and what should be done about it.

Authority keen to continue project

By GYNNIE KERO, February 13, 2020, The National

THE Mineral Resources Authority is looking forward to completing the landowner formalisation process, discussing benefit-sharing arrangements among other things regarding the Wafi-Golpu copper-gold project. Managing director Jerry Garry said the authority welcomed the National Court decision in Lae on Tuesday which dismissed a review application filed by the State and Morobe Governor Ginson Soanu. It lifted the injunction relating to the project. Garry said the injunction had stopped everyone from progressing work on the Wafi-Golpu project since the first quarter of last year. "Consequently, all the statutory assessment process by the MRA were suspended. Regrettably, all the activities on the project site were also suspended leading to the laying off of project personnel," he said. Garry said while the judicial system provided the avenue for justice, it was also equally important to weigh out consequences and effects before engaging in lengthy litigation.

"The MRA welcomes the decision and looks forward to completing the landowner formalisation process, re-engage in development forum to discuss benefit-sharing arrangements, and conclude the Special Mining Lease permitting process," he said. Project partners Australia's Newcrest and South Africa's Harmony Gold are expected to use the block cave mining method. It is also expected that the initial capital investment would be around K9.1 billion, with total capital expenditure expected to be around K17.4 billion over the 28-year life of the mine. Garry told The National earlier that Wafi Golpu was a mega project which required "a lot of stakeholder participation". "Wafi Golpu will take years for construction. "The Ok Tedi copper and gold mine in Western has a life span of

10 years. "It's critical to have the project up. If we don't get it on time, we will have not have copper."

Fiji: Sand Mining Plan At Sigatoka Rive Row Erupts

Fonua Talei, Fiji Sun, 12 Feb 2020



Australian company defends position against the petition, to be tabled in Parliament, to stop Sigatoka River project

An Australian mining company has strongly defended its position against a petition to stop the issue of licence to mine sand at the Sigatoka River. The petition is being organised by SODELPA Opposition MP Viliame Gavoka, who has tabled it for Parliament debate next week. It claims residents of riverbank communities may be:

- forced to leave their homes because the mining would negatively affect their livelihood.
- deprived of their ancestral fishing ground as a result of destruction to their environment.

But Garry Lowder, chairman of Dome Gold Mines Limited, said: "If our project proceeds at Sigatoka it will have substantial environmental benefits, including significant mitigation of the chronic flooding that occurs regularly in the Sigatoka River, and revitalisation of the river, which is currently choked with sand. "The mine, if it proceeds, would very much enhance local employment opportunities and provide a substantial boost to economic activity across the Sigatoka area". Mr Lowder said the company operated in Fiji on a Special Prospecting Licence 1451 issued by the Fijian Government with strict terms and conditions. He also said they had fully complied with the terms of the licence and exercise industry best practices in all of their activities. He said: "We are acutely aware of the need to protect the environment and engage with the local community and we routinely exceed our statutory obligations on both of those matters." Mr Gavoka hopes the Speaker of Parliament, Ratu Epeli Nailatikau, will nominate a committee to carry out an inquiry.

He said he had collected about 900 signatures. The proposed mining area covers 2522.69 hectares on the plains at the mouth of the river, the river itself and an area offshore. The petition raises concerns about plans by the company to mine magnetite, a source of iron, for making steel. Mr Gavoka claimed that in preparation for the Parliament sittings from February 17 21, he had consulted with the landowning units in the Nadroga/Navosa Province particularly the people of the Tikina 'o Nasigatoka and the surrounding riverbank communities. "The support has been overwhelming. If I had more time, I could have got thousands of signatures, but I needed to table it quickly in February because mining is scheduled to commence in 2021 and time is of the essence," Mr Gavoka said. These villages are indicating their concern, they are my people, my relatives and also the settlements around the area like Kulukulu. "I want the inquiry to happen right away. Once the petition is

tabled in Parliament, the Speaker will then nominate a committee to carry out an inquiry," the SODELPA MP said.

Ok Tedi: K800mil to move crusher

By DALE LUMA, February 12, 2020 The National Business

OK Tedi Mining Ltd (OTML) is spending K800 million to relocate its existing in-pit crusher, chief executive officer Peter Graham says. Graham said this would allow access to high grade ore which would enable high production of copper concentrate in 2022. He said the relocation project would be completed by the middle of this year. "OTML is investing K800 million in replacing and relocating the mine's in-pit crusher," Graham said. "This is a strategically important project in that it allows access to high grade ore underneath the existing in-pit crusher. "While the in-pit crusher replacement project will be completed by mid-2020, there is a considerable amount of waste stripping necessary in 2020-2021 to provide access to the higher grade ore from 2022.

"With access to the higher grade ore, copper concentrate production will increase significantly." Graham previously told The National said that: "The project was approved by the OTML board in 2017. "The relocation would release value in the company's productivity and is expected to double returns on investment cost. "This was a high value opportunity that was identified in our 2016 strategic planning cycle and was expected to generate a return of double our investment. "There is significant value opportunity associated with the crusher relocation." When asked on the mine's revenue, Graham said: "In 2019, total revenue was more than US\$1.1 billion (K3.74bil)."

Kua: Gulf's Pasca offshore gas project next on agenda

By SHIRLEY MAULUDU, February 12, 2020, The National Business

THE Pasca A offshore gas project in Gulf will be the next petroleum project the Government will look to develop, Petroleum and Energy Minister Kerenga Kua says. Kua said yesterday that a State negotiating team (SNT) would start discussions with operator Twinza Oil shortly. "Pasca seems to be a good news," he said. "The operator is ready to negotiate with the State. "We have not been able to engage with them because of the P'nyang project. "It's (Pasca A) a small project but it's an important project." The project is 85km out at sea, within PNG's exclusive economic zone. The project will be producing condensate, liquefied petroleum gas (LPG) and natural gas. Condensate and LPG will be produced initially followed shortly after by monetisation of natural gas through LNG production and export.

In a recent interview, Twinza managing director Huw Evans said production would average approximately 19,000 barrels per day of which 55 per cent would be condensate and 45 per cent LPG. Evans said these levels of production would be steady throughout the liquids' extraction phase of the project. "Gas monetisation of the Pasca A field alone will produce around 700,000 tonnes of LNG per year for 12 years, starting a few years after production of LPG and condensate. This equates on average to about one LNG cargo per month," he said. "There are opportunities to expand the LNG production in the Gulf of Papua with the Pasca project as the catalyst for a wider aggregation of discovered yet undeveloped gas resources and we are working closely with the state to explore how we can bring that about." Meanwhile, the Oil and Gas Act provides for the Government to have a backin right of up to 22.5 per cent equity on the project.

Concern over proposed deep sea tailings outfall

February 12, 2020, The National

MINISTER for Fisheries and Marine Resources Dr Lino Tom is unsure about the proposed deep sea tailing pipeline outfall (DSTPO) from the Wafi-Golpu project likely to go out at Wagang, few kilometres east from Lae city. Wagang, in the Ahi local level government, is at the centre of the proposed construction of new fishery wharf project undertaken by the National Fisheries Authority (NFA) and the Wafi-Golpu project DSTPO. Tom earlier said much of the revenue from fishery sector was generated from tuna. But he was uncertain about the DSTPO. NFA managing director John Kasu said discussions were still underway. "The NFA is aware of the proposed DSTPO and discussions are underway to find a common understanding" Kasu said. Kasu, however, did not explain which Government agencies and private entities were trying to find a common ground for mitigation, should any consequences arise from the impact of the DSTPO if constructed. Last Aug 20, Tom signed a memorandum of understanding with Morobe Governor Ginson Saonu to ensure that the NFA completed its geo-tech feasibility and land investigations to allow the start of the project construction. Saonu wants to see the construction of the Wagang fisheries wharf start less than three years from now.

Wafi-Golpu stay order lifted

February 12, 2020, The National

THE National Court in Lae has lifted a stay order on work relating to the multi-billion kina Wafi-Golpu copper-gold projects in Morobe, opening the door for the process to proceed. Morobe Governor Ginson Saonu and the provincial government had asked the court to review the decision by State Solicitor Daniel Rolpagarea to allow Minister for Mining Johnson Tuke to sign a memorandum of understanding (MoU) on Dec 11, 2018, to proceed with talks relating to the project. They also wanted the MoU declared null and void. National Court judge Justice Jacinta Murray ruled that since the MoU had since been withdrawn, "the proceeding filed is now dismissed as having no cause of action or basis to proceed on". Justice Murray ruled that the developer had formalised the withdrawal of the MoU "and nothing else is required to confirm the position taken by the parties".

"Based on the evidence before the court, I find that the MoU has been withdrawn. The judicial review cannot proceed further because the MoU which the plaintiff's lawyer insist must be declared null and void no longer exists." She also set aside the stay order requested by Saonu and granted by National Court judge Justice John Numapo on May 7, 2019. Saonu could not be reached for a comment on the ruling. The court heard that developers Wafi Mining Ltd and Newcrest PNG 2 Ltd had also sought to have the orders by Justice Numapo varied. But this was refused by Justice Murray on Jan 24. In last Friday's judicial review application, Saonu's lawyer Ralph Saulep produced seven statements to support the judicial review application. Justice Murray said the preliminary issue to consider first was whether a MoU upon which the judicial review was based on still existed.

Rural alluvial miners to be empowered

Loop PNG, February 11, 2020

Morobe Governor Ginson Saonu has reaffirmed the Morobe Provincial Government's position to empower all rural alluvial miners of Wau-Bulolo. This was highlighted following a discussion with four tenement holders of Wau, Bulolo and Watut River in Bulolo District. Governor Saonu said MPG has now engaged the services of Albatross Integrated Limited, who have extensive years of working with alluvial miners and other mining projects of New Ireland Province. The company will be the coordinating body to ensure the alluvial miners are empowered. "These are new interventions

undertaken by MPG and to drive the agenda of mining in Morobe," Governor Saonu stated. "I have appointed a Tutumang committee chairman for mining who will work closely with the alluvial miners, landowners, miners associations and cooperative societies from here and onwards to ensure they are fully taken care of in their activities. All reports will then be presented back to PEC on the progress of the alluvial miners.

"I understand that over the many years, the landowners and historical miners of small scale mining in Wau- Bulolo have been deprived of the full benefits of their gold, and so it is time for MPG to intervene to assist them to reach maximum benefits of alluvial gold." Governor Saonu said plans are in place to ensure all alluvial gold collected by the landowners and tenement holders are made into gold bars to ensure financial security in the long run. "The Regulatory Operations Division (ROD) of the Mineral Resources Authority and Albatross Integrated Limited will work now more closely with the landowners and tenement holders to ensure the all are fully taken care of in their alluvial mining activity. "The aim of empowering the alluvial miners is part of the Economic Policy of Triple 1, where people of Morobe are empowered at which activity they are engaged in to be financially sound," Governor Saonu explained. He further emphasised that financial literacy training will be conducted for all Wau-Bulolo alluvial miners as well to ensure they are financially capable.



"The alluvial mining sector will be another economic opportunity for Morobe and a revenue generating activity for Morobe as well." Matthew Dalga, the MRA Development Engineer at the Small Scale Mining Branch representing ROD and MRA, said alluvial mining has huge potential and it can bring positive benefits if well-coordinated and supported. "The MRA will support wherever possible in terms of compliance and ensure the regulatory process is followed so that the initiative taken progresses to a positive direction," he stated. Albatross Integrated Limited Principal Bridget Laimo said all good governance and transparency mechanisms will be in place to ensure all alluvial tenement holders and people are given maximum benefit for their efforts. "Albatross working will be a family orientated partnership with the alluvial miners from onwards," she stated. "The levies retained from the alluvial gold sold will go back to your communities to help build roads, schools and all other necessary development infrastructure." Albatross Integrated Limited for six years have been working with landowners at New Ireland Province, and also up at Hides and Porgera and will now do the same for Morobe.

Horizon Oil denies Financial Review's \$15m bribery scandal allegation, launches independent investigation. Lorna Nicholas, Small CAPS, February 10, 2020

In response to an *Australian Financial Review* article alleging a \$15 million "bribery scandal", Horizon Oil issued an ASX statement saying it "has no actual knowledge" of any wrongdoing. However, prior to market close today, the company revealed it had initiated "an independent investigation" into the matter, due to the "seriousness of allegations" made in the AFR article. According to the AFR, Horizon "repeatedly ignored" corruption warnings and paid US\$10.3 million (\$15.4 million) to a shell company in Papua New Guinea nine years ago. The AFR purports the payment was made 10 weeks after Horizon secured a development licence in PNG after an ongoing legal dispute with PNG's Minister for Commerce and Industry William Duma.

In documents the AFR obtained including emails, faxes, letters and legal briefs, the deal revealed links between the company and Mr Duma, with lawyers warning investigations would be "likely" if the transaction was "scrutinised". The revelations have pressured Horizon chairman Mike Harding, who joined Horizon's board in 2018, to investigate the allegations. Although the deal was before Mr Harding's time, the AFR claims Horizon's chief executive officer Michael Sheridan is "named extensively" in the files along with former chief executive officer Brent Emmett. Both Mr Sheridan and Mr Emmett have declined to comment on the allegations. Meanwhile, Mr Duma told the AFR the allegations amounted to "political witch hunting and malicious intent" to make him look bad.



The allegations had an immediate impact, with Horizon Oil's share price closing out the day down over 28% to \$0.086.

Background

The situation arose in 2010 when Mr Duma accused Horizon of breaching its licence. In an internal email leaked to the AFR, Horizon's then chief executive officer Mr Emmett said it "smells like someone is setting the scene for a handout for a problem that doesn't exist". By the end of 2010, Horizon and Mr Duma were embroiled in a legal battle, with Mr Duma opening up a tender process to develop the gas field. The AFR noted that Horizon then wrote to Mr Duma stating it was "open to any suggest" on resolving the issue, which was the trigger for a settlement which eventually occurred in March 2011.

Horizon's response

The allegations involve the \$15.4 million payment to acquire an interest in Petroleum Retention Licence 21 in PNG's Western Province, which is known to be in an area hosting condensate and gas discoveries. According to Horizon, it and its co-venture partners applied for renewal of PRL 5 in PNG, which was not granted. "Horizon commenced judicial review proceedings in respect of the

Minister's decision to protect its commercial interests," the company stated. "As announced on 31 March 2011, the proceedings were settled including on terms providing for Horizon to be granted a 70% interest in a new PRL 21, covering the same area as the former PRL 5," Horizon explained. PRL 21 was subsequently awarded to Horizon and two local PNG companies – Elevala Energy and Dabajodi International Energy. Under a pre-existing contract, Horizon then transferred a 35% interest in PRL 21 to a subsidiary of Talisman Energy. Horizon then acquired a 10% interest in the PRL from Elevala for US\$10.5 million and a further 5% stake from Dabajodi. "Following these transactions in 2011, PRL 21 was held by Talisman (40%), Horizon (45%) and Kina Petroleum, which was formerly Dabajodi (15%)."

AFR's allegations

The AFR has pointed out that <u>PNG lawyer Simon Ketan</u> became the sole director and shareholder of Elavala four days before the licence was granted. Ashurst lawyers that worked on the deal under the legal firm's previous name of Blake Dawson noted "close connections" between Mr Ketan and government officials, with sources informing the AFR Mr Duma and Mr Ketan were "associates". Mr Ketan told the AFR the files for a "private commercial deal" were closed as they occurred more than seven years ago. He added he "did not recall" any "alleged concerns". The AFR's probe has unearthed no record of Elevala operating any business, providing grants or dividends, or employing staff. At the time, Elevala's registered capital was just \$0.88. Horizon's share price plunged on the news – with the company closing out Monday at \$0.086 – down 28.3%.

PNG PM urges multi-nationals to allow gas project to proceed

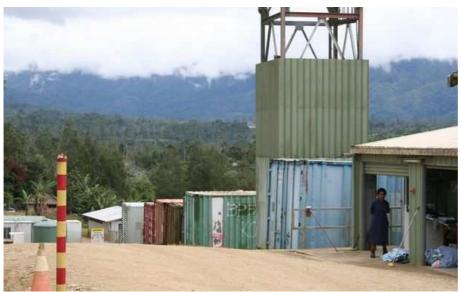
Papua New Guinea's prime minister has urged two energy companies not to hold a major LNG gas project in his country to ransom. Radio New Zealand on 8 February 2020



Papua New Guinea's prime minister James Marape. Photo: PNG PM Media Unit

James Marape's appeal to ExxonMobil and Oil Search follows the <u>failure of negoitiations</u> with the former over the fledgling \$US13 billion P'nyang gas project Oil Search said PNG was demanding terms of Exxon that meant the project developers would not gain a sufficient return on their investment. But Mr Marape accused Exxon of a "lack of interest" to meet PNG halfway by offering concessions for a better state take from the deal. The failure of the negotiations has raised doubt over the future of the separate Papua LNG gas project signed with French major Total. Mr Marape said he called upon the two multi-nationals, as beneficiaries of concessions previous governments have given, to work with Total to deliver Papua LNG. However, he appeared to leave the door open for an agreement with Exxon over the P'nyang gas project proceeding. He said in the interests of

fairness, a Ministerial Gas Committee would request both the state negotiating team and ExxonMobil to present their positions for the State - through a committee of leaders - to decide what is the best outcome for PNG.



LNG Project site (run by project partner Oil Search) in Nagoli, Hela Province, Papua New Guinea. Photo: RNZI / Johnny Blades

The prime minister said he had indicated on all levels of discussions that fundamental policy principles that influenced his government's mindset would not change. "These include no fiscal concessions in P'nyang, treating P'nyang as separate from both PNG and Papua LNG projects, increase in Domestic Market Obligations and local content participation," he said. "These will be fundamental in progressing P'nyang. "In the meantime, I call upon ExxonMobil and Oil Search not to hold the Total project in Gulf to ransom. "If you model the project to be uneconomical, then don't push it: let's leave the gas in my land and you develop Papua plus further work in PNG LNG. "After SNT and ExxonMobil present to the MGC, Cabinet will decide on P'nyang." Mr Marape said his government would shift focus to Wafi-Golpu and Porgera mines, and other resource sectors so life in PNG was not only dependent on P'nyang and other LNG gas projects.

Thousands sue PNG miner for environmental damage

More than 7000 people from the Papua New Guinea province of Madang are suing a mining company for damages worth US\$5.3 billion. Radio New Zealand on 8 February 2020



A file photo of the spill at Basamuk Bay. Photo: Facebook/ Elisha Wesley Mizeu

Last year, 200,000 litres of toxic slurry spilled into the ocean from the Basamuk nickel refinery, turning the sea red and killing marine life. But the plaintiffs - who include villagers, scientists, chiefs and the provincial government - claim the company, Ramu Nico, had been causing environmental damage for years. The lawyer leading the suit, Ben Lomai, said the plaintiffs wanted the court to declare Ramu Nico a public nuisance, and that it acted negligently. He said the spill injured peoples' enjoyment of their customary land and water rights. "We are basically alleging that the tort of nuisance, public nuisance and private nuisance; we're also alleging the tort of strict liability and at the same time we're also alleging the tort of negligence. We're saying for their land and water to be contaminated, that is in breach of the plaintiffs' rights."

Legacy investments fail to yield returns

February 7, 2020, The National Business

The legacy investments that Kumul Mineral Holdings Ltd (KMHL) inherited from Petromin have failed to generate returns, chairman Peter Graham says. "The board of Kumul Minerals has focused on dealing with these legacy investments, cleaning up the balance sheet, and preparing to invest in quality mining projects that will generate industry-competitive returns through the relevant commodity price cycles," he told The National. "After years of losses, Tolokuma gold mine was sold by previous management to a Singaporean company which then defaulted on payment of all but a small fraction of the sales price despite efforts by Kumul Minerals to recover the sales proceeds. "The company went into receivership." Graham said the National Executive Council (NEC) had also directed Petromin (then) to take up a 15 per cent interest in the Solwara 1 deep sea mining project as a "proof of concept" project and provided a State guarantee for a loan of US\$120 million (K408mil) for this equity share.

"Nautilus Minerals Inc, the principal equity holder failed to raise its share of funding to complete the project and instead spent Petromin's US\$120 million (K408mil) (paid upfront) in lieu of making their own proportional contributions," he said. "This unusual arrangement was permitted by the joint venture agreement. "Nautilus was wound up in 2019 leaving an incomplete project, and creditors receiving only cents in the dollar. "Kumul Minerals' application to the Canadian courts to be considered as a creditor was unsuccessful and Kumul Minerals has been left with a loan of US\$120 million to be repaid by April 2021. "Deepsea Mining Finance Ltd (a company owned by the two major shareholders of Nautilus Minerals Inc) subsequently acquired ownership and control of certain subsidiaries of Nautilus including those involved in the Solwara 1 project and is attempting to move the project forward.

"Kumul Minerals is working to remove exposure to financial, operational and reputational risks associated with Solwara 1." Graham added that KMHL holds a 17.4 per cent interest in Bougainville Copper Ltd, which was promised to Panguna landowners and Bougainvilleans by the previous government. "A further 19.06 per cent is held in Treasury which was to transfer to Kumul Minerals as part of consolidating PNG's mining interests in accordance with the Act," he said. "However, the future of these two tranches of shares will be decided by the Government in the context of the recent referendum. "Kumul Minerals currently has no operating assets. "Ok Tedi Mining Ltd, a profitable majority State-owned entity, has yet to transfer into Kumul Minerals pending resolution of exposures relating to Solwara 1." Meanwhile, Graham said Kumul Minerals expects to participate in future quality mining projects such as the Wafi-Golpu gold project in Morobe.

Ramu Nickel: Miner ready to defend lawsuit, continues business as usual February 7, 2020, The National

RAMU NiCo Management (MCC) Ltd says it will deliver all commitments in a project agreement and work closely with its stakeholders. The developer of the nickel and cobalt project said this yesterday after the Madang government filed an K18billion lawsuit for damage to the environment. Ben Lomai from Lomai & Attorneys said he filed the writ of summons in relation to a spill caused by the MCC at Basamuk in Madang last year. Lomai said the summons also sought MCC to pay K1.6 million in special damages. The plaintiffs in the matter are the customary landowners and the Madang government. Ramu NiCo in a statement yesterday said the plaintiff, the Madang government, and the people they represented, were asking the court for damages worth K18billion and K1.6million respectively to be settled in 30 days from yesterday which was extremely unrealistic and would be challenged in court. "We received the documents and will defend vigorously in court," the company said. "As a responsible corporate organisation, we will not allow the plaintiffs to mislead any parties using the court room as all our evidences and facts are in order." "We remain focused to continue with business and deliver all our commitments to PNG."

PM outlines govt intention

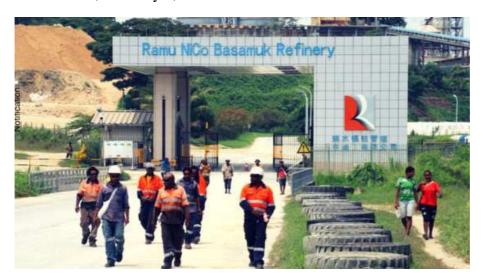
February 7, 2020, The National

PRIME Minister James Marape yesterday called on ExxonMobil and Oil Search not to hold the Total LNG project in Gulf to ransom. He moved to inform the nation and stakeholders what happens after the stalemate between the State Negotiating Team (SNT) and ExxonMobil over the P'nyang LNG Project. "I call upon these two multi-nationals to work with Total to deliver Papua LNG," the Prime Minister said. "You are beneficiaries of concessions previous governments have given. "If you model the project to be uneconomical, then don't push it: let's leave the gas in my land and you develop Papua plus further work in PNG LNG. "After SNT and ExxonMobil present to the MGC, Cabinet will decide on P'nyang. "We will shift focus to Wafi-Golpu and Porgera mines, Pascal LNG plus other resources sectors so life in PNG is not only dependent on P'nyang and other LNG projects. "It is no secret that I am not pleased with the lack of interest shown by ExxonMobil to migrate towards a mid-point.

"A mid-point in which the State takes home a better deal instead of terms similar to concession-based gas agreements Papua New Guinea has signed with ExxonMobil and partners of PNG LNG, and Total and partners of Papua LNG. "I am satisfied that our SNT has subscribed to the mandate bestowed upon Petroleum and Energy Minister Kerenga Kua. "ExxonMobil has been told what our intentions are. "In the interests of fairness, a Ministerial Gas Committee (MGC) will request both the SNT and ExxonMobil to present their positions for the State – through a committee of leaders – to decide what the best outcome is for PNG." Marape said he had indicated on all levels of discussions that fundamental policy principles that influenced his Government's mindset would not change. "These include no fiscal concessions in P'nyang, treating P'nyang as separate from both PNG and Papua LNG projects, increase in domestic market obligations and local content participation," he said. "These will be fundamental in progressing P'nyang. Marape assured the nation that mining and petroleum ministerwould bring in reforms to the Mining and Oil and Gas Acts through enabling Organic Laws this year.

Madang Govt Sues Ramu Nico For K18b

Post Courier, February 6, 2020



The Madang provincial government and 13 landowners have sued Chinese company Ramu Nico for damages worth K18 billion and K1.6 million as special damages to be settled 30 days from today. Lawyer representing the provincial government Ben Lomai said yesterday that based on the final report carried out by international scientists engaged by the government, the case has been granted and a writ of summons will be served on Ramu Nico today. There are about 13 plaintiffs who have signed on behalf of 7968 officers taking the company to court including the provincial government. This included Wadan Namui on behalf of 52 named persons from Astrolabe and Rai Coast, Kaimalang Moses for himself and on behalf of 425 named persons from Rai Coast, Peter Sel on behalf of himself and 122 named persons from Rai Coast, Barthly Andrew for himself and on behalf of 230 named persons from Rai Coast, Micha Wasa Kosi on behalf of 348 per- sons from Rai Coast, Asru Masil on behalf of 82 people of Rai Coast, Willie Mathew on behalf of 71 persons, Sauma Hangi on behalf of 77 people, John Simoi on behalf of 389 persons of Sumkar, Michael Barui on behalf of 1398 people of Sumkar, Henry Amath on behalf of 1233 people of Sumkar, Steven Aren on behalf of 510 people of Sumkar and Kautil Mamari on behalf of 373 people of Sumkar. The plaintiffs and the people they represent are asking the court to make:

- a) A declaration that the Defendant committed public nuisance;
- b) A declaration that the Defendant committed private nuisance;
- c) A declaration that the Defendant is strictly liable for its conduct by continuously dumping of the tailings and other mine waste into Basamuk and Astralobe Bay: and
- d) A declaration that the Defendant committed negligence

Mr Lomai said that they will be asking the court to make a declaration that the continuous activity by the Defendant, particularly the dumping of tailings and waste into Astrolabe and Basamuk bays by the use of a chemical, DSTP which was in breach of the Environmental Act 2000 and was therefore unlawful. The court will also be asked to order the current DSTP located offshore from Basamuk Refinery be relocated back inland to a designated area within the SML, subject to proper environmental, engineering and design and construction recommendations. Other orders sought are:

An order that the permanent injunction restraining the Defendant by itself, its servants or
agents or otherwise, from committing the said nuisance and negligence and to injure the
Plaintiffs and the people they represent in their use and enjoyment of their customary land
and water rights that a permanent injunction restraining the Defendant from destroying the
offshore environment in any way and from dumping waste and tailings into Astrolabe and

- Basamuk Bays in accordance with the Ramu Nickel Environmental Plan 1999 Approval or at all;
- A declaration that the Plaintiffs' rights to the use and enjoyment of their customary land and
 water rights and the rights of the people they represent, have been breached and that they
 have suffered as a direct consequence of the Defendant's dumping of tailings and toxic
 waste activity by the use of DSTP, the Refinery dusts and fumes as well as the slurry spillage;
- An order that the Defendant compensate and or pay damages to the Plaintiffs and the people they represent in the sum of K18 billion and alternatively, such compensatory damages referred to paragraph 690) be assessed;
- An order that the Defendant and the Madang province government in consultation with CEPA and MRA, within 30 days from the date of this, order, take remedial steps to clean the environment that had been contaminated by the activity of the Defendant and that such remediation costs, to be properly assessed by remedial experts, shall be paid by the Defendant;
- An order that the Defendant pay the Madang provincial government K1.6 million as special damages forthwith.

MCC yesterday was contacted but they advised Post-Courier that they have not been served the court injunction but are prepared to counter the case.

Ramu Nickel: Province seeks orders to relocate waste area

February 6, 2020, The National

THE Madang government yesterday filed a case against Ramu NiCo management (MCC) Ltd seeking orders to relocate its deep sea tailings placement (DSTP) and clean the environment. Ben Lomai from Lomai & Lomai Attorneys said he had filed a writ of summons in relation to a spill caused by the MCC at Basamuk in Madang last year. Lomai said the order sought that the DSTP located offshore from the Basamuk refinery be relocated inland. He said the writ was founded on three courses of actions – nuisance, strict liability and negligence. The plaintiffs in the matter are the customary landowners and the Madang government. According to the writ of summons obtained by The National, the plaintiffs are seeking damages of K18 billion from Ramu NiCo. It also seeks Ramu NiCo to pay the Madang government K1.6 million in special damages. Governor Peter Yama said the Madang government acted on behalf of its coastal people who were affected by the Basamuk spill.

"I have filed a writ of summons yesterday in relation to the environmental issues in the Kurumbu-kari and Basamuk area," Lomai told a media conference. "The writ is about 28 pages long and I have included 7,968 plaintiffs which are represented by 13 principal plaintiffs, and the 14th is the Madang government. "We have included those plaintiffs on the basis of the scientific report. "We did not include people whose rights are not affected by the contamination. "The writ is founded on three course of actions; nuisance, strict liability and negligence. The case is based on scientific evidence, we will provide evidence from Dr Alex Mojon and other scientists including doctors from the health division. We will serve this writ of summons to MCC tomorrow (today). "We have not listed other State agencies as MCC is the one that created the contamination."

Porgera: Police ready to make mass arrests

February 6, 2020, The National

POLICE are ready to make mass arrests and flush out criminal elements causing problems in Porgera from tomorrow, provincial police commander Senior Inspector Epenes Nili says. It follows

a meeting on Tuesday attended by the Porgera Joint Venture, public servants, police, business houses, provincial administrator, women's group and village councillors. Police will target people from Hela and Enga and those harbouring them in Porgera. "No one from Hela will remain in Porgera. "We are authorised to remove everyone out of Porgera because of continuous killings," Nili said. At least eight people died recently including Constable Timot Kavanamur three weeks ago. Two police officers from Mt Hagen were also injured in an ambush. He said police were still trying to figure out the motive behind the killing and fighting in Porgera between illegal miners, people from Hela and other ethnic groups. "We encourage the Porgera Joint Venture to support police in monitoring "youth gaps" along the mining site. "Illegal miners enter using those routes," he said. Youth gaps are created by illegal miners to access the Porgera gold mine.

New Caledonia strike continues at SLN mine

A long-running strike at a New Caledonian mine over the restructure at the SLN nickel company may deepen. Radio New Zealand, 5 February 2020



SLN smelter is in Noumea Photo: RNZ Walter Zweifel

Reports say pickets have been set up at two more SLN mines in solidarity with those on strike at the mine in Thio since mid-January. The strikers oppose the restructure of the working week, which calls for more hours on working days but fewer days of work to increase productivity. In Thio, workers also object to working on Sundays. With its 2000 staff, SLN is New Caledonia's biggest private sector employer, but in the past seven years it has run up losses of about \$US1 billion.

MPs stand firm with Prime Minister over Exxon rejection

"We will not surrender our dignity nor our sovereignty" Hon Taboi Awi Yoto, MP, Governor Western and Hon. James Donald, MP, Member for North Fly | 5 February 2020

1. P'NYANG LNG PROJECT

We fully endorse the decision of our Prime Minister to cease negotiations with ExxonMobil on the P'nyang LNG Project. Our Prime Minister has demonstrated wisdom based leadership through the eye of the storm. Our historical participation in the P'nyang negotiations, gave us a comprehensive understanding of the State's and ExxonMobil's proposed takes in the project. FRPG Term Sheet outlined projects that added further value to the country's total share. Our PEC sanctioned policy can become the blue print for project host provinces whereby clusters of industrial hubs can be

grown on the back of resource extraction and independent from Waigani. ExxonMobil and Oil Search wanted maximum benefit for their shareholders in the P'nyang Project. But at what cost to PNG? Are we not entitled to a fair deal? Having done so well in the foundation project, we were expecting ExxonMobil and Oil Search to display commercial fairness and reasonableness – evidently they chose to discard these core virtues.



Western Province MPs stand firm with Prime Minister James Marape over refusal to sign agreement with Exxon Mobil

ExxonMobil/Oil Search asserted that gaps in the Asian LNG market created by maturing off-take agreements, opened a small but fast closing window of opportunity for our gas. Further substantial cost savings would be realized by combining the EPC contracts for Papua trains with P'nyang's. Both companies pushed National Government and FRPG to accelerate P'nyang development, including statutory compliances. During the negotiations, ExxonMobil claimed Papua's development was conditional on P'nyang being licensed first. And so it begs the questions, why didn't ExxonMobil bring into production the proven and certified gas fields in foundation project like Juha?

Why are several of foundation project's gas fields being warehoused with no certainty of delivery to Caution Bay? Why is P'nyang being pushed for development when warehoused fields have yet to be monetized? Why must our Government bear solely the social cost for warehoused gas fields? State sought terms considered commercially reasonable and consistent with regional industry practices, so why couldn't ExxonMobil and Oil Search make at least some concessions, especially when the PNG LNG Project delivered a windfall for both companies at the expense of our People? Where do you draw the line between commercial parity and commercial greed?

Peter Botten has gone to the media stating that our terms compelled ExxonMobil and Oil Search to abandon P'nyang because they would not be able to achieve a return on their investment. What Mr. Botten has intentionally and maliciously elected not to disclose is that in February 2019, ExxonMobil and Oil Search informed the State that project would cost \$7 billion. On the eve of P'nyang Gas Agreement Negotiations, both companies increased capex to US\$12 billion. The inflated capex reduced substantially the ideal investment hurdle rate. SNT went to great lengths to argue that capex was highly exaggerated but ExxonMobil and Oil Search refused to accede. Was the capex deliberately and maliciously increased to secure favorable terms for ExxonMobil and Oil Search? Yes.

The last person to be criticizing PNG Government is Mr. Botten. He should be thankful that he is still employed because of the sacrifice our People made when we lost US\$400 million in a scheme he supervised and diligently implemented through the now infamous UBS Loan. We are still bleeding from the first stab. Mr. Botten is heartless by inflicting another wound. Mr. Botten will be

retiring in his golden parachute, but what about the Kubutu People who still lack after 32 years of oil production, electricity and running water? ExxonMobil and Oil Search promised our leaders the great economic miracle PNG LNG would deliver. Many outcomes were guaranteed. Trusting the ExxonMobil brand, we signed away our sovereign rights. Sadly, many of those promises are yet to materialize. We are steadfast in our resolution that the Oil & Gas Act needs to be amended urgently. The legislation leverages financial and legal benefits to foreigners than to our Country. The amendments are in line with what other hydrocarbon producing nations have successfully enacted in the last 10 years.

2. STANLEY GAS AGREEMENT & PDL

We have instructed lawyers to review the Stanley Gas Agreement. Legal proceedings will be filed shortly to ascertain whether Horizon Oil and its joint venture partners are entitled to continue to enjoy the unbounded generosity of PNG or in the alternative whether the landowners, LLGs and FRPG are due for financial compensation for the questionable delayed development. We believe the Stanley Gas Agreement is unconstitutional because it strips the State of its most basic sovereign rights. There are no penalty clauses for failure to achieve FEED, FID and construction. Shockingly, State has no recourse to terminating the license consequential to fundamental breaches. The deliberate exclusion of these mandatory sunset clauses, has given the developers unfettered latitude to deciding, at their own volition, the development schedule for Stanley. The Stanley PDL has been used to conduct substantially valued farm-outs. Ironically none of these transacted monies have been reinvested in Stanley's construction. For several years now, the developers have not engaged neither communicated with FRPG and landowners. Accordingly we have reached the conclusion that Stanley Gas Fields may never reach commercial production under Horizon Oil as the nominated developer.

The Stanley Gas Agreement and PDL is unprecedented and entirely at odds with established industry practices. How and why did Horizon Oil and its partners vouch for Stanley's FID being achieved by or before 31st December 2014 and construction to begin in 2015? If State had known that Horizon Oil and its partners would fail to achieve the milestones of FID and construction as scheduled, would it still have signed the Gas Agreement and issued PDL? No. Did Horizon Oil and its partners deliberately and maliciously misled the State to sign Gas Agreement and issue PDL? Yes. Surely we acknowledge developers/investors are needed to prove up resources. Legislated incentives are on offer to bring onshore investment dollars. However, any conduct or action that is clearly deceptive, or a Gas Agreement that licenses the ransacking of our resources with negative netback gains for our People, or lack of development thereof to the detriment of our People, will be rejected completely. We will not surrender our dignity nor our sovereignty.

Minister says experts brought in during P'nyang project talks

February 5, 2020, The National Business

PETROLEUM and Energy Minister Kerenga Kua says the State is seeking "expert" advice in relation to discussions on the P'nyang gas project in Western. Kua denied claims that the State had asked for more than what its stake should be in the project, which led to the failure to reach a deal with the development partners last Friday. "It's complex by nature," he said. "Only experts deal with these issues. "As Exxon assembled a team of experts on the other side, the State also assembled a team of internationally acknowledged experts on our side too. "They went to the negotiating table and the advice we received was that we are not looking at the same set of figures. "They are coming with a different set of figures, which they (experts) believe was inflated.

"We were coming in with figures based on comparable construction cost and operating cost elsewhere in the world. "That's why we were not able to agree based on the expert advice to the State."

The State negotiating team was not able to reach an agreement with ExxonMobil and development partners last Friday for the P'nyang gas project. Prime Minister James Marape and development partners had expressed their disappointment. However, Kua told The National yesterday that the decision to walk away from a deal was in the "best interest of the country". "The resource in the ground has been there for millions of years so it can stay in the ground for another few years. It's not a problem," he said.

Resource development partners disappointed with outcome

February 4, 2020, The National Business

DEVELOPMENT partners in the P'nyang gas project in Western are disappointed with the outcome of the gas deal talks that concluded last Friday. A spokesperson from ExxonMobil PNG Ltd told The National: "We are disappointed we were unable to reach an agreement. "We are hopeful that we can continue to work toward an outcome that benefits all stakeholders. "We are proud of our partnership with the people of Papua New Guinea and have worked to create lasting benefits for the country, including our commitment to energy development, as operator of the US\$19 billion (K64.6bil) PNG LNG Project, which provides employment for more than 3,200 people." Oil Search managing director Peter Botten said the company was disappointed with the statement released by Prime Minister James Marape on Friday, which stated that negotiations on the P'nyang gas agreement had stopped, to allow the Government to concentrate on developments already in the pipeline.

"Oil Search respects the Government's right to set fiscal terms for resources developments in PNG, to ensure the State, resource owners and the people receive an appropriate share of value from these projects," he said in a statement. "Oil Search is very committed to getting the correct balance, ensuring appropriate benefits are distributed to the right stakeholders. "This ensures the long term operating stability for any development, as well as being the right thing to do." However, Botten highlighted that the resource size, cost of development and challenges of operating in PNG were very different to other countries. He said, therefore, making broad comparisons with other fiscal regimes in the region was "misleading". "A series of negotiations regarding the terms of the P'nyang gas agreement have taken place over the last months. "It is unfortunate that, at this time, the stakeholders in P'nyang cannot agree on the appropriate balance of value and benefits for a gas agreement to be concluded. Under the terms proposed by the State, the joint venture partners were unable to obtain a return on their investment that made the project investable."

Kua: Walking away was best

By SHIRLEY MAULUDU, February 4, 2020, The National Business

PETROLEUM and Energy Minister Kerenga Kua says the decision to walk away from a deal regarding the P'nyang gas project in Western was made in the "best interest of the country and people". The minister, in an interview with The National yesterday, said since Friday, which was the deadline for discussions, he had been getting positive comments from leaders and the public on the decision the State, through the state negotiating team, had made. "Since negotiations collapsed on Friday, a majority of the people, and the leaders that I have spoken to, are clapping their hands," he said. "They are happy. "They say this is the single most positive thing that has ever happened to this country. "They are very happy about the fact that there is no deal because they are fed up of not receiving a fair share.

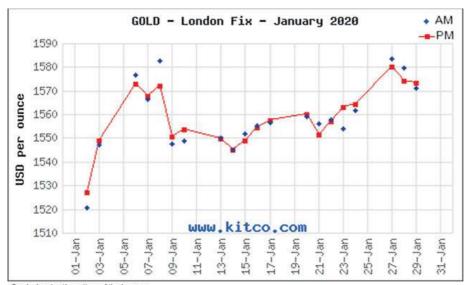
"They are clapping their hands because the state negotiating team has done the right thing in asking for what is fair. "The resource in the ground has been there for millions of years so it can stay in the ground for another few years, it's not a problem. "We won't do a deal in P'nyang but other deals

will still go ahead. "We will still raise revenue in other areas to develop our country. "P'nyang is not the only place that has development potential for us. "We are a developing nation. "We need money for all kinds of things that needs to be developed and we have to make it in this resource, an available resource. "But if our partners refuse to give us a fair share, we will not be able to deliver up to the people's expectations."

Meanwhile, Kua further explained the licence that ExxonMobil had for the development of the project. "The State does acknowledge that Exxon has some residual rights to the petroleum retention licence," he said. "They have in accordance with our law, filed an application for a development licence. "What they have is a retention licence. "Our law says that before that licence expires, you can apply for a development licence and if you do so, your rights under the retention licence continue even though it had already expired until your application for development licence is fully decided by the petroleum development board. "That's the reason why, we were able to do the negotiations."

Mine looking to generate K3.74mil in sales revenue

February 4, 2020, The National Business



Graph showing the pattern of the increase in gold price in the last month.

- Graph courtesy of K92 Mining Ltd

THE K92 MINING Ltd, developer of the Kainantu mine, expects to generate around US\$1.1 million (K3.74mil) in sales revenue with every US\$10 (K34) increase in the gold price this year. Chief executive officer John Lewins was responding to questions from The National in regards to the increase in gold prices in recent months, and the effect on the company. "You will see that the gold price has indeed increased over the last two months,"he said. "The gold price increased from US\$1,460 (K4,974) per ounce at the beginning of last December to US\$1,510 (K5,144) by the end of the month and then to US\$1,575 (K5,366) currently, so a US\$115 (K392) increase per ounce is very significant. "For K92, we have given production guidance of 110,000 to 120,000 ounces for 2020, so for every US\$10 increase in the gold price, we see an increase of approximately US\$1.1 million (K3.7mil) in sales revenue.

"This flows through to PNG through royalty and taxes with improved profits. "For PNG, the mining industry produces two million ounces, so every US\$10 increase in the gold price also increases sales by US\$20 million (K68.14mil). "This again flows through to PNG through royalties and higher taxes with improved profit." Lewins said small scale miners also needed to be aware of the gold price when selling their product to ensure they got the benefit of the price. "Ideally, they

should try and increase production and sales when prices are high, although this is not always possible," he said. "The general view of analysts is that the gold price will be stronger this year than last."

Nickel plant in New Caledonia nears sale - report

The head of the Vale nickel plant in New Caledonia says the board of directors has approved \$US120 million for restructuring the business, which is for sale.

Radio New Zealand, 4 February 2020

The local public broadcaster reports a buyer is expected to be announced by the end of next month. Last year, the Brazilian owner announced that it was divesting itself of its 95 percent share in the nickel company. Vale had been incurring losses in the hundreds of millions of dollars and decided to pull out after earlier contemplating mothballing the nickel plant. Its managers have now expressed optimism that the plant will not be shut. More than 100 employees are expected to lose their job once the nickel refinery closes as Vale prioritises making NHC, or nickel hydroxide cake, which is in demand for batteries for electric vehicles.

Exxon Partner Fires Back at Papua New Guinea in Gas Fall-Out

James Thornhill, Bloomberg, February 3, 2020

Doubling Down

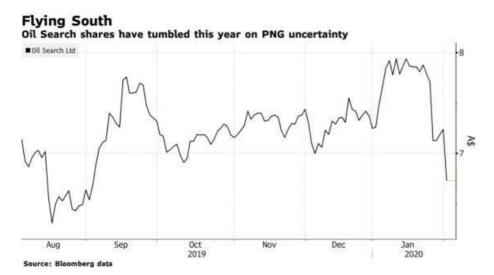
Exxon and partners plan to boost gas exports



- State terms for P'nyang project not bankable, Oil Search says
- Oil Search shares plunge 11.5% Monday to lowest since August

Exxon Mobil Corp.'s partner on a Papua New Guinea gas project that's threatened by failed talks with the government hit back at the state's position on Monday, saying its terms were uneconomical. Oil Search Ltd., in its first comment since the talks broke down Friday, said that the government's demands meant the project would not gain a sufficient return on investment. The impasse casts doubt on a broader \$13 billion plan to double the country's exports after Prime Minister James Marape, who came to power on a promise to increase the nation's share of resources wealth, said Friday that Exxon's proposed terms were 'out-of-the-money' for PNG. The country's take from the project would have been "significantly less" than deals done elsewhere in the region, including Malaysia, where Exxon has a big operation, Marape said Friday.

The size of the resource, cost of development and the unique challenges of operating in PNG made comparisons with other arrangements in the region "misleading," according to Oil Search. "For Oil Search, the project returns under the State's proposed terms were approximately the same as our cost of capital, on an unrisked basis," Managing Director Peter Botten said in a statement to the Australian Stock Exchange. The company's shares ended Monday down 7.2% at the lowest closing level since Sept. 3, and having lost as much as 11% intra-day, as investors reacted to the latest set-back to the group's expansion plans in PNG.



The failure of the P'nyang talks has cast doubt on the future of Total SA's Papua liquefied natural gas project. While the government has already reached agreement with the French company on that project, the business case of Papua was based in part on sharing infrastructure costs to expand the existing PNG LNG processing facility. "With the talks failing, and P'nyang now stalled, we now see the most probable outcome being the PNG expansion (including Papua) stalls," said Morgans analyst Adrian Prendergast in a Feb. 2 note. Oil Search said it would "seek to advance the Papua LNG project in a timely way," but added that several engineering and commercial changes would need to be made following the P'nyang delay. Meetings with the Papua joint venture partners, which also includes Exxon, were planned in the short term, the company said. A spokesman for Total in Papua New Guinea did not immediately respond to a request for comment.

"Papua is looking at a material delay which could push a final investment decision well into 2022," said Saul Kavonic, energy analyst at Credit Suisse. Total is currently targeting an FID in 2021. Further delay could see the expansion plan slip further down the queue in terms of projects competing globally for contractors and long-term offtake contracts. "Trailing in the wake of the biggest wave of new LNG supply the industry has ever seen is not ideal," said Angus Rodger, research director at energy consultancy Wood Mackenzie, adding that any reassessment of how the project is structured would inevitably require lots more time. Marape doubled down on his criticism of Exxon in a Facebook post Sunday, saying the company was "not sincere" in dealing with the government on P'nyang. Referring back to the original Exxon-led PNG LNG project, which started in 2014, Marape said that "to date my families, my tribes and my provinces and country are yet to fully see those promised windfalls yet the state continues to foot the social cost of this project."

Sir Julius satisfied with talks on mining

February 3, 2020, The National Business

NEW Ireland Governor Sir Julius Chan is satisfied with the talks held with the operators of Simberi gold mine and Newcrest gold mine in New Ireland. The New Ireland government held its first 2020

provincial executive council and provincial implementation meetings on Lihir and Simberi from Jan 27 to 29. Sir Julius said it was an opportunity for council members to understand how the companies operate and some of the landowners' concerns. Mining Minister Johnson Tuke was also present at the meeting. "The provincial government acknowledged Newcrest's realisation that it does need to build a ring road around the island as one of the priority project of the New Ireland government," Sir Julius said. Lihir site manager Chris Jordan presented a report on the operations and production of the mine with country manager Stanley Komunt. At Simberi mine, general manager Jason Robertson gave an overview of the mine's operation before the council members toured the mine.

PNG govt rejects major gas deal with ExxonMobil

Papua New Guinea's government says it had to reject a major gas deal because energy giant ExxonMobil was unwilling to offer fair terms.

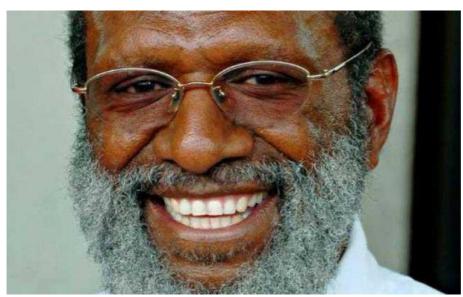
Johnny Blades, RNZ Pacific Journalist, Radio New Zealand, 3 February 2020



An ExxonMobil LNG Project plant near Port Moresby, Papua New Guinea. Photo: RNZ / Johnny Blades

On Friday, PNG concluded months of negotiations with Exxon regarding the fledgling P'nyang gas project in Western Province estimated at \$US13 million. The Minister for Petroleum and Energy, Kerenga Kua, said the state team had negotiated on the basis that it should receive improved terms for PNG compared to previous major Liquefied Natural Gas project agreements in the country. But he alleged that after months of talks, Exxon was acting in "absolute bad faith" and unwilling to match the state's offer of concessions. "Exxon has come in with a determination to exploit our vulnerabilities, exploit us for our weak economic position and take advantage of us," Mr Kua said. "That's what I believe because the evidence, I've seen it in the last three months. Well, this country will no longer accept that kind of thing."

An ExxonMobil spokesperson said the company was disappointed that the two parties were unable to reach an agreement. "We are hopeful that we can continue to work toward an outcome that benefits all stakeholders." Exxon, which last week announced estimated fourth quarter 2019 earnings of US\$5.7 billion, is already the lead operator of the landmark PNG LNG project based in the Melanesian country's Highlands region. The project began exports in 2014 but has not met the expectations of many landowner communities in the project footprint area. Given PNG's growing experience in the industry, and Exxon's deep involvement in the country, there was also expectation in government that an expanded partnership would provide far better returns for PNG.



Kerenga Kua, Papua new Guinea's Minister for Petroleum. Photo: Loop PNG

Prime Minister James Marape said every new project must build on previous projects with improved terms for PNG. "That is a normal progression in nations as successive projects are approved and developed. We insist that this also occurs in PNG." He said Exxon's ultimate offer had barely budged from its opening offer presented last November and was not much different to the Papua LNG Gas Agreement signed with French company Total SA. That agreement, signed almost a year ago, proved unpopular with many leading MPs and precipitated the collapse of the former government of Peter O'Neill. When the government emerged, Mr Marape and his petroleum minister quickly signalled the new administration's desire to ensure more fair and equitable deals for the interests of PNG in resource extractives projects.



Papua New Guinea's prime minister James Marape. Photo: PNG PM Media Unit

A state negotiating team under Mr Kua had subsequently reviewed the Papua LNG agreement and then managed to negotiate a few concessions from Total. "The gas belongs to PNG's people. We are willing to allow international oil companies to develop the field and achieve decent returns by exporting most of the gas, but PNG must also benefit," Mr Marape said. But Mr Kua said the "state take" proposed by Exxon was significantly less than for projects in countries in neighbouring Southeast Asia including countries in which the company had extensive business interests.

"So it knows what the stake take is in all those countries. Now, if you project all those stake takes up on a graph and you compare them, who is the lowest? It's Papua New Guinea." According to Mr Kua, the scrapped deal did not detract from the attractiveness of PNG as an investment destination. "Our country continues to offer a very attractive investment buying climate for all manner of business including oil and gas business development. "So we continue to encourage foreign investors to come and make a bid to participate in our oil and gas industry."

Papua New Guinea LNG expansion plans in limbo after talks collapse Sonali Paul, Reuters, February 2, 2020

Plans to double gas exports from Papua New Guinea within the next four years are in doubt after the government walked away from talks with Exxon Mobil Corp on a key gas project needed for the \$13 billion expansion. Papua New Guinea Prime Minister James Marape on Friday called off negotiations with Exxon on the P'nyang field, blaming the energy giant for failing to budge on a proposed deal that was "out of the money." The expansion of liquefied natural gas exports is crucial for the impoverished Pacific nation, but is vying with several proposed LNG projects in Australia, Mozambique, Qatar, Russia and the United States. One of Exxon's partners in the PNG project, Oil Search Ltd, said on Monday the terms the government had sought would have made the project unprofitable. "Under the terms proposed by the State, the joint venture partners were unable to obtain a return on their investment that made the project investable and bankable," Oil Search said in a statement to the Australian stock exchange.

Shares in Oil Search fell as much as 11.5% early on Monday in their first session since the collapse of the talks, on track for their worst one-day fall in more than four years. The P'nyang agreement was one of two agreements needed for Exxon and its partners to go ahead with a \$13 billion plan to double LNG exports from the Pacific nation. The other agreement, the Papua LNG pact, was sealed with France's Total SA in September. The government was seeking terms on P'nyang that would give the state more than the 45%-50% take that PNG is set to reap on the returns from the Papua LNG project, and well above the terms Exxon negotiated in 2008 for its PNG LNG project, a person close to the negotiations said. P'nyang and Total's Papua LNG project were designed to feed three new processing units, called trains, at Exxon's PNG LNG plant, with the two projects sharing infrastructure in order to save \$2 billion to \$3 billion dollars on construction costs.

Oil Search said on Monday it would now focus its attention on the Papua LNG project, which will feed two new trains, adding 5.5 million tonnes per annum (mtpa) to the plant's 8 mtpa capacity. Joint venture partners are set to meet "in the short term" to plan their next steps, it said. Bank of America analysts estimated that separating the projects would pare the cost savings by a third and delay first production from Papua LNG by 18 months to 2026. "The two projects are rather entwined. There's a bit of uncertainty now. Everything's going to be delayed for quite a period of time," said Andy Forster, senior investment officer at Argo Investments, which owns Oil Search shares. Exxon Chief Executive Darren Woods said on Friday the company hoped to revive talks on P'nyang to get to a "win-win proposition" but flagged that the company was in no hurry as it had other projects it could advance elsewhere.

"But I also think we've got some time given all the other opportunities in front of us and, frankly, given where we're at today in the supply-demand balance of LNG," Woods told analysts on the company's quarterly earnings call last Friday. A global glut of LNG has driven spot LNG prices to more than 10-year lows below \$4 per million BTUs (mmBTU), posing challenges for projects looking to line up long-term customers. PNG Prime minister James Marape, who came to power last May on a pledge to reap more benefits from the country's abundant mineral and energy resources, on Sunday said he was comfortable with the hard line he had taken. "I am sorry but if you show

little respect to our motive to gain extra for the country, you will lose my support," Marape said in a post on Facebook. Total has made no comment on the collapse of the P'nyang talks.

Papua New Guinea scraps talks with Exxon on P'nyang gas project

Nikhil Subba and Sonali Paul, Reuters, 31 January 2020

Papua New Guinea on Friday called off negotiations with Exxon Mobil regarding the P'nyang gas project, casting a shadow on a \$13 billion plan to double the country's gas exports by 2024. The government said Exxon had refused to budge on the financial terms for developing the gas field and failed to come up with an offer that it could accept. The P'nyang field was key to helping feed the expansion of Exxon's PNG LNG plant, which it operates with partners Oil Search and Santos, among others. The P'nyang agreement is one of two agreements needed for Exxon and its partners to go ahead with their \$13 billion plan to expand LNG exports. The other agreement, the Papua LNG pact, was sealed with Total in September.

"Exxon Mobil's offer had barely changed from its opening offer presented last November," Prime Minister James Marape said in a statement, adding that it was not "substantially different" from a recent LNG agreement with Total. The country is hoping Total will still go ahead with its Papua LNG project, a person close to the negotiations said. Exxon Mobil's Papua New Guinea spokesman was not immediately available to comment. The country's petroleum minister had said last year that the government would press Exxon for "far better" terms on the P'nyang gas project than it had with the Total agreement. The government was seeking terms that would give the state more than the 45-50% take that the country is set to reap on the value of Total's Papua LNG project, the person said, adding that the share was much less than the 80% take that governments like Malaysia and Indonesia have on gas projects in their countries.

Wafi-Golpu MOU to be eliminated

So Newcrest and Harmony signed a deal with the O'Neill government that stitched up the landowners and the country - but nobody gets held accountable once again. Not the bureaucrats, not the politicians and certainly not the mining company executives and their lawyers!

Cedric Patjole, Loop PNG, January 31, 2020

The Memorandum of Understanding between the former O'Neill-led coalition government and the Wafi -Golpu Joint Venture will be eliminated. Prime Minister James Marape revealed this at the Back to Business Breakfast event in Port Moresby. The MOU signed in December 2018 established the framework for the parties to progress the permitting of the Wafi-Golpu Project 'as quickly as practicable' with a view to achieving a Special Mining Lease by 30 June 2019. However, the Morobe Provincial Government rejected the move, taking the matter to court and stalling the Wafi-Golpu Mine from maturing. Prime Minister Marape revealed to the business community that the MoU would be eliminated.

"Some of you might be interested on what is happening with Wafi-Gopu, one of our lowest hanging fruits, and let me thank Harmony and Newcrest for their patience," said Marape. "But they also know that the MOU that they signed with the previous government was a show stopper. That MOU was signed outside of the normal protocols of Government. "And so we are in the businesses of now eliminating that MOU, and they have agreed to eliminate that MOU, and so, we're now having discussions with our provincial government and our landowners and very soon, Wafi-Golpu will be a project that is moving towards maturity." Since the move by the Morobe Provincial Government and the ongoing permitting delays, WGJV has reduced its planned work program and manpower.

No more tax concessions: PM

By SHIRLEY MAULUDU, January 31, 2020, The National Business

PRIME Minister James Marape says there will no longer be any tax concessions given to companies in the resource sector. Marape was speaking at the 8th Prime Minister's back-to-business breakfast in Port Moresby yesterday. "I have said many times, under my watch, I will not be encouraging concessions," he said. "I might be forfeiting revenues for the future." Making references to the resource laws, Marape said he was happy the resource industry was open for discussions regarding proposed changes to certain resource laws. "Our laws are one of the friendliest in the world," he said. "Amendments are coming and I am happy the industry was not too harsh on me. "The industry has responded positively to some of the changes we are working on."

However, Marape also appealed to investors to observe the resource laws that were currently in place. "Discussions on P'nyang (gas project) are ongoing," he said. "That is ongoing on top of the two trains that we already have. "I always tell our investors, whilst you are lobbying for your shareholders, my shareholders are the eight million people of this country. "Our starting point is the present laws we have in our country. "We've given concessions already in the Papua LNG, we've given concessions already in the PNG LNG. "The least the country now demands and asks for is that you honour the laws we have in our land, just pay what is our fair share, our due and we have the agreement. "All you have to do is look into our laws, the oil and gas laws and our revenue laws." Meanwhile, discussions for a gas agreement for the P'nyang project in Western between the state negotiating team and ExxonMobil PNG, is set to conclude today.

Landowners side with government

January 31, 2020, The National Business

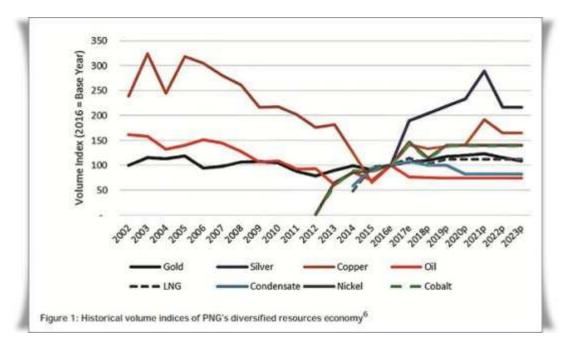
A GROUP of landowners from Western says they support the national government to continue negotiations on the development of the P'nyang project in the province. A spokesperson from the impacted villages Edwin Ingsim said the landowners supported the state negotiating team and wanted to see negotiations concluded and the gas agreement signed. Ingsim said this yesterday following an outburst by North Fly MP James Donald on his social media page (Facebook) this week claiming that the holder of the Petroleum Retention Licence (PRL) 3 or P'nyang was holding onto the licence illegally. "The PRL3 licence for P'nyang has expired in May, 2016, after all the extensions were exhausted by successive governments," Donald wrote on his page. "ExxonMobil held onto the licence for more than 20 years. "If the law says it has expired, so be it that it's expired and return the licence back to the State.

"My proposal would be to return the licence back to the State and the licence can be issued to our own national (state owned entity) company like Kumul Petroleum Holdings Limited (KPHL). "Because KPHL does not have capacity it can put out a bid for a possible genuine investor to purchase into some portion and we can go into development deal owned by a nationally-owned company. "This is how we can make money for our country through this licence. "The PRL3 licence itself is worth billions of dollars." However, Ingsim and the landowners from villages in the 15 licensed areas who met in Port Moresby yesterday refuted Donald's outburst. "We, the landowner leaders of the 15 licensed area villages of the P'nyang LNG project are united and we are in support of the Government, to continue negotiations and decide for us as mandated by the law of our land," Ingsim said.

Report of extractive industries out

The sixth report of the PNG Extractives Industries Transparency Initiative (PNGEITI) report for 2018 was released this week. This report covers the calendar year from Jan 1, 2018 to Dec 31, 2018. Below is a summary of the report, with the introduction by Treasury Minister and PNGEITI chairman Ian Ling-Stuckey. January 30, 2020, The National Business

THE implementation of the Extractives Industries Transparency Initiative (EITI) in PNG continues to gain momentum with the publication of the sixth consecutive PNG EITI Report covering 2018. The timely publication of the annual report signifies PNG's commitment in meeting its reporting obligation as a member country of the EITI Global Initiative. This report is the first to be delivered under the James Marape-led Government and demonstrates the government's continued support towards the promotion of revenue transparency and accountability in the extractive sector. The compilation and publication of the EITI annual reports is an illustration of the sustained efforts and enhanced collaboration between members of the PNG EITI Multi-Stakeholder Group. The reports seek to present to our populace a comprehensive description of the PNG extractives sector, its economic and social impacts and particularly, the management of the revenues generated within this sector.



Historical volume of indices of PNG diversifies resources economy.

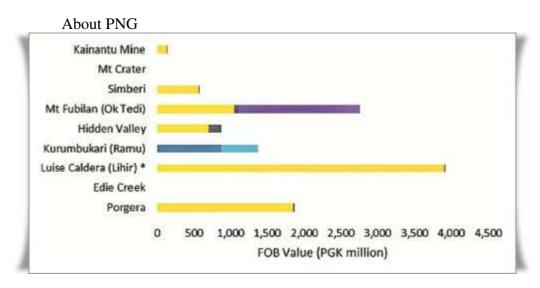
It is a significant progression from the previous five annual reports since PNG became a member of this global body in 2013. The report not only seeks to address, amongst other things, the remaining recommendations from PNG EITI's first validation outcome, in the lead up to the second validation, but it also includes various aspects of reporting attributed to sub-national payments and beneficial ownership disclosure. The 2018 report has been significantly improved to also address reporting gaps identified in previous year reports with the aim of ensuring comprehensiveness and timely reporting on the sector. This will also be the final report produced in compliance with the requirements of the 2016 EITI Global Standard. With the recent introduction of the 2019 EITI Standard, future PNG EITI reports will include additional information such as gender, systematic disclosures on State participation in extractive projects through state-owned enterprises (SOEs), commodity trading, project by project reporting, systematic disclosures on production, license allocations and contracts transparency.

With existing resource projects and new projects on the horizon, the extractive sector will continue to play a significant role in the PNG economy, hence it is vital that citizens are made aware of how

resources generated revenues are being managed and used. The PNG EITI reports contain valuable financial data and other contextual information that are useful for this sector. The reports are also important in diagnosing areas of systematic weaknesses in the government system and practices, the fiscal and taxation laws governing the sector and initiating necessary reforms to address these weaknesses. The country is undergoing a period of significant economic transition and this Government has taken positive steps to put in place mechanisms for faster economic recovery including; prioritising expenditures, less dependency on borrowings and reducing existing debt to a manageable level.

• What is EITI?

The Extractive Industries Transparency Initiative (EITI) is a global organisation established in 2002 with a goal of increasing industry transparency and accountability. Countries participate by issuing annual reports reconciling payments from the extractive industries to receipts by governments, in accordance with the EITI standard. It is PNG's sixth EITI report, covering 2018. In accordance with the EITI Standard, the reporting process has been overseen by a multi-stakeholder group and has been compiled by an independent administrator Ernst & Young. Important progress has been made since PNG's first EITI report, providing greater transparency for Papua New Guineans over revenue streams from the country's mining and oil and gas industry. The 2016 EITI report was the first to undergo validation by the EITI Secretariat and was found to have achieved satisfactory progress.



Value of silver exports from Lihir was not reported by the MRA.

Papua New Guinea is home to around eight million people, living predominantly outside urban areas, and speaking 800 different languages. The country is extremely diverse geographically, biologically, culturally and linguistically. PNG has experienced 17 years of economic growth and is classed as "lower-middle income" by the World Bank. It has a wealth of natural resources, and revenue from these resources could contribute to reducing poverty and improving the lives of PNG citizens. However, 37.5 per cent of PNG citizens continue to live below the national poverty line. The country is classified as "low human development" – ranking 153 out of 188 countries. Corruption is a challenge for PNG. In 2018, it was ranked 138th out of 180 countries in Transparency International's Corruption Perception Index.

What are the extractive industries in PNG?
 Until the current decade, PNG's export commodities were gold, copper and oil. Before 2018, copper volumes decreased while PNG was able to add silver, liquefied natural gas, condensate, nickel and cobalt to its export commodities, diversifying and expanding its revenues from its endowment of natural resources. In the 2019 National Budget, silver was the

only export with volumes forecasted to increase over the forward estimates. Who owns mineral resources in PNG? Subsoil assets in PNG belong to the State. Developers of resource projects generally enter into an agreement with the State in addition to obtaining a resource development licence or mining tenement. This typically involves a broad consultation process with all affected parties. The State has the right, but not the obligation, to acquire up to 22.5 per cent of a participating interest in a designated gas or petroleum project, and up to 30 per cent of a mining project. The State generally also grants free equity in resource projects to landowners from the area in which a project is located. Details of contracts and licences are confidential and not made public, but the EITI process has prompted efforts to understand whether some contracts, particularly in the mining sector, might be publicly disclosed in future.

How do the extractive industries contribute to the PNG economy? PNG's economy is characterised by two very large economic sectors: agriculture, forestry and fishing. They engage most of the labour force (the majority informally). The extractives sector (oil and gas extraction, mining and quarrying) accounts for the majority of export earnings. These two sectors make up nearly 46 per cent of PNG's nominal Gross Domestic Product. The extractives sector contributed significantly to nominal GDP growth in 2018 despite a decrease in total output from 2017. High commodity prices and a weaker PGK currency helped extractives business generate more revenue from less total output. The extractive industries also make up the majority of PNG's exports, and the commencement of the PNG LNG project has been the primary driver of GDP growth in recent years. The extractives sector contributes a smaller proportion of the stock measure of nominal GDP, government revenue and employment. The extractive industries have both positive and negative social impacts in PNG. The positive impacts of the extractive industries are the provision of employment and revenue to local communities, as well as funding for infrastructure such as roads, hospitals and schools. The extractive industries can also be a source of tension between different societal groups and negatively impact the environment through land degradation, water quality and increased carbon emissions.

The mining industry in PNG

During 2018, eight mines were operating in PNG, distributed over a number of provinces. A further four mines were in advanced stages of pre-production. Companies active in mining and exploration in PNG include large international companies, state-owned enterprises, and many junior companies, together with a significant contribution from up to 80,000 small-scale alluvial miners. Mining in PNG is governed principally by the Mining Act 1992 (MA) and administered by the Mineral Resources Authority (MRA). There are four principal channels by which communities benefit economically from mining projects, other than through employment and procurement: Royalties, infrastructure development grants, special support grants, and the public investment programme. The benefits for a project are agreed in a development forum with relevant stakeholders, including the State, company, provincial government, local level government and landowners, and set out in a memorandum of agreement. These agreements are not currently publicly disclosed.

The oil and gas industry in PNG

In 2018, five principal oil fields were operating in PNG. Commercial oil production began in PNG in 1992 and has been in slow but steady decline since the mid-1990s. The PNG LNG project exports liquefied natural gas (LNG), the first shipment of which was in 2014. The project has design capacity of 6.9 million tonnes of LNG per annum, 14 and is expected to make a significant long-term contribution to the economy and government revenues. Another two gas projects are in advanced stages of development. Oil and gas interests in PNG are predominantly in listed companies and state-owned enterprises. A range of companies are actively engaged in exploration and production in PNG, with a number of new projects in planning and development stages. Production figures

for 2018 were inconsistently reported by companies, the Department of Petroleum and Energy (DPE) and Customs. The oil and gas industry in PNG is governed principally by the Oil and Gas Act 1998 (OGA), and overseen by DPE. DPE is chronically under-resourced and lacking in capacity, and has been the subject of a number of recommendations in previous PNGEITI reports. The DPE is working to address some of these recommendations, such as establishing an electronic registry and revenue system.

State-owned enterprises

The State holds the right to acquire a participating interest in any mining or petroleum project in PNG at par value, or 'sunk cost'. In return, the State can receive a share of the profits of the project, paid as dividends in accordance with its rights as a shareholder.

During 2018, PNG's state-owned enterprises (SOEs) that held interests in the extractive industries included:

- Kumul Petroleum Holdings Ltd (all hydrocarbon assets);
- Kumul Minerals Holdings Ltd (all mining assets);
- Ok Tedi Mining Ltd.

The report also covered two organisations that act as trustees: Mineral Resources Development Company Ltd (MRDC) and Ok Tedi Development Foundation. MRDC acts as a trustee shareholder for beneficiary landowners and provincial governments. It holds and manages shareholdings and pays royalties and equity to project landowners. The OGA specifies MRDC's role in holding and managing hydrocarbon assets for landholders, including investment of funds in future generation and community infrastructure trust funds. All oil and gas projects therefore have associated trusts which are wholly owned subsidiaries of MRDC. The MA allows for MRDC to hold the State's interest, but does not mandate it; consequently, not all mining operations have an associated MRDC subsidiary.

Oil Search: Talks continuing

January 29, 2020, The National Business

TEN legislative amendments to the Papua LNG project gas agreement were passed during the final quarter of 2019, according to Oil Search Ltd. The company, a partner in the project, noted in its final quarter report that it was while detailed discussions took place between PRL 3 (P'nyang) joint venture and the Government on the terms for the P'nyang field development. Managing director Peter Botten said: "In mid-October, 10 legislative amendments relating to the PRL 15 (Papua) gas agreement were passed by Parliament. "In addition, discussions between the PRL 3 (P'nyang) joint venture and the PNG Government on the terms of the P'nyang gas agreement continued. "The terms were not finalised by the end of 2019, which was the targeted timeframe. "However, negotiations recommenced early in 2020 and remain ongoing, with all parties striving to reach an equitable solution."

Botten said key commercial agreements and pre-Feed (front-end engineering and design) activities for the three-train integrated development had been completed. "And, subject to the completion of the P'nyang gas agreement, the joint venture participants are ready to progress the three-train LNG expansion into the Feed phase," he said. "Discussions with potential LNG customers in Asia continued during the quarter, with continued interest expressed by the market in contracting additional LNG volumes from PNG. "However, we do not anticipate making any further tangible progress until the joint ventures enter Feed on the expansion project." Meanwhile, in mid-December, the Oil Search board approved entry into the Feed phase for the Pikka unit development on Alaska's North Slope.

The Horse Breeder, the Novelist and the \$60 Billion Panguna Mine Aaron Clark, Bloomberg News, January 27, 2020



Panguna. RNZ/Johnny Blades.

John Kuhns has been many things: an investment banker, a silicon smelter operator in China and a novelist. His sights are now set on an abandoned mine with an estimated \$60 billion of gold and copper. Kuhns is among a handful of people exploring for minerals and courting landowners on the Pacific island of Bougainville. His rivals include an Arabian-horse breeder, a hedge fund investment manager who keeps wallabies on his estate and a former Australian defense minister. The involvement of such an eclectic mix of entrepreneurs is a reflection of the fact that this is no ordinary mineral reserve. Rio Tinto Group operated the Paguna mine for 17 years through subsidiary Bougainville Copper Ltd. The global mining behemoth shut it in 1989 as local protests over mine revenue degenerated into a civil war that killed as many as 20,000 people. The mine has been in limbo ever since. But that may be about to change as the Autonomous Region of Bougainville moves toward independence from Papua New Guinea after a referendum showed an overwhelming majority of the population on the small group of islands wants to establish a new nation.

While the political uncertainty may deter major mining companies from making an immediate investment, the mine's riches attract entrepreneurs hoping to develop the asset to a point where they can deliver it to a big operator for a fee, said Peter O'Connor, a Sydney-based analyst at Shaw and Partners Ltd. "They have to create a story with a vision," he said. Success will depend on earning the trust of thousands of poor, customary landholders, many of whom remember the civil war that was triggered by communities demanding greater compensation from the mine. "The landowners want to reopen the mine but they are divided by the interested developers," said Sam Akoitai, a member of the island's parliament who represents central Bougainville, an area that includes Panguna. "It's really up to the landowners to come together to understand that the land belongs to the clan and not to some individuals."

Bougainville Copper, which is no longer associated with Rio, has estimated it would take seven to eight years and \$5 billion to \$6 billion to rebuild the mine and resume full operations. The company is blamed by many locals for contamination attributed to the mine. "We retain strong levels of support among customary landowners within the project area," Bougainville Copper said in a statement. "We have a trusted local team on the ground that continues to engage with project area communities." The Bougainville Mining Act 2015 strengthened landowner control and was designed to increase compensation to local communities and the island's government from future mining to

avoid a repeat of the bloodshed of the 1980s and 1990s. The government also decided not to renew Bougainville Copper's exploration license, which the company is challenging in court. In June 2019, Kuhns flew several landowners to the U.S. to meet potential investors, including representatives from Barrick Gold Corp. At the Harvard Club in Midtown Manhattan, where stuffed moose, bison and even an elephant head adorn the rooms, the landowners heard Kuhns deliver a Power-Point presentation introducing potential investors to Bougainville. Barrick declined to comment.

"Panguna mine can be rejuvenated and can be resuscitated for a couple of billion dollars," said Kuhns in a follow up phone interview. "It's going to take a major to do that." Among those also interested in Panguna is Jeff McGlinn, who made his fortune in mining and construction services through Western Australia-based NRW Holdings Ltd., which he co-founded. McGlinn, who resigned from NRW in 2010, is part of the glamorous world of Arabian horse breeding, mixing with models and celebrities at parties on the French Riviera and promoting luxury brands. He once gave an Arabian colt to Italian opera singer Andrea Bocelli. McGlinn's roots in mining give him valuable experience for Panguna — one of NRW's businesses was constructing dams that hold mining waste. He's also linked to a recent effort by the island's government to kick start development, when it created Bougainville Advance Mining. The government's Executive Council proposed last year an amendment to the 2015 mining act that would give all available mining rights to the new company, in which McGlinn's Caballus Mining would hold a stake.

That amendment drew criticism from landowners, as well as Bougainville Copper, the former mine operator, which says the proposal undermines its rights to mine Panguna. The bill was later shelved. A representative of Caballus said McGlinn was unavailable to comment. Another interested party is Richard Hains, son of the Australian billionaire David Hains. Richard, famous for keeping wallabies on his Gloucestershire estate, has helped develop mines in some of the world's most difficult places. He's the largest shareholder of RTG Mining Inc., whose management team has financed, built and operated mines across Africa and Asia, including the Boroo gold mine in Mongolia. "Some of the best opportunities in the mining business in the 21st century are now in the more difficult commercial environments," Hains said in a phone interview. RTG believes it can restart production at Panguna through a staged process in as little as 18 months for about \$800 million.

"It's far smarter to start with a smaller footprint," said RTG Chairman Michael Carrick. "Then in consultation with the community, we can turn up the mine's operation." RTG operates a joint venture with the Special Mining Lease Osikaiyang Landowners Association, a Panguna landowners group. The JV employs 15 people, including Philip Miriori, the chairman of the landowners group. There are bigger fish too. Fortescue Metals Group Ltd. said in an emailed statement it has sent representatives to Bougainville to learn about the region and potential opportunities, confirming earlier reports. Founder Andrew Forrest is Australia's second-richest person with a \$10.2 billion fortune, according to the Bloomberg Billionaires Index. Shaw and Partners' O'Connor said Chinese miners may also have a chance of redeveloping Panguna because they have a greater risk appetite and access to cheap financing.

But the Panguna landowners group Chairman Miriori said the people he represents aren't interested in working with Chinese developers because of their poor environmental track record. If anyone wins the right to develop Panguna or other parts of the autonomous region they will need to do so cautiously. Violence remains a constant threat in a community that is still fiercely divided. A geologist working for Perth-based Kalia Ltd. was killed and seven others were injured in an attack in northern Bougainville in December, according to the local government and the company, whose chairman is former Australia Minister for Defence David Johnston. Authorities subsequently suspended Kalia's exploration expeditions and geological field work. There's also a moratorium on work at Panguna because of sensitivity to restarting the mine, said Raymond Masono, Bougainville's vice president and minister for mineral and energy resources. "We are no longer talking with

any investors about Panguna until the moratorium is lifted, and we don't know when" that will be, he said by phone. "The government is treading very carefully on this particular mine."

But prospects for restarting Panguna and allowing for the development of new mines are bolstered by the idea that Bougainville would need revenue to have any chance of financing an independent state. Many hope the mineral wealth could ultimately help reduce poverty for the region's 300,000 people where estimated per capita GDP is only about \$1,100. That would depend not only on clearing the way to restart production, but a government able to make sure that enough of the proceeds are used to fund development. "Given the failure of mining in PNG to deliver really anything like sustainable development, those hopes may end up being disappointed," said Luke Fletcher, executive director of Jubilee Australia, a group that has tracked the effect of resource extraction. But the lure of riches mean miners aren't likely to give up. "Bougainville had almost no exploration for nearly 40 years," said Mike Johnston, executive director of Kalia. "There's no other place like it on the planet."

Woodlark MP Lashes Out At MRA

'We do not want to repeat the same mistake we did for Misima mine which is just a few kilometers away....' Post Courier, January 27, 2020



Construction work has already started for the Woodlark gold mine. Image: Geopacific Resources.

Samarai Murua MP Isi Henry Leonard has hit out at the Mineral Resources Authority (MRA) for acting independently on matters relating to an upcoming mine on Woodlark Island in Milne Bay Province. Mr Leonard told a media conference last week that MRA had failed to consult provincial and district authorities, LLG and landowners in its dealing with this mining prospect. Queries raised by the Post-Courier with the MRA were not answered but the MP was reportedly told through his office that mining activities would start following a mining lease awarded six years ago. The MP's office also understood that MRA officers flew to Alotau last Thursday to have a meeting with provincial and district authorities. However, this did not go down well with Mr Leonard who reminded MRA that he represented the people of Woodlark Island and his office should be consulted.

"Even the current company wants to start to with the construction phase prior to a mining lease awarded six years ago, relevant government authorities on the ground should be aware of such intentions and plans," the MP said. He said that the mining lease as described by MRA should provide mining development plans, a memorandum of agreement (MOA) between all stakeholders, environmental plan, waste disposal plan, relocation plan for locals living around the vicinity and mining closer plan amongst others. Mr Leonard said considerable efforts should be undertaken by the MRA for the good of the national, provincial and local level governments and its people.

"We (Samarai Murua) do not want to repeat the same mistake we did for Misima mine which is in the same electorate and just a few kilometers away. We want a MOA and this MOA should be reviewed every four or five years to ensure compliancy and also a mine closure plan should be in place," the MP said. He said those were some of the fundamental aspects that Misima Mine failed to capture and the legacy is inflicted on the lives of the people, adding that this was a 'reminder' not to be repeated. Mr Leonard said MRA should communicate with relevant government authorities on the ground and should refrain from directing decisions from Konedabu in Port Moresby.

Revenue held in spending account, EITI report says

January 27, 2020, The National Business

THE largest sources of government revenue from the extractive industries in 2018 included corporate income tax, salary and wage tax, dividends and royalties, according to a recent report. The PNG Extractive Industries Transparency Initiative 2018 Report noted that most of this revenue went into consolidated government revenue. In recent years, an effort was made to make the process more strategic and rules-based so that it was directed towards achieving sound fiscal policy. Some revenue from the extractive industries was earmarked for specific purposes, such as the public investment programme. According to the report, the PNG Sovereign Wealth Fund was established in 2015 to ensure that some of the wealth generated by the industries were saved for the future.

Cop, 4 killed in Enga

January 27, 2020, The National

A POLICE constable was shot dead yesterday while four men were killed, women and children wounded on Thursday in an outbreak of violence in Enga. Police Constable (PC) Timot Kavanamur was clearing illegal miners in Porgera when he was shot dead in the morning. On Thursday afternoon, a tribal fight between Pepet and Waiban clans just 15km outside Wabag town resulted in four deaths and nine women and children slashed with bush knives. Police Comm David Manning says the death penalty must be imposed on cop killers and that "fire will have to be fought with fire". "I have said it before and I will say it again. "We cannot have policemen attacked and killed by criminals in our society. "Legislators need to amend or enact appropriate laws to serve as a deterrent on such murderers," he added. Comm Manning said this in a statement yesterday following the killing of a PC Kavanamur by illegal gold miners in Enga's Porgera.

He added that he had also briefed Prime Minister James Marape on what has happened and suggested that a State of Emergency (SoE) be declared in Porgera. Comm Manning said a massive combined police and PNG Defence Force operation was currently being carried out in Porgera and neighbouring areas to flush out the criminals responsible for the shooting of the constable. "The suspect who killed the policeman is known. "We know who he is and we know his associates, we will find them. "Tomorrow (today), a special charter will fly Acting Deputy Comm (Operations) Donald Yamasombi, Asst Comm (Operations) Samson Kua and Special Services Division Director Supt Julius Tasion to Porgera to assess the situation. "They will recommend the next course of action to take," he said.

Comm Manning said an internal security force comprising police and sister disciplined forces to combat sporadic tribal fights within the highlands of PNG and the emergence of violent gangs nationwide, such as the Tommy Baker Gang, would be set up in the medium to long-term to tackle such violence and killings. "A major component of this will be intelligence-driven, so our intelligence community will be part of this force. Defence and the Correctional Services will be required to come on board. "We will of course have to look at enabling legislations and appropriate funding

to make this a force to be reckoned with. "We cannot be complacent and sit back any more. Fire will have to be fought with fire," he added. In the meantime, Comm Manning said he would be requesting the Government, through Police Minister Bryan Kramer, for proper safety equipment such as bullet proof vests, helmets and shields for police personnel. "PNG is becoming a very dangerous country for policemen to work and their safety and protection are very critical to ensuring that they can go out and continue to protect and serve the eight million Papua New Guineans.

"I will be meeting the police minister tomorrow to submit recommendations for him to take up with the Prime Minister and the Cabinet. It is now time for some tough decisions to be made. Enough is enough," he stressed. "I also wish to send my sincerest condolences to the immediate family and colleagues of PC Kavanamur. "It is unfortunate that the life of such a fine young man who had more to offer this country has been cut short. May God comfort us all in this tragic hour," he added. ACP Yamasombi said PC Kavanamur, who was attached to the Air Tactical Unit, was shot dead while trying to remove illegal miners at the Porgera mine. He said he had yet to receive a brief from his men on the ground to release further details on the slaying. Sources told The National that police and soldiers were on duty trying to stop the illegal miners when PC Kavanamur was shot on the neck. Suyan is now under a massive raid by military and police Special Services Division hunting for locals working in collaboration with Hela's deadliest war lord known as Miape.

Race to exploit the world's seabed set to wreak havoc on marine life

New research warns that 'blue acceleration' – a global goldrush to claim the ocean floor – is already impacting on the environment. Robin McKie, The Guardian, 25 Jan 2020



Aitutaki lagoon in Polynesia. Photograph: Andrea Izzotti/Alamy

The scaly-foot snail is one of Earth's strangest creatures. It lives more than 2,300 metres below the surface of the sea on a trio of deep-sea hydrothermal vents at the bottom of the Indian Ocean. Here it has evolved a remarkable form of protection against the crushing, grim conditions found at these Stygian depths. It grows a shell made of iron. Discovered in 1999, the multi-layered iron sulphide armour of *Chrysomallon squamiferum* – which measures a few centimetres in diameter – has already attracted the interest of the US defence department, whose scientists are now studying its genes in a bid to discover how it grows its own metal armour. The researchers will have to move quickly, however, for the International Union for the Conservation of Nature has just added the snail to its list of threatened species. German and Chinese industrial groups have revealed plans to explore the seabed around two of the three vents that provide homes for scaly-foot snails. Should they proceed, and mine the seabed's veins of metals and minerals, a large chunk of the snail's home base will be destroyed and the existence of this remarkable little creature will be threatened.

"On land, we are already exploiting mineral resources to the full," says Jean-Baptiste Jouffray, of Stockholm University. "At the same time, the need for rare elements and metals is becoming increasingly important to supply green technologies such as wind and solar power plants. "And so industrialists are looking to the seabed where it is now technologically and economically feasible to mine for minerals. Hence the arrival of threats to creatures like the scaly-foot snail." Jouffray is the lead author of an analysis, published last week in the journal *One Earth*, which involved synthesising 50 years of data from shipping, drilling, aquaculture, and other marine industries and which paints an alarming picture of the impact of future exploitation of the oceans. This threat comes not just from seabed mining – which is set to expand dramatically in coming years – but from fish farming, desalination plant construction, shipping, submarine cable laying, cruise tourism and the building of offshore wind farms.

This is "blue acceleration", the term that is used by Jouffray and his co-authors to describe the recent rapid rise in marine industrialisation, a trend that has brought increasing ocean acidification, marine heating, coral reef destruction, and plastic pollution in its wake. As they state in their paper: "From the shoreline to the deep sea, the blue acceleration is already having major social and ecological consequences". Another illustration of blue acceleration is provided by seabed grabbing, state the authors. Article 76 of the UN convention on the law of the sea (UNCLOS) allows countries to claim seabed that lies beyond the 200 miles of a nation's exclusive economic zone. Since the first claim under Article 76 was made in 2001, 83 countries have made submissions. Put together, these claims account for more than 37 million sq km of seabed, an area more than twice the size of Russia. Many seabed grabbers include small island states that are trying to become large ocean states in the process. For example, the Cook islands in the South Pacific has claimed an area of seabed that is 1,700 times its land surface. "The extension of the continental shelf is therefore not only transforming the geopolitical landscape, it is also substantially shrinking the area designated as the common heritage of humankind," states the report.

Examples of the conflicts that could ensue because of the blue acceleration include the disruption of key fish stocks by drilling for gas or oil offshore; pipelines that prevent trawl fishing; and offshore wind farms that disturb tourism. Norway provides a stark demonstration of likely future conflicts. It aims to bring about fivefold rises both in salmon farming and cruise tourism in its waters over coming years while also building more and more offshore wind farms and more and more offshore gas and oil platforms. Seabed mining for minerals is also scheduled to begin. This saturation of ocean space renders Norwegian waters as being highly vulnerable to shocks, states the report. The South China Sea is another potential flashpoint. It is a key gateway in the region's network of undersea telecommunication cables; a third of the world's shipping passes through it; while half the world's fishing boats operate in its waters – which are disputed variously by China, Malaysia, Vietnam and others.

Should armed conflict break out here over any of these issues, there would be a far-reaching impact on the world's economy. "The relevance of the ocean for humanity's future is undisputed," states the report. "However, addressing the diversity of claims, their impacts and their interactions, will require effective governance." To achieve this, the authors call for greater accountability to be imposed on those financing the fundamental changes that are now being made to Earth's oceans. These include both banks and governments. In addition, the vulnerability of small island states needs to be addressed, it adds: "Navigating the blue acceleration in a just and sustainable way requires particular emphasis on the implications of increased ocean use across the globe – and how these claims could have an impact on the economic safety and wellbeing of vulnerable communities and social groups."

Bougainville president accuses mining company of lying to Australian stock exchange

John Momis says his government 'will not rest' until Australian-linked miner seeking licence for Panguna mine is banned for life from Bougainville and PNG Kate Lyons, The Guardian, 24 January 2020



Bougainville's Panguna mine, for which RTG Mining is seeking an exploration licence.

The president of the autonomous Bougainville government has accused an Australian-linked mining company of lying to the Australian Securities Exchange over its plans to reopen one of the world's largest copper mines. In a scathing statement, John Momis, the president of the autonomous Bougainville region, accused the Australian-linked RTG Mining of "lies and deceptions" and said his government "will not rest until all RTG and their executives are banned for life from Bougainville and Papua New Guinea". Momis was referring to a statement issued by RTG Mining to the ASX on Tuesday in which the company sought to clarify recent press reports, which have alleged that RTG staff are banned from entering Papua New Guinea. In December, after the results of a referendum that saw almost 98% of Bougainvilleans vote in favour of independence from PNG, Momis issued a warning banning people affiliated with certain foreign mining companies, including six from RTG and one from Kalia Group, from entering Bougainville. Momis said they were creating "disharmony" in the region and that he had sought the assistance of the PNG prime minister and office of immigration and border security to assist with keeping them out of Bougainville.

However, RTG clarified in its statement to the ASX that its executives were "not banned from travel to Papua New Guinea" and emphasised that "the national government currently [have] constitutional authority over border control for the country". RTG is seeking to secure an exploration licence at the Panguna mine in Bougainville. The Panguna mine was at the heart of the brutal civil war in the region that saw an estimated 20,000 people killed between 1988 and 1997. The mine, which once provided 45% of Papua New Guinea's export income, has been mothballed since the conflict began, but there has been talk about reopening it. Among the companies in talks about resuming mining in Bougainville are RTG, which is listed on the Canadian and Australian stock exchanges, ASX-listed Kalia, Bougainville Copper Limited, a former subsidiary of Rio Tinto that ran the Panguna mine in the 1970s and 1980s, and Caballus Mining.

Andrew "Twiggy" Forrest has also expressed interest in mining in Bougainville, with the Sydney Morning Herald reporting that representatives of his mining company, Fortescue, travelled there in 2019 to explore "potential opportunities". There are disputes over land rights at the Panguna mine site, but RTG is the joint venture partner of the Special Mining Lease Osikaiyang Landowners Association (SMLOLA). RTG wrote in their statement to the ASX that the members of the SMLOLA "are the customary landowners who own the minerals at the Panguna Mine under the Bougainville

Mining Act". However, Momis said the SMLOLA was established under an old system and that the autonomous Bougainville government considered its claims over the mine "illegal, null and void". There are concerns that disputes over land rights at the mine site might reignite tensions in the region.

The Bougainville government enacted an indefinite moratorium on renewing the licence of BCL, a controversial mining company, in January 2018 over fears it could reignite violent civil conflict. However, since then, the government has shown signs that it was in favour of restarting mining in the region. Despite voting for independence from PNG, the question of how an independent Bougainville would support itself hangs over the vote, with some experts saying it is impossible for Bougainville to become financially independent without a strong mining industry and that it would take much longer for other mining projects to be established and become profitable than it would take to reopen Panguna. The autonomous Bougainville government and RTG Mining were contacted for comment.

Papua New Guinea Gold mine to become a top tier mining asset while landowners' rights ignored. Financial Post via PNG Mine Watch 24 January 2020



The most basic needs and rights of Papua New Guinea landowners are being completely disregarded while a Canadian and Chinese consortium talks up the potential of an internationally significant gold mine ahead of a PNG Government decision on the mine's lease renewal. Porgera Gold mine in remote Enga Province of Papua New Guinea expired last year and consortium made up of Canada's Barrick Gold Corp and China's Zijin Mining wants their lease to be extended for another 20 years. A majority group of landowners, the Justice Foundation for Porgera headed up by the PNG Resource Owners Chairman Jonathan Paraia believes Barrick has no intention to deliver on promises it's making to reduce environmental destruction or stop practices that damage local lives. "Barrick has had 20 years to adequately deliver on its promises to resettle landowners, provide housing, education, clean drinking water so how can we for a moment believe that it will start honouring promises made under new contracts," he said.

"How many more independent reports detailing environmental and human rights abuses need to be published before the mine is held to account," he said. Mr Paraia understands Barrick needs this lease to be renewed so it can conclude a deal with Chinese state-owned entity Zijin. "If the lease is renewed Barrick will not see it out, it intends to divest its share to its Chinese partner or someone

else," he said. In 2015 Barrick Niugini officials told Landowners to make an offer for 95% of shares in Porgera mine but we could only make an offer for 10% so there was no sale. Instead in 2017 it sold half its shares to Zijin. We believe its goal is to sell its remaining shares once the lease is renewed. The Chairman of the Justice Foundation for Porgera is also extremely concerned about a 70 million kina (almost \$20M US) donation made to the Enga Provincial Government last week by the Chinese Government. "The extremely generous donation while a decision on the mine is imminent is highly suspicious at best, and deserves a high level of scrutiny," he said. Jonathan Paraia also wants Barrick and elements of the PNG Government to stop cherry-picking supportive minority landowners with conflicts of interest and listen to the vast majority who want Barrick out.

"In the last fortnight, as part of Prime Minister James Marape delegation to Enga, Minister Johnson Tuke, Minister Bryan Kramar and Mineral Resources Authority head Jerry Garry unofficially visited the mine site and met with Barrick employees and contractors who claimed to be landowner representatives. "Two of the guests, in particular, Dick Pundi a director of Ipili Porgera Investments Ltd (IPI) and Maso Mangape an employee of IPI claim to represent the interests of Landowners when IPI is a major service provider to Barrick, so whose interests are they serving?" he said. The Justice Foundation for Porgera is aware the Prime Minister is adamant to take over the Porgera Gold Mine but other representatives of government are acting against the interest of the Prime Minister. "The people of Porgera and the Justice Foundation for Porgera know the Prime Minister James Marape is listening to the people and has the best interests of our country at heart. "We stand behind the Prime Minister and support him to say Barrick out, it's time Papua New Guineans profited from Papua New Guinea's valuable resources," Mr Paraia said.

PNG New Ireland Deputy Governor Tells Social Media Mining Critics: Get Smart or Get Screwed. Pacific Mining Watch, 24 January 2020



Papua New Guinea's Deputy Governor of New Ireland, Sammy Missen, said today that it is actually amusing to see all the talk on social media about the failure of politicians to take action to make the mining sector work better, to the benefit of the people of the country. Mr. Missen said "I find it amusing, because all these people are just missing the point. If they are so concerned about making changes in the Mining Act, then they should start supporting those who really want to make changes rather than just complaining all the time." The Deputy Governor said that there is one politician in the country who is serious about making the Mining Sector work to the advantage of the people. "That person is Sir Julius Chan. Sir Julius has been saying for more than ten years that the

Mining Act should be changed. He has been saying that the current Mining Act takes huge wealth from the landowners and only gives them a few toea in return.

Sir J says that the landowners should get automatic ownership in any mine. Landowners should never have to buy shares in a mine – they should get shares free, automatically. The gold and the copper and the nickel is in OUR ground." And, Mr. Missen said, "Sir J says that any company that wants to come in and operate a mine should be able to do so, but they will just be contractors. The owners of the mine will be the owners of the land – the State, the Province or the landowners, whoever owns the land where the mine is operating. And the benefits to the landowners will go up by five times from what they are now. Em tasol." Mr. Missen said that Sir Julius has been trying to make these changes in the Mining Act for years. "Almost three years ago Sir J introduced a Private Member's Bill to Parliament to Revise the Mining Act. But the O'Neill Government did not act. And when the Marape Government came to power one of the first things it did was to invite a New Ireland Team to sit down with him and explain how the Mining Act should be revised. The Prime Minister said he would support those changes, but so far nothing has been done."

Mr. Missen said criticism of the Mining Minister, the Hon. Johnson Tuke, is misplaced. "Minister Tuke fully supports the changes Sir Julius has proposed," he said. "He supports giving ownership of the mines to the people who own the land, increasing royalties for the people and increasing all benefits coming from mining. But he can do nothing without the support of the Prime Minister." "And that is what people should understand," said the Deputy Governor. "They should stop criticising everyone, and realise who their friends are. They should realise that they have an ally in Sir Julius. They have an ally in Minister Tuke. What the people need to do is to Get Smart. The need to telephone their MPs email their MPs, go on social media and tell their MPs they demand that they support the changes Sir Julius wants to make. The people need to make some NOISE! They need to demand a Revised Mining Act that will make the people rich from the wealth that is coming from THEIR ground."

"And if their MPs do not listen to them," Mr. Missen said, "if their MPs do not support giving the people a much larger share of the benefits, then the people need to make it very clear that those MPs will not get their votes in the next election. That is the only thing politicians understand. The People must tell their MPs one thing – if you refuse to support changes to the Mining Law that will benefit us, then you will no longer represent us. Em tasol!" "And that," Mr. Missen concluded, "is what people should be doing. They need to Get Smart. They need to realise who their friends are, and support them. If people just continue to moan and groan and refuse to work together, all our mines will end up just big holes in the ground, and all the wealth from them will be sitting in foreign bank accounts!" In closing, the Deputy Governor said, "I can tell you one thing for sure. If we don't Get Smart, we will surely Get Screwed!"

Official: Solwara 1 failed

By GYNNIE KERO, January 24, 2020, The National Business

MINERAL Resources Authority (MRA) managing director Jerry Garry says Solwara 1 is a failed project and will not get off the ground. Garry when providing an update on the Nautilus proposed seabed mining project said: "We don't think it (Solwara 1) will get off the ground. "State had US\$120 million (K408.8mil) in it and we will probably write it off as debt. "That was a risky investment, technology has never been tried and tested. "Very difficult project." Nautilus had planned to extract high grade seafloor massive sulphide (SMS) deposits of copper, gold, zinc and silver in 1,600-metres of water. On the Tolukuma gold mine in Central, Garry said there was already an investor. "There is a potential investor, the council (Mining Advisory Council) requested they (investor) provide a financial capability statement and they have not provided that so we are working on

that," he said. "They are planning to undertake the project in two phases." Last year, the Tolukuma Gold Mine's (TGML) liquidator, Pini Accountants and Advisors, offered for sale by public tender the mining lease 104 and other mine assets as a package. The liquidator in the public notice, stated that the sale was on a strictly "as is where is basis". The firm said the sale comprised the existing tenements, pending tenement applications and various assets including buildings, plant and equipment.

Vale's restructure in New Caledonia likely to cost more than 100 jobs

The planned restructure of the Vale nickel plant in New Caledonia is expected to result in at least 100 employees losing their jobs. Radio New Zealand on 24 January 2020

Last year, the Brazilian owner announced that it was divesting itself of its 95-percent share in the plant while changing its operations. Local media say talks with unions have resulted in reclassifying some positions and that of the 300 people affected about 125 will be dismissed. The figure is not final and reports quote a union leader as saying the redeployments may lower it to about 100. The *Noumea Post* said the exact figure would be known next month. Vale has been incurring losses in the hundreds of millions of dollars and decided to pull out after earlier contemplating mothballing the plant.

It now plans to close the nickel refinery and to prioritise production of NHC, or nickel hydroxide cake, which Vale says is in great demand for batteries for electric vehicles.

Bougainville president steps up battle with Australian miner

Bougainville President John Momis is stepping up his battle with Australian miner RTG - a company wanting to reopen the Panguna Mine.

Radio New Zealand on 24 January 2020



Bougainville President John Momis Photo: supplied

Mr Momis claims RTG misled the Australian Stock Exchange this week by saying its joint venture partner, the Special Mining Lease Osikaiyang Landowners Association, (SMLOLA), are the customary landowners at Panguna. Mr Momis said SMLOLA was established under a scheme controlled by former miner Bougainville Copper Ltd - a scheme he called a grave mistake. He said his government had started a process to rectify that and all the current mine-affected landowner associations, including SMLOLA would be declared illegal, null and void. The president said the Autonomous Bougainville Government (ABG) would be ensuring there was proper social mapping to

establish the new legal landowner associations and entities. He also reiterated that bans on travelling to Bougainville remain on several senior executives from RTG.

SMLOLA responds

However, SMLOLA has released a statement saying the government had grossly misrepresented them. The members of SMLOLA are customary landowners at the Panguna Mine, it said, not SMLOLA itself as the government had inferred. SMLOLA said the government's claim that SMLOLA was a creation of the former Panguna miner, Bougainville Copper Ltd, was "wholly incorrect". It said the ABG itself set up the landowner group and drafted the constitution. Chairman Philip Miriori said his position and that of the other office holders had since been confirmed by the courts and through the Wardens Hearing in 2015. Mr Mirori also said he was personally invited by the president, when the ABG announced its new Mining Act in 2015 with great fanfare. Now, he said, the government, or more specifically the mining department, was trying to end that measure, and bring in its own developer, Caballus.

"The Mining Department's untruthful and incorrect attack on the SMLOLA and RTG is unprincipled and has no basis in fact or in law. "It is simply designed to push Caballus and to gift Jeffrey McGlinn 40 percent of Panguna for free and upfront, based on a bunch of undeliverable promises," he said. Lawrence Daveona, special advisor to SMLOLA, added there was "absolutely no proper basis" for the government's statement. "There has not even been as much as a proposal or any consultation for the outrageous and sudden claim, somehow deeming all current mine affected landowner associations, including the SMLOLA illegal, null and void." When contacted by RNZ Pacific, RTG chair Michael Garrick declined to comment.

PNG Petroleum Minister Kua brushes aside claims of Threats on Gas Project NBC News, 23 January 2020

Papua New Guinea Petroleum Minister Kerenga Kua has brushed aside claims of threats to close gas projects in Western Province. This follows, Governor, Taboi Awi Yoto and North Fly MP, James Donald claims, the State Negotiating Team has poorly negotiated for the province and the landowners over the P'nyang Gas Project' with the developer in Singapore last week. The leaders have threatened the government to close P'nyang and Stanley LNG Projects before the close of business this Friday until the Oil and Gas Act is amended. In his response, Minister Kua says constitutional law allows all minerals and petroleum is owned by the State and not by provinces and landowners. He said only the State is empowered to commercialise these resources, and no other entity is by law empowered to do this. Mr. Kua said leaders at all levels are entitled to express their views on issues related to resource project negotiations but State will make the final decision. The Petroleum Minister urges leaders to remain calm as P'nyang Ministerial Committee is always on hand to discuss any discontentment.

PNG police MOU with mining company concerning - academic

A Papua New Guinean academic and lawyer says a new memorandum of agreement signed by police and an Australian miner sends the wrong message to the public.

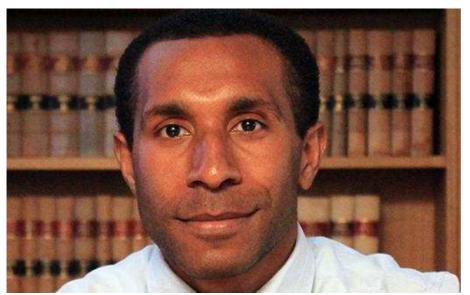
Radio New Zealand on 23 January 2020

PNG police commissioner David Manning this week announced that police would work together with Morobe Consolidated Goldfields to address law and order issues in the Wau/Bulolo area of Morobe Province. "In doing so the [Royal Papua New Guinea Constabulary] acknowledges the importance of maintaining and preserving good order for a harmonious relationship between the mine and the affected community," Mr Manning said. The company is owned by Harmony Gold, which

operates the Hidden Valley gold mine located about 150km south of Morobe's provincial capital Lae. The Hidden Valley mine operations have previously encountered problems with the <u>death of a worker</u> in relation to a landowner compensation bid. An Australian National University PhD candidate and practicising PNG lawyer, Bal Kama, said that given a long history of conflicts between landowners and miners in PNG the newly-announced arrangement raised questions about the impartiality and objectivity of police. Mr Kama said there were hardworking, honest police officers out there who were doing their best to uphold police values, but that such initiatives under the new agreement could undermine their good work.



Hidden Valley gold mine. Photo: Ausenco



Papua New Guinean academic and lawyer, Bal Kama. Photo: Australian National University

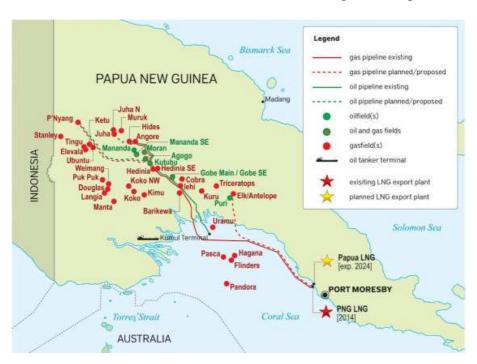
"If the mining firm is willing to support bringing law and order and peace and harmony in the community then let them do it as part of their social responsibility. "By funding community peace projects, funding NGOs that are engaged in making sure that there is harmony and law and order maintained in the community. They don't have to go into a partnership with police." Mr Kama said operators in the extractive industries should also focus on paying their dues to the government and landowning communities on time in order to prevent conflict and ensure police received the resources they need in a timely fashion.

Pressure rises in PNG gas standoff

The P'nyang gas agreement is becoming a test case for the Marape government's promise to stand up to resource extraction firms. Craig Guthrie, Petroleum Economist, 22 January 2019

Papua New Guinea (PNG) failed again in mid-January to agree fiscal terms with ExxonMobil for the development of its onshore P'nyang gas field, raising the stakes for all parties involved in a wider project to double gas exports. The failure of the state team negotiating in Singapore piles political pressure on the PNG government; Prime Minister James Marape rose to power last May on the back of pledges to reap more revenue from international resources firms and lift the vast South Pacific archipelago out of poverty. It also increases the financial strain on private stakeholders. The P'nyang gas agreement needs to be sealed before a complex pre-Feed process can start for a larger associated liquefaction project, the \$13bn Papua LNG, led by Total but also involving ExxonMobil and others, which is targeting FID this year and production in 2024. PNG-based oil and gas exploration and development company Oil Search, a partner in the P'nyang (36.86pc) and Papua LNG (17.7pc) projects, stated last October that the delays meant it reduced capex on the project by 15pc last year, while noting engineering work and marketing cannot get underway until the talks progress.

ExxonMobil refused a deal offered by oil minister Kerenga Kua at the first round of talks last November. Kua said this was "disappointing", claiming the terms, which remain confidential, were in line with similar extraction arrangements in place in Indonesia and Malaysia. Fresh from disappointing renegotiations with Total, PNG wants benefits that are "far greater than Papua LNG" and is seeking "a good deal, not a fast deal", the negotiating team stated. "In the P'nyang talks, the government appears to be seeking a better tax take, more local content and jobs opportunities, more project information from the operator, and a firm commitment to development of P'nyang in a defined timeframe," says Credit Suisse analyst Saul Kavonic. P'nyang, which is estimated to hold 4.4tn ft³ of gas in the West Highlands province, would support an additional train at the Papua LNG project (Total will supply the other two from separate fields). Each of the three trains will have capacity to produce 2.7mn t/yr. Once operational these would double PNG's 2020 LNG exports, which are all produced at ExxonMobil's PNG LNG facility at Caution Bay. Papua LNG is planned to share certain brownfield facilities as well as feedgas and export facilities with PNG LNG.



Weakened hand

A Fitch Solutions report last September warned that PNG's fiscal position had worsened year-to-date. "The country has struggled to establish sustainable revenue streams to meet spending requirements, leading to persistent budget deficits, an unsustainable build-up of public debt and greater exposure to adverse economic or financial shocks," noted Fitch. PNG expert Colin Filer, of the Australian National University's College of Asia and the Pacific, says ExxonMobil is "playing hard ball" because the projects are such a small part of its global portfolio. "It believes it can hold the PNG government's feet to the fire, because of its fiscal woes". Australian bank ANZ stated in December that the lack of a P'nyang breakthrough will delay the forecast national economic recovery by 12 months.

"A longer project dialogue will push the recovery out further, with a risk that extended negotiations could derail the economic upturn." The government also faces the ongoing threat of local resistance from West Highlands landowners. Regional leaders stated on 21 January that they had withdrawn their support for the agreement as it has "not incorporated their interests". Papua LNG also faces a wave of global competitors targeting an anticipated spike in demand for LNG in the mid-2020s that may or may not materialise. "A P'nyang gas agreement remains a precursor to the entire PNG LNG expansion project, which is competing for a rapidly narrowing market opening later this decade," says Kavonic.

Minister urges people to brace for negative outcome

January 22, 2020, The National Business

PEOPLE should be ready to accept a negative outcome if an agreement is not reached between the state and developers of the P'nyang gas project in Western, Petroleum and Energy Minister Kerenga Kua says. Kua said Prime Minister James Marape had tasked the State negotiating team through him (Kua), as minister responsible, and the developers of the project to work towards reaching an agreement for the project by end of this month (Jan 31). "We will know very shortly whether we will have an agreement or not," he said. "If the developers do not agree with the terms in the agreement, then we don't mind. "We will find another way to keep going and so people have to be ready. "We are negotiating as hard as we can to get a bigger percentage to bring into the country. "However, if the developer does not agree with the concession, we must be prepared to leave the resources as they are and walk away from any commercial discussions. "We should not be anxious and keep on giving away these kind of valuable projects and resources for less than what we believe is fair."

Negotiation hiccups cause delay

By SHIRLEY MAULUDU, January 22, 2020, The National Business

THE delay in progressing discussions on the P'nyang gas project in Western is because the State and project operator ExxonMobil PNG Ltd and partners have not agreed on the initial terms of the project. Petroleum and Energy Minister Kerenga Kua said this noting that the state had pushed for more benefits from the project to be catered in the proposed gas agreement. "Negotiations started last Nov 15," he told a media conference yesterday. "After about five weeks, the negotiations collapsed because Exxon, negotiating on behalf of the joint venture partners, and the state negotiating team headed by chairman Isaac Lupari could not reach an agreement on the terms and conditions of the proposed gas agreement. "But then, the State has continued interest to see the project come off the ground if we can be able to secure common ground on the terms and conditions between the state and the developers.

"So the prime minister (James Marape) then, at the end of December last year, called up the key players that included ExxonMobil, Total and Oil Search, and myself to a meeting where he observed that the parties have not been able to reach an agreement, but he said that we must reactivate negotiations. "At that point, he directed me to reduce the demands that we have been making on behalf of the state. "He (Marape) said you are too far up there so you have to come down in order to try to see if you could encourage a deal to be made. "At the same time, he turned to ExxonMobil and said you also have to demonstrate good will. "So, subsequent to that, I have re-tasked the state negotiating team. "We have found a new lower level at which the state will accept the deal and the negotiations have been rescheduled to recommence," "In addition to the direction to come down a little bit, the Prime Minister also directed that in the reactivated negotiation, the deadline is Jan 31."

Premature to discuss P'nyang benefits distribution: Kua

January 22, 2020, The National Business

PETROLEUM and Energy Minister Kerenga Kua says it is premature to be discussing the benefits distribution for the P'nyang gas project in Western before a gas agreement is finalised. Kua was responding to statements this week by Western Governor Taboi Awi and North Fly MP James Donald on the failure of the State negotiating team to incorporate terms put forward by the people of Western for the project's term sheet. "The process of negotiations is on track (for the project)," he said. "At this stage, it is premature to discuss what the province will take. "However, very shortly we will know whether we will have an agreement for the project. "What I can say is the direction the NEC, the ministerial committee of the P'nyang gas project and myself as the minister are going, is the same and for the same outcome that the governor and member wanted.

"They probably wanted the State to have a maximum take from the project. "However, the difference is they wanted us to identify Western's share at this point in time. "We will have to follow the processes and procedures step by step. "First and foremost, a gas agreement should be negotiated. "It will contain the total State take. "It is there that we will know how much the developers will take from the project, and how much the State will benefit from it. "It is there that we will start conversations with the beneficiary groups, which include the provincial government, local level government, landowners and the Government. "We must first concentrate on signing the gas agreement. "Right now I think it's premature to discuss how much the province will benefit from the project. "We might promise something that we are not capable to deliver."

Islanders cry for help after land given away

January 22, 2020, The National

MOTHERS and children on Woodlark Island are crying for help after the Waigani National Court gave away their ancestral land to a foreign company. They expressed their concern during a forum with Samarai-Murua MP Isi Leonard Henry at Kulumadau village on Woodlark in Milne Bay last week after learning that the court in February, 2019 had squashed former Prime Minister Peter O'Neill's decision that was gazetted in Aug 16 to return 80 per cent of the land back to the islanders. A mother, Delma Gumakeki, said the people felt helpless by what had gone on. "How can you feel when someone comes into your house and does anything while you just stand and watch," she said.

"In November last year, four Asians came to our village and carried out surveys on our land while we watched, doing nothing. We were helpless and stood idle. We are strangers on our own land." Another villager, Ledimo Edoni said, he was concerned about the future of his people. He said because the mining project was taking place on a large part of the island there would be no place for

the people to live because the population on the smaller islands of Gawa, Iwa, Kitavai and Kiriwina was increasing and these people who traced their ancestry to Woodlark would look to return.

Woodlark: MP queries relocation plan

By CLIFFORD FAIPARIK, January 21, 2020, The National

SAMARAI-Murua MP Isi Leonard Henry is concerned about the Mineral Resource Authority officers' handling of the relocation plan for villagers affected by mining on Woodlark Island, Milne Bay. During the provincial assembly in Alotau last Friday, Henry said the MRA officers had told Kulumadau villagers to relocate by this week without any proper planning. "I was there on Tuesday (Jan 14) and saw MRA officers mingling with the people and the project developers in trying to fast-track the process," Henry said. "I also learnt that they (developers) will be relocating the people living on especially one of the proposed open pit sites. The villagers told me that there was no signing of memorandum of agreement with them and no proper planning." Henry, during the debate of the 2020 provincial budget of K203.9 million, said:

"There is over US\$800 million (K2.75bil) investment on the mining project. "It is huge and here we are, with no proper plans like a memorandum of understanding. "How can we allow such multi-national companies coming in to do their own thing without us knowing about it? "I don't know if there is a report here in this assembly regarding the progress of the mining on Woodlark. "I don't have any report and a plan as well," he said. "We cannot ignore this because the future of that mine will determine this province's internal revenue and even the national government's internal revenue when it (mining) comes on line. "So at this stage we need to take charge and control what is happening on Woodlark. "We must have a plan to relocate these people especially from Kulumadau village to another area."

Western left out: MPs

January 20, 2020, The National Business

THE State's negotiating team has failed to incorporate what the people of Western want in the P'nyang gas project's main frame term sheet, according to MPs. Governor Taboi Awi and North Fly MP James Donald were disappointed upon arrival from Singapore after attending the P'ynang LNG project negotiations from Wednesday to Friday last week. They claimed that despite assurances by the head of the team, Isaac Lupari, that the terms were captured in the main frame term sheet, they found at the Singapore meeting that it was not only incorrect but also none of their principal positions were in the terms. They claimed that Lupari's team never invited them to discuss and go through the term sheet in a responsible and transparent manner on how the people of Western were to be accommodated in the State's terms. They said it was ExxonMobil, the project operator, which was receptive to their term sheet.

Awi said the project team from the province would not attend the Sydney meeting scheduled for Wednesday. "There is absolutely no justification for our team to convene in Sydney on Jan 22," Awi said. "What are our people going to get? "There is nothing for our province in the term sheet. "The Stanley (gas) project was poorly negotiated by (Lupari's team). "In fact, the Stanley gas agreement deprives the State of its most basic sovereign rights. "A project, hyped up to bring much needed development to PNG's least developed province, has turned out to be a farce. "One messed up natural gas project in the same province is bad enough, but two is ludicrously insane. "We wish to inform our fellow citizens that our Government and the people of Western will withdraw their support for the P'nyang LNG project effective close of business on Monday Jan 20. "P'nyang LNG project will not be developed until the Oil and Gas Act is amended."

Landowners call for decision on mining licence

January 20, 2020, The National Business

THE Porgera Landowners Association has called on the Government to make a decision on the mine licence renewal without delay. In a petition handed over to Mining Minister Johnson Tuke on Jan 10, the association said it supported the existing operator of the Porgera gold mine (Barrick). The petition was presented by the landowners negotiating committee chairman Maso Mangape. It presented a summary of its position paper on the mine lease extension to the Government delegation highlighting its conditions for a lease grant, and its proposed mine benefits-sharing arrangement. Mangape said the association was concerned about the Government's delay in making a decision on the licence renewal. "We feel there is a need for the Government to make a decision quickly on the mining lease," he said. "

The more it delays, people are being kept in suspense and this is attracting undesired reactions. "Allow BNL (Barrick Niugini Ltd) to continue mining while we go to the negotiating table to discuss our terms." Mangape said Barrick had enjoyed a 30-year relationship with the Porgera landowners and a lot of the legacy issues remained unresolved, including resettlement. He said most of the unresolved legacy issues were the responsibility of the National and Enga provincial governments. Tuke said he would hand over the petition to Prime Minister James Marape. He said there were two government processes relating to the licence renewal. One is regulatory facilitated by the Mineral Resources Authority, and the other is the process of the State negotiating team.

Steven wants to discuss mine with authority

January 20, 2020, The National

DEPUTY Prime Minister Davis Steven wants an urgent meeting with Mineral Resource Authority executives to discuss the progress of mining on Woodlark Island in Milne Bay. "It seems that MRA is not consulting the provincial government on the progress of the mine which is a concern and this matter has been raised in the provincial assembly in Alotau," he said. He said this on Friday after receiving reports that construction of an open cut mine pit would start this week at Kulumadau villagers, in Murua, and the villagers would be relocated to another site without the knowledge of the provincial assembly. Also, Kulumadau villagers will be paid K500 per household to relocate and K16 per fortnight for six months only. "The questions have been asked about the mining development agreement that accompany this tenement," Steven said.

"So I will ask them (MRA) to give me details. But obviously the matter raised in the assembly and we are not going to turn a blind eye on it. "In Milne Bay, we have learnt from the now abandoned Misima mine which was a disaster and we don't want to repeat. "We must not follow the interest of the Government and the investors ahead of our people. "So I will raise the issue because it is good to hear both sides of the story." Stevens said that the National Government was managing an ambitious budget to push the national economy forward. "Therefore, we consult with relevant agencies which in this case is MRA," he said. "You see mining tenements are granted in Waigani and Konedobu (in Port Moresby). "And so this Woodlark case is a good opportunity for us to review the system and the way it is working."

Porgera: Official explains process

January 17, 2020, The National Business

THE process involved in the renewal of a special mining lease could be long in large mining operations such as Porgera, Mineral Resources Authority (MRA) managing director Jerry Garry says.

Garry explained to the Porgera Landowners Association (PLOA)last Friday in Enga that there were two processes involved, one of which came under the MRA. He said unlike normal exploration licence applications or mining leases, the process could be long for special mining leases (SML) in large mining operations such as Porgera. "This will come through the normal MRA process with recommendations made but the mining minister will not make a determination as this will come from the National Executive Council (NEC) and the governor-general will sign off," he said.

Garry said there was also a parallel process which was the mine development contract (MDC) which captured all of the larger agreements with the state. "This process is called the MDC negotiation," he said. Garry said Porgera's case was a re-negotiation process because the MDC and the mine licence had expired, but the mine had been allowed to continue operating under Section 112 of the Mining Act which covered and protected the operation until such time the State made a decision. "There is some delay," he said. "The process of MRA is concluding and we will sit in a special Mining Advisory Council meeting."

Barrick Gold forges ahead on Papua New Guinea mine in face of local backlash Jeff Lewis and Melanie Burton, Reuters, January 15, 2020



Barrick Gold Corp is set to elevate its troubled Papua New Guinea mine to its top-tier assets, despite landowner and government demands to cede a larger stake and deteriorating security at the joint venture with China's Zijin Mining With a 20-year lease renewal application in the balance, Barrick has faced backlash from Papua New Guinea (PNG) landowners and residents. Critics say the Porgera mine has polluted the water supply and created other environmental and social problems, with minimal economic returns for locals. Seven people have died at the Porgera mine since September, including three so-called illegal miners last month in clashes that prompted Barrick's local entity to appeal for government intervention.

Barrick hopes to boost the mine's production by 18% or more. This previously unreported outlook raises the stakes for Prime Minister James Marape's government, which has been seeking richer terms from miners and oil and gas producers. The head of the country's mining regulator said Barrick, the world's No. 2 gold miner, is waiting to begin serious negotiations for permit renewal terms with the country's executive council, led by Marape. "If we can renew the permit on a reasonable basis, it stands up as a tier one asset," Barrick Chief Executive Officer Mark Bristow told Reuters, referring to a large scale, long-life, high margin deposit. PNG's next steps with Barrick could influence billions of dollars of planned investment by global miners including Australia's Newcrest

Mining and St Barbara, who are eyeing new mines or mine extensions, but are wary of rising sovereign risk.

Miners, facing a dearth of new deposits and rising resource nationalism, may now have to cede greater rewards to other stakeholders. "There will have to be equitable sharing of the spoils or these things won't be developed or will be discontinued, ultimately," said portfolio manager Simon Mawhinney, at Allan Gray in Sydney who is among Newcrest's biggest investors. Barrick's tierone designation, used describe a mine capable of producing 500,000 ounces of gold annually for at least 10 years at low cost, would place Porgera in league with Barrick's crown jewel assets at a time major gold miners are desperate to replace shrinking reserves. Barrick and Zijin's combined 2018 production at Porgera was around 421,500 ounces [13,1 tons].

ENVIRONMENTAL ISSUES



An exposed pipe that Barrick uses to dump its tailing into the environment at Porgera in Papua New Guinea and people desperate for an income pan for residual gold in the waste, seen in a photograph from 2017. Photo by Catherine Coumans

Barrick has broadened the role of its top China executive and former U.S. diplomat Woo Lee to handle day-to-day talks with the PNG government. It has pledged to relocate villagers whose land the mine has swallowed and study ways to improve management of mine waste currently dumped in rivers, Bristow said. The moves, aimed at mollifying concerns over access to arable land and pollution of local waterways, may not be enough to satisfy landowners and the PNG government who want a larger equity stake. Barrick and Zijin each own 47.5% of the mine, with the remaining 5% held by landowner group, Mineral Resources Enga. Analysts have said Barrick could opt to put its stake on the block with other assets it has shed to meet a \$1.5 billion divestment target. But Bristow played down a potential sale, saying Porgera fits Barrick's investment criteria.

"It makes real returns, it creates value, it can survive the cyclicality of the gold industry and will make a significant contribution to our other stakeholders," he said. Barrick's top executive has shown he is willing to make concessions to settle disputes. In October, Barrick agreed to sell Tanzania a 16% stake in each of its Bulyanhulu, North Mara and Buzwagi mines to resolve a long-running fight over taxes. The Canadian miner may face added pressure to confront issues in PNG that run afoul of investor benchmarks on environmental, social and governance issues. Citi, for example, has pledged not to support mining companies who use riverine tailings disposal which an NGO said in a 2019 report had polluted the rivers and denied locals reliable drinking sources. Maso Mangape of the Porgera Land Owners Association said local residents had been squeezed out. "The mine site has now become a battlefield," he said.

Mine aims to double capacity

January 15, 2020, The National Business

THE plan to expand the Kainantu gold mine in Eastern Highlands is based on the aim to double capacity and production, according to operator K92 Mining Ltd. Chief executive John Lewins, in a recent report, said during the first quarter, the company announced commencement of the expansion of the mine with a goal of doubling capacity to 400,000 tonnes per annum and increasing annual production to an average of 120,000 ounces of gold equivalent (AuEq oz). Based on the preliminary economic assessment (PEA) published last January, major results from the decision to expand production include:

- Total capital expenditure for last year was projected to be US\$30 million (K102.2mil), comprising US\$12 million (K40.8mil) in expansion capital, US\$8 million (K27.2mil) in sustaining capital and US\$10 million (K40.1million) in capital development;
- Production was projected to be 68-75,000 oz AuEq last year and was projected to be 115-125,000 oz AuEq this year; and,
- Number of employees was expected to increase from the current 650 to 750 at the end of last year, and to 800 by the end of this year.

Mori Reassures That Madang Waters Are Safe

Melisha Yafoi, Post Courier, January 15, 2020

Residents of Madang Province, especially those living along the coastline, can now eat fish and use the sea. Minister for Environment and Conservation Wera Mori yesterday gave the clearance following an investigation done by the office of Conservation and Environment Protection Authority. He said the waters are safe for use as elements tested were below detection limit. This was after the slurry spillage which has occurred in August last year. Mr Mori said CEPA is contrasting and comparing the preliminary results of their investigation to the baseline studies that has been done in the past and will give what will be the allowable permits that was granted by environment and conservation for the operations of Ramu nickle project. He said the reconnaissance has been done and the sampling has been taken especially on the quality of water, immediately around Basamuk as well as areas into the bay have shown that most of the results are below the detection limit.

"The elements that were tested included arsenic, cadmium, chromium, cobalt, copper, lead, manganese, mercury, nickel, selenium, silver and zinc. The results returned showed that all of them were below what was allowable in the permits," he said. "Being a nickel mine, you would expect a very high elevated reading of nickel. What was allowed under the permit was 1000 parts per million of nickel," he said. "However, the test in the water quality taken in December taken by the independent team showed that it returned a range of results ranging from 0.5 parts per million to 17.2 parts per million which is far less than the expected permits allowable under the operations of the nickel mine." Mr Mori said the fish in the waters of Madang are safe and urged the people of people of Madang to go back and live their normal lives.

He said another part of the investigation will be looking at fish tissues however for fish tissues people must be able to understand and appreciate that the environment of which those marine organisms especially fish caught around waters concerned are located around an area of high geo tectonic activities. "We are expected to find elevated readings of some of the elements that we know and are being testing but we are going to contrast that back once again to the allowable limits which are specified in the permits that were done before the permitting of the mine," Mr Mori said. "These results when ready will come in place and we will inform the people through parliament for the next month."

Second Phase Of Ramu Investigation To Be Done, Says Environment Minister Melisha Yafoi, Post Courier, January 15, 2020



Minister for Environment and Conservation Wera Mori says they will leave no stone unturned with regards to the Basamuk slurry spillage last year. He said they will be conducting more studies along the coastline in Madang to ensure that there is no environmental damage done following this slurry spill from the Ramu nickle and cobalt project. He said they will be looking into all the drainage system into the Astrolabe Bay as far as Matukar on the North Coast all the way to Saidor in Rai Coast district of Madang province. "We will also do strategic fishing right across the island up to Karkar and back and we will do a thematic mapping to show the distribution of the fish so we can contrast back to the permits," he said. "For the second phase, as soon as we get the funding for from Treasury we will roll it out but we want to do it this month." Mr Mori said CEPA is done with the reconnaissance stage. "Now that we know what we want to arrive at, the next program will be designed to achieve that outcome and that's what's going to happen in the second phase."

Developer pledges to ensure landowners benefit from project

January 14, 2020, The National Business

THE developer of the Ramu nickel and cobalt project in Madang, Ramu NiCo Management (MCC) Ltd has promised to ensure benefits derived from the project are delivered to landowners and other stakeholders. At a recent company event, vice-president Wang Baowen assured impacted landowners and stakeholders that Ramu NiCo was determined to ensure all stakeholders, including landowners were benefiting from the project. "We have delivered many business contracts to the landowner companies since the project's inception," Baowen told the landowner chairmen and their executives and Ramu NiCo staff. "We have made it our business to pay royalties to stakeholders. "In the New Year (2020), we have many tasks ahead of us including the project memorandum of agreement (MoA) review.

"The company understands the expectations of the landowners and stakeholders under the MoA. "No problem. "We can sit together and discuss. "The company would like to look after all parties' expectations and problems." Baowen said last year the company faced a lot of challenges. "I challenge the landowners and the chairmen to support us," he said. "This is your project and you are the stakeholders," he said. "You cannot challenge the project in court and expect benefits from the project. "If all landowners and stakeholders can support us then this project will grow strong and deliver the benefits for all of us, despite low nickel and cobalt world prices." Baowen also told the landowners that the company's project expansion plan would not eventuate soon.

History's Largest Mining Operation Is About to Begin

It's underwater—and the consequences are unimaginable. Wil S. Hylton, The Atlantic, January/February 2020 Issue

Unless you are given to chronic anxiety or suffer from nihilistic despair, you probably haven't spent much time contemplating the bottom of the ocean. Many people imagine the seabed to be a vast expanse of sand, but it's a jagged and dynamic landscape with as much variation as any place onshore. Mountains surge from underwater plains, canyons slice miles deep, hot springs billow through fissures in rock, and streams of heavy brine ooze down hillsides, pooling into undersea lakes. These peaks and valleys are laced with most of the same minerals found on land. Scientists have documented their deposits since at least 1868, when a dredging ship pulled a chunk of iron ore from the seabed north of Russia. Five years later, another ship found similar nuggets at the bottom of the Atlantic, and two years after that, it discovered a field of the same objects in the Pacific. For more than a century, oceanographers continued to identify new minerals on the seafloor—copper, nickel, silver, platinum, gold, and even gemstones—while mining companies searched for a practical way to dig them up.

Today, many of the largest mineral corporations in the world have launched underwater mining programs. On the west coast of Africa, the De Beers Group is using a fleet of specialized ships to drag machinery across the seabed in search of diamonds. In 2018, those ships extracted 1.4 million carats from the coastal waters of Namibia; in 2019, De Beers commissioned a new ship that will scrape the bottom twice as quickly as any other vessel. Another company, Nautilus Minerals, is working in the territorial waters of Papua New Guinea to shatter a field of underwater hot springs lined with precious metals, while Japan and South Korea have embarked on national projects to exploit their own offshore deposits. But the biggest prize for mining companies will be access to international waters, which cover more than half of the global seafloor and contain more valuable minerals than all the continents combined.

Regulations for ocean mining have never been formally established. The United Nations has given that task to an obscure organization known as the International Seabed Authority, which is housed in a pair of drab gray office buildings at the edge of Kingston Harbour, in Jamaica. Unlike most UN bodies, the ISA receives little oversight. It is classified as "autonomous" and falls under the direction of its own secretary general, who convenes his own general assembly once a year, at the ISA headquarters. For about a week, delegates from 168 member states pour into Kingston from around the world, gathering at a broad semicircle of desks in the auditorium of the Jamaica Conference Centre. Their assignment is not to prevent mining on the seafloor but to mitigate its damage—selecting locations where extraction will be permitted, issuing licenses to mining companies, and drafting the technical and environmental standards of an underwater Mining Code.

Writing the code has been difficult. ISA members have struggled to agree on a regulatory framework. While they debate the minutiae of waste disposal and ecological preservation, the ISA has.granted "exploratory" permits around the world. Some 30 mineral contractors already hold licenses to work in sweeping regions of the Atlantic, Pacific, and Indian Oceans. One site, about 2,300 miles east of Florida, contains the largest system of underwater hot springs ever discovered, a ghostly has City." Another extends across 4,500 miles of the Pacific, or roughly a fifth of the circumference of the planet. The companies with permits to explore these regions have raised breathtaking sums of venture capital. They have designed and built experimental vehicles, lowered them to the bottom, and begun testing methods of dredging and extraction while they wait for the ISA to complete the Mining Code and open the floodgates to commercial extraction.

Mining companies want access to the seabed beneath international waters, which contain more valuable minerals than all the continents combined.

At full capacity, these companies expect to dredge thousands of square miles a year. Their collection vehicles will creep across the bottom in systematic rows, scraping through the top five inches of the ocean floor. Ships above will draw thousands of pounds of sediment through a hose to the surface, remove the metallic objects, known as polymetallic nodules, and then flush the rest back into the water. Some of that slurry will contain toxins such as mercury and lead, which could poison the surrounding ocean for hundreds of miles. The rest will drift in the current until it settles in nearby ecosystems. An early study by the Royal Swedish Academy of Sciences predicted that each mining ship will release about 2 million cubic feet of discharge every day, enough to fill a freight train that is 16 miles long. The authors called this "a conservative estimate," since other projections had been three times as high. By any measure, they concluded, "a very large area will be blanketed by sediment to such an extent that many animals will not be able to cope with the impact and whole communities will be severely affected by the loss of individuals and species."

At the ISA meeting in 2019, delegates gathered to review a draft of the code. Officials hoped the document would be ratified for implementation in 2020. I flew down to observe the proceedings on a balmy morning and found the conference center teeming with delegates. A staff member ushered me through a maze of corridors to meet the secretary general, Michael Lodge, a lean British man in his 50s with cropped hair and a genial smile. He waved me toward a pair of armchairs beside a bank of windows overlooking the harbor, and we sat down to discuss the Mining Code, what it will permit and prohibit, and why the United Nations is preparing to mobilize the largest mining operation in the history of the world.

Until recently, marine biologists paid little attention to the deep sea. They believed its craggy knolls and bluffs were essentially barren. The traditional model of life on Earth relies on photosynthesis: plants on land and in shallow water harness sunlight to grow biomass, which is devoured by creatures small and large, up the food chain to Sunday dinner. By this account, every animal on the planet would depend on plants to capture solar energy. Since plants disappear a few hundred feet below sea level, and everything goes dark a little farther down, there was no reason to expect a thriving ecosystem in the deep. Maybe a light snow of organic debris would trickle from the surface, but it would be enough to sustain only a few wayward aquatic drifters.

That theory capsized in 1977, when a pair of oceanographers began poking around the Pacific in a submersible vehicle. While exploring a range of underwater mountains near the Galápagos Islands, they spotted a hydrothermal vent about 8,000 feet deep. No one had ever seen an underwater hot spring before, though geologists suspected they might exist. As the oceanographers drew close to the vent, they made an even more startling discovery: A large congregation of animals was camped around the vent opening. These were not the feeble scavengers that one expected so far down. They were giant clams, purple octopuses, white crabs, and 10-foot tube worms, whose food chain began not with plants but with organic chemicals floating in the warm vent water.

For biologists, this was more than curious. It shook the foundation of their field. If a complex ecosystem could emerge in a landscape devoid of plants, evolution must be more than a heliological affair. Life could appear in perfect darkness, in blistering heat and a broth of noxious compounds—an environment that would extinguish every known creature on Earth. "That was the discovery event," an evolutionary biologist named Timothy Shank told me. "It changed our view about the boundaries of life. Now we know that the methane lakes on one of Jupiter's moons are probably laden with species, and there is no doubt life on other planetary bodies."

Shank was 12 years old that winter, a bookish kid in North Carolina. The early romance of the space age was already beginning to fade, but the discovery of <u>life near hydrothermal vents</u> would inspire a blossoming of oceanography that captured his imagination. As he completed a degree in marine biology, then a doctorate in ecology and evolution, he consumed reports from scientists around the world who found new vents brimming with unknown species. They appeared far below the surface—the deepest known vent is about three miles down—while another geologic feature, known as a "cold seep," gives rise to life in chemical pools even deeper on the seafloor. No one knew how far down the vents and seeps might be found, but Shank decided to focus his research on the deepest waters of the Earth.

Scientists divide the ocean into five layers of depth. Closest to the surface is the "sunlight zone," where plants thrive; then comes the "twilight zone," where darkness falls; next is the "midnight zone," where some creatures generate their own light; and then there's a frozen flatland known simply as "the abyss." Oceanographers have visited these layers in submersible vehicles for half a century, but the final layer is difficult to reach. It is known as the "hadal zone," in reference to Hades, the ancient Greek god of the underworld, and it includes any water that is at least 6,000 meters below the surface—or, in a more Vernian formulation, that is 20,000 feet under the sea. Because the hadal zone is so deep, it is usually associated with ocean trenches, but several deepwater plains have sections that cross into hadal depth.

Deepwater plains are also home to the polymetallic nodules that explorers first discovered a century and a half ago. Mineral companies believe that nodules will be easier to mine than other seabed deposits. To remove the metal from a hydrothermal vent or an underwater mountain, they will have to shatter rock in a manner similar to land-based extraction. Nodules are isolated chunks of rocks on the seabed that typically range from the size of a golf ball to that of a grapefruit, so they can be lifted from the sediment with relative ease. Nodules also contain a distinct combination of minerals. While vents and ridges are flecked with precious metal, such as silver and gold, the primary metals in nodules are copper, manganese, nickel, and cobalt—crucial materials in modern batteries. As iPhones and laptops and electric vehicles spike demand for those metals, many people believe that nodules are the best way to migrate from fossil fuels to battery power.

The ISA has issued more mining licenses for nodules than for any other seabed deposit. Most of these licenses authorize contractors to exploit a single deepwater plain. Known as the-Clarion-Clip-perton-Zone, or CCZ, it extends across 1.7 million square miles between Hawaii and Mexico—wider than the continental United States. When the Mining Code is approved, more than a dozen companies will accelerate their explorations in the CCZ to industrial-scale extraction. Their ships and robots will use vacuum hoses to suck nodules and sediment from the seafloor, extracting the metal and dumping the rest into the water. How many ecosystems will be covered by that sediment is impossible to predict. Ocean currents fluctuate regularly in speed and direction, so identical plumes of slurry will travel different distances, in different directions, on different days. The impact of a sediment plume also depends on how it is released. Slurry that is dumped near the surface will drift farther than slurry pumped back to the bottom. The circulating draft of the Mining Code does not specify a depth of discharge. The ISA has adopted an estimate that sediment dumped near the surface will travel no more than 62 miles from the point of release, but many experts believe the slurry could travel farther. A research compiled by Greenpeace concluded that mining waste "could travel hundreds or even thousands of kilometers."

Like many deepwater plains, the CCZ has sections that lie at hadal depth. Its eastern boundary is marked by a hadal trench. No one knows whether mining sediment will drift into the hadal zone. As the director of a hadal-research program at the Woods Hole Oceanographic Institution, in Massachusetts, Timothy Shank has been studying the deep sea for almost 30 years. In 2014, he led an international mission to complete the first systematic study of the hadal ecosystem—but even Shank

has no idea how mining could affect the hadal zone, because he still has no idea what it contains. If you want a sense of how little we know about the deep ocean, how difficult it is to study, and what's at stake when industry leaps before science, Shank's research is a good place to start.

I first met Shank about seven years ago, when he was organizing the international mission to survey the hadal zone. He had put together a three-year plan to visit every ocean trench: sending a robotic vehicle to explore their features, record every contour of topography, and collect specimens from each. The idea was either dazzling or delusional; I wasn't sure which. Scientists have enough trouble measuring the seabed in shallower waters. They have used ropes and chains and acoustic instruments to record depth for more than a century, yet 85 percent of the global seabed remains unmapped—and the hadal is far more difficult to map than other regions, since it's nearly impossible to see.

If it strikes you as peculiar that modern vehicles cannot penetrate the deepest ocean, take a moment to imagine what it means to navigate six or seven miles below the surface. Every 33 feet of depth exerts as much pressure as the atmosphere of the Earth, so when you are just 66 feet down, you are under three times as much pressure as a person on land, and when you are 300 feet down, you're subjected to 10 atmospheres of pressure. Tube worms living beside hydrothermal vents near the Galápagos are compressed by about 250 atmospheres, and mining vehicles in the CCZ have to endure twice as much—but they are still just half as far down as the deepest trenches.

Building a vehicle to function at 36,000 feet, under 2 million pounds of pressure per square foot, is a task of interstellar-type engineering. It's a good deal more rigorous than, say, bolting together a rover to skitter across Mars. Picture the schematic of an iPhone case that can be smashed with a sledgehammer more or less constantly, from every angle at once, without a trace of damage, and you're in the ballpark—or just consider the fact that more people have walked on the moon than have reached the bottom of the Mariana Trench, the deepest place on Earth.

The first two people descended in 1960, using a contraption owned by the U.S. Navy. It seized and shuddered on the descent. Its window cracked as the pressure mounted, and it landed with so much force that it kicked up a cloud of silt that obscured the view for the entire 20 minutes the pair remained on the bottom. Half a century passed before the film director James Cameron repeated their journey, in 2012. Unlike the swaggering billionaire Richard Branson, who was planning to dive the Mariana in a cartoonish vehicle shaped like a fighter jet, Cameron is well versed in ocean science and engineering. He was closely involved in the design of his submarine, and sacrificed stylistic flourishes for genuine innovations, including a new type of foam that maintains buoyancy at full ocean depth. Even so, his vessel lurched and bucked on the way down. He finally managed to land, and spent a couple of hours collecting sediment samples before he noticed that hydraulic fluid was leaking onto the window. The vehicle's mechanical arm began to fail, and all of the thrusters on its right side went out—so he returned to the surface early, canceled his plan for additional dives, and donated the broken sub to Woods Hole.

The most recent descent of the Mariana Trench was completed last spring by a private-equity investor named Victor Vescovo, who spent \$48 million on a submarine that was even more sophisticated than Cameron's. Vescovo was on a personal quest to reach the bottom of the five deepest trenches in the world, a project he called "Five Deeps." He was able to complete the project, making multiple dives of the Mariana—but if his achievement represents a leap forward in hadal exploration, it also serves as a reminder of how impenetrable the trenches remain: a region that can be visited only by the most committed multimillionaire, Hollywood celebrity, or special military program, and only in isolated dives to specific locations that reveal little about the rest of the hadal environment. That environment is composed of 33 trenches and 13 shallower formations called troughs. Its total

geographic area is about two-thirds the size of Australia. It is the least examined ecosystem of its size on Earth.

Without a vehicle to explore the hadal zone, scientists have been forced to use primitive methods. The most common technique has scarcely changed in more than a century: Expedition ships chug across hundreds of miles to reach a precise location, then lower a trap, wait a few hours, and reel it up to see what's inside. The limitations of this approach are self-evident, if not comic. It's like dangling a birdcage out the door of an airplane crossing Africa at 36,000 feet, and then trying to divine, from the mangled bodies of insects, what sort of animals roam the savanna.



A 3-D model of the Mariana Trench, the deepest place on Earth. Most of what we know about its topography has been gathered by sonar. Only three crewed expeditions have reached the bottom. (Data Design Co)

All of which is to say that Shank's plan to explore every trench in the world was somewhere between audacious and absurd, but he had assembled a team of the world's leading experts, secured ship time for extensive missions, and spent 10 years supervising the design of the most advanced robotic vehicle ever developed for deepwater navigation. Called Nereus, after a mythological sea god, it could dive alone—charting a course amid rocky cliffs, measuring their contours with a doppler scanner, recording video with high-definition cameras, and collecting samples—or it could be linked to the deck of a ship with fiber-optic cable, allowing Shank to monitor its movement on a computer in the ship's control room, boosting the thrusters to steer this way and that, piercing the darkness with its headlamps, and maneuvering a mechanical claw to gather samples in the deep.

I reached out to Shank in 2013, a few months before the expedition began. I wanted to write about the project, and he agreed to let me join him on a later leg. When his ship departed, in the spring of 2014, I followed online as it pursued a course to the Kermadec Trench, in the Pacific, and Shank began sending Nereus on a series of dives. On the first, it descended to 6,000 meters, a modest target on the boundary of the hadal zone. On the second, Shank pushed it to 7,000 meters; on the third to 8,000; and on the fourth to 9,000. He knew that diving to 10,000 meters would be a crucial threshold. It is the last full kilometer of depth on Earth: No trench is believed to be deeper than 11,000 meters. To commemorate this final increment and the successful beginning of his project, he attached a pair of silver bracelets to the frame of Nereus, planning to give them to his daughters when he returned home. Then he dropped the robot in the water and retreated to the control room to monitor its movements.

On-screen, blue water gave way to darkness as Nereus descended, its headlamps illuminating specks of debris suspended in the water. It was 10 meters shy of the 10,000-meter mark when suddenly the screen went dark. There was an audible gasp in the control room, but no one panicked. Losing the video feed on a dive was relatively common. Maybe the fiber-optic tether had snapped,

or the software had hit a glitch. Whatever it was, Nereus had been programmed to respond with emergency measures. It could back out of a jam, shed expendable weight, guide itself to the surface, and send a homing beacon to help Shank's team retrieve it. As the minutes ticked by, Shank waited for those measures to activate, but none did. "There's no sound, no implosion, no chime," he told me afterward. "Just ... black." He paced the deck through the night, staring across the Stygian void for signs of Nereus. The following day he finally saw debris surface, and as he watched it rise, he felt his project sinking. Ten years of planning, a \$14 million robot, and an international team of experts—it had all collapsed under the crushing pressure of hadal depths.

"I think we'll be looking at hundreds or thousands of species we haven't seen before, and some of them are going to be huge."

"I'm not over it yet," he told me two years later. We were standing on the deck of another ship, 100 miles off the coast of Massachusetts, where Shank was preparing to launch a new robot. The vehicle was no replacement for Nereus. It was a rectilinear hunk of metal and plastic, about five feet high, three feet wide, and nine feet long. Red on top, with a silvery bottom and three fans mounted at the rear, it could have been mistaken for a child's backyard spaceship. Shank had no illusion that it was capable of hadal exploration. Since the loss of Nereus, there was no vehicle on Earth that could navigate the deepest trenches—Cameron's was no longer in service, Branson's didn't work, and Vescovo's hadn't yet been built.

Shank's new robot did have a few impressive features. Its navigational system was even more advanced than the one in Nereus, and he hoped it would be able to maneuver in a trenchlike environment with even greater precision—but its body was not designed to withstand hadal pressure. In fact, it had never descended more than a few dozen feet below the surface, and Shank knew that it would take years to build something that could survive at the bottom of a trench. What had seemed, just two years earlier, like the beginning of a new era in hadal science was developing a quixotic aspect, and, at 50, Shank could not help wondering if it was madness to spend another decade of his life on a dream that seemed to be drifting further from his reach. But he was driven by a lifelong intuition that he still couldn't shake. Shank believes that access to the trenches will reveal one of the greatest discoveries in history: a secret ecosystem bursting with creatures that have been cloistered for eternity in the deep.

"I would be shocked if there aren't vents and seeps in the trenches," he told me as we bobbed on the water that day in 2016. "They'll be there, and they will be teeming with life. I think we'll be looking at hundreds or thousands of species we haven't seen before, and some of them are going to be huge." He pictured the hadal as an alien world that followed its own evolutionary course, the unimaginable pressure creating a menagerie of inconceivable beasts. "My time is running out to find them," he said. "Maybe my legacy will be to push things forward so that somebody else can. We have a third of our ocean that we still can't explore. It's embarrassing. It's pathetic."

While scientists struggle to reach the deep ocean, human impact has already gotten there. Most of us are familiar with the menu of damages to coastal water: overfishing, oil spills, and pollution, to name a few. What can be lost in the discussion of these issues is how they reverberate far beneath. Take fishing. The relentless pursuit of cod in the early 20th century decimated its population from Newfoundland to New England, sending hungry shoppers in search of other options. As shallowwater fish such as haddock, grouper, and sturgeon joined the cod's decline, commercial fleets around the world pushed into deeper water. Until the 1970s, the slimehead fish lived in relative obscurity, patrolling the slopes of underwater mountains in water up to 6,000 feet deep. Then a consortium of fishermen pushed the Food and Drug Administration to change its name, and the craze for "orange roughy" began—only to fade again in the early 2000s, when the fish was on a path toward extinction itself.

Environmental damage from oil production is also migrating into deeper water. Disturbing photographs of oil-drenched beaches have captured public attention since at least 1989, when the Exxon Valdez tanker crashed into a reef and leaked 11 million gallons into an Alaskan sound. It would remain the largest spill in U.S. water until 2010, when the Deepwater Horizon explosion spewed 210 million gallons into the Gulf of Mexico. But a recent study revealed that the release of chemicals to disperse the spill was twice as toxic as the oil to animals living 3,000 feet below the surface.

Maybe the greatest alarm in recent years has followed the discovery of plastic floating in the ocean. Scientists estimate that 17 billion pounds of polymer are flushed into the ocean each year, and substantially more of it collects on the bottom than on the surface. Just as a bottle that falls from a picnic table will roll downhill to a gulch, trash on the seafloor gradually makes its way toward deepwater plains and hadal trenches. After his expedition to the trenches, Victor Vescovo returned with the news that garbage had beaten him there. He found a plastic bag at the bottom of one trench, a beverage can in another, and when he reached the deepest point in the Mariana, he watched an object with a large *S* on the side float past his window. Trash of all sorts is collecting in the hadal—Spam tins, Budweiser cans, rubber gloves, even a mannequin head.

Scientists are just beginning to understand the impact of trash on aquatic life. Fish and seabirds that mistake grocery bags for prey will glut their stomachs with debris that their digestive system can't expel. When a young whale drifted ashore and died in the Philippines in 2019, an autopsy revealed that its belly was packed with 88 pounds of plastic bags, nylon rope, and netting. Two weeks later, another whale beached in Sardinia, its stomach crammed with 48 pounds of plastic dishes and tubing. Certain types of coral like to eat plastic more than food. They will gorge themselves like a kid on Twinkies instead of eating what they need to survive. Microbes that flourish on plastic have ballooned in number, replacing other species as their population explodes in a polymer ocean. If it seems trivial to worry about the population statistics of bacteria in the ocean, you may be interested to know that ocean microbes are essential to human and planetary health. About a third of the carbon dioxide generated on land is absorbed by underwater organisms, including one species that was just discovered in the CCZ in 2018. The researchers who found that bacterium have no idea how it removes carbon from the environment, but their findings show that it may account for up to 10 percent of the volume that is sequestered by oceans every year.

Many of the things we do know about ocean microbes, we know thanks to Craig Venter, the genetic scientist most famous for starting a small company in the 1990s to compete with the Human Genome Project. The two-year race between his company and the international collaboration generated endless headlines and culminated in a joint announcement at the White House to declare a tie. But Venter's interest wasn't limited to human DNA. He wanted to learn the language of genetics in order to create synthetic microbes with practical features. After his work on the human genome, he spent two years sailing around the world, lowering bottles into the ocean to collect bacteria and viruses from the water. By the time he returned, he had discovered hundreds of thousands of new species, and his lab in Maryland proceeded to sequence their DNA—identifying more than 60 million unique genes, which is about 2,500 times the number in humans. Then he and his team began to scour those genes for properties they could use to make custom bugs.

Venter now lives in a hypermodern house on a bluff in Southern California. Chatting one evening on the sofa beside the door to his walk-in humidor and wine cellar, he described how saltwater microbes could help solve the most urgent problems of modern life. One of the bacteria he pulled from the ocean consumes carbon and excretes methane. Venter would like to integrate its genes into organisms designed to live in smokestacks and recycle emissions. "They could scrub the plant's CO2 and convert it to methane that can be burned as fuel in the same plant," he said. Venter was also studying bacteria that could be useful in medicine. Microbes produce a variety of antibiotic compounds, which they deploy as weapons against their rivals. Many of those compounds can also be

used to kill the pathogens that infect humans. Nearly all of the antibiotic drugs on the market were initially derived from microorganisms, but they are losing efficacy as pathogens evolve to resist them. "We have new drugs in development," Matt McCarthy, an infectious-disease specialist at Weill Cornell Medical College, told me, "but most of them are slight variations on the ones we already had. The problem with that is, they're easy for bacteria to resist, because they're similar to something bacteria have developed resistance to in the past. What we need is an arsenal of new compounds."

Venter pointed out that ocean microbes produce radically different compounds from those on land. "There are more than a million microbes per milliliter of seawater," he said, "so the chance of finding new antibiotics in the marine environment is high." McCarthy agreed. "The next great drug may be hidden somewhere deep in the water," he said. "We need to get to the deep-sea organisms, because they're making compounds that we've never seen before. We may find drugs that could be used to treat gout, or rheumatoid arthritis, or all kinds of other conditions."

Marine biologists have never conducted a comprehensive survey of microbes in the hadal trenches. The conventional tools of water sampling cannot function at extreme depth, and engineers are just beginning to develop tools that can. Microbial studies of the deepwater plains are slightly further along—and scientists have recently discovered that the CCZ is unusually flush with life. "It's one of the most biodiverse areas that we've ever sampled on the abyssal plains," a University of Hawaii oceanographer named Jeff Drazen told me. Most of those microbes, he said, live on the very same nodules that miners are planning to extract. "When you lift them off the seafloor, you're removing a habitat that took 10 million years to grow." Whether or not those microbes can be found in other parts of the ocean is unknown. "A lot of the less mobile organisms," Drazen said, "may not be anywhere else."



The Clarion-Clipperton Zone is a deepwater plain wider than the continental United States. When the Mining Code is approved, more than a dozen contractors could begin commercial extraction there. (La Tigre)

Drazen is an academic ecologist; Venter is not. Venter has been accused of trying to privatize the human genome, and many of his critics believe his effort to create new organisms is akin to playing God. He clearly doesn't have an aversion to profit-driven science, and he's not afraid to mess with nature—yet when I asked him about the prospect of mining in deep water, he flared with alarm. "We should be very careful about mining in the ocean," he said. "These companies should be doing rigorous microbial surveys before they do anything else. We only know a fraction of the microbes down there, and it's a terrible idea to screw with them before we know what they are and what they do."

Mining executives insist that their work in the ocean is misunderstood. Some adopt a swaggering bravado and portray the industry as a romantic frontier adventure. As the manager of exploration at Nautilus Minerals, John Parianos, told me recently, "This is about every man and his dog filled with the excitement of the moon landing. It's like Scott going to the South Pole, or the British expeditions who got entombed by ice." Nautilus occupies a curious place in the mining industry. It is one of the oldest companies at work on the seafloor, but also the most precarious. Although it has a permit from the government of Papua New Guinea to extract metal from offshore vents, many people on the nearby island of New Ireland oppose the project, which will destroy part of their marine habitat. Local and international activists have whipped up negative publicity, driving investors away and sending the company into financial ruin. Nautilus stock once traded for \$4.45. It is now less than a penny per share.

Parianos acknowledged that Nautilus was in crisis, but he dismissed the criticism as naive. Seabed minerals are no different from any other natural resource, he said, and the use of natural resources is fundamental to human progress. "Look around you: Everything that's not grown is mined," he told me. "That's why they called it the Stone Age—because it's when they started mining! And mining is what made our lives better than what they had before the Stone Age." Parianos emphasized that the UN Convention on the Law of the Sea, which created the International Seabed Authority, promised "to ensure effective protection for the marine environment" from the effects of mining. "It's not like the Law of the Sea says: Go out and ravage the marine environment," he said.

"But it also doesn't say that you can only explore the ocean for science, and not to make money." The CEO of a company called DeepGreen spoke in loftier terms. DeepGreen is both a product of Nautilus Minerals and a reaction to it. The company was founded in 2011 by David Heydon, who had founded Nautilus a decade earlier, and its leadership is full of former Nautilus executives and investors. As a group, they have sought to position DeepGreen as a company whose primary interest in mining the ocean is saving the planet. They have produced a series of lavish brochures to explain the need for a new source of battery metals, and Gerard Barron, the CEO, speaks with animated fervor about the virtues of nodule extraction.

Is there any way to calculate the value of a landscape we know virtually nothing about?

His case for seabed mining is straightforward. Barron believes that the world will not survive if we continue burning fossil fuels, and the transition to other forms of power will require a massive increase in battery production. He points to electric cars: the batteries for a single vehicle require 187 pounds of copper, 123 pounds of nickel, and 15 pounds each of manganese and cobalt. On a planet with 1 billion cars, the conversion to electric vehicles would require several times more metal than all existing land-based supplies—and harvesting that metal from existing sources already takes a human toll. Most of the world's cobalt, for example, is mined in the southeastern provinces of the Democratic Republic of Congo, where tens of thousands of young children work in labor camps, inhaling clouds of toxic dust during shifts up to 24 hours long. Terrestrial mines for nickel and copper have their own litany of environmental harms. Because the ISA is required to allocate some of

the profits from seabed mining to developing countries, the industry will provide nations that rely on conventional mining with revenue that doesn't inflict damage on their landscapes and people.

Whether DeepGreen represents a shift in the values of mining companies or merely a shift in marketing rhetoric is a valid question—but the company has done things that are difficult to dismiss. It has developed technology that returns sediment discharge to the seafloor with minimal disruption, and Barron is a regular presence at ISA meetings, where he advocates for regulations to mandate low-impact discharge. DeepGreen has also limited its operations to nodule mining, and Barron openly criticizes the effort by his friends at Nautilus to demolish a vent that is still partially active. "The guys at Nautilus, they're doing their thing, but I don't think it's the right thing for the planet," he told me. "We need to be doing things that have a low impact environmentally."

By the time I sat down with Michael Lodge, the secretary general of the ISA, I had spent a lot of time thinking about the argument that executives like Barron are making. It seemed to me that seabed mining presents an epistemological problem. The harms of burning fossil fuels and the impact of land-based mining are beyond dispute, but the cost of plundering the ocean is impossible to know. What creatures are yet to be found on the seafloor? How many indispensable cures? Is there any way to calculate the value of a landscape we know virtually nothing about? The world is full of uncertain choices, of course, but the contrast between options is rarely so stark: the crisis of climate change and immiserated labor on the one hand, immeasurable risk and potential on the other.

I thought of the hadal zone. It may never be harmed by mining. Sediment from dredging on the abyssal plains could settle long before it reaches the edge of a trench—but the total obscurity of the hadal should remind us of how little we know. It extends from 20,000 feet below sea level to roughly 36,000 feet, leaving nearly half of the ocean's depths beyond our reach. When I visited Timothy Shank at Woods Hole a few months ago, he showed me a prototype of his latest robot. He and his lead engineer, Casey Machado, had built it with foam donated by James Cameron and with support from NASA's Jet Propulsion Laboratory, whose engineers are hoping to send a vehicle to explore the aqueous moon of Jupiter. It was a tiny machine, known as Orpheus, that could steer through trenches, recording topography and taking samples, but little else. He would have no way to direct its movements or monitor its progress via a video feed. It occurred to me that if Shank had given up the dream of true exploration in the trenches, decades could pass before we know what the hadal zone contains.

Mining companies may promise to extract seabed metal with minimal damage to the surrounding environment, but to believe this requires faith. It collides with the force of human history, the law of unintended consequences, and the inevitability of mistakes. I wanted to understand from Michael Lodge how a UN agency had made the choice to accept that risk. "Why is it necessary to mine the ocean?" I asked him. He paused for a moment, furrowing his brow. "I don't know why you use the word *necessary*," he said. "Why is it 'necessary' to mine anywhere? You mine where you find metal." I reminded him that centuries of mining on land have exacted a devastating price: tropical islands denuded, mountaintops sheared off, groundwater contaminated, and species eradicated. Given the devastation of land-based mining, I asked, shouldn't we hesitate to mine the sea?

"I don't believe people should worry that much," he said with a shrug. "There's certainly an impact in the area that's mined, because you are creating an environmental disturbance, but we can find ways to manage that." I pointed out that the impact from sediment could travel far beyond the mining zone, and he responded, "Sure, that's the other major environmental concern. There is a sediment plume, and we need to manage it. We need to understand how the plume operates, and there are experiments being done right now that will help us." As he spoke, I realized that for Lodge, none of these questions warranted reflection—or anyway, he didn't see reflection as part of his job. He was there to facilitate mining, not to question the wisdom of doing so.

We chatted for another 20 minutes, then I thanked him for his time and wandered back to the assembly room, where delegates were delivering canned speeches about marine conservation and the promise of battery technology. There was still some debate about certain details of the Mining Code—technical requirements, oversight procedures, the profit-sharing model—so the vote to ratify it would have to wait another year. I noticed a group of scientists watching from the back. They were members of the Deep-Ocean Stewardship Initiative, which formed in 2013 to confront threats to the deepwater environment. One was Jeff Drazen. He'd flown in from Hawaii and looked tired. I sent him a text, and we stepped outside.

A few tables and chairs were scattered in the courtyard, and we sat down to talk. I asked how he felt about the delay of the Mining Code—delegates are planning to review it again this summer, and large-scale mining could begin after that. Drazen rolled his eyes and sighed. "There's a Belgian team in the CCZ doing a component test right now," he said. "They're going to drive a vehicle around on the seafloor and spew a bunch of mud up. So these things are already happening. We're about to make one of the biggest transformations that humans have ever made to the surface of the planet. We're going to strip-mine a massive habitat, and once it's gone, it isn't coming back."

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Link: https://amp.theatlantic.com/amp/article/603040/

Justice Cannings starts human rights proceedings on Madang fish ban The National, January 13, 2020



The ban on fish sales was imposed after a spill at the MCC owned Basamuk refinery

MADANG resident judge Justice David Cannings has started a human rights proceeding on his own initiative to inquire into the fish ban in the province. He summoned the provincial administrator and the managing director of the National Fisheries Authority to appear in the National Court on Jan 31. This is to determine who imposed the ban, under what law it was imposed, were there any proven scientific reasons for continuing the ban, and will any person's human rights be infringed by the continuation of the ban. He said the purpose of the inquiry was to determine the validity of the ban

and whether to lift the ban to restore normalcy in the survival routine of the coastal people of Madang. People living in the coastal areas of Madang who rely on the sea for income and food are being affected by the ban imposed by the provincial government last October. The provincial government banned the harvesting, selling, purchasing and production of marine resources from the waters of Madang after a reported slurry spill on Aug 24 at the Ramu NiCo Basamuk Refinery. The provincial fisheries authority on Oct 16 declared the waters around the province and the fish safe.

Official: Minerals not yielding

January 13, 2020, The National Business

A SENIOR official says Papua New Guinea has missed out on a lot of the potential benefits that should have flowed to the State from mineral revenue. Secretary for Department of Mineral Policy and Geoharazd Management Harry Kore said this was unfair. "Assessments and comparative analysis of other countries of similar standing as PNG has demonstrated that PNG has missed out on a lot of the potential benefits that should have flowed to the State," he said. "Our people need to understand these facts. "The numbers don't lie." Making reference to Extractive Industry Transparency Initiative (EITI) 2017 Report, Kore said information on the EITI report was "very valid".

"The diagram of the percentage of the benefit, a mere seven per cent is a major paradigm shift in PNG's perception of the benefits we've been deriving from the extractive sector over the years," he said. "This just does not equate to a fair share. "We have always thought the extractive sector was the major contributor to the economy, which is very true with the volume of export (86 per cent); but when you look at the EITI Report, only a mere seven per cent out of the total is Government revenue. "The figures per se of the actual kina value may seem quite significant but it is the percentage contribution against these other measures that is our focus to ascertain whether we are getting value for the minerals exported."

Council urged to endorse mining bill

By SHIRLEY MAULUDU, January 13, 2020, The National Business

IT is important that the National Executive Council (NEC) endorses the Mining Bill before tabling during the first Parliament sitting this year, an official says. Department of Mineral Policy and Geohazards Management secretary Harry Kore told The National that this would ensure PNG maximised its benefits from exploitation of the country's natural resources. "The Mining Bill looks at our past experiences and adopts international best practice principles and strengthens the regulatory framework to ensure the Mineral Resources Authority (MRA) is empowered to regulate the industry effectively and is able to enforce the provisions of the law to protect the interest of the State," he said. Kore added that the potential for a successful outcome of the State's interest in development of upcoming mineral projects depended on it taking decisive action on the revised Mining Act. He said this would give a sense of direction and certainty to the industry. "The numerous claims by the PNGCMP (PNG Chamber of Mines and Petroleum) that the introduction of the revised Mining Act will be detrimental to the economy of the country is totally misleading and speculative," he said.

"The PNGCMP has not clearly articulated these speculations nor responded to the State's requests for an analysis of a financial model outlining the anticipated negative impacts on the economy. However, the State's assessment of the impacts of the current arrangements and agreements, the application of the tax laws, the applicable rates, the environmental impacts, the many legacy issues and the EITI (Extractive Industries Transparency Initiative) report leaves a lot to be desired." Kore said mining was a vital sector that directly affected the livelihood of Papua New Guineans. Whether the impact is positive or negative depends on the collaborative efforts of every stakeholder and

the desire to work together," he said. "While the mining sector claims to be a significant contributor to the PNG economy, it can only do so with a complete paradigm shift in the way of doing business."

Production exceeded expectations, says miner

January 10, 2020, The National Business

K92 MINING Ltd, operator of the Kainantu gold mine in Eastern Highlands, says its production results for the fourth quarter of 2019 and the whole year exceeded expectations. Chief executive and director John Lewins said this was a testament to the quality of not only the Kora North deposit but also the entire team at Kainantu. Lewins said the record production of 23,646 ounces gold equivalent (AuEq) was delivered during a quarter in which there were significant interruptions to underground operations resulting from the ongoing upgrading of key infrastructure as well as interruptions to plant operations associated with the installation of new equipment. "Importantly, underground development has significantly ramped up over the course of the year, with total tonnes mined, increasing from under 60,000 tonnes in first quarter to 120,000 tonnes in the final quarter," he said.

"This increased development activity reflects the impact of additional equipment and personnel following the decision to go ahead with the expansion project during the first quarter of 2019. Lewins said, in addition, the company continued to work on the expansion of the Kora/Kora North Resource, with a further 26 holes completed during the quarter. "During first quarter, the company announced the commencement of the expansion of the Kainantu gold mine, with a goal of doubling current capacity to 400,000 tonnes per annum and increasing annual production to an average of 120,000 AuEq oz."

Meanwhile, total production over the next 13 years would be 1.33 million oz. Total revenue for the period would be over US\$2 billion (K6.65 billion) with royalty payments for the period would be US\$50 million (K166.4 million). Tax paid to the Government for the period, from payroll and corporate tax would total US\$300 million (K998.3 million), total sustaining capital of US\$202 million (K672million) would be required over the 13-year period, and net cash flow would be US\$1.03 billion (K3.4 billion). The net present value would be US\$710 million (K2.3billion) pre-tax, or US\$559 million (K1.86billion) after tax, and internal rate of return would be in excess of 350 per cent. K92 Mining is engaged in production of gold, copper and silver from Kora and Kora North deposits of Kainantu gold mine.

Secretary discusses mining

January 9, 2020, The National Business

The Department of Mineral Policy and Geohazards Management is the policy arm of the mining industry. Secretary Harry Kore spoke to Business Editor Shirley Mauludu about the department's view of the industry and other issues facing the mining sector.

Q: What is the department's general view of the mining sector?

KORE: Papua New Guinea is host to large scale and world class mines. They include the Lihir and Porgera gold mines, the Ok Tedi copper mine, the kina Ramu Nickel/cobalt mine, Hidden Valley gold mine, Simberi gold mine and the Kainantu gold mine. Information provided by PNG Chamber of Mines and Petroleum states that the value of exports in 2017 based on the Bank of PNG data is K31.4 billion. Mining contributed 37 per cent and petroleum contributed 47 per cent which totals to 84 per cent of the total exports for 2017. The rest of the sectors contributed the balance of 16 per cent of the exports. But it does not tell us how much was derived as benefits to the people of Papua

New Guinea.

Similar information provided by the Chamber for the same year in the PNG Extractive Industry Transparency Initiative (EITI) 2017 Report stated that extractive sector (mining, oil and gas) contributed 86 per cent to the export volume out of PNG. The rest of the other sectors only contributed 14 per cent of the total PNG exports. However, interestingly, from that 86 per cent, the extractive sector's contribution to government revenue is a mere 7 per cent.

This raises a very important question: Is PNG getting its fair share of the mineral resource revenue? My department is working in collaboration with other relevant State departments and entities to ensure we address this question to ensure our people get a fair share of the revenue derived from the exploitation of our mineral resources. This is done through the revised Mining Bill yet to be tabled in Parliament, and the six new policies that we have developed and others that are currently being developed to address the predominant issues in the PNG mining sector. In order for PNG to become "the richest black Christian nation leaving no-one behind", it is imperative that we change the way we've been doing business in mining in this country. Change is inevitable after 44 years of independence. We cannot keep doing the same thing over and over and expect a different outcome. All we want is a fair share of the resource revenue, nothing more, nothing less. And we expect our investors to work with us to correct this glaring anomaly amplified in the EITI Report.

Q: What were some of the major challenges for the sector in 2019 from the department's perspective?

There are predominant issues in the mining sector in PNG that require urgent policy and legislative interventions to be address. Some of these major issues are as spelt out below. Landownership is a core principle issue. Landowner identification and social mapping are critical to any project development in PNG. Identifying the correct landowners is the first step towards acquiring the social licence that guarantees the security of the project. Mineral ownership is a major issue. There is overwhelming call by our people and our leaders for the State to exercise its sovereignty and Constitutional right to retain the ownership of our mineral resources to enable the State to negotiate better deals for the exploitation of our mineral resources at minimal or no cost to the State.

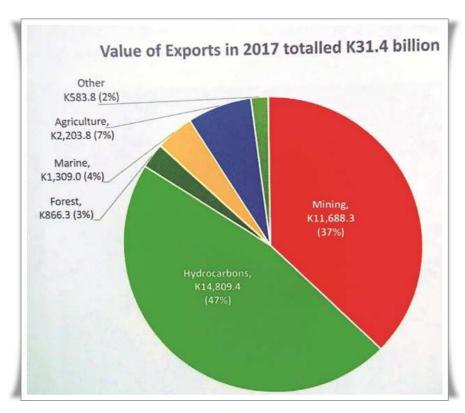
The resettlement or relocation of affected landowners from the project area is a significant challenge for both the developer and the State. The wellbeing and livelihood of our people must be improved and sustained into the future through proper planning with adequate compensation. We expect our investors to be serious about addressing this core issue in their planning. It will be a major consideration as a precondition to the granting of a development licence. The health and safety of the mine workers and the environment they conduct their business is of paramount importance in the sector. Our laws are being revised to be comparative with global industry practices and applicable standards to ensure all our mine workers return home safely to their families and loved ones at the end of the day.

The fair distribution of mine derived benefit and adequate compensation are genuine concerns that the State is addressing through the revised laws and policy developments. There must be fairness in receipts of the benefits derived from the exploitation of the mineral resources between the various stakeholders inclusive of the investor. The landowners, the provincial governments, the districts and the National Government must be entitled to a fair share of the proceeds from the sale of the mineral products. The EITI is a step in the right direction in ensuring accountability by stakeholders. However, the challenge is the correctness of the information being produced by the developer and its authenticity. There should not be any discrepancies between the data produced by the developer and data produced by the responsible State agencies.

The national content aspiration of the Government is a key consideration that should be utilised to add value to the communities surrounding the mine project as well as other citizens intending to undertake service contracts in a mining development. It gives rise to greater participation in resource development by our people and provides project security to the developer. Papua New Guineans are capable and qualified to undertake major service contracts in the resource sector. And the State will ensure its people are given preference when such opportunities are available. Environmental

concern is a serious matter for consideration for any investor intending to conduct business in PNG. The State is putting in place systems to protect and mitigate, minimise or prevent any damages to the environment. The revised Mining Act will not allow riverine discharge into the pristine river system in our country. Any allowable discharge particularly for deep sea tailings disposal in accordance with international best practice standards will be at cost to the responsible party as compensation for the impact to the marine environment. Currently there are no policies or specific legislative provisions that address many of these issues.

Most of the practices are adopted from international best practices and standards in similar jurisdictions in other parts of the world or are industry standards that our developers apply on a day to day basis. Nevertheless my department is addressing these policy gaps in the development of the revised laws and the new policy developments.



Q: What is the status of the country's revised Mining Act?

The revised Mining Bill is going through the government due process. It is currently pending its presentation before the National Executive Council for its formal endorsement and ultimately its enactment in Parliament. The review of the Mining Act 1992 and the Mineral Policy started way back in 2009 when the department was first established following the split between the department and the Mineral Resources Authority. We conducted public consultations through the print media, letters inviting comments and on radio talkback. We did the initial regional consultation in 2011 to identify the predominant issues. Then in 2013, we had another regional consultation to present the draft work we have developed for public scrutiny. In 2014, the Mining Bill was to go before Cabinet but the PNGCMP intervened and requested the minister for specific consultations with the industry which ended in June 2016. The Bill was deferred from being introduced in 2017 and again in 2018 due to the PNGCMP claiming it had not being consulted on the amendments.

As the department responsible for the review of the mining laws of our country, we have on record the persons consulted, the outcomes of those various consultations and a commentary matrix as evidence that we widely consulted the stakeholders. In comparison to many other laws that have been enacted with little or no consultations, the Mining Bill is probably the most overly consulted piece of legislation spanning over a decade since 2009.

Q: I understand the department is also putting together six other mining policies. What are they?

The six mining sector policies are:

- Mining Policy a realignment of the existing mineral policy to reflect the policy changes in the PNG mining sector;
- Offshore Mining Policy addressing deep sea mining in Papua New Guinea;
- Mining Involuntary Resettlement Policy addresses the resettlement or relocation of affected communities from the mining project areas;
- Sustainable Mining Development Policy an international best practice requirement that focuses on improving and sustaining the livelihood of our people beyond mine close;
- Geothermal Resources Policy seeks to harness the opportunity for our people to venture into this sector in a sustainable manner; and,
- Mining Project Rehabilitation and Closure Policy an international best practice that requires investors to start planning for rehabilitation and closure right from the start of operation so that the impact on the livelihood of our people is mitigated and addressed up-front to avoid any impromptu planning that could be unfavourable for our community and our people.

In addition, the Downstream Mineral Processing Policy, the Mine Waste Management Policy, the Small Scale Alluvial Mining Policy and the Geohazards Management Policy are important policy developments that need to be further improved from the draft policy framework developed by the department. Funding is an issue that is causing a set back to the development of these additional new policies.

Q: What is the status of those six mining policies?

The six mining sector policies were initially endorsed in principle by the NEC in 2016 but were contingent upon the enactment of the Mining Bill. These policies are pending an approval by NEC and to be introduced along with the enactment of the Mining Bill.

Q: From the department's perspective, are there any specific issues that are hindering progress of important policies that are vital to the country's mining sector?

The PNG Chamber of Mines and Petroleum's continuous interventions through politics to delay and derail a due government process is a major hindrance to the development of important government policies and laws. The continuous interference in the development and the enactment of the Revised Mining Act demonstrates disrespect and disregard towards the government system and processes. This seriously undermines PNG's sovereignty as an Independent State and the Government's sovereign authority to make laws and policies for the interest of its people without fear or favour. The respective mining policies and the revised Mining Act are positive changes for the country that will benefit the State and its people. The Chamber as the regulated entity should refrain from continuously interfering with a due government process. That is unethical conduct. The Chamber was represented in the consultations by two expert consultants/ negotiators and thirteen senior industry representatives that raised a total of 614 different issues for discussion. However, after seven separate consultations spanning over a period of two years of rigorous and intense scrutiny involving public servants, the chief secretary, the mining minister and the prime minister, the Chamber still claims that it has not been consulted. Any genuine investor would allow the due process to take its course and would willingly comply with the decision taken by the government of the day instead of speaking rhetoric and distorting the truth to serve its own agenda.

Q: What is the department's outlook for the country's mineral sector in 2020 going forward? It is in the best interest of the State for the government of the day to pass the Mining Bill and endorse the six new mining policies. This will promote sustainable development in the mining sector and in the long term, achieve PNG's targets in the Medium Term Development Strategy III and the international conventions, treaties and agreements to which it has ratified domestically. In addition, the revised Mining Act and mining policies will help PNG maximise the benefits derived from its mineral resources. The department envisages that by 2022 and beyond, Papua New Guinea will have a robust regulatory framework for the mining sector that will improve the quality

of life of our people though effective mineral policies and legislations. We have developed a mining blueprint geared towards achieving this vision.

Porgera community leaders condemn attack on policemen January 8, 2020, The National



THE community leaders of Porgera have condemned the attack on policemen which left two sustaining gunshot injuries. Porgera Landowners Association chairman Mark Ekepa and Porgera Women's Association chairperson Serah Erasi described the attack as "the mindless behaviour of a violent group of outsider criminals" in Porgera. "We want peace in our valley, and we utterly condemn this latest outbreak of criminal violence." They said in a joint statement police were there at the invitation of the people to restore peace and order in the district and did not deserve to be attacked. "We understand that the police were travelling on the Porgera Highway near Suyan late on Sunday night when they were ambushed by a group of approximately 10 men armed with high-powered firearms," they said. "Our communities are completely committed to supporting the current police deployment in Porgera and we call on the members of the community to come forward with information on these criminal. "We want to see justice served, and the attackers arrested and dealt with by the law. "Two of the police officers were injured by gunfire and sustained serious injuries as a result of this cowardly criminal act."

USTKE union wary of New Caledonia nickel restructure

Another New Caledonian union has voiced its concerns about the planned restructure and sale of the Vale nickel plant. Radio New Zealand on 7 December 2020

Vale plans to close the nickel refinery and to prioritise production of NHC, or nickel hydroxide cake, which Vale says is in great demand for batteries for electric vehicles. The USTKE union said its role was to minimise the job losses as the Brazilian-owned company changed its business model. The union also said it was closely watching who would be the buyer of the assets. Vale has declined to say where talks are at with potential buyers, but the president of the Southern Province has indicated Vale may well have no option but to sell its assets to Chinese investors. Vale's plan also involves to sell nickel ore abroad which would require government approval. An USTKE delegate told local media that it wanted a limited and measured accord. Last month, another union Solidarity NC urged the authorities to reject Vale's redundancy plans.

MRA Updates On Porgera Mine Lease Application and Wafi-Golpu

Melisha Yafoi, Post Courier, January 7, 2020

Application for a Special Mining Lease for the Porgera gold mine is still in progress. Mineral Resources Authority managing director Jerry Garry told the Post-Courier that the state is progressing the determination of the application which expired on August 16, 2019. Mr Garry said during that process there will be two major streams of activities including the negotiations of the Mining development contract and recommendations from the Mining Advisory Council. He said for the Mining development contract, the State Negotiation Team, (SNT) will recommence negotiations with the mine operators Barrick & Zinjin upon receiving directives from the NEC. "This process will principally discuss fiscal regimes and other stability agreements in terms of taxes, royalties, equity, national content and other benefits teams," he said. While for the recommendations, he said this will be administered by the MRA whereby the technical and financial capabilities of the operator and compensation agreement pertaining to the extension application will be presented before special MAC for its deliberations and recommendations, either for refusal or grant to the Mining Minister & ultimately to NEC. "We anticipate conclusion of the permitting, if, all goes well without any disruptions to the process, within first or second quarter of 2020," he said.

Mr Garry said the permitting of Wafi-Golpu project after being halted due to a court injunction order was relieved preventing everyone from doing any work. He said the injunction remains on foot and will SML application be dealt with only when the court injunction is resolved. "Whenever the court injunction is relived, the MRA will formalise the remaining landowner associations along the pipeline and tailings outfall, and continue to hold development forum to develop the memorandum of agreements and compensation agreements with landowner associations, LLG and provincial government. Concurrently, the SNT will re-open Mining Development Contract negotiations with the project development proponents, Harmony and Newcrest," he said. "It is anticipated that SML permitting may take 4-6 months from the date when the court injunction order is lifted." Mr Garry said as for the Revised Mining Act, whenever the Revised Mining Act is passed by the Parliament, the MRA will re-align itself to meet the new changes. He said the Prime Minister has urged another consultation with the industry during the December 2019 PNG Mining Conference and the Department of Mineral Policy & Geohazard Management will be coordinating this process.

Porgera: Cops attacked January 7, 2020 The National

ABOUT 30 armed men from Hela shot and injured two Mt Hagen Mobile Squad 5 policemen in an ambush in Enga's Porgera on Sunday night. Senior Constable Semi Tinga, second in command of the squad, was shot in the right upper thigh and First Constable Andrew Wapi was shot in the head. According to a police media release, both policemen were in critical conditions (believed to have been caused by loss of blood) and were air-lifted to Port Moresby for urgent medical attention. The two policemen were deployed to Porgera to help restore law and order in the Porgera Mine area. Police Comm David Manning condemned the ambush and attack on the two policemen. "Papua New Guineans should, instead, respect and help policemen who are on duty to uphold law and order," he said, lamenting that attacks on policemen had been on the rise nationwide recently. Comm Manning, who was present to accompany the two policemen's admission to the Pacific International Hospital, said: "This is intolerable. "The public should not be attacking policemen.

"The police force is the symbol of State. "It is an arm of the Government tasked with the fundamental role of protecting and serving the eight million people of Papua New Guinea and bringing criminals to justice. "The continuous attacks on police hamper our efforts to effectively provide the full and wide range of policing services people deserve. "The number of policemen actually

attacked and killed by the public is rising considerably over the last 10 years and this is alarming. "These attacks cannot continue unchecked, so I appeal to the public to please stop attacking policemen who are there to protect and serve you." On the latest attack, Comm Maning said all resources and manpower would be made available to bring to justice those responsible. "A task force is currently investigating the attack," he said. "We are working around the clock and negotiating with local leaders in Porgera to identify and arrest the criminals who clearly have no respect for the law or police." Comm Manning promised to ensure that policemen were given all the support required to effectively and efficiently police the nation. "One priority will be to ensure that policemen are properly trained and equipped.

He said welfare issues, housing, improved terms and conditions, easier access to medical services are some of the issues will be looked into. "But, I also appealed to all policemen and officers to carry out their responsibilities and duty professionally, without fear, favour, malice or ill-will. "Our behaviour, conduct and attitude towards the public will also dictate public response and level of respect for us and the force. "Be firm but fair. "Do your job honestly and at all times remember that we are servants of the people," he said, adding that he would also be looking at strengthening the command and control of the force and improving disciple. Last week, Enga commander Sr Insp Epenes Nili told The National that some 100 policemen from Port Moresby were expected to be deployed to Enga to help restore law and order. He said he filed a detailed report on the ongoing tribal fighting and killings to Comm Manning and that was why security would be beefed up. He also said police had identified about 80 suspects involved in the mass killing of six men, women and children in Mt Kare who bodies were found in Pinu River. However, the national police headquarters in Port Moresby could not be reached for comment on the deployment of the men to Enga.

Panguna Landowners Question Mining Law Changes

Post Courier, January 6, 2020



The Panguna landowners have called for consultation ahead of renewed push to amend Bougain-ville's Mining Laws. In a recent interview with Reuters, Bougainville vice-president and Mining Minister Raymond Masono said, in reference to his determination to push through with highly controversial amendment of mining legislation at all costs, that "the revolution is ongoing". Philip Miriori, the chairman of the Special Mining Lease Osikaiyang Landowners Association

("SMLOLA") said; "There has been no consultation by the Mining Department with landowners post the rejection of amending legislation by the Bougainville Parliamentary legislative committee – none." "This legislation is opposed by each and every Panguna Landowner Association, local government bodies and all sections of the community. It will be a disaster for the mining industry in Bougainville and will ensure Panguna is never reopened."

"Both the Autonomous Bougainville Government and the national government want Panguna to be reopened, so that it can reduce the dependency of Bougainville on the PNG national budget and enable us to deliver fiscal self-reliance for all Bougainvilleans," Lawrence Daveona said, "The Panguna landowners have written to Prime Minister James Marape, drawing his attention to this offensive and destructive attack on all Bougainville landowner's hard-won legal rights being removed with the stroke of the pen, to allow the illegal transfer of the Panguna mine together with a near monopoly over all future large scale mining on Bougainville, to an unknown shelf company in the British Virgin Islands, based on a plan which can never work.

PNG knows better than we do that, we must attract high quality foreign investment to grow and that means bringing in reputable development partners and allowing them to work with us to make Panguna and Bougainville a success." "This is the time for us all to pull together on the back of a very successful and peaceful Referendum. The revolution is done – a proposal like this will only create disharmony again and pit customary landowners against the mining department which is not necessary – we are here to work together co-operatively, to find a fair and equitable solution for everyone."

The SMLOLA was established by the Autonomous Bougainville Government September 7 2011 with its Constitution being drafted by the ABG Mining Department. The SMLOLA was established uniquely for and on behalf of all the customary landowners who own land contained within the area covered by the special mining lease at Panguna and now the subject of the expired EL 01, including the land used for the Panguna gold and copper mine pit, industrial processing areas, Panguna township and the areas around the mine within the area contained in EL 01. The stated purposes of the SMLOLA pursuant to its Constitution is set out in detail in clauses 1.2 (a) – (h), and includes amongst other things, the duty to maximise the commercial benefits of their members in the Panguna Mine and promote peace, unity and co-operation amongst landowners in a sustainable manner.

The customary landowners and their families are members of the SMLOLA by right of birth within the 7 named villages, in accordance with the Naisoi custom, and as set out in clause 2.1.1(a) of the SMLOLA constitution. The SMLOLA has in excess of 3,500 members. The governing body of the SMLOLA is democratically elected every three years as required by clause 4.3.3 of the constitution, by the members so that its structure and board is truly representative of the owners. The current board was elected on 21 December 2018. Section 8 of the Bougainville Mining Act states that "all minerals existing on, in or below the surface of customary land in Bougainville are the property of the owners of the customary land. This is exactly the same as our unwritten customary law on minerals ownership that has been in effect for millennia.

Bougainville landowners seek help from PNG prime minister

A landowner group at the site of the Panguna Mine has asked the Pangua New Guinea Prime Minister James Marape to intervene in its dispute with the Bougainville Mining Department.

Radio New Zealand on 3 January 2020

The group, the Special Mining Lease Osikaiyang Landowners, or SMLOLA, has written to the prime minister detailing its concerns that it is being shut out of involvement in any re-opening of

the mine. A resumption of mining at Panguna, closed by the civil war, has been touted by several groups as the way for Bougainville to develop a viable economy. SMLOLA said since Raymond Masono became Mining Minister two years ago it has been shut out of any talks, despite it being one of the groups which own the minerals under the Bougainville Government's Mining Act. It said it feared the Mining Department was driving secret, controversial changes to this measure without the support of the wider Bougainville Government. And it said a call for a travel ban on executives from its Australian partner, RTG, was disrespectful. SMLOLA said the claims from the Bougainville Government about these executives causing disharmony by disrespecting local custom are "misleading and without factual substance". Attempts by RNZ Pacific to reach Raymond Masono for comment have been unsuccessful.

Fly River affects Ok Tedi mine

Shirley Mauludu, The National, January 3, 2020

THE low water level in the Fly River in Western has forced Ok Tedi Mining Ltd (OTML) to reduce its production by 50 per cent, according to chief executive and managing director Peter Graham. Graham told The National yesterday that water level was low last month (December), thus, impacting the mine's operations. "During December, the water level in the Fly River has been insufficient to allow regular passage of Ok Tedi's feeder vessels loaded with concentrate out of Kiunga and back from Port Moresby with fuel and food for all but the last days of the year," he said. Graham said four vessels were recently cleared but one loaded remained stuck in the shallows. "As a consequence, Ok Tedi has limited stocks of fuel, diesel, explosives and other vital materials and concentrate storage in Kiunga is approaching capacity," he said. "To extend available stocks of vital materials, mine production has been reduced by 50 per cent and some contract personnel have been released.

"In the past week, some fuel and food has been received lifting stocks to 20-30 days at current reduced consumption rates. "For the community, food stocks are adequate through the supermarkets and an allocation of diesel made available for rationing." Graham further noted that the weather forecast was for above average rainfall this month and next. However, he said: "Once river levels rise and sustain, recovery to full production will likely take several weeks." Meanwhile, in a recent statement regarding release of the final dividend of K100 million paid to shareholders, OTML chairman Sir Moi Avei said: "This result has been achieved despite several extended periods of dry weather, including the current month (Dec), during which shipments of supplies in and product out have been severely constrained."

Porgera: 100 cops for Enga January 2, 2020, The National

POLICE are preparing for a major swoop on Enga this week to restore law and order – with some 100 policemen from Port Moresby bound for the province to hunt down more 80 suspected killers on the prowl in the province. This follows the mass killing of six people – men, women and children – in Mt Kare about two weeks ago. Their decomposed bodies were found in Pinu River. The dead, from Pori, were on their way home from Porgera via Mt Kare, a traditional route, when they were attacked. Locals posted on Facebook blaming the ongoing unrest and killings on ongoing feuds between two major tribal warlords. Similar "mass murders" also occurred last year in Tari-Pori's Karida Village in Hela. Enga commander Sr Insp Epenes Nili told The National that some 100 policemen from Port Moresby are expected to arrive in Enga this week to help restore law and order. "I filed a detailed report on the ongoing tribal fighting and killings to Comm David Manning. And that is why security will be beefed up to stop the lawlessness and to catch the suspects," he

added.

Sr Insp Nili said the ongoing tribal fighting in the Porgera Mine area that had claimed many lives was not caused by Engans. "It is a fight between warring tribes from Hela who are chasing each other, spilling into Enga, where they killed their own people at the mine. "Mt Kare shared the border with Hela and Enga. Six people from Hela were killed by their own people in Porgera two weeks ago, which escalated the killing and involved Engans. "Mobile squad from Western Highlands has travelled to the province to help the policemen and soldiers on the ground," he said. Sr Insp Nili said police would step up a manhunt for the suspects and to seize their weapons including firearms and ammunition. "We will not go easy when we move in with a full force," he added. Police Minister Bryan Kramer told The National that a detailed police report on the fighting and killings had been received and confirmed that a posse of policemen would be deployed to Enga. Last week, Sr Insp Nili also told The National that police had identified more than 80 suspects involved in the mass killing. He said the suspects were all from Hela and policemen had been deployed to keep a lookout for them.