

**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/>

Deep sea mining by 2023 gets green light in Pacific

Deep sea mining has got a green light to begin in the Pacific by 2023 after Nauru triggered a rule at the International Seabed Authority. Radio New Zealand on 30 June 2021



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

The UN-mandated Authority, tasked with regulating the seabed, has confirmed that today Nauru triggered a rule that would allow mining to commence within two years in its waters. This comes before environmental regulations are in place at the ISA, and amid growing calls by scientists and Pacific civil society networks for a precautionary pause on the fledgling sector. Ocean scientists have warned that mining activity should not proceed until more research is conducted into the little known environment of the deep sea. But there's growing interest in polymetallic nodules on the seabed, and several Pacific countries, including Nauru, have already sponsored exploration licences for deep sea mining companies.

Following Nauru's move this morning the Deep-Ocean Stewardship Initiative, an accredited Observer at the International Seabed Authority, has written to the ISA to express its concern over the triggering. "Based on current scientific understanding, deep-seabed mining will result in biodiversity loss and irreversible harm to deep-sea ecosystems," the letter reads. It said triggering the two-year rule would not allow much of the relevant scientific research currently underway to be completed, communicated, and taken into account, preventing scientifically informed decision making. "Two years is not a sufficient period for acquisition of the necessary scientific research to inform best environmental practices."

Deep-sea mining could start in two years after Pacific nation of Nauru gives UN ultimatum. *The International Seabed Authority has two years to finalise regulations governing the controversial industry.* Kate Lyons, The Guardian, 30 Jun 2021



Deep sea mining off the Papua New Guinea coast. Photograph: Nautilus minerals

Deep-sea mining has been given the go-ahead to commence in two years, after the tiny Pacific island nation of [Nauru](#) notified the UN body governing the nascent industry of plans to start mining. Triggering the so-called “two-year rule”, which some have called the nuclear option, the International Seabed Authority (ISA) now has two years to finalise regulations governing the controversial industry. If it is unable to do so, the ISA is required to allow mining contractors to begin work under whatever regulations are in place at the time.

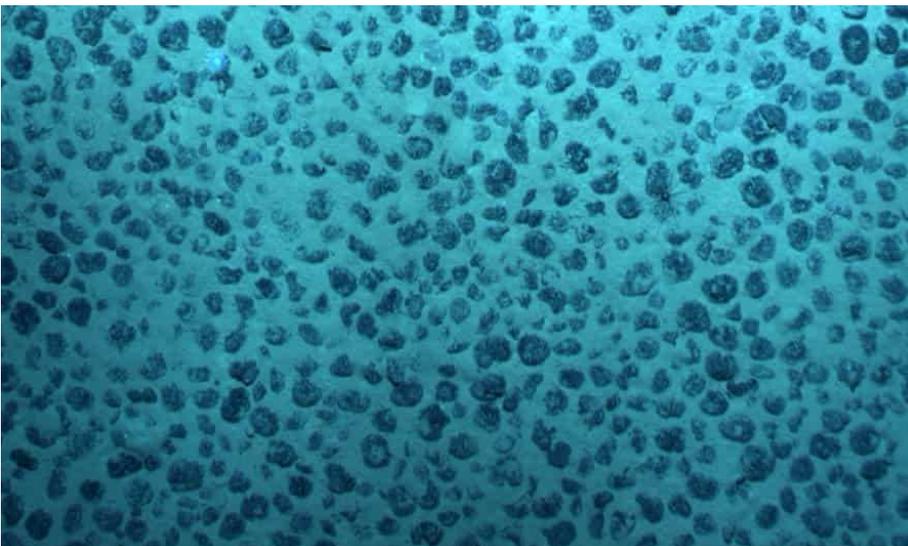
Nauru’s president, Lionel Aingimea, notified the ISA of the intention of Nauru Ocean Resources Inc (NORI), a subsidiary of a Canadian company called DeepGreen, to apply for approval to begin mining in two years in the Clarion-Clipperton Zone (CCZ) in the North Pacific Ocean between Hawaii and Mexico. Aingimea’s letter, dated 25 June, asked the ISA “to complete the adoption of rules, regulations, and procedures required to facilitate the approval of plans of work for

exploitation in the area within two years” from 30 June. Nauru believed draft deep-sea mining regulations were nearly complete after seven years of talks, Aingimea’s letter said.



A rare deep-sea cirrate octopod. Sir David Attenborough has backed calls for a halt to deep sea mining, which conservationists warn could have huge impacts on wildlife and climate change. Photograph: NOAA Office of Ocean Exploration and Research/PA

Environmental groups, the EU Parliament, several Pacific nations including Fiji and Papua New Guinea, and Sir David Attenborough, have called for a moratorium on deep-sea mining, arguing that too little is known about its impact. Last week, more than 350 scientists from 44 countries [signed a petition](#) calling for a moratorium on deep-sea mining “until sufficient and robust scientific information has been obtained”. Jessica Desmond, Oceans campaigner for Greenpeace Aotearoa, said: “We are currently in the middle of a climate and biodiversity crisis, we know that deep sea ecosystems are some of the most important ecosystems on the planet and we are seeing this relentless and reckless push to mine these areas, despite the fact that scientists are very clearly warning us that the outcomes could be disastrous.” “It’s very disappointing, it’s very foolhardy... and very dangerous,” said Duncan Currie, an international lawyer who has worked in oceans law for 30 years. He represents the Deep Sea Conservation Coalition which is calling for a moratorium on deep sea mining.



Rocks called ‘polymetallic nodules’ are seen on the seabed in the Clarion Clipperton Zone of the Pacific Ocean. Photograph: GSR/Reuters

Currie said the two-year rule was designed to be used if a country was ready to mine and then found their path to do so blocked by a few countries in the ISA, or if progress toward adopting regulations to govern deep-sea mining had stalled, but that neither situation was the case. “A very important consultation is happening next week,” said Currie, in reference to a 3 July deadline for responses to draft standards and guidelines. “They can hardly complain that things aren’t happening when they’re happening next week. “If we’re in a situation where a company has tested all their equipment and they’re frustrated by the regulatory environment, we might expect to see this, but we haven’t seen that.” DeepGreen is looking to extract polymetallic nodules from the seabed. The nodules, which resemble potatoes and are thought to take millions of years to form, are rich in manganese, nickel, cobalt and rare earth metals, key components of batteries for electric vehicles. DeepGreen argues deep-sea mining is a less environmentally and socially damaging alternative to terrestrial mining, and is crucial for transitioning to a greener economy.

DeepGreen is in the process of merging with blank-cheque company Sustainable Opportunities Acquisition Corp (SOAC) to become The Metals Company. The Metals Company plans to list on the Nasdaq in the third quarter. But SOAC said in a filing to the US Securities and Exchange Commission (SEC) last week it was not yet known whether mining the seabed would have less impact on biodiversity than mining for the same quantity of metals on land. “We cannot predict ... whether the environment and biodiversity is impacted by our activities, and if so, how long the environment and biodiversity will take to recover,” it said. DeepGreen has deals with Nauru, Tonga and Kiribati for CCZ exploration rights covering 224,533 square km, roughly the area of Romania. DeepGreen did not respond to requests for comment for this story. In response to questions about invoking the two-year rule [for a previous story](#), a spokesperson told the Guardian last week that the two-year rule was “only available to sponsoring states to use, not contractors like DG, which cannot invoke it” but that it was a “a valid option available to all member states of the International Seabed Authority”. The Nauru government did not respond to requests for comment.

Ok Tedi: About 9,000 splitting K19.4mil

June 30, 2021, The National Business

AROUND 9,000 people from 12 project impact villages in Western have received K19.4 million in dividend from the Ok Tedi Mining Ltd (OTML). It is from the nine per cent equity the Mineral Resources Star Mountains Limited (MRMS) has in the OTML for 2020. A statement from the Mineral Resources Development Company (MRDC) said K19.4 million was paid to the 12 villages under the revised benefit sharing agreement decision of May 22, 2021. The six mine villages are Aremkit, Kavorabip, Finalbin, Bultem, Wangbin and Migalsim. The four villages from the lease for mining purpose area are Kumkit, Ok Tedi Tau, Ankit and Noiksikwi. The Korkit and Kawengtikin villages were also included in the payment. The event was held at Migalsim village witnessed by the villagers, Western Governor Taboi Awi Yoto and officials of OTML and MRDC.

MRDC chief operating officer John Tuaim was happy to see the MRSM board paying out money to its beneficiaries. “I am pleased with the MRSM board for delivering this payment which belongs to the 12 villages,” Tuaim said. MRSM chairman David Kaiankim said it was the largest dividend payment to be paid to the 12 villages. “A large portion of MRSM’s income comes from revenue from the Ok Tedi mine,” he said. A total of K49.5 million was received by MRSM from OTML as dividend in December 2020. Of this, 60 per cent was retained for investments and education, while 40 per cent was distributed as dividend to the 12 villages.

Company executive accuses landowners of being greedy, egoistic

June 30, 2021, The National Business

WAFI-GOLPU Joint Venture second in-charge David Masani has accused Morobeans of being unable to manage their greed and ego to ensure the Wafi-Golpu Project is realised. “The project is halted and all employees discharged, leaving only six staff monitoring correspondences and 20 security guards at the project site,” he said. “Therefore WGJV has nothing and no businesses involving or engaged with any other groups, organisations and agencies regarding the Wafi project.” Masani addressed the Wampar Pipeline Landowner Association (WPLA) awareness session in Gabsongkeg recently. WPLA chairman Joe Tetang facilitated the meeting attended by officials from the Mineral Resources Authority (MRA), Commerce and Industry Department, Labour and Industrial Relations Department, Morobe division of mining, environment and climate change and WGJV at Munum, Gabsongkeg and Zifasing.

Masani was asked about the K100 million infrastructure development grant (IDG) in Morobe that was troubling various landowners and splinter groups compiling documents and racing against each other to secure benefits. Other groups were collecting membership fees of K20 to K50, gathering fresh food and firewood promising people to bring the K100 million IDG over to the Morobe capital and slaughtering pigs to celebrate and distribute the money among its members. “It is a tragic indictment over the K100 million IDG and work of conmen,” Masani said. He said the project was on hold with no operation, employees dismissed and no so-called IDG funding. Masani said there were 120 clans and family land boundaries overlapping each other along the Wampar pipeline areas.

Nauru urged to reverse deep sea mining push

Nauru's government is being urged to halt its reported push to allow deep sea mining in international waters by 2024. Johnny Blades, RNZ Pacific Journalist, Radio New Zealand on 28 June 2021



Gerard Barron, the CEO and Chairman of DeepGreen Metals, seen here at an annual session of the International Seabed Authority as a guest of a Nauru government delegation. Photo: International Institute for Sustainable Development

A media report on Saturday claimed the Pacific Island government was intending this week to ask the International Seabed Authority (ISA) to fast-track the adoption of seabed mining regulations. The regulations are still under consultation but Nauru's request would invoke a so-called 'two-year rule' and compel the ISA to allow seabed mining to go ahead within two years, effectively setting a deadline for the body to finalise the mining regulations. Nauru's government hasn't responded to

RNZ Pacific's request for comment, however it has forged close links to one of the companies pushing for deep sea mining. The development of the regulations at the ISA is moving faster than many ocean scientists and environmentalists are comfortable with.

The Pacific Liaison for the Deep Sea Conservation Coalition, a grouping of over 90 organizations worldwide, Phil McCabe, said triggering a 'race to the bottom' could prove disastrous for the world's oceans. He said the coalition was urging Nauru to reconsider its path, and is also calling on the New Zealand government to speak up. "Any responsible government would not just stand by and allow this to occur. We've got this track record in New Zealand of assessing this activity, and it's come up failing. "We know we can't do this without causing serious harm. So our government, I feel, has a responsibility to step up and really challenge this move."



DeepGreen Metals' partner Allseas acquired this former ultra-deepwater drill ship "Vitoria 10000" for conversion to a polymetallic nodule collection vessel. Photo: DeepGreen Metals

There's significant interest among deep sea mining advocates in the Pacific Islands region. Governments in several regional countries - Cook Islands, Tonga, Kiribati and Nauru - have sponsored exploration contracts for companies hoping to mine the deepest parts of the Pacific seabed for polymetallic nodules. One of the main companies leading the charge, DeepGreen Metals, is focussed on the massive Clarion Clipperton Zone in the Central Pacific where it has marine claims under an agreement with the ISA and sponsored by Nauru. Deep sea mining advocates say polymetallic nodules on the seabed are needed for batteries in electric vehicles to aid transition to de-carbonised economies.

But many scientists warn deep sea mining might threaten the ocean's capacity to store carbon and slow climate change. Last week, more than 300 scientists from 44 countries called for a pause on deep sea mining activities to allow more research. The leading ocean experts who issued the statement argue that far too little is known about the ocean ecosystems in the deep sea. These ecosystems are already under stress from climate change, bottom trawling and pollution, and the scientists say deep-sea mining would inflict irreversible damage to the ocean. Furthermore, Pacific civil society groups are [calling for the ISA to pause](#) issuing new exploration contracts in international seas.

In April, a number of major global companies, including car manufacturers Volvo and BMW as well as tech giant Google and Korean battery maker Samsung SDI, signed up to a World Wildlife Fund call for a moratorium on deep sea mining. They promised to exclude any deep sea minerals from their supply chains before environmental risks are "comprehensively understood".



The Pacific Liason for the Deep Sea Conservation Coalition, Phil McCabe. Photo: VNP / Phil Smith

EXCLUSIVE Deep-sea mining rules to be fast-tracked in push from Nauru -source Reuters, Helen Reid, Jeff Lewis, last updated 28 June 2021

June 25 (Reuters) - The government of Nauru plans to ask the International Seabed Authority (ISA) next week to fast-track the adoption of seabed mining regulations, a source with direct knowledge told Reuters on Friday, in a sign of growing pressure to launch the controversial new industry. The so-called "two-year rule" would compel the ISA to allow seabed mining to go ahead within two years, effectively setting a deadline for the body to finalize mining regulations. The source, who was not authorized to speak to the media and declined to be named, said Nauru would send the request to the ISA on June 30. Ambassador Margo Deiye, permanent representative of Nauru to the ISA, did not immediately return a Reuters request for comment.

The Pacific island nation roughly 2,800 miles (4,506 km) northeast of Australia is a sponsoring state for The Metals Co, formerly known as DeepGreen, which plans to list on the Nasdaq next month in a merger with blank-check company Sustainable Opportunities Acquisition Corp ([SOAC.N](#)). Under the United Nations Convention on the Law of the Sea, private mining companies must be sponsored by a state in order to do seabed mining. The Metals Co is also sponsored by Kiribati and Tonga. Any ISA member state that either holds or sponsors a deep-sea exploration license for a private company can trigger the two-year rule. The ISA has not yet received any request to trigger the rule, a spokesperson for the agency said.

Deep-sea mining involves sucking up potato-sized rocks that contain cobalt, nickel and other battery metals and are strewn across the Pacific Ocean floor. Some scientists and environmentalists have called for a ban on the practice, saying too little is known about deep-sea ecosystems and mining could wipe out as-yet undiscovered species. Alphabet Inc's ([GOOGL.O](#)) Google and BMW ([BMWG.DE](#)) have called for a moratorium on the practice. The Metals Co has argued that seabed mining will be more sustainable than mining on land, producing less waste and fewer carbon dioxide emissions.

Based in Vancouver, The Metals Co has said it aims to start mining in 2024 and expects exploitation regulations to be approved within the next two years. In regulatory filings, the company raised the possibility that an ISA member state might trigger the rule. The company did not immediately return a request for comment. Conservation groups have raised concerns about a fast-tracked

timeline. The ISA postponed meetings set for July but this week said it aimed to hold in-person sessions later this year. [read more](#) Matthew Gianni, co-founder of the Deep Sea Conservation Coalition, said the ISA's review process must be properly finished and should not be pressured by the two-year countdown. "Negotiations around regulations and the royalty regime are still underway and should not be rushed to meet an artificial deadline," he told Reuters on Friday.

How do we stop the plunder of the Pacific? A panel of experts give their solutions

From education to legal reform, at the close of the Guardian's Pacific Plunder series, leading Pacific thinkers offer solutions. The Guardian on 25 Jun 2021



What do we do about the problems that arise from extractives industries in the Pacific? Illustration: Ben Sanders/The Guardian

Over the last month, the Guardian has run a [major investigative series](#) examining the extractives industries – [mining](#), [logging](#), [fishing](#) and the nascent industry of [deep-sea mining](#) – in the Pacific. Among the stories of [environmental devastation](#) and [social harm](#) are also stories of Pacific communities [taking control of their resources](#) and succeeding in [resisting unwanted extractive projects](#). As the series comes to a close, four Pacific leaders and thinkers, from across the region, offer solutions to the problem of Pacific plunder.

‘Pacific solutions need to be led by Pacific peoples’. *Dr Katerina Teaiwa is an associate professor in Pacific Studies at the Australian National University*

Former and current imperial powers, including the United States, Australia, the United Kingdom, New Zealand, France, Canada, Japan, China and Indonesia have had and continue to have significant impacts on the cultures and environments of Oceania.

It is critical that these nations attend to the ongoing need for environmental and historical justice including for mining, nuclear testing, deforestation, the Pacific slave trade, land alienation, World War II, climate change, and the displacement of Pacific populations within and across state borders. Such support spans the range from funding for education, health, and social and cultural wellbeing, to the removal of unexploded ordnances and environmental repair. The island of Banaba, for example, mined out for phosphate by Australia, New Zealand and the UK, is a denuded and heavily polluted landscape filled with mining and industrial debris that regularly [faces serious fresh water shortages](#). The entire landscape needs rehabilitation. At six square kilometres, such repair is achievable with Banaban knowledge, innovative thinking, and commitments from the responsible governments, and Kiribati where Banaba is located. Current aid and development agendas and programmes often exacerbate rather than balance out the impacts of these changes. The Pacific

Seasonal Workers Programme, for example, if uninformed by histories of the slave trade and the current experiences of Australian South Sea Islanders, risks reproducing unequal social, political and economic relations between Australia and the Pacific Islands where the benefits accrue primarily to Australian agriculture and stakeholders.



Katerina Teaiwa is of I-Kiribati, Fiji Islander and African American heritage, and is associate professor in Pacific Studies at the Australian National University. Photograph: Supplied



The old cantilever that used to load phosphate onto the ships. Banaba, central Pacific island, Kiribati. Photograph: Janice Cantieri

In order to appreciate the lessons of history we need better support for Pacific Studies education across the region and within countries such as Australia, that foregrounds Pacific agency, creativity, histories, knowledges and diverse identities. Leadership from Pacific women, Pacific youth, and those of diverse genders, also needs to be recognised and prioritised in regionalism, policy making, and caring for land and sea. Sovereignty and self-determination are key and Pacific solutions need to be led by Pacific peoples themselves. You'd think we'd be closer to achieving such sovereignty in our own affairs. Unfortunately, colonial and imperial thinking, and geopolitical wrangling, persists. Some of our own leaders, aid donors, policy makers, foreign affairs journalists and academics continue to treat the Pacific as "underdeveloped" and incapable of determining our own lives and futures. That attitude needs to change.

‘Pacific Island countries need wholesale legal changes’

Dr Bal Kama is a solicitor with the international division of the Environmental Defenders Office Australia, an expert in Pacific Islands constitutions and a Fellow at the Department of Pacific Affairs at the Australian National University

To combat the exploitation of natural resources and its often disastrous consequences for the environment and local communities, Pacific Island countries need wholesale legal changes, greater investment in enforcement and a recognition of Indigenous knowledge of managing resources.



Dr Bal Kama is a solicitor with the international division of the Environmental Defenders Office Australia, an expert in Pacific Islands constitutions and a Fellow at the Department of Pacific Affairs at the Australian National University. Photograph: Supplied

Many Pacific countries continue to rely on colonially influenced resource laws intended to favour foreign companies, such as the terms of the mining laws of Papua New Guinea (PNG) which has raised significant concerns in recent years and continues to be echoed under the current government. There is the need for laws that reflect the expectations of the people as well as international best practices. Once equitable laws are in place, there is a need for effective enforcement of laws and meaningful prosecution. Remote geography, vast sea territories, and lack of appropriate technology and logistics present challenges to enforcement agencies. It requires good investment in policing and justice institutions, deepening of regional collaborations and for offenders to be competently prosecuted under laws that are updated and substantively punitive.



The Ok Tedi Copper mine near Tabubil in Papua New Guinea. Photograph: Friedrich Stark/Alamy

In PNG, the continued use of the Special Agriculture Businesses Leases (SABLs) where customary lands were leased to resource companies despite clear government ban on the use of SABLs demonstrates a breakdown in effective enforcement. Pacific Island countries have one of the highest rates of indigenous peoples of anywhere in the world. There is a need for greater recognition of traditional owners and their ways of sustainably managing their natural resources. Indigenous knowledge and concerns about natural resource management are often neglected. The rigidity of the legal system also means people do not have ready access to avenues of seeking meaningful justice for the plunder of their resources.

An effective way of dealing with these issues is to strengthen the civil society. A robust civil society is important in the absence of strong positive political leadership in protecting the environment and holding government and industry to account. Presently, civil society environmental, indigenous, and public interest environmental law organisations are in their nascent stage in the Pacific and are lacking in resources. Their role needs to be factored into the larger environmental discourses in the Pacific and supported at national and regional levels.

‘Education will help us see other options’

Dorothy Wickham is a journalist from Solomon Islands

Solomon Islands has been struggling with the issue of logging for decades and we are losing all our native forests. As a local journalist, I have covered the logging industry and I have seen the economic and social fallout, and the damage to the environment of my country. Whilst there has been so much awareness-raising work done on the effects on logging, Solomon Islanders still choose to log. There are so many reasons for landowners choices but the most obvious one is financial.



Dorothy Wickham is a journalist from Solomon Islands. Photograph: Supplied/Dorothy Wickham, a journalist from Solomon Islands

Solutions are difficult and will have to come from the government. We need to ban logging and drive landowners towards planting forests or go into down streaming and produce timber. However, government will not be making this decision soon as logging has been a major contributor to our national and rural economies for several decades. Logs alone contribute between 50%-70% to Solomon Islands annual export revenue. The economic reality for an ordinary Solomon Islander is tough, so talking conservation to him or her is an uphill battle. However, education is also a

solution to ensuring landowners understand the long term effects of logging and to choose to think of tomorrow instead of today.



Logs await transportation on Rennell Island, Solomon Islands. Photograph: Zahiyyd Namo/Aelan life photography

Education will bring awareness of other options to young Solomon Islanders, other than working in logging. Currently, education is not free in Solomon Islands and we have more than 3,000 kids drop out of school before finishing each year, which doesn't count the large number of children not in school at all because their parents can't afford it. If I was the Prime Minister, I would ensure that all Solomon Islanders were given free education and support academic and skill based training for all citizens, then maybe we could look past using our natural resources as the only way to generate income.

'Leaders and bureaucrats have forgotten how to do meaningful community participation'

Vani Catanasiga is the executive director at Fiji Council of Social Service, an NGO platform that was established in 1957 in Fiji

Meaningful community participation and obtaining communities' free, prior and informed consent can be testing, particularly in indigenous communities, but I believe it is the key to finding better solutions for the challenges we face in terms of climate change, natural disasters and sustainable resource management.



Vani Catanasiga is the executive director at Fiji Council of Social Service Photograph: Supplied

The challenge is re-teaching this “new” science, because in my experience in both Fiji and the wider region, both leaders and bureaucrats have forgotten how to do this effectively. Any suggestion of community consultations is seen and approached with wariness, reluctance and sometimes hostility - even though some of our resource management laws have already got these community participation clauses. The iTaukei Land Trust Act for example already compels developers to demonstrate consent from 60% of clan/landowning unit members before any work is done. The limitation however is in how this consent is obtained as clan members can be approached individually to sign on, which goes against the communal and collective nature of decision-making within indigenous/iTaukei communities. A better way of obtaining the required 60% per cent would be to make sure it is gained during special clan meetings. Another area for improvement is the Environment Management Act which requires that Environment Impact Assessments (EIA) for development projects be carried out and must include community consultations. But the Fijian government must improve this process by extending the number of days given to the public and communities to make a submission as well as ensuring that the notice calling for public consultations goes out widely via various media platforms.



Women fishing a few meters away from the Dawasamu river mouth, in Fiji. Photograph: Viniana Vuibau/photographer

There have been widespread criticisms of the EIA’s public consultation process because companies have often only provided information about proposed developments in English and not in the vernacular. The role of government agencies, particularly that of provincial development or provincial councils officials, have also been criticised for the way they facilitate connections between developers and communities. We have had cases where government officials were seen driven to the consultations on vehicles belonging to the mining companies who were proposing the work. The impression that creates with villagers is that the government was for the company and the proposed mining development, leading to villagers being confused and not feeling free to consent to or reject the proposed mining project.

(Source: <https://www.theguardian.com/world/2021/jun/26/how-do-we-stop-the-plunder-of-the-pacific-a-panel-of-experts-give-their-solutions>)

Deep sea mining is ocean exploitation: Samoan activist

By Krystal Selwood Juffa, SamoaObserver, 24/06/2021

Pacific island states including Samoa cannot protect the ocean if they are considering policies such as deep sea mining which will put livelihoods at risk and lead to exploitation. That is the view of the Greenpeace Head of the Pacific, Auimatagi Joe Moeono-Kolio, who said they will continue to have issues with the latest venture of the extractive industry, due to its impact on the ocean and the

marine ecosystem. Auimatagi said Greenpeace has its concerns on the introduction of deep sea mining into the region due to the record of the extractive industry and the damage that the “Blue Pacific” could sustain over the years. “We cannot protect the ocean if we continue to find new ways to exploit it,” he said in an emailed response to the Samoa Observer. “Extractive industries have done so much damage to our Blue Pacific and it is pure foolishness to repeat the same old mistakes in the hope of a different outcome. “The ocean is the lifeline of the Pacific and deep sea mining puts that at risk.”

The practice of foreign companies coming into the region “promising riches to these nations” was then put under scrutiny with Auimatagi saying island communities were then left to deal with the damage. “Too often in the Pacific region we have seen large corporations come in promising riches to these nations but instead they are left with a damaged environment and have to live with the impacts of that,” he said. “Plundering the seafloor risks severe and irreversible damage to marine life and biodiversity, but it could also disturb the carbon cycle. “We should not be interfering with the ocean’s ability to absorb carbon and this is just another reason why deep sea mining shouldn’t happen.” French Polynesian academic Dr Keitapu Maamaatuaiahutapu expressed similar sentiments, saying the benefits of deep sea mining were short-term for long-term damage to the environment.

“Economic benefit – short term gain on deep sea mining – in the meantime it is wiser not to go deep sea mining because we have lived here for thousands of years...we are becoming the central part of the economy but we are not part of the benefit,” he said. “Now more than ever we need to connect and cooperate with the rest of the world, it is important that the indigenous people connect and address these global issues so corporations do not have a profit in. “Elected members of the parliament are also owned by transnational corporations.” Attempts by Papua New Guinea to commission the world's first deep sea mining project by 2020 called Solwara 1 did not eventuate with the Canadian-registered firm Nautilus Minerals Inc. going into administration. The demise of the company led to a chorus of calls for a moratorium on deep sea mining in the Pacific.

Deep-Sea Mining Science Statement

24 June 2021

Marine Expert Statement Calling for a Pause to Deep-Sea Mining

Signed by 317 marine science & policy experts from 44 countries

The deep sea is home to a significant proportion of Earth’s biodiversity, with most species yet to be discovered. The richness and diversity of organisms in the deep sea supports ecosystem processes necessary for the Earth’s natural systems to function. The deep ocean also constitutes more than 90% of the biosphere, and plays a key role in climate regulation, fisheries production, and elemental cycling. It is an integral part of the culture and well-being of local communities and the seafloor forms part of the common heritage of humankind. However, deep-sea ecosystems are currently under stress from a number of anthropogenic stressors including climate change, bottom trawling and pollution. **Deep-sea mining would add to these stressors, resulting in the loss of biodiversity and ecosystem functioning that would be irreversible on multi-generational timescales.**

Amongst the specific concerns over the impacts of deep-sea mining are:

- the direct loss of unique and ecologically important species and populations as a result of the degradation, destruction or elimination of seafloor habitat, many before they have been discovered and understood;
- the production of large, persistent sediment plumes that would affect seafloor and midwater species and ecosystems well beyond the actual mining sites;
- the interruption of important ecological processes connecting midwater and benthic ecosystems;

- the resuspension and release of sediment, metals and toxins into the water column, both from mining the seafloor and the discharge of mining wastewater from ships, detrimental to marine life including the potential for contamination of commercially important species of food fish such as tunas;
- noise pollution arising from industrial machine activity on the ocean floor and the transport of ore slurries in pipes to the sea surface, that could cause physiological and behavioral stress to marine mammals and other marine species;
- uncertain impacts on carbon sequestration dynamics and deep-ocean carbon storage.

There is a paucity of rigorous scientific information available concerning the biology, ecology and connectivity of deep-sea species and ecosystems, as well as the ecosystem services they provide. Without this information, the potential risks of deep-sea mining to deep-ocean biodiversity, ecosystems and functioning, as well as human well-being, cannot be fully understood. At the same time, a growing number of scientific reports (IPBES, IPCC, etc.) indicate that Earth's biodiversity is increasingly at risk of extinction.

For the reasons outlined above, we strongly recommend that the transition to the exploitation of mineral resources be paused until sufficient and robust scientific information has been obtained to make informed decisions as to whether deep-sea mining can be authorized without significant damage to the marine environment and, if so, under what conditions. The United Nations Decade of Ocean Science for Sustainable Development (2021-2030) provides an opportune period in which to collect more information about the species and ecosystems that could be affected by deep-sea mining. As scientists, we deeply value evidence-based decision making, especially in instances as consequential as a global decision to open up an entirely new frontier of the ocean to large-scale industrial resource exploitation. The sheer importance of the ocean to our planet and people, and the risk of large-scale and permanent loss of biodiversity, ecosystems, and ecosystem functions, necessitates a pause of all efforts to begin mining of the deep sea, in line with the precautionary principle, and an acceleration of research so that we can gain a better understanding of what is at stake.

Peer-review journal resources

Duarte et al., 2020. Rebuilding marine life <https://www.nature.com/articles/s41586-020-2146-7>

Drazen et al., 2020. Opinion: Midwater ecosystems must be considered when evaluating environmental risks of deep-sea mining <https://www.pnas.org/content/117/30/17455>

Levin et al., 2020. Challenges to the sustainability of deep-seabed mining <https://www.nature.com/articles/s41893-020-0558-x>

Smith et al., 2020. Deep-Sea Misconceptions Cause Underestimation of Seabed-Mining Impacts <https://www.sciencedirect.com/science/article/pii/S0169534720301828#!>

IUCN Deep seabed mining report, 2018 <https://portals.iucn.org/library/node/47761>

Miller et al., 2018. An Overview of Seabed Mining Including the Current State of Development, Environmental Impacts, and Knowledge Gaps <https://www.frontiersin.org/articles/10.3389/fmars.2017.00418/full>

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A Mining Startup's Rush for Underwater Metals Comes With Deep Risks

DeepGreen built a nearly \$3 billion valuation on the dream of gently excavating the ocean floor. Now environmentalists want to block its plans to go public.

By Todd Woody, Bloomberg, 24. Juni 2021

A seabed mining startup, DeepGreen Metals Inc., has successfully sold itself to investors as a game-changing source of minerals to make electric car batteries that can be obtained in abundance—and at great profit—while minimizing the environmental destruction of mining on land. But there's strong scientific evidence that the seabed targeted for mining is in fact one of the most biodiverse places on the planet—and increasing reason to worry about DeepGreen's tantalizing promises. *Bloomberg Green's* examination of corporate and legal filings, regulatory records and other documents raises questions about DeepGreen's business plans. Previously undisclosed agreements with developing island states in the South Pacific show the company's political and financial leverage over its partners, who are dependent on its expertise to exploit their seabed resources and obligated to ensure DeepGreen's compliance with international environmental regulations. For years, the Canadian-registered startup has been pitching a solution to climate change that can be found 13,000 feet below the sea. That's where potato-sized polymetallic nodules rich in cobalt, nickel and copper cover the ocean floor by the billions. DeepGreen Chief Executive Officer Gerard Barron calls these nodules “a battery in a rock.”



Potato-sized polymetallic nodules rich in cobalt, nickel and copper cover the Pacific Ocean floor by the billions. Photographer: Sandy Huffaker/AP Photo for DeepGreen Resources

The deep ocean holds the world's largest estimated reserves of minerals, potentially worth trillions of dollars. While seabed mining remains technologically and commercially unproven, rising demand and prices for metals crucial to decarbonization are already unleashing a gold rush to the bottom of the sea. The minerals can be gently extracted, at least according to DeepGreen's public relations campaign, thus avoiding the toll of terrestrial mining and powering the transition to a clean-energy future. In a statement, DeepGreen said it doesn't view mining on land or underwater as sustainable. “The only path to sustainable metals is to build up enough metal stock to shift away from mined to recycled metals,” says Dan Porras, the company's head of communications and brand. He added: “Our stated objective is to inject enough primary metal stock into the system to enable this shift... and exit primary extraction as soon as possible.”

Scientists say DeepGreen officials have mischaracterized the ocean floor as less vulnerable to harm from mining. It's “a very deep, dark, very monotonous kind of place,” the company's chief ocean

scientist, Greg Stone, said in a 2019 [podcast](#) interview. “We're not talking about vibrant coral reefs, we're not talking about herds of tuna or whales,” he said. The impact from nodule mining? “The longer-term disruption, if you can even call it that, would settle down certainly within months.” The podcast host was skeptical of this light-touch mining. “It sounds like I'm helping you guys brainwash,” he said. “All we got to do is go pick them up? It can't be like that.”

It isn't. Scientists have discovered in recent years that deep-sea life where DeepGreen would mine persists on timescales that dwarf human existence. Nodules form over tens of millions of years, accumulating metallic elements that precipitate from seawater. They are worlds unto themselves: a single nodule can be habitat for scores of species, including millennia-old corals, tubeworms and sponges that incubate the eggs of ghost octopuses. “Nodules are absolutely central to the functionality of this ecosystem,” says Diva Amon, a deep-sea biologist and scientific associate at the Natural History Museum in London. There's growing evidence that beaked whales dive 2.5 miles to this region of the abyss to forage for prey, holding their breath all the while. Half the larger species there [depend on nodules](#), researchers say, and only a [fraction of those animals](#), have so far been discovered.

But DeepGreen executives in public statements tend to focus on the hazards of mining on land while minimizing the harm underwater, [as Barron did in April appearance on Bloomberg TV](#). “Most of statements by DeepGreen are on biomass, not biodiversity,” says Porras, the spokesman, referring to the cumulative weight of living organisms in a given area. “This is why DeepGreen executives describe the abyssal plain as ‘one of the least inhabited places on Earth’ or ‘the equivalent of marine desert.’ ” In March, DeepGreen announced plans to go public by merging with a special purpose acquisition company, or SPAC. These lightly regulated companies carry risks for investors. But the risks here are planetary in scope, with scientists warning of the potential destruction of ocean ecosystems that play a little-understood role in the global carbon cycle and climate change.

So far DeepGreen's success with investors, who have valued its SPAC merger at nearly \$3 billion, is a sign of strength for the nascent deep-sea mining industry's case for nodules. DeepGreen's SPAC, Dallas-based Sustainable Opportunities Acquisition Corp., raised \$300 million last year and institutional and strategic investors have committed \$330 million more to the new deal. The combined business, which will be renamed [The Metals Company](#), will be headquartered in Canada. But environmentalists are moving to challenge the merger. In a June 1 letter to the U.S. Securities and Exchange Commission, an environmental group called Deep Sea Mining Campaign asked for an investigation into what it says is a failure to properly disclose potentially catastrophic environmental risks of seabed mining in the SPAC's [S-4 registration statement](#). DeepGreen's drive to brand itself as a company that would mine with what it calls “the lightest planetary touch” is a test case for disputes between investors, regulators and scientists over how to navigate the potential for untested climate solutions. The company seems to know the allure of guilt-free mining. As Barron [put it](#) to an interviewer in 2019, “Whether you invest in a company like DeepGreen or not, everyone's a sucker for the story.”

DeepGreen is one of just 22 entities with permission to prospect for minerals in the deep ocean. It's the only one soon headed to public stock markets. Licenses are issued by the [International Seabed Authority](#), an autonomous and obscure United Nations organization headquartered in Kingston, Jamaica. The agency is charged with regulating deep-sea mining while, contradictorily, ensuring protection of the marine environment. The ISA is now finalizing regulations that would permit DeepGreen and other companies to apply for licenses to begin mining the seabed. Through a partnership with three small and impoverished South Pacific island states—Nauru, Tonga and Kiribati—DeepGreen holds prospecting rights over nearly 90,000 square miles in a vast stretch of the Pacific Ocean between Hawaii and Mexico called the Clarion-Clipperton Zone.



Barron, International Seabed Authority Secretary General Michael Lodge and DeepGreen Chief Ocean Scientist Greg Stone aboard the Maersk Launcher in 2018. Photographer: Sandy Huffaker/AP Images for DeepGreen Resources

In an extraordinary display of DeepGreen’s influence, Nauru broke UN protocol by ceding its seat to Barron at a February 2019 meeting of the ISA Council in Jamaica, allowing an executive to address the organization’s policymaking body. “Personally, I get very uncomfortable when people describe us as deep-sea miners,” Barron told the delegates, who appeared dumbfounded by the breach of procedure. “We are in the transition business. We want to help the world transition away from fossil fuels with the smallest possible climate change and environmental impact.” It’s a message Barron uses frequently as he travels the world to promote “metals for the future.” One day recycling will dramatically reduce demand for mining new minerals, but not until “we build up a stock of billion new batteries,” as he told the ISA delegates. Part of DeepGreen’s objective is just getting this message out. “While we’ve got a great team of mining people and oil and gas people, this is a communication challenge,” Barron told me at that ISA meeting. “That’s why we hired a head of brand.”



Barron speaks in 2018 with then Nauru President Baron Waqa and others aboard the Maersk Launcher about DeepGreen's plans. Photographer: Sandy Huffaker/AP Photo for DeepGreen Resources

Scientists, environmentalists, the European Parliament, and some national governments are calling for a moratorium on deep-sea mining until its ecological consequences can be better understood. In

March, BMW AG, Google, Samsung Electronics Co. and Volvo Cars endorsed the moratorium and pledged not to use deep-sea minerals. Demonstrations against ocean mining are also heating up. A Greenpeace vessel in April intercepted a DeepGreen ship conducting mining research in the middle of the Pacific. At the June G-7 meeting in Cornwall, England, hundreds of surfers paddled out to demand a ban on seabed mining. On Thursday, in the hours after this story was published, more than 300 ocean scientists and marine experts from 44 countries released a [statement](#) calling for a “pause” in seabed mining “until sufficient and robust scientific information has been obtained” on the environmental impacts. An even stronger call for a mining moratorium came from the [Deep Sea Conservation Coalition](#), an alliance of 80 environmental groups, which credited *Bloomberg Green*’s investigation for “underlining the risks posed by the emerging deep-sea mining industry.”

Opponents, however, face the dilemma of confronting a company that says it cares about sustainability. “We are with @Greenpeace—we must protect the oceans,” DeepGreen wrote on Twitter in 2019. “If the data shows polymetallic nodules are not a safer solution for the planet and humans, @Greenpeace can count on us to stand with you to stop #DeepSeaMining.” Arlo Hemphill, a senior oceans campaigner with Greenpeace, calls this “next-level gaslighting.” Greenpeace also says it has concerns about DeepGreen’s business. “They’ve thrown on a green cape and say all the right words but their sole intention is to make money,” says Hemphill. Before deleting his LinkedIn profile, former DeepGreen environmental scientist Jason Michel Smith wrote a post in late 2020 warning people not to trust the company.

He said he was fired after conflicts with executives and “combating an anti-science private agenda on the daily.” Recent attempts to reach him were unsuccessful. “The company has minimal respect for science, marine conservation, or society in general,” Smith wrote. “Don’t let them fool you. Money is the game. It’s business in their eyes, not people or the planet.” Porras of DeepGreen says the company retained a third party to independently investigate Smith’s allegations, an inquiry in which he says Smith declined to participate. “While the report is privileged and cannot be publicly shared, the statements have been independently confirmed to be without merit.”



A Greenpeace vessel in April intercepted a DeepGreen ship in the middle of the Pacific Ocean.
Source: Marten van Dijk/Greenpeace

At 54, Barron sports the look of an aging rock star—long hair, graying beard, and a unvarying uniform of jeans, boots, T-shirt and leather jacket worn whether addressing the ISA Council or taking an [Instagram selfie](#) with surfing champion Kelly Slater holding pair of polymetallic nodules.

The SPAC registration statement describes Barron as a “seasoned entrepreneur with a track record of building global companies in battery technology, media and future-oriented resource development.” His mining career started with a lucky investment. In 2001, Barron founded Adstream, an Australian ad tech company that would grow to \$100 million in annual revenues, according to the registration statement. That same year he invested in Nautilus Minerals, an early deep-sea mining company headed by fellow Australian David Heydon. “I originally invested in Nautilus not because I knew mining but because I just sort of thought it sounded cool, and I sold out at the right time,” Barron told me in Kingston.

In 2017, the trade publication Mining.com [reported](#) that Barron walked away with \$31 million on his \$226,000 stake after the Canadian-registered company went public in a reverse merger in 2006. Heydon departed in 2008, and then three years later founded DeepGreen in Canada. Other Nautilus investors didn’t fare as well. The company filed for bankruptcy in February 2019 after burning through \$686 million without mining an ounce of metal. That left the poverty-stricken South Pacific island nation of Papua New Guinea out the [\\$120 million it had invested](#) in a joint venture with the company to excavate hydrothermal vent fields for copper, gold and silver. Barron’s background with DeepGreen also includes murky fundraising relationships. Between 2015 and 2020, for example, DeepGreen raised at least \$75 million by selling securities directly to private investors, Canadian and U.S. securities filings show. In a December 2017 offering, DeepGreen sold \$17.6 million worth of securities and paid a sales commission of \$252,288 to a company called Victorem Ventures Limited. The same company also earned a \$102,500 finder’s fee on a securities DeepGreen offered in the U.S. in late 2017, according to an SEC [filing](#).

The Canadian securities filing, which was signed by Barron as DeepGreen’s CEO, declared that Victorem had no relationship to any DeepGreen insider. But corporate records in the U.K. [show](#) that Barron incorporated a company called Victorem Ventures Limited in 2015 and served as the sole director and shareholder until it was dissolved in October 2018. The Canadian securities filing listed Victorem’s address as a villa in Dubai, but did not provide a phone number or email address. DeepGreen subsequently submitted an amended filing that used Barron’s DeepGreen email address and his U.K. phone number as contacts for Victorem. DeepGreen’s Porras says that while Barron was CEO of the startup when the securities were sold, he didn’t hold that position when Victorem performed the services that earned it the commission and finder’s fees. The registration statement says Barron served as a strategic advisor to DeepGreen from 2013 to 2017.

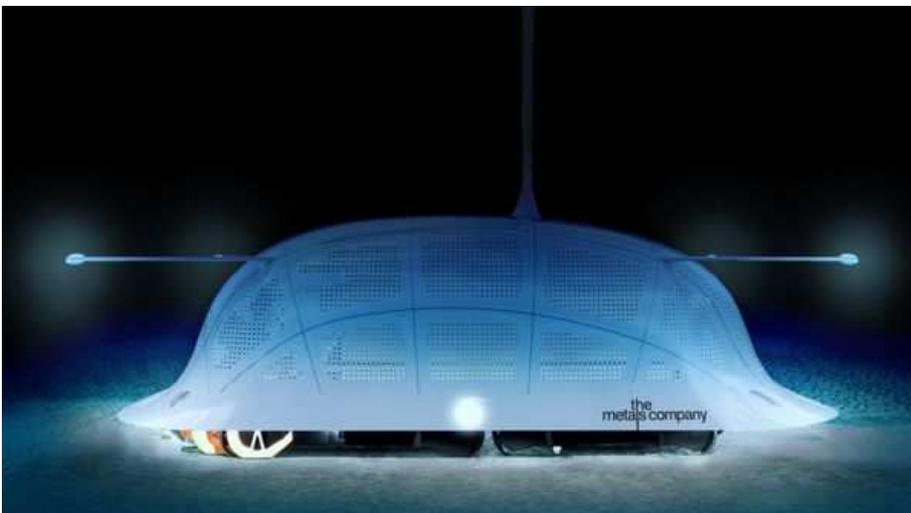
As DeepGreen tries to go public, it has mounted a vigorous campaign to raise funds. In the SPAC registration statement, DeepGreen pegged total capital costs for a single deep-sea mining operation and an onshore metals processing plant at \$10.6 billion with annual operating costs of \$1.8 billion after 2030. Barron, who earns a \$565,000 salary running DeepGreen, which has 24 employees and contractors, would own up to 6.9% of the merged company’s shares. Matthew Gianni, a founder of the [Deep Sea Conservation Coalition](#), fears the SPAC could unleash a wave of capital investment in deep-sea mining. He notes that an independent unit of shipping giant A.P. Moller-Maersk A/S holds a significant stake in DeepGreen. The company did not respond to a request for comment. “Barron is a wildcatter who may provide the political and financial impetus for the big players to jump into deep-sea mining,” says Gianni, a longtime observer of the ISA.

When the UN Convention on the Law of the Sea established the ISA in 1994, it declared the seabed to be “the common heritage of mankind,” with rich and poor nations to share equally in any spoils of seabed mining. Previously confidential agreements between DeepGreen and Nauru and Tonga show the company’s influence over the countries. Mining contractors must secure sponsorship from an ISA member state that is required to exert “effective control” over the contractor and is responsible, along with the ISA, for its compliance with environmental regulations. Sponsoring states in turn can collect royalties and fees. Most sponsoring states work with government-run

mining contractors or companies headquartered in their countries and controlled by their citizens. Western startups like DeepGreen, however, have also sought sponsorship from tiny countries that have access to mining concessions the ISA reserves for developing nations. Over the past decade, mining concessions from South Pacific microstates have traded hands among a small coterie of Barron associates, corporate filings and ISA records show.

One of DeepGreen's mining contracts is sponsored by Tonga, which has a population of 106,000. Tonga's sponsorship agreement with DeepGreen's wholly owned subsidiary, TOML, was previously held by Nautilus and before that by a company controlled by Heydon, the former Nautilus CEO. The [sponsorship agreement](#), which was disclosed in the SPAC registration statement, allows DeepGreen to unilaterally assign the mining contract to another party and declares the agreement is governed by Canadian law. Any disputes must be arbitrated in British Columbia, 5,700 miles from Tonga. The nation of Nauru is involved in a similar arrangement with DeepGreen. The license was originally acquired by a Nauruan-registered company called NORI, founded in 2008 by Heydon before subsequently being bought by Nautilus. The cost of securing the mining concession in 2011 was a \$250,000 fee paid to the ISA. DeepGreen became the owner of NORI the same year.

DeepGreen now estimates it will earn \$95 billion from one area of the Nauru concession over 23 years of production, according to the registration statement. The startup expects to pay 7.6% of those revenues in royalties to Nauru and the ISA. Just as was the case in Tonga, the [sponsorship agreement](#) between DeepGreen and Nauru shows the government exercises little control. It permits DeepGreen to transfer the mining contract to another entity "without reason and without prior consultation." The sponsorship agreement also bars Nauru from nationalizing NORI or expropriating its assets and requires the government to guarantee the transfer overseas of NORI's earnings. "DeepGreen's subsidiaries' local operations are regulated by our sovereign partners under their national laws," Porras says. "Our subsidiary companies have negotiated and agreed with our relevant partners to a neutral jurisdiction to govern certain relationships for the benefit of both parties.



Danish architecture firm Bjarke Ingels Group designed DeepGreen's seafloor robot.
Source: The Metals Company

[Nauru](#) is an 8-square-mile island with a population of 11,000 people that had been ravaged from decades of phosphate mining overseen by the U.K., Australia, and New Zealand. Long plagued by corruption, Nauru's revenues chiefly come from hosting an Australian refugee detention center, though that income has [fallen](#) dramatically recently. DeepGreen's last round of funding exceeded Nauru's GDP. The government of Nauru did not respond to a request for comment. What on Earth? "How could a small country like that have effective control over a multinational company?" asks Pradeep Singh, who studies the ISA as a research associate at the [Institute for Advanced Sustainability Studies](#) in Potsdam, Germany. He notes that Nauru and Tonga could be potentially liable if a

seabed mining disaster happens on their watch. “What wasn’t really anticipated by the Law of the Sea was that multinational companies would go out on their own and partner with the developing countries.”

That’s where DeepGreen’s promotion of its robotic nodule collector might offer reassurance. A new rendering shows a [sleek design](#) created by a Danish architecture firm. The curvy DeepGreen collector resembles a cross between an Apple computer mouse and a Roomba, in stark contrast to mining machines from rival contractors that roll across the seabed on tank-like treads. Porras says the collector is under construction and testing is expected to begin later this year or early 2022. “Directing a jet of seawater across the tops of the nodules, the collector gently frees them from sediment and lifts them on compressed air bubbles to a production vessel at the surface,” DeepGreen says on its website. The reality would likely be far harsher. All marine life on nodules would be killed, says Amon, the biologist. Microbial life in the sediment would also be in peril. “The bacteria are probably one of the most important components of this ecosystem,” she says. “Even if they were able to delicately remove the sediment, that is still where the majority of the animals live and constitute a massive part of the seabed’s biodiversity, including many rare species.” “This is completely unproven technology,” Amon says. “It seems like science fiction.”

Saonu asks court to stay environment permit

By KARO JESSE, June 24, 2021, The National

MOROBE Governor Ginson Saonu has asked the National Court to stay an environment permit granted for the Wafi-Golpu project pending the determination of the judicial review case on it. Saonu and the Morobe government were allowed to review the decision by Minister for Environment, Conservation and Climate Change Wera Mori and managing director of Conservation and Environment Protection Authority (Cepa) Gunther Joku which approved the issuing of the environment permit under Section 65 of the Environment Act 2000. Soanu through his lawyer Jason Rotep asked the court to temporarily stay the permit while it determined whether it was issued in compliance of the law and careful assessment of the risk and management of risk that might impact the biodiversity on land and sea.

Deputy Chief Justice Ambeng Kandakasi will make a ruling on the case on first week of next month. Saonu and the Morobe government are claiming that the decision by the State to approve the environment permit was made ultra vires, was a denial of natural justice, bias and unreasonableness. They claimed that there was lack of proper consultation between the state and landowners on the risk and impact of the Deep Sea Tailing Placement (DSTP) on the environment on land and sea. “One of the grounds the plaintiffs were relying on is the production of documents (Environmental Impact Studies)” Rotep said. “The requested information is not produced. “If these documents are provided, the defendants then would be in a better position to assess safety standards in regards to environment concerns on disposing of mine tailings”.

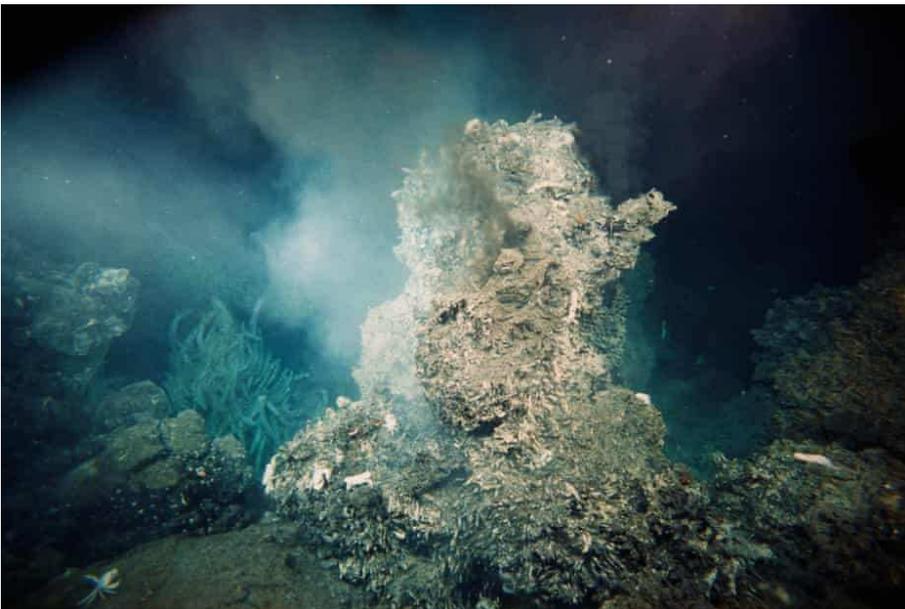
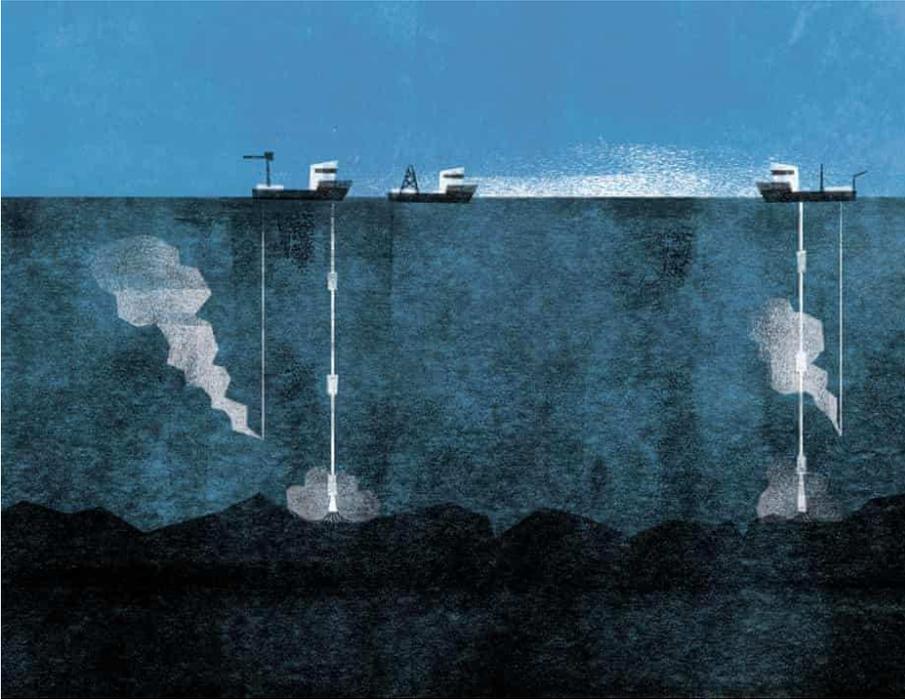
Pacific plunder

Mining’s new frontier: Pacific nations caught in the rush for deep-sea riches

Miners are pushing hard to extract metals from the ocean floor, but there is mounting concern about what it might do to the marine environment. By Kate Lyons, The Guardian, 23 Jun 2021

Travel thousands of metres below the surface of the ocean, and you reach the seabed. Pitch black and quiet, it is largely unexplored, untouched, unknown. What is known is extraordinary. The landscape at the bottom of the sea is as varied as the earth surface: 4,000m (13,000ft) down, abyssal plains stretch for miles like deserts; there are trenches large enough to swallow the Earth’s largest

mountains; venting chimneys rise in towers like underwater cities; seamounts climb thousands of metres. Hot thermal vents – believed by some to be the places where all life on Earth started – gush highly acidic water at temperatures of up to 400C, drawing in an array of creatures.



Tiny crabs, tubeworms, and other sea life live next to a hot hydrothermal vent. The heat and minerals expelled by the vent allow these creatures to survive without sunlight at the ocean's floor. Photograph: Ralph White/Getty Images

So little is known about what happens this far under the sea that in the 25 years following the discovery of the hydrothermal vents, an average of two new vent species are discovered every month. They include the yeti crab, a ghostly white crustacean with silky-blond bristles on its claws that give it a resemblance to the Abominable snowman. Others discovered in the last 20 years include the beaked whale and the Greenland shark, which dives to around 1,200m and has a lifespan of close to 400 years, [making it one of the world's longest-living organisms](#). "Every time you go down into the deep, you see something incredible and often new," says Diva Amon, a deep sea biologist and fellow at the Natural History Museum in London who has undertaken 15 deep sea expeditions.

“There’s a bone-eating worm called *Osedax*, which lives on the bones of dead whales in the deep ... Another special one was ... an anemone whose tentacles were 8ft long.”

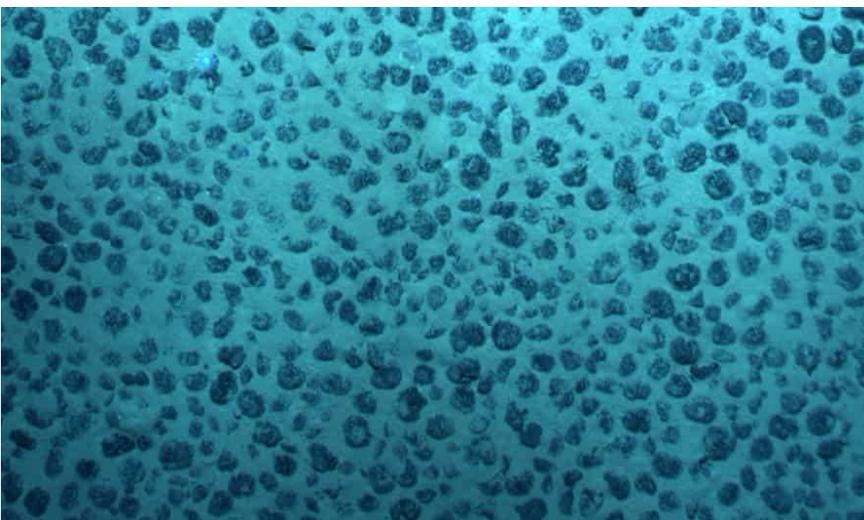


Greenland shark, which has a life span of close to 400 years. Photograph: Dotted Zebra/Alamy

Anna Metaxas, professor of oceanography at Dalhousie University in Nova Scotia, Canada, recalls the first time she travelled to the deep sea, in waters near the Bahamas. “The most spectacular part of that dive was the bioluminescence. Because it gets dark at 1,000m they all light up, they all flash. I was in a submersible that had a plexiglass sphere, it was like flying through space.”

Mining’s new frontier

Ninety percent of the ocean – and 50% of the Earth’s surface – is considered the deep sea (areas deeper than 200m). Only 0.0001% of the deep seafloor has been investigated. Doing so is perilous, technically challenging and expensive. But despite these obstacles, companies have set their sights on the seabed as the new frontier for mining. Since 1982, the International Seabed Authority (ISA), which is charged with regulating human activities on the deep sea floor, has issued 30 contracts for mineral exploration, taking in an area of more than 1.4m sq km. Most of these sites are in the Pacific Ocean, in the Clarion-Clipperton fracture zone (CCZ). In particular, companies have their eyes on polymetallic nodules – bundles of ore that resemble potatoes, which litter the surface of the deep sea and are rich in manganese, nickel, cobalt and rare earth metals. The nodules are up to 10cm in diameter and are thought to form at the staggeringly slow rate of just a few centimetres every one million years.



Polymetallic nodules, which are rich in manganese, nickel, cobalt and rare earth metals are seen on the seabed. Photograph: GSR/Reuters

“A battery in a rock,” is how DeepGreen, one of the big players in the nascent industry describes the polymetallic nodules. It touts deep-sea mining as a less environmentally and socially damaging alternative to terrestrial mining, and says it is crucial for affecting a transition to a greener economy, with the nodules containing the minerals needed for the batteries used in electric vehicles. “Society has an urgent, growing need for battery metals to enable a full transition to clean energy and electric vehicles. We believe that polymetallic nodules are the cleanest source of these metals, with by far the lightest planetary touch,” says the company on its [website](#). Its proposal is to dispatch ships to the CCZ and suck up the nodules through long pipes that stretch to the seabed. The nodules would be processed on the ship, with excess sediment pumped back into the sea. So far, licenses in international waters have only been issued for exploration and not mining, but the ISA is working on a regulatory framework for mining of the deep sea, with DeepGreen saying it will be ready to begin the work by 2024.



Vehicles used in a failed deep sea mining project off the coast of Papua New Guinea. Photograph: Nautilus minerals

Our largest ecosystem

There are concerns about the environmental impact deep sea mining could have on marine ecosystems, particularly given how little is known about them and the very slow pace of reproduction and growth at those depths.



Osedax mucofloris, which feeds on the bones of dead whales. Photograph: The Natural History Museum/Alamy

An experiment in 1978, which involved the extraction of nodules from the seabed in the CCZ, pointed to how long-lasting the damage can be. The area was revisited in 2004, and researchers found the tracks made by mining vehicles 26 years earlier were still clearly visible on the seabed. There was also a reduced diversity of organisms in the disturbed area. “You are talking about the destruction of the habitat on the seafloor. Any area you are mining will be destroyed,” says Duncan Currie, an international lawyer who has worked in oceans law for 30 years. He represents the Deep Sea Conservation Coalition which is calling for a moratorium on deep sea mining. Amon was part of a project that conducted baseline surveys in the area of the CCZ that the UK has a licence to explore for potential mining.

“As part of the work we were doing out there, we found that of the megafauna, the larger animals, more than half of them were completely new to science, and more than half of them relied on the nodules as a surface to attach to. Things like corals, sponges, anemones – they actually need the nodules. So potentially mining in that area could have quite a drastic impact.”

“It’s also our largest ecosystem so it provides about 96% of all habitable space on earth,” says Amon. “I think most people still assume that that space is just sort of empty or there’s not a lot happening. But actually, it couldn’t be further from the truth, the deep ocean is a vast reservoir of biodiversity.”



Gigantopelta aegis, a species of deep sea snail that lives on hydrothermal vents. Photograph: GeoMar

“The deep sea has a PR problem,” says Amon. “It’s not something that people think about. There are some cute things, but there aren’t adorable pandas, but that doesn’t mean that those species aren’t important.” Other environmental concerns range from worries that noise pollution will interfere with deep sea species’ ability to communicate and detect food falls, increased temperature from drilling and vehicle operation, materials being discarded and heavy vehicles crushing seabed organisms and compacting the seabed. Most concerning, Currie says, is the potential impact of sediment plumes. After the minerals are processed on ships, the proposal is to return the non-useful sediment into the ocean via long pipes, or risers, depositing them at a depth of 1,500m.

“The return sediment plume will be almost 24/7 – a continuous plume pumped into the ocean. No one has any idea what it will do: will it go up, go down? Will it interfere with the breeding of squid? We know fish migrate up and down, will it affect that? It’s incredibly important and we know almost nothing about it,” he says.

The deep sea has a PR problem... there aren’t adorable pandas, but that doesn’t mean that those species aren’t important. *Diva Amon*



A mullusc photographed by the US National Oceanic and Atmospheric Administration. Photograph: NOAA Office of Ocean Exploration and Research/PA

DeepGreen disputes this saying its modelling and experiments show that the spread of the plumes is far smaller and the amount of sediment injected into the mid-water column is far less than is often cited by campaigners. “The anti-DSM [deep-sea mining] community consistently catastrophises and misrepresents the impact assessments that don’t support their narrative,” said a spokesperson for DeepGreen, who added “we welcome and share many of the environmental concerns about the impact of nodule collection on the marine environment”. “Our goal is to make sure that our activity does not cause any large-scale disruptions to ecosystem services and that we minimize the risk of biodiversity loss. That’s why we have partnered with the world’s leading academic and research institutions to baseline and better understand the entire water column, from seabed to surface.”



Deep-sea mining off the Papua New Guinea coast. Photograph: Nautilus minerals

Concerns in the Pacific

Caught up at the centre of this huge push for a new extractive industry are Pacific island nations. Nations must sponsor companies that want to explore for minerals and among the countries that have issued licences are the tiny Pacific Island countries of Tonga, Cook Islands, Nauru and Kiribati. DeepGreen holds rights to the exploration contracts sponsored by the Pacific countries of Nauru, Tonga and Kiribati and is one of the operators making the most noise about starting commercial mining in the near future. DeepGreen, a Canadian firm with an Australian chief executive, is in

the process of being acquired by the Sustainable Opportunities Acquisition Corp. Once merged the company will be known as The Metals Company. The relationship between DeepGreen and Nauru is of particular concern to observers of deep-sea mining. Observers have warned about an imbalance of power between the company and the tiny nation, which has a population of around 12,000.

Currie recalls an incident at the 2019 International Seabed Authority meeting in Kingston, Jamaica, when Gerard Barron, the Australian chief executive of DeepGreen (and now boss of The Metals Company) spoke for Nauru. “[There was] surprise, some shock among some of the seasoned NGO delegates. It’s just not done,” he said. “Everybody was taken aback,” says Metaxas of the incident. “That doesn’t happen that a contractor takes the chair of a member state.” A spokesperson for DeepGreen said that “Mr Barron was attending the ISA meeting as a member of the Nauruan delegation and Nauru chose to offer him the opportunity to address the Council.... There is nothing uncommon about this practice.” It said that on the same day, Belgium allowed the chairman of a company that holds two exploration contracts the opportunity to address the council.



CEO of DeepGreen (and soon-to-be CEO of The Metals Company) Gerard Barron, right, presenting Nauru’s former president, Baron Waqa, with a polymetallic nodule. Photograph: Twitter/ The metals Company

“The Pacific nations I think are particularly vulnerable,” says Metaxas. “They have vulnerable economies, this is an opportunity for an economic boom in a country if it’s done right, if it’s successful. I’m sure it’s quite tempting, but I sure hope that there’s also some advice about how much to risk and how to manage it all.” There are still questions to be resolved about whether the company or sponsoring state would be liable in the event of environmental damage or other harm. DeepGreen says that its subsidiary NORI has indemnified Nauru for liability under both the sponsorship agreement and its Nauru’s International Seabed Minerals Act. However, according to an advisory opinion issued by the International Tribunal for the Law in 2011, states can still be liable if there is a “causal link between the failure of that state to meet its responsibilities and the damage

caused by the sponsored contractor.” Some have voiced concerns about the capacity of small developing nations to monitor the work done by their partner companies, which could lead to liability.

“If Nauru is the sponsoring state, they have obligations under the law of the sea convention to exercise due diligence, they have to make sure that their contractors operate appropriately and if they don’t do that work properly, international law says they are liable,” says Currie. But Ralph Regenvanu, the opposition leader of Vanuatu, says “there’s absolutely no capacity” of states like Nauru to do this monitoring. “We’d be interested to know what are the measures they’re taking, what are the safeguards they’re taking.”

Pacific peoples are indigenous peoples... Pacific peoples’ views towards our Earth, our resources, are very special ones. *Ralph Regenvanu*

In 2014, when he was minister for lands and natural resources, Regenvanu led a months-long consultation on the subject of deep sea mining in Vanuatu. “People thought basically it was too early to do anything, we shouldn’t do anything. There were calls even then for a moratorium,” he said. Vanuatu’s government, along with the prime ministers of Fiji and Papua New Guinea, have called for a regional moratorium on deep-sea mining while more can be learnt about potential environmental harms and how to protect against them. “Pacific peoples are indigenous peoples. All countries of the Pacific have some of the highest rates of indigenous people as part of population in the whole world. Pacific peoples’ views towards our Earth, our resources, are very special ones,” says Regenvanu.

What next?

Before mining can commence, the ISA needs to release a code for the exploitation of the deep sea. This was due to be released and adopted in July 2020, but was delayed due to Covid. The ISA announced this week that it aimed to resume face-to-face meetings this year. “It is not implausible to expect that the ISA will be in position to finalise the code by 2023,” said the DeepGreen spokesperson, who added the company expects submit their environmental impact statement in 2023 for review in the hope of beginning commercial mining in 2024. Meanwhile, others are urging caution. This month the EU parliament advised the European Union to promote a moratorium on deep seabed mining until its environmental impacts could be better understood and managed.

But DeepGreen’s boss, Gerard Barron, has suggested that if the ISA moves slowly on developing a regulatory framework, the company might invoke the so-called two-year rule, which allows a country sponsoring a mining contractor to notify the ISA that the company intends to begin mining. The ISA then has two years to finalise the regulations for deep sea mining. If it is unable to do so, the ISA is required to allow the contractor to begin work under whatever regulations are in place at the time. “It’s something that’s consistently under review – it’s not off the table, that’s for sure,” Barron told [China Dialogue Ocean](#) about triggering the two-year rule. In response to the Guardian’s questions on the subject, DeepGreen said the two-year rule is “only available to sponsoring states to use, not contractors like DG, which cannot invoke it” but that it was a “a valid option available to all member states of the International Seabed Authority.”

(Source: <https://www.theguardian.com/world/2021/jun/23/minings-new-frontier-pacific-nations-caught-in-the-rush-for-deep-sea-riches>)

Judge to hear appeal to stay environment permit

June 23, 2021, The National

DEPUTY Chief Justice Ambeng Kandakasi will today hear an urgent application by Morobe governor Ginson Saonu and the provincial government seeking to stay the environment permit issued for

the Wafi Golpu project. Saonu was granted leave by the court on March 29 to seek a review of the Government decision to issue the permit. It was approved by Minister Wera Mori and the managing director of the Conservation and Environment Protection Authority Gunter Joku under section 65 of the Environmental Act 2000. Saonu's lawyer Jason Rotep submitted that there were preliminary issues yet to be resolved and that it was necessary to stay the decision until the determination of the case. Rotep argued that since the environment permit was issued, the special mining lease (SML) could be issued anytime. He also pointed out that the section of the Environment Act 2000 which was used to issue the permit had in fact been amended in 2014. But Solicitor-General Tauvasa Tanuvasa told the court that the amended Environment Act 2014 was yet to be gazetted, and the principle Environment Act 2000 was still in effect. Justice Kandakasi said it was important to note that the issue was related to the people, environment and the biodiversity.

Bergbau am Meeresboden Forscher finden Hinweise auf zahllose unbekannte Tiefsee-Arten
Mangan, Kupfer, Kobalt: Am Meeresboden schlummern tonnenweise Bodenschätze, doch ihr Abbau birgt Umweltrisiken. Eine Studie zeigt, wie groß die Artenvielfalt in der Tiefsee ist – und wie wenig wir über das Leben dort wissen. SpiegelOnline, von Christoph Seidler, 22.06.2021



Tiefseegarnele am Ozeanboden, Foto: Senckenberg / Nils Brenke

Ein wenig erinnerte das Gerät, das da über den Boden des Pazifiks kroch, an eine Pistenraupe, wie man sie aus Skigebieten kennt. In viereinhalb Kilometern Wassertiefe, irgendwo zwischen Mexiko und Hawaii, war das 9 mal 4 mal 5 Meter große Kettenfahrzeug »Patania II« im Mai auf der Suche nach interessanten Rohstoffen. Gesteuert wurde das Gefährt vom norwegischen Spezialschiff »Normand Energy« aus. Mithilfe einer Hydraulikvorrichtung nahm der sogenannte Kollektor kleine metallische Brocken vom Ozeangrund auf, die ein bisschen aussahen wie Miniatur-Pferdeäpfel. Die Knollen enthielten Mangan, aber auch andere wertvolle Metalle wie Kupfer, Nickel und Kobalt. Über Millionen von Jahren sind sie aus Metallverbindungen, die ursprünglich im Meerwasser und im Porenwasser des Sediments gelöst waren, gewachsen. An die Oberfläche befördert, könnten sie [eine lukrative Ressource](#) für die immer rohstoffhungrigere Weltwirtschaft sein.

Seit Jahrzehnten arbeiten Rohstoffsucher daran, diesen Schatz zu heben. Aktuell können die Vorkommen aber nur erkundet werden, dafür ist eine Lizenz der Internationalen Meeresbodenbehörde nötig. Regeln und Erlaubnisse für den Abbau gibt es noch nicht – auch wenn Unternehmen wie die kanadische [Metals Company](#) bekunden, großes Interesse an der Förderung zu haben. Deutschland gehört wie China, Russland, Frankreich oder Südkorea zu den Staaten, die eine Erkundungslizenz im Bereich der sogenannten Clarion-Clipperton-Zone im Zentralpazifik besitzen. Allein im deutschen Lizenzgebiet werden Manganknollen mit einem Trockengewicht von 600 Millionen Tonnen [vermutet](#).



So sieht eine der begehrten Manganknollen aus, Foto: Caroline Seidel/ dpa

Auch ein belgisches Erkundungsgebiet gibt es. Dort und im deutschen Bereich wurde der Kollektor nun ausprobiert, auf einer Fläche mit der Größe von insgesamt acht Fußballfeldern. Teil der Erkundungen waren auch Untersuchungen zu den Umweltauswirkungen dieser Erkundungen. Diese wurden vom europäischen Projekt »MiningImpact« geleitet, an dem Forscherinnen und Forscher aus 29 europäischen Instituten teilnehmen.

»Ein solcher Test ist notwendig, um die Folgen eines möglichen industriellen Abbaus auf die Meeresumwelt und die Biodiversität der Tiefsee unter realitätsnahen Bedingungen besser abschätzen zu können«, erklärt die Biologin Annemiek Vink von der zuständigen Bundesanstalt für Geowissenschaften und Rohstoffe (BGR) in Hannover. Sie war auf einem weiteren norwegischen Schiff, der »Island Pride«, genau damit beschäftigt. Unter anderem wurden dabei zwei ferngesteuerte Tauchroboter, ein autonomes Unterwasserfahrzeug sowie 50 Sensoren zur Messung der Sedimentkonzentration in der Wassersäule eingesetzt.

Wissenslücken so groß wie Tiefseegräben

Kritisch beäugt wurde die Doppel-Expedition von [Greenpeace](#), die Organisation war mit ihrem Schiff »Rainbow Warrior« [vor Ort](#). Umweltschützer protestieren [seit Jahren](#) gegen Vorarbeiten für den Tiefseebergbau – und verweisen darauf, wie wenig die Menschheit bisher über die Gebiete am Meeresgrund weiß. Und das ist tatsächlich weit mehr als ein Aktivistenlogan: Es ist die Tatsache. Für große Teile der Weltmeere gilt, dass wir gar nicht wissen, wie sie im Detail aussehen – rund 80 Prozent des Ozeanbodens [sind bis heute nicht kartiert](#). Dazu kommt, dass die Menschheit auch von den Lebensformen der Tiefsee kaum eine Ahnung hat. Das wird noch einmal deutlich, wenn man sich eine brandneue Forschungsarbeit ansieht, die ein europäisch-amerikanisches Team gerade veröffentlicht hat.

Die Gruppe hatte sich mehr als 300 Sedimentproben aus potenziellen Abbaugebieten für Manganknollen im Pazifik angesehen. Dabei suchte sie gezielt auch nach sogenannter Umwelt-DNA. Das sind Erbgutabschnitte, die nicht direkt aus Organismen extrahiert werden, sondern aus Umweltprouben wie Wasser oder Sedimenten. So lässt sich die biologische Vielfalt eines Ökosystems ermitteln, ohne all dort vorkommenden Arten zu kennen. Die Forscher arbeiten dabei wie Kriminaltechniker an einem Tatort: Sie sichern Spuren von allen Lebewesen, die irgendwann einmal über dieses Stückchen Ozeangrund gekrochen sind – und dort ihren genetischen Fingerabdruck hinterlassen haben.

Das Ergebnis der aktuellen Untersuchungen: Ein Großteil der Tiefseefauna in der Clarion-Clipperton-Zone ist offenbar bis heute unentdeckt: Mindestens 60 Prozent der am Meeresboden lebenden Foraminiferen, das sind Einzeller mit Schalen, sowie ein Drittel aller Eukaryoten, also Lebewesen mit Zellkern, sind noch unbeschrieben. »Wir konnten außerdem darlegen, dass die Vielfalt in den potenziellen Seebergbaugebieten im Vergleich zu anderen Tiefseegebieten besonders hoch ist«, sagt die Meeresforscherin Angelika Brandt vom Senckenberg Forschungsinstitut und Naturmuseum Frankfurt.



60 Prozent der am Boden lebenden Foraminiferen in der Clarion-Clipperton-Zone sind noch unbeschrieben; Foto: Franck Lejzerowicz

Brandt ist eine der Co-Autorinnen der neuen Forschungsarbeit. Sie plant gerade ihre nächste Expedition, es wird ihre 30., als sie mit dem SPIEGEL über ihre Erkenntnisse spricht. Unterhält man sich mit der Forscherin, spürt man ihre Begeisterung für die biologische Vielfalt der auf den ersten Blick so lebensfeindlichen Tiefsee. Nur wenig über null Grad ist das Wasser dort kalt, der Druck Hunderte Mal höher als an der Erdoberfläche. In der Tiefe landet kaum Energie, die Sonne strahlt längst nicht so weit, Futter ist rar. Und doch floriert das Leben – mit einer wohl größeren Artendiversität als an Land.

Deutschland hat Verlängerung der Lizenz beantragt

Nach Angaben der BGR wurden bei der Internationalen Meeresbodenbehörde bisher insgesamt 18 Verträge zur Exploration von Manganknollen, fünf für Mangankrusten und weitere sieben zur Erforschung von Massivsulfiden vergeben. Die deutsche Explorationslizenz für die Manganknollen läuft in vier Wochen aus, eine Verlängerung ist beantragt – aber auch wegen Corona noch nicht entschieden. Ob aus der Erforschung irgendwann auch einmal eine Förderung wird, wird dann die Bundesregierung befinden müssen. Als Träger einer Erforschungslizenz hätte Deutschland auch das Vorkaufsrecht für das Recht zur Ausbeutung. Doch dafür fehlen, zumindest bisher, die Interessenten. Auch das muss man einmal sagen: Tiefseebergbau ist technologisch anspruchsvoll, teuer – und wegen der ökologischen Fragen für die Firmen womöglich auch mit einem Reputationsrisiko verbunden.

»Die Bundesregierung hat im Rahmen der Ratsschlussfolgerungen zur EU-Biodiversitätsstrategie die grundsätzliche Ansicht unterstützt, dass Rohstoffe in der Tiefsee so lange nicht abgebaut werden sollten, bis die Auswirkungen des Bergbaus ausreichend untersucht sind und gezeigt werden kann,

dass die marine Umwelt durch diesen nicht ernsthaft gefährdet wird«, heißt es in einer bisher noch nicht veröffentlichten Antwort der Bundesregierung auf eine Anfrage der FDP-Bundestagsfraktion, die dem SPIEGEL vorliegt. »Eine abgestimmte Position oder Bewertung der Bundesregierung bzgl. eines Moratoriums gibt es bisher nicht.«

Antwort der Bundesregierung auf eine parlamentarische Anfrage der FDP-Fraktion

Die »Frage nach einer Entscheidung für oder gegen Tiefseebergbau« stelle sich »derzeit noch nicht«, so die Regierungsbeamten weiter. »Eine abgestimmte Position oder Bewertung der Bundesregierung bzgl. eines Moratoriums gibt es bisher nicht.« Eine kategorische Absage an die Rohstoffförderung am Meeresgrund ist das aber auch nicht.

Insgesamt gibt sich die Bundesregierung aber vergleichsweise entspannt. Im Hinblick auf die Metalle Mangan, Nickel, Kupfer, Kobalt, Blei und Zink, die etwa beim Abbau von Manganknollen am Meeresboden gewonnen werden können, geht man nach eigenem Bekunden davon aus, »dass die entsprechenden Rohstoffvorkommen an Land in den nächsten Jahrzehnten nicht erschöpft sein werden. Die Gefahr, dass in absehbarer Zukunft eine Abhängigkeit von Rohstoffen aus dem Tiefseebergbau entsteht, sieht die Bundesregierung deshalb nicht.«

»Wir wollen keinen Tiefseebergbau um jeden Preis.«

Olaf in der Beek, FDP-Bundestagsabgeordneter

Der FDP-Abgeordnete Olaf in der Beek nennt die Einschätzung Bundesregierung, dass vorerst nicht von einer Rohstoffknappheit auszugehen sei, dagegen »fast ein wenig naiv«. Rohstoffpolitik sei auch immer geopolitisch relevant. »Deutschland und Europa laufen Gefahr, in weitere Abhängigkeiten zu geraten. Das gilt auch und vor allem im Hinblick auf die Außen- und Geopolitik Chinas, das gerade in Entwicklungsländern immer mehr Rohstoffquellen unter seine Kontrolle bringt.« In der Beek sagt aber auch: »Wir wollen keinen Tiefseebergbau um jeden Preis«. Der Schutz der Meere stehe stets im Vordergrund. »Wenn jedoch ökologisch vertretbar Rohstoffe in der Tiefsee gewonnen werden können, sollten wir diese Chance nicht ungenutzt lassen.« Ob und unter welchen Umständen es tatsächlich vertretbar sein könnte, Rohstoffe vom Ozeangrund zu holen, Forscherinnen wie Angelika Brandt und Annemiek Vink werden es mit herausfinden. Beim aktuellen Test des Kollektors »Patania II« seien jedenfalls noch keine Manganknollen an die Oberfläche gebracht worden, heißt es bei der BGR. Das Gerät habe sie einfach am Rande der Versuchsflächen aufgestapelt.

Wafi-Golpu: Parties questioning environment permit returning to court

June 22, 2021, The National

PARTIES in a judicial review case questioning the issuing of an environment permit for the Wafi-Golpu project are to return today with a statement of agreed facts so that the case could proceed. Deputy Chief Justice Ambeng Kandakasi made the order yesterday in the National Court after Conservation and Environment Protection Authority lawyer Asher Chillion moved that the case be dismissed. Chillion argued that the plaintiffs, Morobe Governor Ginson Saonu and the provincial government, had failed to comply with an order to provide a statement of agreed facts. He also said there was an issue on the legislation on which the environment permit for the Wafi-Golpu project was issued. But it was not pleaded in the motion.

The court was told that the case was based on the Environment Act 2000, which was amended in 2014. The court was also told that the the provision used to grant the permit had been repealed. Plaintiffs' lawyer Jason Rotep submitted that the only relevant legislation they came up with was the Environment Act 2000. "Based on that we filed the proceedings. And Section 65 is completely repealed, which nullified the environment permit which was already issued," Rotep said. Solicitor-

General Tauvasa Tanuvasa submitted that the issue should have been resolved in the statement of agreed facts which had been delayed by the plaintiffs. Justice Kandakasi told the parties that the issue on which was the prevailing legislation and any other issues should have been resolved in the draft statement of agreed facts.

Positive results for Adyton Resources

June 22, 2021, The National Business

THE Mayur Resources Ltd recently spun-out Adyton Resources has announced further high-grade gold intersections from its drilling programme at the Gameta gold project. It is located in the Woodlark basin which has the Misima and Woodlark projects in Milne Bay. Mayur owns 43 per cent of Adyton. Managing director Paul Mulder said: “It is developing copper/gold projects in PNG’s Pacific Rim of Fire, a prolific geological region hosting some of the world’s largest mines including Ok Tedi, Porgera, Lihir and Golpu.” Mayur Resources is an ASX-listed company focused on the development of natural resources in PNG. Meanwhile, Mayur’s diversified asset portfolio covers industrial minerals (iron, construction sands, lime and cement), energy and power generation. Its portfolio of projects, many in proximity to world-scale producing mines, are either coastal or near the coast for easy development and access to future seaborne markets.

Porgera authority plans to restore services

June 21, 2021, The National

THE newly-appointed Porgera Local Level Government Special Purposes Authority board plans to restore basic services in the Porgera Valley, says chairman Thomson Kulara. Kulara said after the swearing-in ceremony on Friday that Porgera had regressed resulting in basic services not reaching the people. For example, the Piam market and post office have been closed. Closure of services would also affect surrounding areas such as Paiela, Polotika, Taiyopoko, Hewa and Mt Kare. He said there was also an increase in crime in the Porgera and Paiela valleys. “Tribal warfare has caused more destruction (and) loss of lives,” he said. “Since 2000, there have been several ongoing tribal fights in both Porgera and Paiela, mine closures, illegal mining in the pit leading to a state of emergency in 2009.” He said the new authority board would maintain law and order in Porgera and Paiela. He said the plans were to restructure and restore normalcy, fund and empower law implementing agencies in Porgera and Paiela to bring peace in the tribal fighting areas. Enga deputy governor and Porgera Rural LLG president Leo Kuala said the authority needed to be adequately funded to carry out its functions.

Settle issues outside court: Landowner

June 21, 2021 The National Business

A landowner from the PDL 2 (petroleum development license) area of Kutubu, Southern Highlands is urging everyone to solve concerns relating to benefits outside of court. Yaferaka integrated landowner group (ILG) chairman Sakai Kei urged all recipients of the memorandum of agreement funds from the Kutubu project to reconcile. He claimed that a lot of people who were not customary landowners were receiving funds earmarked for PDL 2. The Kutubu agreement fund is a grant pledged by the State to be used for various project in the Kutubu project area. “A total of K89,579,000 for PDL 2 customary landowners like my ILG and myself have been paid to people and entities that are not impacted or affected or not owning a single customary land in PDL 2, Kutubu project,” Kei said. “There are only few I can say that are genuine landowners.” He said the Yaferaka ILG had withdrawn its membership from the Namo’ Aporo Landowners Association Inc in 2019. Kei urged

the Petroleum and Energy Department to complete the clan vetting exercise for the PDL 2 area to address disputes in economic participation.

Landowner firms to seek legal options

June 18, 2021, The National

GULF Governor Chris Haiveta says landowner companies that have invested K22 million in a casino hotel project in Port Moresby will pursue legal options to recoup their funds. “The Boroko casino was a state sanctioned project,” he said. “However, it was a bad investment decision by boards of Petroleum Resources Gobe (PRG) and Petroleum Resources Moran (PRM) in 2007. He was reacting to National Gaming Control Board (NGCB) chairman Clemence Kanau who recently claimed the Boroko casino project was “not sanctioned by the Government and NGCB”. Haiveta said Kanau’s statement was incorrect. “This is a State-sanctioned project in which the Mineral Resources Development Company landowner trust companies were invited to invest. “The facts are that the State and CMSS signed the project agreement on March 22, 2007 for the casino hotel. “That agreement stems from a NEC decision by the State to fully back the CMSS Casino project and was executed by the Governor-General, the minister and the National Capital District Governor at that time.” “PRG and PRM were invited to invest K11 million each in the project.”

Twinza hopeful about project

June 18, 2021, The National Business



TWINZA Oil PNG is hopeful its terms of the proposed Pasca A offshore oil and gas project is acknowledge by the Government to get the project online. Country manager Roppe Uyassi told *The National* that the terms had met the desired Government take as confirmed by Deloitte. Prime Minister James Marape also wants the project agreement to be completed this month. Twinza hopes to move forward with the country’s first offshore oil and gas project. “Unfortunately, for all stakeholders, we have not made much progress,” Uyassi told *The National*. “We are still waiting for the Minister of Petroleum to communicate to us whether the terms agreed with the State negotiation team have been accepted.

“The terms outlined recently are acceptable especially given we have achieved the State take outcomes desired by the State as confirmed by the Deloitte report commissioned by the minister

himself. “Hopefully, the terms Twinza has on the table (are) acknowledged so that we can sign the gas agreement and get on with developing Papua New Guinea’s first offshore oil and gas development.” According to an earlier company statement, the completion of the Pasca A gas agreement would allow the project to move into the front-end engineering and design (Feed) phase, with a final investment decision in late 2022 and first production in 2025. It said the delay in concluding the gas agreement would affect the planned project schedule, defer investment and see production moved to 2026.

Wrong man paid K20mil, court steps in

By KARO JESSE, June 17, 2021, The National

DEPUTY Chief Justice Ambeng Kandakasi has restrained Mark Sakai from using a K20 million Kutubu landowner memorandum of agreement (MoA) fund paid to his private company by the Department of Treasury. Yesterday at the Waigani National Court a major landowning group of the Kutubu project area, Namo’aporo Landowner Association (NLA), obtained the ex-parte restraining order after it found out that Treasury paid the money to the wrong person. NLA’s lawyer Edward Waifaf submitted that on Nov 28, 2019, NLA applied for an outstanding K50 million and was waiting for the payment and later found out that Sakai had used the deed of trusteeship to divert K20 million of that money to his private company Redskins Estates Ltd last Dec 2. “Before these funds are depleted or dissipated, I want the court to restrain the use of these funds,” Waifaf said. The Kutubu MoA fund is a grant pledged by the state to be used for various projects in the Kutubu project area.

State initially pledged K80 million for the landowners, from which NLA was paid K30 million and, while awaiting the outstanding K50 million, Sakai diverted K20 million to his private company’s account. The court was told that the money was supposed to be paid to NLA and not Sakai’s company, which was only incorporated in 2017. The Kutubu project started in the early 1990s. “Leaders live in Moresby and receive huge sums of money and they swindle this money while the people in the villages miss out,” Justice Kandakasi said. “Is this how we want to take back PNG? People are rich yet poor because leaders swindle people’s money.” Justice Kandakasi also asked the lawyer for the state if they are aware of this and it appears the wrong person was paid and the correct person is complaining. He told the state lawyer that if the money is swindled, NLA be reimbursed and the state can recover it from the person it paid the money to.

Telefomin: Misirim suspended to face leadership tribunal

Post-Courier, June 17, 2021

Telefomin MP and Minister for Defence Solan Mirisim has been suspended from office as a leader after his files containing allegations of misconduct in office was presented before a leadership tribunal by the Office of the Public Prosecutor yesterday. By operation of law under s.28 of the Organic Law on Duties and Responsibilities of a Leader, a leader is automatically suspended from office with pay when the Public Prosecutor refers the matter to the leadership tribunal by formally presenting the allegations and statement of reasons to the tribunal bench. Mr Mirisim was referred to the Public Prosecutor by the Ombudsman Commission on November 11, 2020, and recommended a leadership tribunal against the leader on misconduct allegations on its opinion that there was a prima facie case that the leader had been guilty of misconduct in office.

A total of 22 allegations have been levelled against the leader, citing his failure to submit annual statements, failure to declare personal income payments and use of official position for personal benefit. Other allegations included the leader’s failure to declare interest in a Motop Business

Group, use of personal bank accounts to conduct business and interference in the selection and appointment process of the Secretary for the Department of Defence, among others. The allegations and the statement of reasons were presented by Public Prosecutor Pondros Kaluwin to the tribunal members, comprising Justice Les Gavara-Nanu as chairman and senior magistrates, Mark Selekariu and Josephine Kilage, as members. The tribunal was adjourned to July 13 for the leader to plead to the allegations.

‘Extractive industry helps drive revenue’

June 17, 2021, The National Business

PNG Manufacturers Council chief executive officer Chey Scovell says the extractive industry has been one of the major drivers of the economy with its revenue contributions. He said although some agriculture commodity prices, such as vanilla, were high, the country continued to be a small player in that market. Scovell highlighted that there was high cash flow in the vanilla regions but the country seemed to miss out on the foreign exchange earned by the small number of exporters. “Extractives, extractives and extractives continue to lead the way in paying, albeit that some agriculture commodity prices have been high, we continue to be a very small player,” he said. “One exception is vanilla – its prices are sky high and we’re number one or two exporter in the world. “In my sector, low cost food manufacturers have continued to benefit from the change in consumer spending.”

Stakeholders support plan to extend mine life

June 15, 2021 The National Business

THE St Barbara Simberi mine operations has received support from stakeholders in its plan to extend the mine life. A recent meeting was attended by executives of the Big Tabar Landowner Association and local level government ward 5 member Timothy Puru. The 12 community stakeholder groups include the Simberi Mining Area Association, Tatau Landowner Association and Big Tabar Landowner Association. They wanted to see the mine continue operating and creating benefits. These benefits included business development, enterprise creation and employment opportunities for local people. “The broad community benefits and employee opportunities remain topical and important conversations throughout the consultation process,” said Walter Ponderelei, St Barbara Simberi operations community relations manager. St Barbara expects the next phase of the consultation process to begin this month with the government’s public consultation forum.

The Conservation and Environment Protection Authority and Mineral Resources Authority distributed copies of the social environment impact study report to New Ireland’s community and government leaders in preparation for the forum. It will be held at the Tabar Island group, Namatanai. Acting general manager Wayne Patterson said St Barbara was committed to a consultation process with key stakeholders and government(s). “Our belief is that we can all be genuine partners in generating sustainable agriculture, aquaculture and biodiversity, employment and training benefits from a longer mine life for Simberi operations,” he said. “It is a legacy we will be proud to leave behind for our community and the people of PNG.” The mine’s sulphide project is an extension of operations on mining lease 136 using existing infrastructure together with a new flotation plant to process sulphide ore.

Porgera reserves at 10 million ounces

BY MELISHA YAFOI, Post-Courier, June 9, 2021

The Porgera gold mine's reserves are over 10 million ounces, says Barrick president and chief executive officer Mark Bristow. He said this 10 million ounces of resources can be able to support the mine life for a 20-year period. "We've got enough resources over 10 million ounces to be able to support a 20-year life. "Reserves means that you finance by law so we are going to redo all that because things have changed but we are very confident that we will be able to convert a lot of those resources into reserves as well so that's our first job," he said. Mr Bristow said the company will be reviewing the reserves and the mine plans because prior to the close last year, they were just developing as part of the application for the renewal. "Now we will refresh that and the first refreshment is in July. We're comfortable with a 10-year plan and we're comfortable with a conceptual 20-year plan," he said.

Mr Bristow said under the new Porgera structure, it is all about the benefit of important stakeholders, which are the people of the host country. He said the first action that they will be doing is to start the drilling. "There will be two levels of drilling," Mr Bristow said. "The life of mine drilling which is to continue to make sure we've got a visual visibility of the runway ahead of us and then what we call grade control drilling which allows us for detailed mine planning which we always draw ahead of every mining. "The important thing about mining is you consumed your asset every year and if you don't reinvest in it, it dies because you don't replace what you mine. "It's a very important perspective to continue to reinvest in the future particularly in geology so that you replace the reserves that you are mining, it's a consumptive industry."

Mine closure unnecessary: Barker

By DALE LUMA, June 9, 2021, The National Business

THE closure of the Porgera gold mine in Enga last April has had unnecessary, devastating economic impact on the lives of so many people, according to an economist. Executive director with the Institute of National Affairs Paul Barker was responding to the handing over of the mine's framework agreement by Prime Minister James Marape to Barrick Niugini Ltd president and chief executive Mark Bristow last weekend. Barker said the US\$300 million (K1.052 billion) to open the mine showed the massive cost to revive with more than a year of lost jobs, contract, revenue and foreign exchange. Bristow had said the cost of restarting the mine would be US\$300 million, with care and maintenance of the mine alone costing BNL US\$120 million (K421 million). An additional US\$180 (K625million) is needed to restart the mining operations.

"So much lost and now so much capital reinvestment before costs are recovered and profitable earnings and positive tax contributions can be restored," Barker said. "This has had such an unnecessary but devastating economic impact on the lives of so many, but also the economy of the country for remote gains in the future. "This serves as a model of how not to proceed with prudent resource sector planning and governance. "The focus seems to be on achieving a greater equity stake, which over the years had been dropped in return for equity in Oil Search and the Papua New Guinea LNG. "While many would argue that a greater tax cut is a preferable and lower risk option for the State (unavailable to businesses) and enables government to better focus on its core responsibilities of delivering public goods and essential services and it's regulatory and oversight functions."

Who profits from the mass extraction of the region's natural resources?

A series from Guardian Australia since 30 May 2021:

<https://www.theguardian.com/world/series/pacific-plunder>

Pacific Plunder I: The island with no water: how foreign mining destroyed Banaba

The Kiribati island survived droughts due to sacred caves that captured rainfall but rampant phosphate extraction ruined this precious resource

By Joshua McDonald, The Guardian, 8 Jun 2021, Last modified on 10 Jun 2021



Roubena Ritata sits on a rock on Banaba, a central Pacific island that is part of Kiribati. Photograph: Janice Cantieri

The last decent rain on Banaba was more than a year ago. Without rain, people on the isolated central Pacific island, which is part of the country of [Kiribati](#), have been forced to rely on a desalination plant for all their water for drinking, bathing and growing crops. But in late November the plant broke down and the situation became desperate for the nearly 300 people living there. Harrowing stories emerged of people forced to drink contaminated water, outbreaks of diseases and fears of starvation.



Taboree Biremon with his wife: 'We're just looking for a way to survive.' Photograph: Janice Cantieri

“Skin disease and diarrhoea is widespread, especially in children, because we’ve had no choice but to drink contaminated water or saltwater,” says a Banaba resident, Taboree Biremon. “The [children] are not OK because they don’t understand. They want food they can’t receive. We just feel so sad about it but there’s nothing we can do.” For three months residents had no fresh water to drink, no food other than fish because all their crops died and were not able to bathe, Taboree says. “We also couldn’t sleep, because all we wanted to do was search the island for water. We’re just looking for a way to survive. The feeling we have is we’re just drifting out in the sea, lost, and no one cares.” A ship from the Kiribati capital, Tarawa, 400km away, did eventually arrive in March, delivering bottled water and equipment to set up a new desalination plant.



Empty store shelves on Banaba. Photograph: Janice Cantieri

But Banaban elders say relying on support from faraway places is not sustainable, especially as the climate crisis worsens. “Desalination plants are not a solution,” says Roubena Ritata, an elder. How long until this one breaks and we’re back in the same situation? What we need is the rehabilitation of our island.” Banaban leaders are seeking a long-term fix. In fact, they seek a solution that would see them return to a traditional method of capturing and collecting water, a method that allowed their ancestors to survive on the island for centuries.



The sacred underground caves are known as *te bangabanga*. Photograph: Janice Cantieri

To achieve this the elders are writing to the Australian and [New Zealand](#) governments, asking for support for a monumental job of rebuilding or cleaning an underground network of sacred caves, known as *te bangabanga*. Australia and New Zealand contributed to the destruction of *te bangabanga* during the 20th century through phosphate mining, which was begun by the Australian prospector Albert Ellis in 1900. For the next 80 years, the British Phosphate Commission, equally owned by Australia, New Zealand and the UK, mined Banaba so extensively that about 90% of the island's surface was stripped bare. By the time BPC left, 22m tonnes of land had been removed.

“The devastation is absolutely a result of their activity,” says Katerina Teaiwa, a Banaban scholar, associate professor at the Australian National University and the author of *Consuming Ocean Island: Stories of People and Phosphate from Banaba*. “They came in, had a big party, made lots of money and left.” Perhaps most damaging is the impact the mining had on *te bangabanga*. Banabans have historically been able to survive droughts due to the natural ability of the caves to capture and store water. But according to elders, nearly all of the caves were destroyed and the few that remain have been contaminated. “For many Banabans, *te bangabanga* now exists only in the stories and dances passed down through the generations,” says one elder, Pelenise Alofa, adding that historically, only women could enter the caves, which anchored women's importance in the community. “That's all been lost now ...



When mining finally ended, 22m tonnes of land had been removed. Photograph: Janice Cantieri

“We perform dances and tell stories of how our ancestors found the caves during a bad drought. It's part of who we are, but I thought these problems would be solved by now – instead they get worse.” Alofa says elders would like to see Australia and New Zealand fund a team of researchers to travel to Banaba to assess the damage and repair the caves. There have been earlier attempts by Banabans to receive compensation for what was done to their land – resulting in some minor wins. In 1976 a group sued Britain for its role in the devastation: the court ruled that while the UK had a moral debt it had no legal obligation. The British government did eventually offer Banabans an ex-gratia payment of A\$10m on behalf of the BPC partner governments on the condition they dropped all further legal action.

Now Banabans say the drought has solidified their resolve to seek compensation and find a long-term solution. While Banaba is home to just 300 people, it has a diaspora of nearly 6,000. Most Banabans were forcibly relocated to the Fijian island of Rabi when mining restarted after a hiatus during the second world war. “Every Banaban in Fiji and our diaspora communities in Auckland desire to go back to Banaba and reconnect with our homeland but the devastation caused by mining means

there's no place for people to settle," says Rae Bainteiti, a youth leader and the director of the Kiribati Aotearoa Diaspora Directorate. He adds: "As an activist, I teach the young generation to stand their ground and be brave. I encourage them to have this conversation, to hold governments who contributed to the destruction of our land to account."



The old cantilever that used to load phosphate on to ships. Photograph: Janice Cantieri

Another impact of mining was the construction of dwellings using asbestos, which when inhaled can lead to lung cancer and mesothelioma, both fatal diseases. Mike McRae-Williams, an Australian environmental specialist with more than 30 years' experience in the mining sector, was in 2008 contracted to travel to Banaba to assess the seriousness of the situation. "Our conclusion was that it is extremely serious," he says. "It's definitely a health hazard to the people living there and will have significant health impacts. I doubt anything has been done about it." Teaiwa says Banabans' calls for rehabilitation must be heeded: "We need to move away from this same continuous narrative of 'the poor Banaban people, who have no water, help them' and move towards an approach that is actually finding a solution.

"This whole thing is a series of crises. We can't just keep telling the story of devastation and vulnerability over and over again. Where does the crisis end, if not with justice?" A spokesperson for New Zealand's Ministry of Foreign Affairs and Trade said it supported the Kiribati-led emergency relief effort to the island on 10 March but declined to comment on Banabans' pleas for New Zealand and Australia to fund a long-term solution to the water crisis. Australia's Department of Foreign Affairs and Trade did not respond to repeated requests for an interview. (Source:

<https://www.theguardian.com/world/2021/jun/09/the-island-with-no-water-how-foreign-mining-destroyed-banaba>)

Pacific Plunder II: Australian mining companies have paid little or no corporate income tax in PNG despite huge profits. *The Pacific country's concessionary tax system leads to 'undertaxed' resource sector and 'no equity' for people in Papua New Guinea*
by Josh Nicholas and Kate Lyons, The Guardian, 8 Jun 2021

Australian mining companies have paid little or no corporate income tax in [Papua New Guinea](#) despite earning hundreds of millions of dollars from their PNG operations, benefiting from a complex taxation system that experts say leaves the country's resources sector significantly "undertaxed".

Guardian analysis of company reports and industry data can reveal that during the past decade Australian mining giants Newcrest and St Barbara, which have huge mines in PNG, have paid no corporate income tax some years, with the companies legally using generous tax rules and accounting practices to minimise their tax burdens.



A rusted truck remains at a Panguna mine in Bougainville, which recently voted for independence from Papua New Guinea. Photograph: Illya Gridneff/AAP

PNG has vast natural resources, with gold, silver and copper mines dotted around the country, as well large petroleum and liquefied natural gas reserves, but comparatively little of the wealth from these resources makes its way into government coffers or trickles down into communities. In 2018, oil and mineral products made up almost 90% of the value of Papua New Guinea's exports but less than 10% of government revenues, according to [the latest data from](#) the Extractive Industries Transparency Initiative. Oil and mineral products contributed an even smaller share of government revenues [in previous years](#). This is partly due to PNG's taxation system, which uses an additional profits or "rent tax" method of taxation, which is complex, rather than a more straightforward flat royalty rate.



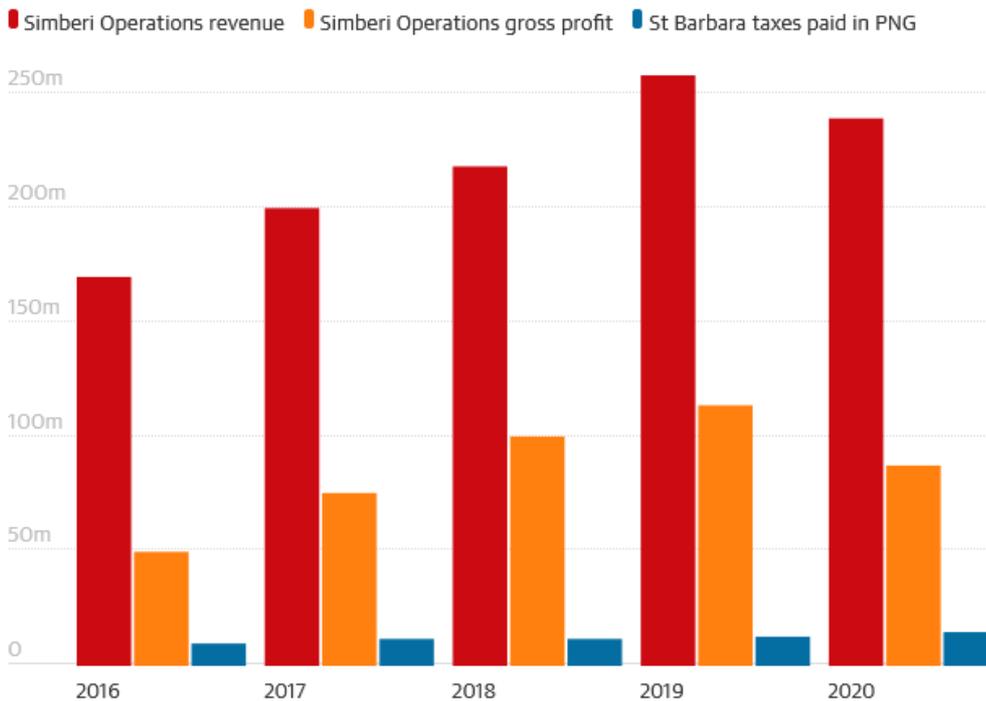
Panguna mine, Papua New Guinea Photograph: Natasha Harth/Queensland Art Gallery

Big profits, little tax

Australian companies own and operate many of the largest mines in Papua New Guinea, and 97% of PNG's gold exports go to Australia, but the royalties, salary and other taxes levied in PNG can add up to just a fraction of either the revenue or operating profit. ASX-listed mining company St Barbara operates the Simberi mine, one of the largest goldmines in the world, in New Ireland province. The mine has generated AU\$199m or more in revenues in each of the past four years, but paid nothing in income taxes to the PNG government between 2012 and 30 June 2020. Between 1 July and 31 December 2020, St Barbara paid AU\$7.7m gross in Papua New Guinea income tax. Revenues, gross profit and taxes paid in PNG by St Barbara.

Revenues, gross profit and taxes paid in PNG by St Barbara

Measured in Australian dollars, taxes paid include income taxes, royalties, wage/salary taxes, and other taxes/duties



Guardian graphic | St Barbara annual and sustainability reports; St Barbara response to Guardian Australia questions

Annual reports filed with the Australian Stock Exchange show that the mine booked gross profit greater than AU\$75m in each of the [2020](#), [2019](#), [2018](#) and [2017](#) financial years. In the [2016](#) financial year, St Barbara's Simberi operations booked AU\$170m in revenue and AU\$50m in gross profit.

Prior to last year, St Barbara's Simberi Operations was not subject to corporate income tax in PNG, according to a company response to Guardian Australia questions, due to the "significant capital expenditure to develop the mine and its associated infrastructure, together with operating losses incurred in the early years of St Barbara's ownership of the mine". "Since 2009, St Barbara's Simberi Operations has delivered \$31m in royalties, paid an annual 0.5% production levy and contributed AU\$38m in contracts to landowner businesses. The company pays 2.0% royalties, based on revenue," the company said in a statement. It added it had invested more than AU\$43m in the surrounding community, including in health, education and farming projects. "St Barbara respects and complies with tax obligations in all the markets in which it operates, including Papua New Guinea," it said. ASX-listed Newcrest Mining [operates](#) the Lihir goldmine on Aniolam Island in PNG. Newcrest did not pay corporate income tax in PNG in the [2016](#) or [2017](#) financial years, according to the

company's tax contribution reports. The company did pay US\$3m in corporate income tax [in 2018](#), the last year a report was published.

Newcrest also pays other taxes, such as the US\$27m in royalties, US\$39m employee taxes, and US\$14m in other taxes and levies it paid in [2018](#). In that same year, [its annual report](#) shows Newcrest booked more than US\$1.2bn in revenue from the Lihir mine. Earnings before interest and taxes for Lihir were US\$261m. In response to Guardian Australia's questions, a Newcrest spokesperson said a lot had changed since 2018, the last year it released a tax contribution report, including the rising gold price, "which means that past tax payments are not a good indicator of future tax payments." The spokesperson said the company had paid a total tax contribution of PGK199m (AU\$74m) in the 2020 financial year, as well PGK629m (AU\$233m) in royalties between 2010 and June 2020.

They also contributed PGK96m (AU\$35m) to "approved infrastructure developments on behalf of the PNG government through the tax credit scheme, which is deemed to be 'prepaid' company tax," the spokesperson said. "Since August 2010, Newcrest has invested more than US\$3bn in capital expenditure into Lihir, which is a significant injection into PNG's economy ... The majority of this capital expenditure qualifies for tax depreciation as per the PNG tax law," the spokesperson said. "Our tax profile is in line with the operation of the PNG taxation law and we are fully compliant with the law." Both ASX-listed [Crater Gold Mining](#) and the recently de-listed [Niuminco](#) have reported losses on their annual reports for the past several years. Neither company could be reached for comment. Guardian Australia does not suggest that any of these companies have broken any relevant laws.

'Poor tax design'



Ok Tedi Copper mine near Tabubil, Papua New Guinea. Photograph: Friedrich Stark/Alamy

Diane Kraal, a senior lecturer at Monash University, was appointed by the PNG government to research petroleum and mining tax reform in the country in 2014. "Looking at the latest World Bank report in PNG, they confirm that the resource sector in PNG is undertaxed," she said. "It's undertaxed because of poor tax design and companies aren't going to complain about that." "In PNG they have persisted with a rent tax and it hasn't worked because it's too complex," said Kraal. "These things can be manipulated. I'm not saying [Australian companies] are doing the wrong thing, everyone's got the right to minimise their tax burden, but there are more ways it can be manipulated than a royalty system."

Sam Koim, commissioner-general of PNG's Internal Revenue Commission, said the low taxes paid by foreign companies in PNG were due to its "very concessionary fiscal regime". "We're mostly profit-based," he said. "So if they don't make a profit, they don't pay taxes. On top of that, in most cases when projects are negotiated, we give a lot of concessions to these foreign companies to come and exploit our resources ... That's why a lot of the gains from natural resources haven't been felt by PNG." A spokesperson for Newcrest said: "We support meaningful and well considered reform of the PNG tax system and actively participate in this process. Our tax policy states that we act with integrity and honesty in all jurisdictions where we have a presence. We do not engage in manipulative behaviour."

Who owns Papua New Guinea's mines

Beneficial owners of major operating mines

Mine name	Operators and owners	Operating	Country of majority ownership
Mt Crater	Gold Anomaly Limited	Pending licence renewal	Australia
Porgera	Barrick Gold Corporation & Zijin Mining Group	No	Canada/China
Frieda River	PanAust Limited	Special mining licence application lodged	China
Kainantu	K92 Mining Inc	Yes	Canada
Lihir	Newcrest Mining Ltd	Yes	Australia
Kurumbukari mine, Ramu	MCC Ramu NiCo Ltd & Highlands Pacific	Yes	China
Hidden Valley	Harmony Gold Mining Company Ltd	Yes	South Africa
Edie Creek	Niuminco Edie Creek Ltd	Yes	Australia
Simberi	St Barbara Ltd	Yes	Australia
Ok Tedi	Ok Tedi Mining Ltd	Yes	Papua New Guinea
Wafi-Golpu	Newcrest and Harmony JV	Special mining licence application lodged	Australia/South Africa

Guardian graphic | Source: The Extractive Industries Transparency Initiative and company filings.

Vested interests

Kraal said PNG's taxation system meant there was "no equity" for the Papua New Guinean people and had crippled the government's ability to provide basic services to its people, including coping with the current Covid outbreak. "You can see one of the fallouts of the lack of revenue in the Covid environment ... The mineral wealth they've got should well and truly be catering for the health needs of the population." Newcrest said it did not believe this assertion to be factually accurate.

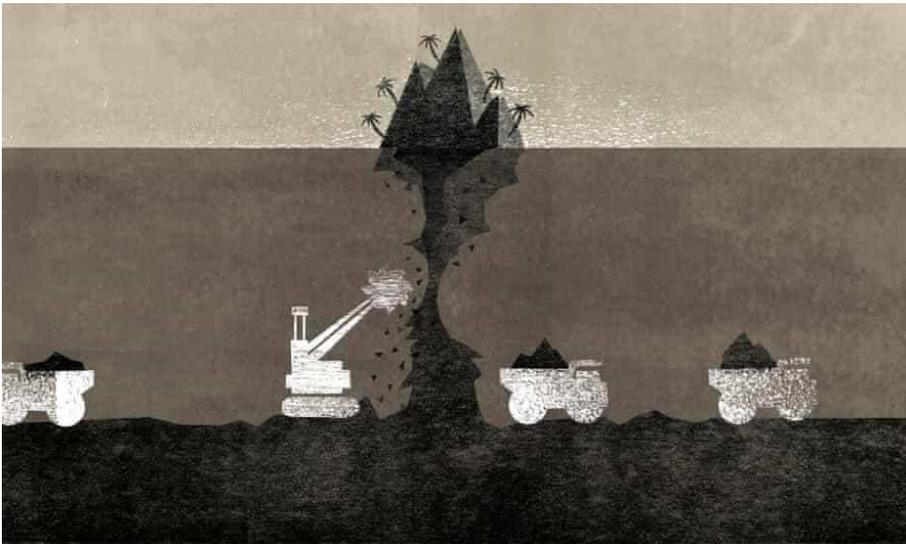
The mineral wealth [PNG has] should well and truly be catering for the health needs of the population *Diane Kraal, Monash University*

The taxation system in PNG is a legacy from when PNG was an Australian colony and offered tax holidays and other exemptions to attract foreign investors, Kraal said. “There’s a presence of multinational companies in PNG, including Australian companies, and they’re hugely powerful,” she said. “When huge companies start lobbying, you’ve got to have a strong press, you’ve got to have a strong government ... and they don’t have that in PNG at the moment... They’ve got Covid, they’ve got economic contraction and they’ve got political problems and that just gives power to vested interests.”

Kraal said that while the taxation system in PNG needed reform, the responsibility for this lay with the PNG government and not the Australian companies, which she said were doing the “right thing” by shareholders in seeking to minimise their tax burden. “You can’t expect foreign companies to pay more tax than the legislation requires.” Koim said James Marape, the country’s prime minister, had been fighting for PNG to get greater benefits from its natural resources since coming to power in 2019. “Our government at the moment through the prime minister has a very strong emphasis on getting a better share of our resource endowments ... We are hoping the strong will translates into a strong change in the fiscal regime through legislative enactment.” (Source: <https://www.theguardian.com/world/2021/jun/09/australian-mining-companies-have-paid-little-or-no-corporate-income-tax-in-png-despite-huge-profits>)

Pacific Plunder III: Mining in the Pacific: a blessing and a curse

Millions of tonnes of fuel, oil and minerals are extracted from the region – but some communities have little to show for it but devastation. By Lyanne Togiba in Port Moresby and Ben Doherty, The Guardian, 6 Jun 2021, Last modified on Mon 7 Jun 2021

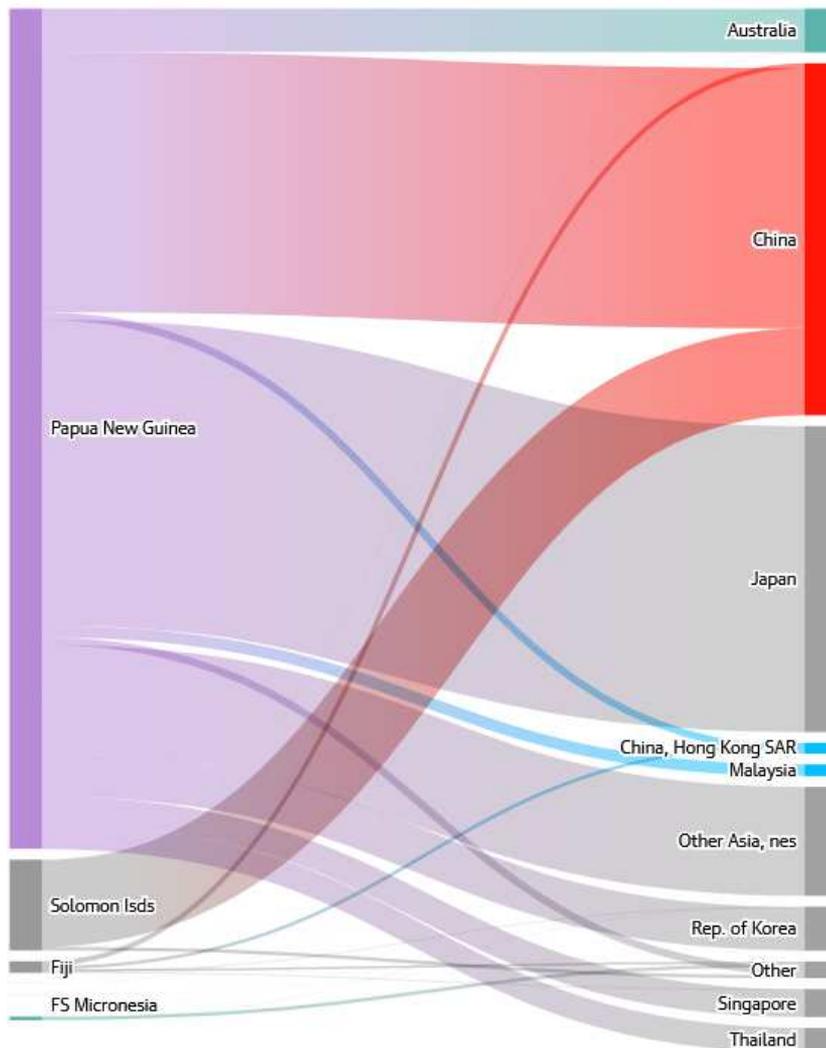


Mining represents a dilemma for Papua New Guinea: balancing economic benefit against the wellbeing of communities and environmental degradation. Illustration: Ben Sanders/The Guardian

Mining is big business in the Pacific. Guardian analysis of trade data can reveal that each year nearly 11m tonnes of fuel and oil (the equivalent of 1100 Eiffel towers) are extracted from the region, 2m tonnes of copper, nickel, manganese and aluminium are mined, and gold worth US\$2.6bn is quarried. But despite the minerals and wealth pulled from the Pacific’s mountains, valleys, oceans and rivers, communities often have little to show for it. In Solomon Islands, a [bauxite mine on Rennell Island](#) has scarred a once-pristine landscape and been the cause of environmental disasters – spills of oil and bauxite into the island’s fishing grounds – while paying zero royalties to the government.

Exports of oil, metals and minerals from the Pacific

Tonnes exported in 2019



Excluding countries that export less than 1000 tonnes
Guardian graphic Guardian analysis of CEPI's BACI trade flow database

Nauru once had one of the highest per capita incomes in the world because of a booming phosphate mining industry in the 1970s and 80s. But the mismanagement of hundreds of millions in royalties caused the near-collapse of the country's economy and fuelled a series of financial crises. Nearly 80% of the island's small landmass is unliveable, having been stripmined by foreign multinationals. On Kiribati's Banaba, mining has left the atoll with no reliable supply of drinking water. And, in New Caledonia, angst over nickel mining has undermined political stability. But nowhere is the impact of mining – its booms and busts, potentials and pitfalls – felt more acutely than across Papua New Guinea's broad archipelago.

A wicked dilemma

On the island of [Bougainville](#), which for now remains part of PNG but in 2019 voted overwhelmingly for independence, sits Panguna – the gold and copper mine which once brought billions to its foreign owners. The giant hulk of Panguna, all but silent now for 32 years, is representative of the wicked dilemma faced by PNG in its relationship with mining: its resources are both blessing and curse.

On one hand, resource extraction has poured millions into government coffers, funding development and government services, and enabling a fragile post-independence economy to grow. Panguna bankrolled PNG in its early post-independence years. Over 17 years it made more than US\$2bn for the mine's former owner and operator, [Rio Tinto](#), which pulled 550,000 tonnes of copper concentrate and 450,000 ounces of gold from the mine in its last year alone. At one point, Panguna accounted for 45% of all of PNG's exports and 12% of its GDP. By weight, oil, metals and minerals represent 61% of the country's total exports. But the majority of the wealth generated by the vast natural resources does not flow to the people of the country but runs offshore.



Community anger over Panguna's environmental damage, and at the disproportionate distribution of profits to offshore companies, led to an armed insurrection against the mine, forcing its closure in 1989 and sparking a decade-long civil war that killed up to 15,000 people. Photograph: Human Rights Law Centre

In monetary terms, oil and mining accounted for approximately 90% of PNG exports in 2018 but just 10% of government revenues. On top of this, many mines, such as the Lihir goldmine exploiting tax exemptions and accounting practices like accelerated depreciation, have paid almost zero corporate tax since 2013. In the case of Panguna, the mine brought but a sliver of the wealth and development that was promised to those whose land it was on – less than 1% of profits. It left behind a legacy of division, violence and environmental degradation. Rio Tinto abandoned Panguna in 1989. It has never returned, saying it is unsafe for its staff, despite pleas from landowners to repair the vast and ongoing environmental damage.

The director of PNG's Institute of National Affairs, Paul Barker, says it is a constant challenge for resource-rich developing nations to balance the economic benefit of extraction against the wellbeing of their peoples. "We all use the products from extractive industries, but it is society's responsibility – including government and the mining industry's – to manage that process to minimise the negative impact, to lay down and apply minimum standards... and to mark some places as off-limits for extractive industries," he says. Barker says PNG "has made many mistakes along the way", in not keeping the profits and benefits of mining within the country, to be used for the advantage of the PNG people, and allowing too much of the wealth generated by its natural resources to go offshore. "It learned a lot of lessons from mistakes, like the need for effective landowner consultation ... but then forgot those lessons in some cases, and pushed through some projects through arrangements that lacked transparency, creating avenues for future discontent."



Bougainville Revolutionary Army fighters keep watch over the captured Panguna mine in 1994. Photograph: Ben Bohane/The Guardian

‘We cannot access clean drinking water’

At the other end of PNG, the story is starkly familiar. The polluting Ok Tedi mine in Western province has been kept open for two decades beyond its original lifespan, even after [BHP](#) walked away from the site, leaving it in the hands of the PNG government. The mine discharges millions of tonnes of poisonous waste down the Fly River each year, killing fish and trees, and poisoning croplands and drinking water.



Ok Tedi River has been reduced to a mine tailings drain. It carries the muddy tailings towards the Fly River, where it affects the aquatic life and people who live along one of the world’s great rivers. Photograph: Auscape/Universal Images Group/Getty Images

Michael Eneau, ward member from the Kiwai local level government area – on the mouth of the Fly, downstream from Ok Tedi – tells the Guardian “the damage to the environment and people’s livelihoods continues today”. “Over time, the waste from the mine being deposited into the river has seen a build-up of sediments and this has caused over-flooding – causing villages to be completely

submerged,” he says. “Our water wells have also been affected and we cannot access clean drinking water.” Impacted communities along the river receive a payment of K100 – US\$27.70 – per person, per year as part of the government-brokered community mine continuation agreement. Eneau argues that this pales in comparison with the damage to lives and livelihoods.

Ok Tedi Mining Limited says that since the mine’s opening in 1984, it has contributed more than K10bn (US\$2.77bn) to “assist the development of economically sustainable local and regional communities in the province through employment, taxes and royalties and capacity building and economic and social development programs”. Mine profits have funded roads, schools and a hospital. It says it has spent more than US\$1.9bn “to reduce the long-term impact of its mining operations on the river system”. “Over the last six years, the CMCA communities have received over K340m in cash compensation from Ok Tedi Mining Ltd and a further K50m will be paid out to the communities this year.” Other mines have run into similar problems, balancing foreign and domestic economic interests, as well as the rights of those who’ve lived on the land for generations.



A giant mining truck working at the Ok Tedi mine in 2006. Photograph: Lloyd Jones/AAP

In 2020 the PNG government cancelled the mining lease of a part-Chinese owned Porgera gold mine in Enga, claiming that the country was not getting its fair share of its profits. But still more mines are proposed: in Lae, PNG’s first coalmine and coal-fired power plant is proposed, while in Sepik province, at the head of the Sepik and Frieda rivers, plans for the country’s largest copper and gold mine have been advanced, over the vociferous protests of village councils and the concerns of the UN special rapporteur, who says the planned mine carries a risk of “catastrophic ... loss of life and environmental destruction [and] appears to disregard the human rights of those affected”.

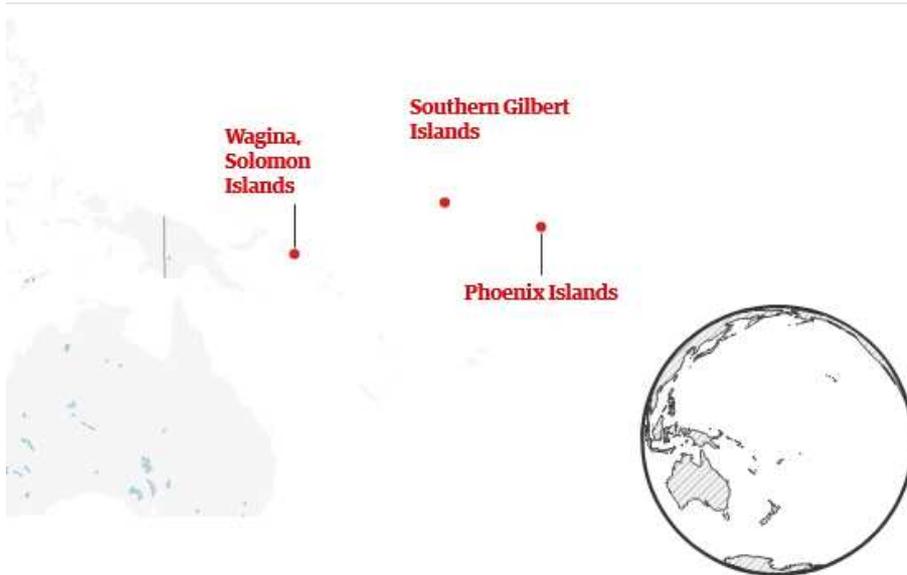
(Source: <https://www.theguardian.com/world/2021/jun/07/mining-in-the-pacific-a-blessing-and-a-curse>)

Pacific Plunder IV: The little island that won: how a tiny Pacific community fought off a giant mining company. *A proposal to mine 60% of Wagina for bauxite was met with outrage by locals and became a landmark case in Solomon Islands.* Dorothy Wickham in Wagina and Ben Doherty, The Guardian, 6 Jun 2021, Last modified on 7 Jun 2021

When a mining company arrived on Wagina nearly a decade ago with a proposal to mine 60% of the island for bauxite, resistance was swift and resolute. “I was in the group that went and physically stopped the machines that landed on the site behind this island,” says Teuaia Sito, the former

president of the Lauru Wagina Council of Women. “We do not want mining, it’s simple,” says Sito, a mother of 10 and grandmother to 19. “What good would mining bring to us?”

The story of a giant company arriving on a tiny Pacific island to mine it for its valuable resources is not an unusual one; what is unusual in Wagina’s case is that the people of Wagina won. Those on Wagina – a small island in [Solomon Islands](#), home to roughly 2,000 people, 1,700km north-west of Cairns – fought hard to keep the mining company away because the memory of forced displacement is not a distant tale handed down through generations, but a living memory. Wagina’s people have been displaced twice already. In the 1930s they were forced from their ancestral home in the Southern Gilbert Islands (now part of Kiribati), because of land shortages and overpopulation, to a new island chain, the Phoenix Islands.



In the early 1960s the British forcibly uprooted them again, ostensibly because of persistent droughts, but the community believe the relocation was related to British nuclear testing in neighbouring atolls. That time the families were moved more than 3,000km across the Pacific, to Wagina where they began a new life among Melanesian neighbours who looked and spoke, ate and farmed, celebrated and mourned, differently to the ways they had known back home. Moving was an upheaval some could not face a second time.



Wagina’s people have become the largest exporters of seaweed in the Pacific

“One old man committed suicide before we left our home because he was not happy about leaving things behind like the coconut trees he planted,” says one villager, Tetoaiti Amon. But the people of Wagina have made their new island their home, building kastom and community links and a new industry: they are now the largest farmers of seaweed – for toothpaste, food, cosmetics and fertiliser – in the Pacific. Then, in 2013, Solomon Bauxite Limited – a mining company owned by two Hong Kong-listed companies – was granted a permit for an open-cast mine on Wagina. Publicly available plans show that the mine would have affected 48 sq km – 60% – of the island, and involved clearing 2,000 hectares of virgin forest.

An airport would have been built (the island is now accessible only by boat), along with new roads, significant excavation and the movement of roughly 150 truckloads of bauxite every day for 20 years. The business case was strong. The island is rich in the key ore for making aluminium, which is used in construction, cars, aircraft and consumer electronics. And Solomon Islands is close – 10 days by sea – to China, the world’s largest bauxite importer. The mine was forecast to produce between 24bn and 40bn kg of ore over two decades, [working 16 hours a day, six days a week](#).



The scale of the proposed bauxite mine

But the islanders fought the case in a bruising, burdensome court struggle that ran for four years and, in 2018, were granted a stay on mining until the proposal was further scrutinised. The saddest part is not having the sense of owning the land where you live *William Kadi, Solomon Islands Environmental Law Association*

In March 2019 the islanders’ victory was strengthened when, in its first decision, Solomon Islands’ environmental advisory committee [overturned the mining licence](#), finding that residents had not been properly consulted and the company’s environmental impact statement was “rather unscientific and improper” and not legally valid. “[A mine tenement covering 60% of a small island](#) will have tremendous environmental impacts on water quality, air quality, the ecology and the marine environment,” the committee said in its decision. “It will also have a dramatic and likely irreversible impact on the more than 2,000 residents of the island who rely on the sea and land for their livelihood ... What will become of the people of Wagina if the mining occupies such a significant area of Wagina Island? Where will they obtain their material to construct their homes and resources to support their livelihoods?” That decision was appealed but last November the environment minister upheld the decision. But the fight is not finished yet.

The mining proposal has been widely, though not universally, opposed on Wagina, creating fissures within a small community built on consensus. This year a group of eight villagers – calling themselves the Maungatabu, or “council of elders” – reportedly signed a memorandum of understanding

with Solomon Bauxite for mining to proceed. William Kadi, vice-president of the Solomon Islands Environmental Law Association, has steered the people of Wagina's legal battle. He says while the MOU has no legal standing and is fiercely contested on the island, residents still live with the threat that miners might return to their home. "The saddest part is not having the sense of owning the land where you live," he says. "It's just unbelievable that these people have been here for decades and still they could not have new parcels of land in the Island granted for them to cater for a growing population and their needs, while a mining company can just easily sign off a lease for three-quarters of the island, it's just absurd."



Harvested seaweed dries on jetties on an islet off Wagina



Tebukewa Mereki, Wagina elder who led the legal challenge against the proposed mine Photograph: Supplied

The Guardian put questions about the proposed mine to Solomon Bauxite Limited but did not receive a response. In response to an Amnesty International investigation, a company director, Bruce Hills, wrote: "The Wagina bauxite project represents a significant financial and development opportunity for Solomon Islands." "The directors ... believe that it is critical that Solomon Islands be in a position to attract mining companies that have the genuine skills and willingness to develop the mining industry in an environmentally and socially sustainable manner. "[We believe this project is too valuable](#) for all stakeholders for it not to be developed." But a Wagina elder, Tebukewa Mereki, who led the appeal to the environmental advisory committee, has spent years patiently arguing before courts and tribunals that the right of the people of Wagina to live peacefully on their island outweighs any promised economic or development benefits.

“Wagina is our life,” he said [in his legal challenge](https://www.theguardian.com/world/2021/jun/07/the-little-island-that-won-how-a-tiny-pacific-community-fought-off-a-giant-mining-company). “If they destroy Wagina, we have nowhere else to go.” (Source: <https://www.theguardian.com/world/2021/jun/07/the-little-island-that-won-how-a-tiny-pacific-community-fought-off-a-giant-mining-company>)

European Investors seek interest to build Gold Refinery in PNG

EUROPEAN INVESTORS EXPRESSES INTEREST IN PARTNERING WITH THE STATE TO ESTABLISH A GOLD REFINERY IN PNG

Pacific Mining Watch 8.6.2021

A group of investors in Europe have expressed interest in partnering with the State to build a gold mining refinery in Papua New Guinea. PNG's Ambassador to Belgium and the European Union and the Commissioner-General to Expo2020, Joshua Kalinoe, says currently PNG is putting together a package on the gold bullion and precious metal refinery to take to the World Expo2020 in Dubai. This is in line with PNG's targeted approach towards its participation in the expo. Mr. Kalinoe says there may be other investors who will be interested in partnering with the State and people of PNG to go into the refinery. Meantime, PNG is expected to participate in the Expo2020 in Dubai in October this year. This international event supposed to take place last year but due to COVID-19, it has been postponed to this year. Speaking to N-B-C News this week, P-N-G's Ambassador to Belgium and European Union and Expo 2020 Commissioner General, Joshua Kalinoe, says it is important that P-N-G participate in this event to showcase its natural resources and other things.

Bring in more projects: Expert

By CLARISSA MOI, June 7, 2021, The National Business

PAPUA New Guinea should continue getting resource projects coming online if the country wants to keep growing its economy, an industry expert says. Santos PNG general manager and a council member in the PNG Chamber of Mines and Petroleum Chris Chambers said this during the chamber's webinar series on Thursday. He said it was important that the Government and the industry worked together to get secured pipeline of projects coming through. “It is also important to see that sanctioning of large projects such as the PNG LNG gives a very quick economic fill up to the economy as getting taxes, (the different taxes) and increase in employment.” According to a snapshot of a report from the PNG Extractive Industries Transparency Institute (PNG EITI), the resource industry accounts for 88 per cent of the country's total export and 28 per cent of its gross domestic product (GDP) in 2019. PNG is in the top 10 of the most resource industry dependent economies in the world, according to World Bank. “It's not necessarily a great thing, but it's something we have to work within and try to maximise,” Chambers said. Some of the country's outstanding resource projects includes:

- THE Porgera gold mine in Enga which is scheduled to be reopened later this year;
- THE US\$5.4 billion (K154.91bil) Wafi-Golpu project situated between Huon Gulf and Wau-Bulolo districts in Morobe. This large-scale underground mining project is owned by Harmony Gold Mining Ltd and Newcrest Mining Ltd on a 50/50 shareholding basis;
- THE US\$12 billion (K41.38bil) Papua LNG project to be operated by Total E&P PNG Ltd;
- THE US\$9.2 billion (K31.67bil) P'nyang gas project in Western currently owned by ExxonMobil and Oil Search;
- PASCA A Petroleum project in Gulf; and,
- OTHERS such as the Frieda River copper and gold in East and West Sepik and the K420 million Woodlark project in Milne Bay to be operated by GeoPacific Resources Ltd.

Prime Minister James Marape said the Government remained focused on the Wafi-Golpu project and other outstanding resource projects. “We have already issued an environmental permit and we will progress Wafi-Golpu after Porgera is moved,” he said. “In the petroleum space, Pasca has been discussed. “We thank ExxonMobil for reopening discussions on P’nyang, and we are remobilising for Papua LNG. “We have been actively in business in the midst of Covid-19 as far as the mining and petroleum sector is concerned.” Marape said the Government welcomed and would work with all investors in the country as they were entitled to a good return on investment however also ensuring that the locals got their fair share from the resources.

Porgera valley gets 10 per cent equity

BY MELISHA YAFOI, Post-Courier, June 7, 2021

The Porgera valley landowners will receive 10 per cent in equity under the new Porgera. This was announced by the Prime Minister James Marape last Friday in Porgera when he handed over the Porgera framework agreement to the provincial government. He told the people of Porgera at Paiam field on Friday that the new deal in the agreement is a fair deal after very hard negotiations between the State and the company. He explained that the 51 per cent is for equity alone, but in the next five years once the mine is processing raw materials including other economic projects, the State will receive 65 per cent and the company to get 35 per cent under the mine’s restart value. “In order for the mine to be reopened, you need to invest capital so we will put in 36 per cent to restart the mine while Barrick will put up 64 per cent,” he said. Mr Marape said under this framework agreement also, Porgera will receive an additional 10 per cent in equity on top of the 5 per cent equity that remains with Enga provincial government through Mineral Resources Enga.

He said the handing over of the framework agreement is the first step toward reopening the mine and would like all parties to come to an agreement so that the development forum can be held between the months of June and August. Meanwhile, Barrick president and chief executive officer Mark Bristow said: “The Framework Agreement sets a new paradigm for arrangements between Papua New Guinea (PNG) and the world’s leading resource companies, based on a fair and equitable sharing of benefits and responsibilities. “Whether it be the State, the provincial government, the landowners or Barrick Niugini Limited (BNL), we are all stakeholders in the new Porgera and are therefore invested in its success and its ability to deliver benefits to the country and local communities through responsible mining.” Over the next 20 years, the overall economic benefits derived from the mine will be shared 53 per cent for PNG and 47 per cent for BNL. At the end of the first 10-year period, the PNG stakeholders will have the option to purchase BNL’s 49 per cent equity at fair market value.

Mine opening at K1.05bil

By GYNNIE KERO, June 7, 2021 The National

THE cost of restarting the Porgera mine is around US\$300 million (K1.052 billion), according to Barrick Niugini Ltd (BNL) president and chief executive officer Mark Bristow. Bristow said care and maintenance of the mine alone had cost BNL US\$120 million (K421 million) and an additional US\$180 million (K625mil) was needed to restart mining operations at Porgera. He said the sooner the mine reopened, the lower the cost. “I just came back from a meeting to restart the mine. “It takes a lot of work to get this mine up and running,” he said. “The world’s mining (industry) is in a boom. “So we have to compete with a hot industry at the moment.” He also said the company had started a plan to re-employ workers. “One of the things we were not prepared to do was to put people at risk when the mine was closed,” he said.

“So we retrenched everyone who wasn’t required for care and maintenance and paid them their full dues. “When we start the new Porgera it will be a new vehicle. Those who had been working for us will receive their dues, and then everyone starts (afresh). “As soon as we finalise the documents and create the new company, we will start with fresh employment. “We want to employ Porgera people first and other Papua New Guineans second.” Barrick currently employed 800, some of whom were contracted employees. “We need to employ another 800 at the end of this year, then another 1,000. “I’m back in July, the team is working on the prestart. “In 10 days’ time, we will have all drafts ready for negotiation.” The mine was closed last April due to differences between the Government and BNL.

Locals can buy BNL shares in 10 years: Marape

By GYNNIE KERO, June 7, 2021, The National Main Stories

LOCAL shareholders in the Porgera mine will have the option of buying the 49 per cent shares held by operator Barrick Niugini Ltd (BNL) after 10 years, says Prime Minister James Marape. This was one of the announcements Marape made in Enga last Friday when he handed over the new Porgera Framework Agreement to BNL president and chief executive officer Mark Bristow. The agreement was successfully negotiated with BNL in April. He also said the Government was not going to contribute cash upfront to restart the mine which was closed last April. “The 36 per cent equity cash call will be raised by BNL with zero per cent or no interest charge,” he added. He said a development forum was expected this month in Enga where Special Mining Lease (SML), Leases for Mining Purposes (LMP) and all affected areas would get together to allocate the benefits. Marape also announced that:

- THE State gained an additional one per cent on top of the two per cent for royalties allowed by law;
- THE State has secured full 30 per cent corporate tax (unlike Lihir and Ramu) plus securing an additional two per cent fiscal stability tax;
- BETTER local content for more local contractors and employees; and,
- ONE-OFF US\$15mil start-up seed capital for landowners, and every year a US\$3mil (K10.43mil) fund for future generations.

Marape and his delegation toured the mine site afterwards. He told the people that his visit to Lagaip-Porgera on Friday was to talk to the affected landowners, the mine management and mine-affected communities. “Since taking office on May 30, 2019, I have advocated for a greater share of the benefits from our resources to affected landowners, and that stands,” he said. “That is why we have amended existing resource laws, including the Mining Act 2020 and the Oil and Gas Act 2020, to ensure landowners get a fair share.” Marape assured the people that the landowners would be involved “every step of the way towards reopening the mine”.

Mine success rests with govts, landowners: BNL

By GYNNIE KERO, June 7, 2021, The National

BARRICK Niugini Ltd (BNL) says the responsibility of ensuring the success of the “new Porgera” mine also rests with the national and provincial governments, plus the landowners. BNL president and chief executive officer Mark Bristow said illegal mining and lawlessness in the area must be addressed before the mine was reopened at the end of the year.

He told the people of Porgera at Paiam on Friday that he had no doubt as owners and partners, “we can all work together to deliver the potential of this asset for the benefit of all”. He said the Framework Agreement “sets a new paradigm for arrangements between PNG and the world’s leading

resource companies based on a fair and equitable sharing of benefits and responsibilities”. Under the terms of the agreement, PNG stakeholders would own a 51 per cent equity stake in the mine with BNL remaining as the operator. Bristow said in the next 20 years, the overall economic benefits derived from the mine would be shared – 53 per cent for PNG and 47 per cent for BNL. At the end of the first 10-year period, PNG stakeholders would have the option of buying the BNL’s 49 per cent equity.

Landowners support reopening of Porgera mine

By GYNNIE KERO, June 7, 2021, The National

LANDOWNERS of Porgera in Enga have shown their support for the reopening of the mine which will generate many benefits for them. Porgera Landowner Association (PLOA) chairman Maso Mangape said it was fitting that Prime Minister James Marape explained details of the framework agreement to the people in Paiam last Friday. “(But) we will only succeed if we put our differences aside and support one another,” he said. “Partnership is the only way forward and we must take our cue from Barrick and the State who have showed us that through a commitment to work as a team, even the most difficult tasks can be achieved.” Porgera Women in Business president Elizabeth Lape Iarume said “we felt the pain” when the mine closed last April. According to the Government’s 2021 Budget, the closure of the mine cost the country K898.5 million. Marape wanted to see a quick re-start when the framework agreement was signed in Port Moresby. PLOA deputy chairman Dickson Pundi said: “We have all prayed long and hard for a fruitful outcome to talks between the State and Barrick and we have all played our parts as stakeholders to support both sides to come to an agreement.”

Porgera people suffer

BY MELISHA YAFOI, Post-Courier, June 4, 2021

WHEN Barrick was asked to pack up and leave by the State, little did everyone realise that the mine had literally become a way of life for the people of Porgera. Since Barrick took over from Placer Dome to operate the Porgera Gold Mine, like any mining township, upfront cash payment, or we might say the money culture for goods and services was all they’d come to know. A culture not of subsistence, but dependence really took root over the last 30 years of the Special Mining Lease that expired in 2019. Gardening is something rarely done as many of the landowners have been receiving their little shares from the mine. This translates into hard cash payments of K70,000 to K80,000 at any given time. Majority of the locals, including those who come from nearby villagers, have all worked with service providers for the mining town. As soon as they get their payments, families get on a charter fly into Port Moresby and have the time of their lives. Once the wallet runs low, a simple phone call back home to the mine pit and the pockets are full again.

This has been the lifecycle for three decades. To them then, “yes I am a mine landowner, spend whatever I have now tomorrow I will still have money”. It was careless to be honest. The announcement of the closure of the mine following the State’s decision to get better benefits for the people in 2020 was one that the people did not see coming. It pushed the norm to the curb. Many don’t know how they will carry on with their lives as the only source of income was asked to leave. While service providers came out stating their losses, little attention was given to the everyday average Porgerian as they too were impacted the most. Few members of the township shared with the media who arrived on site on Wednesday in preparation for equity forum launch today that, they were lost. “We don’t know a life without the mine. Since the closure we have since then been surviving on a credit basis for money to buy buai and smoke.

What happened was that when mine closed, people were basically lost. 95 per cent of the people did not budget before the closure while only 5 per cent were wise enough to do so. Large number of loans have been obtained from loan sharks and small finance establishments to a point where they are now in huge debt. Though some were asked to resume duties, especially service providers, borrowing repayments is now the fortnightly cycle impacting many Porgerans with earnings diverted to repaying debt. Money makers during this period are those coming in from Mt Hagen to sell fresh produce including vegetables and root crops such as kaukau, banana and taro. Without the service of those Hagen producers, Porgera would literally starve. Many lessons were also learnt as people begin to realise that while they were relying on the hard cash they forgot to do something sustainable for themselves.

The Porgera story is not only one for the State to realise the effects of its decision, but importantly, a personal one for the people that there is more that can be done with quick money on hand. Women have realised that if 30 years ago they used those monies to do poultry or tailoring they wouldn't have been hit this badly. Those who have since been involved with selling of second hand clothing are the few who still are in business but they too, have felt and saw firsthand how limited cash is. Reality today is everyone is struggling day to day to ensure that there is food for their families. This one year since the mine closure has taught them many hard lessons. They are now well prepared to take this next step when the mine reopens in utilising these funds in something tangible for the long run like owning a small business for themselves and not rely on other people.

With the State now on the path into getting the mine reopened, the people are impatiently waiting to get on with their own new normal. Today they will be seeing a new era for them with Barrick CEO and Prime Minister signing an agreement on the new equity arrangements before the landowners at Paiam field. Will they truly learn and do what they plan to do when the mine opens is a question they will have to answer themselves.

Govt paying 36pc equity

By DALE LUMA, June 4, 2021, *The National*

THE Government will only pay 36 per cent of its 51 per cent equity in the Porgera gold mine, says Prime Minister James Marape. Responding to questions from *The National* yesterday, Marape said 15 per cent of the 51 per cent equity was free – as part of new terms reached with Barrick Niugini Ltd, the operator of the mine. Marape said the mine would fund the 36 per cent when it resumed operation, scheduled for seven months from when the framework agreement was signed. Marape is expected to visit Porgera today. There are four more subsidiary agreements that needed to be ticked off before the mine restarts. “When you look at the equity of 100 per cent, Barrick share is 49 per cent, our share is 51 per cent (of which) 15 per cent is equity that we will not pay for. We are only paying for 36 per cent,” he said.

“The deal is structured in a way that the mine will pay for itself – the 36 per cent. “When we harvest, we pay our 36 per cent throughout the course of the mine. “It’s a deal that in my view is much better than all the other deals put together. When we started negotiations, they said the project will finance your share and they asked us to pay 6 per cent interest. “But we negotiated hard and we are now paying zero per cent interest. And as the mine produces, our 36 per cent will be (paid) off in that process. “Not a toea will be spent by the Government to restart the mine.” He promised to “sleep with the people, stay with the people and inform the people what we have secured as far as the framework agreement is concerned”.

Delay to impact Twinza project

Post-Courier, June 3, 2021

Further delays regarding the Pasca A gas agreement will impact the project's schedule, says Twinza. The developer of the Pasca A gas project is currently awaiting a response from the Petroleum Minister as to whether the terms offered to the State, and outlined most recently in the Twinza media release of April 19, 2021, are acceptable. The continued delay in concluding the Gas agreement will impact the project schedule, defer investment and see production move up to 2026. The completion of the Pasca A Gas Agreement this month would allow the project to move into the front-end engineering and design phase, with a final investment decision in late 2022 and first production in 2025. According to Twinza, an execution version of the agreement, incorporating these terms and using the State's own template, is with the Minister for his consideration.

Twinza chairman and CEO, Ian Munro, said that the company remains committed to delivering Pasca A — PNG's first offshore oil and gas project. He said the 12-month long process may be stalled yet again because the State has not communicated to Twinza the agreement terms which would be acceptable. "It is time to bring this matter to a conclusion such that the project can move forward and Twinza is on standby to execute the agreement on the Petroleum Minister's desk," he said. Mr Munro said Twinza will provide an update once they receive correspondence from the Petroleum Minister — which will either confirm the agreement or provides clarity on the terms on which the State would sign the gas agreement.

Fly River clean-up yet to start, minister says

By DALE LUMA, June 3, 2021, The National Business

ENVIRONMENT, Conservation and Climate Change Minister Wera Mori says dredging at the mouth of the Fly River has not began yet even though a clean-up notice was given to Ok Tedi Mining Ltd. Mori said sand and sediment build up as a result of mining activities needed to be cleared in order for the river to be used. "Despite the fact that we have issued a clean-up notice to Ok Tedi, they have not got their act together to start the cleaning up the mouth of the Fly River," he said. It is understood that an overseas company was to be involved in a major dredging project in the Gulf of Papua to remove all the sediments building up there.

The company, from Hong Kong, Hong Kong Financial Group Ltd, was supposed to undertake the project and ship away all the sediments to clear the waterways and sea at no cost to Ok Tedi. Mori, however, told *The National* yesterday that they had not done that yet but it was up to Ok Tedi to start coordinating with them (Hong Kong Financial Group Ltd). He said it was Ok Tedi's responsibility to organise the cleanup. Mori also previously said sedimentation build up had the potential to affect marine life, reef ecosystems and agriculture for the Middle Fly people. He said similar clean up exercises were to be carried out on the Ramu River and other River systems affected by sedimentation buildup. Ok Tedi spends around K273.3 million annually on its dredging operations at Bige which has so far seen regrowth.

People exposed to waste: Mori

June 3, 2021, The National Business

A GOVERNMENT minister has admitted that toxic waste from a gold mine in East New Britain has not been disposed of safely. Environment, Conservation and Climate Change Minister Wera Mori made the frank admission about the Sinivit gold mine. "We have in Sinivit a very sad case and I must admit that as a Government minister," he said. "We have a very dangerous situation where

there is exposure to cyanide and if we don't get our act together and if the Government does not make the money available for us to decontaminate the site and get rid of the waste, then we will subject our people to potential dangers." Mori said plans were underway to export the material overseas for safe storage. "We may be considering exporting to other countries such as Australia," he said.

He said the decontamination and cleanup of the cyanide waste in the river system at the mine would cost between K6 million to K8 million. "The volumes of the creeks there are not enough to allow for natural dilution and, therefore, if such waste including those that are exposed make their way into the creeks, it may have catastrophic consequences," he said. "We are not only looking at a cleanup but we have to decontaminate before we cleanup. "We have got to put in access roads but most importantly, the waste that can be captured will have to be removed from site and stored elsewhere that is much safer than having them stored in the ground." Mori said unfortunately, the Government was not yet able to provide the funding but an assessment has already been done for the decontamination and clean up exercise.

Marape to hand over deal

By GYNNIE KERO, June 2, 2021, The National

PRIME Minister James Marape is expected to hand over a framework agreement for the reopening of the Porgera Mine in Enga to the landowners. He said this in a statement yesterday following reports that the landowners wanted his visit this week to be called off. "Since taking office on May 30, 2019, I have advocated for a greater share of the benefits from our resources to landowners and that stands," Marape said. "That is why we have amended existing resource laws including the Mining Act 2020 and Oil and Gas Act 2020 to ensure that landowners get a fair share. "My visit to the Porgera Mine in Laigaip-Porgera this week is to talk to the affected landowners, the mine management and other mine-affected communities. "One of the main reasons is to formally hand over the framework agreement (for the reopening).

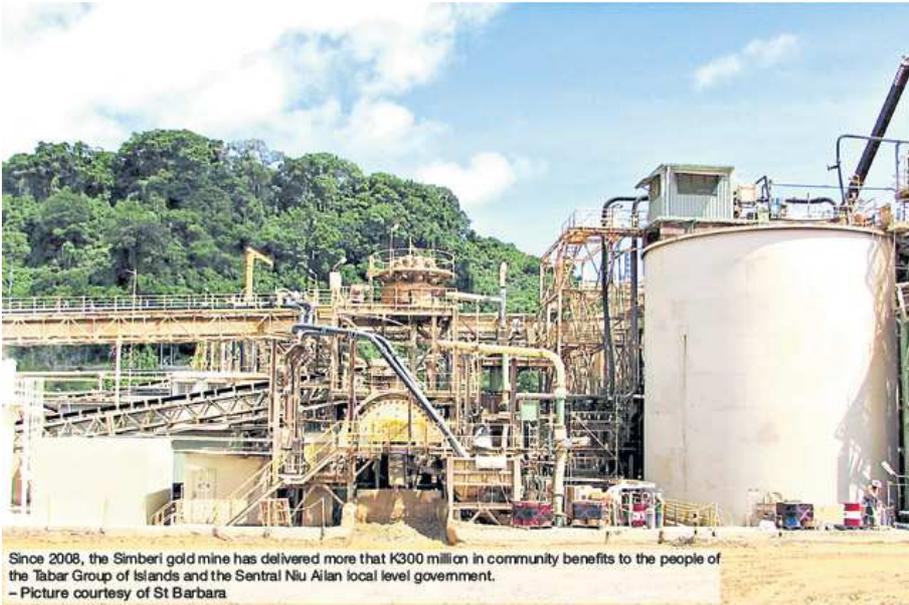
"The landowners will get a copy of the agreement before any awareness is carried out, which will include the Enga government and their community leaders." He said landowners and communities in Porgera knew well the impacts of the mine and the benefits they got. "I look forward to meeting the people of Porgera and speaking to the affected landowner communities and the Enga government with the developer Barrick soon," he said. The Government plans to set a date for a development forum where all benefits will be heard and discussed. Porgera Chamber of Commerce and Industry president Nickson Pakea said the PM's trip this week would restore confidence to the business community and the people. He said since the mine's closure, Porgera had been facing so many law and order issues resulting in the loss of lives and livelihood. "The businesses and community are glad to welcome the delegation in Porgera to see the mine reopening," he said.

Mine starts work after temporary closure

June 2, 2021, The National Business

ST Barbara says remedial work has started on its K3.4 billion Simberi gold mine in New Ireland following a fatal incident last month. It forced a temporary suspension of mining and hauling operations. The Australian miner yesterday said that haul road maintenance and pit traffic management controls had resumed. They were in addition to grade control drilling and blast activities which had also restarted. Other regular maintenance work on vehicles, heavy equipment and the process plant have been conducted. Acting general manager Wayne Patterson said: "The safety and wellbeing of our employees and the host community remains the operation's priority." In the meantime,

investigations are continuing into the death of a female mine operator. Mineral Resources Authority managing director Jerry Garry had told *The National* that a full investigation was being done. According to the authority, she was the first female to have an accident in the PNG mining industry.



Partners keen on mine opening

June 1, 2021, *The National*

LANDOWNERS and stakeholders in the Porgera gold mine in Enga are looking forward to welcoming the State and Barrick Niugini Ltd (BNL) teams onsite on Thursday. Landowners representatives Maso Mangape, Dickson Pundi, Mark Ekepa and Pala Tela in a joint statement said they had been conducting community awareness following the signing of a framework agreement between the State and BNL in April for the reopening of the mine. During the community awareness activities key aspects of the framework agreement that impact landowners were shared. According to a recent agreement, a joint venture between PNG (51 per cent equity) and BNL (49 per cent equity) would own and operate the Porgera mine. The mine is expected to resume operations later this year, with BNL to finance the restart. The framework agreement also provides that Papua New Guinea stakeholders and BNL will share the economic benefits generated over the life of mine on a 53-47 per cent basis.

There will be an increase in the equity allocated to a broad group of landowners who are the customary owners of the mine area, with the State to retain the right to acquire the remaining 49 per cent of the mine from BNL at fair market value after 10 years. The new deal secured an additional one per cent royalty taking Special Mining Lease landowners and the Enga provincial governments royalties to three per cent. The wider Porgera community also stands to gain with BNL paying US\$3 million (K10.6 million) annually for 10 years to the Porgera Sustainable Development Fund, and a further US\$15 million (K53.3 million) upfront to the appropriate categories of landowners. “Local landowners and PNG are the big winners in the deal negotiated by Prime Minister James Marape and BNL with the support of Porgera landowners,” the statement said. “We now enthusiastically await the arrival of Prime Minister Marape and Barrick president Mark Bristow for an equity forum to be staged in Porgera.”

Call for Govt to fast-track project

June 1, 2021, The National Business

LANDOWNERS of the US\$5.4 billion (K18.48bil) Wafi-Golpu gold and copper project in Morobe are calling on the Government to move forward with the project. The landowners of the special mining lease 10, from Hengambu, Yanta and Babuaf represented by their presidents on Friday, said the project had been delayed for too long. Yanta landowners association president Victor Geactulu, Babuaf landowners association president Jack Raban and Hengambu landowners association president John Nema said the landowners of the SML 10 area wanted to see the project get off the ground. “The Government, after that development forum, has to progress to the signing of the mine agreement for the operation to start at the mine site,” Nema said. He said the multi-billion kina project when developed would boost the economy at a time when it was experiencing a slump.

“We call on the Government and the Morobe government and stakeholders to decide on an effective way forward for the immediate start of the mine,” he said. Morobe government lawyer Ralph Saulep said issues regarding the development of Wafi-Golpu project were currently before the court. “We will not hesitate to cite people for contempt if the situation warrants it,” he said. He said all issues regarding the legality of the environmental permit issued last Dec 18 and the delay of mine, including the challenge to the issuance of the special mining lease were before the court. Saulep said any person who believes that he or she had a standing could apply to the court to join as a party.

Black sand mining pushes Fiji's boundaries

Much of Fiji's coastline is fragile - under threat from climate change, coastal erosion and flooding, which has become more severe in the past two years - it's also being affected by mining.

Don Wiseman, RNZ Pacific Deputy News Editor, Radio New Zealand on 31 May 2021y



Sigatoka sands Photo: from Facebook

Black sand mining by a Chinese owned company called Amex Resources Ltd has been happening at the Ba River Delta on the north of Viti Levu for most of the past two years. Another project, by a Fijian subsidiary of Australian company Dome Gold Mines, is exploring black sand deposits near the Sigatoka Sand Dunes on the south coast of the main island. That site is adjacent to the Sigatoka Sand Hills National Park, which is reported to be close to World Heritage status. Environmental advocacy group, Jubilee Australia, is calling for the mining to stop, saying the communities have not been properly informed about the implications of the projects. Spokesperson Fyfe Strachan said

Jubilee was calling for consultation with the people to ensure they are able to give free, prior and informed consent to any mining development. "In Ba the community is starting to see some environmental impacts already occurring from the project, including impacts on crabs and fish stocks, and in Sigatoka members of the community that they just really concerned to have a better understanding of the risks and the environmental impacts of those projects before those projects are given the green light to go ahead," she said.

Jubilee Australia's report is called '[A line in the sand - investigating black sand mining in Fiji](#)'. A Fiji environmental and human rights defender, Tevita Naikasawalu, backs the Jubilee call, saying the natural resources, the foreshore, are irreplaceable. "Without them the people who depend on them will not survive, given our current situation. We are in Covid and our economy has dropped, I think behind zero now," he said. "The only thing that is sustaining us is our natural resources." The coordinator of the social, ecological and justice programme for Caritas in Fiji, Kositino Tikomaibolagane, said communities at Ba that did consent, were misled. "So some of them actually gave their consent because they said there is only exploration and they signed and gave their signatures but at the end of the day when the mining takes place then they realised what they had signed before was actually the consent form to do the mining," he said, adding everyone in the communities must be fully informed.



Sigatoka River, Fiji. Photo: RNZI/Johnny Blades

The executive director of Fiji's Council of Social Services said there needed to be a rethink of the way the country went about development. Vani Catanasiga said her group, as part of the National Disaster Council, has had a lot to do with communities affected by climate change. She asked whether, with Fiji having experienced three cyclones last season and increasing incidents of coastal flooding, mining on the coastline is a good idea? "If we are facing increased impacts of climate change, shouldn't our development options be reviewed. Should we look at options that don't increase our vulnerability but instead increase our capacity to cope with something that is really beyond our control, like climate change," Catanasiga said.

Lack of information

An opposition MP in Fiji said the lack of information coming through to the people is down to the government. Lenora Qereweretabua said she has seen faults in the government's approach when she has attended consultations around the country. "I find that the language used in those public consultations is not a language understood by the communities - so there are a lot of layers that still have to be dealt with before communities can give free, prior and informed consent," she said.

Qereweretabua said another flaw is environmental impact assessment reports were expensive and could cost people thousands of dollars. She said they should be free. The Mineral Resources Minister Jone Usamate has promised a comprehensive statement is being prepared on the Jubilee report.

Dome Gold Mines chairman Jack McCarthy, in an email to RNZ Pacific, claimed the report was full of misleading claims designed to create concern within the community. He said Dome complied with the many regulations that protect the population and environment. McCarthy, told RNZ Pacific in 2016, when it was first looking for an exploration licence that the mining effort around the Sigatoka River mouth would improve water quality by allowing the river to flow more quickly, and allow transport up the river. Amex Resources Ltd, which we could not reach, has told the Fiji Sun it would lodge a comprehensive complaint with the Mineral Resources Department over a report it claimed is full of lies.

Governor Saonu plans to form alluvial mining company

May 31, 2021, The National Business

Morobe Governor Ginson Saonu plans to form a company for the province called Morobe Alluvial Mining Ltd (MAML). Saonu said the Labu Butu people had created history in alluvial mining making awareness on ML167 along the river bed of the Markham River. “At Misima, there is alluvial mining plus Kainantu, Madang and other parts of the country,” he said. “But there is not a single alluvial mining company belonging to PNG. “Alluvial mining is the lifeline of the people of Morobe and PNG who live off it. “But there is no recognition from the provincial governments or the National Government.” Saonu said all mining rules and regulations would be followed in the development of mining lease 167 which covers 700 hectares of the Markham River down to the mouth. “We will follow mining rules and regulations and meet the requirements,” he said. “The project will continue to help the people. “With the spin-off and other requirements, people are not ready. “That is why we are having this gathering so people can air their views. We cannot just come and impose ideas. “This is the beginning of negotiations and participation. “I want to make sure that people participate. “They understand me and I understand them and then work will come.”

Pacific Plunder V: The extraction of valuable resources from across the Pacific has made companies billions but comes at a sometimes catastrophic cost

The Guardian, 30 May 2021

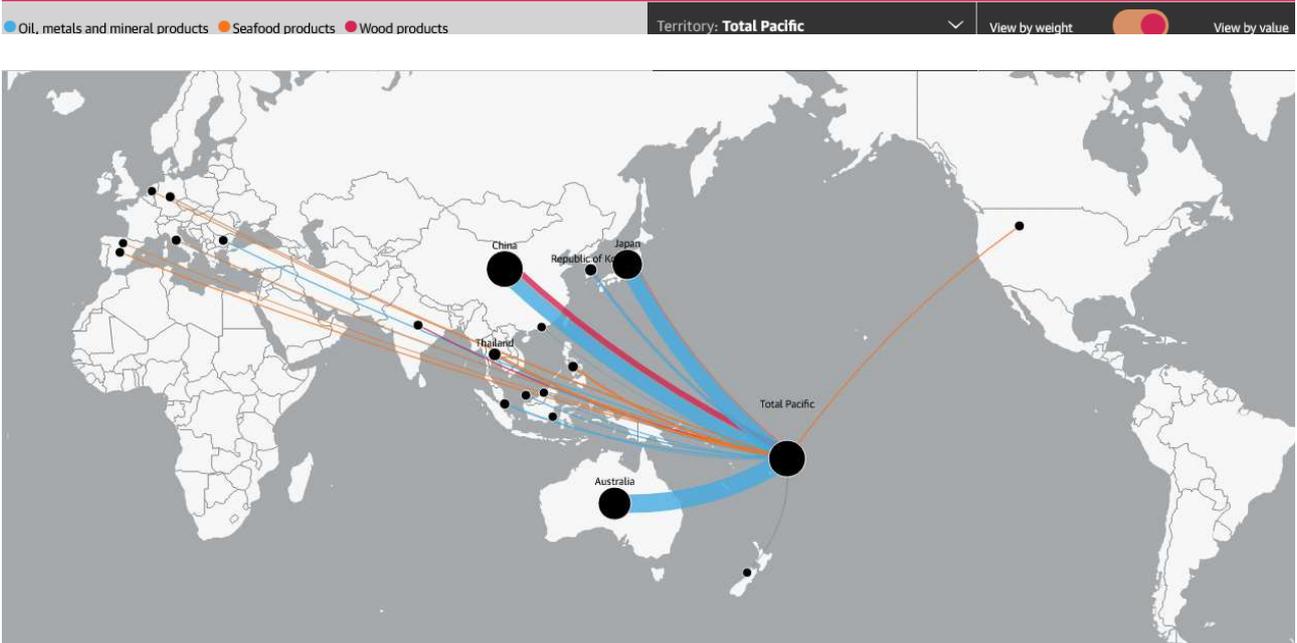
Millions of tonnes of minerals, fish and timber are extracted from Pacific island nations each year, generating massive profits for foreign multinationals. Across the region, mining, fishing and logging industries have shored up the budgets and stabilised the economies of Pacific countries, sometimes making and breaking governments. Done well, these industries bring jobs to the Pacific and bring in much-needed revenue for development. But there are also cases where companies have started mining, logging and fishing projects without regard for environmental or social harms of the work they do. The region is covered in the scars of mining projects, deforestation and illegal fishing. The Guardian has collected data from across the region to map what resources are being harvested from Pacific countries, where they end up, who these projects profit and who they harm. Over the next month, we will launch a series of reports and investigations that outline the impact of the resource extraction industry in the Pacific region – focusing on logging, mining, fishing, and the emerging industry of deep-sea mining. A global audit of Pacific resource extraction undertaken by the Guardian’s Pacific Project has revealed that:

- **China dominates resource extraction** in the region, taking just over half the total tonnes of the minerals, timber and fish exported.

- **In some industries, Pacific communities see less than 12%** of the final value of the resources being extracted, with little paid in royalties or reinvested in the countries which own the resources. Despite their collective natural resource wealth, GDP per capita remains low for many Pacific Island states.
- The extraction each year of billions of dollars worth of minerals, oil, gas and timber – **US\$11.8bn in 2019** - is causing **environmental devastation**, poisoning rivers and forests, and degrading food security.
- The scale of these extractive industries is also having **significant social and health impacts on Pacific people**.

A few countries take the vast majority of the Pacific's natural resources

Showing the top recipients of minerals, seafood and wood export from the Pacific islands. Measured by weight or US dollars. Lines are scaled by the maximum for the territory shown, and so are not comparable between countries



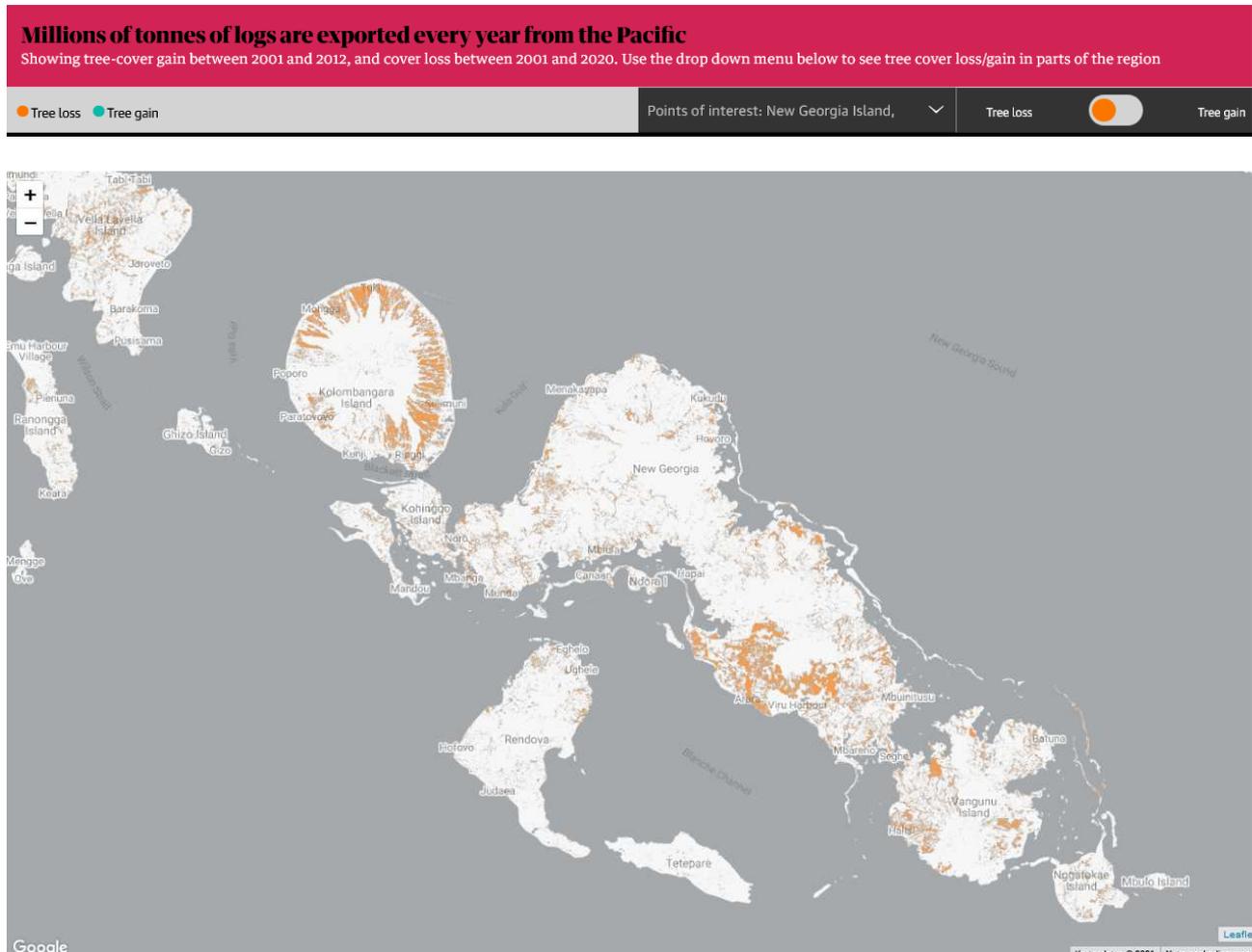
Value of the trade flows were calculated using CEPII's 2019 BACI dataset. Minerals, seafood and wood were identified and classified using keywords in the dataset. Guardian Graphic | Sources: CEPI BACI International Trade Database, Observatory of Economic Complexity, UNStats

China is the Pacific's biggest customer whether measured by weight or US dollars. But Australia is close behind when measured in value – \$2.8bn to China's \$3.3bn in 2019. This is due to the fact that while China takes a lot of wood and fish from the region – which are heavy but relatively inexpensive – Australia imports valuable minerals, such as gold. China's lack of laws against importing illegal timber, and poor accountability for environmental or social impacts mean the impact of their resource extraction is often worse than for companies from countries like Australia, which are subject to more scrutiny. "China's mineral, timber, fossil fuel, food and other imports from Pacific Island nations are staggering in magnitude. They're creating enormous challenges for sustainable development in the region," says Prof Bill Laurance from James Cook University.

Logging

Solomon Islands and Papua New Guinea are among the largest exporters of tropical logs in the world. But the forestry industry is dominated by foreign companies, with some of the logging done illegally and often at unsustainable levels. By some estimates Solomon Islands exports more than 19 times a sustainable amount of timber every year. On current rates, the archipelago could exhaust all of its natural forests by 2036. Already there is evidence that logging in Solomon Islands is impacting the country's coral reefs, a vital part of the food ecosystem. Logging projects have also been linked to significant internal migration and increasing food insecurity through localised inflation and the destruction of mangroves and food gardens. Many communities across the Pacific have

been left with little to show for decades of logging – despite the fact that forested land is mostly under customary ownership. Corruption and poor processes mean that landowners and governments are often shortchanged. In PNG, the reported annual revenues from forestry are between US\$200m and \$300m, but the industry claims to make only between \$8m and \$9m in profit.



Tree-cover loss can be due to factors other than deforestation, such as fire. With a sustainable forestry industry, tree-cover loss will be replaced by gain as saplings grow large enough. Guardian Graphic | Sources: Global Forest Watch

Mining

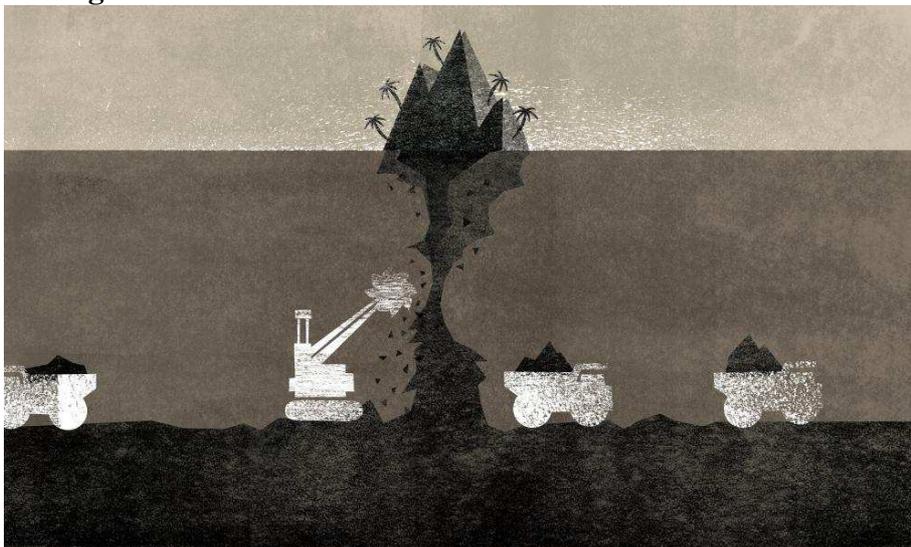
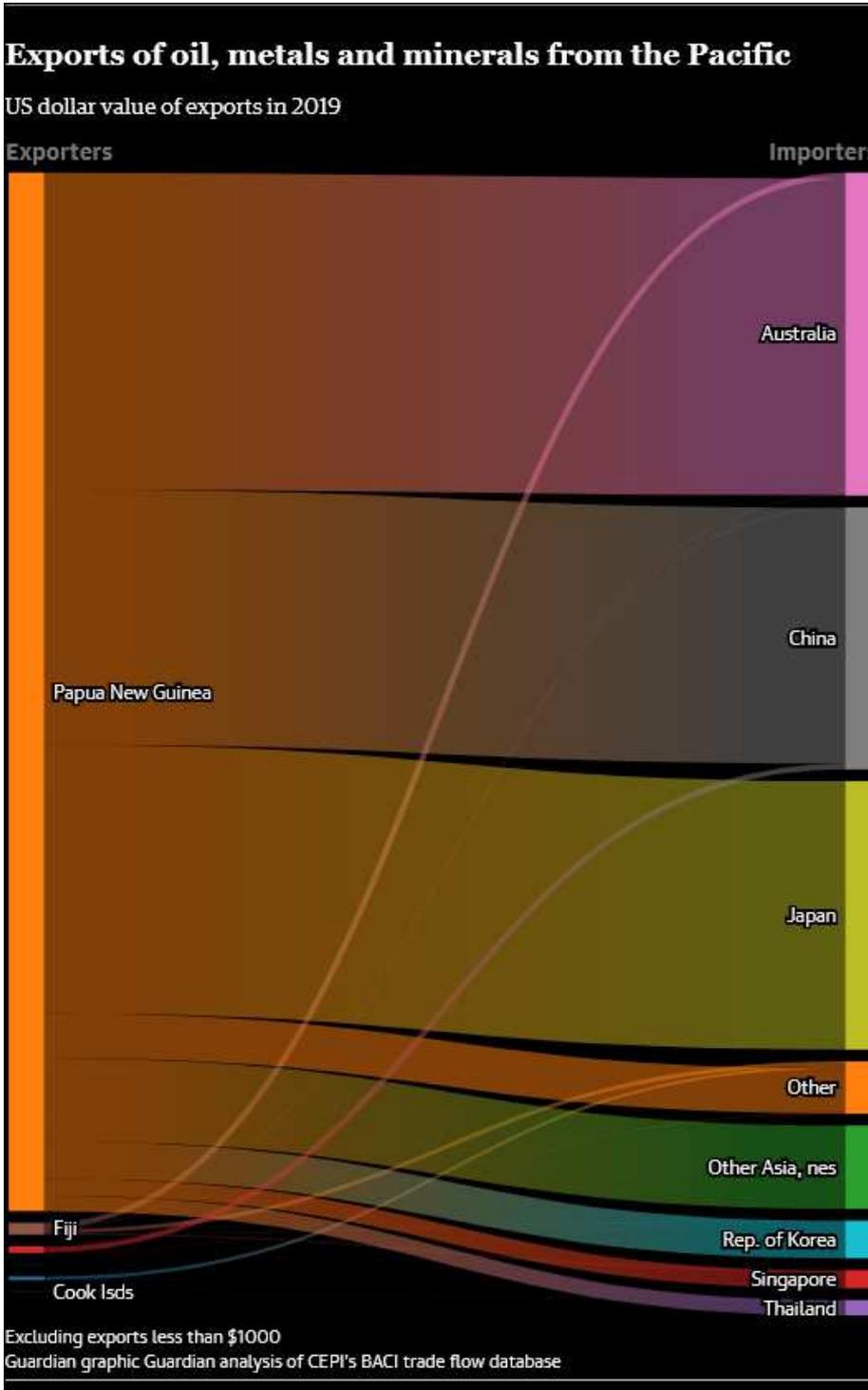


Illustration: Ben Sanders

Mining has dominated Pacific economies for decades but ownership and operations have mostly been a foreign affair. Every year nearly 11m tonnes of fuel and oil are extracted from the region, 2m tonnes of copper, nickel, manganese and aluminium are mined, and gold worth \$2.6bn is quarried. But despite the minerals and wealth pulled from the Pacific’s mountains, valleys, oceans and rivers, communities often have little to show for it. Huge gold and copper mines like PNG’s Ok Tedi and Panguna have delivered millions in royalties for fragile economies but they have also wrought devastating impacts upon the lives and livelihoods of the people who live with them.



Excluding exports less than \$1000; Guardian graphic Guardian analysis of CEPI's BACI trade flow database

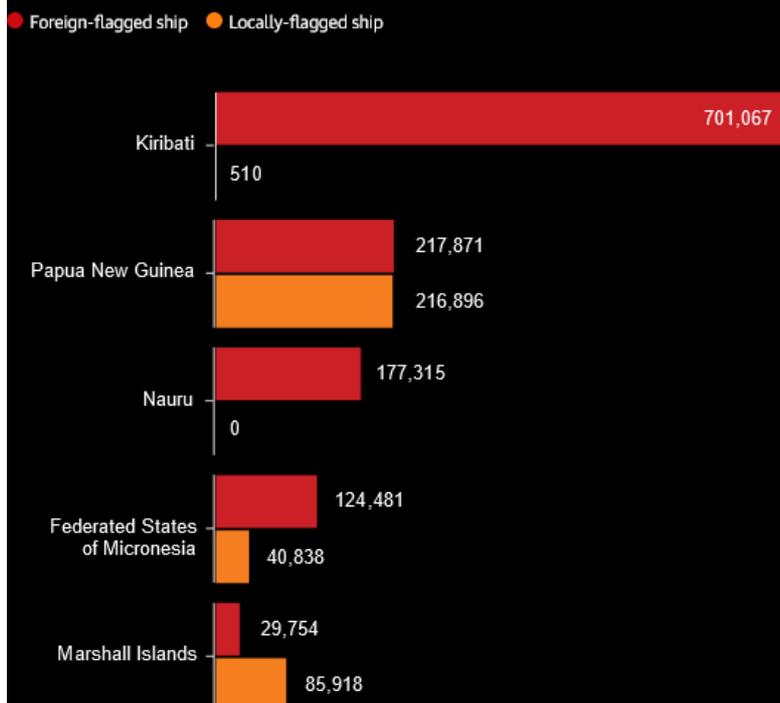
Oil and mining accounted for approximately 90% of the value of all PNG export in 2018 but just 10% of government revenues. Promises for infrastructure or royalty payments for local communities are often broken. And concessionary terms or exemptions are often granted to win projects, with the result that many mines – including the Lihir goldmine – have paid almost zero corporate tax for years. In Solomon Islands, a bauxite mine on Rennell Island has been the cause of catastrophic spills of oil and bauxite into the island’s fishing grounds, endangering a World Heritage site – while enjoying multi-million dollar tax exemptions granted by the country's government. And the island of Nauru once had one of the highest per-capita incomes in the world because of a booming phosphate mining industry in the 1970s and 80s. But the mismanagement of hundreds of millions in royalties caused the near-collapse of the country’s economy, fuelling a series of financial crises and ongoing political instability. Nearly 80% of the country’s small landmass is unliveable, having been stripmined by foreign multinationals.

Fishing

The Pacific region exported 530,000 tonnes of seafood products in 2019, netting US\$1.2bn. The biggest exporters were Papua New Guinea (\$470m), Fiji (\$182m), the Federated States of Micronesia (\$130m), Vanuatu (\$108m) and Solomon Islands (\$101m). The biggest importers of Pacific fish in 2019 were Thailand, with seafood imports from the Pacific worth \$300m, the Philippines (\$195m), Japan (\$130m), China (\$100m) and the US (\$100m). In some ways the fishing industry is a success story for the Pacific region. In a landmark moment of regional cooperation, eight countries signed the parties to the Nauru agreement in 1982, which allowed the tiny countries to negotiate as a bloc, the access to their waters by foreign fishing vessels, a move that has generated an additional \$500m a year in revenue. But the Pacific — the world’s most fertile fishing ground, which supplies well over half of the world’s tuna — also falls victim to illegal fishing, with estimates that up to one in every five wild-caught fish are illegally caught.

Foreign vessels dominate the fishing industry in the Pacific

Tonnes of fish caught offshore in 2014 by Pacific ships compared with ships with foreign flags



+ Expand

Guardian graphic: Gillet 2016

Deep-sea mining



Illustration: Ben Sanders

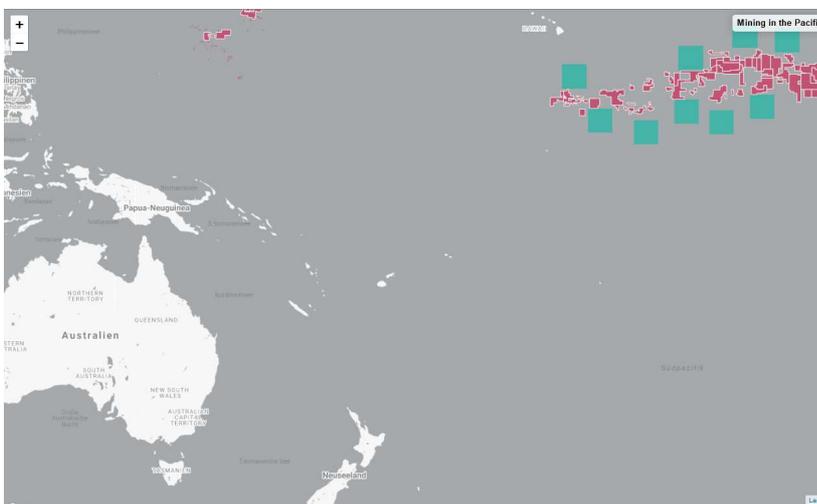
Negotiations are under way to open nearly half the Earth's surface to mining. The International Seabed Authority is finalising a mining code that would, for the first time, allow companies and nations to mine minerals from the ocean floor, up to 5km below the waves. Proponents argue that seabed mining would be a well-regulated industry, one that avoids the mistakes of mining on land. The industry is potentially worth billions of dollars and could assist the transition to a renewable energy economy, supplying raw materials for key technologies including batteries, computers and phones. But marine scientists who study the deep sea floor – an area of the world humanity knows less about than the surface of the moon – have urged caution. They warn that the world could lose whole species of marine life even before they are known to science. Pacific nations are caught up in this nascent extractive industry, as many of the exploratory licences that have been granted have been sponsored by them and are in or near Pacific waters. A coalition of some of the most significant civil society organisations in the region has launched a campaign for a “blue line” to be drawn against deep sea mining, saying it represents the “most grievous violation of Mother Ocean, already exploited by those nations that have rejected the basic human responsibility to live in harmony with the fragile ecosystem of our planet for the financial benefit of a few”.

Where companies are exploring the ocean floor for minerals

Deep sea mining is still a nascent industry, but many of the areas where countries have been granted exploration licenses are near coral vents and other centres of marine biodiversity. **Hover** or **tap** on mining areas to see more information

● Mining licenses ● Area of particular environmental interest

Points of interest: Pacific overview



Guardian Graphic | Sources: International Seabed Authority

Notes and methods

Guardian Australia’s trade flow dataset was constructed using the 2019 version of the BACI database created by CEPII. The BACI database was in turn created using UN Comtrade data, directly reported by each country. Goods in the BACI database were identified using the HS17 version of the Harmonized System Codes. The Guardian classified goods as “seafood products”, “wood products” or “oil, metal and mineral products” based on keywords in the Harmonised System Codes. Aggregate trade flows were calculated by grouping data by exporter, importer and the category assigned by the Guardian.

(Source: <https://www.theguardian.com/world/ng-interactive/2021/may/31/pacific-plunder-this-is-who-profits-from-the-mass-extraction-of-the-regions-natural-resources-interactive>)

Pacific Plunder VI: ‘They failed us’: how mining and logging devastated a Pacific island in a decade *Rennell Island, in Solomon Islands, has suffered the triple assault of extensive logging, bauxite mining, and a devastating oil spill from a carrier hired by a mining company*

By Mike Puia in West Rennell, photographs by Zahiyyd Namo, The Guardian, 30 May 2021, Last modified on 2 Jun 2021



Logging and mining started on Rennell island a decade ago, with serious environmental and social impacts. Photograph: Zahiyyd Namo/Aelan life photography

There is perhaps nowhere in the Pacific where the costs of extractive industries are as heartbreakingly clear as Rennell Island. The island, a tiny dot in the vast South Pacific that lies at the southern tip of [Solomon Islands](#), is home to a few thousand people. And it’s starkly divided. On one side is pristine East Rennell, a Unesco world heritage site, which offers a glimpse of Rennell unspoiled. But in the last decade, West Rennell has suffered the triple assault of logging, bauxite mining, and a devastating oil spill from when a bulk carrier, hired by a mining company, ran aground on a reef.

Logging companies arrived on the island about 10 years ago. Satellite images show extensive tree cover loss in the western part of the island and the scars of roads built to get the timber out. Locals in West Rennell, like Ajilon Nasiu, say that since logging and mining began there, the environment has changed. “Birds and animals here have moved out, probably to East Rennell. We haven’t heard the sound of birds in the morning,” says Nasiu, the former speaker of the national parliament in Honiara. He has been closely observing logging and mining activities since they started on the island. “The problems we experience are because landowners were not united to protect our forest and land or to confront companies.” Mining soon followed the logging, with leases covering

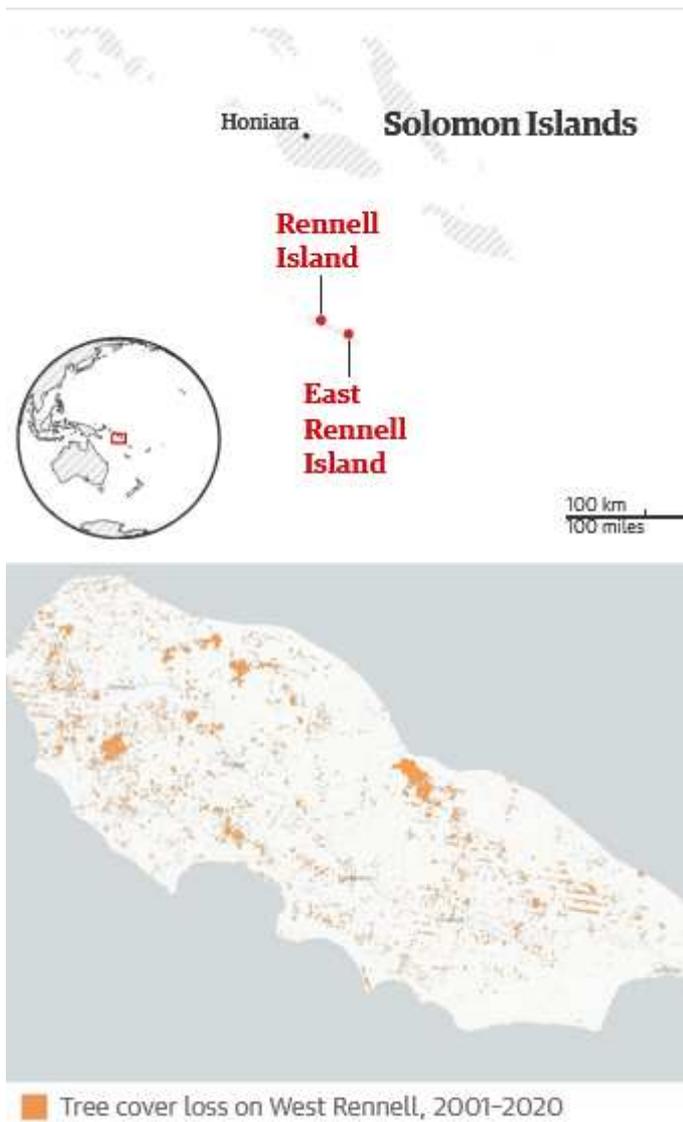
much of West Rennell granted to companies eyeing the bauxite-rich soil. Bauxite ore is the main source of aluminium.



The pristine eastern part of Rennell Island is a Unesco world heritage site, known for Lake Tegano, the largest enclosed lake in the Pacific Islands.



The impacts of logging and bauxite mining on Rennell Island.



Landowners and some officials [estimate that since 2014 up to 50% of the bauxite-rich soil in West Rennell has been exported](#). While Solomon Islands government offers generous tax exemptions to mining companies operating on Rennell, companies do pay into government coffers. [The governor](#)

[of Solomon Islands' central bank says](#) that while exempt from paying export taxes, Bintang Mining Company, one of the major operators on the island, contributed SBD\$142m (US\$17.8m) in foreign exchange in 2020 and \$131m (US\$16.4m) in 2019. Businesses in West Rennell flourished during the peak of logging and mining activities. Children could buy mobile phones, shops opened and people had cash to spend.



The introduction of mining and logging on Rennell Island has had profound impacts on community life.

But even current and former government officials have conceded that the way previous governments handled the process of land acquisition and granted leases for the bauxite mining industry did not abide by mining regulations and has harmed the community. Former prime minister Rick Houenipwela told SIBC last year: “Sadly, [Solomon Islands](#) have not benefited from the Rennell mining operations.” Amos Tuhaika, from Avatai Village, told the Guardian their forest, gardens and sea have been destroyed by extractive companies. “We rely on the national government, provincial government and the police to protect us but they failed us,” he said.



Amos Tuhaika, from Avatai Village said that the community’s ability to feed itself from the land and sea had been significantly affected by logging and mining on the island.

People in West Rennell say that the arrival of mining and logging operations also changed the fabric of social life. Shops selling alcohol sprang up in villages near mining and logging camps. In Lavagu village, Rosemary Tingi'ia said families had been destroyed by the impact of the foreign miners, who have had children to foreign mining workers.

"We haven't heard the sound of birds in the morning" *Ajilon Nasiu*



While some of the men proving caring partners who provided for their children, more often the experiences were far more destructive. Often the women were paid for sex, sometimes just basic food and shelter, and when the miners' work had finished, they returned to their home countries, leaving the young women to fend for themselves and their children. There is deep stigma and shame in Solomon Islands for the women and their children in this situation. The children have no defined traditional role in the community where land is passed down patrilineally, and the women struggle to be accepted by their indigenous families or to find future partners. "These children now become fatherless without a house or a bank account," said Tingi'ia.



Rosemary Tingi'ia said some local women had children by foreign mine workers who then returned to their home countries, leaving them without support for themselves or their children.

And then, in February 2019, Rennell Island was the site of the most serious man-made disaster in the country's history. During Cyclone Oma, a bulk carrier, the MV Solomon Trader, carrying 700 tonnes of oil, ran aground on Kongobainiu reef. The carrier, hired by mining company Bintan Mining Solomon Islands, had been attempting to load bauxite from a nearby mine on the island. It spilled 300 tonnes of oil into the pristine bay. The water turned black, people reported being forced to drink rainwater, because their fresh water sources were contaminated and, unable to fish, were reliant on deliveries of food from Honiara, 250km away. At Avatai village, every chicken died a week after the spill and children suffered skin and eye infections.



MV Solomon Trader, a Hong Kong-flagged vessel when it ran aground at Kangava Bay, Rennell Island, spilling more than 300 tonnes of heavy oil into the sea.

The owner of the vessel, King Trader, and its South Korean insurer, P&I Club, apologised for the spill in March 2019, describing the situation as “totally unacceptable”. [In a statement](#) the companies said “although matters of liability are yet to be determined ... [we] have expressed deep remorse”. The statement said they were “acutely aware of environmental damage” and were working as quickly as possible to bring the spill under control. According to a report by local and international experts into the spill, which was given to Solomon Islands government in 2019 and [leaked to the ABC](#), the oil spill caused the direct loss of more than 10,000 square metres of reef and more than 4,000 square metres of lagoon habitat and economic losses of up to AU\$50m.

The report said the site could take up to 130 years to recover. Five months later, a second major spill hit the bay, when an estimated 5,000 tonnes of bauxite slipped into the water while it was being loaded on to a barge, turning the bay red. “It’s like a scene from the Exodus,” a source on the island [told the Guardian](#) at the time. The member of parliament for Rennell-Bellona province, Dr Tautai Agikimu’a Kaitu’u, said West Rennell landowners didn’t get what they should get from their natural resources. “Logging and mining in West Rennell, especially mining, has caused many problems to our communities and the environment... The situation here in West Rennell with regards these operations is a sad one,” he said.

(Source: <https://www.theguardian.com/world/2021/may/31/they-failed-us-how-mining-and-logging-devastated-a-pacific-island-in-a-decade>)

Pacific Plunder: The \$3bn bargain: how China dominates Pacific mining, logging and fishing. *China received more than half of all seafood, wood, and minerals exported from the region in 2019. Experts warn this is creating ‘enormous challenges for sustainable development’*
By Josh Nicholas, The Guardian, 30 May 2021, Last modified on 1 Jun 2021

One country dominates the Pacific’s resources extraction. Guardian analysis of trade data has revealed that [China](#) received more than half the total tonnes of seafood, wood and minerals exported from the region in 2019, a haul worth \$3.3bn that has been described by experts as “staggering in magnitude”. The country’s mass extraction of resources comes as China has deepened its connections with governments across the region, amid a soft power push that sees it rivalling the influence of the US and Australia in the Pacific. China took more by weight of these resources from the Pacific than the next 10 countries combined, with experts saying China “would easily outstrip” other countries, including Australia, when it comes to “gross environmental impact of its extractive industries”.



China regularly claims more than 90% of the total tonnes of wood exported by Papua New Guinea and Solomon Islands. Photograph: Alessio Bariviera

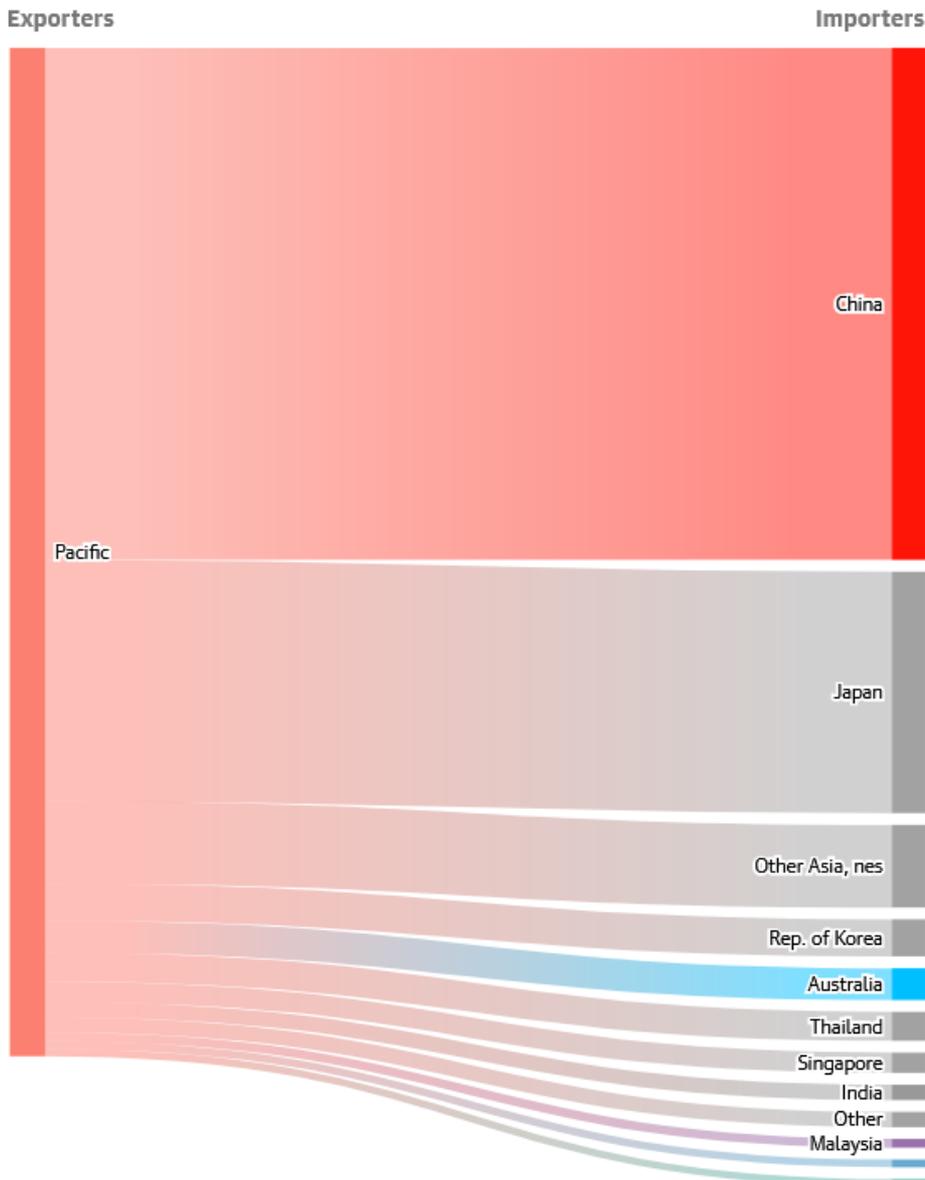
Data analysis reveals the extent of China’s appetite for Pacific natural resources. In 2019 China imported 4.8m tonnes of wood, 4.8m tonnes of mineral products, and 72,000 tonnes of seafood from the Pacific. The next single largest customer for the Pacific’s extractive resources was Japan, which imported 4.1m tonnes of minerals – mostly petroleum - 370,000 tonnes of wood and 24,000 tonnes of seafood. Australia imported 600,000 tonnes of minerals, 5,000 tonnes of wood and 200 tonnes of seafood.

Shane Macleod, a research fellow at the Lowy Institute, says that China is such a dominant customer of Pacific resources because of its proximity to the region and its need to power its economy.

“They just have the appetite. They have the need for natural resources and they’re looking for sources and the Pacific is geographically close. It has the added benefit that the supply lines are shorter,” he said. “So you can look at the Ramu nickel mine in [Papua New Guinea](#). That is providing raw material for China in the region, directly, without having to be transported from the other side of the planet.” From [Solomon Islands](#), more than 90% of extractive resources go to China when measured by weight. And China regularly claims more than 90% of the total tonnes of wood exported by Papua New Guinea and [Solomon Islands](#). Beyond direct imports of resources, [data](#) from the American Enterprise Institute shows more than US\$2bn was invested by Chinese companies in Pacific mining in the past two decades. These include investments in the controversial [Porgera](#), [Ramu Nickel](#) and [Frieda River](#) mines in PNG. The Chinese government has also [sent billions](#) of dollars in official finance into the region, including tens of millions for new marine and industrial zones.

Where the Pacific's extractive exports go

Tonnes exported of seafood, wood and mineral products in 2019



Guardian graphic Guardian analysis of CEPII's BACI trade flow database

Comparing the Pacific's exports

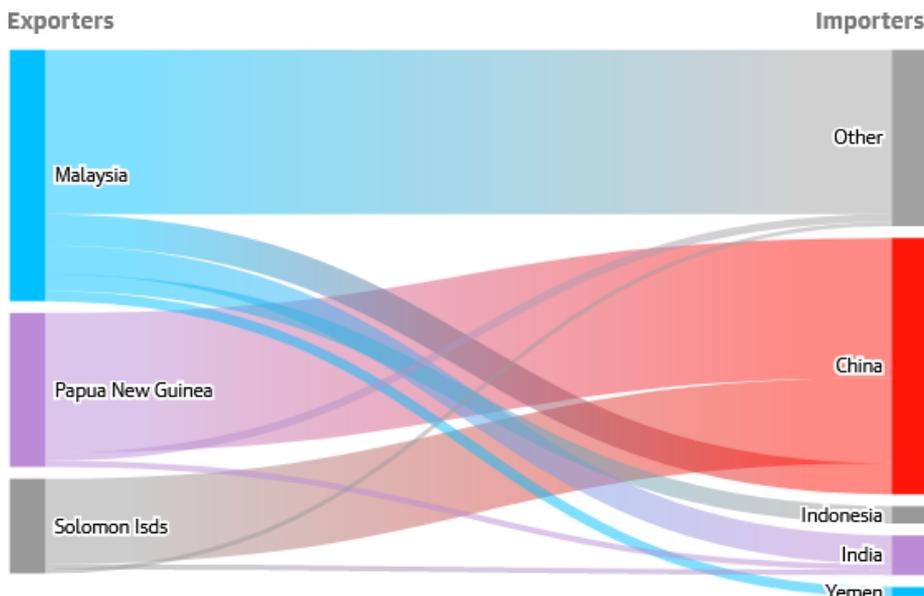
China is the Pacific's biggest customer whether measured by weight or US dollars. But Australia is close behind when measured in value – \$2.8bn to China's \$3.3bn in 2019. This is due to the fact that many extractive products are heavy but relatively inexpensive commodities, like wood. "In terms of the gross environmental impact of its extractive industries, China would easily outstrip other industrial nations that operate in the Pacific region, including Australia," says Prof Bill Laurance from James Cook University in north Queensland. "China's mineral, timber, fossil fuel, food and other imports from Pacific Island nations are staggering in magnitude. They're creating enormous challenges for sustainable development in the region."



A logging truck heads through the village of Vanimo, Papua New Guinea, en route to the Vanimo Forest Products log camp where the logs will be loaded onto a ship for export to China. Photograph: Chicago Tribune/Tribune News Service via Getty Images

China receives a smaller share of Malaysian wood exports

Tonnes of wood exported in 2019



Guardian graphic Guardian analysis of CEPI's BACI trade flow database

The logging that takes place in the region has huge impacts on communities. “Most of those logs have been produced illegally, often ... through the violation of land rights. This is not an abstract concept in PNG but one with real-life impacts for countless people across the country. Most rural communities depend directly on their land and forests for at least some of their needs. When that forest vanishes, or is stolen, the impacts are severe.” While China’s new forest law, which came into effect in July 2020, aims to promote sustainable trade of timber, as well as to safeguard China’s forests, there are still concerns about some companies’ practices. “Even if the laws and rules change, it will take time and effective enforcement before the companies change behaviour,” Stanley says.

Foreign-flagged fishing vessels

Fishing is a huge source of income for many small Pacific nations. But they largely haven't been able to capture the full value of this resource. Apart from Fiji, Pacific nations haven't been able to move up the value chain into the processing of fish into more valuable products. Kiribati, for instance, [receives](#) up to 75% of its government revenue from fishing access fees and levies. But Kiribati directly exports very little – just 1,000 tonnes of seafood were exported to China in 2019. Foreign-flagged vessels, meanwhile, landed hundreds of thousands of tonnes of fish in Kiribati waters.

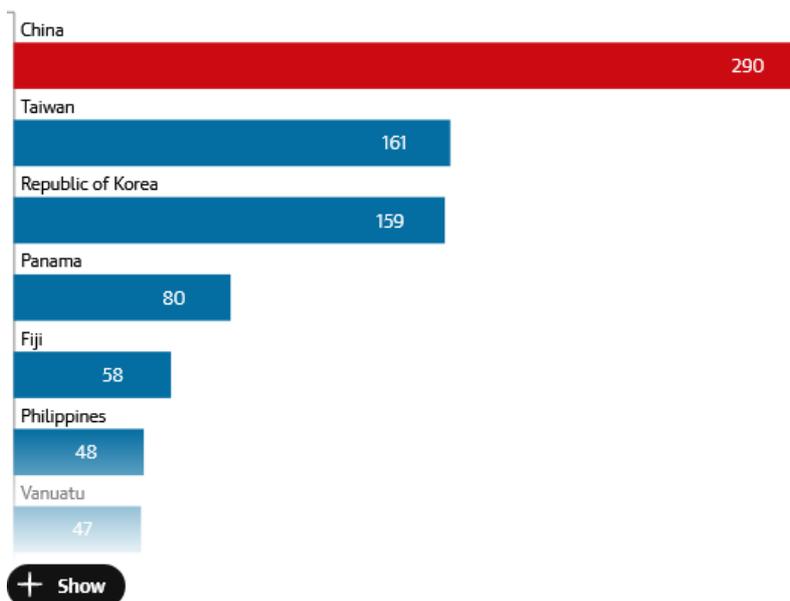


Chinese fishing boat detained by Palauan authorities on suspicion of illegally harvesting sea cucumber. Photograph: Richard Brooks/Lightning Strike Media Productions

A survey of boats operating in the Pacific in 2016 found that Chinese-flagged vessels far outstripped those of any other country. China had 290 industrial vessels licensed to operate in the region at the time, more than a quarter of the total, and more than the 240 from all the Pacific nations combined.

Fishing vessels in Pacific waters in 2016

Number of industrial vessels licensed to operate in the Pacific region in August 2016



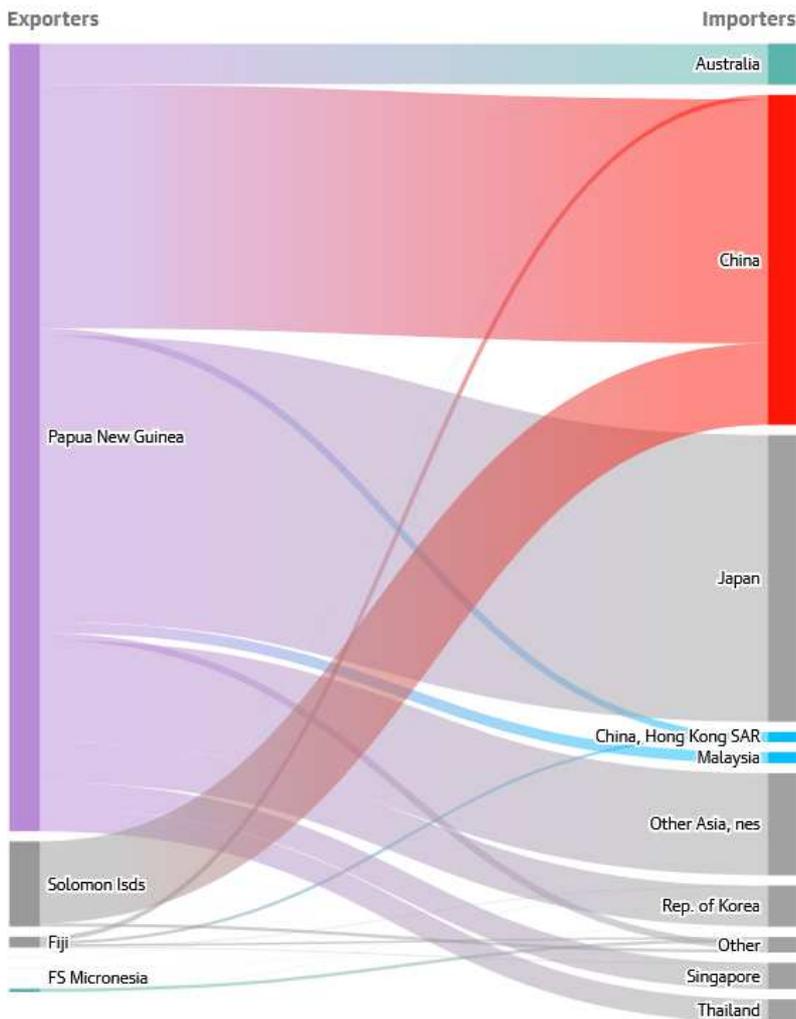
Outside of PNG, little of the offshore fishing in the Pacific is conducted by locally flagged ships. Rather, local fishing is concentrated in coastal waters. There are highly valuable species in these waters, according to Dr Hugh Govan at the University of the [South Pacific](#), such as sea cucumbers. But Govan says many coastal fisheries are overfished or commercially extinct. The main market for sea cucumbers is southern China, but these were overfished to such a degree in PNG that the government [had to halt fishing for several years](#). China's foreign ministry spokesperson, Hua Chunying, says China is "[a responsible fishing country](#)", with "zero tolerance" for violations of relevant laws and regulations committed by distant fishing vessels". "We have ... strengthened international cooperation, and done a great deal of fruitful work in jointly combating illegal fishing and promoting the sustainable development of fishery resources with other countries."

Mining disasters and scrutiny

Measured by weight, Solomon Islands sends almost all of its mineral products to China, much of it aluminium ore. Minerals account for more than [90% of the value of PNG's total exports](#), and it sends just over 30% by weight to China. Australia is also deeply involved in mining in PNG – controlling many of the largest mines, and importing \$2.5bn of gold in 2019. Australia takes almost 100% of the gold from Fiji and about 80% from PNG. But when measured in weight these pale compared with the minerals exported to China.

Exports of oil, metals and minerals from the Pacific

Tonnes exported in 2019



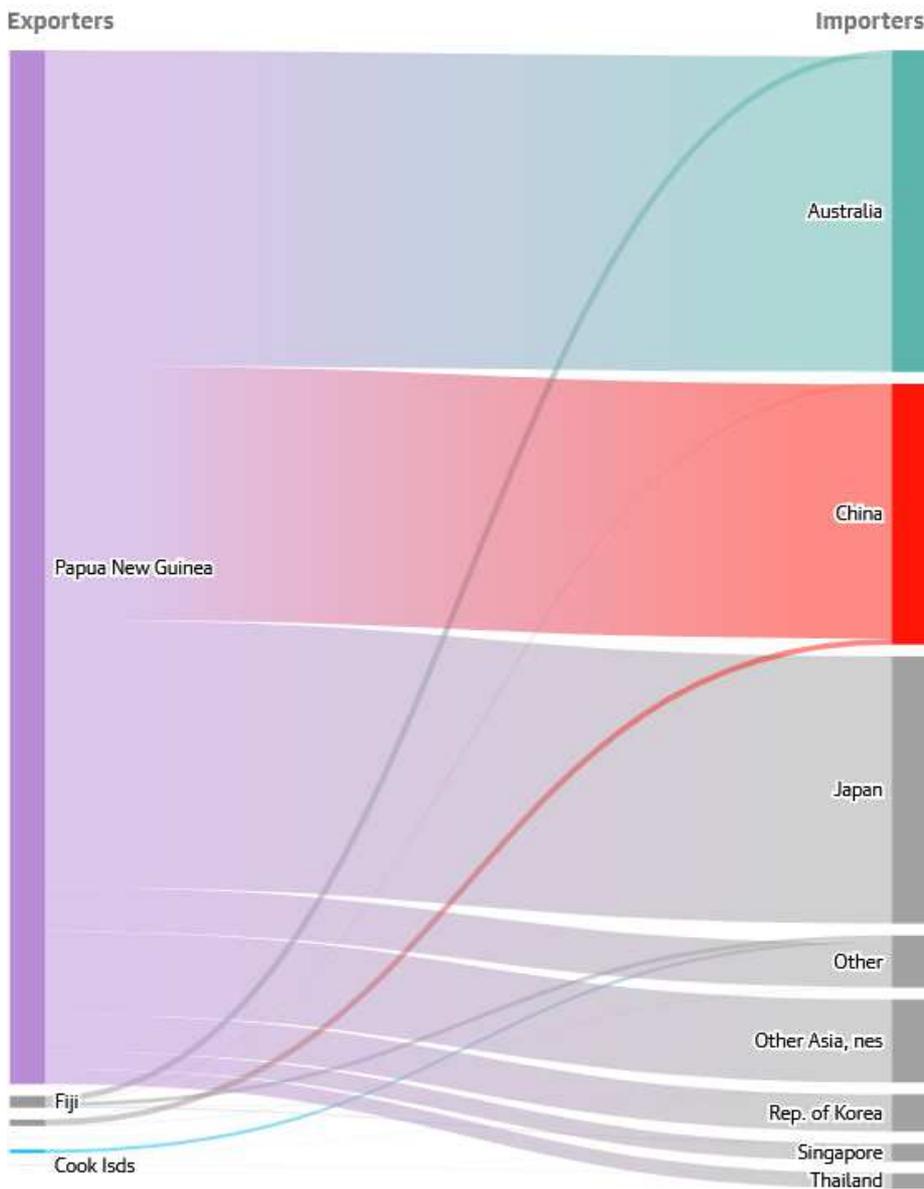
Excluding countries that export less than 1000 tonnes

Guardian graphic Guardian analysis of CEPI's BACI trade flow database

But the Lowy Institute’s Shane McLeod, argues that a significant difference between Chinese and Australian trading partners is how accountable companies are held for environmental and social issues. Large-scale mining operations in PNG have a horrific environmental track record, including [disposal of mining waste at Anglo-Australian BHP’s Ok Tedi mine](#), at Anglo-Australian Rio Tinto’s Panguna and, more recently, at the Chinese-operated [Ramu Nickel](#) mine. Many foreign-owned companies have subsequently withdrawn from projects that have proven environmentally ruinous.

Exports of oil, metals and minerals from the Pacific

US dollar value of exports in 2019



Excluding exports less than \$1000

Guardian graphic Guardian analysis of CEPI's BACI trade flow database

“But Chinese companies operating abroad aren’t subjected to scrutiny from their home markets in the same way as companies from western nations are,” McLeod said. “Ok Tedi is a good example – the environmental disaster was a cause of [major embarrassment](#) for [BHP], with scrutiny from media eventually fed through to investors.” “Companies with a Chinese listing/investors do face pressure and scrutiny, but I think the way that manifests itself is opaque and unseen. It’s not clear to what extent an environmental issue would limit the operations of a resource project, for example. “I expect feedback for MCC [the Metallurgical Corporation of China, the operator of Ramu Nickel]

comes through a political/governmental channel rather than, say, a journalist from China covering the environmental impact of a mine there.” China’s foreign ministry did not reply to the Guardian’s requests for comment.



The Panguna mine sparked a decade-long civil war in Papua New Guinea’s autonomous region of Bougainville. Photograph: Ilya Gridneff/AAP

[Last year](#) the PNG government cancelled the mining lease of the part-Chinese owned Porgera mine, claiming that the country was not getting its fair share of major natural resource projects. The Chinese joint venture partner, Zijin Mining, “has flagged international political ramifications, warning the lease dispute could damage bilateral relations between [PNG] and China”. The next test of corporate social responsibility may be on the horizon, with proposed mines from both [Australian](#) and [Chinese](#) companies in PNG facing pushback for environmental and cultural reasons.

Notes and methods

- *Guardian Australia’s trade flow dataset was constructed using the 2019 version of the [BACI database](#) created by CEPII. The BACI database was in turn created using [UN Comtrade data](#), directly reported by each country.*
- *Goods in the BACI database were identified using the HS17 version of the [Harmonized System Codes](#).*
- *The Guardian classified goods as “seafood products”, “wood products” or “oil, metal and mineral products” based on keywords in the Harmonised System Codes. Aggregate trade flows were calculated by grouping data by exporter, importer and the category assigned by the Guardian.*
- Do you know more or have a story to tell about how your community has been affected by resource extraction in the Pacific? Get in touch: kate.lyons@theguardian.com

(Source: <https://www.theguardian.com/world/2021/may/31/the-3bn-bargain-how-china-dominates-pacific-mining-logging-and-fishing>)

First gas shipment in ‘25

By GYNNIE KERO, May 28, 2021, The National Main Stories

THE first shipment of liquefied petroleum gas (LPG) from the US\$1.6 billion (K5.5 billion) Pasca A project in Gulf is expected in 2025, says Petroleum Minister Kerenga Kua. It will be the

country's first offshore extractive resource project with infrastructure in the Gulf of Papua, about 95kms offshore in waters 93 metres deep. Kua said Pasca A was a small gas condensate project in terms of reserves size. But with the offshore production facilities, its potential to aggregate small pockets of stranded gas fields in the Gulf of Papua is huge. "The project will evolve in a two-phased development plan. "In Phase One, rich liquids will be stripped and produced, namely liquid petroleum gas (LPG) and condensate while gas is re-injected. "In Phase Two, gas will be produced."

Phase One is expected to have a two-year timeframe where around 32 and 38 million barrels of LPG and condensates will be produced. Phase Two will begin in the third year of the production life of the project. An estimated 330 to 400 billion cubic feet of gas (BCF) will be produced for the 10 years of the project life. Operator Twinza Oil (PNG) Ltd is focused on commercialising its "discovered but as yet undeveloped assets". It is in a commercial partnership with Baker Hughes General Electric (BIIGE) which provides vendor financing on Twinza Oil Ltd's drilling programmes. In a statement this week, Kua said discussions on the development started during the application for a petroleum development license stages in 2018. Cabinet set up the State Negotiating Team (SNT) for the Pasca A project in 2020 to negotiate an acceptable deal for the State.

"Last September, the Pasca A SNT and Twinza Oil Ltd initialed the term-sheet for a Gas Agreement," Kua said. "However, there were some misunderstandings on the financial analysis method used and a domicile status of the company. "These have been resolved through the SNT negotiations and offline discussions with Twinza. "In negotiating resource projects deals for the country, the State has taken an approach to tax from production rather than profits. "The Pasca A SNT has so far negotiated the production levy from base case of 2 per cent (equal to Papua LNG Gas Agreement) from the Loloata initialed term sheet of last September, up to 4 per cent in April. "At a 5 per cent production levy that State would have reached 55 per cent state take on nominal cash flow analysis, which is what we want to achieve."

Kua sure of sealing Pasca deal

Post-Courier, May 26, 2021

The Government is keen to close a deal for Pasca offshore oil and gas project in the Gulf. Minister for Petroleum Kerenga Kua (pictured) said in September 2020, that the Pasca A SNT and Twinza Oil Ltd initialled the term-sheet for a gas agreement, however, there were some misunderstandings on the financial analysis method used and a domicile status of the company. "These have been resolved through the SNT negotiations and offline discussions with Twinza," he said. "In negotiating resource projects deals for the country, the State has taken an approach to "tax" from production rather than profits." He said the Pasca A SNT so far, among other things, negotiated the production levy from base case of 2 per cent (equal to Papua LNG gas agreement) from the Loloata initiated term-sheet of September 2020, up 4 per cent in April 2021.

"At a 5 per cent production levy that State would have reached 55 per cent stake take on nominal cashflow analysis, which we want to achieve. This will equate to a return to the State of above 60 per cent on a discounted cash-flow basis," Mr Kua said. "At that level, the State will be happy to close the deal. "However, I do understand that Twinza has one or two residual issues and the State will, of course, look into it." He said the Pasca A SNT has exhausted its extended mandate, however, considerations and options for a deal for the venture have been covered and it is now at the level of "captains" to make that call at the table. "I have written two separate letters to the chairman and chief executive officer of Twinza Oil Ltd to travel to Port Moresby to meet myself and the Prime Minister to discuss and close off a deal for the Pasca A project, which will then be followed by a gas agreement," Mr Kua said.

Mine production on hold

May 24, 2021, The National Business

A FATALITY at St Barbara’s US\$1.3 billion (K3.4 billion) Simberi mine in New Ireland has forced the gold explorer to temporarily cease production on the site. In a statement, the Australian miner said the casualty involved a Papua New Guinean staffer, as local law enforcement bodies have launched a full investigation into the incident. It also said mining activities had been halted and the premises had declared temporarily off-limits until the facilities received safety clearance to resume operation. Managing director and chief executive officer Craig Jetson said it was “devastating news”. “Our thoughts are with the employee’s family, friends and colleagues at Simberi,” he said. “The safety and wellbeing of our employees is our highest priority.” St Barbara was taken steps to provide care and support to the family of the worker, local community and all employees at the Simberi operations. The Mineral Resources Authority was also notified about the incident. Simberi is the northernmost island in the Tabar group of islands in New Ireland – 900 kilometers from Port Moresby.

Communities affected by mine closure, now relieved

BY ROBERT APALA, Post-Courier, May 20, 2021

Communities and people in and around Porgera valley in Enga Province have faced hardship due to the closure of the Porgera gold mine in April 2019 and many have lost businesses, livelihood, job opportunities and a sense of security. The people of Porgera have faced hard times because all these years, they have been literally dependent on the mine. Deputy chairman for Porgera Landowners Association negotiating team Dickson Pundi, said the developer provides electricity and communication network and even takes care of the road maintenance, but when the developer ceased operation everything stopped. “Throughout the closure period, I continued to live in Porgera with my family and travelled to Port Moresby when I was required to help in the negotiations for the mine reopening, to acquire improved benefits for my people as a principal landowner,” Mr Pundi said.

“Covid-19 arrived in PNG during this period, which affected businesses all over the country. Paiam Hospital was on its knees. Many lost their jobs and were forced to turn to the informal sector to survive. The banks moved in to repossess vehicles and equipment that had been purchased by locals to provide services to the mine. “Life in Porgera became harder and as a community, we came together to share what little we had with each other. “Together as a community – and through the Grace of God, we continue to survive. “During the closure of the mine our people came together to ensure continued peace and security around the mine site. Collectively we worked together to safeguard the mine assets because whether you are supporting the State or Barrick Niugini Limited (BNL), we all know that the safety and security of the mine directly impacts our collective future,” Mr Pundi said. “With increased equity comes increased responsibility. Everyone has a responsibility to maintain safety and security standards in the community. Illegal miners must stop. Women and children involved in illegal mining must stop.”

Misrepresentation and NON-DISCLOSURE regarding DeepGreen-SOAC Merger

Deep Sea Mining Campaign, MEDIA RELEASE, 16 May 2021

SECURITIES EXCHANGE COMMISSION AND NEW YORK STOCK EXCHANGE ASKED TO INVESTIGATE

The Deep Sea Mining Campaign (DSMC) have taken the lead on behalf of civil society organizations around the world to alert shareholders, the Securities Exchange Commission (SEC) and the New York Stock Exchange (NYSE) to the high levels of risk and potential liabilities

likely to be associated with the proposed business combination between DeepGreen and Sustainable Opportunities Acquisition Corporation (SOAC)¹.

Shareholders in SOAC will shortly be invited to vote on approving the business combination which will form The Metals Company (TMC), and/or redeeming their investment. Dr. Helen Rosenbaum, DSMC Coordinator, stated “SOAC and Deep Green promote TMC as a sustainable and environmentally positive investment option. However, DeepGreen is a start-up mining company seeking to extract non-renewable minerals from unique and biodiverse deep sea environments. It plans to do so despite warnings from scientists that the destruction of deep seabed ecosystems could affect the health of our oceans and planet, and that the impacts would be extensive, severe and last for generations.²

Andy Whitmore, DSMC Finance Advocacy Officer, stated “we believe the Preliminary S-4 Registration Statement lodged by SOAC with the SEC fails to adequately disclose many environmental, social and governance (ESG) risks of material concern. We believe that shareholders need to be apprised of the full scope and magnitude of liabilities likely to affect their investment before they vote on whether to approve SOAC’s proposed acquisition.” “SOAC has presented itself to shareholders from the time of its initial public offering as a sustainable investment. We have asked the NYSE and SEC to be vigilant in examining DeepGreen’s proposed business and operations, as well as SOAC’s environmental-related disclosure, in light of SOAC’s stated sustainability goals.” Despite TMC’s claims several international bodies have concluded that deep sea mining is not a sustainable investment option, including the United Nations Environment Programme, the United Nations Conference on Trade and Development³ and five major international banks which have developed policies excluding finance for deep sea mining.⁴

¹ SOAC is a SPAC – Special Purpose Acquisition Company. SPACs allows private firms to become publicly traded and listed on stock exchanges without the time, capital, and regulatory expenditures required in a traditional IPO. They are often referred to as ‘blank cheque’ companies.

² For example form a growing body of literature: Chin, A and Hari, K, 2020, **Predicting the impacts of mining of deep sea polymetallic nodules in the Pacific Ocean: A review of Scientific literature**, Deep Sea Mining Campaign and MiningWatch Canada, <http://www.deepseaminingoutofourdepth.org/impacts-of-mining-deep-sea-polymetallic-nodules-in-the-pacific/> and Smith, C. *et al*, **Deep-Sea Misconceptions Cause Underestimation of Seabed-Mining Impacts**. *Trends in Ecology & Evolution*, 2020; DOI: 10.1016/j.tree.2020.07.002

³ See <https://www.unepfi.org/publications/turning-the-tide/> (p.16); https://unctad.org/system/files/official-document/ditcted2020d4_en.pdf (p.28)

⁴ See bank policies at ABN Amro, BBVA, Lloyds Banking Group, NatWest and Standard Chartered

Cops to probe K400mil royalties

By DALE LUMA, May 14, 2021 The National Business

AN investigation will be launched by police into the use and disbursement of over K400 million in royalties from the Lihir gold mine paid to the New Ireland government, says Namatanai MP Walter Schnaubelt. Schnaubelt, who is the Forest Minister, said the investigation would determine how the money was used and on what projects undertook in the province and districts since 2007. He said Namatanai had not received its 20 per cent royalty shares which was supposed to be remitted by the provincial government since 2007. According to the Lihir agreement signed between the government and the mine when it started, 50 per cent of royalties would go to the New Ireland provincial government and from which 20 per cent would go to Namatai and another 20 per cent would go to Kavieng district. A recent National Executive Council (NEC) decision had directed the mine pay the districts their royalty shares directly which had seen Namatanai already receive two payments of K1.5 million and K1.8 million, according to Schnaubelt.

The third payment was expected soon however, it was understood that the provincial government took the NEC decision to court. Schnaubelt said the provincial government needed to account for

the shares not paid since 2007. “There are no acquittals with MRA (Mineral Resource Authority) and Finance (Department),” Schnaubelt said. “Where have the funds gone to? “There is also no tangible outcomes in the programmes in the provincial budget. “There is lack of service delivery. “The hospitals in the district are in the same condition they were 30 years ago.” Schnaubelt said the provincial government had to explain what projects they used the funds on and the implementation in the districts. He alleged that there was a separate trust account which money from the provincial trust account has been transferred into which had two foreign consultants as signatories to the account. The two were alleged by Schnaubelt to have been brought in as consultants who were attached to the provincial government. He called on Governor Sir Julius Chan to put aside any indifference and put the interest of the people first.

Seafloor mining fever drives \$2.9 billion merger

Nelson Bennet - Business in Vancouver | May 11, 2021

Littering the abyssal plain of the Pacific Ocean are an estimated 21 billion tonnes worth of polymetallic nodules containing high grades of manganese, nickel, copper and cobalt – the battery metals that Tesla (Nasdaq: TSLA) has warned may soon be in short supply. They sit on top of the sea floor just waiting to be hoovered up, and several companies, including one from Vancouver, DeepGreen Metals, is in the race to begin harvesting them. Getting the 50% reduction in greenhouse gas emissions by 2030 that US President Joe Biden has committed to will require a massive shift to renewable energy and electric cars. For electric car batteries alone, a fivefold-to-sixfold increase in copper, nickel and cobalt may be needed by 2025, according to a recent report by Aperio Intelligence. The ISA estimates there are 21 billion of tonnes of polymetallic nodules resting on the ocean floor in a region called the Clarion Clipperton Zone between Hawaii and Mexico. The World Bank estimates a 1,000% increase in battery metals will be needed by 2050, and cites research in Nature warning that “the world cannot tackle climate change without adequate supply of raw materials to manufacture clean technologies.” Given that it can take 10 to 20 years to get a new mine permitted and in production, the world appears headed for a “peak metals” crunch, which may explain the sudden minerals rush in the Pacific Ocean.

A new international deep ocean mining code, delayed by the pandemic, is now expected to be in place by 2023, and several companies that have been in the exploration stage, including heavyweights like Lockheed Martin (NYSE:LMT), are now hoping to start commercial harvesting as early as 2024. One of these companies is Vancouver’s DeepGreen Metals, which is merging with Sustainable Opportunities Acquisition Corp. (NYSE:SOAC), a special-purpose acquisitions company, in a deal valued at \$2.9 billion. The new company will be called The Metals Co. “The scale of the green transition is monumental, and the timeline is daunting,” Gerard Barron, the Australian CEO of DeepGreen, said in a news release. “We believe that polymetallic nodules are an important part of the solution. They contain high concentrations of nickel, cobalt and manganese – they’re effectively an EV battery in a rock.” DeepGreen shareholders include Vancouver mining and entertainment mogul Frank Giustra and Brian Paes-Braga, founder of Lithium-X, which he sold for \$265 million in 2018.

“He [Giustra] and I have been involved about four years in the company,” Paes-Braga, who sits on DeepGreen’s board of directors, told BIV News. Paes-Braga said he realized that, though lithium is important for EV batteries, it’s a small market compared to other battery metals. “The real big play was the nickel market and the copper market,” Paes-Braga said. “So when we saw DeepGreen, we just felt that, at some point, if this electric vehicle trend is happening, this is going to be a very valuable company, a very valuable resource.” The organization responsible for regulating deep sea mining, International Seabed Authority (ISA), was created by the United Nations Convention on the Law of the Sea, which was signed 167 countries – the United States being the one notable holdout.

The ISA estimates there are 21 billion of tonnes of polymetallic nodules resting on the ocean floor in a region called the Clarion Clipperton Zone between Hawaii and Mexico, containing an estimated six billion tonnes of manganese, 234 million tonnes of copper, 270 million tonnes of nickel and 46 million tonnes of cobalt. To put that in perspective, annual global nickel production in 2019 was 2.7 million tonnes, according to Statistica. There are 18 countries, companies or consortia with exploration licences for polymetallic nodules in the Clarion Clipperton Zone. DeepGreen holds exploration and commercial rights in the zone through its subsidiaries, royalty agreements with three Pacific Island Nations and industrial partners that include Maersk and the Allseas Group S.A., which are shareholders. Allseas, a Swiss company, is building the harvesting machine that will be used.

The prospect of dragging mining equipment across the ocean floor has understandably [caused some alarm](#) among marine scientists and environmentalists. Greenpeace has been ramping up a campaign against ocean mining. The Deep Sea Conservation Coalition warns that not enough is known about the impacts on deep sea mining on marine life, and has called for a moratorium. But DeepGreen says ocean mining would have far fewer environmental impacts than terrestrial mining. It requires no deforestation, road-building or tailings ponds and has a considerably lower carbon footprint. Moreover, the area where the mining would take place is not abundant in sea life. “These are like deserts under the ocean,” Paes-Braga said. “There’s not a lot living down there. From an environmental or ecological perspective, we’re not naive to say there’s not going to be some sort of impact – of course there will be. “It’s a trade-off. Like anything in life, we’ve got to consider trade-offs. I think it comes down to educating people. If we do a good job of educating people, I think it’s going to be a great outcome for our stakeholders and for the world.”

Harvesters, which would operate like big underwater vacuum cleaners, would operate at a depth of about four kilometres. They would be connected by a pipe to a surface vessel, where the nodules would be pumped. Once the ship is full, it would take the nodules to port and they would be processed on land. DeepGreen is aiming to begin deep sea mining in 2024. Conventional resource investors may balk at investing in a new and untested approach to mineral extraction. Mickey Fulp, publisher of the *Mercenary Geologist*, does not doubt that there is an abundance of metals in the abyssal plain and does not buy the environmental arguments against it. But he’s skeptical that seabed mining can be economically feasible. “I think it’s a great idea. I just don’t think it’s practical,” he said. “There are too many impediments to getting it done. Greenpeace is onto it and is protesting, as we speak, against it.” Once the DeepGreen-SOAC merger is finalized and an ongoing environmental impact assessment is completed, the company plans to start with a kind of bulk sampling at one million tonnes annually. “Once we are able to achieve that, the unlocking of the value to the company is going to be the real inflection point,” Paes-Braga said, “because we’re going to be able to prove that it works, that it’s economic, and that we’re going to become a major supplier to the metal industry.” (*This article first appeared in [Business in Vancouver](#)*)

Locals told not to disrupt project’s ops

May 12, 2021, The National Business

THE Madang administration has urged locals to take ownership of and respect the Ramu NiCo project. Madang administration director of mines John Bivi said the Ramu nickel and cobalt mine was the only mineral resource project that was operating in Madang and the people needed to respect it and not disrupt its operations. He said this during the presentation of the royalty payments to all 31 council wards in the Sumgilbar local level government (LLG) chamber at Gimbrin last Thursday. Bivi was invited to the ceremony that saw Sumgilbar LLG president Brendon Kennedy distribute K213,000 in royalties. Sumgilbar LLG deputy president Willie Malibun clarified that from the amount received, a sum of K5,000 was allocated to all the 31 wards in Sumgilbar for them to open

bank accounts and maintain their payments and other revenue. The ceremony was attended by officers from the Ramu NiCo Management Ltd community affairs and corporate office and the Madang police commander Supt Mazuc Rubiang. Community affairs supervisor government/community liaison section Kuipa Tonny said MCC had paid over K2.9 million in royalties for the year 2018-2019 which had been shared among 14 LLGs in Madang. Tonny acknowledged a submission by the Madang town mayor and Madang urban LLG president Ismael Yama who requested for the allocation to be given directly to the 14 LLGs and not to Madang.

Mayur starting project soon

By CLARISSA MOI, May 11, 2021, *The National Business*



MAYUR Resources Ltd is close to developing the country's first iron and industrial sands project in Orokolo Bay, Gulf, with its mining lease application being assessed by the Mineral Resources Authority (MRA). Mayur Resource Ltd managing director Paul Mulder told *The National* that the MRA had already received the application being lodged earlier this year for the company's K60 million project and assessment had already began. He said it was not a large project, however, the benefits would be for the community included job creation both direct and indirect, also considering that it was a sustainable mining activity inland from the coast. An added post mining of multiple mechanised sago operations at the mining site that would replicate similar facilities that International Finance Corporation (IFC) and French energy firm Total had already established further up the Purari River.

"We are ensuring that prior to us beginning the mining, everyone must be clear on the direct and indirect benefits as well as sustainable ongoing benefits," Mulder said. "We can't say when the MRA will have the project assessed. "That is their internal processes. "But if you compare projects such as Wafi-Golpu, this project is well over 100 times bigger than what we are proposing in capital construction cost and is more complex and much larger in scale. "The initial benefits will last for 15 years with follow on sustainable mechanised sago plantations to continue well after this. "We feel that this could be assessed in an expedient manner as it will benefit many parties and is not complex, involves no chemicals and can be commenced in a much shorter timeframe." Mulder explained that the project should not be confused with any sort of sand mining on beaches as it was an ancient buried paleo-geological formation deposit inland, away from the ocean where normal mining practices would be applied in accord with the Mining Act.

Investment condition vital

By DALE LUMA, May 11, 2021, The National Business



NEGOTIATING improved benefit-sharing arrangements for resource projects requires a good knowledge of the potential returns from such projects, as well as the conditions offered in other countries, says an economist. Institute of National Affairs executive director Paul Barker said the Government “owns the resource and is the regulator”. “So, it is in a strong position to negotiate on its own terms and benefits on behalf of other stakeholders, notably the customary landowners,” he said. But he warned the Government to be careful to avoid conflicts between its regulatory role, and that of potential shareholders, including issues on social and environmental grounds. PNG has billions of kina worth of resource projects yet to get off the ground including the Wafi-Golpu in Morobe, Papua LNG, P’nyang, the Pasca A offshore oil and gas, Frieda River copper and gold, Woodlark and Porgera which is yet to restart operations.

“It should, generally, avoid the need to commit to costly equity participation entailing major up front commitments and heavy borrowing by the State,” Barker said. He said the Government “clearly has more important duties to its citizens with its limited resources, notably providing basic quality infrastructure and services”. “Equity in corporate ventures is more of a luxury, when public goods are as poor as they are in PNG,” he said. “And when the State is able to secure sound revenue through taxation and other mechanisms and benefit-sharing arrangements, so long as over-generous investment incentives have not been offered. “Acquisition of equity should occur particularly in diverse investments overseas and at home, rather than domestic extractive projects with limited life-spans.

“And it should be made through a well-managed and accountable sovereign wealth fund, rather than from up-front borrowing – that is, from savings rather than costly commercial borrowings. “Awareness of the realistic project returns are also crucial, when recognising the potential investors negotiating position, with respect to its other global options,” Barker said. “Papua New Guinea needs to have competitive investment conditions if it wants international (and domestic) investors to develop projects or other goods and services, but clearly it doesn’t want to be taken for a ride with unduly generous conditions, which provide inadequate benefits to the State, or the public it serves.”

Govt, Total restart project talks

May 7, 2021, The National Business

AFTER a year of delay because of Covid-19, the Government and Total, the operator of the Papua LNG project, have announced the remobilisation of the project teams and of other required resources. This followed a meeting on Monday between Total chairman and chief executive officer Patrick Pouyanné and a delegation of Papua New Guinea led by the Deputy Prime Minister Samuel Basil in Paris, France, with the objective to review together the next steps for the development of the Papua LNG project. The objective is to launch the front end engineering design (Feed) in early 2022 and to prepare for a final investment decision in 2023. This positive development followed the signing and the reconfirmation of the Papua LNG gas agreement in 2019, the signing of the fiscal stability agreement and the award of the licence extension in February. Pouyanné said he was honoured to welcome Basil to the company's head office in Paris to review the Papua LNG implementation plan. "This is indeed a very strong signal of the dedication of the PNG Government to the success of this key project," he said.

"I confirm that this project is ranking very high in Total's portfolio given its proximity to growing Asian LNG markets and we will dedicate all necessary resources." Basil said it was important for the Government to meet the Total chairman and CEO and the French authorities to stress the importance to PNG of the Papua LNG project and to pledge their full support to the project. "I am pleased with the outcome of this meeting with clear implementation plans," Basil said. Papua LNG project will target the production of the two main discoveries of block PRL-15, Elk and antelope, that were fully appraised until 2017. It is expected that the gas produced by these fields will be transported by a 320 km onshore/offshore pipeline to the Caution Bay site in order to be liquefied in two trains to be built with a total capacity of 5.6 Mt/y which will be integrated to the existing PNG LNG facilities in Caution Bay. Total and PNG authorities will cooperate to create significant in-country value and to implement the Papua LNG project in an exemplary manner and taking into highest consideration the biodiversity and environmental stakes as well as the local communities' rights.

Another body found at Porgera mine site

By ELIAS LARI, May 5, 2021, The National

THE body of another young man was found in Porgera yesterday, bringing to nine the number of deaths, with one in critical condition at the Paiam Hospital, from the latest tribal clashes there, a senior public servant says. Chief executive officer for the Porgera district Jerry Maku said another body was found yesterday at the mine site and his relatives had taken it to the hospital for a post-mortem. Maku said the district had assisted the relatives of the deceased with an ambulance to transport the body back to his village at Paella. He said eight people were killed over the weekend and the latest death from tribal fighting was at the mine site. Maku said security personnel had been engaged in the fighting zone at Kairik and both parties were forced back to their own territories from Monday. However, he said since the fighting was going on, gunmen moved into Porgera Station on Monday and held up a store belonging to a foreigner and walked away with K100,000. "We did not witness such things in the past and I do not know what kind of society we are building here," Maku said. "The Porgera administration is working to put an end to all these problems, restore peace and normalcy."

Interrogations begin over New Caledonia unrest

Investigators in New Caledonia have begun formal interrogations of seven Kanak leaders in connection with last December's violence at the Vale nickel plant.

Radio New Zealand on 4 May 2021



Demonstrations amid tension over planned Vale sale in early December Photo: Théo Rouby / Hans Lucas

The planned sale of the plant last year led to repeated demonstrations by civil society groups and culminated in clashes at the Vale site. Elite riot police were deployed to fight off attackers who destroyed equipment and installations worth millions of dollars. Those being held for questioning include leaders of the Rheebeu Nuu group and the indigenous Kanak umbrella organisation opposed to Vale selling the plant to other foreign investors. According to media reports, premises of offices and homes have been searched as investigators want to establish the chain of command during the December unrest. No charges have been laid but the reports say the seven are being interrogated for alleged participation in a criminal organisation, theft, destruction of property and violence against police. The detention period may not exceed four days. The Vale plant was shut during the unrest and has since been sold to a new, mainly local consortium, which includes as a minority stakeholder the Swiss commodity trader Trafigura.

Eight killed in tribal fight

By ELIAS LARI, May 4, 2021, *The National* Main Stories

THE raging tribal fighting in Porgera has claimed eight lives over the weekend, Porgera Chamber of Commerce and Industry (PCCI) president Nickson Pakea says. Pakea said the killings were related to ongoing fight between two tribal groups with each group losing four lives. Enga police commander Supt Epenes Nili, when contacted by *The National* yesterday, said he was aware of the tribal fighting but had not received any report on the killings in Porgera. PNG Defence Force (PNGDF) chief of staff Capt Philip Polewara told *The National* last night that PNGDF was aware of the tribal fighting in Porgera. But Capt Polewara said he was not aware of the eight deaths and would get more information from PNGDF soldiers on call-out in Porgera. However, Pakea said police and soldiers were on the ground but needed logistics support to put the situation to a rest. He said fighting was raging fiercely in Laiagam, Mulitaka, and almost the entire electorate of Lagaip-Porgera, resulting in many deaths since last year.



“The bodies were located by the Seventh-day Adventist (SDA) church youths when they crossed the fighting zones with their brass bands as a sign to call off the fight,” Pakea added. “The tribal clash is like a genocide with at least one death a day. “The authorities must take quick and serious counter-actions to stop the tribal war. “The district law and order committee had suggested for a curfew last month (April 28) and also the provincial executive council declared the electorate as a fighting zone but there is no logistic support on the ground to mobilise support and counter measures. “When Barrick PJV was operating the gold mine, we never required logistics support from the provincial government or the administration. “However, we are now handicapped,” he added.

Pakea called on the Government, through the Mineral Resources Authority, to intervene and provide logistics support to address lawlessness. “Since the provincial government and its administration are not quick to support Porgera Mine, we have no choice but to call on the Government to intervene and address lawlessness immediately,” he said. Pakea said Prime Minister James Marape should look at issues relating to the mine because that could solve the current problems. “We are fed up with tribal fights which have claimed so many lives, including women and children, and affecting basic services like health and education,” he added. Pakea claimed that killing was becoming a norm in Porgera and “it is a very serious threat to peaceful and law-aiding communities”.

Inspection finds DSTP system in good condition

May 4, 2021 The National Business

AN inspection of the deep sea tailings placement (DSTP) system being used by the Ramu NiCo Management (MCC) at its Basamuk refinery in Madang has concluded that it is in good condition. The inspection was conducted recently by independent consultants from Australia. The two consultants, from the Aus-ROV Pty Ltd, were engaged to carry out an integrity check on the DSTP pipeline placement assisted by the MCC corporate health, safety and environment officers Moses Yaa, Steven Opur and Enny Marason. Yaa said they checked whether there was any exterior fracture along the pipeline or any displacement of the pipeline. An under-water robot called the remote operating vehicle was used to capture images along the pipeline from the shore of the Basamuk refinery covering the tailings mixing tank to the outlet of the tailings at Basamuk Bay in Rai Coast.

Pasca A facing delay

By DALE LUMA, May 4, 2021, *The National Business*



THE Pasca A offshore oil and gas project in Gulf faces further delay to its start-up which is now expected in 2025, says developer Twinza Oil Ltd. Country manager Roppe Uyassi told *The National* that the project would continue to be delayed until a gas agreement was signed, although it was likely to be further exacerbated by the standing down of the project team. “This is really unfortunate for PNG, following the lengthy delays we have already seen from resource projects in PNG such as Papua LNG and Wafi-Golpu,” Uyassi said. The Government, just before the signing of the agreement last month, made known its demand for a 6 per cent production levy before it could sign the agreement. It was, according to the developer, 4 per cent higher than what was initially agreed to. Petroleum Minister Kerenga Kua said it was imperative to secure the best deal for the country, while the window for negotiations was still open.

Uyassi told *The National* that oil and gas exploration and development “is very risky but potentially lucrative business”. “There needs to be a balance that recognises the risk taken by private investors and the development goals and aspirations of PNG, and the best deal would be one that maximises revenues to PNG,” he said. “This could be in the form of payments to local businesses and employees, or taxes and royalties to the Government to fund the country’s development priorities in health, education, security, infrastructure etc. “Importantly, it must also provide an incentive for private investors from all over the world to provide their money to develop the Pasca A Project on the promise of profits that will reward them for taking the risk to invest in Papua New Guinea. “We firmly believe that the deal agreed to between the State and Twinza strikes the right balance and provides a win-win outcome for both parties, delivering the highest State take of any resource development in PNG, be it on a discounted or nominal project value going to the State.

“We understand that the outcomes of over 65 per cent discounted and 52 per cent nominal State take were even verified and benchmarked independently by Deloitte after being consulted by the State. “The agreed terms also included domestic market obligation (DMO) for the supply of gas being provided from the first year of production for the first time in PNG’s history, plus an increased percentage of domestic market gas supply to 10 per cent of production.” Uyassi said the Pasca Project would require an additional investment of at least K5 billion over the coming years. “Even the State nominee carrying the State’s 22.5 per cent equity on the project going forward would require project financing to move this project forward into production, meaning that whatever terms we agree with the State must also be viable for the State nominee to raise financing. “The worst case scenario would see Twinza sign an unviable gas agreement deal, only for the project to fail as it

can't attract investment from financiers who are more conservative than oil and gas project proponents such as Twinza."

Uyassi said given the continued delays in the signing of the agreement, Twinza had already begun standing-down the Pasca Project team as the timing of execution of the gas agreement remained uncertain. "This will continue, however I will point out that as a foreign investor, Twinza has invested more than K350 million in the Pasca field over the past 11 years and will remain committed to PNG long-term," he said. "The Pasca Project is ready to move into the Feed phase of project development soon after a successful gas agreement signing." Uyassi added that the project had been on hold since 2020 awaiting commencement of the Feed phase. "We remain hopeful that the development of PNG's first offshore oil and gas field will commence soon," he said. "We are committed to Papua New Guinea and remain hopeful this is something PNG will have to address for the long-term good of the industry and the many local businesses that depend on the industry."

Sinking Seabed Mining

MEDIA RELEASE, Thursday 11 February 2021

Papua New Guinean, Australian, and New Zealand civil society welcome ban on seabed mining in the Northern Territory



kasm
kiwis against seabed mining



With the destructive threat of seabed mining opening up in the South Pacific, the Government of the Northern Territory, Australia have made a stand in permanently banning seabed mining¹ to protect Top End coastal ecosystems and regional economies.

A nine-year campaign in the Northern Territory led by Traditional Owners, environment groups, commercial and recreational fishers, tourism operators and scientists opposing the seabed mining industry welcomed the government's decision to ban seabed mining. The ban has also been welcomed by civil society across the Pacific and Internationally. Jonathan Mesulam, Alliance of Solwara Warriors in Papua New Guinea (PNG) stated, "We congratulate the NT government on this decision. For over a decade we have been opposing the world's first deep sea mining project, to be given an operating licence, the Solwara 1 mine in the Bismarck Sea, only 25km from my traditional village."

The Alliance of Solwara Warriors, civil society and PNG Churches have been speaking out against Solwara 1 for many years. This included a joint letter in June 2019² calling for the PNG Government to cancel all deep sea mining licences and to ban seabed mining in national waters. "PNG has no need for seabed mining. We are blessed with abundant fisheries, productive agricultural lands and marine life. Seabed mining will benefit only a small number of people who are already wealthy and not bring prosperity to our communities and Indigenous ways of life." Fierce opposition in New Zealand, ongoing for over a decade, has banded Traditional Owners, environment groups, scientists, commercial and recreational fishers together in calling for a ban.

Cindy Baxter, Chair, Kiwis Against Seabed Mining, said, "This political decision by the Northern Territory Labour government to ban seabed mining is leadership that prioritises care for the well being of their marine spaces and of the people who rely upon and are connected to those spaces. Protecting the ocean environment from seabed mining pre-emptively puts people and places over profits - at the expense of those people and those places." "It's time for the New Zealand

government to follow this example. Seabed mining has been shown to be inappropriate and unacceptable through two failed seabed mining application processes, and another that's been rejected by two courts, as we wait for the Supreme Court to make a final decision. After 15 years of failed attempts by the miners, it's time to draw a line on the sea floor and put an end to all of our pain."

With the call for a ban on seabed mining in New Zealand and Papua New Guinean waters, there is also an international call for a moratorium³ on deep seabed mining. This is seen as the responsible way forward until several fundamental conditions can be met, including environmental, social and economic risks to be comprehensively understood with no loss of biodiversity and the free, prior and informed consent of coastal communities. "Not only will deep sea mining result in the loss of species and damage the seabed for thousands of years, it would potentially result in negative consequences for the rest of the ocean and the people who depend on its health⁴," claimed Natalie Lowrey, Deep Sea Mining Campaign. "We congratulate the Northern Territory Government in leading the way with a permanent ban on seabed mining. The stakes are extremely high particularly for Pacific economies, cultures and livelihoods, as well as iconic marine species that will all be under threat from both shallow and deep seabed mining."

1 Protecting our Environment: Government to Ban Seabed Mining, media release, 5 February 2021 Northern Territory Government, <https://newsroom.nt.gov.au/mediaRelease/34139>

2 Joint Letter calling for the Papua New Guinea Government to cancel all Nautilus Minerals deep sea mining licences and to ban seabed mining in PNG, 28 June 2019, <http://www.deepseaminingoutofourdepth.org/joint-letter-calling-for-the-papua-new-guinea-government-to-cancel-all-nautilus-minerals-deep-sea-mining-licences-and-to-ban-seabed-mining-in-png/>

3 Deep Sea Conservation Coalition representing over 80 organisations globally has a moratorium position on deep sea mining, http://www.savethehighseas.org/wp-content/uploads/2019/08/DSCC-Position-Statement-on-Deep-Seabed-Mining_July2019.pdf

4 Chin, A and Hari, K (2020), Predicting the impacts of mining of deep sea polymetallic nodules in the Pacific Ocean: A Review of Scientific literature, Deep Sea Mining Campaign and MiningWatch Canada, 52 pages, <http://www.deepseaminingoutofourdepth.org/wp-content/uploads/Nodule-Mining-in-the-Pacific-Ocean-2.pdf>